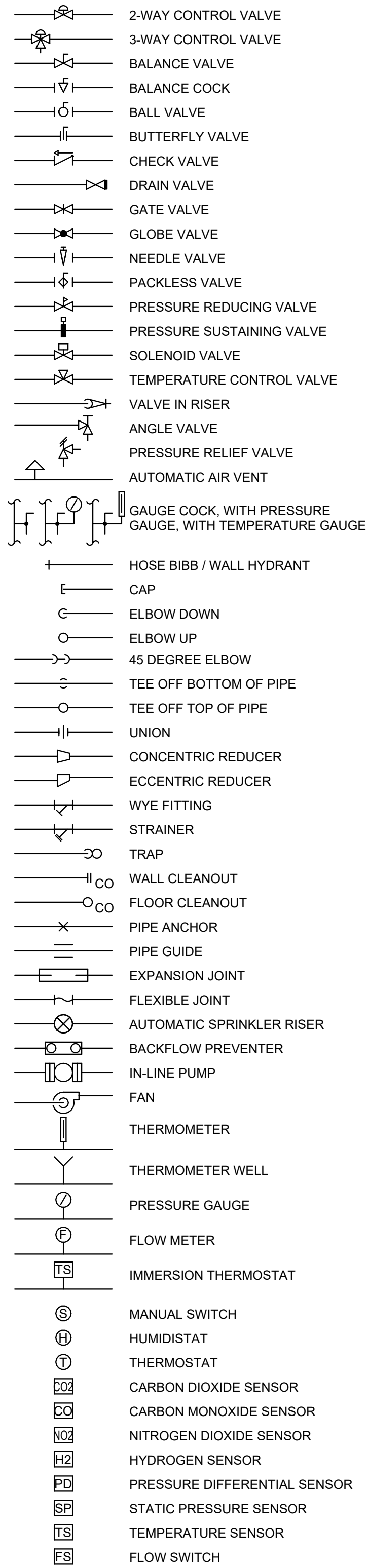
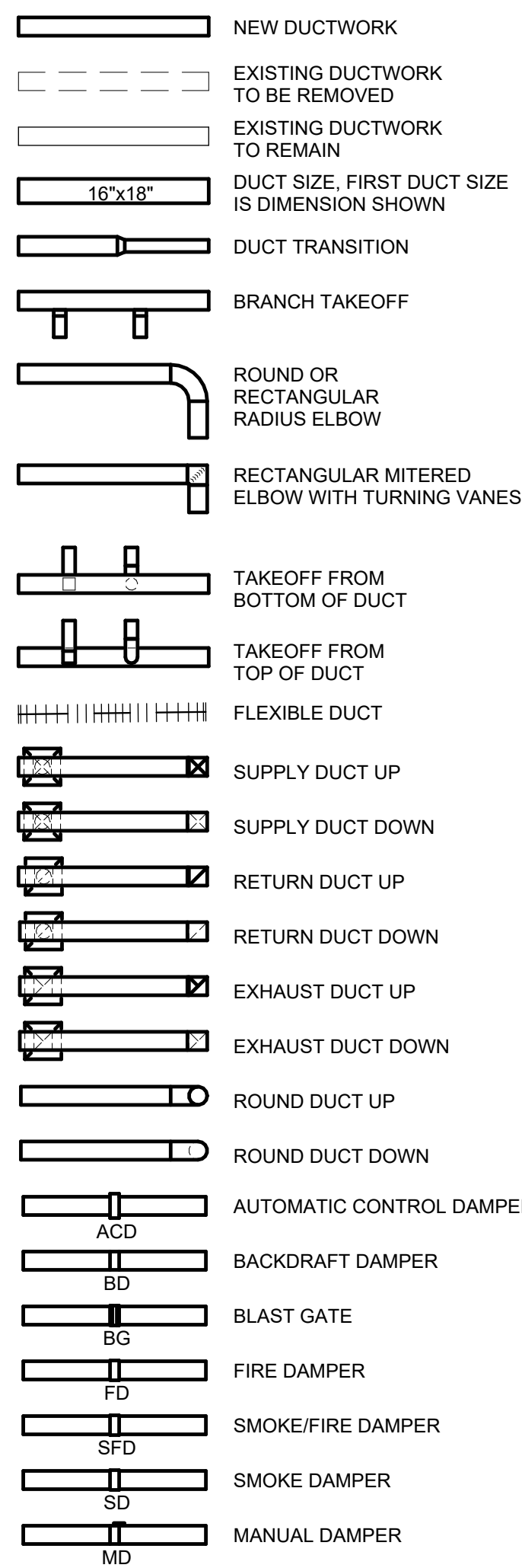




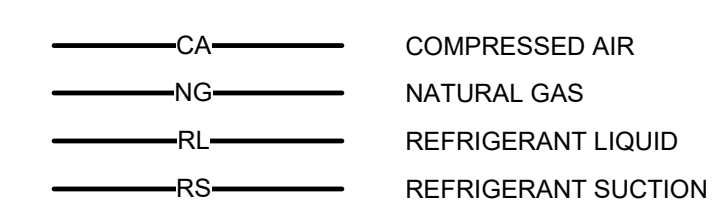
**MECHANICAL DIAGRAM SYMBOL LIST**



**DUCTWORK SYMBOL LIST**



**PIPING SYMBOL LIST**



**GENERAL MECHANICAL NOTES**

- THE FOLLOWING NOTES APPLY TO ALL MECHANICAL DRAWINGS UNLESS NOTED OTHERWISE.
- FINAL ELECTRICAL POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT SHALL BE BY ELECTRICAL TRADE.
  - FINAL GAS CONNECTIONS TO ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED BY PLUMBING TRADE.
  - ALL FIELD CONTROL WIRING AND INTERLOCK WIRING SHALL BE FURNISHED AND INSTALLED BY TEMPERATURE CONTROL TRADES. FOR EXAMPLE, WIRING FROM CONTROL PANEL TO CONTROLLED DEVICE SHALL BE SHOWN AND INSTALLED BY TEMPERATURE CONTROL TRADES.
  - ALL ROOF CURBS FOR MECHANICAL EQUIPMENT ARE FURNISHED BY MECHANICAL TRADES (UNLESS NOTED OTHERWISE) AND INSTALLED BY ARCHITECTURAL TRADES. COORDINATE WITH ROOF SLOPE AND STRUCTURAL DRAWINGS.
  - PROVIDE ALL ACCESS PANEL LOCATIONS REQ'D FOR WALL/DRYWALL CEILING AREAS TO GENERAL CONTRACTOR FOR EQUIPMENT INSTALLATION AND SERVICE.
  - COORDINATE EQUIPMENT HOUSEKEEPING PAD, SIZE AND LOCATION WITH ARCHITECTURAL AND STRUCTURAL TRADES. ALL MECHANICAL EQUIPMENT SHALL BE ON 4 INCH CONCRETE CURBS IF ON CONCRETE FLOOR.
  - KEEP ALL EXHAUST AIR AND SANITARY VENTS AWAY FROM OUTSIDE AIR INTAKE, AT LEAST A MINIMUM OF 10 FEET.
  - MECHANICAL CONTRACTOR SHALL COORDINATE ALL OPENINGS IN MASONRY/PRE-CAST WALLS WITH MASON/PRE-CAST CONTRACTOR.
  - MECHANICAL CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL TRADES PAINTING OF ALL EXPOSED DUCTWORK, DIFFUSERS AND PIPING/INSULATION.
  - PROVIDE 4" HIGH CONCRETE CURB AROUND ALL DUCT PENETRATIONS THROUGH MECHANICAL MEZZANINE FLOOR. COORDINATE CURB AND OPENING SIZE WITH ARCHITECTURAL AND STRUCTURAL TRADES CONTRACTORS.
  - TEMPERATURE SENSORS (THERMOSTATS) MOUNTED ON EXTERIOR WALLS TO BE MOUNTED ON MIN. 1" THICK INSULATION.
  - ELECTRICAL TRADES WILL PROVIDE 120 VOLT ELECTRICAL JUNCTION BOXES IN THE MECHANICAL ROOM AND MEZZANINE ROOMS DEDICATED FOR MECHANICAL EQUIPMENT CONTROLS. TEMPERATURE CONTROL TRADES SHALL EXTEND CIRCUITS AS REQUIRED TO FEED THE VARIOUS CONTROL PANELS AND/OR ALL ASSOCIATED CONTROLS.
  - TEMPERATURE CONTROL TRADES SHALL PROVIDE STARTERS, POWER, DISCONNECT SWITCH, FEEDERS AND INTERLOCKS FOR ALL MOTORIZED DAMPERS.
  - ACCESS DOORS: PROVIDE ACCESS DOORS FOR ALL EQUIPMENT THAT REQUIRES ROUTINE MAINTENANCE OR SERVICE, AND THAT IS CONCEALED BEHIND NON-ACCESSIBLE WALL OR CEILING CONSTRUCTION. TYPICALLY ACCESS PANELS ARE NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SIZING OF ACCESS DOORS TO PERMIT REQUIRED ACCESS FOR ROUTINE MAINTENANCE OPERATIONS. ACCESS PANELS ARE SHOWN ON THE DRAWINGS ONLY WHEN THEIR SIZE OR LOCATION MUST BE COORDINATED WITH ADJACENT CONSTRUCTION, OR IF THEY ARE TO BE CUSTOM MADE FOR THE PROJECT.
  - ELECTRICAL CONTRACTOR WILL PROVIDE 120 V ELECTRICAL POWER TO TEMPERATURE CONTROL PANELS AND DEDICATED JUNCTION BOXES AS INDICATED ON ELECTRICAL DRAWINGS. THE TEMPERATURE CONTROL CONTRACTOR SHALL EXTEND TO THESE CIRCUITS AS REQUIRED TO FEED THE VARIOUS CONTROL PANELS AND OR ASSOCIATED CONTROLS. THE TEMPERATURE CONTROL CONTRACTOR SHALL REVIEW THE INDICATED 120 V POWER SUPPLY LOCATIONS PROVIDED ON THE ELECTRICAL DRAWINGS. IF THE TEMPERATURE CONTROL CONTRACTOR DETERMINES THAT ADDITIONAL 120 V CIRCUITS ARE REQUIRED TO MEET THEIR SYSTEMS DESIGN NEEDS THAT ARE NOT INDICATED ON THE ELECTRICAL DRAWINGS, THEN TEMPERATURE CONTROL CONTRACTOR SHALL INCLUDE THE ADDITIONAL 120 V CIRCUITS AS PART OF THE TEMPERATURE CONTROL SCOPE OF WORK INCLUDING BREAKERS, CONDUIT, WIRE AND INSTALLATION FOR A COMPLETE AND OPERABLE SYSTEM.
  - TEMPERATURE CONTROL TRADES SHALL PROVIDE STARTERS, POWER, DISCONNECT SWITCH, FEEDERS AND INTERLOCKS FOR ALL MOTORIZED DAMPERS.
  - ALL OF THE RELIEF LOUVERS IN THE HANGAR SHALL INCLUDE SPRING OPEN FAILURE MODE OR AS APPROVED BY AHJ.

**GENERAL HVAC NOTES**

- THE FOLLOWING NOTES APPLY TO ALL MECHANICAL HVAC DRAWINGS UNLESS NOTED OTHERWISE.
- ALL DUCTWORK DIMENSIONS NOTED ON PLANS REFER TO THE CLEAR INSIDE OPENING REQUIRED.
  - PROVIDE TRANSITION FROM VAV OUTLET SIZE TO NOTED DISCHARGE DUCT SIZE.
  - DUCT FITTINGS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH "DUCT FITTING PROVISIONS" AS SHOWN ON DUCTWORK DETAIL SHEET AND THE LATEST SMACNA STANDARD.
  - INSTALL MANUAL VOLUME DAMPERS AT ALL SUPPLY AIR BRANCH DUCTS TO THE DIFFUSER, BRANCH RETURN AIR DUCT, EXHAUST AIR DUCT, AND OTHER LOCATIONS AS SHOWN ON PLANS, INCLUDE MANUAL VOLUME DAMPERS IN ALL DIFFUSER AND EXHAUST GRILLE DUCTWORK BRANCHES FOR BALANCING.
  - DUCT RUNOUTS TO ALL OVAL OR ROUND NECK AIR DEVICES TO BE THE SAME AS ROUND DEVICE NECK (OR ROUND EQUIVALENT TO OVAL, WITH TRANSITION) U.N.O.
  - PROVIDE FLEXIBLE CONNECTION AT DIFFUSER NECK. ALL FLEXIBLE DUCT SHALL BE INSULATED AND LIMITED TO 5'-0" IN LENGTH.
  - DUCTED EXHAUST AND RETURN GRILLES SHALL BE HARD DUCT CONNECTED.
  - ALL OF THE RELIEF AIR LOUVERS IN THE HANGAR SHALL HAVE MOTORIZED DAMPERS AND SHALL FAIL IN THE OPEN POSITION. SEND AN ALARM TO THE BAS IF THERE IS A FAILURE.
  - EXPOSED EXHAUST ROUND DUCTWORK SHALL BE UNINSULATED SPIRAL DUCTWORK UNLESS NOTED OTHERWISE.
  - CONCEALED ROUND DUCTWORK: FOR ROUND RUNOUTS TO CEILING DIFFUSERS AND VAV TERMINALS, REFER TO OTHER GENERAL HVAC NOTES THIS SECTION U.N.O.
  - PROVIDE FLEXIBLE CONNECTION AT DISCHARGE AND INLET OF ALL HORIZONTAL FAN COILS, LIEBERT UNITS AND FANS (EXHAUST/SUPPLY).
  - NOT USED.

**GENERAL HVAC PIPING NOTES**

- THE FOLLOWING NOTES APPLY TO ALL HVAC PIPING SHOWN ON PIPING DRAWINGS UNLESS NOTED OTHERWISE.
- ALL REFRIGERATION AND CONDENSATION PIPES ARE TO BE ABOVE CEILING UNLESS NOTED OTHERWISE. PIPING IS TO BE INSULATED PER SPECIFICATION.
  - RUN ALL DRAIN LINES INDIRECT TO NEAREST FLOOR DRAIN WITH MIN. 1/8" PER FOOT SLOPE UNLESS NOTED OTHERWISE.
  - INSTALL SLEEVES FOR ALL PIPES PASSING THROUGH WALLS.
  - ALL SPLIT SYSTEM AIR CONDITIONING UNITS SHALL HAVE CONDENSATE PIPING EXTENDED TO NEAREST DRAIN.
  - EXTEND ALL ROOFTOP UNITS CONDENSATE TO CODE APPROVED LOCATION. INCLUDE P-TRAPS.

**MECHANICAL EQUIPMENT IDENTIFICATION**

Key Name	Mech ID
AC	AIR COMPRESSOR
ACCU	AIR COOLED CONDENSING UNIT
ACRT	AIR CURTAIN
ACU	SPLIT SYSTEM AIR CONDITIONING UNIT
AHU	AIR HANDLING UNIT
CAF	COMPRESSED AIR FILTER
CAO	COMPRESSED AIR OUTLET W/ FILTER
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CUH	CABINET UNIT HEATER
DG	DOOR GRILLE
EF	EXHAUST FAN
EUH	ELECTRIC UNIT HEATER
HP	HEAT PUMP
HRHP	HEAT RECOVERY HEAT PUMP
HVU	HEATING AND VENTILATING UNIT
IH	INTAKE AIR HOOD
MAU	MAKE-UP AIR UNIT
RCAD	REFRIGERATED COMPRESSED AIR DRYER
RH	RELIEF AIR HOOD
TCP	TEMPERATURE CONTROL PANEL
WMS	WIRE MESH SCREEN

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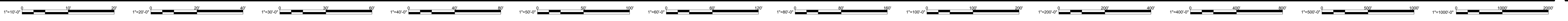
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PROJECT MANAGER E. RICE  
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DRAWN BY T. JANZEN  
QUALCHECK C. LONG  
SHEET TITLE

**MECHANICAL GENERAL INFORMATION**

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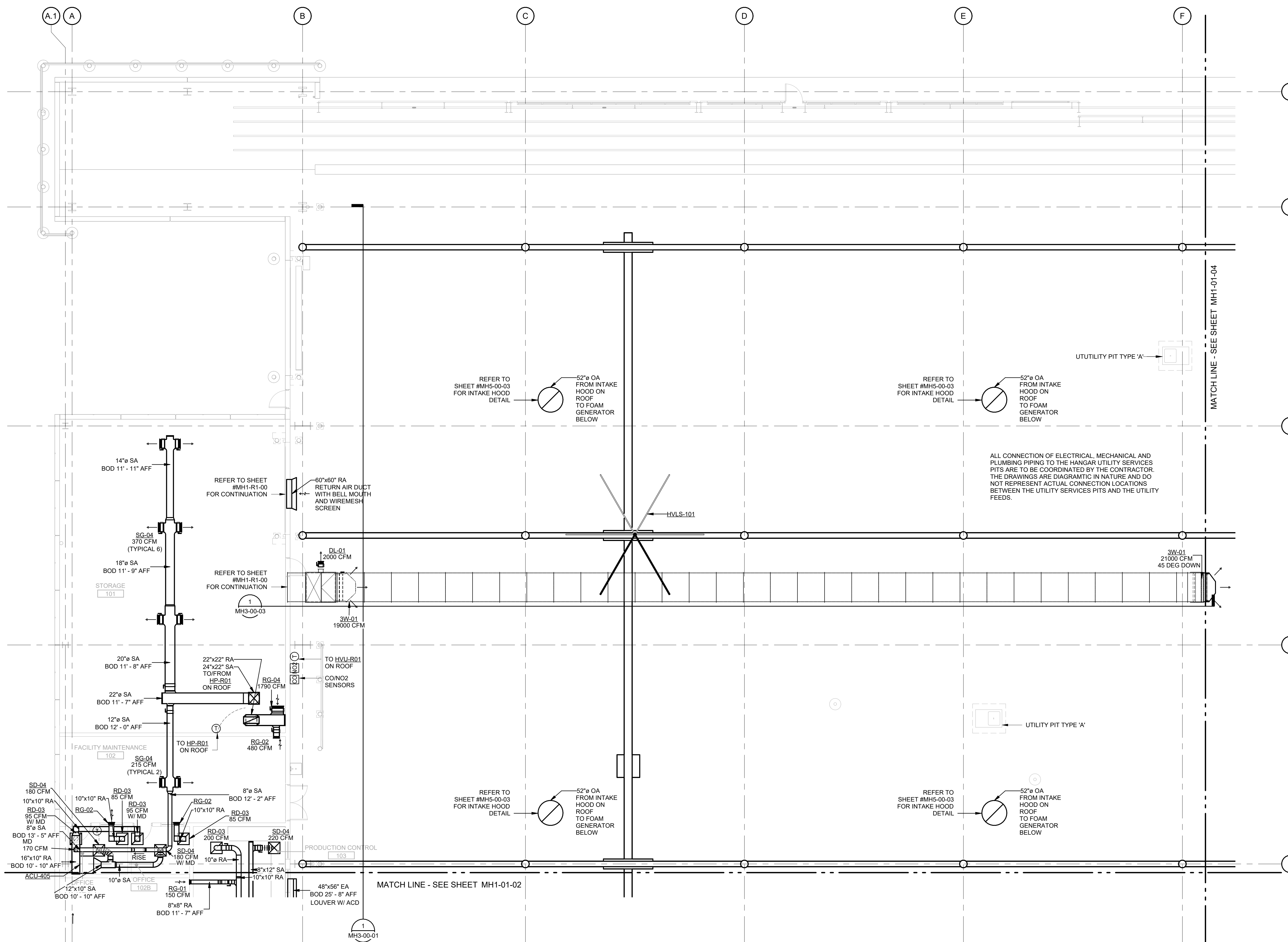
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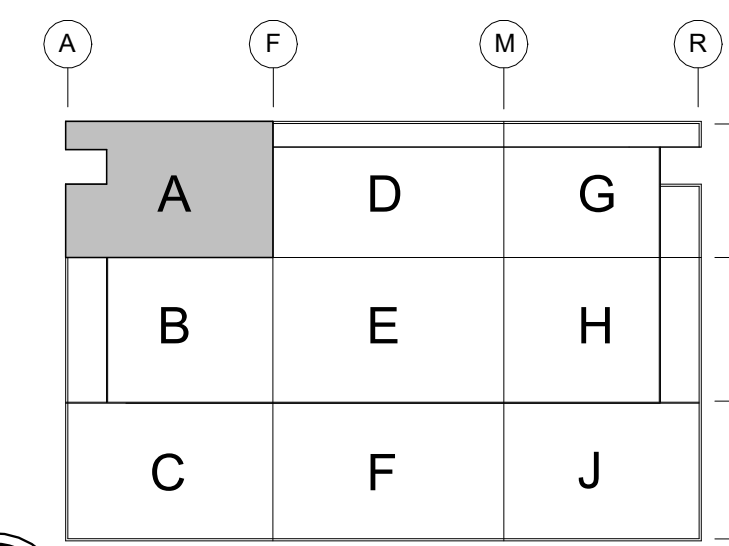
PROJECT #	241054
PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALITY CHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
HVAC PLAN  
FIRST FLOOR  
AREA A**

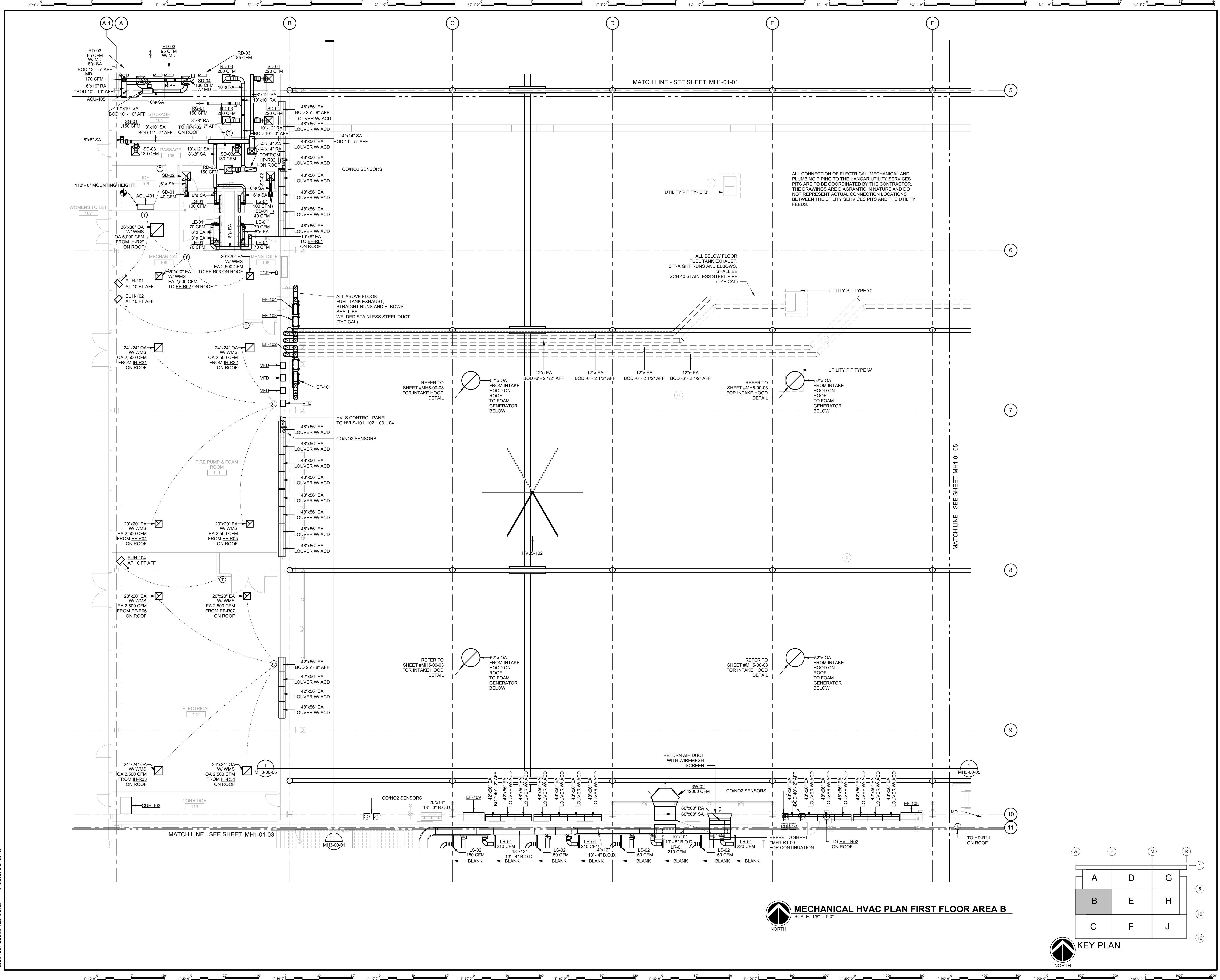
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**MECHANICAL HVAC PLAN FIRST FLOOR AREA A**  
SCALE: 1/8" = 1'-0"



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**SHOP DRAWING**

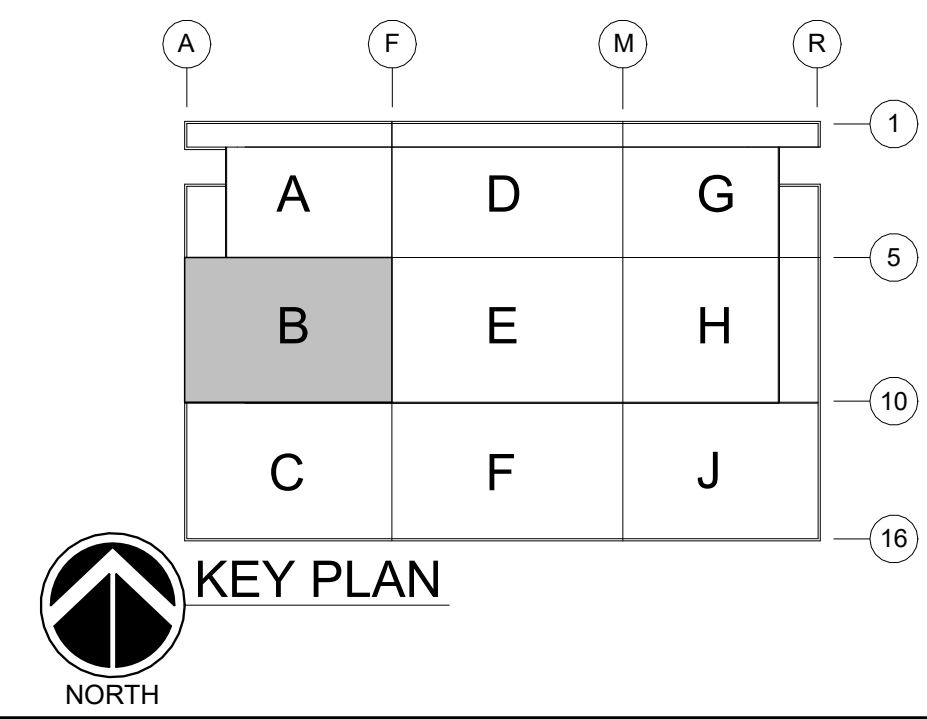
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**MECHANICAL HVAC PLAN FIRST FLOOR AREA B**

