

Addendum 1



300 East Locust, Ste. 313, Des Moines, Iowa 50309 (515) 243-0569

March 5, 2010

West Hancock High School Phase 2

Alvine No. 2009 0801

Bid Date: March 15, 2010

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Specifications and drawings shall be considered modified or revised as hereinafter described. Revisions to the drawings are referenced by the drawing number.

Changes to the Project Manual

Architectural Specification Items:

1AS1. Section 09900 - Painting

1. The following items/surfaces shall be painted (colors to be selected by Architect):
 - A. All new wood siding (patching locations) shall be painted to match existing.
 - B. Boiler Room roof structure/deck and walls (steel should be primed in the factory).
 - C. Steel equipment support members (exterior) above the roof.
 - D. At locations where a wall is patched with gypsum wallboard (GWB), paint the entire wall from edge of wall to edge of wall.

Mechanical Specification Items:

1MS1. Section 00100 – Instruction to Bidders

1. Page 00100-2, Paragraph 1.5D: Replace with the following:

“Bids will be opened and read publically. The successful bidder will be notified after a final decision is reached by the West Hancock School Board at their next regularly scheduled meeting on 3/15/2010.”

1MS2. Section 00303 – Bid Proposal

1. Page 00303-1: Add the following:

“ALTERNATE NO. 2: Add/Deduct cost to complete the required work in a single phase.

ADD _____ Dollars

(\$_____)

1MS3. Section 01230 – Alternates

1. Page 01230-1: Add the following:
 - “B. Alternate No. 2: Add/Deduct cost to complete the required work in a single phase. The School district will allow work to continue past the original Phase 1 completion date of August 6, 2010. The Contractor will be allowed to complete the project while school is in session. A detailed schedule will be required for shifting of students to allow work in groups of 2 - 4 classrooms/spaces at any given time. The Contractor is required to maintain heat and water to the building at all times when students are present.”

1MS4. Section 02525 – Geothermal Wells

1. Add the attached “Bore Log” to the end of Section 02525.

1MS5. Section 15181 – Hydronic Piping

1. Page 15181-3, Subparagraph 2.1.A.2: Add the following:
 - “f. HCI Terminator B.”
2. Page 15181-3, Subparagraph 2.1.A.5: Add the following:
 - “c. HCI Terminator A.”
3. Page 15181-3, Subparagraph 2.1.A.6: Add the following:
 - “f. Patterson Pump.”

1MS6. Section 15185 – Hydronic Pumps

1. Page 15185-3, Paragraph 2.1.A: Add the following:
 - “10. Patterson Pump.”
2. Page 15185-4, Paragraph 2.4.A: Add the following:
 - “7. Patterson Pump.”

1MS7. Section 15514 – Finned Water-Tube Boilers

1. Page 15514-2, Paragraph 2.1A: Add the following:
 - “5. RBI Boilers.”

1MS8. Section 15745 – Water-Source Heat Pumps

1. Page 15745-4, Subparagraph 2.2.E.2: Add the following:
 - “Solenoid valve shall be factory installed and wired. Valve shall open on compressor start and close on compressor stop.”

2. Page 15745-6, Subparagraph 2.3.E.2: Add the following:
“Solenoid valve shall be factory installed and wired. Valve shall open on compressor start and close on compressor stop.”
3. Page 15745-7, Paragraph 2.4.A: Add the following:
“4. Hose connections are not required on console type heat pumps. All valves, strainers, fittings etc noted above are required.”

1MS9. Section 15785 – Air-to-Air Energy Recovery Units

1. Page 15785-6, Replace Paragraph 2.2.N with the following:
“1. Control System:
 1. Control system shall be a factory-mounted stand-alone microprocessor-based DDC, necessary sensors and interfaces to monitor and operate all functions as outlined in the equipment/control schedule or required for complete unit operation (heating, cooling, frost control, damper and sequencing).
 2. The DDC shall be equal to Delta Native BACnet applications controller that can communicate on an RS-485 LAN using the BACnet MS/TP protocol.
 3. Control system shall be mounted in the unit main control compartment.
 4. Integral control panel shall be provided with a hinged access door and a locking device.
 5. Control panel compartment heaters and thermostats shall be provided if control panels cannot be protected from minimum ambient temperatures.
 6. All control devices, except those not mounted directly to the unit, shall be factory-mounted and wired. Control panel shall have a labeled strip to connect all wires for field-installed control components.
 7. Factory-mounted DDC control system shall be factory-programmed and run-tested prior to shipment to verify functions and logic.
 8. Automatic unit start-up is provided via an external dry contact provided by others.
 9. A unit-mounted intelligent programmable interface device shall be included for communication, display and setpoint control.
 - a. A flow schematic with sensor and component identification and location, sequence of operation and factory setpoints shall be included with submittals. A wiring schematic provided with the unit shall be completed in ladder/logic format with component labeling according to line numbers and a completed bill of materials prior to shipment.
 10. Building BAS system shall monitor/adjust the following points:
 - a. Enable/disable
 - b. Supply fan status
 - c. Exhaust fan status
 - d. Wheel status
 - e. Unit alarm
 - f. Setpoints
 - g. Supply air temperature
 - h. Outside air damper position
 - i. Exhaust air damper position”

