#### ADDENDUM NO. 01

#### TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Replace Chiller & Fan Coil Units Oakview State School Monett, Missouri PROJECT NO.: E2331-01

Bid Opening Date: 1:30 PM, Tuesday, July 9, 2024 (Unchanged)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

#### **SPECIFICATION CHANGES:**

1. <u>Section 004113 – BID FORM</u>

**USE THE BID FORM INCLUDED WITH THIS ADDENDUM FOR SUBMITTING BID.** Do not use the BID FORM found on the MissouriBUYS website. Be sure to use the BID FORM labeled Addendum 01 in the header.

The BID FORM adds Alternate No. 2.

- 2. Section 012300 Alternates
  - a. ADD paragraph 3.1.B. as follows:
    - B. Alternate No. 2: Remove all existing piping insulation from existing heating hot water, chilled water, condensate, and refrigerant piping, and replace with new insulation per the specifications.
- 3. Section 230719 HVAC Piping Insulation
  - b. ADD 1.1.A.4 as follows:
    - 4. Condensate drain piping, indoors
  - c. ADD 3.11.D as follows:
    - D. Condensate Drain Piping:
      - 1. Flexible elastomeric: 3/4 inch thick.

#### **DRAWINGS CHANGES:**

- 1. Sheet M-101 See Attached revised sheet M-101
  - a. ADD alternate #2 Special Notes.
  - b. DELETE three-way valves at DOAS units on Mechanical Piping Plan.

- 2. Sheet M-102A See Attached revised sheet M-102A
  - a. ADD alternate #2 Special Notes.
- 3. Sheet M-500 See Attached revised sheet M-500
  - a. Detail #1 and #2: ADD backflow preventer and pressure reducing valve note to Heating Water and Chilled Water Piping Diagrams.
  - b. Detail #3: ADD control valve note to DOAS Unit Piping Detail.
- 4. Sheet M-600 See Attached revised sheet M-600
  - a. ADD backflow preventer and pressure reducing valve sections to Hydronic Specialties Schedule.

### **GENERAL COMMENTS:**

- 1. The Pre-Bid Meeting was held June 25, 2024. The attendance sheet is included in the attachment.
- 2. For site access prior to bid date, contact Guy Manning at 417-766-4761.
- 3. For questions regarding bidding requirements or MBE/WBE/SDVE goals contact Paul Girouard, Contract Specialist at 573-751-4797 or Paul.Girouard@oa.mo.gov
- 4. **As of July 1, 2020,** all MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No other certifications from other Missouri certifying agencies will be accepted.
- 5. MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid. Any questions please contact Paul Girouard.
- 6. The Contractor shall pay not less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed, as determined by the Missouri Department of Labor and Industrial Relations. Bidders are to adhere to Prevailing Wage Hourly Rate of Wages, and the Department of Labor and Industrial Relations can be contacted to determine the applicable wage rate for the work on this project.
- 7. Coordination:
  - a. The chiller disconnect switch will be replaced by the Owner during construction. Contractor shall coordinate with Owner for timing of replacement.
- 8. The following questions were received:
  - a. Will press fittings be allowed on copper piping?
    - i. Press fittings will be allowed on copper piping 2" and less.
  - b. Should the DOAS coil valves be 3-way (as shown on page M101) or 2-way (as shown on M500)? During the meeting, you indicated to follow detail 3 on M500 (2-way).
    - i. These valves should be two-way as shown on M-500.

- c. Are we supposed to use pressure independent control valves for the chilled water on the Fan coil units (Detail 5, M500) only or are pressure independent control valves required for the hot water as well?
  - i. Pressure independent control valves shall be used for control valves on heating hot water as well.
- d. The sequences on page M-501 indicate that the chiller controls (and boiler controls) are to provide the control of the chilled water (and hot water system). Should we plan for the chiller and boiler to do that control directly or should the building automation system controllers provide direct control of those systems?
  - Chiller and boiler factory controls are to provide control of equipment such as internal valves and staging. BAS shall monitor points from each system as specified and control system pumps.
- e. Considering that the DOAS units will have factory controls, will they be able to control the run-around reheat coils directly or will that need to be done by the building automation system?
  - i. Control of the DOAS unit run-around loop shall be by the BAS.
- f. Since the Division 26 occupancy sensors will command the exhaust damper actuators directly, do they need to be monitored (or controlled) by the building automation system?
  - i. BAS shall control and monitor position (open/closed) of exhaust system motorized dampers.
- g. Interpretation of spec. for SA and OA ductwork to be BOTH lined AND wrapped. Is this correct?
  - i. Per specification section 230713 / 3.9, these ducts are only required to be wrapped.

#### **ATTACHMENTS**:

- A. Pre-Bid Meeting Sign-In Sheet (2 Pages)
- B. Section 00413 BID FORM (5 Pages)
- C. M-101 Addendum 01 Revision (1 Page)
- D. M-102A Addendum 01 Revision (1 Page)
- E. M-500 Addendum 01 Revision (1 Page)
- F. M-600 Addendum 01 Revision (1 Page)

END ADDENDUM 01

Name	Company & Title	Phone & Fax	E-Mail Address
David Burkett	FMDC		david. burkette as. mo, 504
Ryan Abbott	FMDC	(573) 298-1967	Ryan. Abbotta Oa. mo.gov
Dustris Brown	JOHNSON CONTROLS, INC	417-413-8249	dustin. W. brown@jci.com
TREVOK STAUDICH	VAZQUE2	913 710 8009	trevorso VAZQUEZ CC. com Jesse K@ VAZQUEZ CC. com
TAIR GALLER	ENUNOTECH	913-238-1727	JAMES G Q ENVIROTECHKS.com
Amber Tanner	MSI Constructors	417-881-0903	estimating amsi constructors. cor
DON UAGNER	OA-FMDC	816-565-5098	DON. WAGNER & OA.MO. GON
Gr Maddida	of Func	417-766-4761	G.y. worlding Con mo. Gov
Bruce Dahlstro.		(417) 434-655	3 Bruce. Dahlstomwoa.ma

JONES CJD ENGINEERING (417) 877.1700 rjonesecjd-eng.com FYAN

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Control Service (o

417. 234.0201 Zaltis@ Contolerise. Com

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# STATE OF MISSOURI

### Per Addendum 01

Bid Time: <u>1:30 PM</u>
Bid Date:

### **SECTION 004113 - BID FORM**

1.0	BID	
	A. From:	(Bidder's Name)
		herein after called the "Bidder".
	B. To:	Director, Division of Facilities Management, Design and Construction Room 730, Harry S Truman State Office Building 301 West High Street Jefferson City, Missouri 65101
		herein after called the "Owner."
	C. For:	Replace Chiller & Fan Coil Units Oakview State School Building Monett, Missouri
	D. Project Number:	E2331-01
		hereinafter called the "Work."
	E. Documents:	The undersigned, having examined and being familiar with the local conditions affecting the work and with the complete set of contract documents, including the Drawings, the Invitation For Bid, Instructions To Bidders, Statement of Bidders Qualifications, General Conditions, Supplement to General Conditions, and the technical specifications, including: addenda number through hereby proposes to perform the Work for the following:
	F. Bid Amount:	
		Dollars (\$)
	H. Alternates:	Alternate No. 1: Install (4) fan coil units in new mechanical closets in lieu of above ceiling, as indicated by notes and details on the drawings labeled "Alternate #1." Includes revisions to acoustical grid ceilings and construction of new closet partition walls with doors.
		Dollars (\$)
		Alternate No. 2: Remove all existing piping insulation from existing heating hot water, chilled water, condensate, and refrigerant piping, and replace with new insulation per the specifications.
		Dollars (\$)
• •		
2.0		CENTAGE OF PARTICIPATION PROJECT GOALS
	certified by the State Section 34.074, RSM	ic goals are: <b>MBE 10%</b> , <b>WBE 10%</b> , and <b>SDVE 3%</b> . NOTE: Only MBE/WBE firms of Missouri Office of Equal Opportunity, and SDVE(s) meeting the requirements of Io, and 1 CSR 30-5.010, as of the date of bid opening can be used to satisfy the articipation goals for this project.
3.0	BID BOND	

A. Accompanying the bid is: \_\_\_ 5% Bid Bond or \_\_\_ Cashier's Check/Bank Draft for 5% of base bid that is

payable without condition to the Division of Facilities Management, Design and Construction, State of Missouri, as per Article 5 of "Instructions To Bidders".

#### 4.0 CONTRACT COMPLETION TIME AND LIQUIDATED DAMAGES

A. The Bidder agrees to complete the work within 200 working days from the date the Notice of Intent to Award is issued as modified by additional days added by the Owner's acceptance of alternates, if applicable. This includes ten (10) working days for document mailing and processing. The Bidder further agrees to pay to, or allow the State as liquidated damages the sum of \$700 for each working day thereafter that the entire work is not substantially complete.