**MH1-01-02**  
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**MECHANICAL HVAC PLAN FIRST FLOOR AREA B**  
 SCALE: 1/8" = 1'-0"



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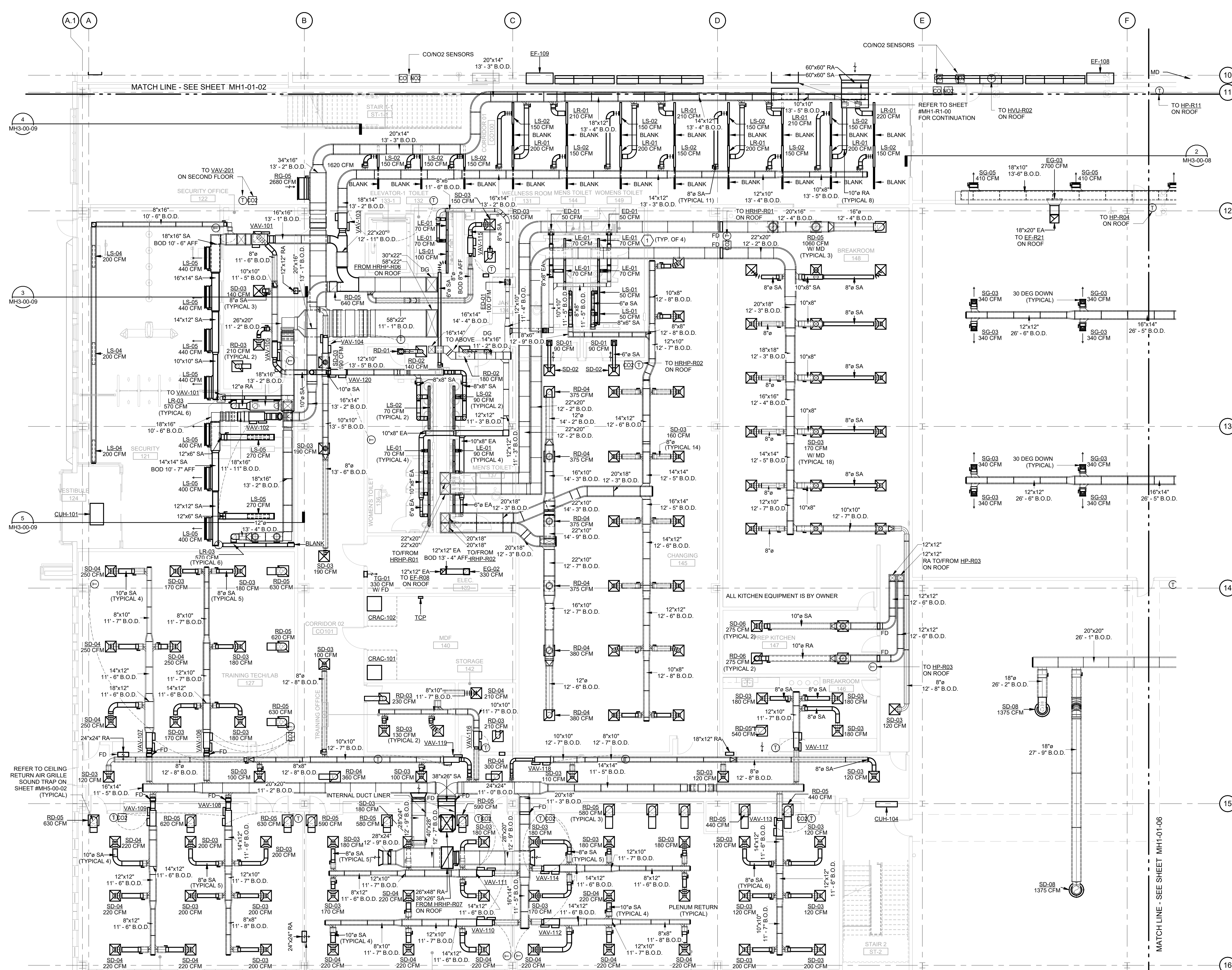
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**SHOP DRAWING**

NOTES THIS DRAWING  
1. LINEAR DEVICE PLENUM BOX TO BE PROVIDED WITH FIELD CUT INLET.



A	D	G
B	E	H
C	F	J

KEY PLAN

**MECHANICAL HVAC PLAN FIRST FLOOR AREA C**  
SCALE: 1/8" = 1'-0"

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**MECHANICAL HVAC PLAN FIRST FLOOR AREA C**

**MH1-01-03**  
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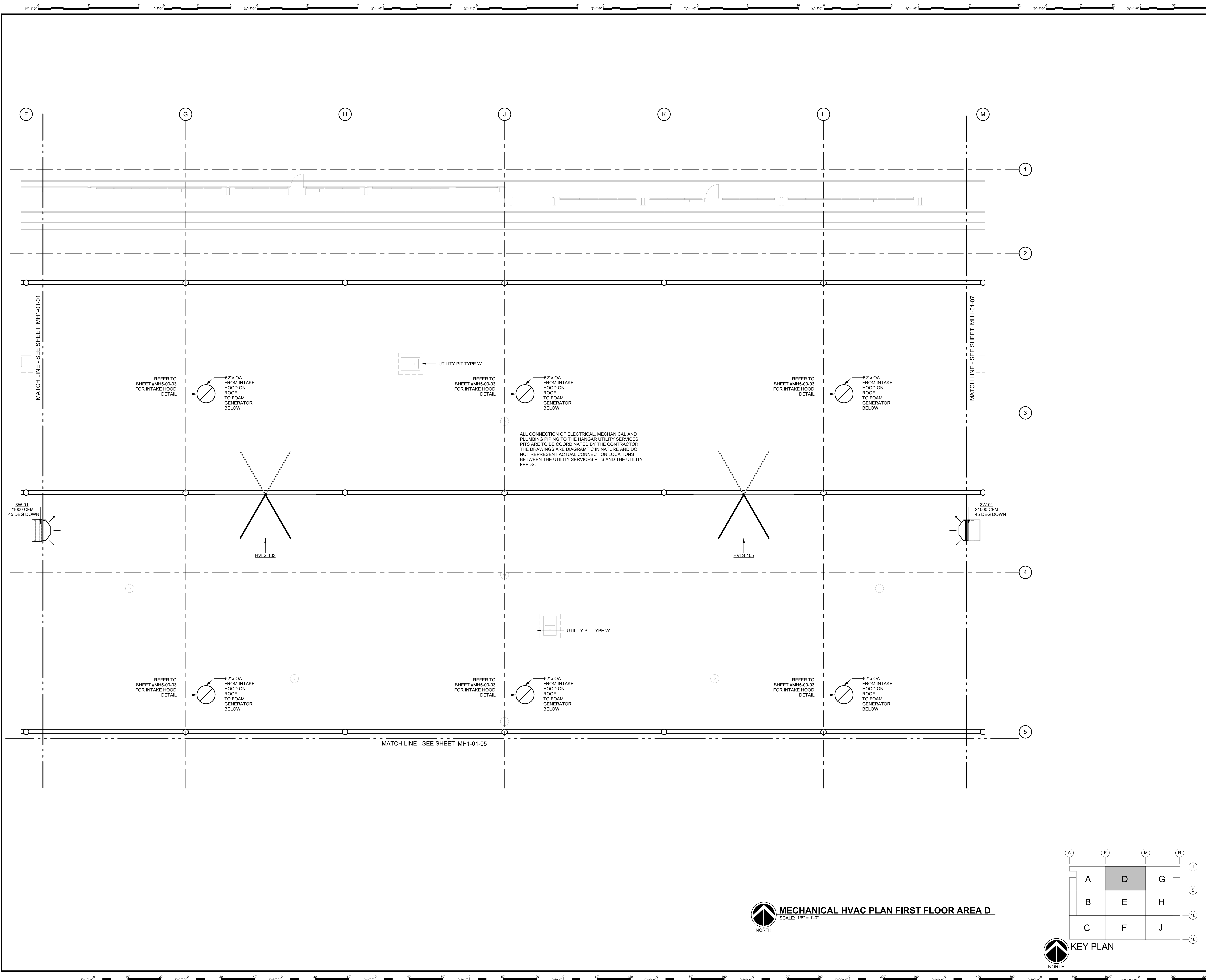
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**MECHANICAL  
HVAC PLAN  
FIRST FLOOR  
AREA D**

**MH1-01-04**  
SHEET NUMBER



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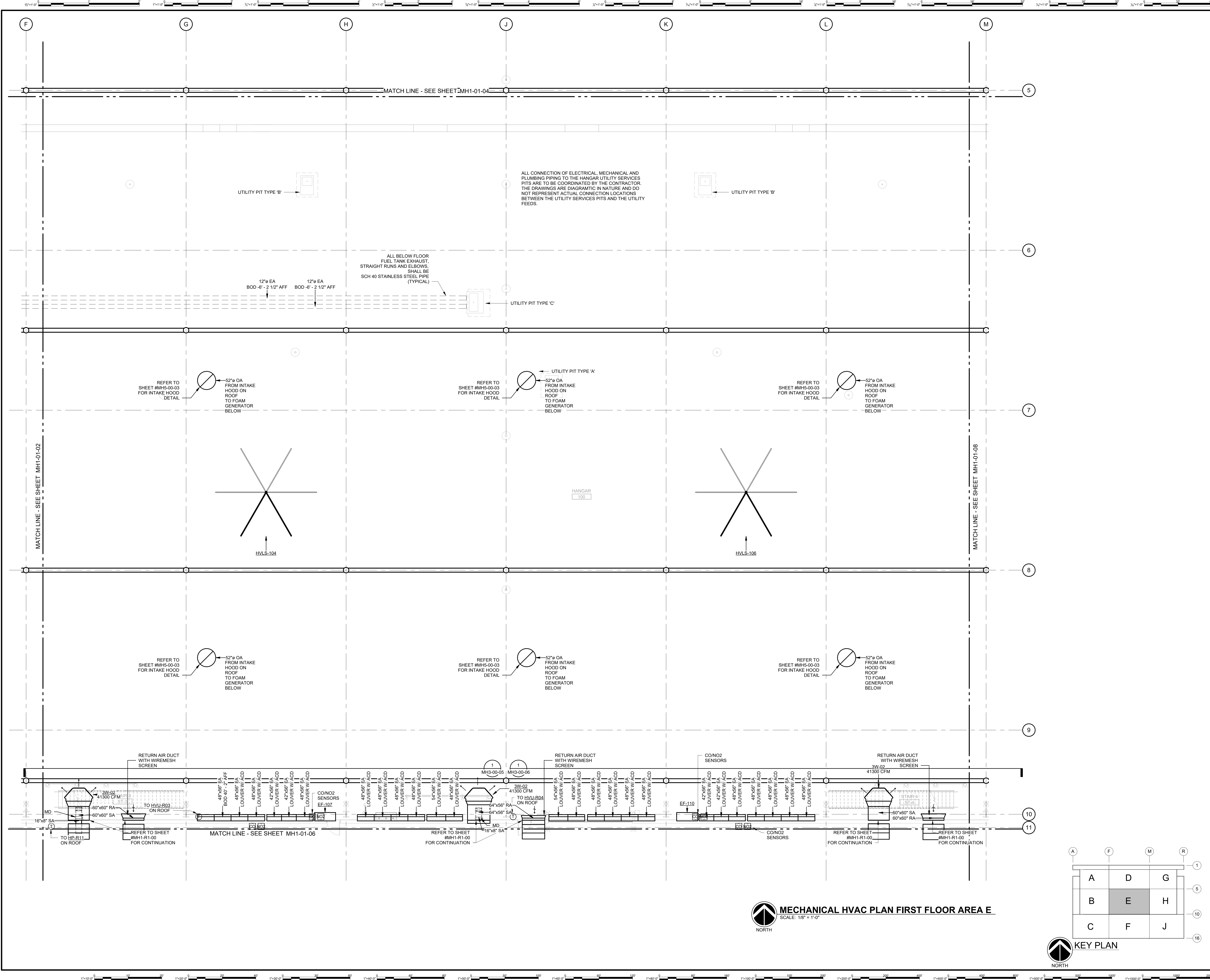
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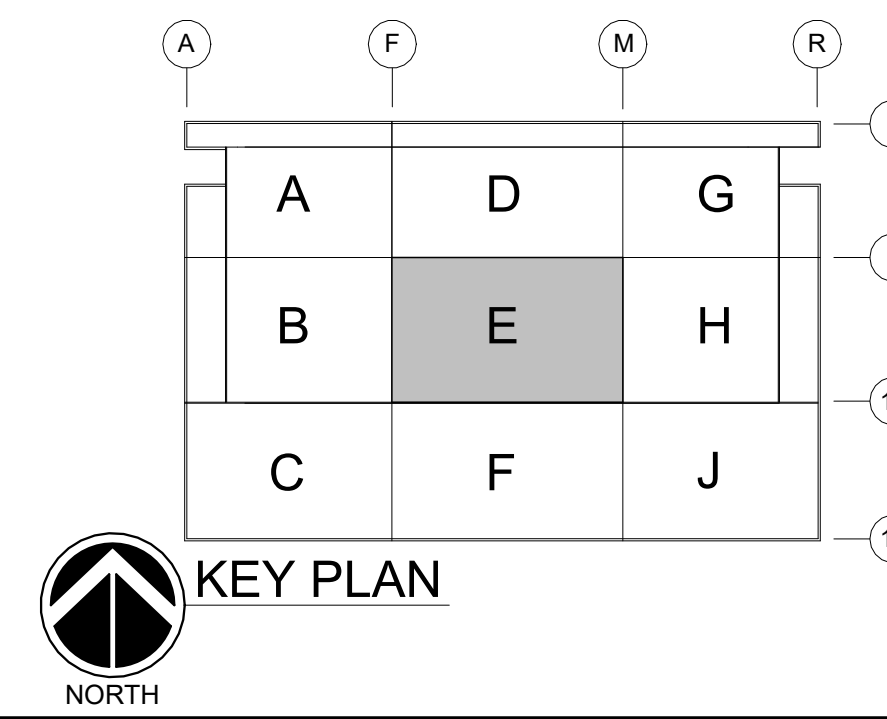
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**MECHANICAL HVAC PLAN FIRST FLOOR AREA E**

**MH1-01-05**  
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**MECHANICAL HVAC PLAN FIRST FLOOR AREA E**  
SCALE: 1/8" = 1'-0"



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**SHOP DRAWING**

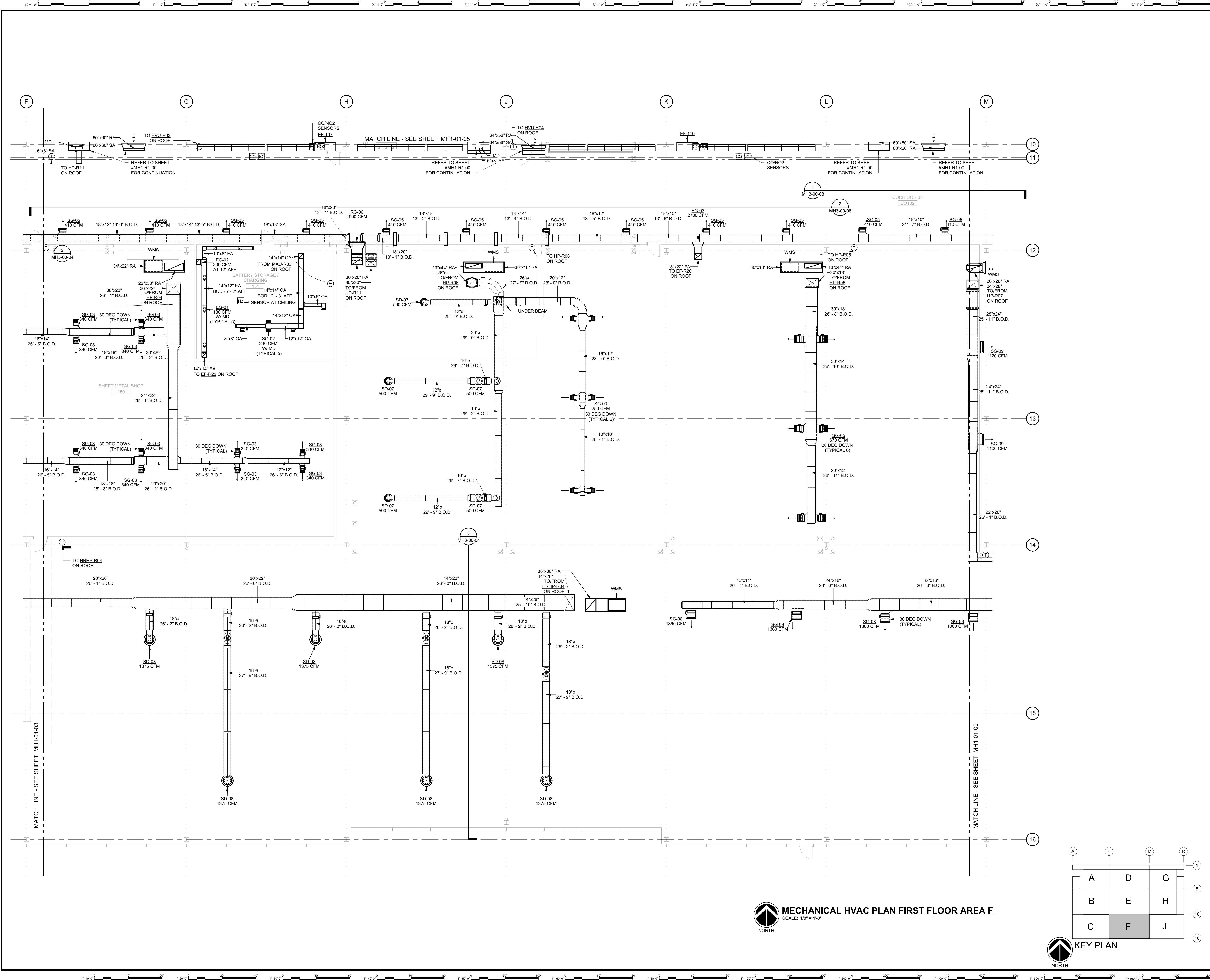
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SHEET TITLE

**MECHANICAL HVAC PLAN FIRST FLOOR AREA F**

**MH1-01-06**  
SHEET NUMBER



**MECHANICAL HVAC PLAN FIRST FLOOR AREA F**  
SCALE: 1/8" = 1'-0"



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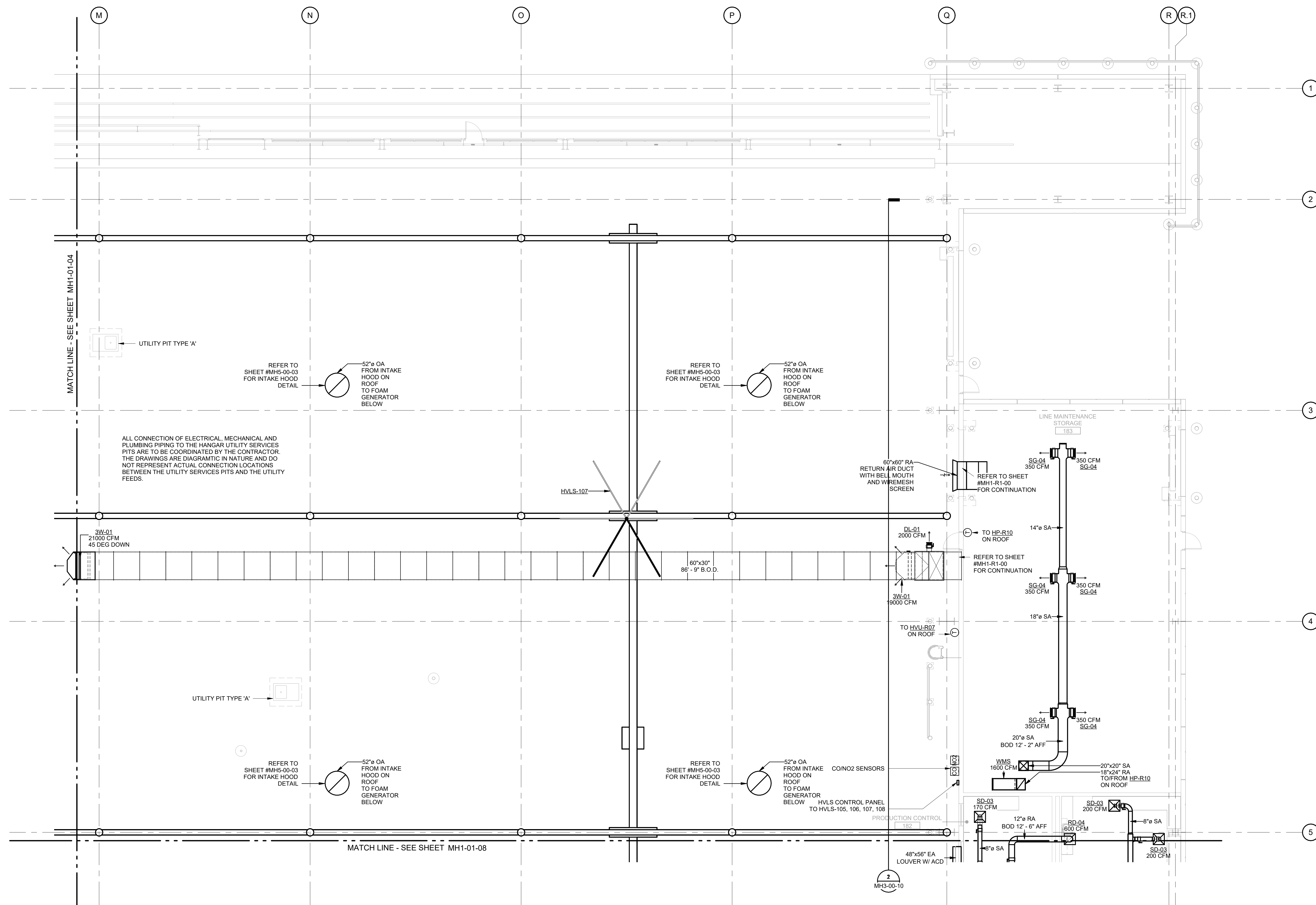
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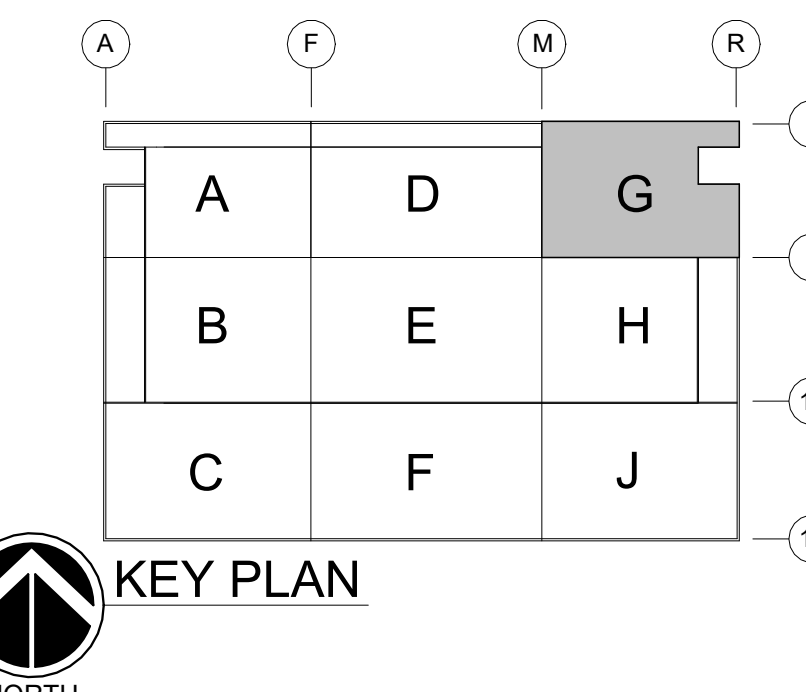
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QUALITY CHECK	C. LONG
SHEET TITLE	

**MECHANICAL HVAC PLAN FIRST FLOOR AREA G**

**MH1-01-07**  
SHEET NUMBER



**MECHANICAL HVAC PLAN FIRST FLOOR AREA G**  
SCALE: 1/8" = 1'-0"



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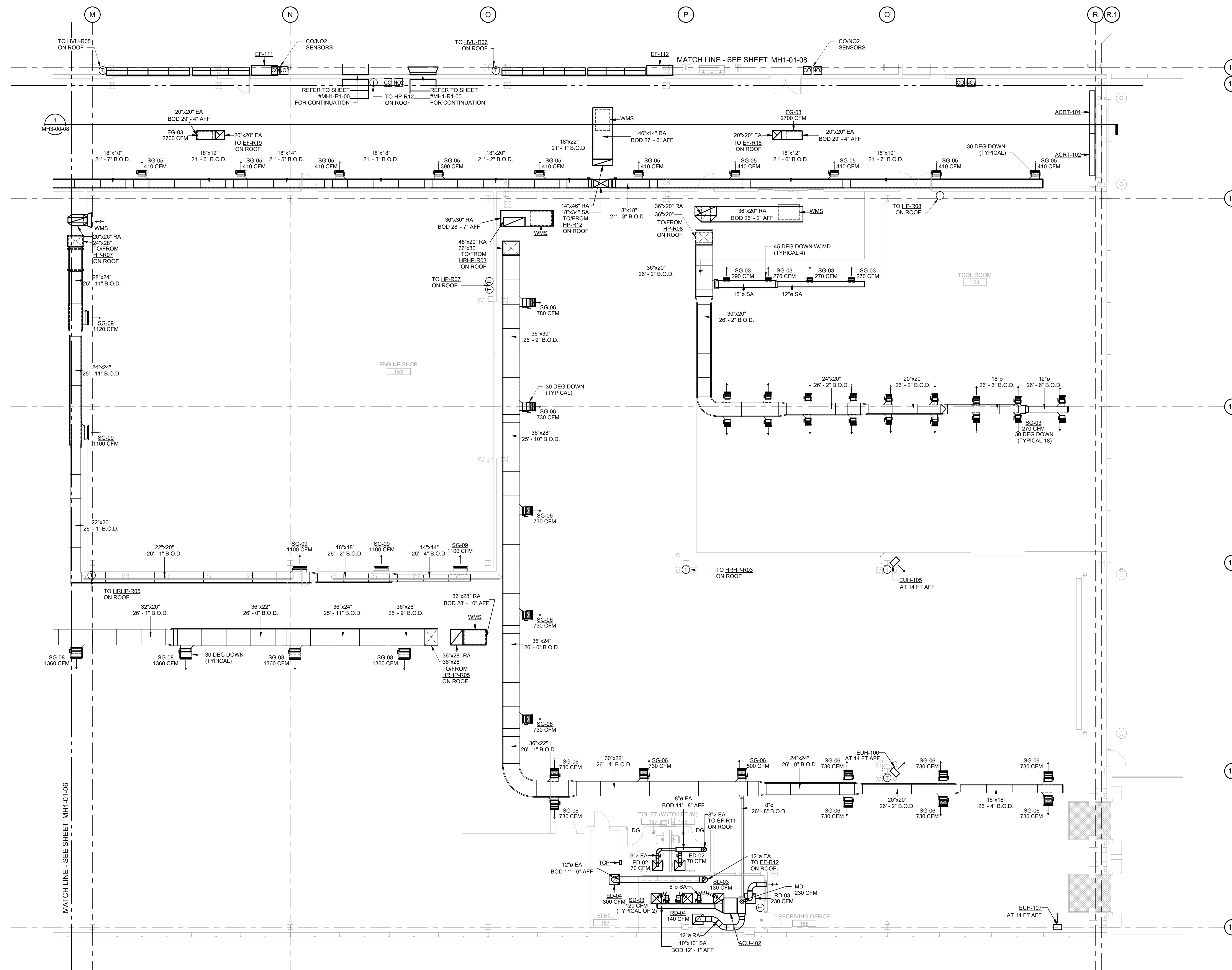
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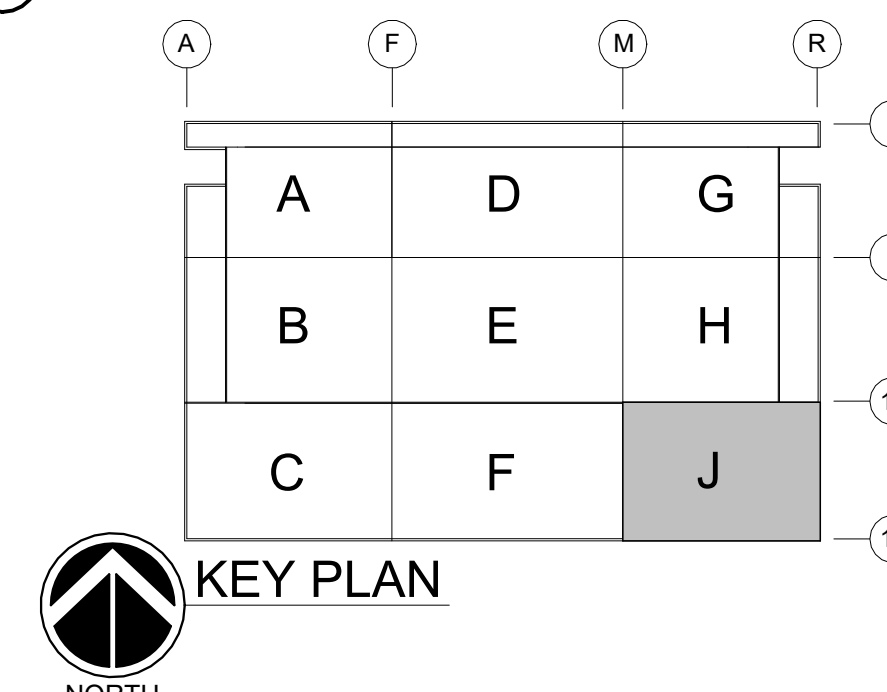
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PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
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QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
 HVAC PLAN  
 FIRST FLOOR  
 AREA J**

