

# METASYS UPGRADE PROPOSAL

January 4<sup>th</sup>, 2022

To: Craig School District

Project: **Metasys Modernization & HVAC Upgrade 2022**

Reference: **Site Survey Notes performed by Charles Ihler on 8/3/2021**



4000 W. Dimond Blvd STE 240  
Anchorage, AK 99502  
Name: Brian Johnson  
Phone: (907) 802-1099

## PRICING SUMMARY

DESCRIPTION	Total Price
Metasys Modernization & HVAC Upgrade	\$111,750.00

## SCOPE OF WORK—2022 SYSTEM UPGRADE:

### (QTY.) SYSTEM NAME

#### (1) Metasys Network Architecture:

- **ADS Server Upgrade:**
  - Furnish and upgrade Metasys to version 11
  - Furnish ADS Site Subscription (3 year) Software including:
    - Metasys Database Manager, SCT, CCT, Export Utility, Advanced Reporting, Network Engine Images, Network Engine Update Tool, Metasys Launcher
    - DVD Copy of: ADS Software Upgrade
  - Furnish and install new ADS Turnkey Server/work station to provide long term trending and enable energy saving measures.
  - Front end Retro Commissioning – all programming, graphics, schedules, dashboards included.
  - Work with SD IT department and connect BAS to school network to enable remote communications.
  - Migrate all existing data into new User Interface – configure new Graphics and build dashboards
  - Set up schedules and user profiles.
  - Work with Facilities team to configure advanced reporting and outbound notifications.

#### (7) AHU (QTY 5), MAU (1), SF (1)

- Furnish and install new DDC controller with panel; to include at each unit:
- Furnish and install start/stop, status relays for supply fan
- Provide BACnet Integration to fans VFD's.

#### (3) VMA Controllers

- Furnish and install new controller to include at each unit:
- Troubleshoot and Retro Commission existing VMA controllers (total 24)

#### (1) Heating System

- Troubleshoot and Retro Commission

#### (16) TEC Controllers

- 10 controllers currently offline
- Troubleshoot and Retro Commission

**EXCLUSIONS/CLARIFICATIONS:**

- Installation of all server software included.
- Up to 8 hours of key user training included.
- No Gateways or Middleware included with 3<sup>rd</sup> party integrations.
- BACnet interfaces for 3<sup>rd</sup> party controllers excluded unless noted in scope above.
- Excludes after-hour, weekend, or holiday work.
- Excludes any additional work not identified in scope.
- All parts, labor, travel, overnight expenses, per diem included.
- Local transportation excluded.

**Important:** This proposal incorporates by reference the Terms and Conditions attached

This Proposal is Valid Until for 30 days from the proposed date.

This proposal is hereby accepted, and Johnson Controls is authorized to proceed with the work, subject to credit approval by Johnson Controls, Inc. Milwaukee, WI.

**Johnson Controls, Inc.**

Purchaser - Company Name



Signature

Name:

CHRIS Reuten

Title:

Superintendent

Date:

1/5/2022

Signature

Name:

Title:

**Notes from 8/3/2021 Onsite visit for reference:**

Not connected to network 192.168.1.2. Recommend to update NAE to latest version and put it on the school network so we can assist remotely when needed. This will save the district a good amount of money in reduction of service costs.

No graphics. Recommend adding graphics either old UGT to the NAE or adding a server for graphics/UI and long term trending for recording old data to validate energy savings measures.

Most equipment in hand.

VFDs not integrated.. no speed control/sequence. Recommend replacing controllers with updates BACnet controller (on N2 protocol) with proper sequence. We will have to add static pressure sensors or modulate based on flow requirements of the VAV boxes.

AHC-01 (AHU-1)

Was Off, RF-0 overridden to 40%  
Shutdown low limit alarm triggered  
SA-P un-calibrated  
Building Pressure -0.28 suspect and unlikely.  
Min POs 20%

UNT-2 (EF-1)

Heating Pump 7 Off in Alarm (monitoring only)  
EF1 On and operating

AHC-03 (AHU-2)

Min Pos 10%  
AHU-2 no longer operating to sequence, controller failure?  
Occupied but no start command.

UNT-04 (HP Status)

Offline

AHC-05 (AHU-3)

AHU Fan control by Schedule. Occupancy should be scheduled, not fan control to allow for unoccupied heating operation.

AHU-3 appears to be a leaking heating valve to the coil.  
HP10/HP11 command and status do not match and are in alarm.  
DA-T sensor failure

UNT-based Room Control by Hot Deck/Cold Deck mixing with interlock from fan run.

