

OwnerContingency Modification

0309b. - Stillwater New High School

Title: Add HVAC Controls

OwnerContingency Modification : # 3

Date: 08/27/2024 **Date Required:**

Description of Work: "The below work is included in PCO #3:

1. Add HVAC controls back into DeHart Airconditioning contract as outlined on the attached proposal from Automation Integrated. Automation integrated to engineer, furnish, program, install and commission a Niagara N4 Building Automation System for Phase 1 of the New High School project as outlined in construction documents and detailed on attached proposal.
2. Automation integrated to be contracted through, and managed by, DeHart Airconditioning."

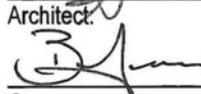
The below items will increase or decrease the contract scheduled value by the amounts listed below. Time in days indicates additional time required to project completion due to the changes referenced.

Item	Units	UM	Unit Price	Item Total	Bonds & Ins	Fee	Total	Time (In days)
1 : Add HVAC Controls	0.00	LS	0.00	- 312,375.0	0.0	0.00	- 312,375.00	
2 : DeHart A/C	0.00	LS	0.00	312,375.0	0.0	0.00	312,375.00	

Total Change Amount: 0.00

Notes: This Modification may add scope beyond the original contract documents. If the funds committed by this modification are needed for legitimate construction related items the contingency fund will be replenished in the amount of this modification by the owner.

Approved By:

	9/25/2024
Construction Manager:	Date:
	9/30/2024
Architect:	Date:
	10/2/24
Owner:	Date:

Request for Change Order

Project: 88709 Stillwater Schools	Request for Change Order Number: 0004
	Title: Add in controls
	Request for Change Order Date: Aug 5, 2024
To: CMS Willowbrook	Architect's Project No:
	Contract Date:

We propose to make the following changes in this contract :

PCO:0004

Name: Add in controls	Source:	Type: Owner Change Order
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Description: Add for Automated Integrated Controls

Scope of work:

Amount: 312,375.00

Cost Items:

Number	Name	Description	Amount
01	Add in controls		297,500.00

Markups for above items are listed below:

Number	Name	Description	Amount
02	5% markup		14,875.00

Cost Items inclusive of markups:

Number	Name	Description	Amount
01	Add in controls		312,375.00

The total Cost to perform the work as described above is a CHANGE of 312,375.00.

Please indicate your acceptance and approval of this additional work in the space provided below

CONTRACTOR

ADDRESS

BY *(Signature)*

(Typed name)

DATE _____





August 2, 2024

Stillwater Public Schools
Attn: Rob Lemecker

RE:SPS High School Phase 1 (#24-2571)

PROPOSAL

We propose to engineer, furnish, program, install and commission a Niagara N4 Building Automation System for the High School - Phase 1 per the 505 Architecture drawings dated 05/03/24 through Addendum #3.

VAVs are not specified. They are spec'd under a substitution request listed Addendum #2 request #28 and meet all of the engineer's comments.

Pricing in accordance with State contract 1048-AI.

**BASE BID using SACV in lue of VAV terminals:
Two Hundred Ninety-Seven Thousand Five Hundred Dollars (\$297,500.00)**

This price includes the following:

- **One (1) - New AI 24"x24"x8" Control Panels**
 - **One (1) - Distech Controls EC-BOS-8200 Niagara N4 Supervisory controller**
 - Five year SMA
 - Connect up to 200 devices
 - Open Nics statement licensing
 - Connected to existing SPS Niagara 4 supervisor server
 - Pre-wired control panels with 24vdc power supplies and battery backup, convenience outlet
 - Install, commissioning, control drawings
- **Twenty-Two (22) - SACV - VAV terminal units**
 - SACV terminals included in this proposal
 - Distech Controls DDC controller
 - Factory installed
 - Zone temperature sensor with LCD setpoint adjust and override
- **Sixty-Eight (68)- Automate RTUs**
 - **NOTE: Provide and Install Distech ECY IP based controller per 230900-2.4.A**
 - One (1) - Distech Controls ECY-303
 - BACnet/IP, RESTful communication
 - New Cat6 communication networking
 - Auto Commissioning features