**MH1-01-09**  
 SHEET NUMBER



**MECHANICAL HVAC PLAN FIRST FLOOR AREA J**  
 SCALE: 1/8" = 1'-0"



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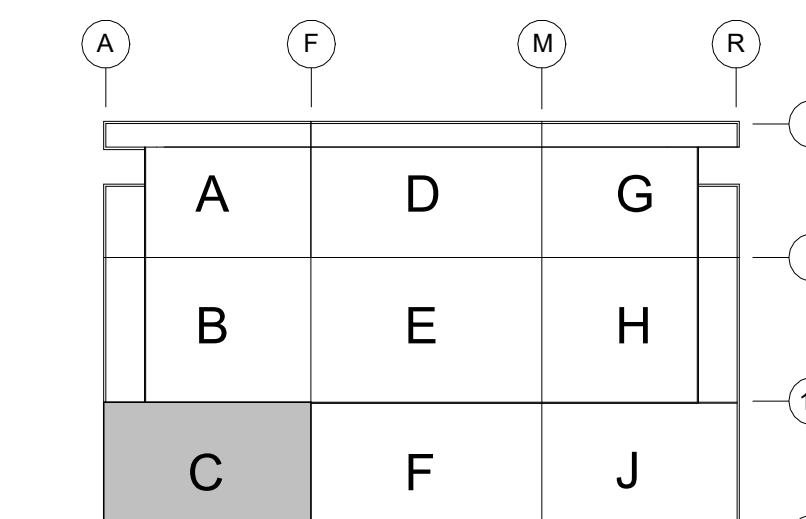
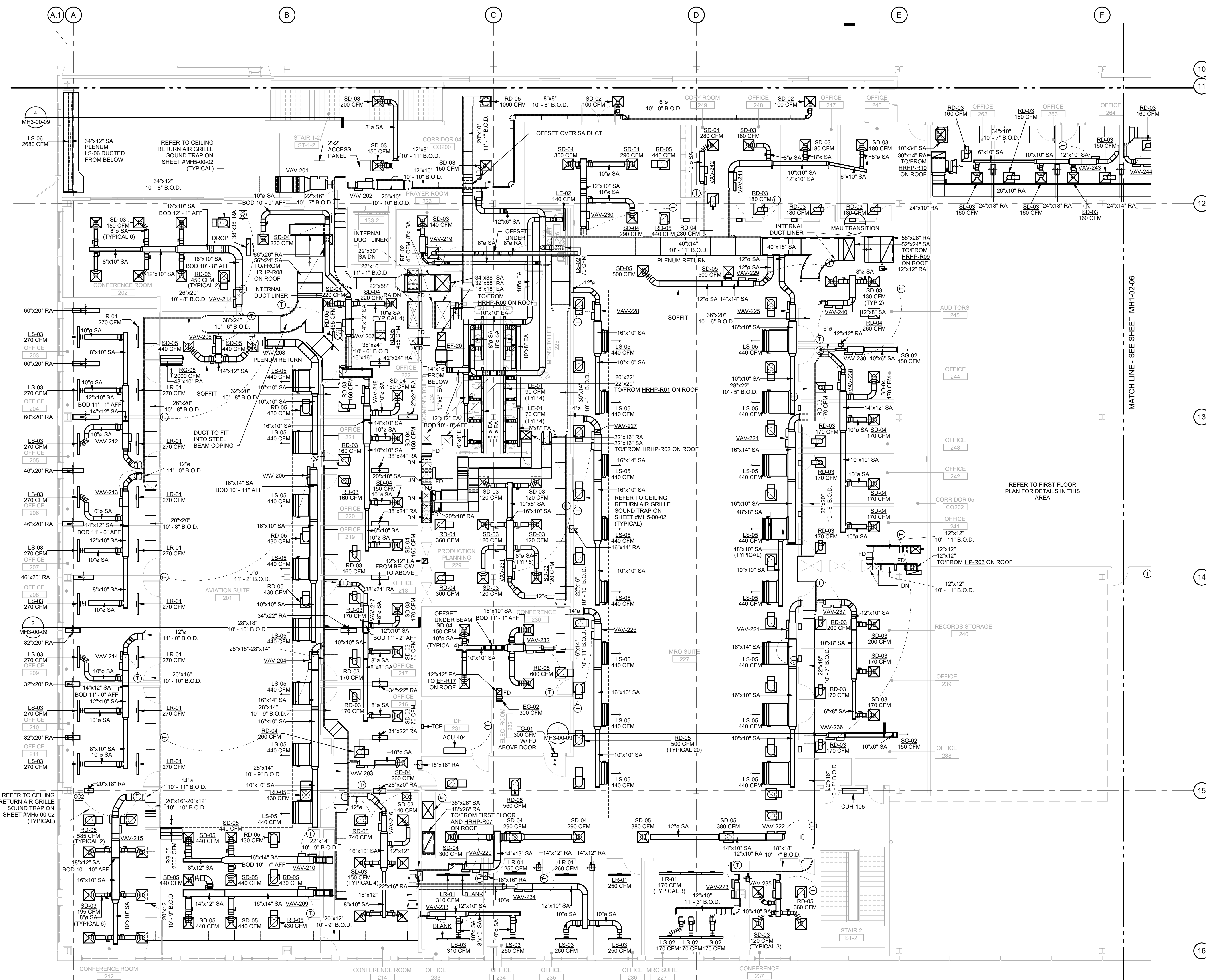
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SHEET TITLE

**MECHANICAL HVAC PLAN SECOND FLOOR AREA C**

**MH1-02-03**  
SHEET NUMBER



**MECHANICAL HVAC PLAN SECOND FLOOR AREA C**  
SCALE: 1/8" = 1'-0"  
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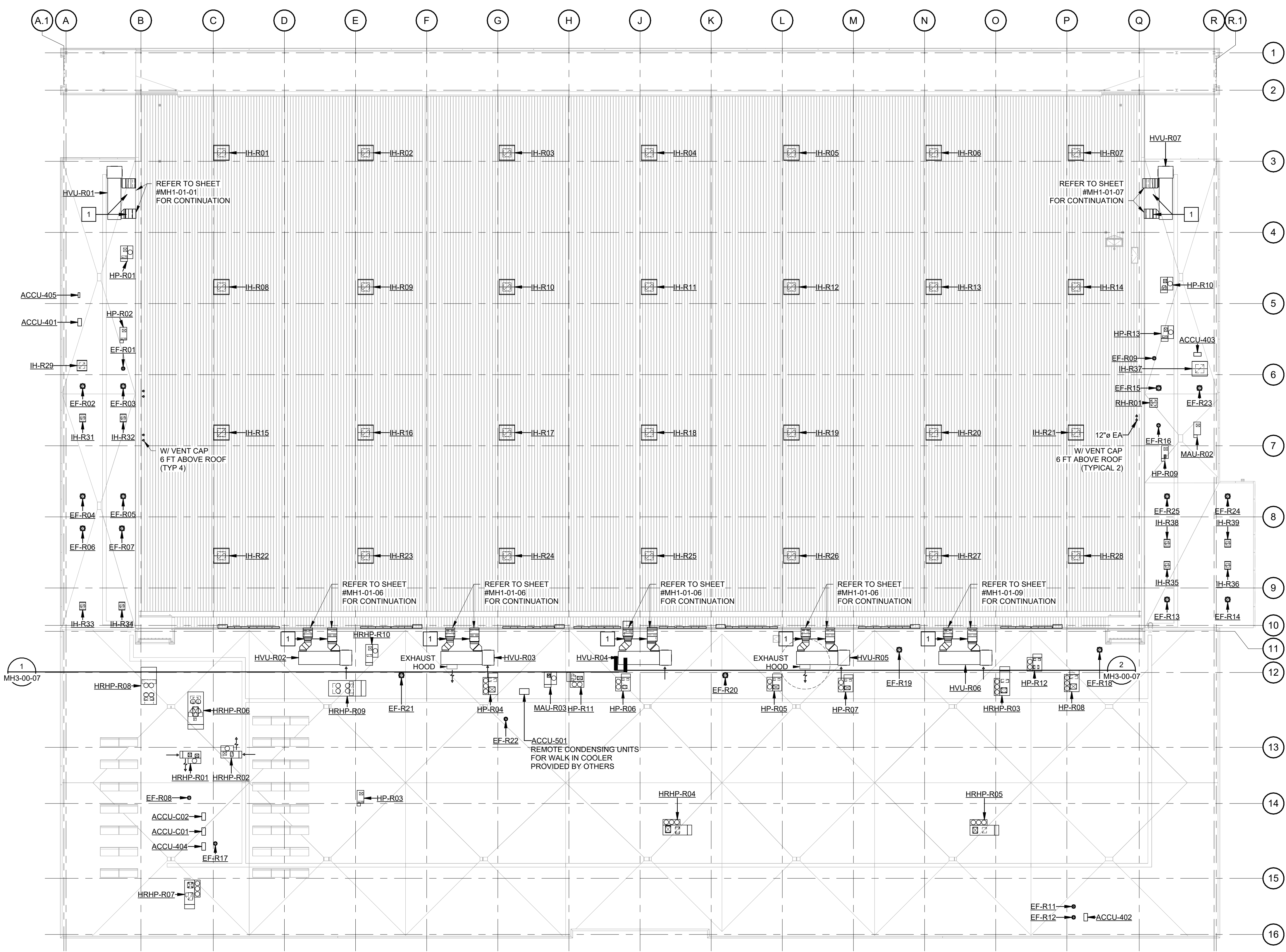
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1	01/02/25	ISSUED FOR CONSTRUCTION
REV	DATE	DOC REL ## - DESCRIPTION

PROJECT #	241054
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DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
HVAC PLAN  
ROOF  
COMPOSITE**

**MH1-R1-00**  
SHEET NUMBER



**NEW KEY NOTES:**

- 1 EXTERIOR SUPPLY AND RETURN DUCT SHALL BE INSULATED WITH DUCT BOARD AND JACKETED WITH STAINLESS STEEL JACKET.

**MECHANICAL HVAC PLAN ROOF COMPOSITE**  
SCALE: 1" = 30'-0"





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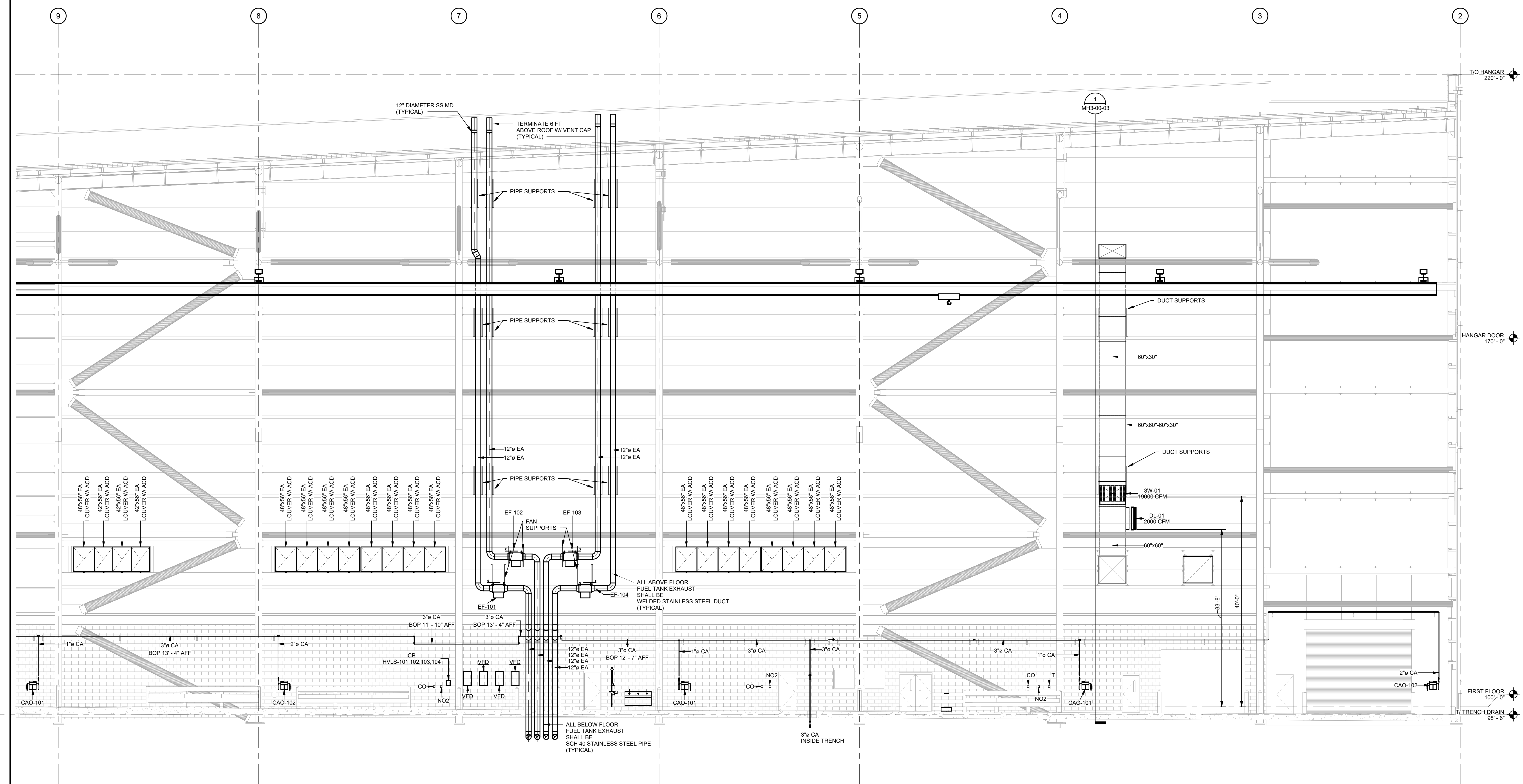
CONTRACTOR INFORMATION

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 TEL +1.513.772.7545

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**MECHANICAL HVAC SECTION 01 (100 HANGAR - WEST WALL)**  
 SCALE: 1/8" = 1'-0"

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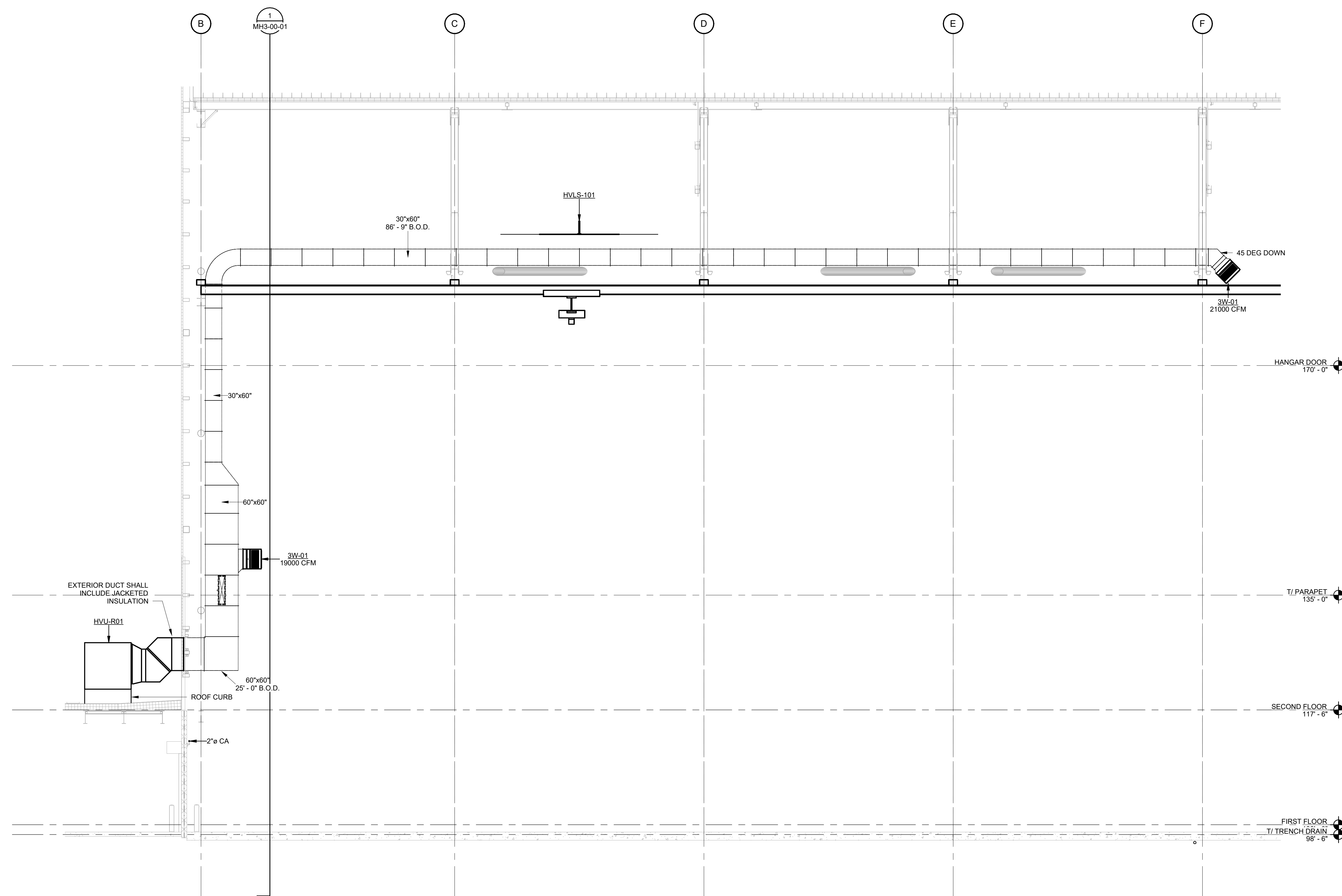
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**MECHANICAL HVAC SECTION 03 (100 HANGAR)**

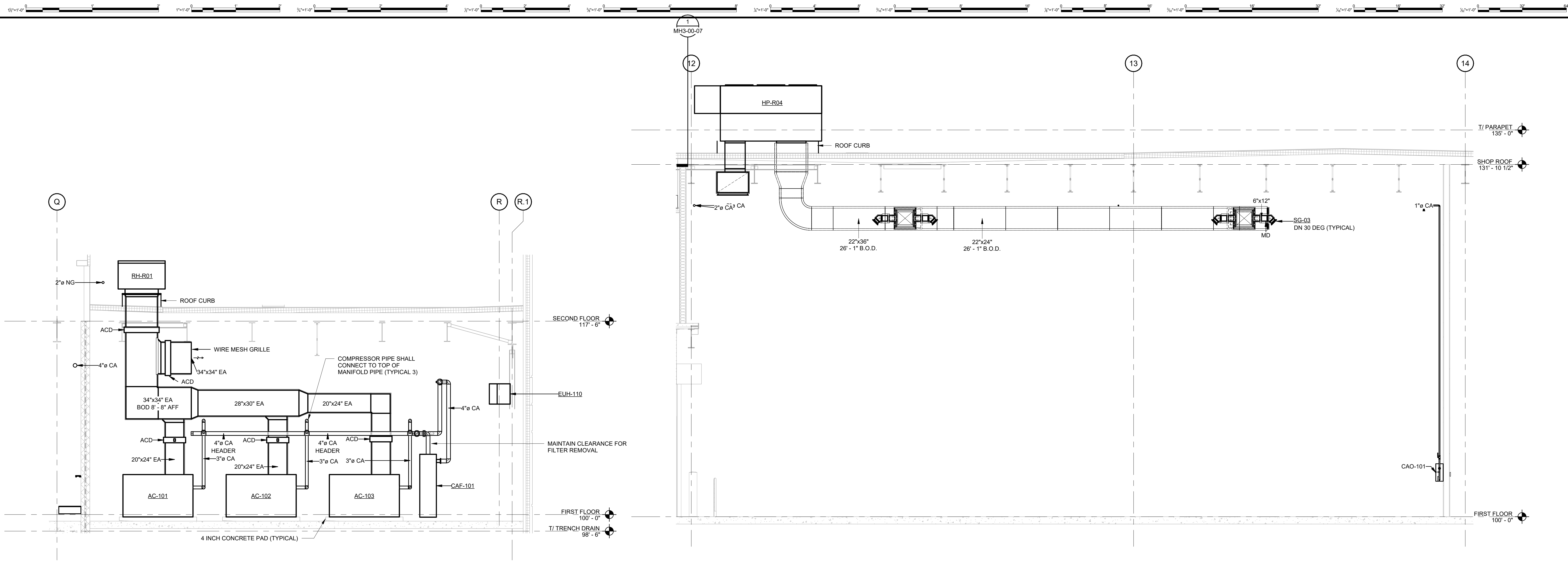
SCALE: 1/8" = 1'-0"

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PROJECT MANAGER	E. RICE
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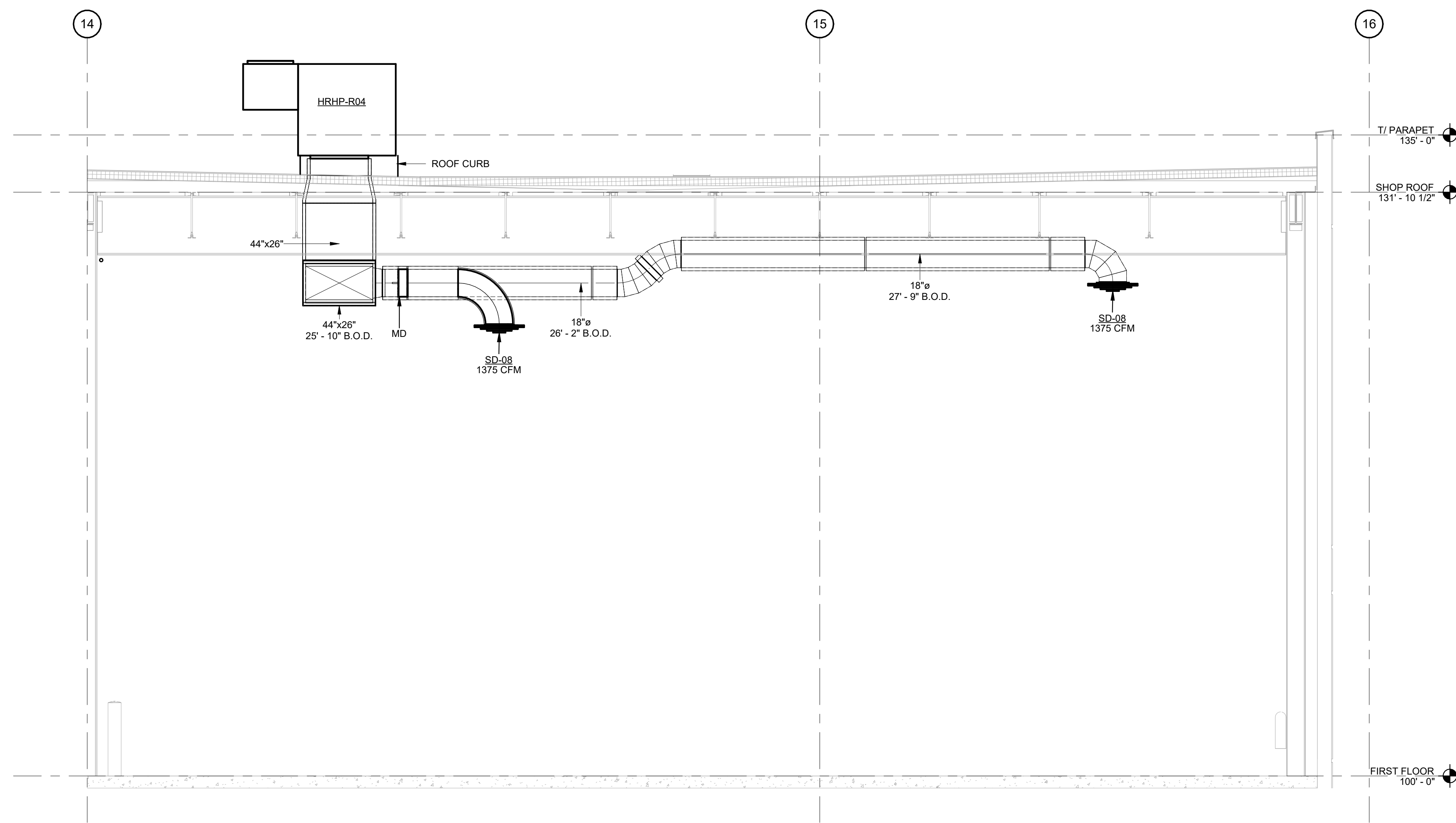
**MECHANICAL  
 HVAC SECTIONS**