AHC-09 (AHU-4)

Fan commanded on with no status., no control.  
EF-2 reports no status.

Room 175 (VAC-10/VAV-10) Controls Have failed but online. All unreliable. No program.

RM-170 VAC-11 no hot water for failed valve.

Room 191 VAC-12 failed thermostat or bad controller.

AHC-13 (AHU-5) Fan Start/Stop by schedule ...no unoccupied control. Need to schedule Occupied Command. Programing change required.

AHC-15 (MAU-1) Zone Thermostat Failure. Building Static Pressure sensor suspect. Filter reports "Dirty" though no fan Status.

VMA-33 Library Media Room 119 Baseboard heating overridden, mode overridden occupied.

VMA-35 Computer Room 118 Ventilation Flow overridden to 300 cfm (points not mapped for balancing)

VMA-41 Conference Room 115 Supply Flow Override to 100 cfm.

VMA-42 (Kitchen) Room sensor or wire failure.

VMA-45 Counselor Room 134 heating valve override to 30%, based on temperature of SA its unlikely this valve is operating properly.

VMA-46 (&50) Library Media Room 119 Heating Valve Override to 100%

TEC-61, 64, 65, 68, 69, 70, 91, 92, 93, 94 offline. (CUH, UHs)

TEC-085, 86, 87 UH-5 Shop Heating shows status of on but room 5 deg F under setpoint @ 64 deg. Trending shows this room sits (63-65) in last day.

Schedule has all VMAs pulling full cooling from 6 to 2P. This appears to be attempting to flush the building during occupied hours. This should be tied to school days and should probably be writing to setpoints to allow the unit to control for heat.

All pump systems in alarm (summer, not a surprise).

All AHUs have a sort of OST that doesn't appear to be calculating.

Holiday Calendar Disabled.

\*training\* (8 hours recommended)

18 system overrides. Mostly mode and heating to keep certain spaces on.

Issue with building static pressure. Likely caused by sensor tubing, on-site maintenance staff to work on this.

Appears to be a conversion from OWS, or ?? there is a manual on site for this.

AHUs run off coolest zones served; should be switched to average with a seasonal option for selecting source.

No time server, it was off 30 minutes. Restored.

**Standard Terms and Conditions – U.S.A.**

References to "products", "equipment" or "services" herein shall mean those to be furnished by Seller as identified on the applicable Seller Quotation

