

Westfield Washington Schools
Westfield High School Chiller 1 Installation - 2026

DATE: February 27, 2026

This Addendum issued prior to bidding, alters, amends, corrects or clarifies the Proposal Documents to the extent stated herein and does hereby become a part of the Proposal Documents, and will become a part of the Contract Documents of the successful bidder.

GENERAL

A. GENERAL

1. Pre-Bid walkthrough agenda with important updates is included within this Addendum for reference.
2. Sign in sheet from the walkthrough is included within this Addendum for reference.

B. SPECIFICATIONS

1. 00 10 10 – Summary of Work
 - a. Under Paragraph 1.1-C, revise the estimated chiller delivery date to **May 1, 2026**, and the substantial completion date to **June 5, 2026**.
2. 00 11 10 – Notice to Bidders
 - a. The Bid Date for the project has been changed to **March 12, 2026**. Time and location remain unchanged.
3. 00 42 00 – Bid Form
 - a. Replace the Bid Form with the attached Bid Form clarifying substantial completion date.

MECHANICAL

A. SPECIFICATIONS

1. 23 09 00 – Instrumentation and Control for HVAC
 - a. Replace this section with the attached section 23 09 00.
 - 1) Clarifications to temperature controls scope of work.

END OF ADDENDUM

PRE-BID AGENDA

PROJECT: Westfield High School
Chiller 1 Replacement

PROJECT#: 25121

MEETING DATE: 2/19/2026

TIME: 1:00 PM

MEETING AGENDA:

1. Bidding Schedule
 - a. Bids due at 2:00 PM, Thursday, March 5, 2026
 - b. Bids to be delivered per Notice to Bidders:

Westfield Washington Schools
19500 Tomlinson Road, Suite B
Westfield, IN 46074
 - c. All questions directed to Joe Chrapla (joe.chrapla@redimond.com) by 5:00 PM, Thursday, **March 5, 2026**.
 - d. Addenda tentatively scheduled to be issued February 24 and March 2.
2. Project Scope
 - a. Single Prime Contract
 - b. Receive one Trane chiller, pre-purchased by the Owner.
 - c. Demo existing chiller.
 - d. Installation of new chiller. New Chiller will require having the barrels split for egress into the room. Contractor is responsible for having Trane authorized rep oversee this process.
 - e. New controls for chilled water plant and heating water plant by Conserv. **Work to be done under separate contract by Conserv.**
 - f. Electrical connections as required.
3. Project Schedule
 - a. Chillers to ship early April. **Updated now to ship April 27, 2026.**
 - b. Building access – normal working hours. After hours if need, coordinate with Owner.
 - c. Chiller installation Substantially Complete by May 1, 2026.
 - d. ~~Temperature control work Substantially Complete by July 31, 2026.~~ **Work to be done under separate contract by Conserv.**
4. Questions?

- END -



CLIENT: Westfield Washington Schools
D&A# 25121
PROJECT TITLE: Westfield High School – Chiller 1 Replacement
DATE: February 19, 2026
TIME: 1:00 PM

PLEASE PRINT

NAME:	COMPANY:	PHONE:	E-MAIL:
Bill Eisler	RE Dimond	317-634-4672	bill.eisler@redimond.com
Joe Chrapla	RE Dimond	11	joe.chrapla@redimond.com
Derek Maue	RE Dimond	11	derek.maue@redimond.com
Josh Kaufman	Frontline	812-581 0359	JKaufman@Frontline-LLC.com
Ben Mosical	Ellis Mechanical	317 412 1502	ben@EllisMechanics/Inc.com
Steve Hicks	LONG Elec	317-496-1389	shicks@longelectric.net
Kyle Arnold	CONSERV	217-409-1051	Kyle.Arnold@conserv-tech
Chris Harris	Peine Engineering	463 304 2495	charris@peineengineering.com
Mike McConaha	Johnson Melton	317-646-2099	mconaha@johnsonmelton.com
M. Rowland	JM Rowland	317-797-3447	mrowland8685@gmail.com
Trevor Ozark	Lehman	765-617-7853	t.ozark@lehmanmechanical.net

SECTION 00 42 00 – BID FORM

FOR (PROJECT): Westfield High School Chiller 1 Replacement - 2026

TO (OWNER): Westfield Washington Schools
19500 Tomlinson Road, Suite B
Westfield, IN 46074

BY (BIDDER):

Name

Address

Contact Person

Contact Phone Number & Email

The undersigned, having become familiar with all conditions of the site, the Request for Bids and all associated Drawings and Addenda, hereby agrees to furnish all labor, materials, equipment, fixtures and incidentals required for the execution of the Project in conformance with the intent of the Construction Documents. Pursuant to these requirements, the undersigned submits the following Bid which includes all applicable taxes, overhead and profit.