**MH3-00-03**  
 SHEET NUMBER



**MECHANICAL HVAC SECTION 04 (175 COMPRESSOR)**  
SCALE: 1/4" = 1'-0"

**MECHANICAL HVAC SECTION 05 (150 SHEET METAL SHOP)**  
SCALE: 1/4" = 1'-0"



**MECHANICAL HVAC SECTION 06 (152 STORES)**  
SCALE: 1/4" = 1'-0"



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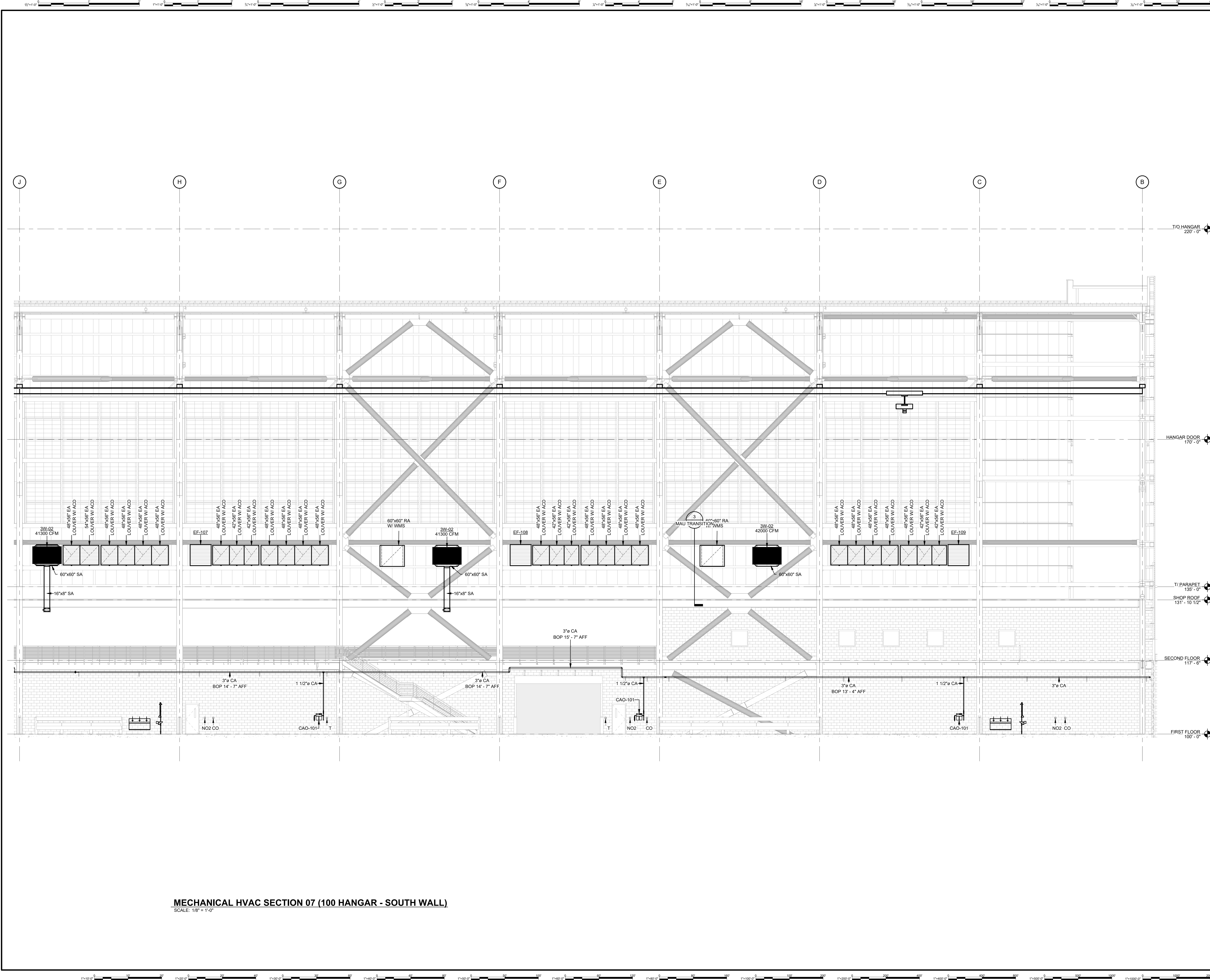
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**MECHANICAL HVAC SECTION 07 (100 HANGAR - SOUTH WALL)**  
 SCALE: 1/8" = 1'-0"

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1	01/02/25	ISSUED FOR CONSTRUCTION	

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**MECHANICAL HVAC SECTIONS**

**MH3-00-05**  
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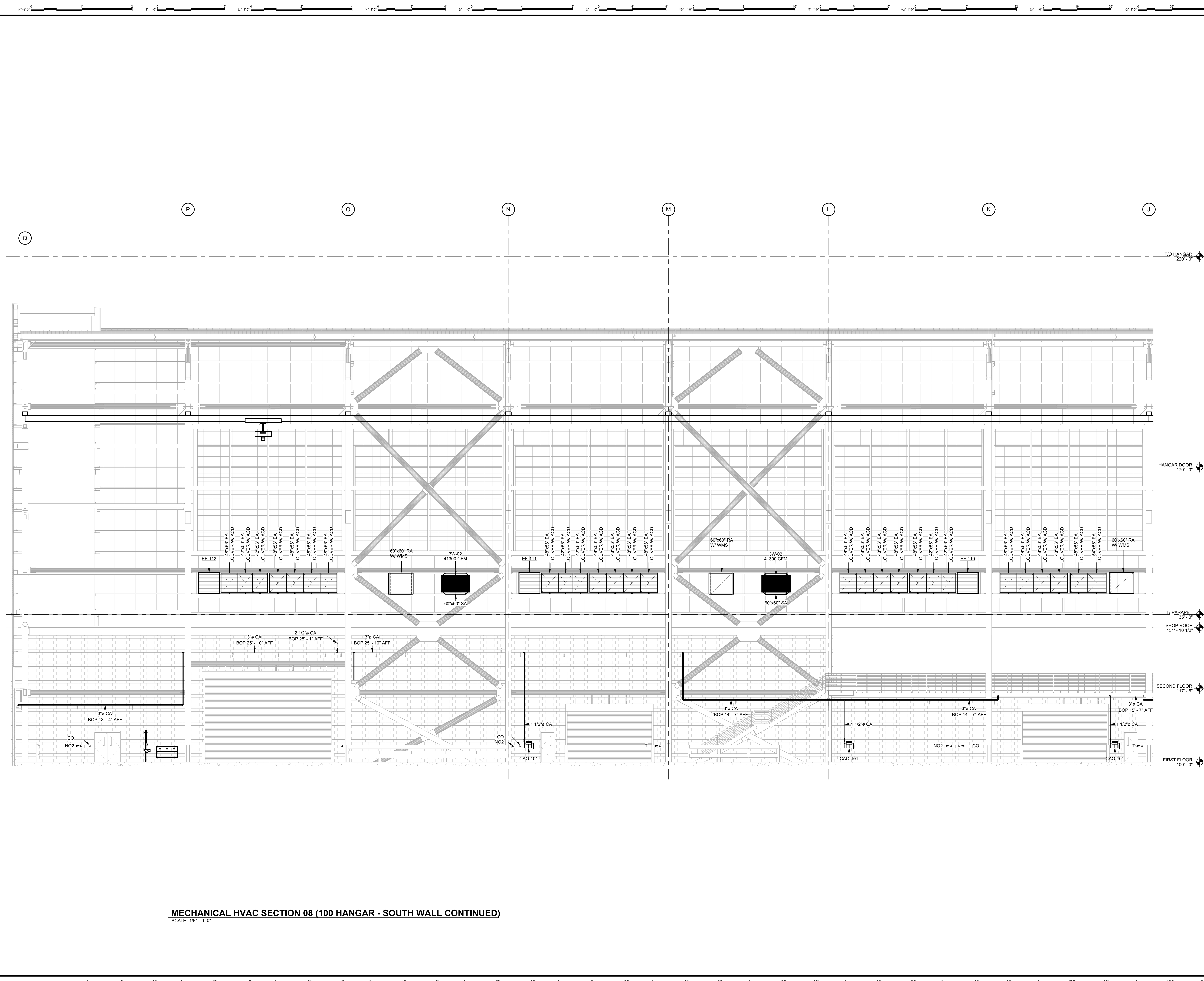
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**SHOP DRAWING**



T/O HANGAR 220' - 0"  
 HANGAR DOOR 170' - 0"  
 T/ PARAPET 135' - 0"  
 SHOP ROOF 131' - 10 1/2"  
 SECOND FLOOR 117' - 6"  
 FIRST FLOOR 100' - 0"

REV	DATE	ISSUED FOR CONSTRUCTION	DOC REL ## - DESCRIPTION
1	01/02/25	ISSUED FOR CONSTRUCTION	

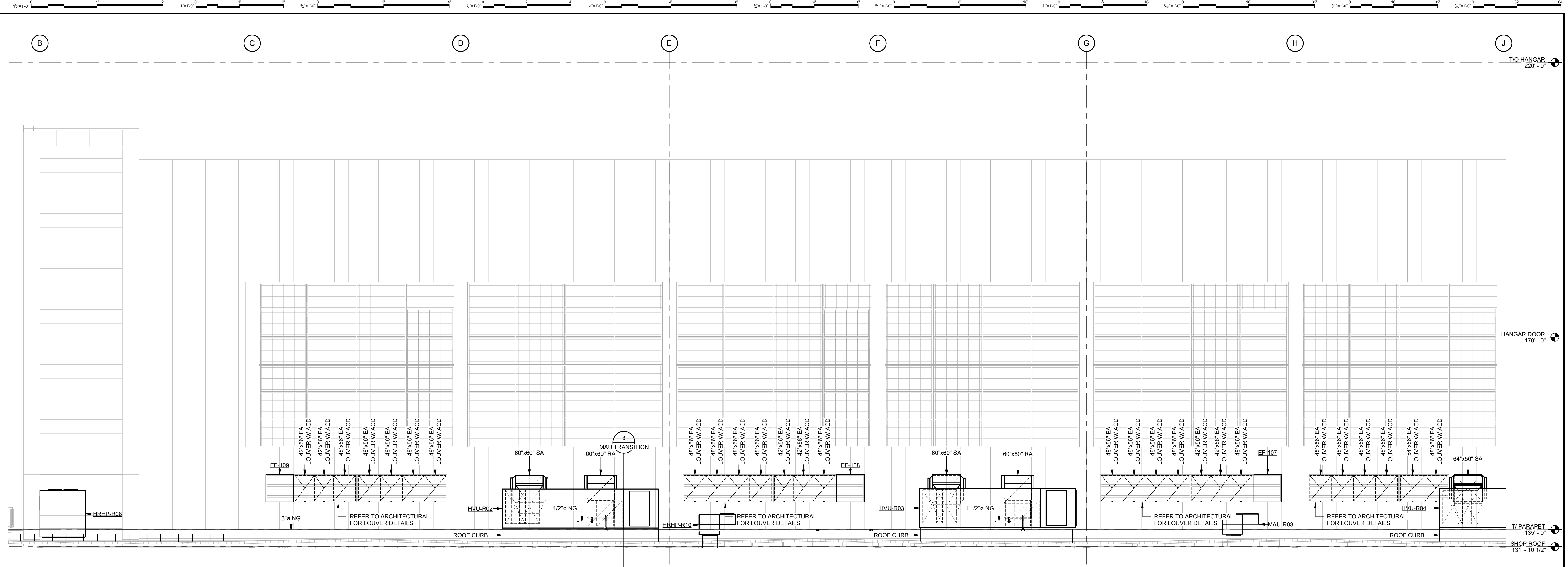
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**MECHANICAL HVAC SECTIONS**

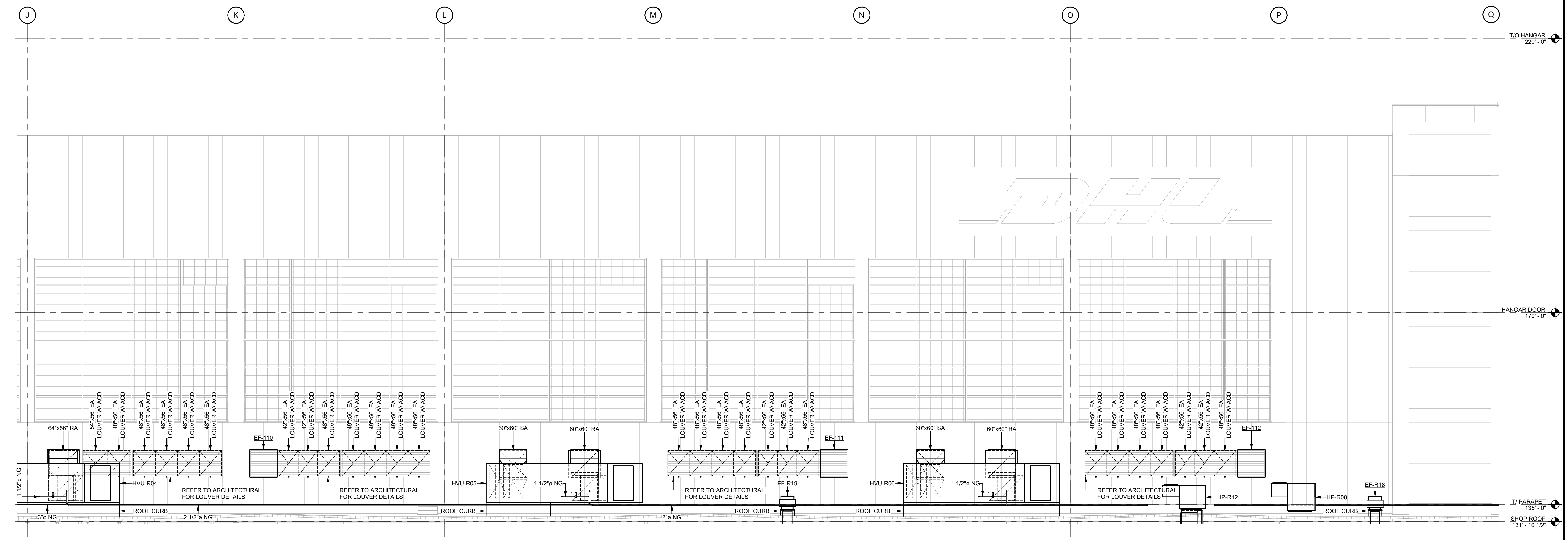
**MH3-00-06**  
 SHEET NUMBER

**MECHANICAL HVAC SECTION 08 (100 HANGAR - SOUTH WALL CONTINUED)**  
 SCALE: 1/8" = 1'-0"

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**MECHANICAL HVAC SECTION 09 (100 HANGAR - BACK)**  
SCALE: 1/8" = 1'-0"



**MECHANICAL HVAC SECTION 10 (100 HANGAR - BACK CONTINUED)**  
SCALE: 1/8" = 1'-0"



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SHEET NUMBER

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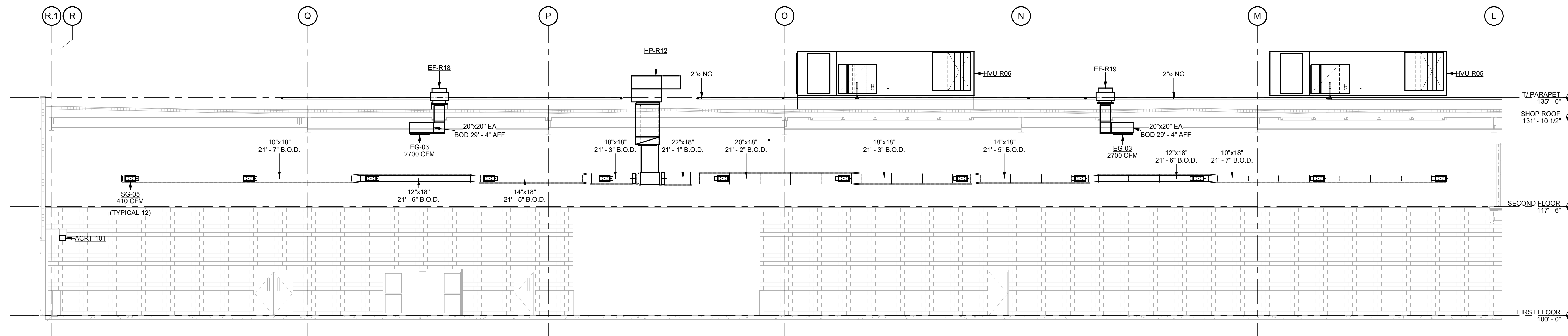
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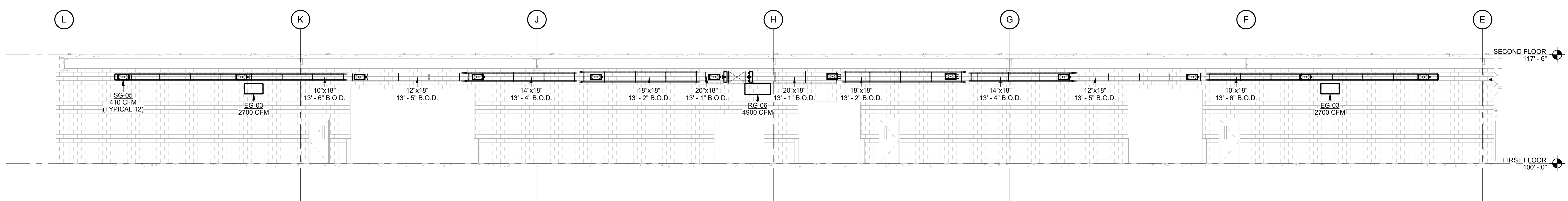
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**MH3-00-08**  
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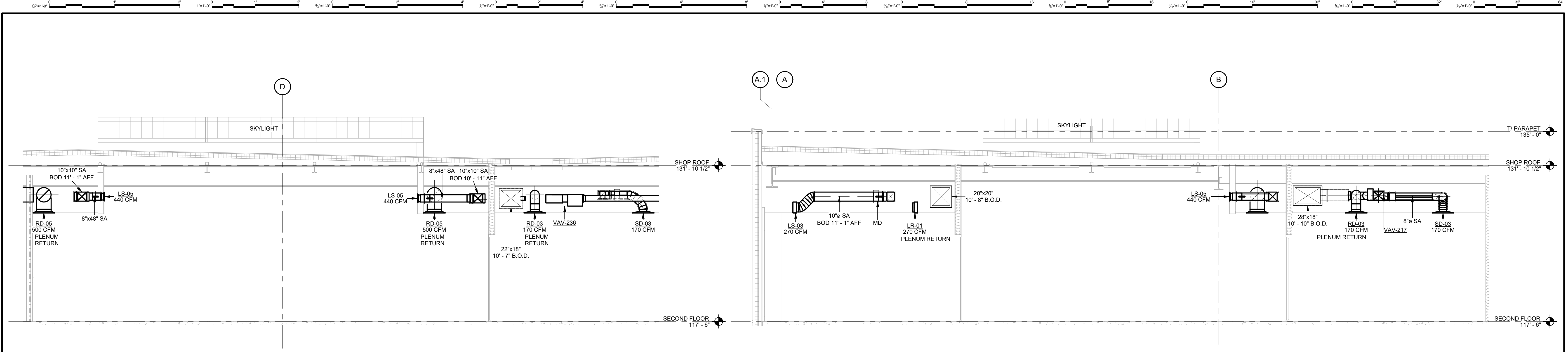
**MECHANICAL HVAC SECTION 11 (CO102 CORRIDOR 03)**

SCALE: 1/8" = 1'-0"



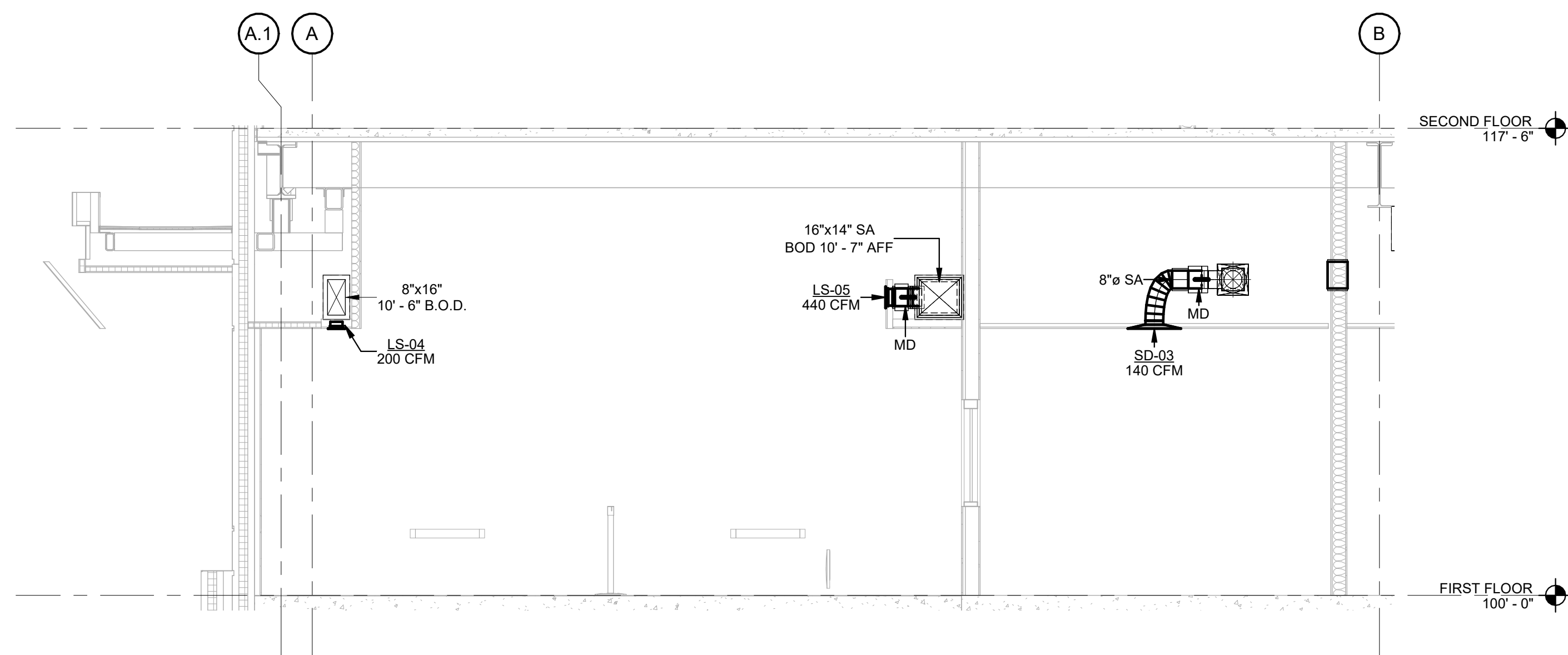
**MECHANICAL HVAC SECTION 12 (CO102 CORRIDOR 03 CONTINUED)**

SCALE: 1/8" = 1'-0"

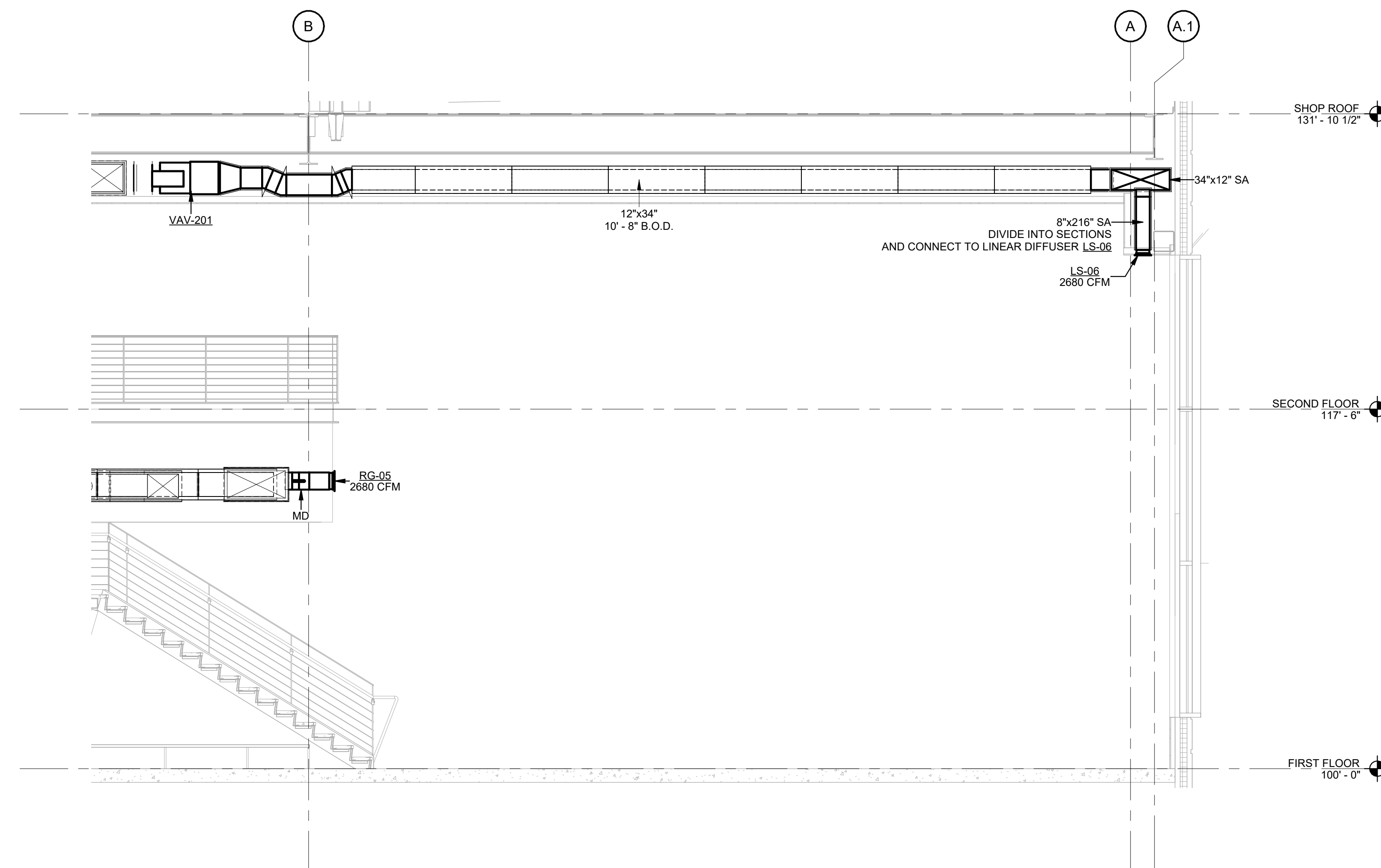


**MECHANICAL HVAC SECTION 13 (227 MRO SUITE)**  
SCALE: 1/4" = 1'-0"

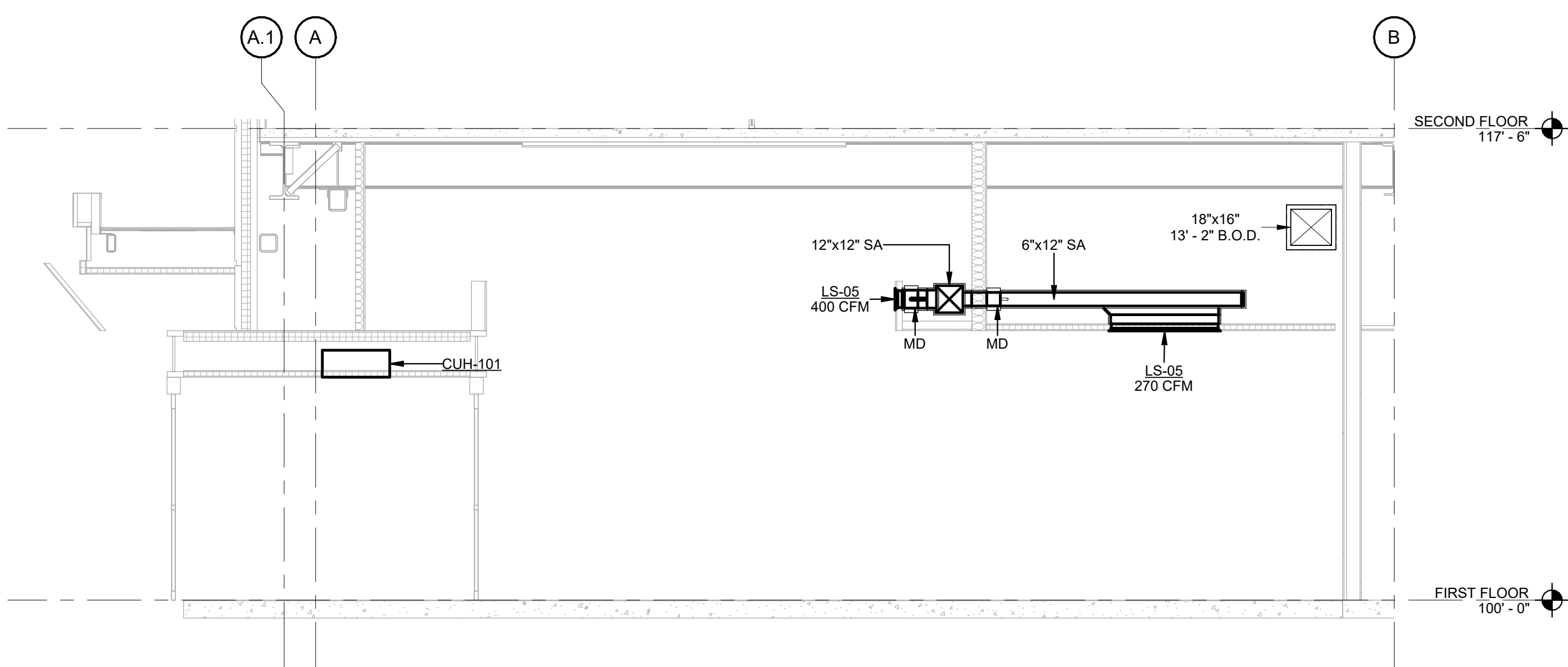
**MECHANICAL HVAC SECTION 14 (201 AVIATION SUITE)**  
SCALE: 1/4" = 1'-0"



