MIDDLETON ASSOCIATES INCORPORATED 1702 W. COLLEGE AVE., SUITE E NORMAL, IL 61761-2793 309/452-1271 FAX 309/454-8049

ADDENDUM NUMBER 3 TO THE DRAWINGS AND SPECIFICATIONS

PROJECT: Lincoln Central Elementary School HVAC Renovation

FOR: Lincoln Elementary School District No. 27 304 8<sup>th</sup> Street Lincoln, IL 62656

A/E PROJECT NO: 25821422

- ISSUE DATE: October 25, 2022
- BID OPENING: Thursday, November 17, 2022, 2:00 p.m. prevailing time 304 8<sup>th</sup> Street, Lincoln, IL 62656

THIS ADDENDUM DOES NOT CHANGE THE BID DATE OR BID TIME.

Upon receipt of this ADDENDUM, insert same into the documents, which were issued to you. Hereafter, said ADDENDUM shall be as much a part of the said documents as though originally set forth therein. THIS ADDENDUM DOES NOT CHANGE THE BID DATE.

13. TO THE DRAWINGS; Sheet M4.1: Added bipolar ionization devices to the heat pump schedule. Call Alpha Controls, Jason Vogelbaugh, 217-299-1379, for a price on one acceptable product

Attachment: Sheet M4.1

END ADDENDUM NO. 3

										Н	EAT PU	MP S	CHEDU	LE											
							COOLIN	Ĵ		Н	EATING		WATER	H.P.	PUMP	GRUNDFOS	WATER		FILTER			ELECTRIC	AL		
MARK	MANUFACTURER	MODEL	CONFIGURATION	S.A.	ESP	CAPAG	CITY (MBH)	EWT	EER	CAP. TOTAL	EWT	СОР	FLOW	WPD	HEAD	PUMP	PIPING		SIZE	VOLTS	Ø	MCA	MAX	MARK	NOTES
		NUMBER	POS. / ORIN.	(CFM)	(IN W.C.)	TOTAL	SENSIBLE	(° F)		(BTH)	(°F)		(GPM)	(FT)	(FT)	MODEL	SIZE	OTY				(AMPS)	FUSE		
HP-1	WATER FURNACE	NBV049	VERTICAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-1	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-2	WATER FURNACE	NBV049	1 VERTICAL	31550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-2	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-3	WATER FURNACE	NBV049	VERTICAL	31550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-3	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-4	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-4	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-5	WATER FURNACE	NBH064	HORIZONTAL	1800	0.50	64.3	43.9	85	15.3	57.3	45	4.3	12.0	8.2	17.0	UP 26-64F	1-1/2	2	20x25/20x22	208	3	27.6	40	HP-5	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-6	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-6	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-7	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-7	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-8	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-8	1,2,3,4,5,6,7,8,9,10,12,13,14,
HP-9	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-9	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-10	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-10	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-11	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-11	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-12	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-12	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-13	WATER FURNACE	NBH012	HORIZONTAL	400	0.5	13.55	9.3	85	15.5	10.5	45	3.7	2.5	2.3	11.0	UP 26-64F	3/4	1	16x16	208	1	6.7	15	HP-13	1,2,3,4,5,6,12,13,14
