

November 14, 2022

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

ADDENDUM NUMBER 2
TO THE DRAWINGS AND SPECIFICATIONS

PROJECT: Lincoln Central Elementary School HVAC Renovation

FOR: Lincoln Elementary School District No. 27
304 8th 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 8th 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.

3. The contractor shall turn the removed chiller and boilers over to the owner in good working condition for salvage.
4. Propress fittings are acceptable for joints on the interior copper heat pump loop piping or condensate piping less than or equal to 2".
5. TO THE DRAWINGS; Sheet M1.1: Revised loop piping routing around main entrance. Revised loop piping in East corridor and into the upper mechanical room adjacent to the gym. Relocate heat pumps HP-1, HP-2, and HP-3 into the upper mechanical room adjacent to the gym. This adds 88' of 12" x 24" duct to three heat pumps that need to be painted 1 coat flat black paint. Added four electric unit heaters in mechanical room, electrical room, and storage to replace removed hydronic unit heaters.
6. TO THE DRAWINGS; Sheet M1.3: Show revised location for HP-1, HP-2, and HP-3 in the upper mechanical room adjacent to the gym.
7. TO THE DRAWINGS; Sheet M4.1: Add the schedule for the electric unit heaters.
8. TO THE DRAWINGS; Sheet E1.1: Show power for new electric unit heaters in mechanical room, electrical room, and storage.
9. TO THE DRAWINGS; Sheet E1.3: Show power for relocated heatpumps HP-1, HP-2, and HP-3 in the upper mechanical room adjacent to the gym.
10. TO THE DRAWINGS; Sheet A801 & Sheet A803: Add ceiling removal and

replacement as shown on new A801 and A803 sheet.

11. TO THE DRAWINGS; Sheet M1.2: Delete original Sheet M1.2. Replace with attached Sheet M1.2.
12. TO THE DRAWINGS; Sheets A801, A802, and A803: With the ceiling removal shown, there may be 2 security cameras to be reinstalled and 12 exit fixtures reinstalled.

Attachments: Sheet M1.1, Sheet M1.2, Sheet M1.3, Sheet M4.1, Sheet E1.1, Sheet E1.3, Sheet A801, Sheet A803

END ADDENDUM NO. 2



- GENERAL NOTES:**
- DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
 - UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
 - MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

- NOTES:**
- 2 #12 THHN, #12 CU GRD, 3/4" C BACK TO A 15A, 2P BRKR.
 - 2 #8 THHN, #10 CU GRD, 3/4" C BACK TO A 35A, 2P BRKR.
 - 3 #8 THHN, #10 CU GRD, 3/4" C BACK TO A 35A, 3P BRKR.
 - 3 #8 THHN, #10 CU GRD, 3/4" C BACK TO A 40A, 3P BRKR.
 - 3 #12 THHN, #12 CU GRD, 3/4" C CONNECTED TO EXISTING 15A, 480V CIRCUIT WHICH FED REMOVED PUMPS.
 - 3 #10 THHN, #10 CU GRD, 3/4" C CONNECTED TO EXISTING 30A, 480V SERVICE FROM REMOVED AHU.
 - 4 #3/0 THHN, #6 CU GRD, 2" C TO A NEW 200A, 3P BRKR IN EXISTING PANEL "IDP1" LOCATED IN ELECT. ROOM 116.
 - 2 #12 THHN, #12 CU GRD, 3/4" C BACK TO A NEW 20A, 2P BRKR IN EXISTING PANEL "1PPZ".

MIDDLETON ASSOCIATES - INC
 ARCHITECTS
 1702 W. College Ave.
 Suite E
 Normal, IL 61761-2793
 p: 309.452.1271
 f: 309.454.8049
 middletonassociates.net

State of Illinois Professional Design Firm Number 184.000267

MMEA ENGINEERS
 MIDDLETON ENGINEERING ALLIANCE, INC
 288 EASTLAND DRIVE
 JEFFERSON CITY, MISSOURI 65101
 Phone: 573-636-2100
 Design Firm Registration #14207687-0002

CENTRAL ELEMENTARY SCHOOL
 100 Seventh Street - Lincoln, IL 62656
LINCOLN ELEMENTARY SCHOOL DISTRICT #27
 100 South Maple Street
 Lincoln, IL 62656