**MECHANICAL HVAC SECTION 15 (121 SECURITY)**  
SCALE: 1/4" = 1'-0"



**MECHANICAL HVAC SECTION 16 (CO100 CORRIDOR 01)**  
SCALE: 1/4" = 1'-0"



**MECHANICAL HVAC SECTION 17 (121 SECURITY)**  
SCALE: 1/4" = 1'-0"



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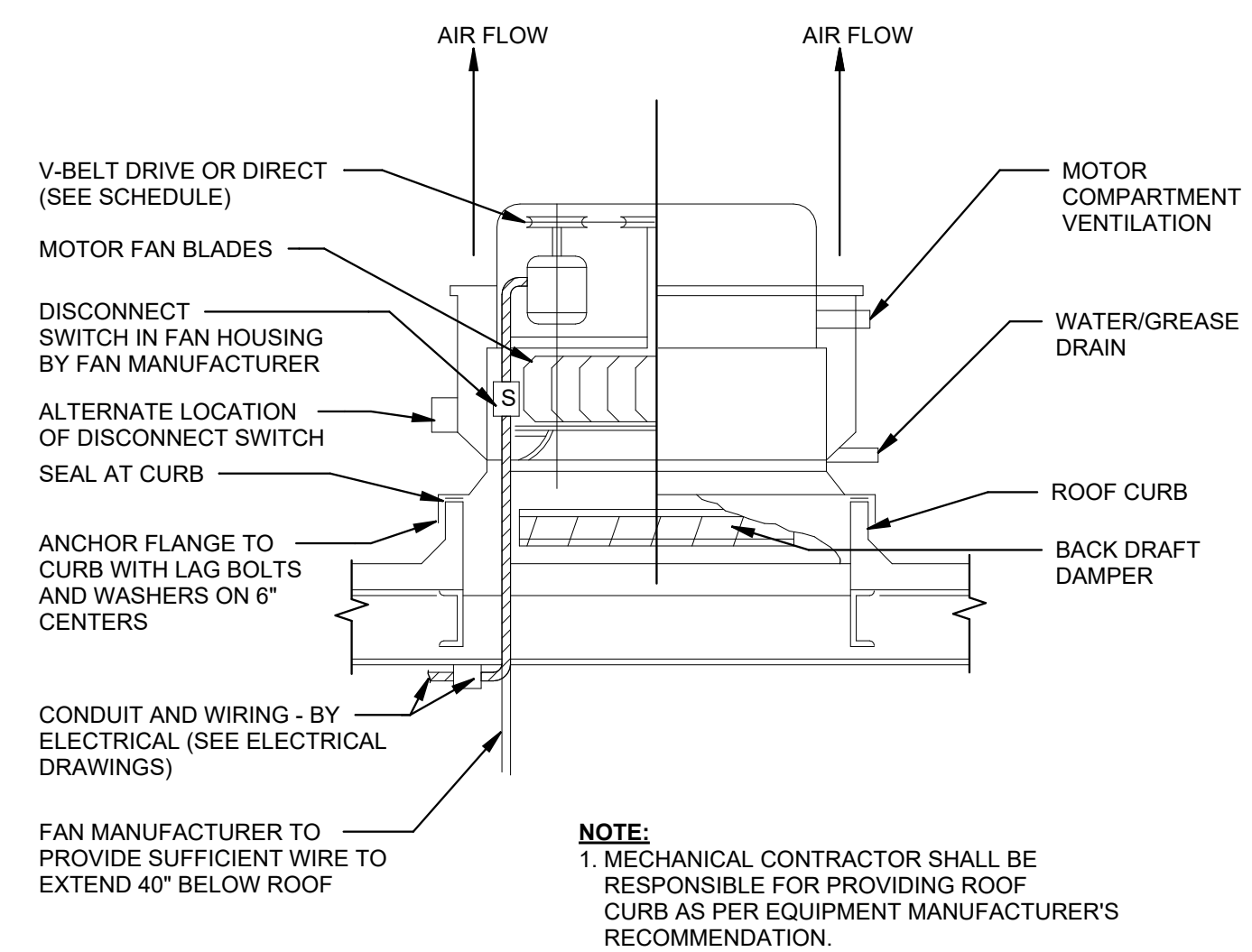
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**MECHANICAL HVAC SECTIONS**

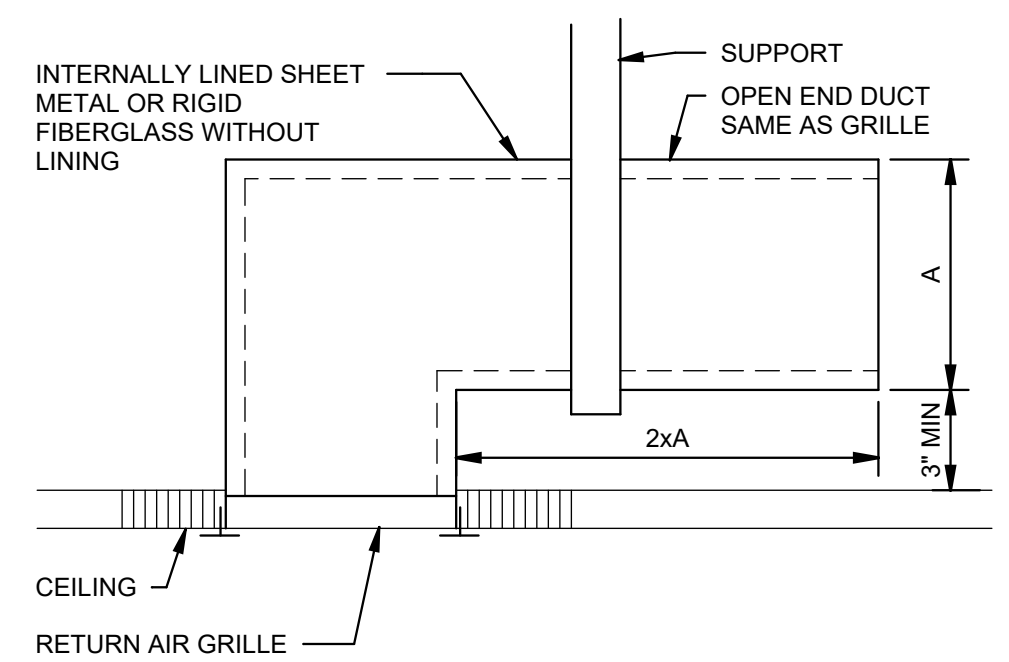
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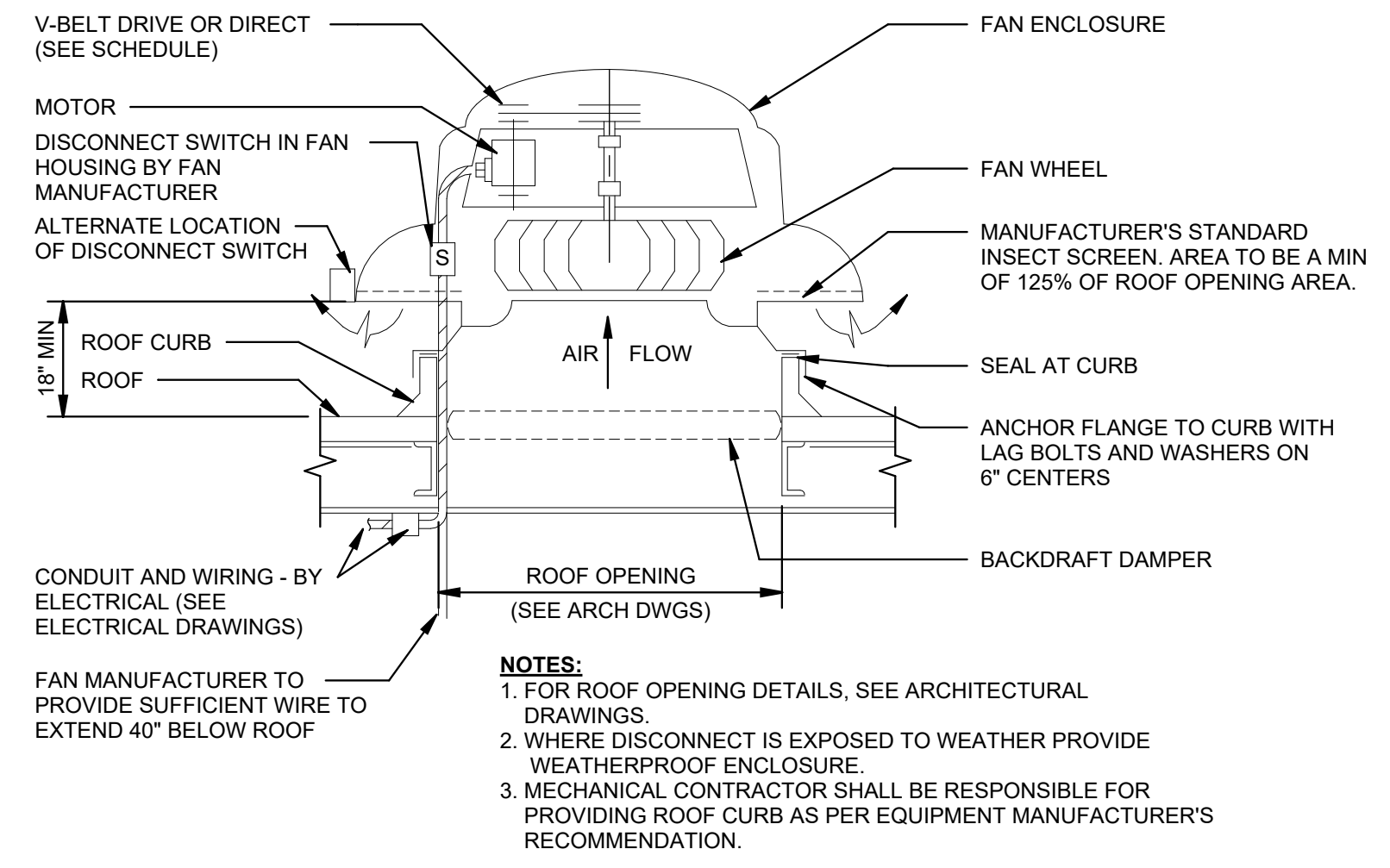




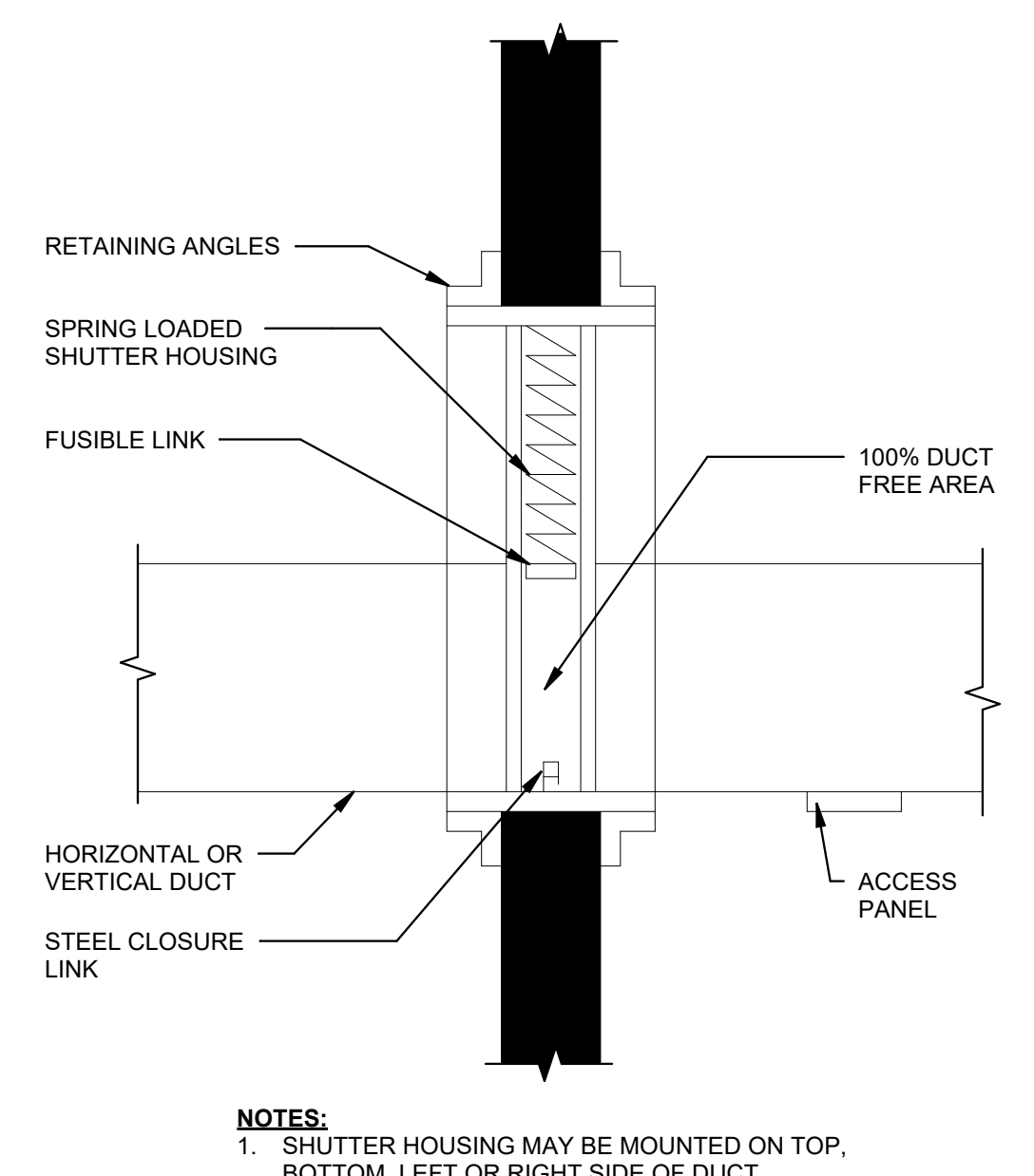
**CENTRIFUGAL UPBLAST ROOF FAN DETAIL**  
NOT TO SCALE



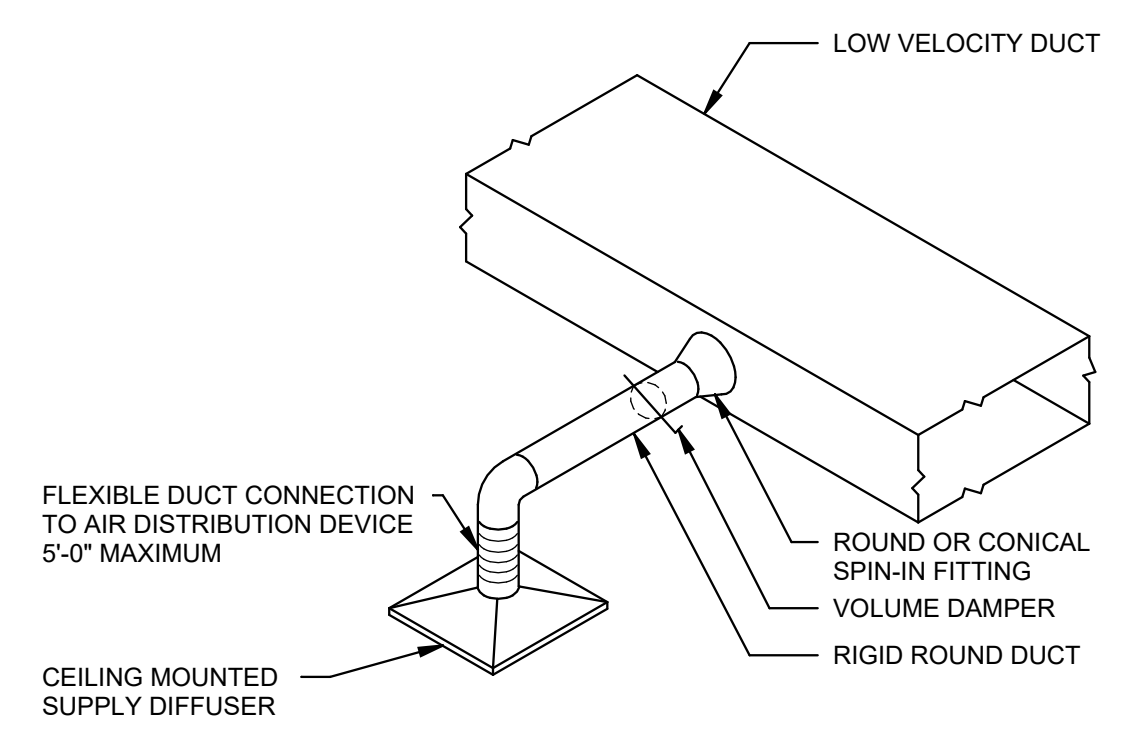
**CEILING RETURN AIR GRILLE WITH SOUND TRAP DETAIL**  
NOT TO SCALE



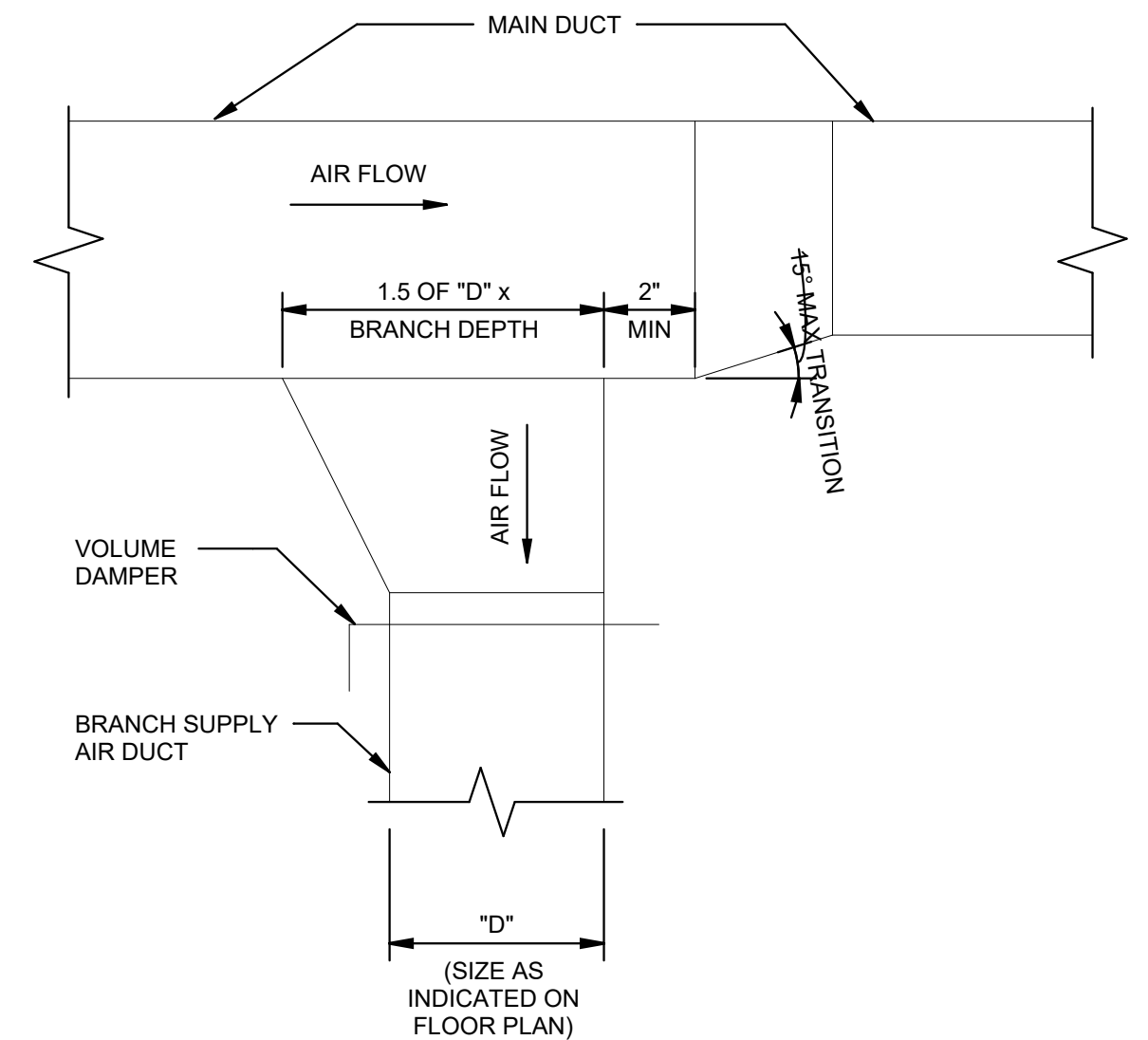
**CENTRIFUGAL DOME TYPE ROOF EXHAUST FAN DETAIL**  
NOT TO SCALE



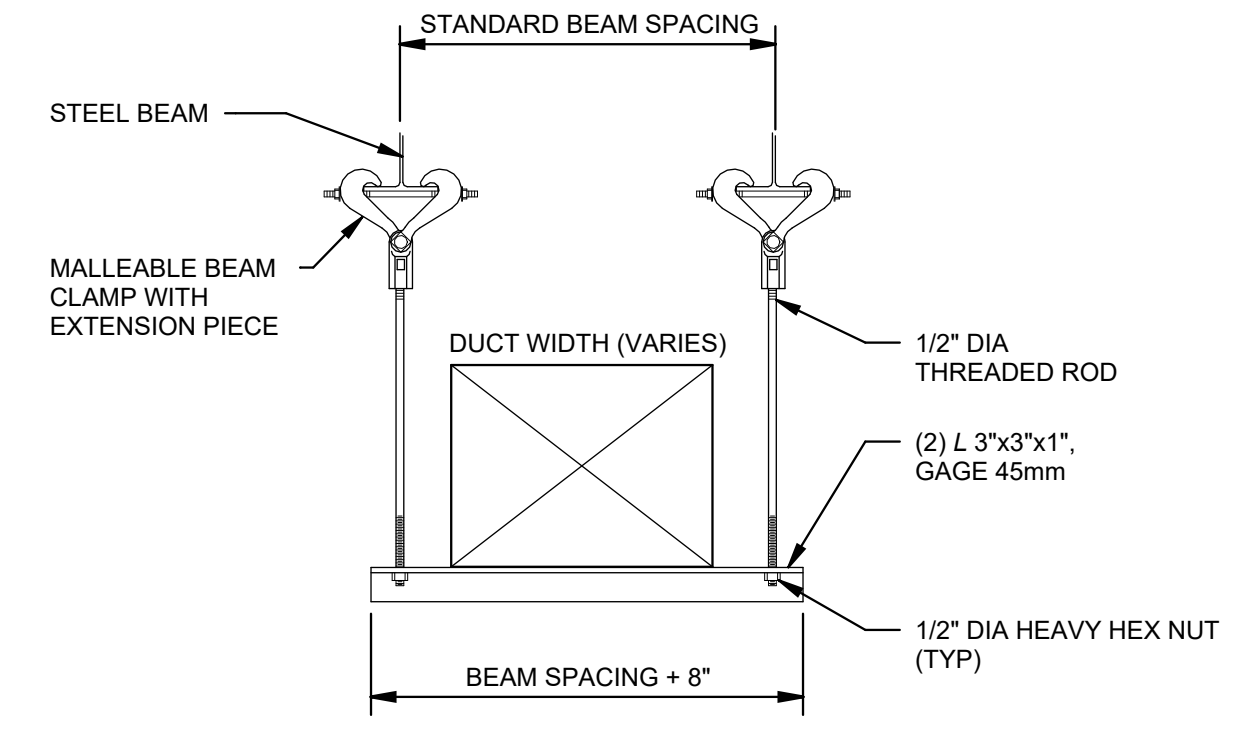
**CURTAIN TYPE DYNAMIC FIRE DAMPER DETAIL**  
NOT TO SCALE



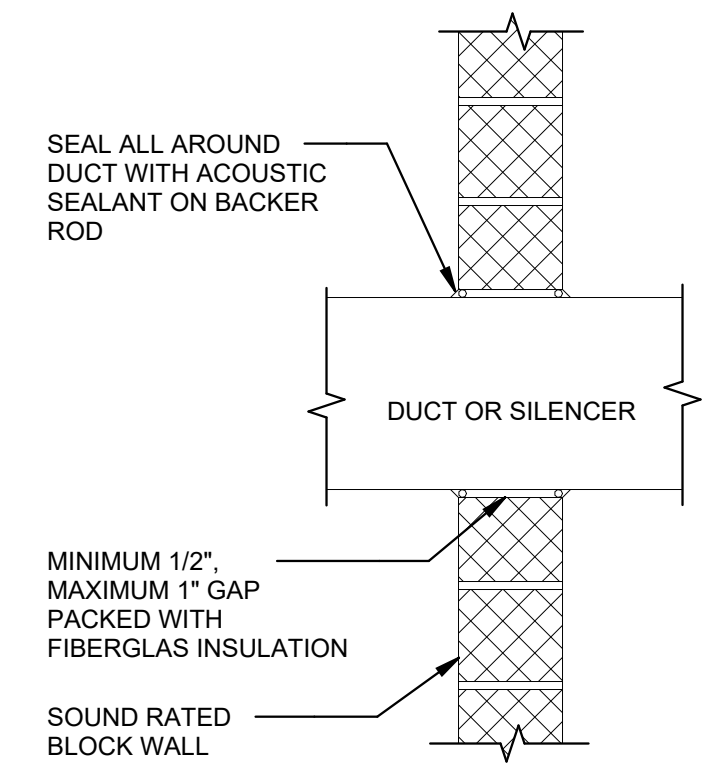
**DIFFUSER CONNECTION DETAIL**  
NOT TO SCALE