HP-14	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-14	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-15	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-15	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-16	WATER FURNACE	NBH064	HORIZONTAL	1800	0.50	64.3	43.9	85	15.3	57.3	45	4.3	12.0	8.2	17.0	UP 26-64F	1-1/2	2	20x25/20x22	208	3	27.6	40	HP-16	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-17	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-17	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-18	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-18	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-19	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-19	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-20	WATER FURNACE	NBH018	HORIZONTAL	600	0.5	17.05	11.4	85	15.6	16.7	45	3.8	4.0	6.7	15.0	UP 26-64F	1	1	18x29	208	1	14.5	20	HP-20	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-21	WATER FURNACE	NBH018	HORIZONTAL	600	0.5	17.05	11.4	85	15.6	16.7	45	3.8	4.0	6.7	15.0	UP 26-64F	1	1	18x29	208	1	14.5	20	HP-21	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-22	WATER FURNACE	NBH018	HORIZONTAL	600	0.5	17.05	11.4	85	15.6	16.7	45	3.8	4.0	6.7	15.0	UP 26-64F	1	1	18x29	208	1	14.5	20	HP-22	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-23	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-23	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-24	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-24	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-25	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-25	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-26	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-26	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-27	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-27	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-28	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-28	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-29	WATER FURNACE	NBH012	HORIZONTAL	400	0.5	13.55	9.3	85	15.5	10.5	45	3.7	2.5	2.3	11.0	UP 26-64F	3/4	1	16x16	208	1	6.7	15	HP-29	1,2,3,4,5,6,12,13,14
HP-30	WATER FURNACE	NBH038	HORIZONTAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-30	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-31	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-31	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-32	WATER FURNACE	NBH072	VERTICAL	2200	0.5	69.85	50.5	85	14.1	67.0	45	4.0	15.0	10.0	18.0	UP 43-75F	1-1/2	2	20x25/20x22	480	3	14.6	20	HP-32	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-33	WATER FURNACE	NBH072	VERTICAL	2200	0.5	69.85	50.5	85	14.1	67.0	45	4.0	15.0	10.0	18.0	UP 43-75F	1-1/2	2	20x25/20x22	480	3	14.6	20	HP-33	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-34	WATER FURNACE	NBH072	VERTICAL	2200	0.5	69.85	50.5	85	14.1	67.0	45	4.0	15.0	10.0	18.0	UP 43-75F	1-1/2	2	20x25/20x22	480	3	14.6	20	HP-34	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-35	WATER FURNACE	NLV160	VERTICAL	5000	0.50	147.9	105.9	85	14.3	108.2	45	3.5	28.0	5.9	14.0	UP 43-75F	2	2	40x42	480	3	28.7	30	HP-35	1,2,3,4,5,6,7,8,9,11,12,13,14
HP-36	WATER FURNACE	NBH049	HORIZONTAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	480	3	12.1	15	HP-36	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-37	WATER FURNACE	NBV038	VERTICAL	1250	0.50	39.25	29.0	85	16.3	31.8	45	4.4	7.0	4.9	13.0	UP 26-64F	1-1/4	1	20x37	208	1	23.2	35	HP-37	1,2,3,4,5,6,7,8,9,10,12,13,14
HP-38	WATER FURNACE	NBV049	VERTICAL	1550	0.50	50.85	33.3	85	16.7	43.4	45	4.1	9.0	5.3	14.0	UP 26-64F	1-1/4	2	20x20/20x22	208	3	21.5	35	HP-38	1,2,3,4,5,6,7,8,9,10,12,13,14