Changes to Drawings

Architectural Drawing Items:

1AD1. Sheet D101 – Main Level Demolition Floor Plan

1. Remove the existing ceiling in the Boiler Room. Therefore, the roof structure will remain exposed in the boiler room.
2. Revise the note pointing to Boiler Room 90 to read:

“PREPARE WALLS AND ROOF STRUCTURE/DECK FOR NEW PAINT”
3. Remove existing suspended acoustical lay-in ceilings in corridors as required for installation of mechanical piping (see Mechanical Drawings). Salvage all ceiling tiles for reuse. Reuse of grid pieces is acceptable if the grid is not damaged during removal. Replace all damaged ceiling grid and tiles that are damaged due to construction procedures in this project.
4. Revise the note reading “REMOVE ACT FLOOR” to read:

“ASBESTOS TILE REMOVED BY OTHERS – NOT IN CONTRACT”
5. At all locations noting mechanical equipment (i.e. fin tube radiators, HVAC units, Window ACs, etc.) to be removed, refer to mechanical drawings for more information. This illustration is showing removal of mechanical items only as it coordinates with architectural items.

1AD2. Sheet A101 – Main Level Floor Plan

1. Revise the note pointing to Boiler Room 90 to read:

“PAINT WALLS AND ROOF STRUCTURE/DECK”
2. See the attached Sketch ADD#1-A1 for dimensions within the Lunch Room 1.

General Architectural Items:

1. Penetrations will be made for new equipment and equipment structure above the roof. Maintain all roof warranties as the result of these penetrations. Consult with manufacturer for warranty information and for proper boots/flashing necessary to maintain the warranties.
2. The Acoustical Ceiling Specification Section 09510 is only provided for patching that may be necessary due to the work above the ceiling. No completely new ceilings are included in this project.
3. The unit prices requested in Section 01210 are requested for the purpose of establishing a unit price for change orders that may be the result of unforeseen patching or floor/ceiling repair.

Mechanical Drawing Items:

1MD1. Sheet M301 – Mechanical Details

1. Detail 6/M301 – Gas Water Heater Detail: Thermostatic mixing valve shown shall be new. Valve to be manufactured by Leonard Valve Company, Powers or Symmons Industries.

1MD2. Sheet M401 – Mechanical Schedules

1. Vertical Cabinet Unit Ventilator Water Source Heat Pump Schedule: Add note as follows:

“Provide BAC-net or Lonworks interface for central BAS workstation. Required functions shall be as specified in Section 15745 – Water Source Heat Pumps and Section 15785 – Air-to-Air Energy Recovery Units.”

1MD3. Sheet M402 – Mechanical Control Schematics

1. Detail 4/M402 – Boiler Control Schematic: All Boiler Control noted shall be by the central BAS system. In addition to outdoor air temperature, the boilers shall also be enabled by a call for heat from the heat pump loop.

END

AWL/mkm

BID PROPOSAL

OWNER: West Hancock CSD

PROJECT: West Hancock High School Geothermal Project
510 9th Ave. SW, Britt, Iowa 50423

Date bid submitted:
March 15, 2010

PROPOSAL OF _____

organized and existing under the laws of the State of _____ and doing business as

(a corporation / a partnership / an individual) _____

TO: West Hancock CSD
510 9th Ave. SW
Britt, Iowa 50423
Attn: Mr. Richard Keith

The bidder, having become familiar with the conditions affecting the cost of the work at the place where the work is to be done, and with the related specifications and other contract documents, hereby proposes and agrees to furnish all labor, materials, necessary tools, expendable equipment and all utility and transportation services necessary to perform and complete all work required for the installation of a new geothermal heat pump system which shall include, but not be limited to, a geothermal loop field, new classroom heat pump units, new roof-mounted energy recovery units, new mechanical piping and sheet metal ductwork, new electrical power distribution to heat pump units, new heat pump unit temperature controls, structural and architectural building modifications, and any additional work, in accordance with the contract documents, within the time set forth hereinafter, and at the prices stated below.