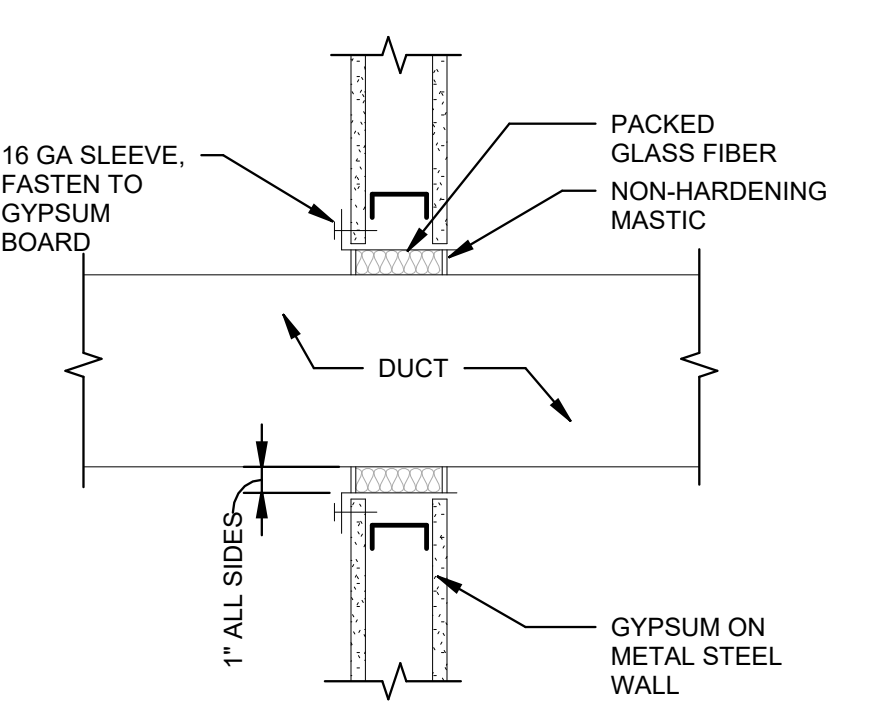
**DUCT CONNECTION DETAIL**  
NOT TO SCALE



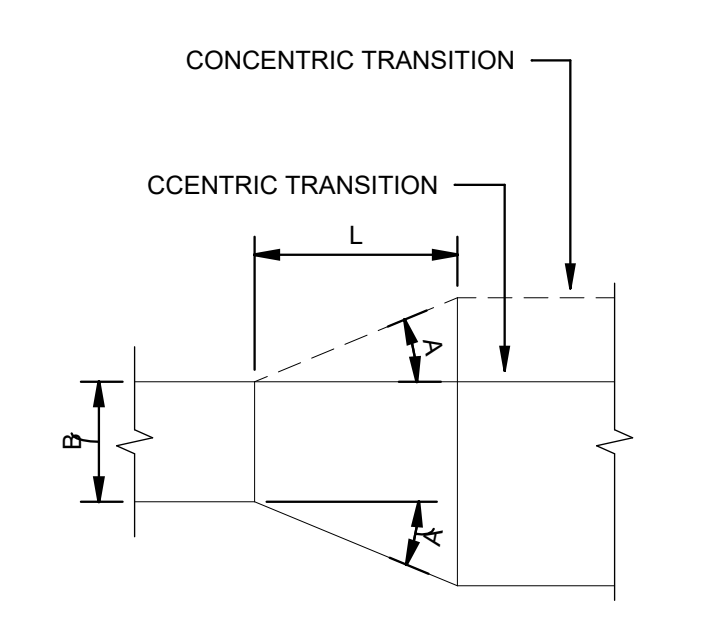
**DUCT HANGER DETAIL**  
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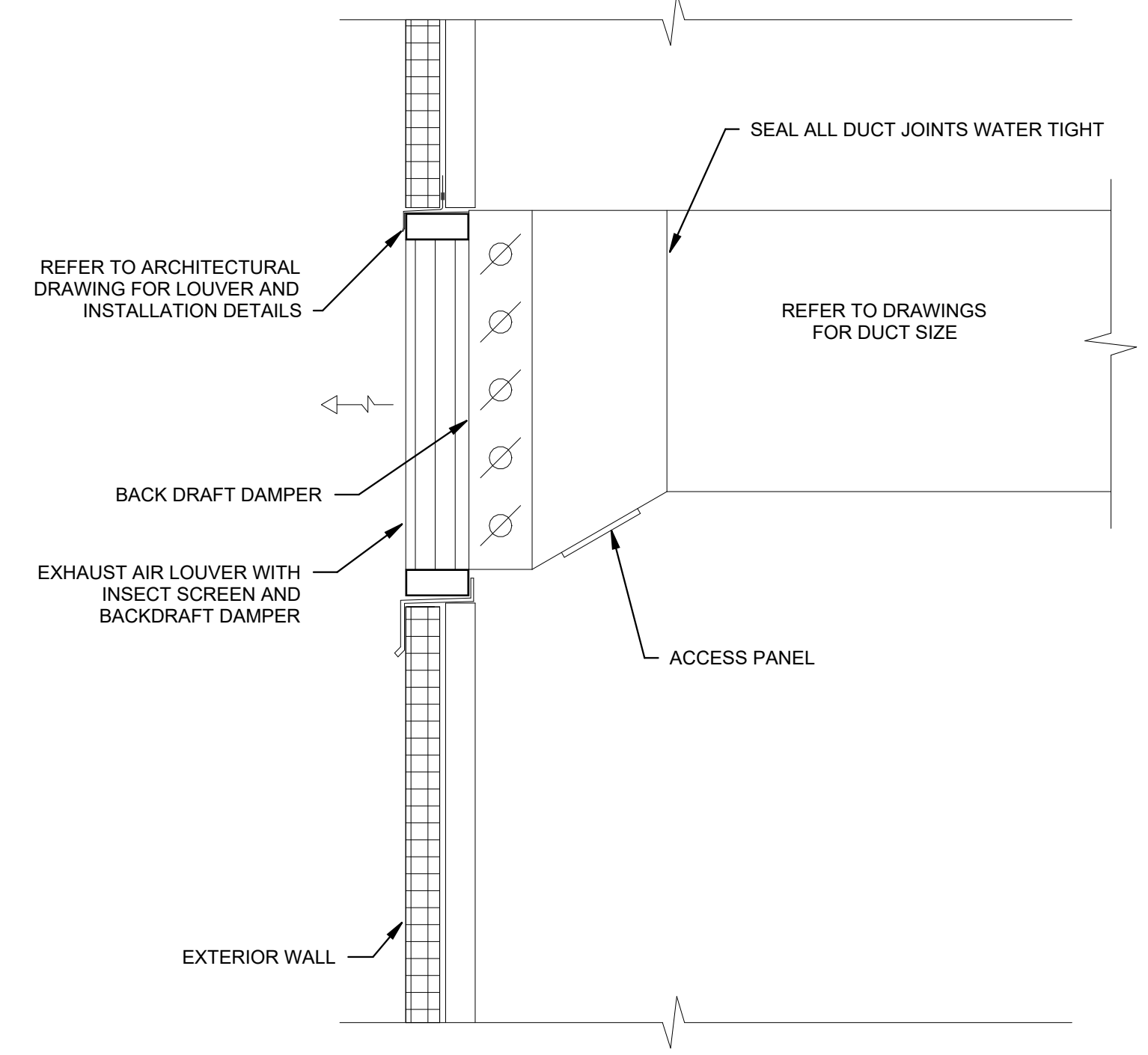
**DUCT PENETRATION DETAIL**  
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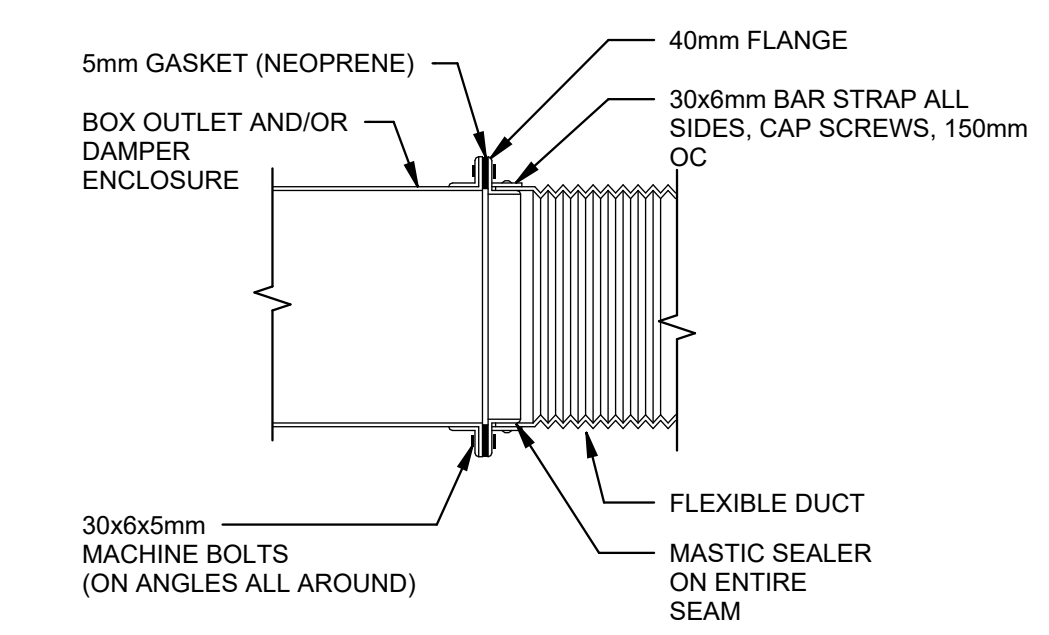
**DUCT SEAL AT NON-RATED WALLS DETAIL**  
NOT TO SCALE



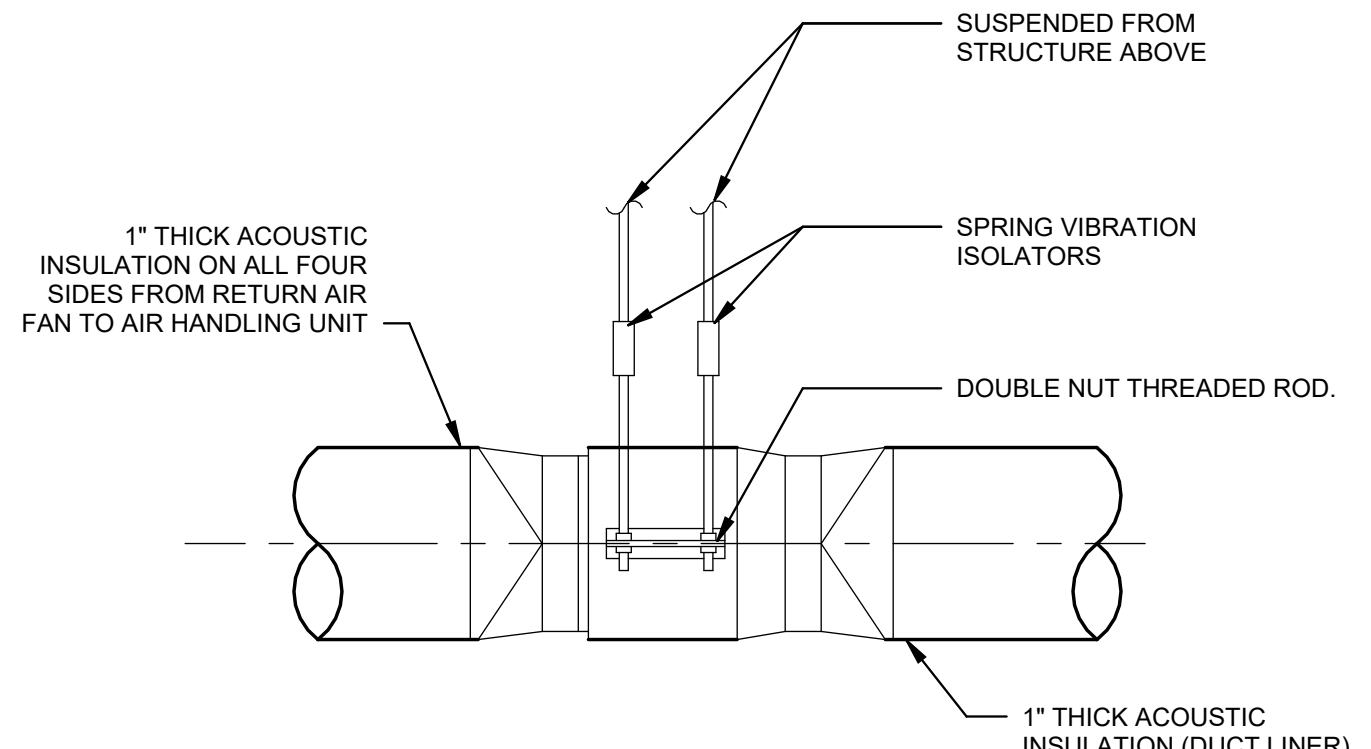
**DUCT TRANSITIONS - 1T DETAIL**  
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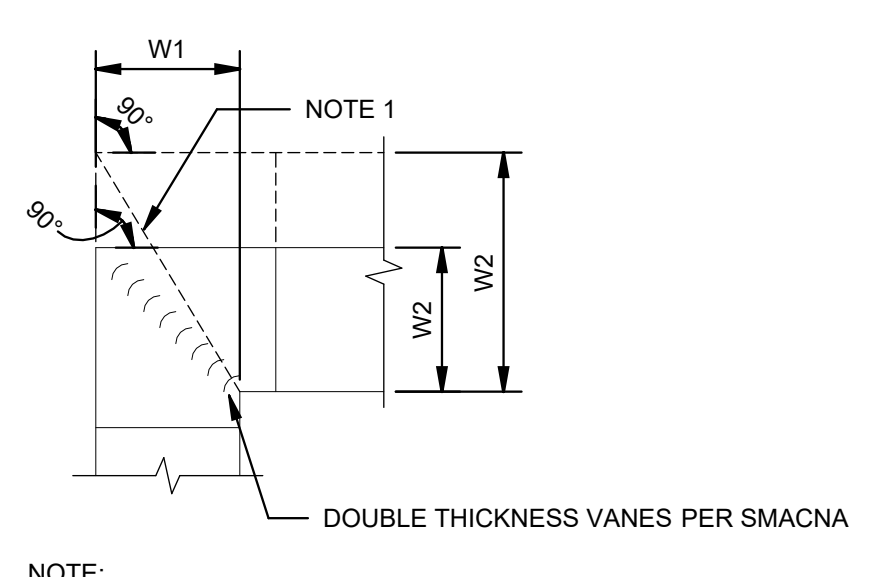
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NOT TO SCALE



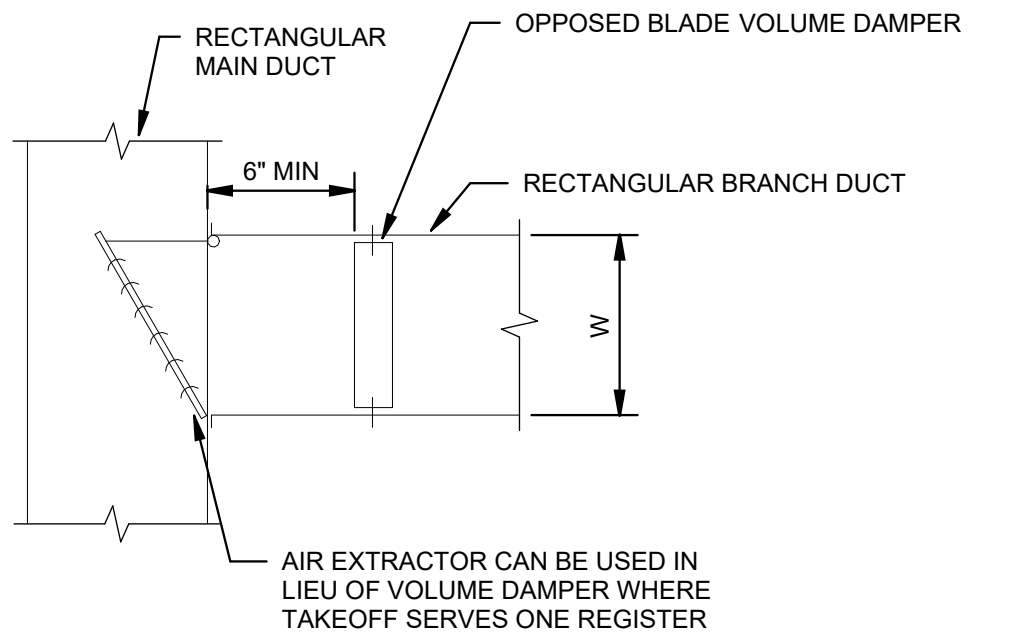
**FLEXIBLE CONNECTION DETAIL**  
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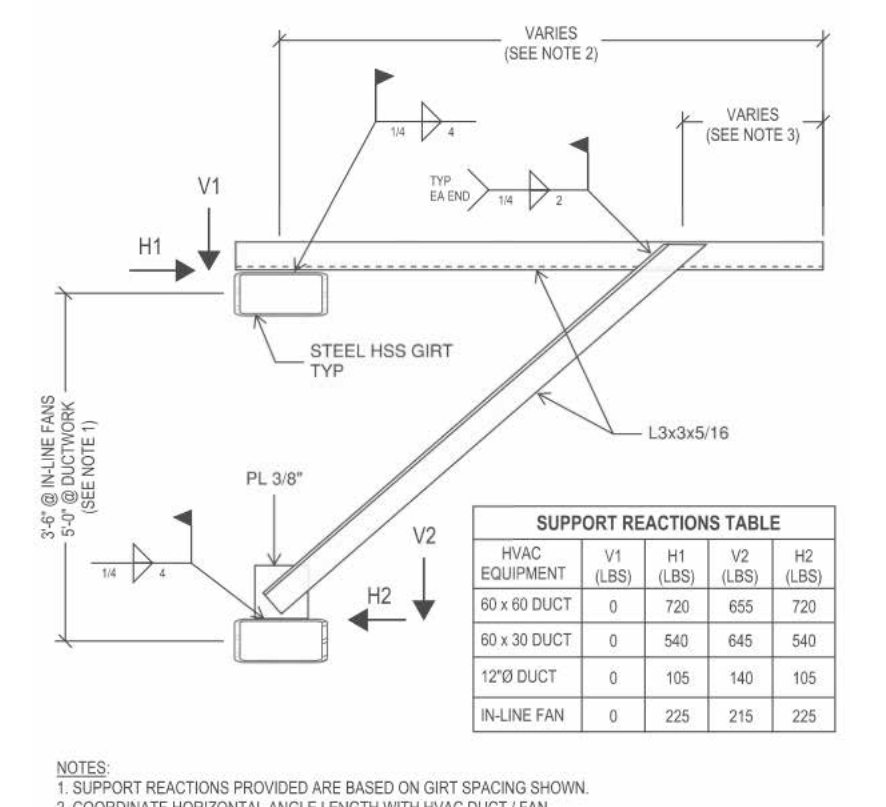
**IN-LINE FAN DETAIL**  
NOT TO SCALE



**MITERED ELBOW (90°) - 1E DETAIL**  
NOT TO SCALE



**MITERED ELBOW (LESS THAN 90°) - 2E DETAIL**  
NOT TO SCALE



**INLINE FAN AND VERTICAL DUCT SUPPORT**  
NOT TO SCALE

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**MECHANICAL HVAC DETAILS**

**MH5-00-02**  
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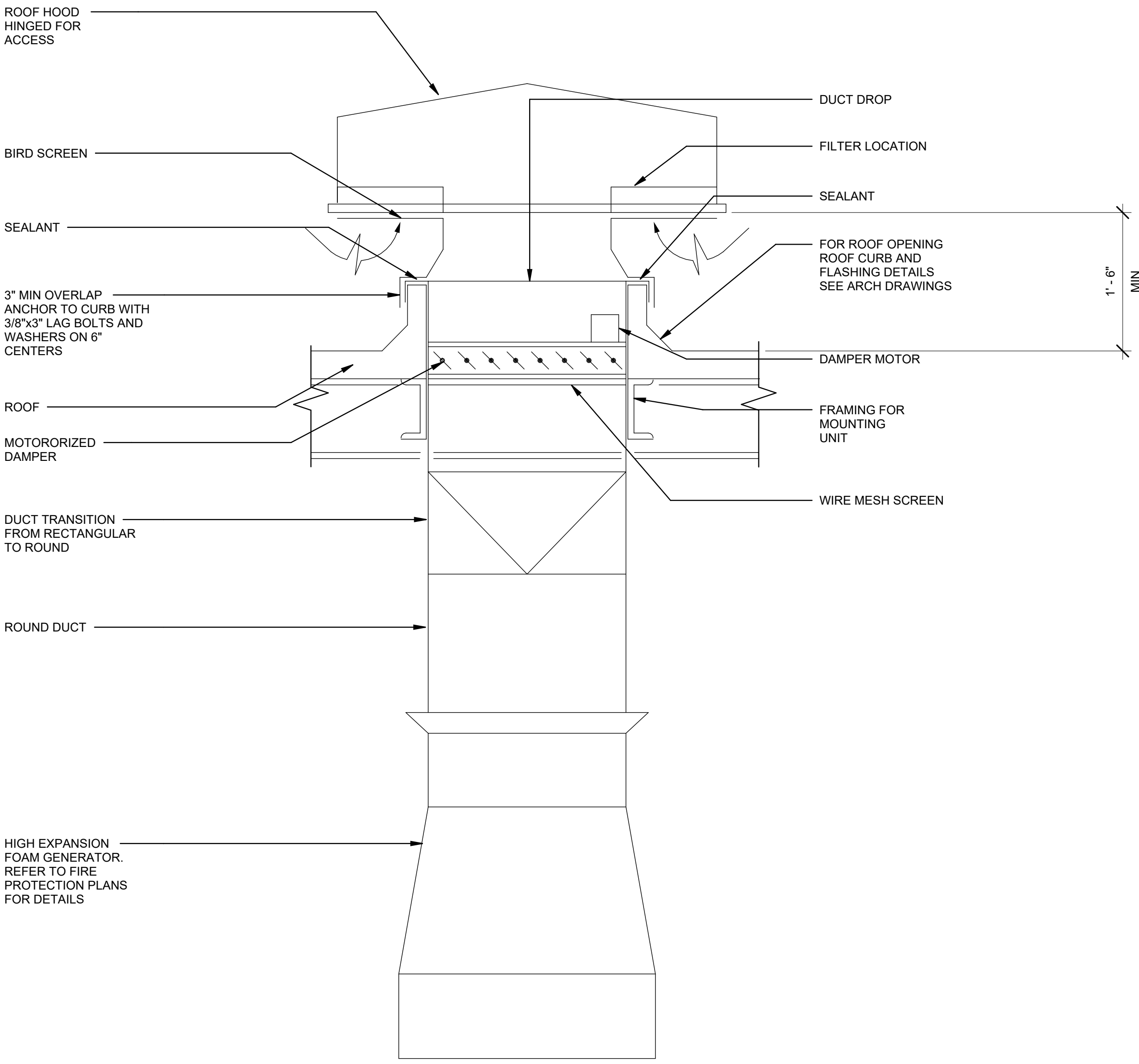
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**MECHANICAL HVAC DETAILS**

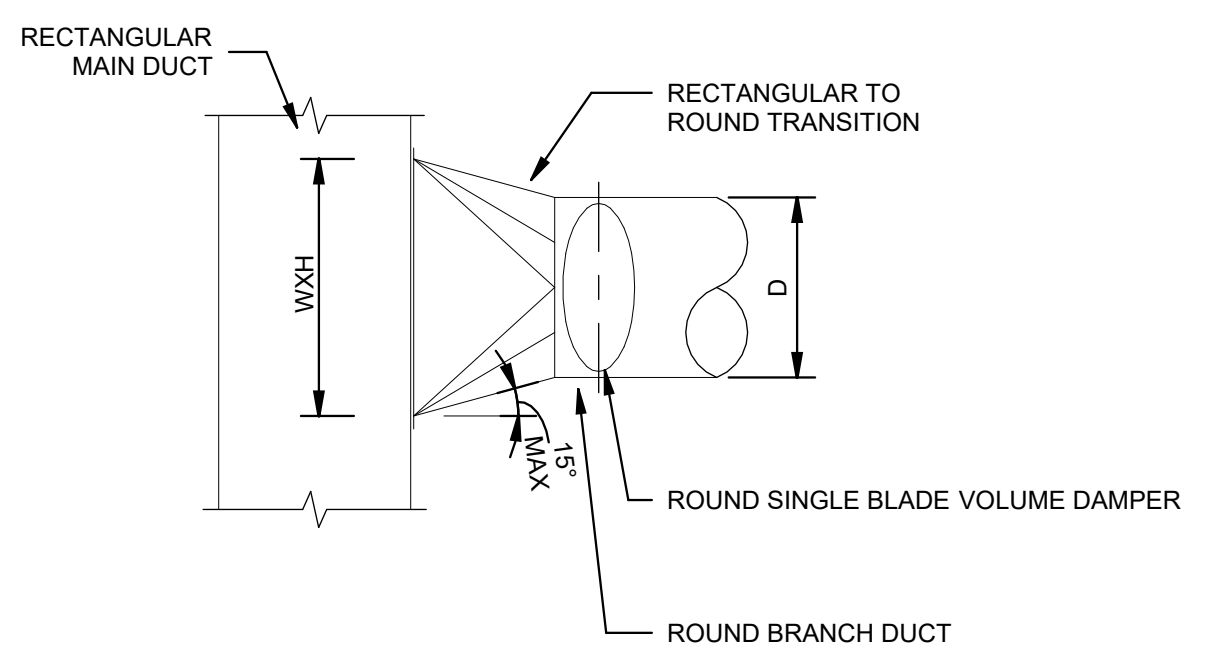
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DUCT FITTING PROVISIONS				
SYSTEM VELOCITY	MAIN DUCT	FITTING DESCRIPTION	FITTING TYPE	KEYED NOTES
MEDIUM	RECTANGULAR	RECTANGULAR BRANCH	1B	
MEDIUM	RECTANGULAR	ROUND BRANCH	4B	1
MEDIUM	ROUND	ROUND BRANCH	7B	
MEDIUM	RECTANGULAR	SPLIT	1S, 2S	
MEDIUM	RECTANGULAR	ELBOW	1E, 2E, 3E	2
MEDIUM	ROUND	ELBOW	4E, 5E	
LOW	RECTANGULAR	RECTANGULAR BRANCH	1B, 2B	
LOW	RECTANGULAR	ROUND BRANCH	3B, 5B	1
LOW	ROUND	ROUND BRANCH	6B	
LOW	RECTANGULAR	SPLIT	1S, 2S	
LOW	RECTANGULAR	ELBOW	1E, 2E, 3E	
LOW	ROUND	ELBOW	4E, 5E	

- GENERAL NOTES:
- FOR MEDIUM VELOCITY DUCT SYSTEMS, AIR VELOCITY IS GREATER THAN 600 METERS/MIN. FOR LOW VELOCITY DUCT SYSTEMS, AIR VELOCITY IS LESS THAN 600 METERS/MIN.
  - WHERE SEVERAL FITTINGS ARE LISTED, FITTINGS ARE INTERCHANGEABLE SUBJECT TO KEYED NOTES.
  - PROVIDE FOR OFFSETS, OBSTRUCTIONS, AND TRANSITIONS AS SHOWN ON THIS SHEET.