- One (1) - Distech EC-SmartVue Zone sensor
 - Communicating room temperature sensor with backlit display and graphical menus. Setpoint adjust, after hours override
 - Temperature, humidity, and **CO2**
 - **Per 230900-2.4.B**
 - New thermostat cable installed (Cat5e)
- Two (2) - Duct temperature probes (supply/Return Air)
- One (1) - Current sensor (installed on the main power to monitor fan and compressor status)
- 2 stage cool/2 stage heat
- Dehumidification/hot gas bypass control (if RTUs are capable)
- Economizer control
- Utilize the CO2 sensor to run demand-controlled ventilation (DCV)
- TAB assistance to set minimum outside air damper positions for building pressure control
- **Ten (10)- Automate exhaust fans (start/stop)**
 - Equipment included:EF-9, 10, 11, 12, 14, 17, 18, 19, 20, LEF-1
 - Command relay
 - Monitoring of exhaust fans with current sensor to enable the associated RTU minimum outside air damper position to provide makeup air to the zone. Control of exhaust fans by others per the equipment schedule (ie, light switch/timer or line voltage thermostat).
- **Two (2)- Automate exhaust fans (Temperature control)**
 - Equipment included:EF-13, 21
 - Command relay
 - Zone temperature sensor
 - Monitoring of exhaust fans with current sensor to enable the associated RTU minimum outside air damper position to provide makeup air to the zone. Control of exhaust fans by others per the equipment schedule (ie, light switch/timer or line voltage thermostat).
- **Ten (10)- Automate exhaust fans (manual control)**
 - Equipment included:EF-1, 2, 3, 4, 5, 6, 7, 8, 15, 16
 - Command relay
 - Monitoring of exhaust fans with current sensor to enable the associated RTU minimum outside air damper position to provide makeup air to the zone. Control of exhaust fans by others per the equipment schedule (ie, light switch/timer or line voltage thermostat).
- **Miscellaneous**
 - Three (3) - High Velocity Fans
 - Monitoring only, local control by equipment manufacturer
 - Ten (10) - Split System AC unit monitoring
 - Equipment included: ITFC-1, 2, 3, 4, 5, 6, AC-1, 2, 3, 4
 - Provide and install a separate zone temperature sensor for each split system. Temperature to be monitored ONLY by the BMS to generate alarms and histories.
 - Includes installation of low voltage interconnecting wiring for thermostat
 - Kitchen Hood/MAU
 - Equipment included:MAU-1, 2, 3, 4 KEF-1, 2, 3, 4, 5, 6, 7, 8

- Provide labor for factory designated low voltage interconnecting wiring (ex. Zone temp, humidity, static pressure sensor).
- BACnet integration from the hood equipment to the BMS(Communication gateways by equipment manufacturer)
- Excludes fire alarm and/or smoke detector hookup.
- Exterior Lighting
 - Lighting contactors by Electrical
 - Provide a command relay
- Two (2) - Electric Duct Heater (EDH)
 - Equipment included: EDH-1, 2
 - Wire fan interlock between EDH and associated RTU
 - Command relay
 - Monitor manual wall switch position
- Electric Baseboard/unit heaters
 - Equipment included: EBBH-1 through 11, UH-1
 - Command relay
 - Status current sensor
 - Zone temperature sensor
- Elevator Sump pump monitoring
 - Equipment included: SP-1
 - Monitor sump pump high level to generate alarms as necessary
 - **Note: High water alarm/oil smart switch provided by others**
- **Automate/Monitor Safe room**
 - Six (6) - Relief hood
 - Monitor motorized damper position with damper actuator end switch to generate alarms as necessary
- Walkin cooler temperature monitoring
 - Provide cooler temperature sensors and add to the district standard cooler temperature monitoring system
- One (1) new Outside Temperature, Humidity, CO2/VOC sensor
- Creation of end user graphics, navigation, alarms, and histories on the existing SPS Supervisor
- 8 hours owner training

This proposal does NOT include the following:

- Taxes
- VFDs or motor starters
- Roof penetrations, pitch pans, etc
- Control Valves and damper actuators
- Cutting, Patching, or Painting
- SPS Network equipment of any kind
- Work to be performed during normal business hours (8am-5pm)
- Test and Balance (T&B), minimum outside air positions
- Fire alarm devices, Smoke dampers, Fire/smoke damper, Smoke Detectors (Install, test or verify)

Pricing in accordance with State contract 1048-AI.

If you have any questions or need further information, please contact me at 405-226-8095 or by e-mail tory@ai-sys.com.

Regards,



Tory Friesen
Sales Engineer