The bidder agrees to immediately commence ordering equipment upon award of contract and to proceed with all possible speed toward completion of work required.

BASE BID: _____ Dollars
(\$_____)

ALTERNATE NO. 1: Add Performance Bond and Labor and Material Payment Bond:

ADD _____ Dollars
(\$_____)

ALTERNATE NO. 2: Add/Deduct cost to complete the required work in a single phase.

ADD _____ Dollars
(\$_____)

UNIT PRICE NO. 1: Add or delete additional carpet flooring per square yard installed.

Unit Price: \$_____

UNIT PRICE NO. 2: Add or delete additional resilient tile flooring per square foot installed.

Unit Price: \$ _____

UNIT PRICE NO. 3: Add or delete additional acoustical ceilings per square foot installed.

Unit Price: \$ _____

VOLUNTARY SUBSTITUTIONS: The undersigned bidder proposes the following voluntary substitutions with the understanding that the Base Bid and all Alternates are based on products specified or approved in addenda:

<u>Product</u>	<u>Manufacturer</u>	<u>Model No.</u>	<u>Difference in Cost (Deduct)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SUB-CONTRACTOR LIST:

The undersigned proposes the following Sub-Contractors:

General: _____

Mechanical: _____

Electrical: _____

Technology: _____

Acknowledgement of receipt of Addenda No. _____ through No. _____.

Completion Time: _____ days from award of contract.

Bidder shall indicate any exceptions to the specifications in the space below. If none, so indicate.

Dated this _____ day of _____, 20_____

Firm Name: _____

Signature: _____ Title: _____

Address: _____

Firm's Fed. I.D. No.: _____

Telephone No.: _____

Fax No.: _____

Formation Thermal Conductivity Test Report

Date September 9-11, 2009
 Location Britt, IA
 Undisturbed Soil Temperature Approx. 52.5°F

Borehole Data – As Provided by Barker, Lemar Geothermal Services

Borehole Diameter 4 inches
 Borehole Depth 15 ft

Formation Log	Topsoil/clay	0'-8'
	Brown clay	8'-12'
	Gray clay	12'-15'

U-bend Size 1 inch HDPE
 U-Bend Length 300 ft
 Grout Type GeoPro TG Lite
 Grout Solids 4:1 sand to bentonite ratio
 Grouted Portion Entire bore

Test Data

Test Duration 41.9 hrs.
 Average Voltage 238.5 V
 Average Power 6,122 W
 Total Heat Input Rate 20,895 Btu/hr
 Calculated Circulator Flow Rate 6.7 gpm
 Standard Deviation of Power 1.55%
 Maximum Variation in Power 3.52%