- KEY NOTES:
- PROVIDE "5B" IF ROUND DUCT CONNECTION IS GREATER THAN MAIN DUCT HEIGHT.
  - DO NOT USE VANED ELBOWS WHERE DUCT VELOCITIES EXCEED 915 METERS/MIN.

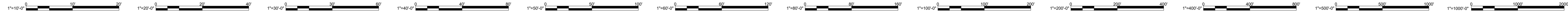


**RECTANGULAR TO ROUND BRANCH - 4B DETAIL**  
 NOT TO SCALE

NOTES:  
 1. FOR ROOF CURB AND OPENING DETAIL, SEE ARCHITECTURAL DRAWINGS.

**FOAM GENERATOR ROOF INTAKE HOOD**  
 NOT TO SCALE

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**TERMINAL UNIT SCHEDULE**

MARK	AREA SERVED	LOCATION	INLET SIZE (IN)	AIR FLOW (CFM)			AIR TEMP (°F)		ELECTRIC REHEAT		ELECTRICAL					TOTAL STATIC PD (IN WC)	BASED ON MANUFACTURER MODEL	COMMENTS
				MAX	MIN	MIN HEATING	ENT	LVG	KW	VOLT	PHASE	HZ	MCA	MOP				
VAV-101	121 SECURITY	122 SECURITY OFFICE	16	1780	710	1180	55	85	1.5	277	1	60	51.9	60.0	0.0	PRICE SDV	NOTE 1	
VAV-102	121 SECURITY	121 SECURITY	14	1740	530	870	55	85	8.5	277	1	60	38.4	40.0	0.0	TITUS DESV	NOTE 1	
VAV-103	CO100 CORRIDOR 01	CO100 CORRIDOR 01	14	1650	500	830	55	85	0.0	277	1	60	36.1	40.0	0.0	PRICE SDV	NOTE 1	
VAV-104	CO101 CORRIDOR 02	CO101 CORRIDOR 02	8	570	290	290	55	85	0.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-105	122 SECURITY OFFICE	122 SECURITY OFFICE	8	420	130	130	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-106	127 TRAINING TECH/LABS	127 TRAINING TECH/LABS	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-107	127 TRAINING TECH/LABS	127 TRAINING TECH/LABS	10	1000	300	500	55	85	5.0	277	1	60	22.6	25.0	0.0	TITUS DESV	NOTE 1	
VAV-108	128 TRAINING TECH/LABS	128 TRAINING TECH/LABS	10	1000	300	500	55	85	0.0	277	1	60	22.6	25.0	0.0	TITUS DESV	NOTE 1	
VAV-109	128 TRAINING TECH/LABS	128 TRAINING TECH/LABS	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-110	129 TRAINING CLASSROOM	129 TRAINING CLASSROOM	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-111	129 TRAINING CLASSROOM	129 TRAINING CLASSROOM	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-112	130 TRAINING CLASSROOM	130 TRAINING CLASSROOM	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-113	130 TRAINING CLASSROOM	130 TRAINING CLASSROOM	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-114	130 TRAINING CLASSROOM	130 TRAINING CLASSROOM	10	880	270	440	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-115	131 WELLNESS ROOM	131 WELLNESS ROOM	4	150	50	75	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-116	142 STORAGE /141 TRAINING OFFICE	142 STORAGE	8	470	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-117	146 BREAKROOM	146 BREAKROOM	8	540	170	170	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-118	CO101 CORRIDOR 02	CO101 CORRIDOR 02	6	350	110	110	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-119	CO101 CORRIDOR 02	CO101 CORRIDOR 02	8	420	130	130	55	85	0.0	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-120	132 TOILET /136 W TOILET /137 M TOILET	136 W TOILET	8	420	420	420	55	85	0.0	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-201	121 SECURITY	122 SECURITY OFFICE	16	2680	810	1340	55	85	13.0	277	1	60	58.7	60.0	0.0	TITUS DESV	NOTE 1	
VAV-202	121 SECURITY	122 SECURITY OFFICE	12	1090	330	550	55	85	0.0	277	1	60	24.8	25.0	0.0	PRICE SDV	NOTE 1	
VAV-203	201 AVIATION SUITE	201 AVIATION SUITE	6	260	80	80	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-204	201 AVIATION SUITE	201 AVIATION SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-205	201 AVIATION SUITE	201 AVIATION SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-206	201 AVIATION SUITE	201 AVIATION SUITE	10	880	270	270	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-207	201 AVIATION SUITE	201 AVIATION SUITE	10	880	270	270	55	85	0.0	277	1	60	13.5	15.0	0.0	PRICE SDV	NOTE 1	
VAV-208	201 AVIATION SUITE	201 AVIATION SUITE	10	880	270	270	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-209	201 AVIATION SUITE	201 AVIATION SUITE	12	1320	400	400	55	85	6.5	277	1	60	29.3	30.0	0.0	TITUS DESV	NOTE 1	
VAV-210	201 AVIATION SUITE	201 AVIATION SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-211	202 CONFERENCE ROOM	202 CONFERENCE ROOM	10	900	270	450	55	85	4.5	277	1	60	20.3	25.0	0.0	TITUS DESV	NOTE 1	
VAV-212	203 OFFICE / 204 OFFICE / 205 OFFICE	205 OFFICE	10	810	250	410	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-213	206 OFFICE / 207 OFFICE / 208 OFFICE	206 OFFICE	10	810	250	410	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-214	209 OFFICE / 210 OFFICE / 211 OFFICE	209 OFFICE	10	810	250	410	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-215	212 CONFERENCE ROOM	212 CONFERENCE ROOM	12	1170	360	590	55	85	0.0	277	1	60	27.1	30.0	0.0	PRICE SDV	NOTE 1	
VAV-216	214 CONFERENCE ROOM	214 CONFERENCE ROOM	8	740	230	370	55	85	3.5	277	1	60	15.8	20.0	0.0	TITUS DESV	NOTE 1	
VAV-217	216 OFFICE / 217 OFFICE / 218 OFFICE	218 OFFICE	8	510	160	260	55	85	2.5	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-218	219 OFFICE / 220 OFFICE / 221 OFFICE / 222 OFFICE	222 OFFICE	8	620	190	190	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-219	223 PRAYER ROOM	223 PRAYER ROOM	4	140	50	75	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-220	227 MRO SUITE	227 MRO SUITE	10	880	270	270	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-221	227 MRO SUITE	227 MRO SUITE	12	1320	400	660	55	85	6.5	277	1	60	29.3	30.0	0.0	TITUS DESV	NOTE 1	
VAV-222	227 MRO SUITE	227 MRO SUITE	10	760	230	230	55	85	2.5	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-223	227 MRO SUITE	227 MRO SUITE	8	510	160	260	55	85	2.5	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-224	227 MRO SUITE	227 MRO SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-225	227 MRO SUITE	227 MRO SUITE	10	880	270	270	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-226	227 MRO SUITE	227 MRO SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-227	227 MRO SUITE	227 MRO SUITE	12	1320	400	400	55	85	4.0	277	1	60	18.1	20.0	0.0	TITUS DESV	NOTE 1	
VAV-228	227 MRO SUITE	227 MRO SUITE	10	880	270	270	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-229	227 MRO SUITE	227 MRO SUITE	10	1000	300	300	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-230	227 MRO SUITE	227 MRO SUITE	10	880	270	270	55	85	0.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-231	229 PRODUCTION PLANNING	229 PRODUCTION PLANNING	8	720	220	220	55	85	2.5	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-232	230 CONFERENCE	230 CONFERENCE	8	600	180	180	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-233	233 OFFICE / 234 OFFICE	233 OFFICE	8	560	170	280	55	85	3.0	277	1	60	13.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-234	235 OFFICE / 236 OFFICE	235 OFFICE	8	510	160	260	55	85	2.5	277	1	60	11.3	15.0	0.0	TITUS DESV	NOTE 1	
VAV-235	237 CONFERENCE	237 CONFERENCE	6	360	110	180	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-236	CO202 CORRIDOR 05	239 OFFICE	4	150	50	75	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-237	238 OFFICE / 239 OFFICE / 240 RECORDS STORAGE	240 RECORDS STORAGE	8	540	170	170	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-238	241 OFFICE / 242 OFFICE / 243 OFFICE / 244 OFFICE	244 OFFICE	8	680	210	210	55	85	2.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-239	CO202 CORRIDOR 05	244 OFFICE	4	150	50	75	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-240	245 AUDITORS	245 AUDITORS	6	260	80	80	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-241	246 OFFICE / 247 OFFICE / 249 OFFICE	248 OFFICE	8	540	170	170	55	85	2.0	277	1	60	9.0	15.0	0.0	TITUS DESV	NOTE 1	
VAV-242	249 COPY ROOM	249 COPY ROOM	6	280	90	90	55	85	1.0	277	1	60	4.5	15.0	0.0	TITUS DESV	NOTE 1	
VAV-243	265 OFFICE / 265 OFFICE / 264 OFFICE	264 OFFICE	8	480	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-244	265 OFFICE / 266 OFFICE / 267 OFFICE	265 OFFICE	8	480	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-245	268 OFFICE / 269 OFFICE / 270 OFFICE	268 OFFICE	8	480	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-246	272 OFFICE / 273 OFFICE / 274 OFFICE	272 OFFICE	8	480	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-247	275 OFFICE / 276 OFFICE / 277 OFFICE	275 OFFICE	8	480	150	150	55	85	1.5	277	1	60	6.8	15.0	0.0	TITUS DESV	NOTE 1	
VAV-248	278 OFFICE / 279 OFFICE / 271 OFFICE	278 OFFICE	8	560	170	170												



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**SHOP DRAWING**

**FOAM GENERATOR ROOF INTAKE HOOD SCHEDULE**

MARK	LOCATION	SYSTEM SERVED	CFM	APPROX DIMENSIONS			WEIGHT (LB)	MAX AIR PD (IN WC)	ROOF OPENING		BASED ON MANUFACTURER MODEL	COMMENTS
				LENGTH	WIDTH	HEIGHT			LENGTH (IN)	WIDTH (IN)		
IH-R01	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R02	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R03	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R04	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R05	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R06	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R07	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R08	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R09	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R10	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R11	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R12	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R13	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R14	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R15	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R16	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R17	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R18	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R19	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R20	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R21	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R22	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R23	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R24	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R25	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R26	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R27	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3
IH-R28	HANGAR ROOF	HIGH EXPANSION FOAM GENERATOR	21391	8'-3"	8'-3"	2'-2"	525	0.10	54	54	ANSUL JET-X 27 WEATHER HOOD	NOTE 1, 2, 3

**FOAM GENERATOR ROOF INTAKE HOOD SCHEDULE NOTES:**

1. REFER TO FIRE PROTECTION PLANS FOR HIGH EXPANSION FOAM GENERATOR.
2. INCLUDE SLOPED 12" ROOF CURB. CURB SLOPE TO MATCH ROOF SLOPE.
3. INCLUDE AUTOMATIC CONTROL DAMPER THAT SHALL BE TIED TO FIRE ALARM.

**ROOF INTAKE / RELIEF HOOD SCHEDULE**

MARK	AREA/SYSTEM SERVED	LOCATION	THROAT WIDTH	THROAT LENGTH	MAX THROAT VELOCITY (FPM)	CFM	STATIC PRESSURE DROP (IN WC)	ACCESSORIES	ELECTRICAL			APPROX WEIGHT (LB)	BASED ON MANUFACTURER MODEL	COMMENTS
									VOLT	PHASE	HZ			
IH-R29	109 MECHANICAL ROOF	109 CORRIDOR	36"	36"	700	5000	0.100	MOTORIZED DAMPER	120	1	60	205	GREENHECK FGI	NOTE 1, 2
IH-R31	110 FIRE RISER ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R32	110 FIRE RISER ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R33	112 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R34	112 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R35	171 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R36	171 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R37	175 COMPRESSOR ROOF	54"	54"	1000	16490	0.100	MOTORIZED DAMPER	120	1	60	370	GREENHECK FGI	NOTE 1, 2	
IH-R38	172 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
IH-R39	172 ELECTRICAL ROOF	24"	24"	700	2500	0.100	MOTORIZED DAMPER	120	1	60	120	GREENHECK FGI	NOTE 1, 2	
RH-R01	175 COMPRESSOR ROOF	36"	36"	1400	11490	0.100	MOTORIZED DAMPER	120	1	60	151	GREENHECK FGI	NOTE 1, 2	

**ROOF INTAKE / RELIEF HOOD SCHEDULE NOTES:**

1. INCLUDE ROOF CURB.
2. INCLUDE AUTOMATIC CONTROL DAMPER.

**AIR CURTAIN SCHEDULE**

MARK	AREA SERVED	LOCATION	OVERALL LENGTH	MAX FPM AT NOZZLE	MAX CFM AT NOZZLE	dBA MEASURED 10FT FROM NOZZLE	MOUNTING HEIGHT	MOTOR DATA			ELECTRICAL			APPROX WEIGHT (LB)	BASED ON MANUFACTURER MODEL	COMMENTS
								HP	RPM	VOLT	PHASE	HZ	AMP			
ACRT-101	CO102 CORRIDOR 03 O.H	CO102 CORRIDOR 03	98"	4247	2884	73	144'-0"	2.5	1750	480	3	60	16	135	MARS STD296	NOTE 1
ACRT-102	CO102 CORRIDOR 03 O.H	CO102 CORRIDOR 03	98"	4247	2884	73	144'-0"	2.5	1750	480	3	60	1.6	135	MARS STD296	NOTE 1

**AIR CURTAIN NOTES:**

1. PROVIDE DOOR SWITCH CONTROL.

**UNIT HEATER (ELECTRIC) SCHEDULE**

MARK	AREA SERVED	LOCATION	TYPE	NOM CFM	AIR TEMPERATURE		HEATING COIL (KW)	FAN POWER (HP)	ELECTRICAL			BASED ON MANUFACTURER MODEL	COMMENTS	
					EAT (°F)	LAT (°F)			VOLT	PHASE	HZ			
CUH-101	124 VESTIBULE	124 VESTIBULE	HORIZONTAL CABINET	600	55	80	3.0	1/30	480	3	60	3.7	TRANE FF D 080	NOTE 2, 4, 5
CUH-102	170 CORRIDOR	170 CORRIDOR	HORIZONTAL RECESSED	600	55	80	3.0	1/30	480	3	60	3.7	TRANE FF E 080	NOTE 2, 4
CUH-103	113 CORRIDOR	113 CORRIDOR	HORIZONTAL RECESSED	600	55	80	3.0	1/30	480	3	60	3.7	TRANE FF E 080	NOTE 2, 4
CUH-104	ST-2 STAIR 2	ST-2 STAIR 2	VERTICAL WALL HUNG CABINET	600	55	80	3.0	1/30	480	3	60	3.7	TRANE FF F 080	NOTE 2, 5
CUH-105	ST-2 STAIR 2	ST-2 STAIR 2	VERTICAL WALL HUNG CABINET	600	55	80	3.0	1/30	480	3	60	3.7	TRANE FF F 080	NOTE 2, 5
EUH-101	109 MECHANICAL	109 MECHANICAL	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2
EUH-102	111 FIRE PUMP	111 FIRE PUMP	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2
EUH-103	112 ELECTRICAL	112 ELECTRICAL	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2
EUH-104	112 ELECTRICAL	112 ELECTRICAL	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2
EUH-105	152 STORES	152 STORES	SUSPENDED	650	45	95	10.0	1/30	480	3	60	12	MARLEY MUH-10-4	NOTE 1, 2
EUH-106	152 STORES	152 STORES	SUSPENDED	650	45	95	10.0	1/30	480	3	60	12	MARLEY MUH-10-4	NOTE 1, 2
EUH-107	152 STORES	152 STORES	SUSPENDED	650	45	95	10.0	1/30	480	3	60	12	MARLEY MUH-10-4	NOTE 1, 2
EUH-109	171 ELECTRICAL	171 ELECTRICAL	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2
EUH-110	COMPRESSED AIR SYSTEM	175 COMPRESSOR	SUSPENDED	650	45	95	7.5	1/30	480	3	60	9	MARLEY MUH-07-4	NOTE 1, 2

**UNIT HEATER (ELECTRIC) SCHEDULE NOTES:**

1. PROVIDE WALL BRACKET SUPPLIED BY UNIT MANUFACTURER.
2. BMS TEMPERATURE SENSOR.
3. INTRINSICALLY SAFE UNIT.
4. WITH BOTTOM SUPPLY AND RETURN.
5. WITH INTEGRATED THERMOSTAT.

**FAN SCHEDULE**

MARK	AREA/SYSTEM SERVED	LOCATION	TYPE	AIR FLOW (CFM)	ESP (IN WC)	FAN RPM	DRIVE TYPE	HP	ELECTRICAL			MOTOR CONTROL	ROOF/WALL OPENING (IN)	APPROX WEIGHT (LB)	BASED ON MANUFACTURER MODEL	COMMENTS
									VOLT	PHASE	HZ					
EF-107	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-108	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-109	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-110	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-111	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-112	100 HANGAR	100 HANGAR	SIDEWALL PROPELLER	14,600	0.30	389	BELT	2.00	480	3	60	BMS	60 x 60	222	GREENHECK SBE-2L54-20	NOTE 1, 3
EF-R01	107 M TOILET / 108 M TOILET ROOF	CENTRIFUGAL DOWNBLAST	280	0.20	724	BELT	0.25	120	1	60	BMS	14 1/2" x 14 1/2"	70	GREENHECK GB-100	NOTE 2, 3	
EF-R02	109 MECHANICAL ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R03	109 MECHANICAL ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R04	111 FIRE PUMP ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R05	111 FIRE PUMP ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R06	112 ELECTRICAL ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R07	112 ELECTRICAL ROOF	CENTRIFUGAL DOWNBLAST	2,500	0.30	759	BELT	0.33	120	1	60	BMS	20 1/2" x 20 1/2"	90	GREENHECK GB-180	NOTE 1, 3	
EF-R08	140 ELECTRICAL ROOF	CENTRIFUGAL DOWNBLAST	330	0.40	1021	BELT	0.25	120	1	60	BMS	14 1/2" x 14 1/2"	70	GREENHECK GB-100	NOTE 1, 2	
EF-R09	176 M TOILET / 177 M TOILET ROOF	CENTRIFUGAL DOWNBLAST	500	0												



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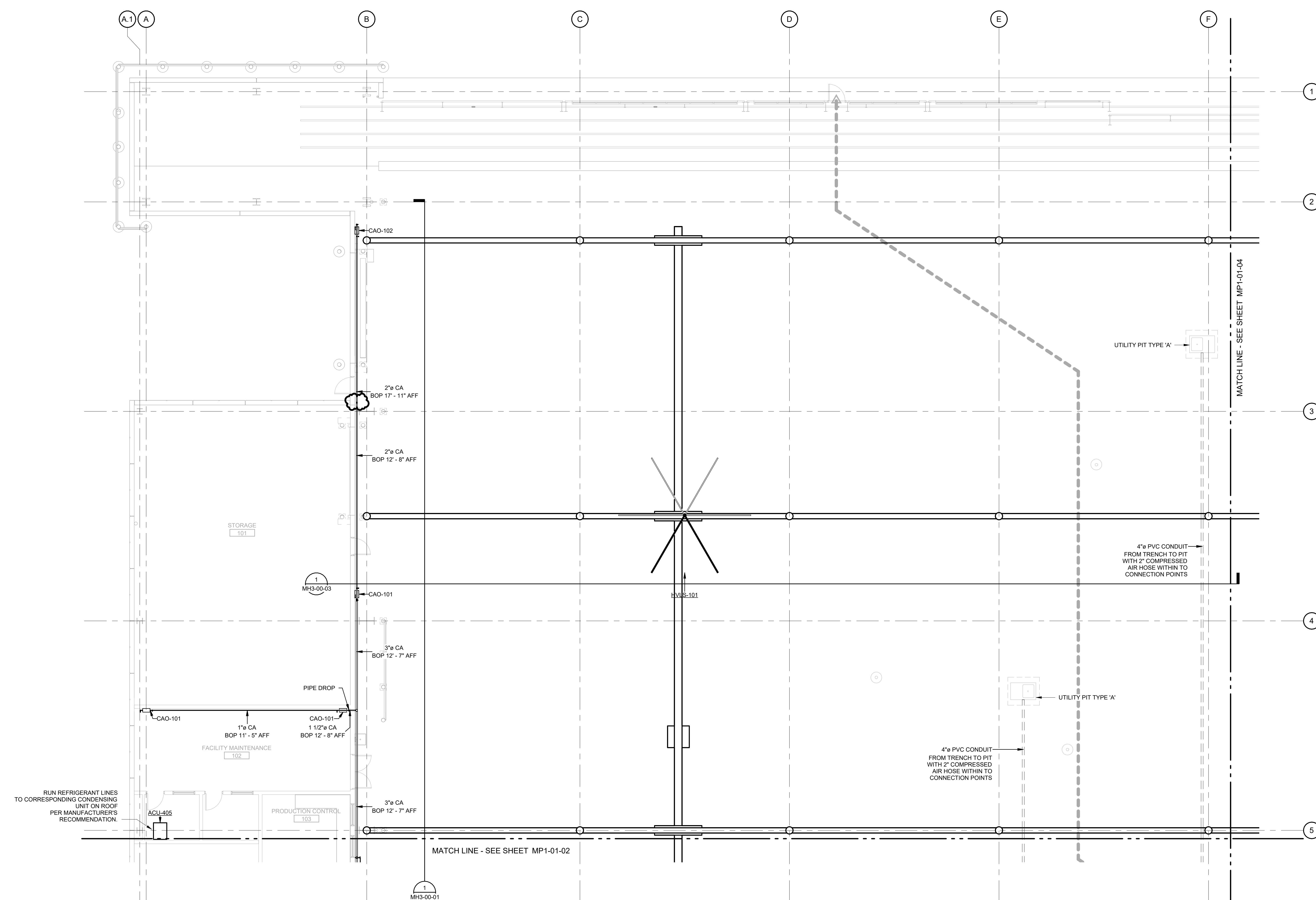
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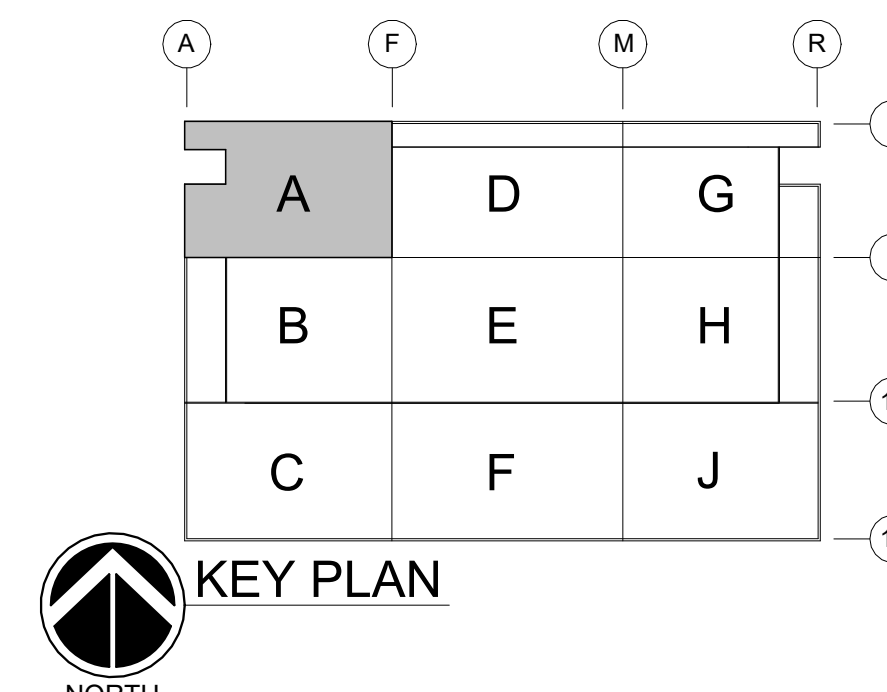
PROJECT #	241054
PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL PIPING PLAN FIRST FLOOR AREA A**