WAYNE A. STROPE
 062.068121
 Expires 11/30/2023

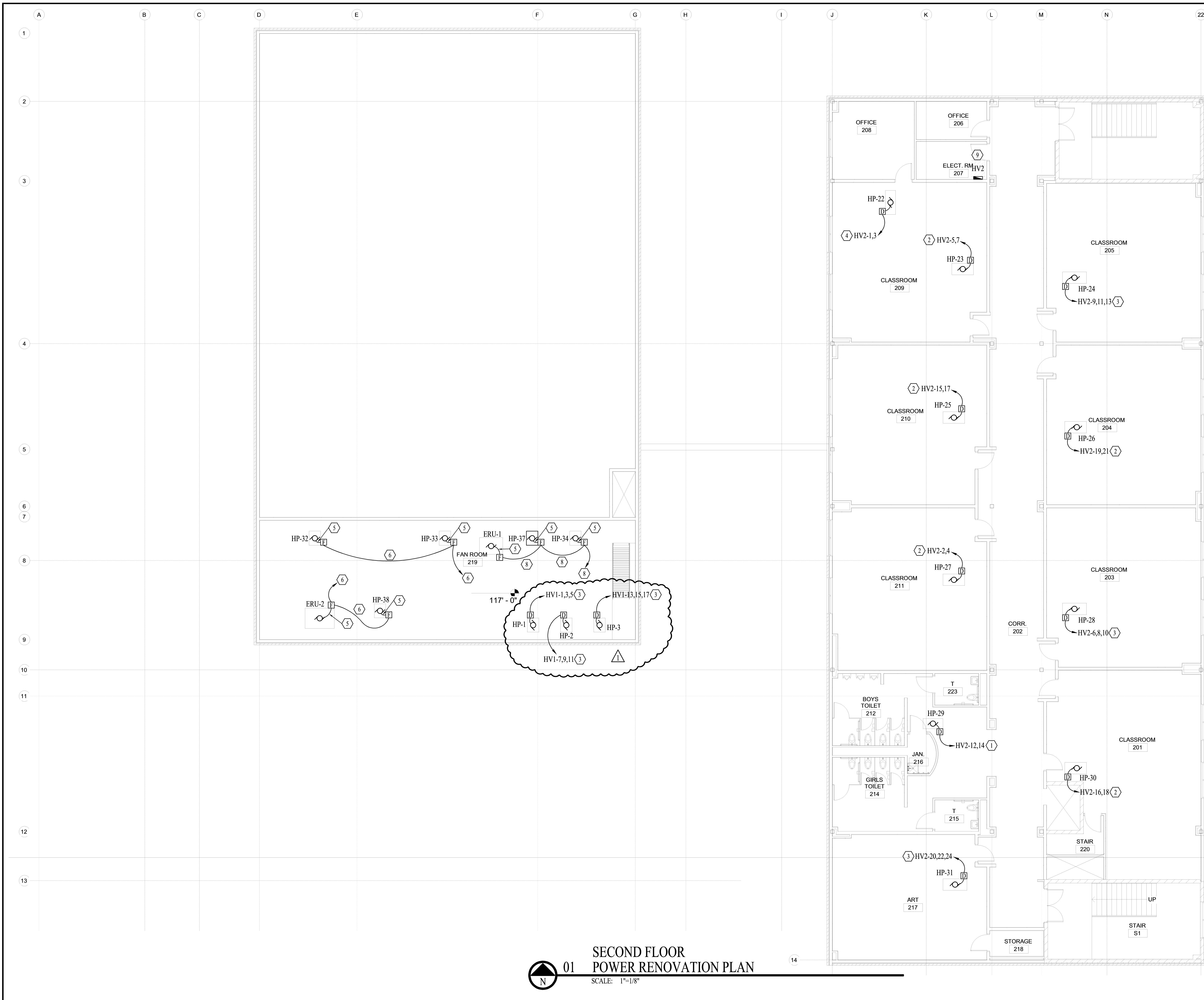
WAYNE A. STROPE
 062.068121

NO.	DATE	REVISIONS	REMARKS
1	11-09-2022	ADDENDUM #1	

THE CONTRACTOR SHALL VERIFY CONDITIONS & DIMENSIONS ON THE JOB. INFORMATION SHOWN ON ANY PART OF THE DRAWINGS SHALL APPLY TO THE WORK UNLESS SET FORTH OTHERWISE.

PROJECT NO. 25821422
 ISSUE DATE 10/25/2022
 SHEET E.1.1

01 FIRST FLOOR NORTH POWER RENOVATION PLAN
 SCALE: 1"=1/8"



GENERAL NOTES:

- DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
- UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
- MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

NOTES:

- 2 #12 THHN, #12 CU GRD, 3/4" C BACK TO A 15A, 2P BRKR.
- 2 #8 THHN, #10 CU GRD, 3/4" C BACK TO A 35A, 2P BRKR.
- 3 #8 THHN, #10 CU GRD, 3/4" C BACK TO A 35A, 3P BRKR.
- 2 #12 THHN, #12 CU GRD, 3/4" C BACK TO A 20A, 2P BRKR.
- 3 #12 THHN, #12 CU GRD, 3/4" C FROM FUSED DISCONNECT TO EQUIPMENT.
- 3 #10 THHN, #10 CU GRD, 3/4" C CONNECTED TO EXISTING 30A, 480V SERVICE FROM REMOVED AHU.
- 3 #8 THHN, #10 CU GRD, 3/4" C CONNECTED TO EXISTING 35A, 480V SERVICE FROM REMOVED AHU.
- 4 #3/0 THHN, #6 CU GRD, 2" C TO A NEW 200A, 3P BRKR IN EXISTING PANEL "2DP1" LOCATED IN ELECT. ROOM 207.

01 SECOND FLOOR POWER RENOVATION PLAN
SCALE: 1"=18"

MIDDLETON ASSOCIATES - INC ARCHITECTS
1702 W. College Ave. Suite E
Normal, IL 61761-2793
p: 309.452.1271
f: 309.454.8049
middletonassociates.net

State of Illinois Professional Design Firm Number 184.000267

MMEA ENGINEERS
MID-MO ENGINEERING ALLIANCE, INC
288 EASTLAND DRIVE
JEFFERSON CITY, MISSOURI 65801
Phone: 573-636-2100
Design Firm Registration #14202687-0028

CENTRAL ELEMENTARY SCHOOL
100 Seventh Street - Lincoln, IL 62656
LINCOLN ELEMENTARY SCHOOL DISTRICT #27
100 South Maple Street
Lincoln, IL 62656