Base Bid

- **Base Bid to include all work required for the installation of Owner furnished chiller and all associated work as detailed in Design Documents - Lump Sum:**

_____ Dollars (\$_____)

(State Amount in Words)

COMPLETION OF WORK:

The undersigned Bidder agrees to coordinate and expedite his Work with all contractors, and this work will be substantially complete on or before **June 5, 2026**.

CONTINGENCY ALLOWANCE:

The undersigned Bidder agrees that bid includes the \$40,000 contingency allowance as described under 01 21 00 Allowances.

ADDENDA:

Receipt of Addenda issued to the Drawings and Request for Bids is hereby acknowledged:

Addenda Nos.: _____

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Subscribed and sworn to before me by _____ this _____ day of _____, 2026.

My Commission expires _____

Notary Public

BIDDER'S SIGNATURE

IN TESTIMONY WHEREOF, the Bidder have hereunto set their hand this _____ day of _____, 2026.

Company Name _____

By _____

By _____

END OF SECTION 00 42 00

SECTION 23 09 00 – INSTRUMENTATION AND CONTROL FOR HVAC

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Section 20 00 10 Common Work Results for HVAC
- C. Section 20 00 50 Common Materials and Methods for HVAC

1.2 SCOPE OF WORK

- A. This Section shall:
 - 1. Furnish and install controls associated with Chiller-1 that integrate fully with the existing building automation system temporarily, as required, until the new BAS central plant controls are installed and come online. The existing building automation system is a Siemens controls system that will be phased out.
- B. All water temperature sensors, differential pressure sensors and switches associated with Chiller (CH-1) shall be replaced with new. Coordinate all piping needs with the chiller installation contractor.
- C. The Input/Output Summary Table on the Drawings identifies the minimum points that are to be addressed and incorporated into the Direct Digital Control (DDC) System. Any other points required to accomplish the sequences of operation specified or allow for proper operation of the equipment shall be provided at no additional cost to the Owner. The Temperature Control Contractor shall fully coordinate all necessary controls interface requirements with the Mechanical Contractor and applicable equipment prior to submittals.
- D. Furnish and install all control wiring that is a part of this contract.
- E. Furnish and install all 120-volt, 24-volt, communication wiring, data wiring, conduit and accessories to all control panels, actuators, control devices that are part of the Temperature Control System required with the replacement of the chiller.

1.3 WORK BY OTHERS

- A. Mechanical Contractor will install all taps, control valves and thermowells in piping for all temperature sensors, flow switches, pressure sensors and any other control device installed in piping.
- B. Mechanical Contractor shall fully coordinate controls interface to all mechanical equipment, with Temperature Control Contractor, prior to ordering equipment to meet intent of sequences of operations.

- C. Mechanical Contractor will install all differential pressure switches including isolation valves.
- D. Electrical Contractor provides:
 - 1. Wiring of all power feeds through all disconnects, starters and VFD's to electrical motors.

1.4 QUALITY ASSURANCE

- A. Materials and equipment shall be the catalogued products of manufacturers regularly engaged in production and installation of automatic temperature control systems and shall be manufacturer's latest standard design that complies with the specification requirements.
- B. The manufacturer of the building automation system shall provide documentation supporting compliance with ISO-9002 (Model for Quality Assurance in Production, Installation, and Servicing). The intent of this specification requirement is to ensure that the products from the manufacturer are delivered through a Quality System and Framework that will ensure consistency in the products delivered for this project.

1.5 SUBMITTALS

- A. Quantities prepared and submitted as noted in Section 20 00 10 "Shop Drawings".
- B. Submit documentation in the following phased delivery schedule:
 - 1. Valve and damper schedules including normal and fail-safe positions.
 - 2. Equipment data cut sheets.
 - 3. System schematics, including:
 - a. Sequence of operations
 - b. Point names
 - c. Point addresses
 - d. Interface wiring diagrams
 - e. Panel layouts
 - f. System riser diagrams
 - g. PDF compatible as-built drawings
- C. Upon project completion, submit operation and maintenance manuals, consisting of the following:
 - 1. Index sheet, listing contents in alphabetical order.
 - 2. Manufacturer's equipment parts list of all functional components of the system, AutoCAD disk of system schematics, including wiring diagrams.
 - 3. Description of sequence of operations.
 - 4. As-Built interconnection wiring diagrams.
 - 5. Operator's Manual.
 - 6. Trunk cable schematic showing remote electronic panel locations, and all trunk data.
 - 7. List of connected data points, including panels to which they are connected and input device (ionization detector, sensors, etc.).
 - 8. Conduit routing diagrams.

