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**AutomatedLogic**

# Proposal

#23-0044  
Date: 7/14/25

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Blount County Schools  
Attn: Mr. James Duke – Facilities Supervisor

**Project Name: Blount County Schools HVAC Controls Proposal**  
**(Carpenter Middle School #23-0044 - Updated for 2025)**

James,

HSC is pleased to provide you with the following proposal to provide Automated Logic Controls for the location mentioned above. The equipment mentioned below shall be furnished with new controls if accepted.

- (2) VAV RTU's
- (17) RTU's including the (4) in the Gym
- (35) AHU's on Ground
- (4) Split Units – Café/Kitchen
- (10) VAV's
- (5) Mini Split Units – Space Temp Monitoring Only
- (1) PTAC Unit – Space Temp Monitoring Only
- (1) MUA/Kitchen Hood – Monitor Status

**-VAV RTU** control points to be provided shall consist of the following:

- \*Fan Status
- \*SAT
- \*RAT
- \*RARH
- \*MAT
- \*SASD Status
- \*RASD Status
- \*Comp. 1 Status
- \*Comp. 2 Status

## **HSC Building Automation & Controls**

[www.hscbac.com](http://www.hscbac.com)

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- \*Diff. Press

- \*Fan S/S

- \*Compressor 1 S/S

- \*Compressor 2 S/S

- \*OA Damper

-Controllers shall be housed in Nema 3R enclosures. Temp sensors and current transformers shall be provided/installed along with the other temperature and humidity sensors noted. The outside air damper actuators and control valves is assumed to be working and shall be reused. Existing wiring shall be reused as much as possible.

**-RTU's, AHU's and Split Units** will have the following control points:

- \*Zone temp, set adj & override

- \*Fan Status

- \*Comp. 1 Status

- \*Comp. 2 Status if present

- \*SAT

- \*SARH

- \*MAT

- \*RAT

- \*RARH

- \*SASD Status

- \*RASD Status

- \*Fan S/S

- \*Comp. 1 S/S

- \*Comp. 2 S/S if present

- \*Heat 1 S/S

- \*Heat 2 S/S if present

- \*OA Damper

-Controllers shall be housed in Nema 3R enclosures. Temp sensors and current transformers shall be provided/installed. New thermostat wire shall be run. Outside air damper actuators is assumed to be working and shall be reused. The remaining existing control wiring shall be reused as much as possible.

**-VAV's** will have the following control points:

- \*Zone temp, set adj & override

- \*Discharge Air Temp

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**\*Damper Control**

-Controllers shall be installed in the VAV's. Zone temp sensors and discharge air temp sensors shall be provided/installed for each unit. New thermostat wire shall be run. The remaining existing control wiring shall be reused as much as possible.

**-Mini Split and PTAC Units** will have the following control points:

**\*Space Temp monitoring only**

**-MUA/Kitchen Hood Unit** will have status monitored only,

-All new controllers mentioned above shall be networked via Cat 6 cable and be brought back to a Gateway by which the owner will need to provide a ethernet access point as well as an IP address for remote access to the system.

**Standard HSC Project Applications shall be applied:**

**\*Engineering Drawings**

**\*Custom programming to ALC and Customer standards**

-Equipment Optimization

-Alarms Setup

-Reports Setup

-Trending Setup

-Live Logic Page

**\*Custom graphics to ALC Customer standards**

-Equipment graphics

-Central Plant graphics

**\*\*Boilers**

**\*\*Closed Circuit Cooler**

**\*\*Pumps**

**\*Startup and Commissioning on all control modules and points**

**\*Project Management**

**\*Free Customer Training provided at customers request (unlimited hours) – Onsite or at HSC Knoxville**

**\*1-year standard warranty on ALC control modules**

**Clarifications:**

**\*\*All existing damper actuators, valves, firestats, flow switches and vfd's shall be reused.**

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\*\*Pricing based on walk through back on May 22, 2025.

\*\*Remote connectivity is dependent on IT policy and cooperation.

\*\*All existing wiring and conduit shall be reused as much as possible.

\*\*Startup of controls will be performed by Controls Vendor and not via a 3<sup>rd</sup> party. If 3<sup>rd</sup> part commissioning is required, Controls Vendor will provide an additional cost.

\*\*Work hours are to be done during normal business hours. After Hours, Weekends, and Holidays can be calculated at a different rate if required.

\*\*Permits, and Payment/Performance Bonds are not included but can be provided at a cost.

\*\*Existing controls that are removed shall be turned over to the owner.

**Exclusions:**

-Integration to any existing system not specifically detailed within our proposal is not included.

-Life Safety Controls, Fire/Fire-Smoke control dampers, HOA Switches, VFD's, VFD installation and wiring, disconnects, starters, 120v+ power wiring, smoke detectors, including associated wiring and interlocks are not included unless otherwise detailed within proposal.