WAYNE A. STROPE
062.068121
Professional Engineer
Expires 11/30/2023

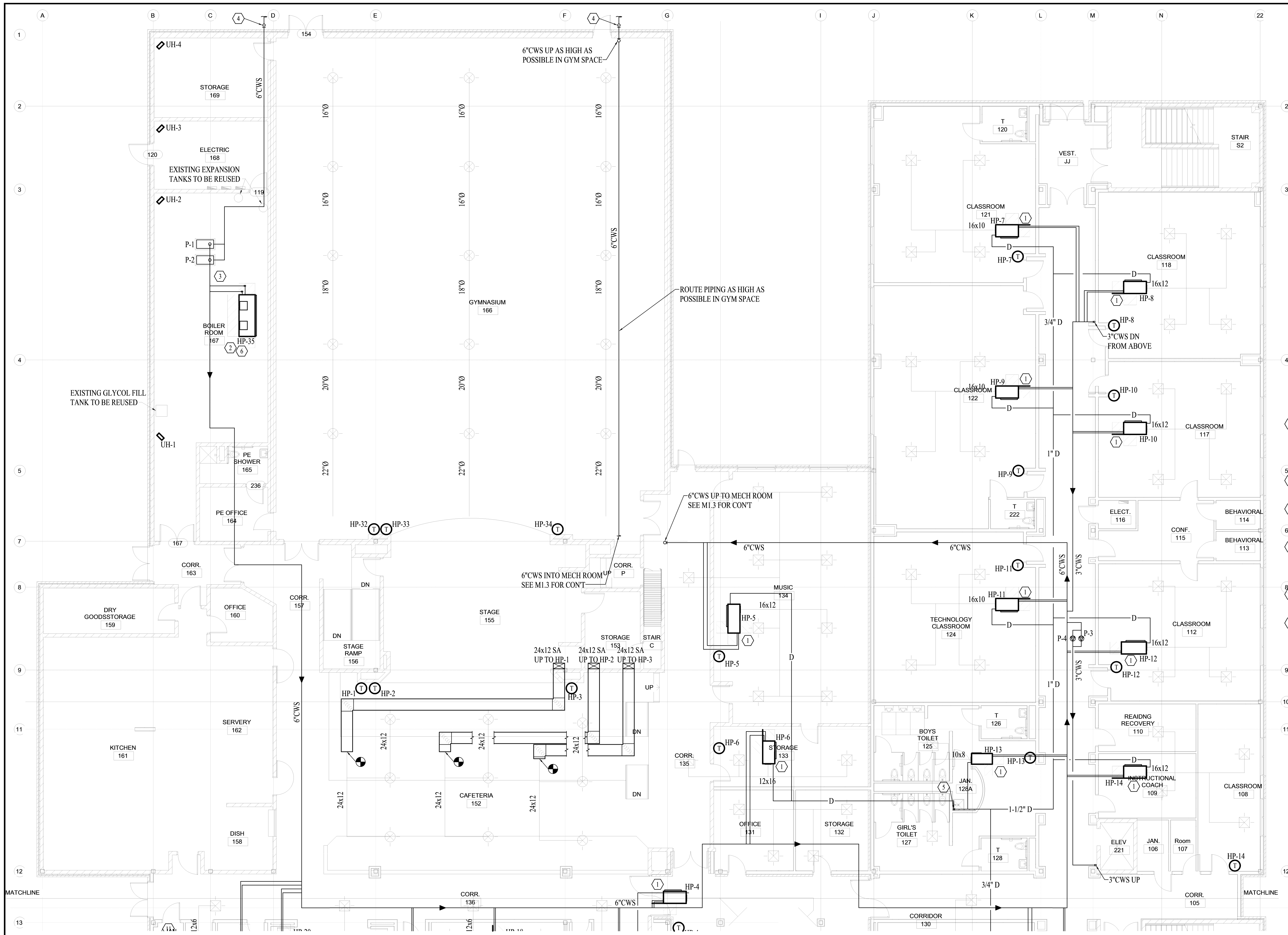
WAYNE A. STROPE
062.068121

NO.	DATE	REVISIONS	REMARKS
1	11-09-2022	ADDENDUM #1	

THE CONTRACTOR SHALL VERIFY CONDITIONS & DIMENSIONS ON THE JOB. INFORMATION SHOWN ON ANY PART OF THE DRAWINGS SHALL APPLY TO THE WORK UNLESS SET FORTH OTHERWISE.

PROJECT NO. 25821422
ISSUE DATE 10/25/2022
SHEET E.13

BID DOCUMENTS



- GENERAL NOTES:**
- DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
 - UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
 - MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

- NOTES:**
- MOUNT HEAT PUMPS ON SUPPORTS FROM REMOVED VAV BOXES. MODIFY SUPPORTS AS REQUIRED FOR HEAT PUMPS. CONNECT HEAT PUMP SA TO EXISTING SA DUCT SERVING THE SPACE.
 - CONNECT TO EXISTING RA AND SA DUCT FROM REMOVED AHU-4.
 - SEE GEOTHERMAL SYSTEM PIPING DIAGRAM FOR FURTHER DETAILS ON PIPING SYSTEM COMPONENTS.
 - ENTER BUILDING APPROXIMATELY 10'-0" ABOVE FINISHED FLOOR. INSULATE PIPING AND PROVIDE PAINTABLE SHEET METAL ENCLOSURE AROUND EXPOSED PIPING.
 - 1-1/2" CONDENSATE DRAIN WALL TO MOP SINK.
 - TIE INTO EXISTING ABANDONED CONDENSATE DRAIN.

01 FIRST FLOOR NORTH MECHANICAL RENOVATION PLAN
SCALE: 1"=18"

REISSUE OF SHEET

BID DOCUMENTS

MIDDLETON ASSOCIATES - INC
ARCHITECT
1702 W. College Ave.
Suite E
Normal, IL 61761-2793
p: 309.452.1271
f: 309.454.8049
middletonassociates.net

State of Illinois Professional Design Firm Number 184.000267

MMEA ENGINEERS
MID-MO ENGINEERING ALLIANCE, INC
288 EASTLAND DRIVE
JEFFERSON CITY, MISSOURI 6801
Phone: 573-636-2106
Design Firm Registration #14202687-0002

CENTRAL ELEMENTARY SCHOOL
100 Seventh Street - Lincoln, IL 62656
LINCOLN ELEMENTARY SCHOOL DISTRICT #27
100 South Maple Street
Lincoln, IL 62656