#### 5.0 ATTACHMENTS TO BID

A. 004336	Proposed Subcontractors
004337	MBE/WBE/SDVE Compliance Form
004338	MBE/WBE/SDVE Joint Venture Form
004339	MBE/WBE/SDVE Waiver Form
004340	SDVE Business Form
004541	Affidavit of Work Authorization
004545	Anti-Discrimination Against Israel Act Certification form
013513.13 (3.6) B5	DESE Drug Testing Certification (DUE WITH BID SUBMITTAL)

#### 6.0 BIDDER'S CERTIFICATIONS

By signing and submitting this bid form, the Bidder certifies as follows:

#### A. No Undisclosed Interests or Associations, Collusion, or Solicitation of Other Bidders

- 1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association or corporation.
- 2. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham proposal.
- 3. The Bidder has not solicited or induced any person, firm or corporation to refrain from submitting a bid.
- 4. The Bidder has not sought by collusion or otherwise to obtain any advantage over any other bidder or over the Owner.

#### **B.** Accuracy of Contract Documents

The Bidder has based this bid upon an official/complete set of contract documents, either obtained from the Owner or from a secondary source known to the Bidder to have provided a complete and accurate set of contract documents. If the Bidder received the contract documents from such a secondary source, any errors or omissions in the contract documents shall be interpreted and construed in favor of the Owner and against the Bidder. This bid is based upon the conditions within Article 1.2 of the General Conditions.

#### C. Non-Discrimination

The Bidder will not discriminate against any employee or applicant for employment because of race, creed, color or national origin in the performance of the Work.

#### D. Prevailing Wage

MISSOURI PREVAILING WAGE LAW (Sections 290.210 to 290.340, RSMo): The Contractor shall pay not less than the specified hourly rate of wages, as set out in the wage order attached to and made part of the specifications for work under this contract, to all workers performing work under the contract, in accordance with sections 290.210 to 290.340, RSMo. The Contractor shall forfeit a penalty to the Owner of one hundred dollars per day (or portion of a day) for each worker that is paid less than the specified rates for any work done under the contract by the Contractor or by any subcontractor, in accordance with section 290.250, RSMo.

**DAVIS-BACON ACT:** If this Project is financed in whole or in part from Federal funds (as indicated in the Instructions to Bidders or other bid or contract documents for this Project), then this contract shall be subject to all applicable federal labor statutes, rules and regulations, including provisions of the Davis-Bacon Act, 40 U.S.C. §3141 et seq., and the "Federal Labor Standards Provisions," as further set forth in Section 007333 – Supplementary General Conditions for Federally Funded/Assisted Construction Projects, which is incorporated into the contract by reference. Where the Missouri Prevailing Wage Law and the Davis-Bacon Act require payment of different wages for work performed under this contract, the Contractor and all Subcontractors shall pay the greater of the wages required under either law, on a classification by classification basis.

#### E. Transient Employers

The Bidder will comply with the provisions of Sections 285.230-234, RSMo, regarding transient employers.

#### F. Federal Work Authorization Program

The Bidder has enrolled and is participating in, and will continue to participate in, a federal work authorization program in accordance with Sections 285.525 and 285.530, RSMo for the duration of any contract awarded because of this bid.

#### G. Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA)

- 1. If awarded contract for this project, the Bidder/Contractor shall only utilize personnel authorized to work in the United States in accordance with applicable federal, state and local laws. This includes, but is not limited to, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and INA Section 274A.
- 2. If found to be in violation of this requirement or any applicable laws, and if the State of Missouri has reasonable cause to believe that the Contractor has knowingly employed individuals who are not eligible to work in the United States, the state shall have the right to cancel the contract immediately without penalty or recourse and suspend or debar the contractor from doing business with the state.
- 3. The Contractor agrees to cooperate fully with any audit or investigation from federal, state or local law enforcement agencies.

#### H. Anti-Discrimination Against Israel Act

- 1. If the awarded Contractor meets the definition of a company as defined in section 34.600, RSMo, and has ten or more employees, the Contractor shall not engage in a boycott of goods or services from the State of Israel; from companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or from persons or entities doing business in the State of Israel as defined in section 34.600, RSMo.
- 2. If, at any time during the life of the contract, Contractor meets the definition of a company as defined in section 34.600, RSMo, and the company's employees increases to ten or more OR the contractor's business status changes to become a company as defined in section 34.600, RSMo, and the company has ten or more employees, then the Contractor shall submit to the Division of Facilities Management, Design and Construction a completed Box C of the exhibit titled "Anti-Discrimination Against Israel Act Certification, and shall comply with the requirements of Box C.

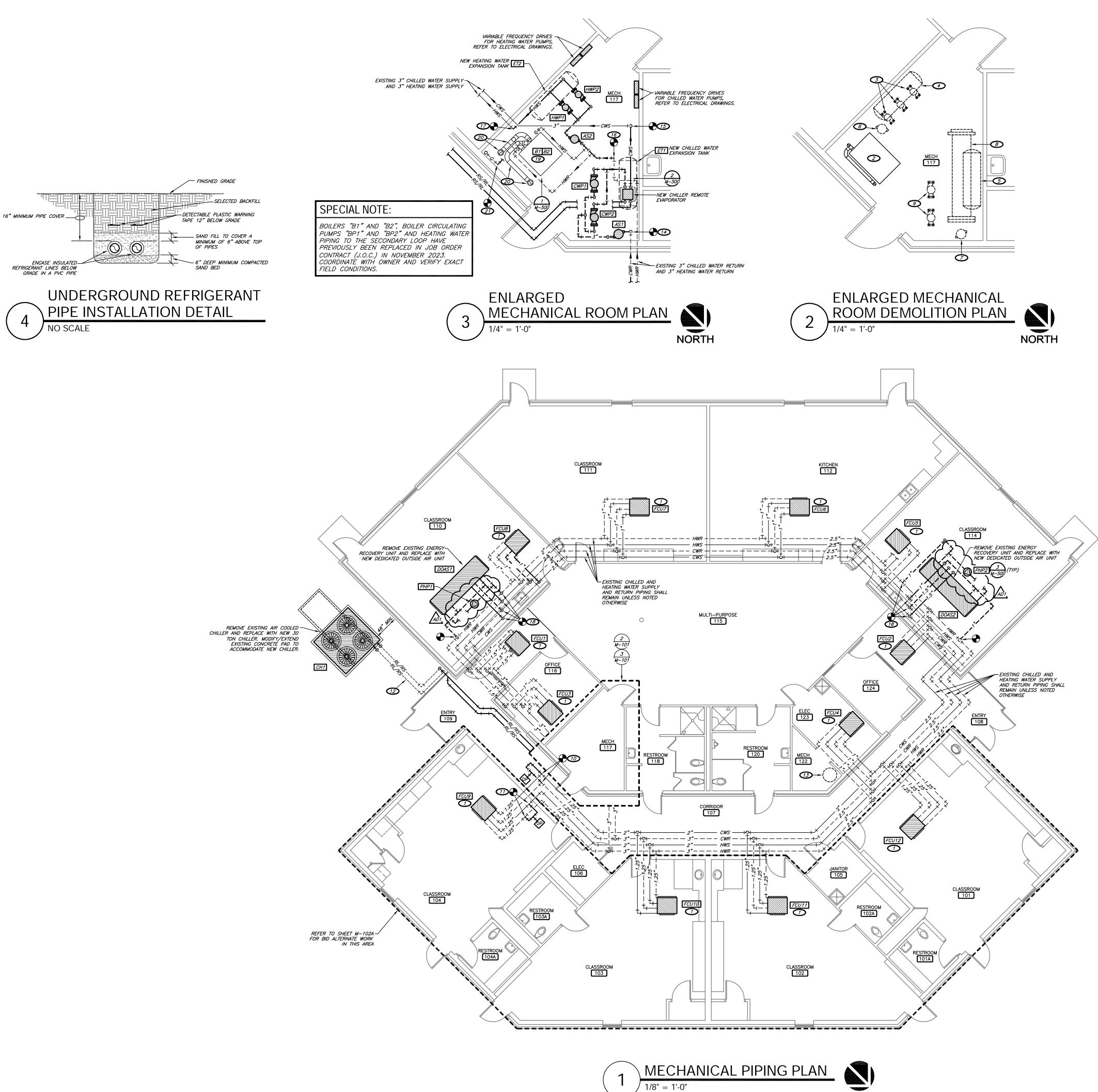
7.0 CONTACT INFORMATION	
	Partnership LLC Limited Partnership Corporation Joint Venture
	Fax Number:
	or Social Security Number:
Missouri Business Charter Number:	(or provide the proper certificate from the Secretary of State)
Contact Name:	Contact email:
8.0 SIGNATURES	
FOR SOLE PROPRIETORSHIPS/C	GENERAL PARTNERSHIPS ONLY
	Name each general partner:
Sole Proprietor's Name (printed)	
Today's Date:	
	ne sole proprietor/general partner of (name of business)
	nd if the name of said business is other than my legal name, having filed a
· ·	the Missouri Secretary of State in order to allow me to use such name in ded by Section 417.200, RSMo, et seq.), do hereby submit this bid and agree to be
	rein provided (if a general partnership, all partners must sign below).
Signature:	Signature:
Signature:	Signature:
FOR LIMITED LIABILITY COMP	
Manager's (or Managing Member's) N	Name (printed) today's dateState(s) of organization:
I,	, being the Manager (or Managing Member) of (full legal name of limited
	ganization), and being duly
•	n behalf of said limited liability company, do hereby submit this bid on behalf of
	ee that said limited liability company shall be bound unto the State of Missouri as
herein provided.	Signature:
	Signatire:

 $\frac{FOR\;LIMITED\;PARTNERSHIPS/LIMITED\;LIABILITY\;PARTNERSHIPS/LIMITED\;LIABILITY\;LIMITED}{PARTNERSHIPS\;ONLY}$ 

	today's date:	State(s) of organization:
General/Managing Partner's Nam	e (printed)	
I,	, being the General Partner/Manaş	ging Partner of (full legal name of limited
partnership/limited liability partne	ership/limited liability limited partnersl	nip from partnership agreement or Certificate of
Limited Partnership)	, and being du	aly authorized to act as herein provided on
behalf of said limited partnership/	limited liability partnership/limited lia	bility limited partnership, do hereby submit this
bid on behalf of said limited partn	ership/limited liability partnership/lim	ited liability limited partnership and agree that
said limited partnership/limited lia	ability partnership/limited liability limi	ted partnership shall be bound unto the State of
Missouri as herein provided.		
	1	Signature:
	•	Signature
President's Name (printed)	Secretary's Name (printed)	Today's date
State(s) of incorporation:		
I,	, being the (officer or title)	of (full legal name of
corporation, from Articles of Inco	rporation)	, and being duly
authorized by the Board of Direct	ors of said corporation to act as herein	provided on behalf of said corporation, do
hereby submit this bid on behalf o	f said corporation and agree that said of	corporation shall be bound unto the State of
Missouri as herein provided.		
Signature:President	Attested 1	by:
President		by: Corporate Secretary
	e bidder. If the signator is other than the corporation.	ate president, the bidder must provide satisfactory evidence

#### FOR ASSOCIATIONS/JOINT VENTURES

If multiple business entities/individuals are bidding collectively as an association or joint venture, each business entity/individual bidding as part of the association or joint venture shall sign this bid in the above sections relevant to the form that such business entity or individual does business, and the bidder shall duplicate the necessary number of signature pages so that all members of the association or joint venture shall sign this bid. If a name is adopted for use by the association or joint venture, the association or joint venture shall file a Registration of Fictitious Name with the Missouri Secretary of State in order to use such name in connection with the association or joint venture, as provided by Section 417.200, RSMo, *et seq*.



# **KEYNOTES:**

1 REMOVE EXISTING FAN COIL UNIT AND REPLACE WITH NEW FAN COIL UNIT. REMOVE EXISTING SHUT-OFF VALVES AND CONTROL VALVES FOR REPLACEMENT WITH NEW VALVES. REFER TO 4-PIPE FAN COIL

2 EXISTING BOILERS PREVIOUSLY REMOVED AND REPLACED UNDER JOB ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023.

3 REMOVE EXISTING HEATING WATER PUMPS.

4 REMOVE EXISTING HEATING WATER EXPANSION TANK.

7 REMOVE EXISTING CHILLED WATER EXPANSION TANK.

6 REMOVE EXISTING HEATING WATER AIR SEPARATOR.

7 REMOVE EXISTING CHILLED WATER AIR SEPARATOR. 8 REMOVE EXISTING CHILLER REMOTE EVAPORATOR.

9 REMOVE EXISTING CHILLED WATER PUMPS.

INSTALL NEW DIFFERENTIAL PRESSURE SENSOR IN EXISTING CHILLED WATER LOOP PIPING.

11) INSTALL NEW DIFFERENTIAL PRESSURE SENSOR IN EXISTING HEATING WATER LOOP PIPING.

12 INSTALL NEW REFRIGERANT LINES BELOW GRADE IN PVC PIPES IN SAME ROUTING AS REMOVED CHILLER REFRIGERANT PIPING. REFER TO UNDERGROUND REFRIGERANT PIPE INSTALLATION DETAIL. COORDINATE ALL REFRIGERANT PIPING INSTALLATION DETAILS WITH CHILLER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR A REMOTE EVAPORATOR INSTALLATION.

13 REMOVE EXISTING DOMESTIC GAS WATER HEATER. REMOVE EXISTING GAS PIPING TO ABOVE CEILING AND CAP. REMOVE EXISTING VENT AND COMBUSTION AIR UP THRU ROOF. CAP AND SEAL ROOF OPENINGS WEATHERTIGHT.

14 CONNECT NEW 2.5" CHILLED WATER RETURN TO EXISTING 3" CHILLED WATER RETURN. FIELD VERIFY SIZE AND LOCATION OF EXISTING PIPE.

15 CONNECT NEW 2.5" CHILLED WATER SUPPLY TO EXISTING 3" CHILLED WATER SUPPLY. FIELD VERIFY SIZE AN LOCATION OF

16 CONNECT NEW 3" HEATING WATER RETURN TO EXISTING 3" HEATING WATER RETURN. FIELD VERIFY SIZE AN LOCATION OF EXISTING PIPE.

CONNECT NEW 3" HEATING WATER SUPPLY TO EXISTING 3" HEATING WATER SUPPLY. FIELD VERIFY SIZE AN LOCATION OF EXISTING PIPE.

18 REMOVE EXISTING BRANCH PIPING FROM REMOVED ERV UNIT AND INSTALL NEW BRANCH PIPING AS INDICATED. REFER TO DOAS UNIT PIPING DETAIL.

19 BOILERS "B1" AND "B2" PREVIOUSLY REPLACED UNDER JOB ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023.

20 BOILER VENT AND COMBUSTION AIR PIPING PREVIOUSLY REPLACED/RECONNECTED UNDER JOB ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023.

21 BOILER GAS PIPING PREVIOUSLY RECONNECTED UNDER JOB ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023.

STATE OF MISSOURI

MICHAEL L. PARSON, **GOVERNOR** 

RYAN S. JONES - ENGINEER PE-2004017193 PROFESSIONAL SEAL

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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, **DESIGN AND CONSTRUCTION** 

FAN COIL UNIT REPLACEMENT NOTES:

REPLACE EXISTING FAN COIL UNIT HEATING WATER AND CHILLED WATER CONTROL VALVES WITH NEW CONTROL VALVES. COORDINATE WITH NEW BUILDING AUTOMATION SYSTEM.

CONNECT EXISTING CONDENSATE DRAIN PIPING TO NEW FAN COIL UNIT.

BALANCE HEATING AND COOLING WATER FLOWS AS INDICATED IN FAN COIL UNIT SCHEDULE.

ALTERNATE #2: CONTRACTOR SHALL REMOVE ALL EXISTING PIPING INSULATION FROM EXISTING HEATING HOT WATER,

CHILLED WATER, CONDENSATE, AND REFRIGERANT PIPING,

ALL NEW PIPING INSTALLED UNDER BASE BID SHALL BE

ALL NEW PIPING INSTALLED UNDER ALTERNATE #1 BID SHAL

AND REPLACE WITH NEW INSULATION PER THE

BE INSULATED AS PART OF ALTERNATE #1 BID.

**ALTERNATE #2 SPECIAL NOTES:** 

INSULATED AS PART OF BASE BID.

SPECIFICATIONS.

**OAKVIEW STATE SCHOOL** 

REPLACE CHILLER & FAN COIL UNITS

PROJECT # E2331-01 FACILITY # 5012038004

REVISION: ADDENDUM #1 DATE: 07/02/2024 **REVISION:** 

**REVISION:** DATE:

ISSUE DATE: 04/12/2024

CAD DWG FILE: M-101.DWG DRAWN BY: CHECKED BY: DESIGNED BY: TKB

SHEET TITLE:

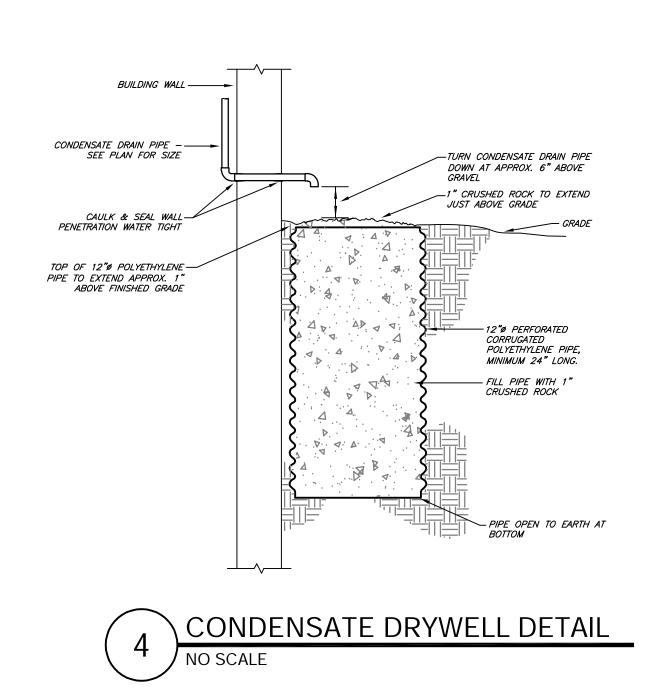
**MECHANICAL** PIPING PLAN

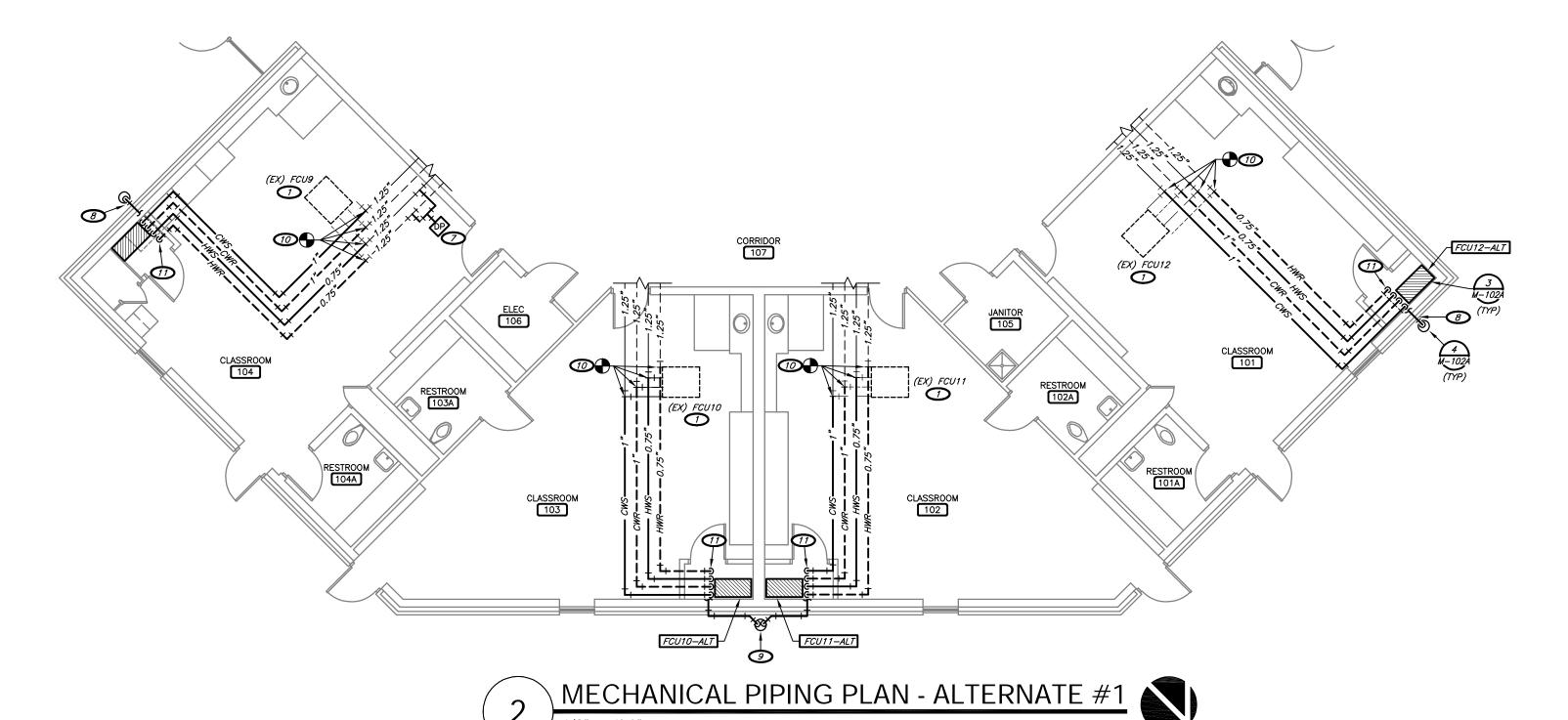
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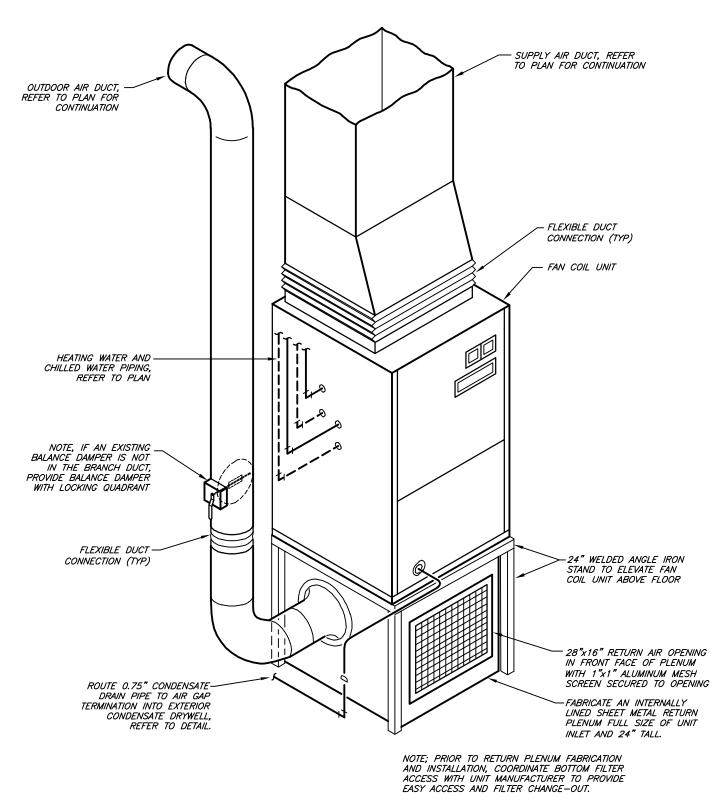
7 OF 11 SHEETS