West Hancock High School, Britt, IA September 9-11, 2009

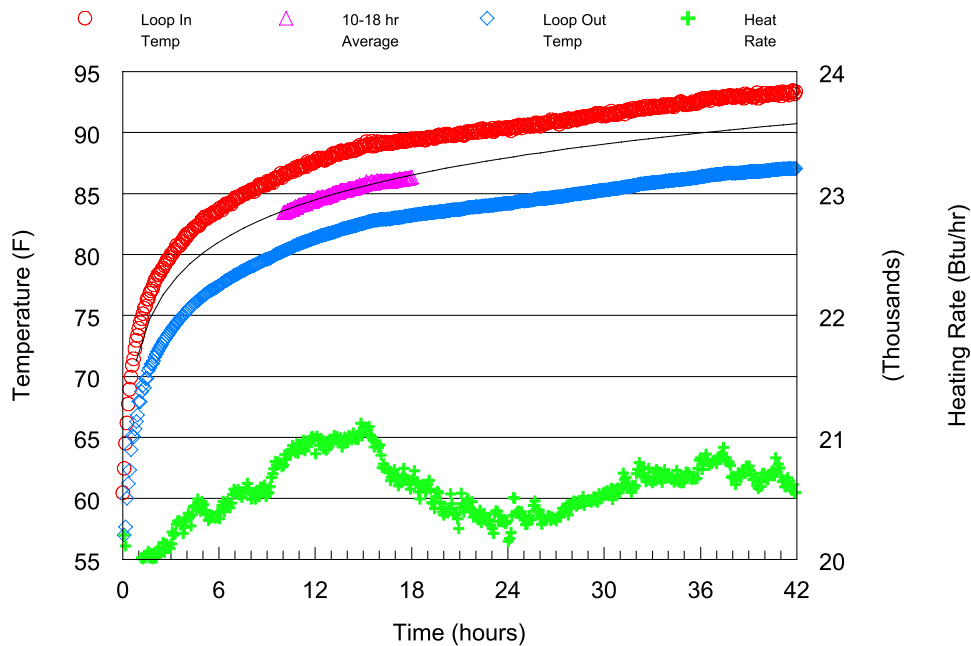


Figure 1: Temperature versus Time Data

REINSTALL EXISTING SALVAGED WINDOW IN EXISTING FRAME

REINSTALL EXISTING SALVAGED WINDOW IN EXISTING FRAME

REPLACE CARPET ONLY AT EXISTING UNIT REMOVAL

PATCH INTERIOR FRP AND GWB @ FORMER WINDOW

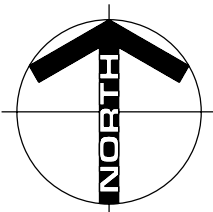


NEW RT

NEW RT

PATCH INTERIOR FRP AND GWB @ FORMER WINDOW

ADJOINING ELEMENTARY SCHOOL

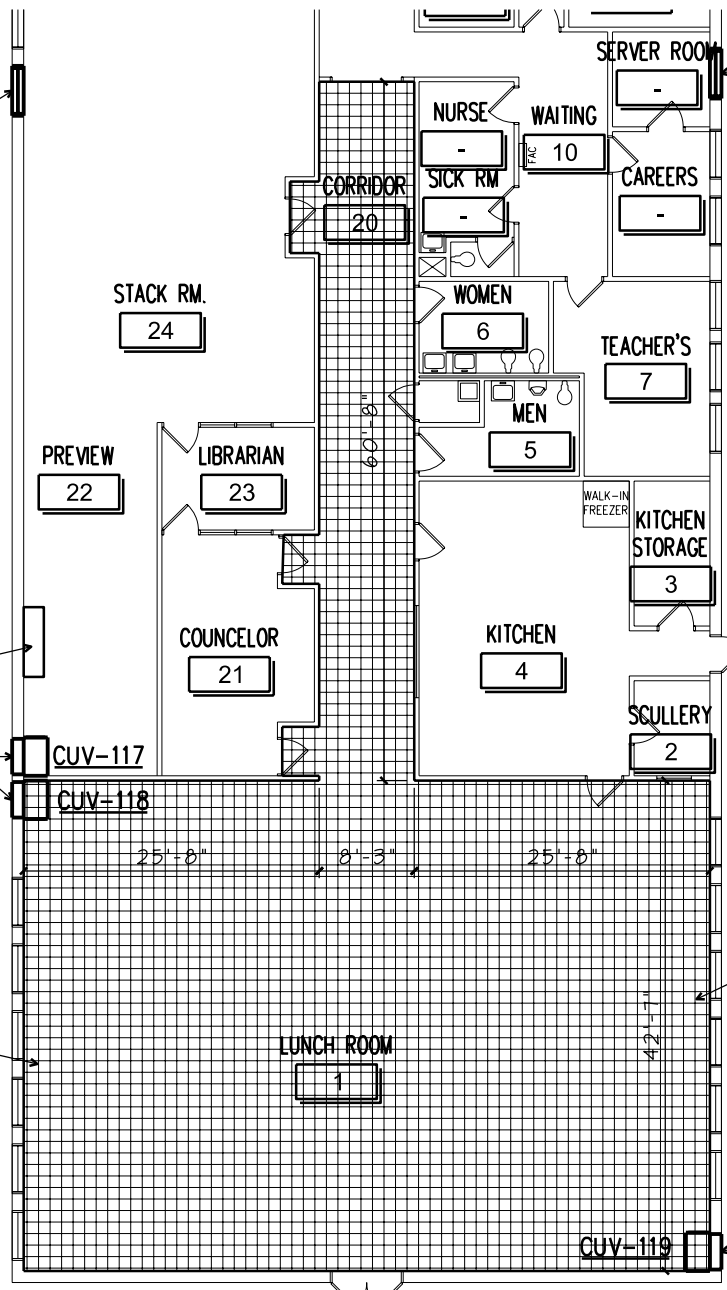


Accord
architecture.
208 East State Street
P.O. Box 826
Mason City, Iowa 50401
641-423-4784 Fax 641-423-9244

Project Title WEST HANCOCK HIGH SCHOOL
HVAC UPDATES
Sheet Title FLOOR PLAN

SCALE: 1/16" = 1'-0"
Reference Sheet A101
Sketch Number ADD#1-A1

Project Number 2916
Date MARCH 5, 2010
Drawn By R. KIBBEE



CUV-117
CUV-118

CUV-119