WAYNE A. STROPE
062.068121
Professional Engineer
Illinois
Expires 11/30/2023

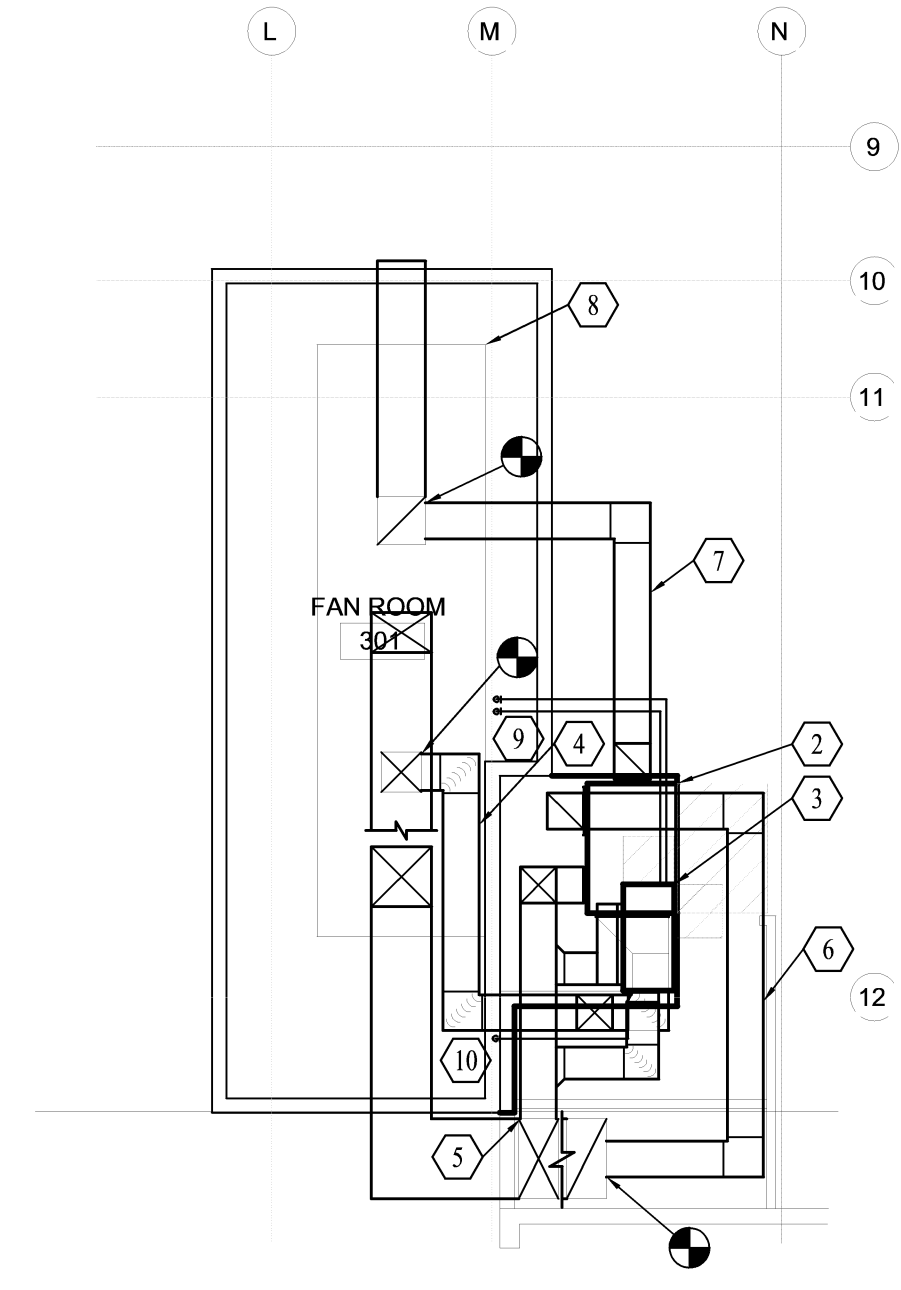
WAYNE A. STROPE
062.068121

NO.	DATE	REVISIONS	REMARKS
1	11-09-2022	ADDENDUM #1	THE CONTRACTOR SHALL VERIFY CONDITIONS & DIMENSIONS ON THE JOB. INFORMATION SHOWN ON ANY PART OF THE DRAWINGS SHALL APPLY IN THE WORK UNLESS SET FORTH OTHERWISE.

PROJECT NO. 25821422
ISSUE DATE 10/25/2022
SHEET M1.1

NO.	DATE	REVISIONS	REMARKS
1	11-09-2022	ADDENDUM #1	

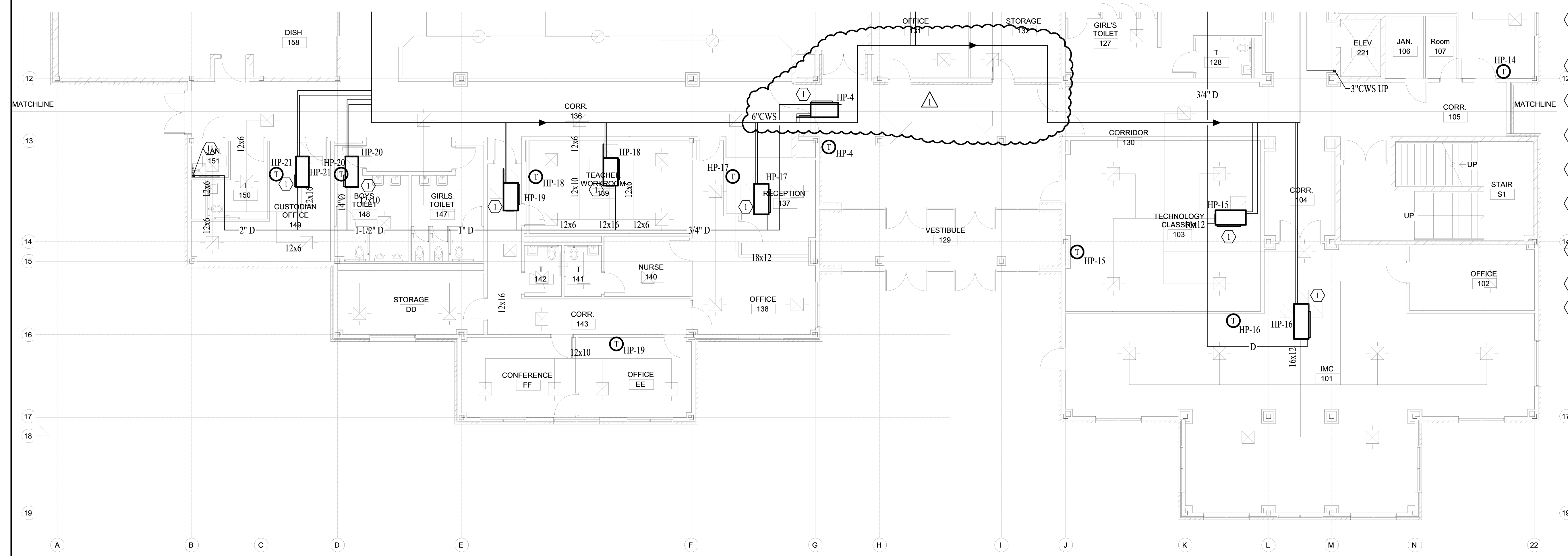
THE CONTRACTOR SHALL VERIFY CONDITIONS & DIMENSIONS ON THE JOB. INFORMATION SHOWN ON ANY PART OF THE DRAWINGS SHALL APPLY IN THE WORK UNLESS SET FORTH OTHERWISE.



01 THIRD FLOOR MECHANICAL RENOVATION PLAN
SCALE: 1"=1/8"

- GENERAL NOTES:**
- DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
 - UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
 - MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

- NOTES:**
- MOUNT HEAT PUMPS ON SUPPORTS FROM REMOVED VAV BOXES. MODIFY SUPPORTS AS REQUIRED FOR HEAT PUMPS. CONNECT HEAT PUMP SA TO EXISTING SA DUCT SERVING THE SPACE.
 - ERU-3 MOUNTED ON CONCRETE ENCLOSURE ABOVE ELEVATOR.
 - HP-36 HUNG FROM STRUCTURE ABOVE ERU-3. SEE OA/HP DETAIL FOR CONNECTION INFORMATION.
 - 18"x18" OA DUCT FROM EXISTING OA DUCT TO ERU-3 OA INTAKE.
 - 18"x18" OA DUCT FROM ERU-3 OUTLET TO EXISTING SA DUCT.
 - 18"x18" EA DUCT FROM EXISTING RA DUCT TO ERU-3 EA INLET.
 - 18"x18" FROM ERU-3 EA OUTLET TO EXISTING RELIEF HOOD DUCT.
 - DISCONNECT EXISTING AHU AND ABANDON IN PLACE. UTILIZE 480V POWER CIRCUIT FOR ERU-3.
 - SUPPLY AND RETURN PIPING FROM BELOW.
 - CONDENSATE DRAIN DOWN.
 - 2" CONDENSATE DRAIN WALL TO MOP SINK.