-Remote connectivity is dependent on IT policy and cooperation

-Access panels, doors, painting, patch work

-Davis Bacon Wage

-Performance/Payment Bond or Permits

-Accelerated shipping costs

**Price Breakout for TIPS:**

Installation/ (Program & Commissioning) Labor 2224 hrs @ \$115/hr = \$255,760.00

ALC OF561-E2 qty. 40 @ \$632.00ea = \$25,280.00

ALC OF141-E2 qty. 10 @ \$678.00ea = \$6,780.00

ALC OF683-E2 qty. 19 @ \$1,228.00ea = \$23,332.00

ALC OF022-E2 qty. 6 @ \$392.00ea = \$2,352.00

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ALC G5CE qty. 1 @ \$2,332.00 = \$2,332.00  
ALC ZS2P-ALC qty. 66 @ \$84.00ea = \$5,544.00  
ALC ZS2-ALC qty. 6 @ \$52.00ea = \$312.00  
ALC ZSD-B-8-6-B qty. 2 @ \$122.00ea = \$244.00  
ALC ZSA-B-24-6-B qty. 58 @ \$350.00ea = \$20,300.00  
ALC ZSD-BH-6-6-B qty. 114 @ \$272.00ea = \$31,008.00  
ALC NSB-10K-2-D-8-A qty. 10 @ \$22.00ea = \$220.00  
ALC ZPS-SR-EZ-ST-IN qty. 2 @ \$230.00ea = \$460.00  
ALC NSB-ACC07-A qty. 4 @ \$22.00ea = \$88.00

**Total Covered by Tips: \$374,012.00**

Tips Contract# 23100201

**TIPs Contract number:** 23100202 (JOC contract# for construction)

23100201 HSC Building Automation & Controls Energy and Water Efficiency Goods and Services JOC

23100202 HSC Building Automation & Controls Energy and Water Efficiency Goods and Services JOC

Sincerely,

*Troy Storm*

HSC Building Automation & Controls

Knoxville, TN 37909

TN License# 67457 Exp. Date: 1-31-2026

Cc: John Hughes

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# Proposal

#23-0047  
Date: 7/14/25

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Blount County Schools  
Attn: James Duke – Facilities Supervisor

**Project Name: Blount County Schools HVAC Controls Proposal**  
**(William Blount 9<sup>th</sup> Grade Academy – Updated for 2025)**

HSC is pleased to provide you with the following proposal to provide Automated Logic Controls for the location mentioned above. The below mentioned shall be provided should this proposal be accepted.

**William Blount 9<sup>th</sup> Grade Academy**

-Existing controls for this location shall be replaced for the following equipment:

- (78) WSHP's
- (1) PAU and associated EF
- (1) Loop Control Panel for two Boilers, one Cooling Tower and two Pumps
- (1) DHW Pump
- (6) FAU's
- (1) MUA/Kitchen Hood – Monitor Status

-**WSHP's** shall be monitored and/or controlled for the following points:

- \*Fan Status
- \*SAT
- \*Zone temp, set adj & override
- \*Firestat
- \*Compressor Status
  
- \*Fan S/S
- \*Compressor Enable/Disable
- \*Rev. Valve

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\*OA Damper

-Controllers shall be furnished/installed in a Nema 1 enclosure. Each controller shall have a digital zone temp sensor, discharge air temp sensor and a current transformer for fan status and compressor status. Existing OA damper motors shall be reused and are assumed in working condition as will the existing firestats. New wire shall be pulled for the new zone thermostats. It is the intent to reuse the remaining control wire for terminations to the control devices.

-**PAU** and the associated **EF** shall have the following points provided:

- \*Zone temp, set adj & override
- \*S. Fan Status
- \*Ex. Fan Status
- \*Discharge Air Temp
- \*Ret. Air Temp
- \*SASD Status
- \*RASD Status
  
- \*S. Fan S/S
- \*Ex. Fan S/S
- \*Comp. 1 Enable/Disable
- \*Comp. 2 Enable/Disable
- \*OA Damper

-The controller shall be housed in Nema 1 enclosure. Digital Zone temp sensor, temperature sensors and current transformers shall be provided/installed. It is assumed that both the existing Firestat and the OA damper actuator are working and shall be reused. Existing control cable shall be reused as much as possible.