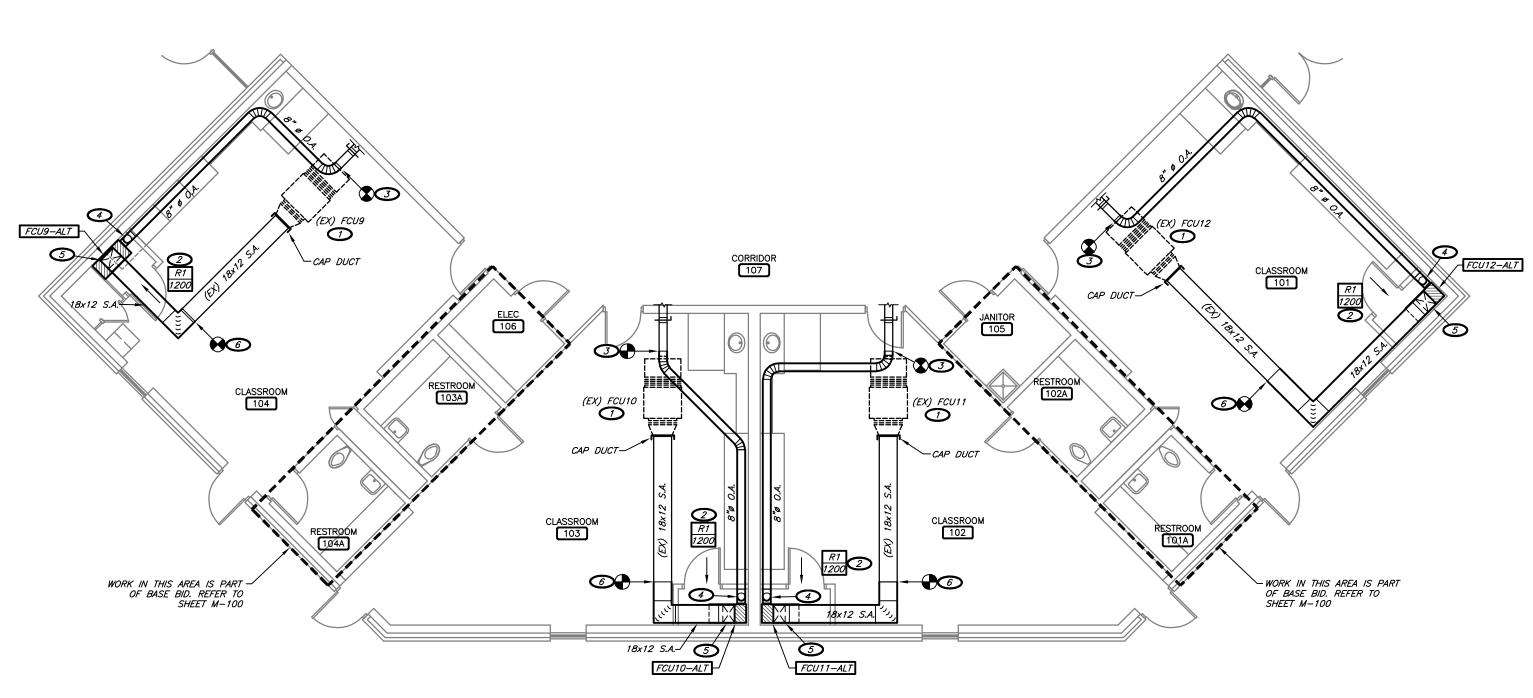
APRIL 12, 2024

**NORTH** 









VERTICAL FAN COIL UNIT DETAIL NO SCALE

HVAC PLAN - ALTERNATE #1 NORTH

**NORTH** 

# **KEYNOTES:**

- 1) REMOVE EXISTING FAN COIL UNIT, PIPING, RETURN PLENUM AND SUPPLY DUCT TRANSITION. CAP SUPPLY DUCT.
- 2 PROVIDE RETURN AIR OPENING IN DOOR AND SECURE RETURN GRILLE IN FACE OF DOOR AT APPROXIMATELY 6" ABOVE FLOOR.
- 3 CONNECT NEW 8"Ø OUTSIDE AIR DUCT TO EXISTING 8"Ø DUCT, EXTEND TO NEW FAN COIL UNIT AS INDICATED.
- 4 ROUTE 8" OUTSIDE AIR DUCT DOWN AND CONNECT TO RETURN PLENUM AT FAN COIL UNIT.
- 5 18x12 SUPPLY DUCT DOWN AND TRANSITION TO FAN COIL UNIT. 6 CONNECT NEW 18x12 SUPPLY DUCT TO EXISTING SUPPLY DUCT, FIELD VERIFY SIZE AND LOCATION OF EXISTING DUCT.
- NEW DIFFERENTIAL PRESSURE SENSOR INSTALLED UNDER BASE BID. REFER TO SHEET M-101.
- 8 0.75" CONDENSATE DRAIN FROM FAN COIL UNIT, ROUTE LOW THROUGH EXTERIOR WALL AND TERMINATE INTO CONDENSATE DRYWELL, REFER TO DETAIL. SEAL WALL PENETRATION WEATHERTIGHT.
- 9 0.75" CONDENSATE DRAIN FROM EACH FAN COIL UNIT, ROUTE LOW THROUGH EXTERIOR WALL AND TERMINATE INTO CONDENSATE DRYWELL, REFER TO DETAIL. SEAL WALL PENETRATIONS WEATHERTIGHT.
- 10 REMOVE A PORTION OF EXISTING CHILLED WATER AND HEATING WATER BRANCH PIPING AND VALVING, EXTEND TO NEW FAN COIL
- 1" CHILLED WATER SUPPLY AND RETURN AND 0.75" HEATING WATER SUPPLY AND RETURN DOWN TO FAN COIL UNIT.

## STATE OF MISSOURI MICHAEL L. PARSON, **GOVERNOR**



RYAN S. JONES - ENGINEER PE-2004017193 PROFESSIONAL SEAL

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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

OAKVIEW STATE SCHOOL

REPLACE CHILLER & FAN COIL UNITS

PROJECT # E2331-01 FACILITY # 5012038004

REVISION: <u>ADDENDUM</u> #1

DATE: <u>07/02/2024</u>

ISSUE DATE: 04/12/2024

CAD DWG FILE: M-102A.DWG

## **ALTERNATE #1 SPECIAL NOTES:**

- CONTRACTOR SHALL CONSTRUCT NEW MECHANICAL CLOSETS WITH 36" ACCESS DOOR WITH INTEGRAL RETURN AIR LOUVER WITH MIN. 2.7 SQ. FT. OF FREE AREA. REFER TO SHEET A-101A FOR CLOSET AND DOOR DETAILS.
- MODIFY THE EXISTING CEILING GRID AND TILES AS REQUIRED TO ACCOMMODATE THE NEW MECHANICAL CLOSET WALLS.
- MODIFY THE EXISTING LOWERED CEILING GRID AND TILES AT THE PREVIOUS/REMOVED FAN COIL UNIT LOCATIONS TO MATCH THE ADJACENT HIGHER CEILING.

### **ALTERNATE #2 SPECIAL NOTES:**

ALTERNATE #2: CONTRACTOR SHALL REMOVE ALL EXISTING PIPING INSULATION FROM EXISTING HEATING HOT WATER, CHILLED WATER, CONDENSATE, AND REFRIGERANT PIPING, AND REPLACE WITH NEW INSULATION PER THE SPECIFICATIONS.

BE INSULATED AS PART OF ALTERNATE #1 BID.

- ALL NEW PIPING INSTALLED UNDER BASE BID SHALL BE
- INSULATED AS PART OF BASE BID. ALL NEW PIPING INSTALLED UNDER ALTERNATE #1 BID SHALL

SHEET TITLE:

REVISION:

REVISION:

DATE:

DATE:

DRAWN BY:

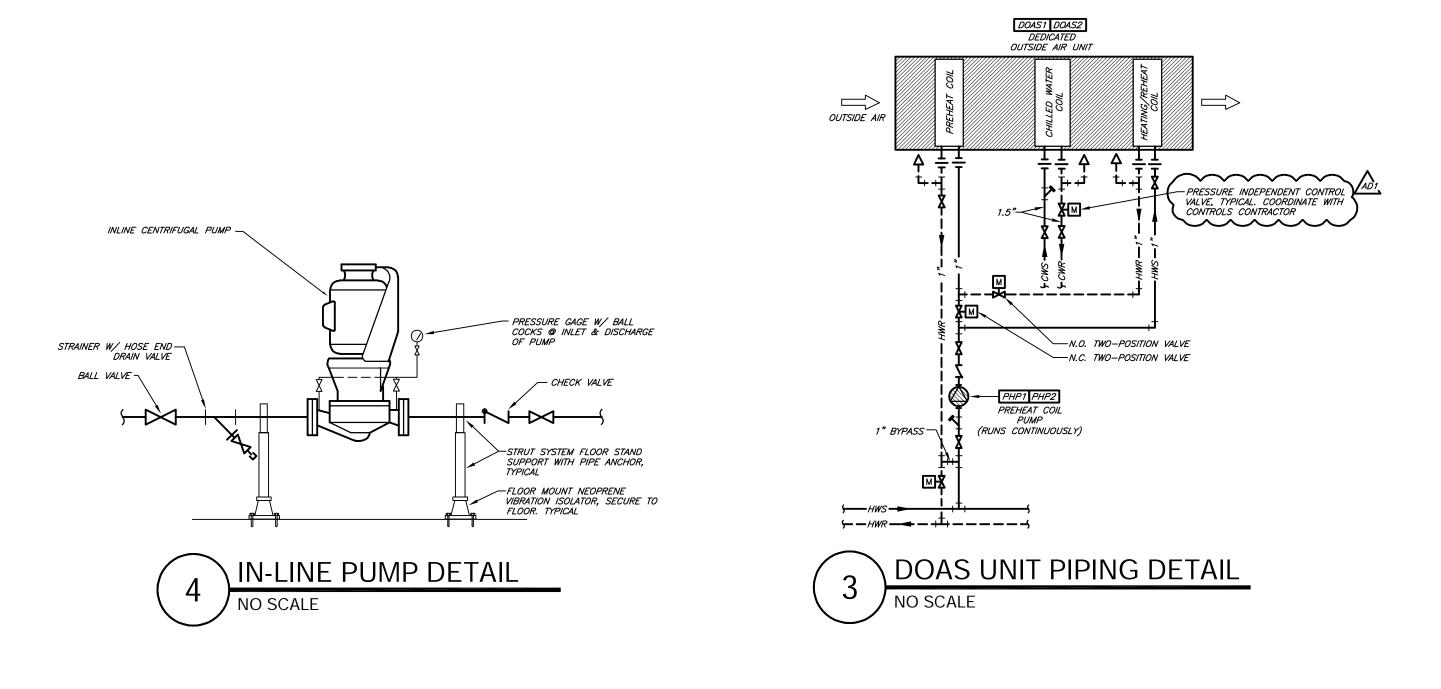
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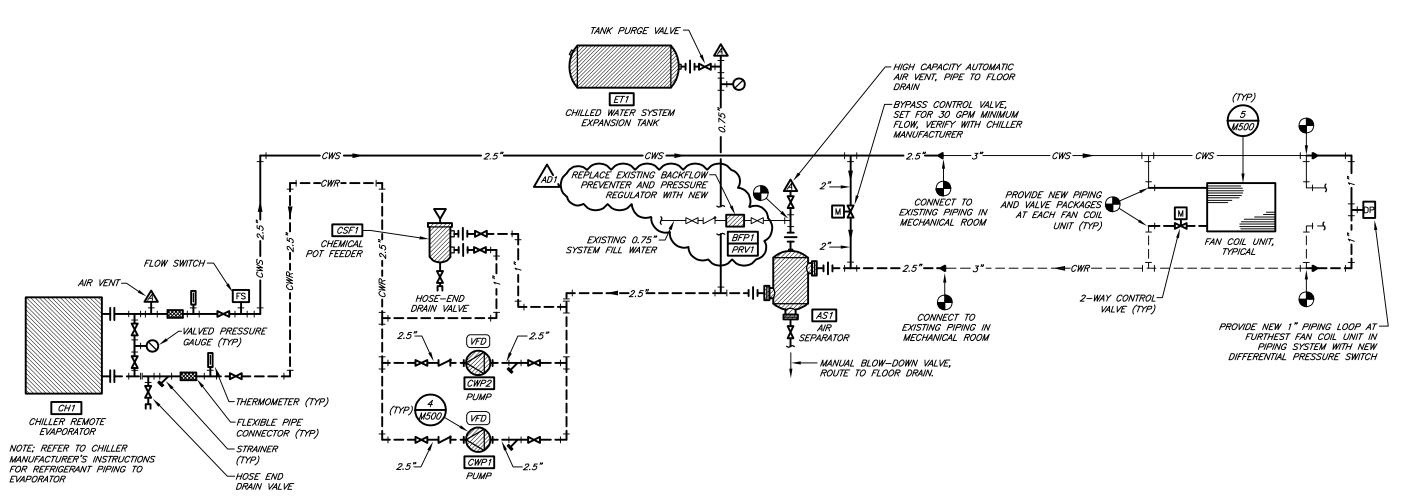
**MECHANICAL** PLANS -**ALTERNATE #1** 