01 FIRST FLOOR SOUTH MECHANICAL RENOVATION PLAN
SCALE: 1"=1/8"

NO.	DATE	REVISIONS	REMARKS
1	11-09-2022	ADDENDUM #1	

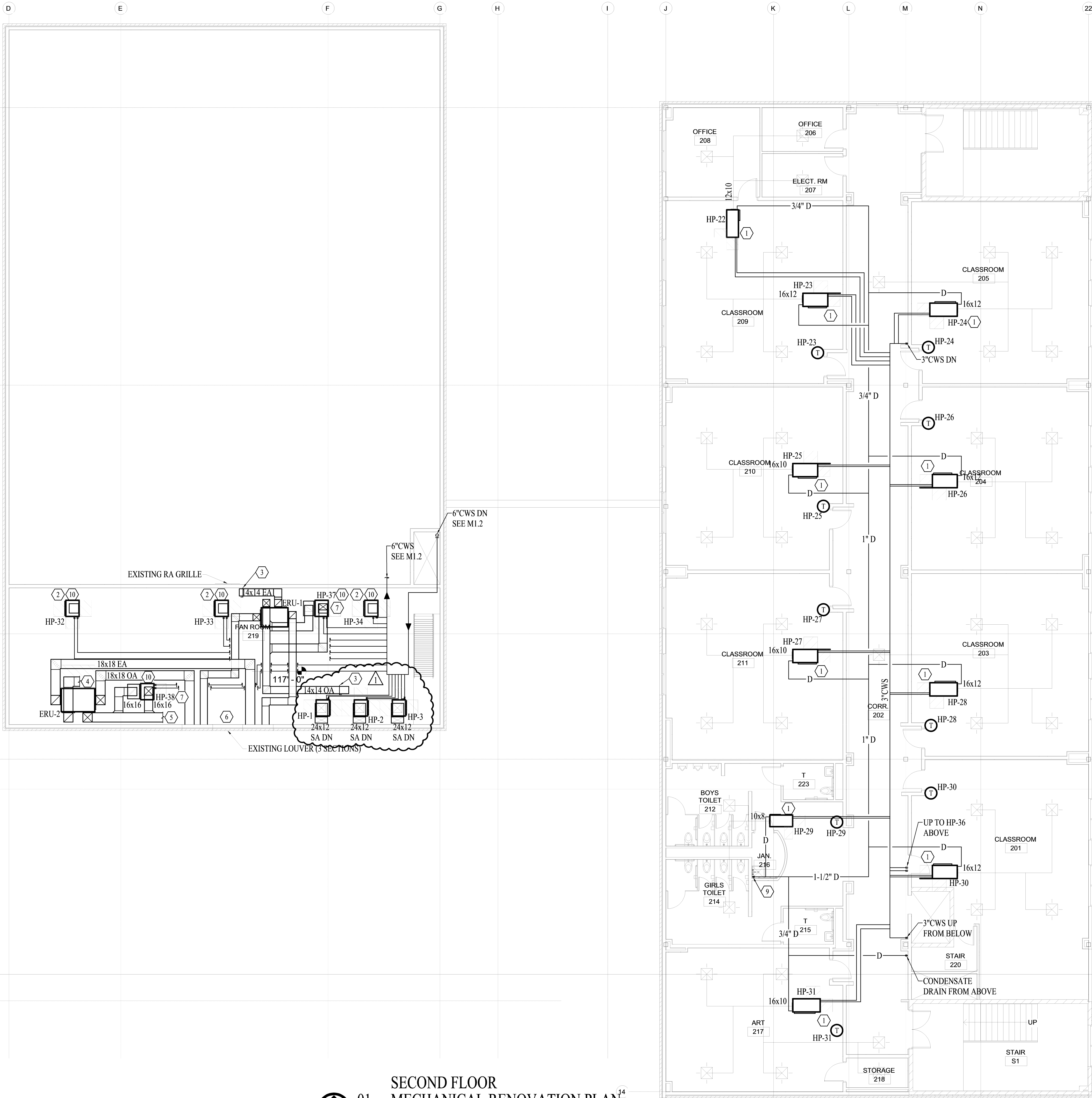
THE CONTRACTOR SHALL VERIFY CONDITIONS & DIMENSIONS ON THE JOB. INFORMATION SHOWN ON ANY PART OF THE DRAWINGS SHALL APPLY TO THE WORK UNLESS SET FORTH OTHERWISE.

GENERAL NOTES:

- DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
- UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
- MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

NOTES:

- MOUNT HEAT PUMPS ON SUPPORTS FROM REMOVED VAV BOXES. MODIFY SUPPORTS AS REQUIRED FOR HEAT PUMPS. CONNECT HEAT PUMP SA TO EXISTING SA DUCT SERVING THE SPACE.
- CONNECT HEAT PUMP SA TO EXISTING 24"x24" SA DUCT AT WALL OF MECHANICAL ROOM.
- MVD SET @ 1050 CFM WITH UNIT RUNNING @ MAX SPEED.
- CONNECT NEW 18"x18" EA FROM ERU-2 EA INLET TO EXISTING RA FROM REMOVED AHU-S 2 AND 3.
- CONNECT NEW 18"x18" OA FROM ERU-2 OA OUTLET TO EXISTING SA FROM REMOVED AHU-S 2 AND 3.
- UTILIZE EXISTING 3 ZONE LOUVER FOR EA AND OA. UTILIZE WEST SIDE FOR OA AND EAST SIDE FOR EA FROM ERU-1 AND ERU-2.
- SEE HP/OA DETAIL FOR FURTHER CONNECTION INFORMATION.
- PROVIDE PAINTABLE 16 GAUGE SHEET METAL ENCLOSURE AROUND EXPOSED PIPING.
- 1-1/2" CONDENSATE DRAIN WALL TO MOP SINK.
- TIE INTO EXISTING ABANDONED CONDENSATE DRAIN.