NOTES:

1 RATINGS ARE BASED ON (COOLING) 80/67; (HEATING) 68.

2 HEATPUMPS TO BE PROVIDED WITH FACTORY WIRED AND INSTALLED CIRCULATORS.

3 WET ROTOR CIRCULATORS CAN BE INSTALLED IN BORTH VERTICAL AND HORIZONTAL LINES. THE PUMP SHALL BE INSTALLED WITH MOTOR SHAFT POSITIONED HORIZONTALLY. UNDER NO CIRCUMSTANCES SHOULD THE PUMP BE INSTALLED WITH THE SHAFT VERTICAL OR WHERE THE SHAFT FALLS BELOW THE HORIZONTAL PLANE. FOR FURTHER INFORMATION ON THE WET ROTOR CIRCULATORS, SEE INSTRUCTIONS THAT CAME WITH THEM 4 PROVIDE ALL UNITS WITH 2" MERV 8 FILTERS.

5 INSTALLING CONTRACTOR SHALL PROVIDE 5 YEAR LABOR WARRANTY FOR UNIT COMPRESSOR AND REFRIGERANT SYSTEM.

6 PROVIDE FACTORY INSTALLED DISCONNECT SWITCH

7 ECM MOTOR

8 PROVIDE AS TWO SPEED HEAT PUMPS

9 PROVIDE WITH 2-STAGE BACNET THERMOSTAT WITH TEMPERATURE CONTROL AND HUMIDITY CONTROL FOR FIELD INSTALLATION.

10 PROVIDE WITH HOT GAS REHEAT DEHUMIDIFICATION CONTROLLED BY SPACE HUMIDISTAT.

11 PROVIDE WITH HOT GAS REHEAT DEHUMIDIFICATION CONTROLLED BY SPACE HUMIDISTAT AND HOT GAS BYPASS

12 BALL VALVES SHALL BE FULL PORT AND INSTALLED SO THAT HEATPUMP CAN BE REMOVED WHEN VALVES ARE SHUT.

13 BALANCE VALVES SHALL BE SELECTED FOR A MAX PRESSURE DROP OF 5' AT INDICATED OPERATING FLOW RATES.

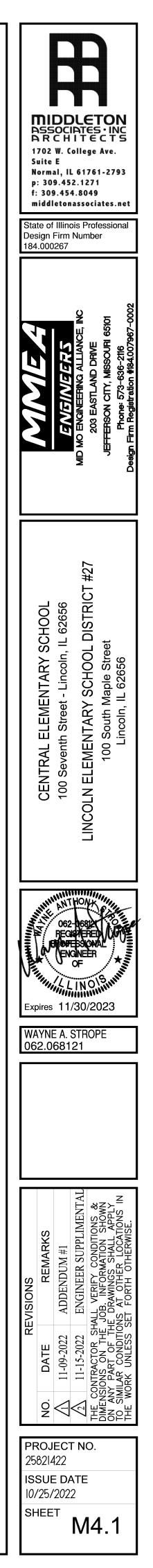
4 PROVIDE WITH GLOBAL PLASMA SOLUTIONS MODEL GPS-FC-3-BAS BIPOLAR IONIZATION DEVICE. MOUNT IN PER MANUFACTURER'S INSTRUCTIONS. 

$\Lambda$	7										
	ELECTRIC HEATER SCHEDULE										
	MARK	MANUFACTURER	MODEL NUMBER	KW	#	E	LECTR	ICAL	REMARKS		
					STAGES	VOLTS	Ø	MCA	MOP		
	UH-1	MARKEL	F1F513	3.0	1	208	1	18	20	NOTE 1	
	UH-2	MARKEL	F1F513	3.0	1	208	1	18	20	NOTE 1	
	UH-3	MARKEL	F1F513	3.0	1	208	1	18	20	NOTE 1	
	UH-4	MARKEL	F1F513	3.0	1	208	1	18	20	NOTE 1	

NOTES:

1. PROVIDE WITH INTEGRAL THERMOSTAT, DISCONNECT SWITCH, AND CEILING MOUNTING BRACKET.

	NICAL SYMBOL SCHEDULE BOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS								
	TIE TO EXISTING (CONNECTION POINT)								
	WASTE PIPING								
	VENT PIPING								
	DOMESTIC COLD WATER PIPING								
	DOMESTIC HOT WATER SUPPLY PIPING								
	DOMESTIC HOT WATER RETURN								
G	NATURAL GAS								
D	DRAIN LINE								
	UNION - FLANGE - STRAINER								
	GATE VALVE - CHECK VALVE								
	BALL VALVE - PLUG COCK								
₩	CALIBRATED BALANCING VALVE W/ PORTS								
_ĀĀ	TRIPLE DUTY VALVE - PRESSURE REDUCING REGULATING VALVE								
_kk	BUTTERFLY VALVE - THREE WAY CONTROL VALVE								
	PRESSURE RELIEF VALVE								
	SOLENOID VALVE - GAUGE VALVE								
Ŷ	PRESSURE GAUGE								
— <b>E</b>	THERMOMETER (BULB OR DIAL TYPE)								
	PUMP								
⊠	STEAM TRAP								
<u> </u>	TEST PORT - PETES PLUG								
	MANUAL VOLUME DAMPER (VD)								
	MOTORIZED DAMPER								
	FIRE DAMPER (FD)								
	SMOKE DAMPER (SD)								
	SMOKE FIRE DAMPER (SFD)								
T 3 H 3	THERMOSTAT - HUMIDISTAT (ZONE SUBSCRIPT)								
<u>①</u>	CO2 SENSOR								
TC	TEMPERATURE CONTROL								
Т	TEMPERATURE SENSOR								



## BID DOCUMENTS