



July 3, 2018

City of Hallandale Beach, FL
630 N.W. 2nd Street
Hallandale Beach, FL 33009
Attn: James Sylvain, P.E.

Re: Hallandale Beach Water Treatment Plantr
SCADA Software Replacement and Miscellaneous Additions

Mr. Sylvain,

We are pleased to submit our **Not to Exceed** proposal to perform the following tasks associated with modifying your SCADA system within the Water Treatment Plant. The tasks are broken down as follows and task pricing is in accordance with the City of Sunrise SCADA Maintenance Contract, Contract No. (12)C-12-H.

The following tasks are priced below in our proposal:

- SCADA Software Replacement to VT SCADA
- Addition of Back-Up Server and Redundancy to existing Primary Server
- PLC & SCADA Additions to Chlorine and Fluoride Systems

Our proposal is as follows:

SCADA Software Replacement to VT SCADA

Remove the existing GE iFIX and Data Flow System Software from your existing server and install new VT SCADA Software on your primary and back-up servers and deploy software to Eight (8), Thin Clients throughout the plant. Application programming will include the following:

- Twenty (20) – Plant-Wide Graphics (Replacing the iFIX Graphics)
- Twenty-Six (26) – Remote Site Graphic Displays (Replacing the Data Flow Graphics)
- One Hundred (100) – Plant-Wide Signal Trends (Replacing the iFIX Trends)
- Two Hundred Fifty (250) – Remote Site Signal Trends (Replacing the Data Flow Signal Trends)
- Four (4) – Automatically Generated Reports
- Eight (8) – Operator Initiated Reports

Our price includes a workshop where our Programmer will meet at your facility to obtain a current copy of the existing GE Proficy iFix and Data Flow HMI applications and to discuss the “look and feel” of the new graphic screens, trends and reports.

Proposal Task Pricing

Engineering Services and Software License

Four (4) Project Management Hours @ \$ 150.00 per hour	\$ 600.00
Eight (8) – Control System Engineer Hrs. (Graphics Workshop) @ \$ 120.00 per hour	\$ 960.00

Twenty-Four (24) – Control System Engineer Hours (Graphic Submittal) @ \$ 120.00 per hour	\$ 2,880.00
Three Hundred Twenty (320) – Control System Engineer Hours (office programming) @ \$ 120.00 per hour	\$ 38,400.00
One Hundred (100) – Control System Engineer Hours (on-site Start up) @ \$ 160.00 per hour	\$ 12,000.00
One (1) – Lot of Estimated Travel & Living Expenses	\$ 4,000.00
One (1) VT SCADA, 5000 Tag Dual Server Premium Package complete with	\$ 23,034.00
<ul style="list-style-type: none"> • Two (2) Server Development Runtime Licenses • Two (2) Alarm Notification License • Two (2) Built-In Historians • Unlimited Thin Clients • Includes 20% Contractual Markup on materials/software 	
Total Software Replacement Task Price:	\$ 81,874.00

Replacement of Primary and Addition of New Primary & Backup/Redundant Servers

Furnish, Install and Configure new Primary and Back-Up Servers compatible with the proposed SCADA software. Servers shall be configured as Redundant.

Proposal Task Pricing

Engineering Services and Equipment

Twelve (12) – Project Management Hrs. (Project Plan) @ \$150.00 per hour	\$ 1,800.00
Eight (8) – Control System Engineer Hrs. (Server Submittal) @ \$ 120.00 per hour	\$ 960.00
Eight (8) – Control System Engineer Hrs. (Network Drawing) @ \$ 120.00 per hour	\$ 960.00
Eight (8) – AutoCad Operator Hours (Network Drawing) @ \$ 60.00 per hour	\$ 480.00
Eight (8) – Control System Engineer Hrs. (Office Configuration) @ \$ 120.00 per hour	\$ 960.00
Sixteen (16) – Control System Engineer Hrs. (On-Site Installation) @ \$ 120.00 per hour	\$ 1,920.00
Twelve (12) – Control System Engineer Hrs. (On-Site Verification) @ \$ 120.00 per hour	\$ 1,440.00
One (1) – Lot of Estimated Travel & Living Expenses	\$ 1,250.00

Hardware (Including 20% Contractual Mark-Up) \$ 13,295.00

- One (1) – Rack Solutions 151-3500, 16U Office Cabinet
- Two (2) – Dell Poweredge R560 Servers as described in the attached document
- One (1) – APC SMX750, Rack Mounted, 750 VA Uninterruptible Power Supply
- One (1) Lot of Cables, Connectors & Cable Management Hardware

Total Primary & Backup Server Task Price: \$ 23,065.00

PLC & SCADA Additions to Chlorine & Fluoride Systems

Design, Furnish and Install the following Allen Bradley Point I/O in your existing PLC panel to integrate the Chlorine and Fluoride Systems into you SCADA system. Engineering Services and Hardware is as follows:

Proposal Task Pricing

Engineering Services

Eight (8) – Project Management Hrs. @ \$ 150.00 per hour	\$ 1,200.00
Sixteen (16) – Control System Engineer Hrs. (Design) @ \$120.00 per hour	\$ 1,920.00
Eight (8) – AutoCad Operator Hrs. (Drawing Additions) @ \$ 60.00 per hour	\$ 480.00
Sixteen (16) – Control System Technician Hrs. (Hardware Installation) @ 90.00 per hour	\$ 1,440.00
Twenty-Four (24) – Control System Engineer Hrs. (PLC Programming) @ \$ 120.00 per hour	\$ 2,880.00
Twenty-Four (24) – Control System Engineer Hrs. (SCADA Graphics) @ \$ 120.00 per hour	\$ 2,880.00
Sixteen (16) – Control System Engineer Hrs. (On-Site Start Up) @ \$ 120.00 per hour	\$ 1,920.00
Four (4) – AutoCad Operator Hrs. (As Built Documentation) @ \$60.00 per hour	\$ 240.00
One (1) – Lot of Estimated Travel & Living Expenses	\$ 2,500.00

Hardware (Includes 20% Markup)

\$ 6,505.00

- One (1) Allen Bradley 1734-AENT Ethernet Interface Module
- Two (2) Allen Bradley 1734-IB8 Discrete Input Modules (24 VDC)
- Two (2) Allen Bradley 1734-OB8E Discrete Output Modules (24 VDC)
- Three (3) Allen Bradley 1734-IE8C Analog Input Modules
- Three (3) Allen Bradley 1734-OE4C Analog Output Modules
- Ten (1) Allen Bradley 1734-TB Terminal Blocks
- One (1) Allen Bradley 1734-FPD Field Power Distribution Block

Total Chlorine and Fluoride Additions

\$ 21,965.00

As indicated above, this is a Not to Exceed proposal where employee reports are submitted for your review and said time billed upon the rates listed above for each discipline within each task.

In addition, estimated travel and living expenses including the contractual 10% markup are included in the above prices. However, per the terms of the referenced contract, travel and living expenses will be invoiced at cost plus the contractual 10% markup.

If you have any questions regarding this proposal, do not hesitate to contact me at your convenience.

Respectfully Submitted,

Revere Control Systems, Inc.

Jerry Zitterman

Jerry Zitterman

City of Hallandale Beach, FL
New Primary and Redundant Servers

Category	Description	SKU
PowerEdge R640	PowerEdge R640 Server	[210-AKWU]
Motherboard	PowerEdge R640 Motherboard	[329-BDKC]
Trusted Platform Module	No Trusted Platform Module	[461-AADZ]
Chassis Configuration	3.5" Chassis with up to 4 Hard Drives and 3PCIe slots	[321-BCQF]
Shipping	PowerEdge R640 Shipping	[340-BKNE]
Shipping Material	PowerEdge R640 x4 and x10 Drive Shipping Material	[340-BLUC]
Processor	Intel® Xeon® Silver 4112 2.6G, 4C/8T, 9.6GT/s, 8.25M Cache, Turbo, HT (85W) DDR4-2400	[338-BLUR]
Additional Processor	No Additional Processor	[374-BBBX]
Processor Thermal Configuration	Standard Heatsink for 1 CPU	[370-ADNM] [412-AAIQ]
Memory DIMM Type and Speed	2666MT/s RDIMMs	[370-ADNU]
Memory Configuration Type	Performance Optimized	[370-AAIP]
Memory Capacity	(2) 8GB RDIMM, 2666MT/s, Single Rank	[370-ADNI]

Category	Description	SKU
RAID Configuration	C3, RAID 1 for 2 HDDs or SSDs (Matching Type/Speed/Capacity)	[780-BCDN]
RAID/Internal Storage Controllers	PERC H330 RAID Controller, Minicard	[405-AAEF]
Hard Drives	(2) 1TB 7.2K RPM SATA 6Gbps 512n 3.5in Hot-plug Hard Drive	[400-ASHH]
Operating System	Windows Server® 2016,Standard,16CORE,Factory Inst,No MED,NO CAL	[634-BILL]
OS Media Kits	Windows Server® 2016,Standard,16CORE, Media Kit	[634-BILD]
Client Access Licenses	5-pack of Windows® Server 2016,2012 Device CALs (Standard or Datacenter)	[634-BIMR]
Embedded Systems Management	iDRAC9, Express	[385-BBKS]
Group Manager	iDRAC Group Manager, Disabled	[379-BCQY]
Password	iDRAC,Legacy Password	[379-BCSG]
PCIe Riser	Riser Config 4, 2x16 LP	[330-BBGY]
Network Daughter Card	Intel Ethernet I350 QP 1Gb Network Daughter Card	[540-BBCB]
Internal Optical Drive	DVD +/-RW, SATA, Internal	[429-ABBD]
Fans	5 Standard Fans for R640	[384-BBPR]

Category	Description	SKU
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 495W	[450-ADWQ]
Power Cords	(2) NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America	[450-AALV]
Bezel	Standard Bezel for x4 and x8 chassis	[325-BCHH] [350-BBJS]
Quick Sync 2 (At-the-box mgmt)	No Quick Sync	[350-BBKB]
BIOS and Advanced System Configuration Settings	Performance BIOS Setting	[384-BBBL]
Advanced System Configurations	UEFI BIOS Boot Mode with GPT Partition	[800-BBDM]
Rack Rails	ReadyRails™ Sliding Rails With Cable Management Arm	[770-BBBL]
System Documentation	OpenManage DVD Kit, Powerededge R640	[631-ABKN]
Shipping Information	US No Canada Ship Charge	[332-1286]
iDRAC Service Module	iDRAC Server Manager Disabled	[379-BCQX]
Hardware Support Services	3 Years Basic Hardware Warranty Repair: 5x10 HW-Only, 5x10 NBD Onsite	[813-9254] [813-9255]