01 SECOND FLOOR MECHANICAL RENOVATION PLAN
SCALE: 1"=18"
14

HEAT PUMP SCHEDULE																									
MARK	MANUFACTURER	MODEL NUMBER	CONFIGURATION POS./ORIN	S.A. (CFM)	ESP (IN W.C.)	COOLING				HEATING			WATER FLOW (GPM)	H.P. WPD (FT)	PUMP HEAD (FT)	GRUNDFOS PUMP MODEL	WATER PIPING SIZE	FILTER		ELECTRICAL				MARK	NOTES
						TOTAL	SENSIBLE	EWT (°F)	EER	CAP. TOTAL (BTH)	EWT (°F)	COP						QTY	SIZE	VOLTS	Ø	MCA (AMPS)	MAX 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
HP-2	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-2	1,2,3,4,5,6,7,8,9,10,12,13
HP-3	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-3	1,2,3,4,5,6,7,8,9,10,12,13
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

NOTES:

- RATINGS ARE BASED ON (COOLING) 80/67; (HEATING) 68.
- HEATPUMPS TO BE PROVIDED WITH FACTORY WIRED AND INSTALLED CIRCULATORS.
- 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
- PROVIDE ALL UNITS WITH 2" MERV 8 FILTERS.
- INSTALLING CONTRACTOR SHALL PROVIDE 5 YEAR LABOR WARRANTY FOR UNIT COMPRESSOR AND REFRIGERANT SYSTEM.
- PROVIDE FACTORY INSTALLED DISCONNECT SWITCH
- ECM MOTOR
- PROVIDE AS TWO SPEED HEAT PUMPS
- PROVIDE WITH 2-STAGE BACNET THERMOSTAT WITH TEMPERATURE CONTROL AND HUMIDITY CONTROL FOR FIELD INSTALLATION.
- PROVIDE WITH HOT GAS REHEAT DEHUMIDIFICATION CONTROLLED BY SPACE HUMIDISTAT.
- PROVIDE WITH HOT GAS REHEAT DEHUMIDIFICATION CONTROLLED BY SPACE HUMIDISTAT AND HOT GAS BYPASS
- BALL VALVES SHALL BE FULL PORT AND INSTALLED SO THAT HEATPUMP CAN BE REMOVED WHEN VALVES ARE SHUT.
- BALANCE VALVES SHALL BE SELECTED FOR A MAX PRESSURE DROP OF 5' AT INDICATED OPERATING FLOW RATES.

ELECTRIC HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL NUMBER	KW	# STAGES	ELECTRICAL				REMARKS
					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:

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

MECHANICAL SYMBOL SCHEDULE	
ALL SYMBOLS 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
	NATURAL GAS
	DRAIN LINE
	UNION - FLANGE - STRAINER
	GATE VALVE - CHECK VALVE
	BALL VALVE - PLUG COCK
	CALIBRATED BALANCING VALVE W/ PORTS
	TRIPLE DUTY VALVE - PRESSURE REDUCING REGULATING VALVE
	BUTTERFLY VALVE - THREE WAY CONTROL VALVE
	PRESSURE RELIEF VALVE
	SOLENOID VALVE - GAUGE VALVE
	PRESSURE GAUGE
	THERMOMETER (BULB OR DIAL TYPE)
	PUMP
	STEAM TRAP
	TEST PORT - PETES PLUG
	MANUAL VOLUME DAMPER (VD)
	MOTORIZED DAMPER
	FIRE DAMPER (FD)
	SMOKE DAMPER (SD)
	SMOKE FIRE DAMPER (SFD)
	THERMOSTAT - HUMIDISTAT (ZONE SUBSCRIPT)
	CO: SENSOR
	TEMPERATURE CONTROL
	TEMPERATURE SENSOR

MIDDLETON ASSOCIATES - INC
ARCHITECTS
1702 W. College Ave.
Suite E
Normal, IL 61761-2793
p: 309.452.1271
f: 309.454.8049
middletonassociates.net

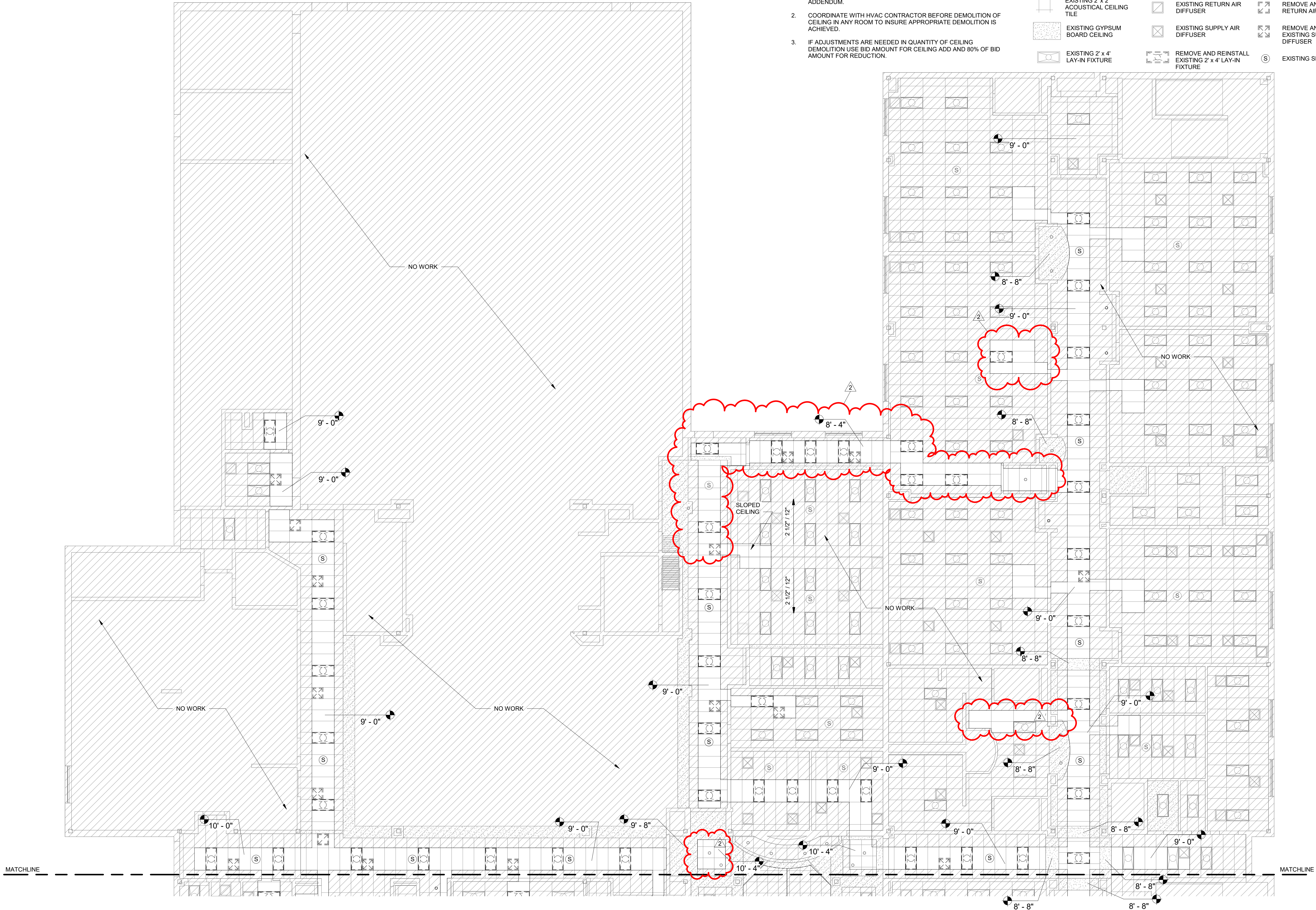
State of Illinois Professional Design Firm Number 184.000267