1.6 WARRANTY

- A. Provide all services, materials and equipment necessary for the successful operation of the entire BAS system for a period of one year after substantial completion of entire project.
- B. The adjustment, required testing, and repair of the system includes all computer equipment, transmission equipment, all sensors, and control devices.

PART 2 - PRODUCTS

2.1 Approved BUILDING LEVEL CONTROLLER Manufacturers/Contractors

- A. Johnson Controls – Installation by Conserv

2.2 FIELD DEVICES

A. Analog Input Sensors

1. Analog sensing devices shall be available for the measurement of common variables such as temperature, static pressure, differential pressure, humidity, fluid flow, etc. All devices shall be standard manufactured for the purpose intended with an output range as specified. High impedance resistive temperature elements shall not be acceptable to reduce transient noise and voltage coupling and damage at the DDC controller.
2. All temperature measuring sensors shall have the capability of providing local indication at the sensing location and specifically at those locations shown on the point chart.
3. Duct temperature sensors shall incorporate a Thermistor bead embedded at the tip of a staticless steel tube. Probe style sensors shall be used in all air handling and duct applications. No averaging sensors allowed.
4. Duct mounted sensors mount through a hole in the duct and be positioned so as to be easily accessible for repair or replacement. A seal shall be used on the sensor assembly to prevent air leaks.
5. Immersion sensors shall be employed for measurement of temperature in all chilled and hot water applications as well as refrigerant applications. Thermal wells shall be brass or stainless steel for non-corrosive fluids below 250°F and 300 series stainless steel for all other applications.
 - a. Sensor and well shall be supplied as a complete assembly including well head. A thermal conductive compound shall be used in the sensor / well assembly.
 - b. All thermal wells and sensors shall be mounted to allow easy access to sensor for repair or replacement. All thermal wells are to be installed by the Mechanical Contractor.
6. When thermowells are required, sensor and well shall be supplied as a complete assembly including well head. Thermal conductive compound shall be used in sensor/well assembly.
7. Thermowells constructed to be compatible with the medium being measured.
8. All thermowells and sensors mounted to all easy access to the sensor for repair or replacement; installed as part of the piping work.
9. Outside air sensors designed to withstand the environmental conditions to which they will be exposed; equipped with solar shields.

10. Accuracies: as follows, including errors associated with sensor, leadwire and A to D converter.

	<u>Point Type</u>	<u>Accuracy</u>
a.	Chilled Water Temperature	1.0°F
b.	Sensors Used in Calibrations	0.5°F

B. Pressure Sensors and Transmitters

1. Pressure sensor construction compatible with the medium being measured.
2. All pressure sensors sized to withstand two times (2x) the average without damage and to hold calibrated accuracy when subject to a momentary forty percent (40%) overrange input.
3. Pressure measurement accuracy within one percent (1%) of the span over an ambient operating temperature of 30°F to 140°F.
4. Differential pressure sensors and transmitters used for flow measurement: sized to the flow sensing device and be supplied with the proper shutoff and bleed valves as required.

C. Differential Pressure Switches

1. Pressure differential switches incorporate corrosion resistance, sensing elements of bourdon tube, bellows or diaphragm type, have tamper-proof adjustable range and differential pressure settings; operate automatically and reset automatically when conditions return to normal.
2. Pressure sensor switch contacts: snap action type.
3. Complete Sensor Assembly protected against vibration at all critical movement pivots, etc.

D. Relays

1. Control relays rated for the application, equipped with Form C contacts, in a dustproof enclosure.
2. Relay contacts: silver cadmium with a minimum life span rating of one (1) million operations. Contacts shall be sized appropriately for intended use and amperage.
3. Relay coils equipped with coil transient suppression.
4. All interface relays must be of two-piece construction consisting of a plug in relay and a base. Maintenance personnel shall be able to change out the relay by plugging a new relay in the base. Relays requiring breaking of wiring connections for maintenance purposes are not permitted.

E. Wire and Cable

1. General: provide all wire and cable required for this installation including connection to existing system.
2. Control wiring:
 - a. Control wiring for Digital Functions: 18 AWG minimum with 300-volt insulation.
 - b. Control wiring for Analog Functions: 18 AWG minimum with 300-volt insulation, shielded 2 or 3 wire to match analog function hardware.
 - c. Control wire and cable shall be run in continuous lengths from control point to control point with no splices allowed.
 - d. Use 600V insulation if installed in conduit with 480V power wire.
 - e. All control wiring and cable shall be plenum rated except when installed in conduit.
 - f. All control wiring and cable shall be color coded "purple".