-**WSHP Loop** control points provided shall be as follows:

- \*Boiler 1 Status
- \*Boiler 2 Status
- \*Boiler 1 HWST
- \*Boiler 2 HWST
- \*OAT
- \*OARH
- \*Bldg. Loop S. Temp
- \*Bldg. Loop R. Temp
- \*Pump 1 Status
- \*Pump 2 Status
- \*CT Fan 1 Status
- \*CT Fan 2 Status

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- \*CT 1 VFD Fault
- \*CT 2 VFD Fault
- \*Spray Pump Status
- \*Bldg. Loop Flow Sw. Status
- \*Clg. Tower S. Temp
- \*Clg. Tower R. Temp

- \*Boiler 1 Enable/Disable
- \*Boiler 2 Enable/Disable
- \*Pump 1 S/S
- \*Pump 2 S/S
- \*Spray Pump S/S
- \*CT #1 Fan S/S
- \*CT #2 Fan S/S
- \*Bypass Valve
- \*CT #1 Fan VFD Speed
- \*CT #2 Fan VFD Speed

**-DHW Pump** shall consist of monitoring status and enabling/disabling pump.

**-FAU's** shall consist of monitoring and or controlling the following points:

- \*Discharge Air Temp
- \*Fan Status
- \*Filter DP
- \*SASD Status if present
  
- \*Fan Enable/Disable
- \*Fresh Air Damper
- \*Cooling Mode
- \*Heating Mode

-Each controller shall be housed in an enclosure complete with the necessary temperature and dp sensors. Existing F/A Damper actuator shall be reused and is assumed in good working order. Existing control cable shall be reused as much as possible.

**-MUA/Kitchen Hood** Unit will have status monitored only.

-Controllers and expanders shall be installed in a Nema 1 enclosure. All temperature sensors and current transformers shall be provided/installed as needed. Existing Bypass Valve, VFD's and Flow Switch are assumed to be working and shall be reused. Existing control wiring shall be reused as much as possible.

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-All new controllers shall be networked via Cat 6 cable. The owner will provide an IP address for remote access to the system.

**Standard HSC Project Applications shall be applied:**

- \*Engineering Drawings
- \*Custom programming to ALC and Customer standards
  - Equipment Optimization
  - Alarms Setup
  - Reports Setup
  - Trending Setup
  - Live Logic Page
- \*Custom graphics to ALC Customer standards
  - Equipment graphics
  - Central Plant graphics
    - \*\*Boilers
    - \*\*Closed Circuit Cooler
    - \*\*Pumps
- \*Startup and Commissioning on all control modules and points
- \*Project Management
- \*Free Customer Training provided at customers request (unlimited hours) – Onsite or at HSC Knoxville
- \*1-year standard warranty on ALC control modules

**Clarifications:**

- \*\*All existing damper actuators, valves, firestats, flow switches and vfd's shall be reused.
- \*\*Pricing based on walk through and the mechanical drawings that were provided for each location.
- \*\*Remote connectivity is dependent on IT policy and cooperation.
- \*\*All existing wiring and conduit shall be reused unless noted otherwise.
- \*\*Startup of controls will be performed by Controls Vendor and not via a 3<sup>rd</sup> party. If 3<sup>rd</sup> part commissioning is required, Controls Vendor will provide an additional cost.
- \*\*Work hours are to be done during normal business hours. After Hours, Weekends, and Holidays can be calculated at a different rate if required.

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\*\*Permits, and Payment/Performance Bonds are not included but can be provided at a cost.

\*\*Existing controls that are removed shall be turned over to the owner.

**Exclusions:**

-Integration to any existing system not specifically detailed within our proposal is not included.

-Life Safety Controls, Fire/Fire-Smoke control dampers, HOA Switches, VFD's, VFD installation and wiring, disconnects, starters, 120v+ power wiring, smoke detectors, including associated wiring and interlocks are not included unless otherwise detailed within proposal.

-Remote connectivity is dependent on IT policy and cooperation

-Access panels, doors, painting, patch work

-Davis Bacon Wage

-Performance/Payment Bond, Permits

-Accelerated shipping costs

**Price Breakout for Tips:**

Installation/(Program & Commissioning) Labor: 2282hrs @ \$115/hr = \$262,430.00

ALC OF561-E2 qty. 83 @ \$632ea = \$52,456.00

ALC OF683-E2 qty. 1 @ \$1,228.00ea = \$1,228.00

ALC OFBBC qty. 1 @ \$4,010.00 = \$4,010.00

ALC FIO812u qty. 1 @ \$2,628.00ea = \$2,628.00

ALC FIO48u qty. 1 @ \$1,196.00ea = \$1,196.00

ALC NSB-10K-2-D-8-A qty. 164 @ \$22.00ea = \$3,608.00

ALC NSB-10K-2-S-A qty. 4 @ \$24.00ea = \$96.00

ALC NSB-10K-2-H200-O-BB2-A qty. 1 @ \$202.00ea = \$202.00

ALC ZS2P-ALC qty. 78 @ \$84.00ea = \$6,552.00

ALC NSB-ZPS-SW2-A qty. 6 @ \$66.00ea = \$396.00

ALC NSB-ZPS-ACC07-A qty. 12 @ \$22.00ea = \$264.00

**Total Covered by Tips: \$335,066.00**

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Tips Contract# 23100201

**Tips contract number:** 23100202 (JOC contract # for construction)

23100201 HSC Building Automation & Controls Energy and Water Efficiency Goods and Services JOC

23100202 HSC Building Automation & Controls Energy and Water Efficiency Goods and Services JOC

Sincerely,

*Troy Storm*

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