GENERAL NOTES

1. ALL TRADES: SEE SPECIFICATION SECTION 010100 SUMMARY OF WORK FOR QUANTITIES OF LIGHT FIXTURES, SPEAKERS, EMERGENCY LIGHTS, AND AIR DIFFUSERS TO BE REMOVED AND REINSTALLED. FIRE ALARM DEVICES WILL BE NOTED IN ADDENDUM.
2. COORDINATE WITH HVAC CONTRACTOR BEFORE DEMOLITION OF CEILING IN ANY ROOM TO INSURE APPROPRIATE DEMOLITION IS ACHIEVED.
3. IF ADJUSTMENTS ARE NEEDED IN QUANTITY OF CEILING DEMOLITION USE BID AMOUNT FOR CEILING ADD AND 80% OF BID AMOUNT FOR REDUCTION.

REFLECTED CEILING PLAN LEGEND

- EXISTING 2' x 4' ACOUSTICAL CEILING TILE
- EXISTING 2' x 2' ACOUSTICAL CEILING TILE
- EXISTING GYPSUM BOARD CEILING
- EXISTING 2' x 4' LAY-IN FIXTURE
- EXISTING RECESSED CAN LIGHT
- EXISTING RETURN AIR DIFFUSER
- EXISTING SUPPLY AIR DIFFUSER
- REMOVE AND REINSTALL EXISTING 2' x 4' LAY-IN FIXTURE
- EXISTING CEILING HEIGHT ABOVE FLOOR
- REMOVE AND REINSTALL RETURN AIR DIFFUSER
- REMOVE AND REINSTALL EXISTING SUPPLY AIR DIFFUSER
- EXISTING SMOKE DETECTOR



1 FIRST FLOOR REFLECTED CEILING PLAN - NORTH
1/8" = 1'-0"



ARCHITECTS
MIDDLETON ASSOCIATES, INC ARCHITECTS
 WWW.MIDDLETONASSOCIATES.NET
DESIGN Mavens ARCHITECTURE, LLC
 WWW.DESIGNMAVENS.COM
 DESIGN FIRM REG# 184-008472

CIVIL ENGINEER
MMEZ ENGINEERS
 WWW.MMEZENGINEERS.COM

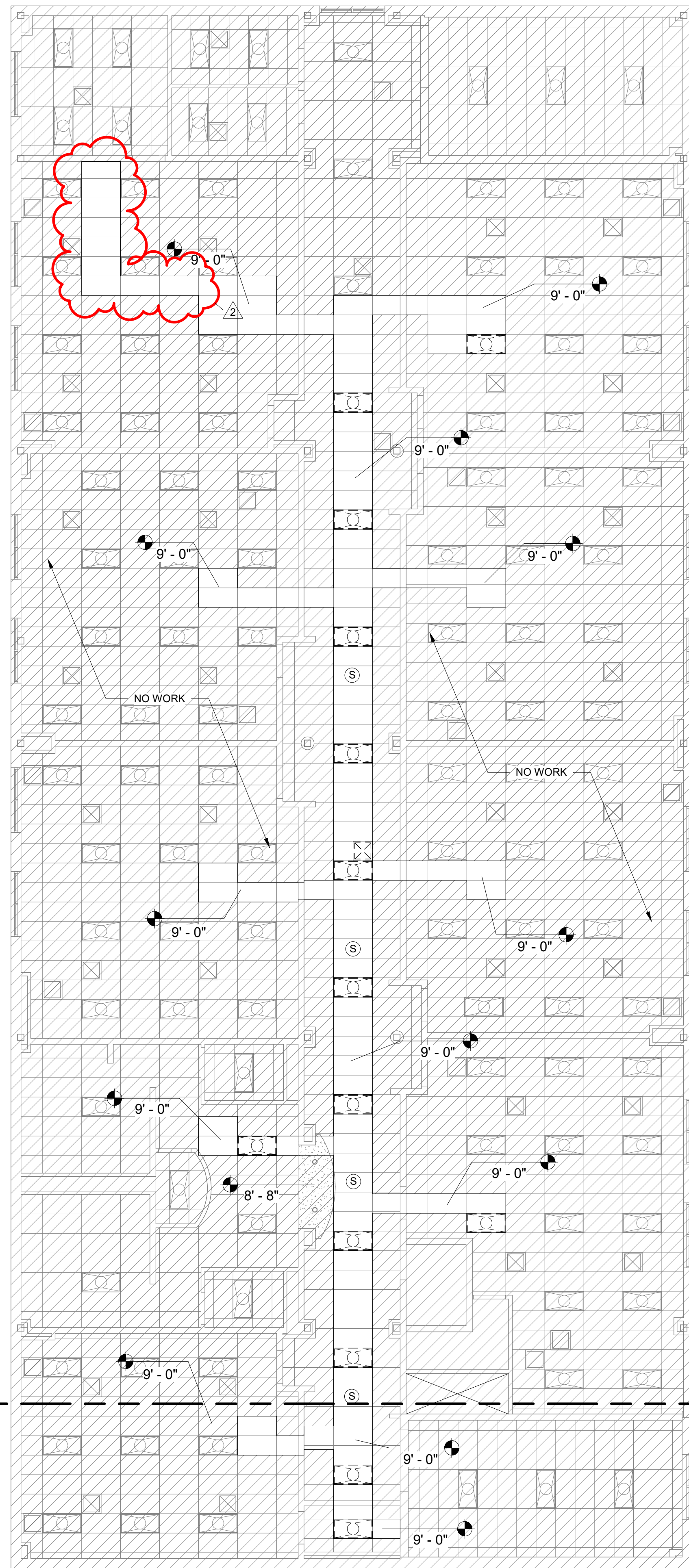
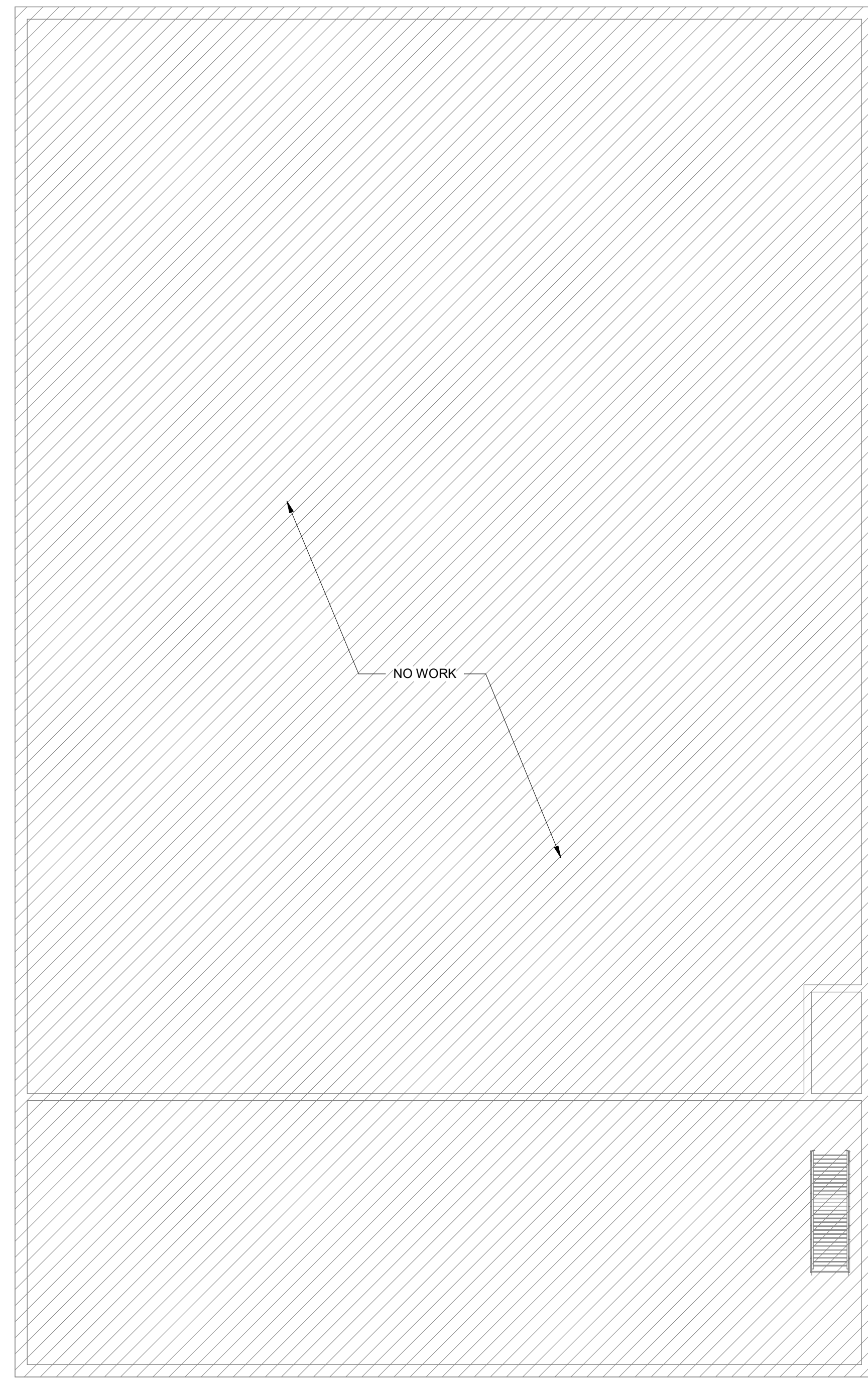
MEP ENGINEER