DESIGNED BY: TKB

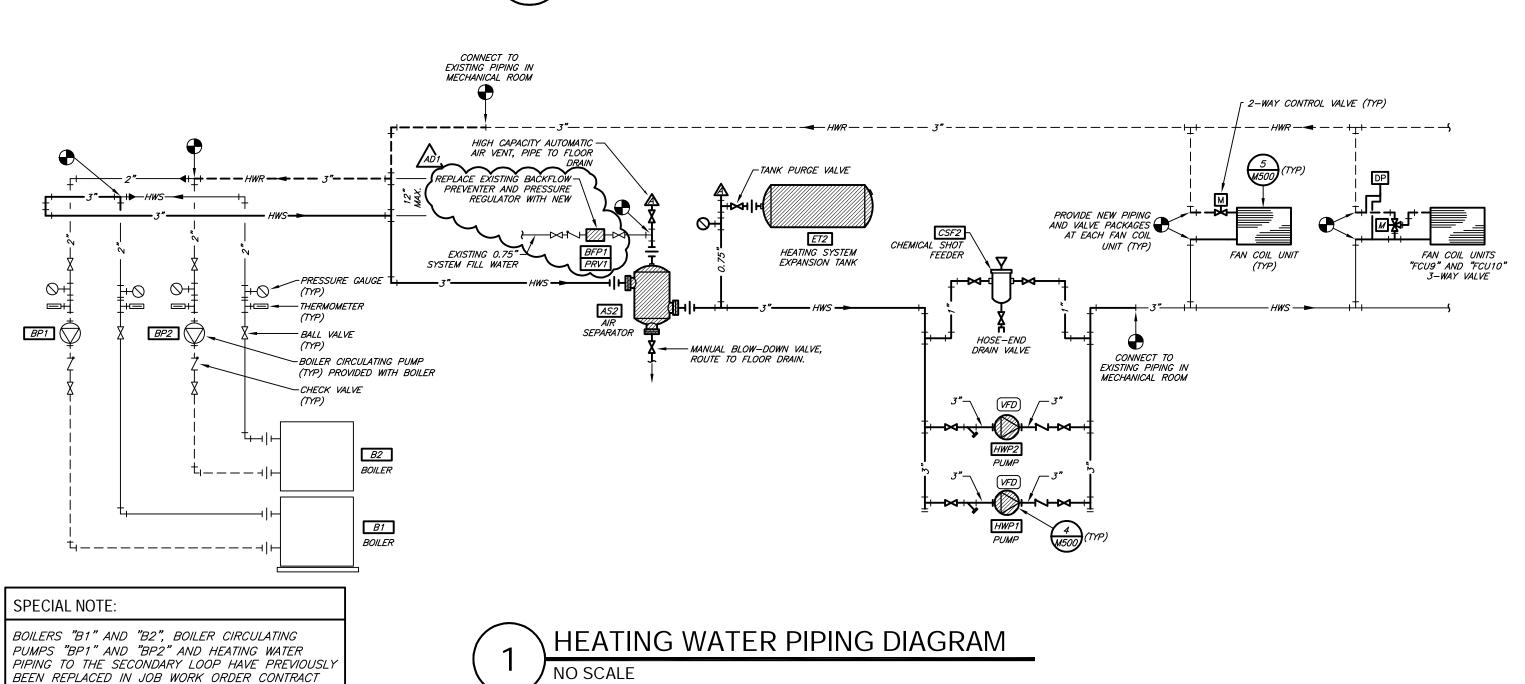
SHEET NUMBER:

8 OF 11 SHEETS APRIL 12, 2024

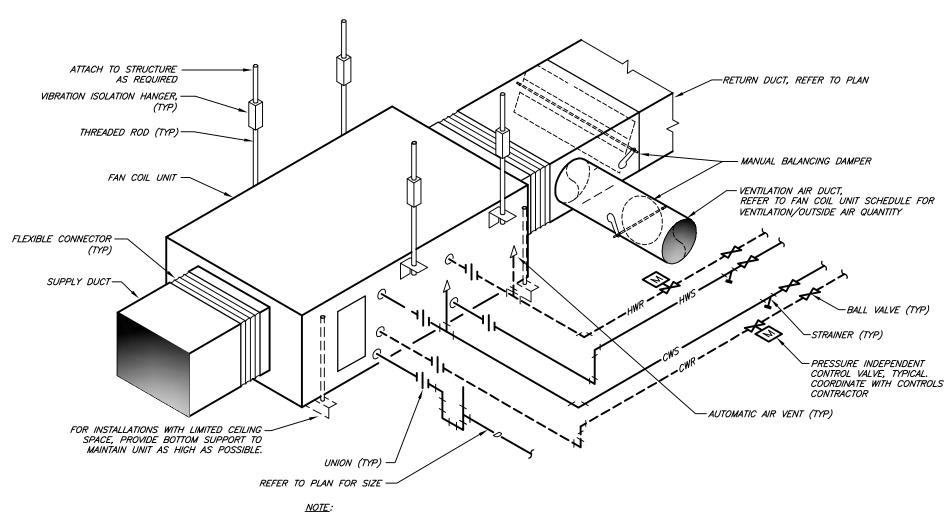




2 CHILLED WATER PIPING DIAGRAM
NO SCALE



(J.O.C.) IN NOVEMBER 2023. COORDINATE WITH OWNER AND VERIFY EXACT FIELD CONDITIONS.



NOTE: CONFIGURE INSTALLATION OF PIPING AND VALVING TO MAINTAIN ACCESSIBLIITY OF FAN COIL UNIT FILTER RACK AND CONTROL VALVES.

5 4-PIPE FAN COIL UNIT DETAIL
NO SCALE

STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR



RYAN S. JONES - ENGINEER
PE-2004017193
PROFESSIONAL SEAL

Missouri State Certificate of Authority #2005026903

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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

OAKVIEW STATE SCHOOL

REPLACE CHILLER & FAN COIL UNITS

PROJECT # E2331-01 SITE # 2038 FACILITY # 5012038004

REVISION: ADDENDUM #1
DATE: 07/02/2024
REVISION:

REVISION:
DATE:
ISSUE DATE: 04/12/2024

CAD DWG FILE: M-500.DWG
DRAWN BY: TKB
CHECKED BY: RSJ

SHEET TITLE:

MECHANICAL DETAILS

DESIGNED BY: TKB

SHEET NUMBER:

M-500

9 OF 11 SHEETS
APRIL 12, 2024

	BOILER SCHEDULE														
MARK	MANUFACTURER	MODEL#	FUEL	INPUT (MBH)	OUTPUT (MBH)	DESIGN (GPM)	WPD (FT)	TURNDOWN RATIO	THERMAL EFFICIENCY	VOLTAGE/ PHASE	МОСР	NOTES			
B1	HTP	ELUD-399FBN	NAT. GAS	399	379	32	28.0	20:1	98%	120/1	20	1			
B2	HTP	ELUD-399FBN	NAT. GAS	399	379	32	28.0	20:1	98%	120/1	20	1			

<u>NOTES:</u>
1. BOILERS PREVIOUSLY REPLACED UNDER JOB ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023. SCHEDULE IS PROVIDED FOR REFERENCE ONLY.

IOTE: HEATING WATER SYSTEM IS 100% WATER WITH CHEMICAL TREATMENT.

	AIR DEVICE SCHEDULE														
MARK	MANUFACTURER	MODEL	DUCT CONNECTION SIZE	SERVICE	MODULE SIZE	FRAME	FINISH	DAMPER	MAX. NC	DELTA P (STATIC)	NOTES				
E1	ALDES	CER-S-II 18 721	6" DIAMETER	EXHAUST	10"x10"	SURFACE	WHITE	REGULATOR	30	0.25"	1,2				
R1	KRUEGER	S480 0.5" BLADE SPACING	-	RETURN	24"x18"	DOOR	WHITE	-	25	0.03"	-				

NOTES:

1. GRILLE/DIFFUSER NECK SHALL BE SAME SIZE AS BRANCH DUCTWORK UNLESS NOTED OTHERWISE ON PLAN.

2. A	LL ALUMINUM	CONSTRUCTION
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	FAN SCHEDULE														
MARK	MANUFACTURER	MODEL#	SERVICE	CFM	DELTA P (STATIC)	MOTOR HP/WATTS	RPM	DRIVE	VOLTAGE/ PHASE	CONTROLLED BY	NOTES				
EF1	соок	101C17D	EXHAUST	525	0.75"	1/3 HP	1725	DIRECT	120/1	BAS/DUCT PRESSURE	1,2,3,4,5				
EF2	соок	101C17D	EXHAUST	525	0.75"	1/3 HP	1725	DIRECT	120/1	BAS/DUCT PRESSURE	1,2,3,4,5				

NOTES:

1. PROVIDE FACTORY MOUNTED DISCONNECTING MEANS. 2. GRAVITY BACKDRAFT DAMPER.

3. INCLUDE LOREN COOK ACCESSORY #VFPC VARI-FLOW PRESSURE CONTROLLER WITH 0-10VDC OUTPUT SIGNAL.

4. FAN ENABLED BY THE BUILDING BUILDING AUTOMATION SYSTEM AND SPEED CONTROLLED BY DUCT PRESSURE. 5. SLOPED, INSULATED ROOF CURB. FIELD VERIFY EXISTING ROOF SLOPE PRIOR TO ORDERING.