F. Field Equipment Panels

1. Panels shall be pre-wired and piped and house all controls, transducers, transformers, relays, switches, etc., to coordinate BAS components to achieve specified Direct Digital Control (DDC) sequences.
2. Provide NEMA 1 type enclosures, factory fabricated steel or aluminum totally enclosed and equipped with a hinged front door having locking latch. All cabinet locks shall be keyed alike. BAS contractor shall furnish required number of field equipment panels, located adjacent to DDC controllers as necessary to accommodate all panel mounted field equipment.

G. Current Sensing Relays

1. Sensing relay shall be a solid-state electronic device with split-core design to eliminate the need to remove power conductor for installation or servicing.
2. Amperage rating of 0-135 Amps.
3. Trip set point shall be adjustable to +/- 1% of range. Provide a trip LED. Provide trip set calibration on all current sensors.
4. Sensor supply current is induced from monitored conductor. Minimum conductor current required is 2 Amps. Provide a power LED to indicate that power is available at the current sensing relay.
5. Sensor shall have 600 VAC ms isolation.
6. Current sensor shall be Veris Hawkeye Model H722.

H. Refrigerant Monitoring System

1. Provide all equipment, materials, labor and services to furnish and install a refrigerant detection, monitoring and control system as indicated on the drawings and specified in this section.
2. Refrigerant monitor shall use infrared technology to detect the presence of refrigerant and be capable of incorporating future alternative refrigerants. Unit shall be compound specific and be calibrated for refrigerant in use. Refer to equipment schedules. Sensing range shall be 0-1000 parts per million (ppm) or as required for refrigerant in use.
3. System components shall be designed for 115-volt operation. Units shall be designed for ambient operating temperatures of 40°F to 105°F.
4. System components shall be certified by UL and CSA requirements. Unit manufacturer shall be certified to ISO-9002 requirements.
5. System shall be furnished with the following:
 - a. Microprocessor based operating system
 - b. Two alarm levels
 - c. Time delays
 - d. LCD display and keypad
 - e. Built-in audible alarm with manual silence switch
 - f. Built-in visual alarm
 - g. Infrared sensing cells/sniffers. Minimum (2) Unless noted otherwise.
6. System shall be designed to provide the following operation modes:
 - a. Exhaust Fan Actuation (Under Separate Project)
 - b. Intake Damper Actuation (Under Separate Project)
 - c. Activate remote audible alarm
 - d. Activate remote visual alarms
 - e. Deactivate boilers within the Chiller Room.(Under Separate Project)

- f. Deactivate water heaters within the Chiller Room.(Under Separate Project)
 - g. Send alarms to the Building Automation System (BAS)
 - h. 4-20 mA output
- 7. Audible alarms shall have a send power level of 96 Db measured 10 ft from device and be suitable for indoor or outdoor applications.
 - 8. Visual alarms shall be amber colored lights suitable for indoor or outdoor applications. At a minimum, one visual alarm shall be provided outside each exit door from the chiller room, and one visual and audible alarm shall be provided within the chiller room.
 - 9. Plastic laminate safety signage shall be provided outside each exit door from the chiller room. Signage shall be minimum 3/4" black letters on a white background. "IF LIGHT IS ON, DO NOT ENTER MECHANICAL ROOM." Confirm wording with Engineer/Owner.
 - 10. Provide to the Owner a complete calibration kit and testing kit with one year's supply of testing materials and one spare infrared sensing cell.
 - 11. Manufacturers authorized representative shall start-up, test and commission the system in accordance with manufacturer's written instructions.
 - 12. Manufacturers authorized representative shall provide a minimum of 2 hours of Owner training in the proper operation, calibration and maintenance of the system.
 - 13. Manufacturers:
 - a. MSA/Bacharach MGS-402
 - b. Genesis Sherlock 202
 - c. Sentech Corporation Model IR-SNIF-MCD2
- I. Liquid Flow Switch
 - 1. Provide liquid flow switch utilizing bronze paddle sized appropriately for pipe size.
 - 2. Contacts shall be snap acting SPDT and rated for 10 Amps @ 120 VAC.
 - 3. Temperature operating range shall be 32 degrees F to 250 degrees F.
 - 4. Provide liquid flow switch for operational status of water systems as indicated in the sequence of operation.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Project Management as a Prime Contractor - Provide a designated project manager who, for duration of construction, will be responsible for the following:
 - 1. Construct and maintain project schedule.
 - 2. On-site coordination with all applicable trades and subcontractors.
 - 3. Authorized to accept and execute orders or instructions from Owner/Engineer.
 - 4. Attend project meetings as necessary to avoid conflicts and delays.
 - 5. Make necessary field decisions relating to this scope of work.
 - 6. Coordination/Single point of contact.
- B. Electrical Installation
 - 1. Furnish and install sensor, LAN, actuator and interlock wiring as specified in Division 26 and 27 or shown on the plans. Connect controls in accordance with approved wiring diagrams. Wiring requirements are as follows:

- a. 110-volt power and discrete control wiring: #12 AWG THHN.
 - b. Sensor/low voltage control wiring: #18 AWG twisted/shielded pair.
 - c. Communication wiring: #20 AWG twisted/shielded pair.
2. Wiring installation minimum requirements, in accordance with Owners' standards, as follows:
- a. Outdoors: Apply raceway products as specified below unless otherwise indicated:
 - 1) Exposed Conduit: GRC.
 - 2) Concealed Conduit, Aboveground: RNC, Type EPC-40-PVC.
 - 3) Underground Conduit: RNC, Type EPC-80-PVC, direct-buried.
 - 4) Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
 - 5) Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.
 - b. Indoors: Apply raceway products as specified below unless otherwise indicated.
 - 1) Exposed, Not Subject to Physical Damage: EMT.
 - 2) Exposed and Subject to Physical Damage: GRC. Raceway locations include the following:
 - a) Loading docks.
 - b) Corridors used for traffic of mechanized carts, forklifts, and pallet-handling units.
 - c) Mechanical and Boiler Rooms.
 - d) Electrical Rooms.
 - e) Utility tunnels.
 - c. Concealed in Ceilings and Interior Walls and Partitions: EMT.
 - d. Concealed in Exterior Walls: RNC, Type EPC-40-PVC.
 - e. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
 - f. Damp or Wet Locations: GRC or IMC.
 - g. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4 stainless steel in institutional and commercial kitchens and damp or wet locations.
 - h. Space Sensors: All wiring and cables in EMT within wall construction. Use of wire mold is not permitted unless indicated on drawings or approved by Engineer.
 - i. Control wiring shall be routed in building cable trays or be supported from J-hooks.
 - j. All control wiring shall be completely independent of all other computer/technology wiring. Control system shall be connected to new/existing network system in only one place.
 - k. All shield to be grounded at the DDC panel, shields at the sensors or transducers to be folded back and taped.
 - l. All digital input and output signal wiring between field devices and panel must be "continuous run". No splices will be permitted. Connections (including shield) must be soldered and taped. Signal integrity must be checked with an oscilloscope and appropriate signal generator and lines so tagged. Inform the Engineer of any such work before implementation.
 - m. Do not route cable diagonally across the building.
 - n. Control shall not be routed in the same conduit as power.

- o. Running wire above bar joist in roof/floor metal deck flutes is not permitted. Wire to be run above bottom chord of truss and supported with J-hooks and wire ties at maximum 4' o.c.
- p. Line voltage (48 volts and above) shall be kept separated from low voltage within the control panel. Line voltage terminals shall be covered or protected in such a way that accidental contact with line voltage is prevented.
- q. Temperature Control Contractor shall insure that no low voltage wiring is exposed to high voltage wiring within starters, control cabinets, etc. Insulation rating on control wiring must match high voltage wiring rating (above 300 volts) within starters or devices such as start/stop relays and current sensors must be mounted in companion enclosures. Follow guidelines in Div. 26 and/or the NEC, whichever is most strict.

3.2 TRAINING

- A. The contractor shall provide factory trained instructor to give full instruction to designated personnel in the operation of the system installed. Instructors shall be thoroughly familiar with all aspects of the subject matter they are to teach. The contractor shall provide all students with a student binder containing product specific training modules for the system installed. All training shall be held during normal working hours of 8:00 am to 4:30 PM weekdays.
- B. Provide 16 hours of training for Owner's designated operating personnel. Training shall include:
 - 1. Explanation of drawings, operations and maintenance manuals.
 - 2. Walk-through of the job to locate control components.
 - 3. Operator workstation and peripherals.
 - 4. DDC controller and ASC operation/function.
 - 5. Operator control functions including graphic generation and field panel programming.
 - 6. Operation of portable operator's terminal.
 - 7. Explanation of adjustment, calibration and replacement procedures.
 - 8. Student binder with training modules.
- C. Since the Owner may require personnel to have more comprehensive understanding of the hardware and software, additional training must be available from the BAS contractor. If such training is required by the Owner, it will be contracted at a later date.

END OF SECTION 23 09 00