- (1) **AGREEMENT AND LIMITATIONS.** Buyer accepts these Standard Terms and Conditions by signing and returning Seller's Quotation, by sending a purchase order in response to the Quotation, or Buyer's instructions to Seller to begin work, including shipment of product or performance of services. Upon Buyer's acceptance, Seller's Quotation and the related terms and conditions referred to in the Quotation shall constitute the entire agreement relating to the products, equipment and services covered by the Quotation (the "Agreement"). No terms, conditions or warranties other than those identified in the Quotation and no agreement or understanding, oral or written, in any way purporting to modify such terms and conditions whether contained in Buyer's purchase order or shipping release forms, or elsewhere, shall be binding on Seller unless hereafter made in writing and signed by Seller's authorized representative. Buyer is hereby notified of Seller's express rejection of any terms inconsistent with these Standard Terms and Conditions or to any other terms proposed by Buyer in accepting Seller's Quotation. Neither Seller's subsequent lack of objection to any such terms, nor the delivery of the products or services, shall constitute an agreement by Seller to any such terms.
- (2) **TERMINATION OR MODIFICATION.** If either party materially breaches this agreement, the other party may notify the breaching party in writing, setting out the breach, and the breaching party will have 60 days following such notice to remedy the breach. If the breaching party fails to remedy the breach during that period, the other party may by written notice terminate the Agreement. These Standard Terms and Conditions may be modified or rescinded only by a writing signed by authorized representatives of both Seller and Buyer. Accepted orders may be cancelled or modified by Buyer only with Seller's express written consent. If cancellation or modification is allowed, Buyer agrees to pay to Seller all expenses incurred and damage sustained by Seller on account of such cancellation or modification, plus a reasonable profit.
- (3) **PRICE, SHIPMENT, AND PAYMENT.** Prices on accepted orders are firm for a period of 90 days from date of acceptance. Price and delivery is F.O.B. point of manufacture, unless otherwise provided. Unless otherwise agreed to in writing by Seller, all payments are due net thirty (30) days from the date of invoice. Seller may, at its sole option, have the right to make any delivery under this Agreement payable on a cash or payment guarantee before-shipment basis. In the case of export sales, unless otherwise agreed to in writing by Seller, all payments are to be made by means of a confirmed irrevocable letter of credit.
- (4) **TAXES.** All prices exclude state and local use, sales or similar taxes. Such taxes, if applicable, will appear as separate items on the invoice unless Buyer provides a tax exemption certificate that is acceptable to taxing authorities.
- (5) **DELIVERY.** The delivery date(s) provided by Seller for the product and equipment is only an estimate and is based upon prompt receipt of all necessary information from Buyer. The delivery date(s) is subject to and shall be extended by delays caused by strikes, fires, accidents, shortages of labor or materials, embargoes, or delays in transportation, compliance with government agency or official requests, or any other similar or dissimilar cause beyond the reasonable control of Seller. FAILURE TO DELIVER WITHIN THE TIME ESTIMATED SHALL NOT BE A MATERIAL BREACH OF CONTRACT ON SELLER'S PART. If Buyer causes Seller to delay shipment or completion of the product or equipment, Seller shall be entitled to any and all extra cost and expenses resulting from such delay.
- (6) **LIMITED WARRANTY.** Seller warrants that the product and equipment furnished by Seller under the Agreement will be of good quality and that the services provided by Seller will be provided in a good and workmanlike manner. If Seller installs or furnishes product or equipment under the Agreement, and such product or equipment, or any part thereof, is covered by a manufacturer's warranty, Seller will transfer the benefits of that manufacturer's warranty to Buyer. This limited warranty does not cover failures caused in whole or in part by (i) improper installation or maintenance performed by anyone other than Seller; (ii) improper use or application; (iii) corrosion; (iv) normal deterioration; (v) operation beyond rated capacity, (vi) the use of replacement parts or lubricants which do not meet or exceed Seller's specifications, or (vii) if Seller's serial numbers or warranty date decals have been removed or altered. To qualify for warranty consideration for products or equipment, at the earlier of the Buyer's discovery of the defect or the time at which the Buyer should have discovered the defect; Buyer must immediately notify Seller in writing for instructions on warranty procedures. Seller's sole obligation for defective services shall be to repair or to replace defective parts or to properly redo defective services. All replaced equipment becomes Seller's property. THIS WARRANTY IS EXCLUSIVE AND IS PROVIDED IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED.
- (7) **INDEMNIFICATION, REMEDIES AND LIMITATIONS OF LIABILITY.** In addition to Paragraph 8 below regarding patents, Buyer agrees that Seller shall be responsible only for such injury, loss, or damage caused by the intentional misconduct or the negligent act or omission of Seller. In the event Buyer claims Seller has breached any of its obligations, whether of warranty or otherwise, Seller may request the return of the goods and tender to Buyer the purchase price theretofore paid by Buyer, and in such event, Seller shall have no further obligation under the Agreement except to refund such purchase price upon redelivery of the goods. If Seller so requests the return of the goods, the goods shall be redelivered to Seller in accordance with Seller's instructions and at Seller's expense. The remedies contained in these Standard Terms and Conditions shall constitute the sole recourse of Buyer against Seller for breach of any of Seller's obligations under the Agreement, whether of warranty or otherwise. In no event shall Seller be liable for special, indirect, incidental, or consequential damages, including loss of anticipated profit, or other economic loss, or for any damages arising in tort, whether by reason of strict liability, negligence, or otherwise, regardless of whether Seller has been apprised of the possibility of such.