MANUFACTURER				
WANTACTORER	MODEL#	SERVICE	SIZE	CFN
ALDES	CAR3	EXHAUST	8"	225
ALDES	CAR3	EXHAUST	8"	225
		ALDES CAR3	ALDES CAR3 EXHAUST	ALDES CAR3 EXHAUST 8"

	DEDICATED OUTDOOR AIR UNIT SCHEDULE																											
MARK MAI	MANUFACTURER	R MODEL#	OA	PREHEAT						COOLING				HEATING					SUPPLY FAN			VOLTAGE/	MCA	моср	NOTES			
	MANUFACTURER		CFM	OA (DB)	LVG (DB)	EWT/LWT	GPM	PD (FT HD)	ROWS	ENT (DB/WB)	LVG (DB/WB)	EWT/LWT	GPM	PD (FT HD)	ROWS	ENT (DB)	LVG (DB)	EWT/LWT	GPM	PD (FT HD)	ROWS	ESP (IN. W.C.)	TOTAL (IN. W.C.)	HP	PHASE MICA MICA	I WOCF	NOTES	
DOAS1	DAIKIN	CAH003GDCC	950	0.0	57.7	120.0 / 88.5	4.0	5.0	4	95.0 / 76.0	52.6 / 52.5	44.0 / 54.0	15.1	3.9	6	57.7	90.8	150.0 / 119.3	2.2	7.0	4	0.50"	1.67"	2.5	208/3	6.5	15	1 THRU 7
													DOAS	1 REHEAT I	ЛОDE=	52.6	58.6	75.0 / 70.0	4.0	7.0								
DOAS2	DAIKIN	CAH003GDCC	950	0.0	57.7	120.0 / 88.5	4.0	5.0	4	95.0 / 76.0	52.6 / 52.5	44.0 / 54.0	15.1	3.9	6	57.7	90.8	150.0 / 119.3	2.2	7.0	4	0.50"	1.67"	2.5	208/3	6.5	15	1 THRU 7
	DOAS2 REHEAT MODE = 52.									52.6	58.6	75.0 / 70.0	4.0	7.0														

ACCESSORIES: 1. SINGLE POINT POWER CONNECTION

2. FACTORY MOUNTED DISCONNECT

3. MERV 11 FILTERS ON OUTSIDE AIR INLET. PROVIDE TWO SPARE SETS OF FILTERS AT PROJECT CLOSEOUT. 4. PROVIDE SPRING VIBRATION ISOLATOR HANGERS.

5. INCLUDE A FACTORY INSTALLED BACNET GATEWAY CARD TO INTERFACE WITH THE BUILDING AUTOMATION SYSTEM. 3. INCLUDE FREEZESTAT TO SHUTDOWN UNIT AND CLOSE OUTSIDE AIR DAMPER AT LOUVER.

7. INCLUDE ELECTRONICALLY COMMUTATED MOTOR FAN ARRAY WITH VARIABLE SPEED CONTROL.

							HYE	ROI	VIC S	SPEC	CIAL	TIES	SCHE	DUL	E.					$\sim$		~~~	$\sim$	AD1
	OPERATING CONDITIONS AIR SEPARATOR AIR ELIMINATOR EXPANSION TANK CHEMICAL/GLYCOL FEEDER STRAINER BACKFLOW PREVENTER PRESSURE RED. VALVE																							
SYSTEM SERVED	ТЕМР.	PRESSURE	FLOW	FLUID	MFR.	MODEL	TAG	MFR.	MODEL	MFR.	MODEL	ACCEPT. (GAL.)	TANK VOL. (GAL.)	TAG	MFR.	MODEL	TAG	MFR.	MODEL	MFR.	MODEL	MFR.	MODEL	NOTES
CHILLED WATER SYSTEM (CWP1)	44-55 F.	30 PSIG	62 GPM	WATER	BG	RL-2.5	AS1	BG	107A	BG	D-60	11.3	33.6	ET1	NEPTUNE	DBF-2HP	CSF1	MF	B1TC-125#	WATTS	LF009	WATTS	LF123LP	1
CHILLED WATER SYSTEM (CWP2)	44-55 F.	30 PSIG	62 GPM	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	MF	B1TC-125#	-	-	-	-	1
HEATING WATER SYSTEM (HWP1)	45-150 F.	30 PSIG	58 GPM	WATER	BG	RL-2.5	AS2	BG	107A	BG	D-80	22.6	44.4	ET2	NEPTUNE	DBF-2HP	CSF2	MF	B1TC-125#	WATTS	LF009	WATTS	LF123LP	2
HEATING WATER SYSTEM (HWP2)	45-150 F.	30 PSIG	58 GPM	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	MF	B1TC-125#		-	-	-	2
ABBREVIATIONS:																					$\overline{\mathcal{A}}$			

ABBREVIATIONS: BG - BELL & GOSSETT

MF - METRAFLEX COMPANY

WS - WESSELS COMPANY PG - PROPYLENE GLYCOL MIXTURE

NOTES:

1. SYSTEM RELIEF VALVE SETTING SHALL BE 30 PSIG.

2. SYSTEM RELIEF VALVE SETTING SHALL BE 75 PSIG.

	FAN COIL UNIT SCHEDULE																							
		FAN DATA				COOLING								HEATING									матгол	
MARK	MFGR.	MODEL#	CFM	E.S.P. (IN. W.C.)	H.P.	O.A. CFM	EAT (DB / WB)	EWT/LWT (F)	GPM	WPD (FT)	SHC (MBH)	THC (MBH)	NO. ROWS	EAT (F)	LAT (F)	EWT/LWT (F)	GPM	WPD (FT)	МВН	NO. ROWS	VOLTAGE/ PHASE	MCA	моср	NOTES/ ACCESSORIES
FCU1	IEC	HPY12	1200	0.40"	1/2	110	75.0 / 62.3	44.0 / 55.4	4.6	3.2	23.5	26.5	4	70.0	90.9	150 / 120.6	1.8	5.1	26.2	1	120/1	7.4	15	1,2,4,5,6
FCU2	IEC	HPY12	1200	0.40"	1/2	110	75.0 / 62.3	44.0 / 55.4	4.6	3.2	23.5	26.5	4	70.0	90.9	150 / 120.6	1.8	5.1	26.2	1	120/1	7.4	15	1,2,4,5,6
FCU3	IEC	CXB12	800	0.40"	1/6	50	75.0 / 62.3	44.0 / 53.9	4.4	2.9	18.3	22.1	4	70.0	94.5	150 / 116.4	1.3	2.6	21.6	1	120/1	5.4	15	1,2,4,5,6
FCU4	IEC	CXB10	700	0.40"	1/6	35	75.0 / 62.3	44.0 / 50.9	6.0	4.3	16.8	21.0	4	70.0	95.1	150 / 119.9	1.3	2.3	19.4	1	120/1	4.4	15	1,2,4,5,6
FCU5	IEC	CXB10	700	0.40"	1/6	200	75.0 / 62.3	44.0 / 54.6	3.4	1.7	15.6	18.2	4	70.0	97.7	150 / 128.4	2.0	4.4	21.4	1	120/1	4.4	15	1,2,4,5,6
FCU6	IEC	HPY12	1000	0.40"	1/2	200	75.0 / 62.3	44.0 / 52.4	5.9	4.7	21.0	25.0	4	70.0	95. <i>4</i>	150 / 131.5	2.9	10.7	26.5	1	120/1	7.4	15	1,2,4,5,6
FCU7	IEC	HPY12	1000	0.40"	1/2	200	75.0 / 62.3	44.0 / 57.2	3.4	2.0	20.6	22.6	4	70.0	104.1	150 / 123.6	2.9	10.2	37.7	1	120/1	7.4	15	1,2,4,5,6
FCU8	IEC	CXB10	700	0.40"	1/6	200	75.0 / 62.3	44.0 / 55.8	2.9	1.3	15.2	17.3	4	70.0	97.7	150 / 128.4	2.0	4.4	21.4	1	120/1	4.4	15	1,2,4,5,6
FCU9	IEC	HPY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 59.0	3.1	1.7	22.1	23.4	4	70.0	102.0	150 / 124.6	3.4	13.1	42.4	1	120/1	7.4	15	1,3,4,5,6,9
FCU10	IEC	HPY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 59.0	3.1	1.7	22.1	23.4	4	70.0	102.0	150 / 124.6	3.4	13.1	42.4	1	120/1	7.4	15	1,3,4,5,6,9
FCU11	IEC	HPY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 59.0	3.1	1.7	22.1	23.4	4	70.0	102.0	150 / 124.6	3.4	13.1	42.4	1	120/1	7.4	15	1,2,4,5,6,9
FCU12	IEC	HPY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 59.0	3.1	1.7	22.1	23.4	4	70.0	102.0	150 / 124.6	3.4	13.1	42.4	1	120/1	7.4	15	1,2,4,5,6,9
FCU9-ALT	IEC	VEY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 54.0	5.4	4.2	24.0	27.6	4	70.0	90.8	150 / 120.0	1.8	4.9	26.0	1	120/1	7.0	15	1,2,4,6,7,8
FCU10-ALT	IEC	VEY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 54.0	5.4	4.2	24.0	27.6	4	70.0	90.8	150 / 120.0	1.8	4.9	26.0	1	120/1	7.0	15	1,2,4,6,7,8
FCU11-ALT	IEC	VEY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 54.0	5.4	4.2	24.0	27.6	4	70.0	90.8	150 / 120.0	1.8	4.9	26.0	1	120/1	7.0	15	1,2,4,6,7,8
FCU12-ALT	IEC	VEY12	1200	0.40"	1/2	200	75.0 / 62.3	44.0 / 54.0	5.4	4.2	24.0	27.6	4	70.0	90.8	150 / 120.0	1.8	4.9	26.0	1	120/1	7.0	15	1,2,4,6,7,8