FIRST FLOOR REFLECTED CEILING PLAN - NORTH
 CENTRAL ELEMENTARY GEOTHERMAL
 LINCOLN ELEMENTARY SCHOOL DISTRICT #27
 304 8th ST., LINCOLN, IL 62656

REVISIONS		
#	DATE	DESCRIPTION
2	11/14/22	ADDENDUM 2

PROJECT # 25821422
 ISSUED DATE 10/25/2022
 SHEET
A801
 OF SHEETS

BID DOCUMENTS



REFLECTED CEILING PLAN LEGEND

- EXISTING 2' x 4' ACOUSTICAL CEILING TILE
- EXISTING 2' x 2' ACOUSTICAL CEILING TILE
- EXISTING GYPSUM BOARD CEILING
- EXISTING 2' x 4' LAY-IN FIXTURE
- EXISTING RECESSED CAN LIGHT
- EXISTING RETURN AIR DIFFUSER
- EXISTING SUPPLY AIR DIFFUSER
- REMOVE AND REINSTALL EXISTING 2' x 4' LAY-IN FIXTURE
- EXISTING CEILING HEIGHT ABOVE FLOOR
- REMOVE AND REINSTALL RETURN AIR DIFFUSER
- REMOVE AND REINSTALL EXISTING SUPPLY AIR DIFFUSER
- EXISTING SMOKE DETECTOR

GENERAL NOTES

1. ALL TRADES. SEE SPECIFICATION SECTION 010100 SUMMARY OF WORK FOR QUANTITIES OF LIGHT FIXTURES, SPEAKERS, EMERGENCY LIGHTS, AND AIR DIFFUSERS TO BE REMOVED AND REINSTALLED. FIRE ALARM DEVICES WILL BE NOTED IN ADDENDUM.
2. COORDINATE WITH HVAC CONTRACTOR BEFORE DEMOLITION OF CEILING IN ANY ROOM TO INSURE APPROPRIATE DEMOLITION IS ACHIEVED.
3. IF ADJUSTMENTS ARE NEEDED IN QUANTITY OF CEILING DEMOLITION USE BID AMOUNT FOR CEILING ADD AND 80% OF BID AMOUNT FOR REDUCTION.

MATCHLINE

MATCHLINE

1 SECOND FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"



ARCHITECTS
MIDDLETON ASSOCIATES, INC ARCHITECTS
 WWW.MIDDLETONASSOCIATES.NET
DESIGN Mavens ARCHITECTURE, LLC
 WWW.DESIGNMAVENS.COM
 DESIGN FIRM REG# 184-008472

CIVIL ENGINEER
 MEP ENGINEER
MMEZ ENGINEERS
 WWW.MMEZENGINEERS.COM

SECOND FLOOR REFLECTED CEILING PLAN
CENTRAL ELEMENTARY GEOTHERMAL
LINCOLN ELEMENTARY SCHOOL DISTRICT #27
 304 8th ST., LINCOLN, IL 62656

REVISIONS		
#	DATE	DESCRIPTION
2	11/14/22	ADDENDUM 2

PROJECT #	25821422
ISSUED DATE	10/25/2022
SHEET	A803
OF SHEETS	

BID DOCUMENTS