- (8) **PATENTS.** Seller shall indemnify, defend, or at its option settle, and hold Buyer and its directors, officers, employees, agents, subsidiaries, affiliates, subcontractors and assignees, harmless from and against any and all claims, suits, actions or proceeds ("Claims") against such parties based upon the infringement or alleged infringement, or violation or alleged violation, of (a) any United States patent and (b) any copyright, trademark, trade secret or other proprietary right of a third party which is enforceable in the United States, as a result of Buyer's use of the product or equipment within the United States, provided that: (i) Buyer gives Seller prompt written notice of any such Claim, (ii) Buyer gives Seller full authority to defend or settle any such Claim, and (iii) Buyer gives Seller proper and full information and assistance, at Seller's expense (except for Buyer's employees' time) to defend or settle any such Claim. THE FOREGOING IS IN LIEU OF ANY WARRANTIES OF NON-INFRINGEMENT, WHICH ARE HEREBY DISCLAIMED. The foregoing obligation of Seller does not apply with respect to products or equipment or portions or components thereof (a) not supplied by Seller, (b) made in whole or in part in accordance with Buyer or owner specifications, (c) which are modified after shipment by Seller, if the alleged infringement related to such modification, (d) combined with other products, processes or materials where the alleged infringement relates to such combination, (e) where Buyer continues allegedly infringing activity after being notified thereof and/or after being informed of modifications that would have avoided the alleged infringement without significant loss of performance or functionality, or (f) where Buyer's use of the product or equipment is incident to an infringement not resulting primarily from the product or equipment; Buyer will indemnify Seller and its officers, directors, agents, and employees from all damages, settlements, attorneys' fees and expenses related to a claim of infringement, misappropriation, defamation, violation of rights of publicity or privacy excluded from Seller's indemnity obligation herein.
- (9) **GOVERNING LAW.** The formation and performance of the Agreement shall be governed by the laws of the State of Wisconsin, U.S.A. Any action for breach of the Agreement or any covenant or warranty must be commenced within one year after the cause of action has accrued unless such provision is not permitted by applicable law.
- (10) **DISPUTE RESOLUTION.** Seller shall have the sole and exclusive right to determine whether any dispute, controversy or claim arising out of or relating to the Agreement, or the breach thereof, shall be submitted to a court of law or arbitrated. The venue for any such arbitration shall be in Milwaukee, Wisconsin. The arbitrator's award may be confirmed and reduced to judgment in any court of competent jurisdiction. In the event the matter is submitted to a court, Seller and Buyer hereby agree to waive their right to trial by jury and covenant that neither of them will request trial by jury in any such litigation.
- (11) **SOFTWARE LICENSE.** To the extent software is provided by Seller under the Agreement, Buyer agrees that such software may only be used in accordance with the terms and conditions of the software license agreement that accompanies the software. Buyer agrees not to directly or indirectly decompile, disassemble, reverse engineer or otherwise derive the source code for the software. If Buyer is a U.S. Government agency, Buyer acknowledges that the software licensed under the Agreement is a commercial item that has been developed at private expense and not under a Government contract. The Government's rights relating to the software are limited to those rights applicable to Buyer's as set forth herein and is binding on Government users in accordance with Federal Acquisition Regulation 48 C.F.R. Section 12.212 for non-defense agencies and/or Defense FAR Supplement 48 C.F.R. Section 227.7202-1 for defense agencies.
- (12) **MISCELLANEOUS**
- (a) **CHANGES OF CONSTRUCTION AND DESIGN:** Seller reserves the right to change or revise the construction and design of the products or equipment purchased by Buyer, without liability or obligation to incorporate such changes to products or equipment ordered by Buyer unless specifically agreed upon in writing reasonably in advance of the delivery date for such products or equipment. Buyer agrees to bear the expense of meeting any changes or modifications in local code requirements which become effective after Seller has accepted Buyer's order.
- (b) **CHARACTER OF PRODUCT AND SECURITY INTEREST:** The goods delivered by Seller under the terms of the Agreement shall remain personal property and retain its character as such no matter in what manner affixed or attached to any structure or property. Buyer grants Seller a security interest in said goods, any replacement parts and any proceeds thereof until all sums due Seller have been paid to it in cash. This security interest shall secure all indebtedness or obligations of whatsoever nature now or hereafter owing Buyer to Seller. Buyer shall pay all expenses of any nature whatsoever incurred by Seller in connection with said security interest.
- (c) **INSURANCE:** Buyer agrees to insure the goods delivered under the Agreement in an amount at least equal to the purchase price against loss or damage from fire, wind, water or other causes. The insurance policies are to be made payable to Seller and Buyer in accordance with their respective interests, and when issued are to be delivered to Seller and held by it. Failure to take out and maintain such insurance shall entitle Seller to declare the entire purchase price to be immediately due and payable and shall also entitle Seller to recover possession of said goods.
- (d) **INSTALLATION:** If installation by the Seller is included within the Seller's Quotation, Buyer shall Provide all of the following at its own expense and at all times pertinent to the installation: i) free, dry, and reasonable access to Buyer's premises; and ii) proper foundations, lighting, power, water and storage facilities reasonably required.
- (e) **COMPLIANCE WITH LAWS:** Seller's obligations are subject to the export administration and control laws and regulations of the United States. Buyer shall comply fully with such laws and regulation in the export, resale or disposition of purchased products or equipment. Quotations or proposals made, and any orders accepted by Seller from a Buyer outside the United States are with the understanding that the ultimate destination of the products or equipment is the country indicated therein. Diversion of the products or equipment to any other destination contrary to the United States is prohibited. Accordingly, if the foregoing understanding is incorrect, or if Buyer intends to divert the products or equipment to any other destination, Buyer shall immediately inform Seller of the correct ultimate destination.