GENERAL NOTES:
CHILLED WATER CAPACITIES BASED ON 100% WATER.
OUTSIDE/VENTILATION AIR SUPPLIED FROM "DOAS1" AND "DOAS2", REFER TO PLANS. NOTES:
1. FACTORY DISCONNECT SWITCH

2. 2-WAY MODULATING CHILLED AND HOT WATER VALVE PACKAGES 3. 3-WAY MODULATING CHILLED AND HOT WATER VALVE PACKAGES

1. CONTROLS AND REMOTE MOUNTED ROOM THERMOSTAT WITH FAN SPEED CONTROLLER BY BAS CONTRACTOR. 5. 1" FLAT FILTER WITH SIDE ACCESS

6. CONDENSATE OVERFLOW CONTROL DETECTION AND FAN SHUTDOWN.

7. TOP SUPPLY AND BOTTOM RETURN AND BOTTOM INLET FILTER. FRONT FILTER ACCESS.

8. UNIT PROVIDED AS PART OF BID ALTERNATE #1. REFER TO SHEETS M-102A AND E-101A. . UNIT PROVIDED AS PART OF BASE BID. IF ALTERNATE #1 IS ACCEPTED, THIS UNIT SHALL BE OMITTED.

	HYDRONIC PUMP SCHEDULE																	
MARK	MANUFACTURER	MODEL	INLET	DISCH.	GPM	HEAD (FT.)	NPSH	TYPE	WORKING CLASS	FLOW	H.P.	RPM	VOLTAGE/ PHASE	CONST.	FLUID TYPE	FLUID TEMP.	NOTES/ ACCESSORIES	EQUIVALENT MANUFACTURERS
BP1	PROVIDED	WITH BOILER PE	ER J.O.C.		-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP2	PROVIDED	WITH BOILER PE	ER J.O.C.		-	-	-	-	-	-	-	-	-	-	-	-	-	-
CWP1	B&G	e-80 1.5x1.5x9.5B	1.5"	1.5"	62	60	-	IL	175	VARIABLE	3	1750	208/3	BF	WATER	40-60	1,2,3	ARMSTRONG, TACO
CWP2	B&G	e-80 1.5x1.5x9.5B	1.5"	1.5"	62	60	-	IL	175	VARIABLE	3	1750	208/3	BF	WATER	40-60	1,2,3	ARMSTRONG, TACO
HWP1	B&G	e-80 1.5x1.5x9.5B	1.5"	1.5"	50	50	-	IL	175	VARIABLE	2	1750	208/3	BF	WATER	60-180	1,2,3	ARMSTRONG, TACO
HWP2	B&G	e-80 1.5x1.5x9.5B	1.5"	1.5"	50	50	-	IL	175	VARIABLE	2	1750	208/3	BF	WATER	60-180	1,2,3	ARMSTRONG, TACO
PHP1	B&G	PL-36	1"	1"	4	32	-	IL	175	CONSTANT	1/6	3300	120/1	BF	WATER	35-130	1,3	ARMSTRONG, TACO
PHP2	B&G	PL-36	1"	1"	4	32	-	IL	175	CONSTANT	1/6	3300	120/1	BF	WATER	35-130	1,3	ARMSTRONG, TACO

BF - BRONZE FITTED

CI - CAST IRON

CSST - CORREGATED STAINLESS STEEL

CW - CONTINUOUS WELD

BMES - BASE MOUNTED END SUCTION BMFC - BASE MOUNTED END SUCTION FLEXIBLE COUPLED

MI - MALLEABLE IRON

MJ - MECHANICAL JOINT

CDW - CONDENSER WATER HW - HEATING HOT WATER DHW - DOMESTIC HOT WATER

ST - STAINLESS STEEL

SW - SOLVENT WELD

NOTES/ACCESSORIES

1. PROVIDE PREMIUM EFFICENCY MOTOR.

IL - IN-LINE

2. PROVIDE INVERTER DUTY MOTOR AND VARIABLE FREQUENCY DRIVE WITH INTEGRAL DISCONNECT. VFD SUPPLIED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICIAN. 3. REFER TO HYDRONIC SPECIALTIES SCHEDULE FOR ADDITIONAL ACCESSORIES AND REQUIREMENTS.

					TEDIA			_					
		ŀ	PIPING	i MA	IERIA	L SCF	IEDUL	-E					
			PIPIN	'G			FITTI	VGS	MAXIMUM	WORKING	FIELD		
SYSTEM	SIZE	TYPE	SCHEDULE	GRADE	ASTM	MATERIAL	MATERIAL	TYPE	PRESSURE (PSI)	TEMP (DEG. F)	PRESSURE (PSI)	TIME (HOURS)	NOTES
CONDENSATE DRAIN	ALL	М	-	-	B88	COPPER	COPPER	SJ	120	40-180	150	1	-
CHILLED WATER SUPPLY & RETURN	0.75" - 3"	L	-	-	B88	COPPER	COPPER	SJ	125	80-200	150	1	-
HEATING WATER SUPPLY & RETURN	0.75" - 3"	L	-	-	B88	COPPER	COPPER	SJ	125	80-200	150	1	-
DOMESTIC WATER ABOVE GRADE	ALL	L	-	-	B88	COPPER	COPPER	SJ	120	40-180	150	1	-
REFRIGERANT PIPING	ALL	ACR	-	-	B280	COPPER	COPPER	SJ	150	40-180	200	4 HR	-
ABBREVIATIONS:													
BR -BRASS CI - CAST IRON	DI DR	- DUCTILE IR - DRAINAGE				NH SJ	- NO-HUB	NTIMONIY S	OLDER JOINT				
CS - CARBON STEEL	DWV												

	AIR COOLED CHILLER SCHEDULE															
MARK	MANUF.	MODEL#	NOMINAL TONS	CAPACITY TONS	AMBIENT (DEG. F)	EWT (DEG. F)	LWT (DEG. F)	GPM	WPD (FT)	VOLTAGE/ PHASE	MCA	МОСР	EER	DPLV.IP (EER)**	WEIGHT (LBS.)	NOTES & ACCESSORIES
СН1	DAIKIN	AGZ030E	30	*28.1	95	55.0	44.0	61.1	8.9	208/3	163.0	175	9.9	15.6	2,900	1,2,3,4,5,6,7
2. PRO 3. PRO 4. PRO	PROVIDE SINGLE POINT POWER CONNECTION WITH FACTORY INSTALLED SERVICE ENTRANCE RATED DISCONNECT PROVIDE CONTROL POWER TRANSFORMER PROVIDE WYE-DELTA COMPRESSOR STARTERS															
6. INC																

## STATE OF MISSOURI MICHAEL L. PARSON, **GOVERNOR**



RYAN S. JONES – ENGINEER PE-2004017193 PROFESSIONAL SEAL

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OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

OAKVIEW STATE SCHOOL

REPLACE CHILLER & FAN COIL UNITS

PROJECT # E2331-01 2038 FACILITY # 5012038004

REVISION: <u>ADDENDUM #</u>1 DATE: <u>07/02/2024</u> REVISION: REVISION:

DATE: ISSUE DATE: 04/12/2024

CAD DWG FILE: M-600.DWG DRAWN BY: CHECKED BY: RSJ DESIGNED BY: TKB

SHEET TITLE:

MECHANICAL EQUIPMENT **SCHEDULES** 

SHEET NUMBER:

11 OF 11 SHEETS APRIL 12, 2024