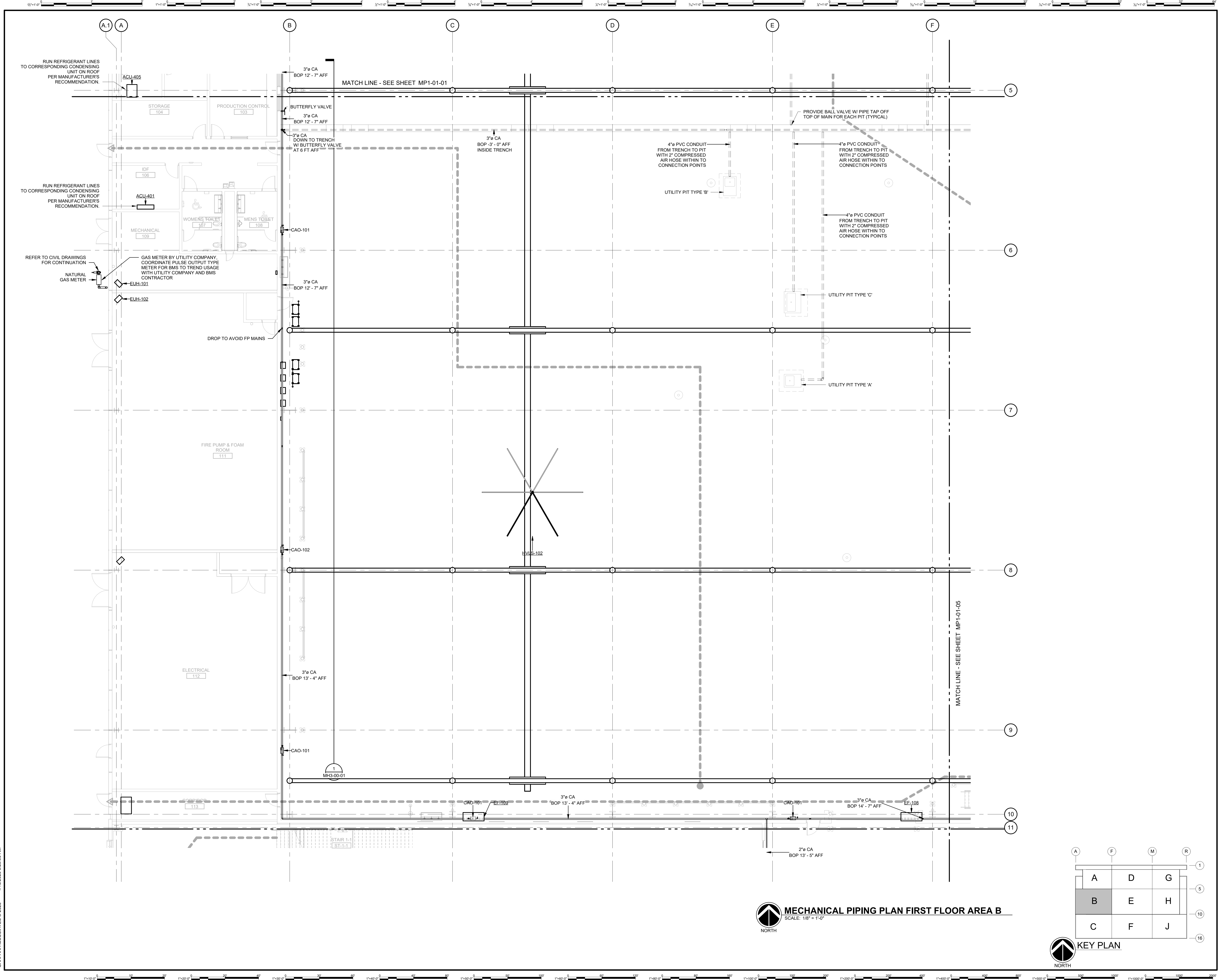
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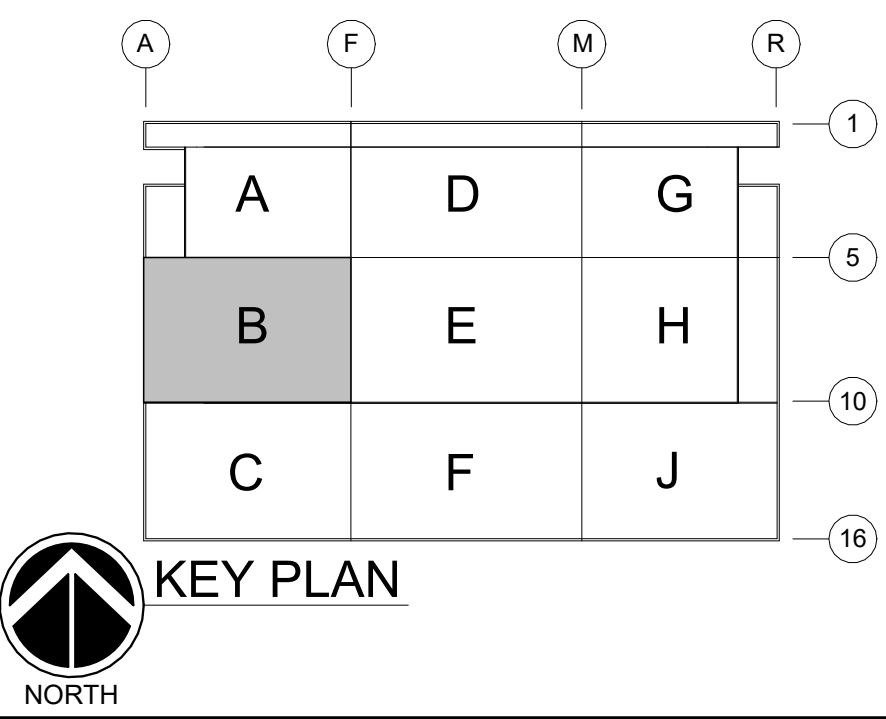
**MECHANICAL PIPING PLAN FIRST FLOOR AREA A**  
 SCALE: 1/8" = 1'-0"



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**MECHANICAL PIPING PLAN FIRST FLOOR AREA B**  
 SCALE: 1/8" = 1'-0"



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 PROJECT MANAGER E. RICE  
 DESIGNED BY T. JANZEN  
 DRAWN BY T. JANZEN  
 QUALITY CHECK C. LONG  
 SHEET TITLE

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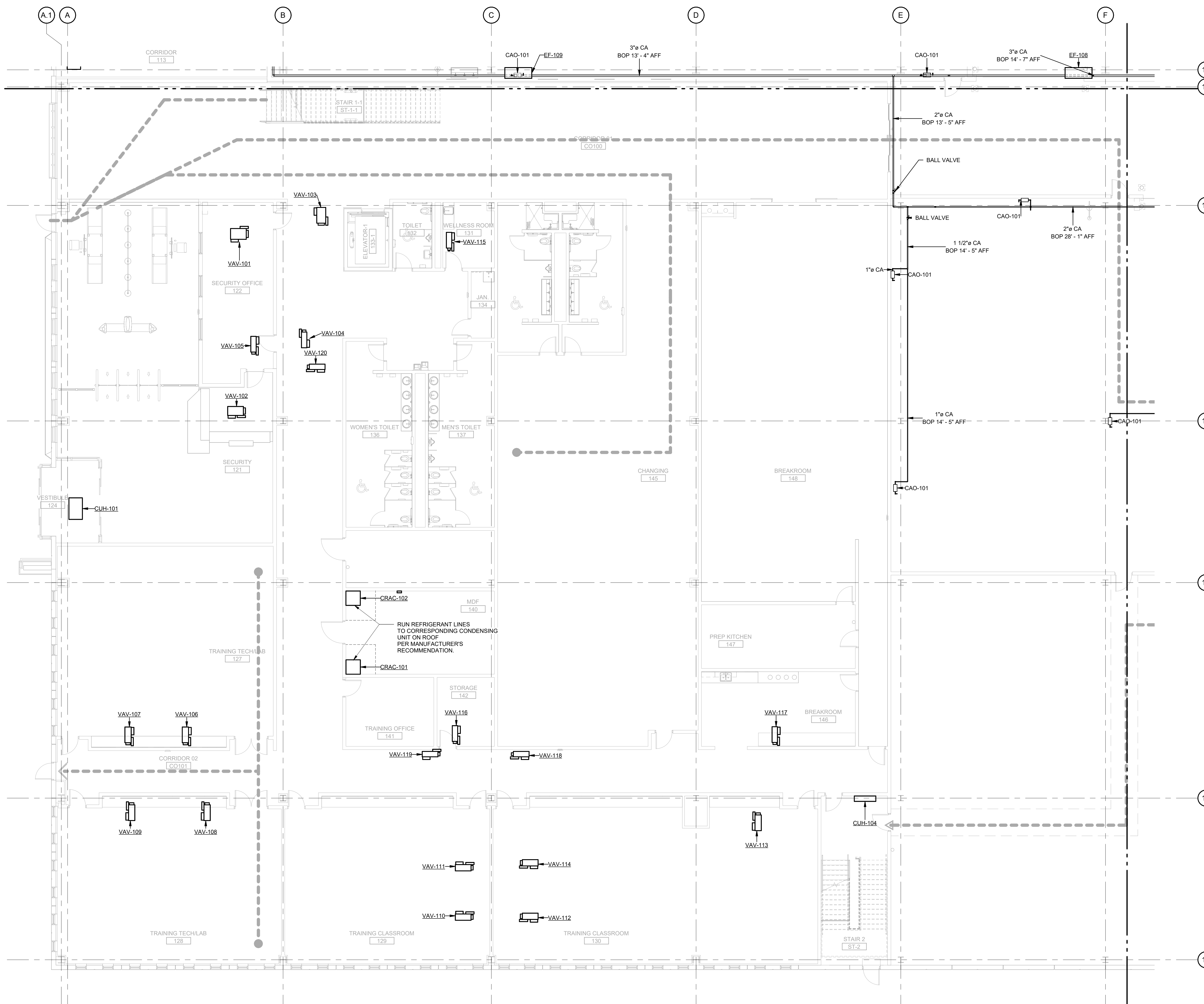
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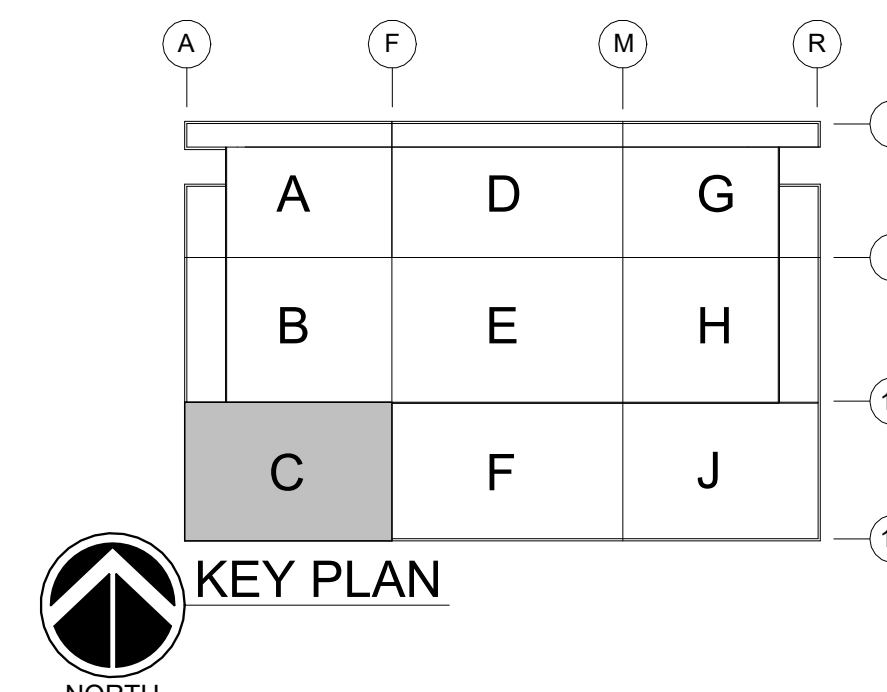
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PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
PIPING PLAN  
FIRST FLOOR  
AREA C**

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**MECHANICAL PIPING PLAN FIRST FLOOR AREA C**  
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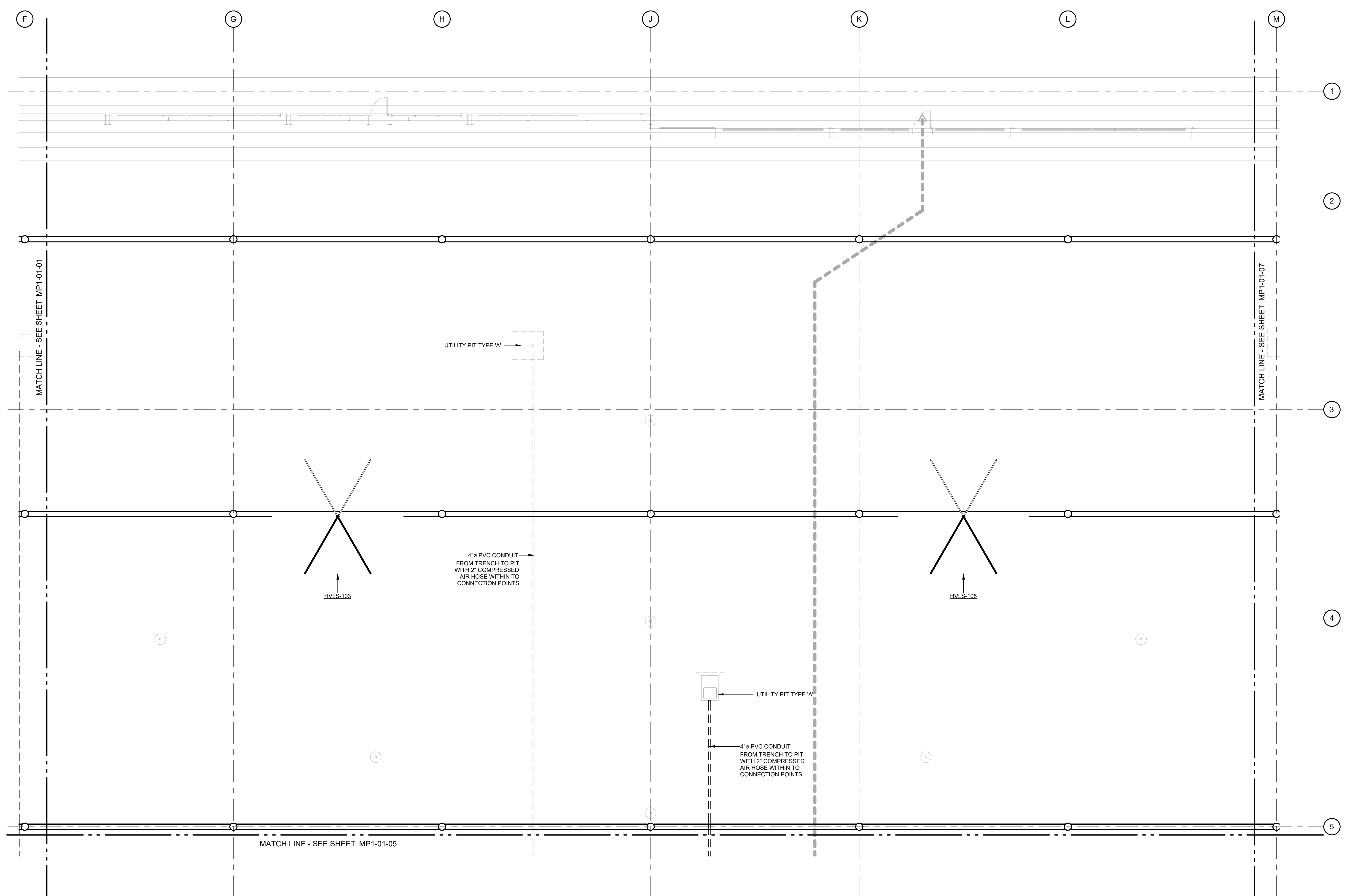
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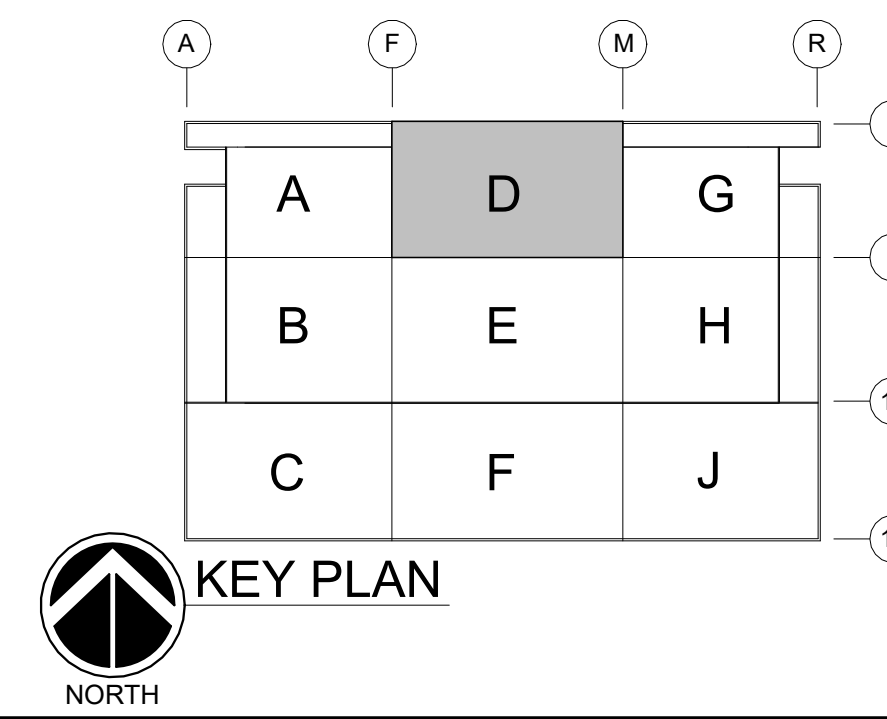
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PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
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QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
PIPING PLAN  
FIRST FLOOR  
AREA D**

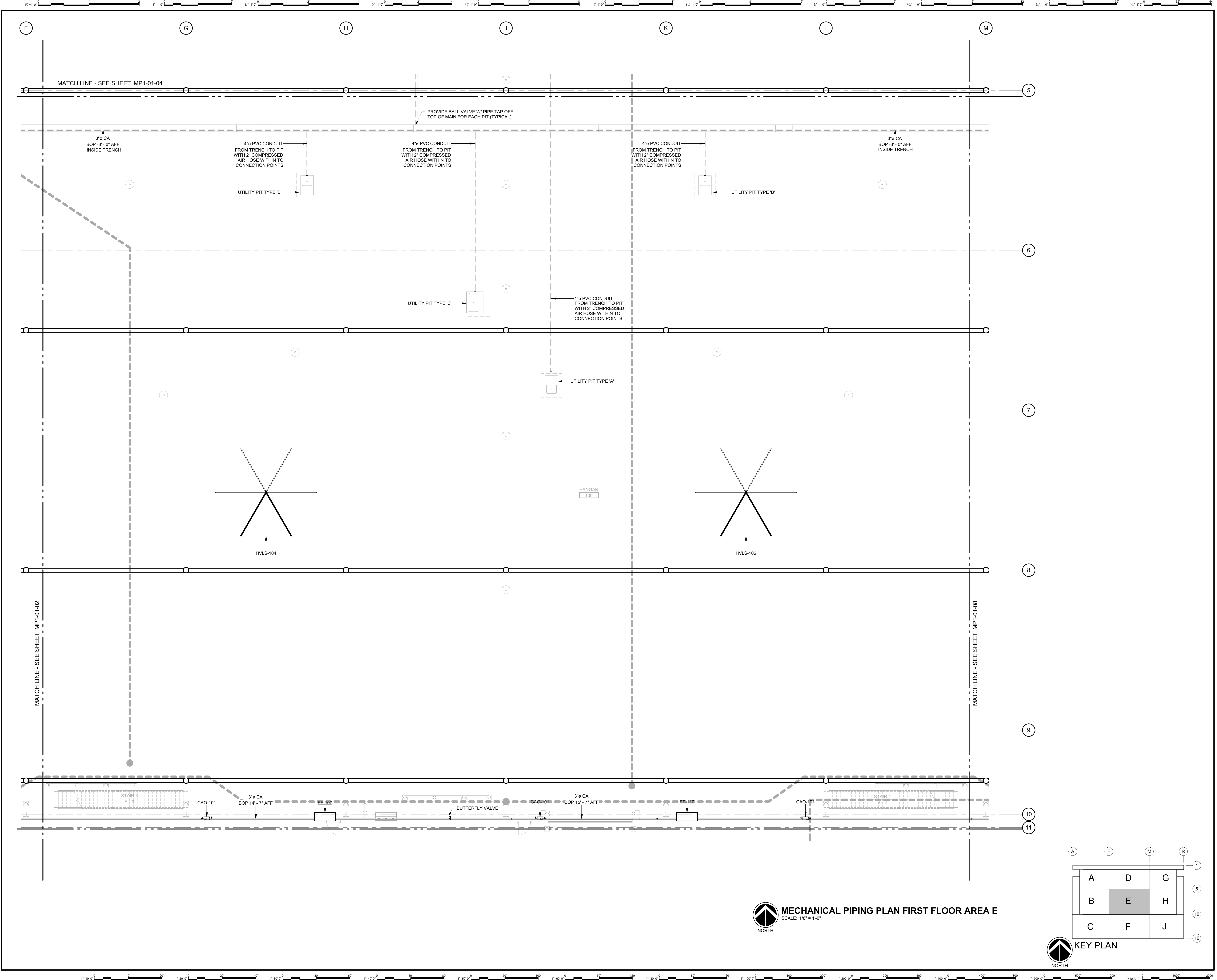
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**MECHANICAL PIPING PLAN FIRST FLOOR AREA D**  
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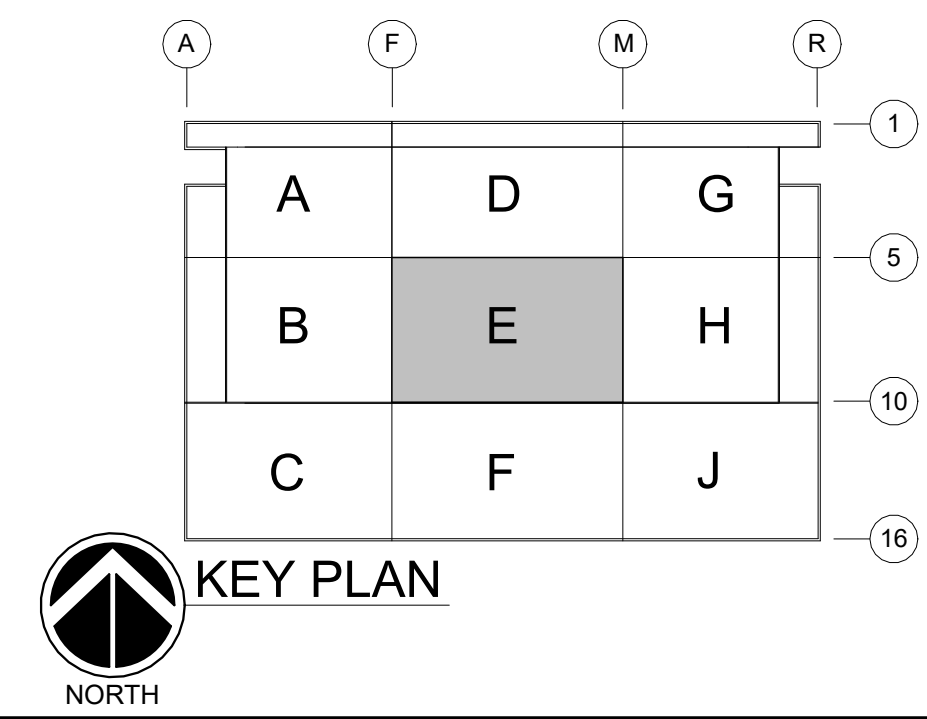
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 PROJECT MANAGER E. RICE  
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 DRAWN BY T. JANZEN  
 QUALCHECK C. LONG  
 SHEET TITLE

**MECHANICAL PIPING PLAN FIRST FLOOR AREA E**

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**MECHANICAL PIPING PLAN FIRST FLOOR AREA E**  
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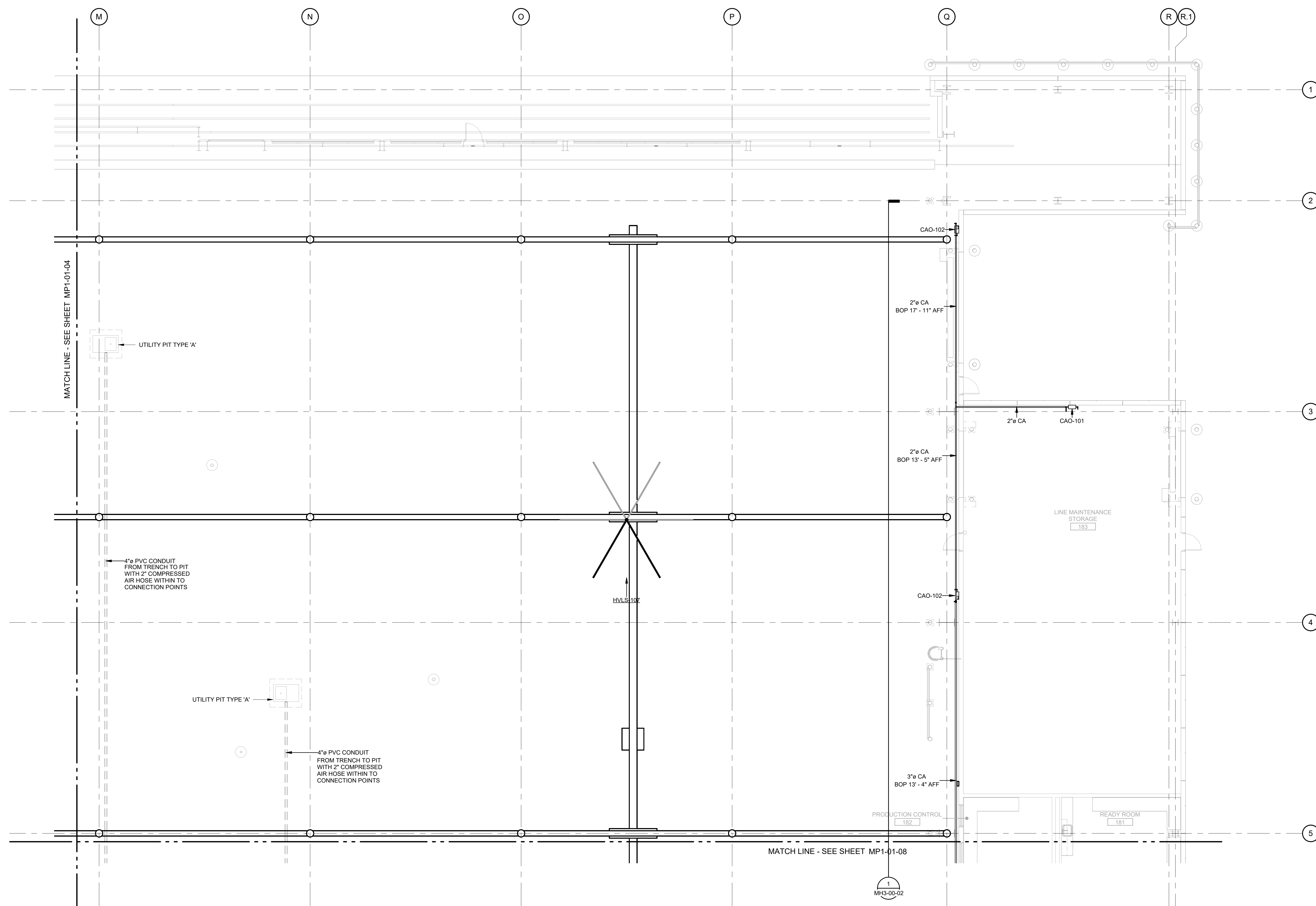
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PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
 PIPING PLAN  
 FIRST FLOOR  
 AREA G**

**MP1-01-07**  
 SHEET NUMBER



**MECHANICAL PIPING PLAN FIRST FLOOR AREA G**  
 SCALE: 1/8" = 1'-0"



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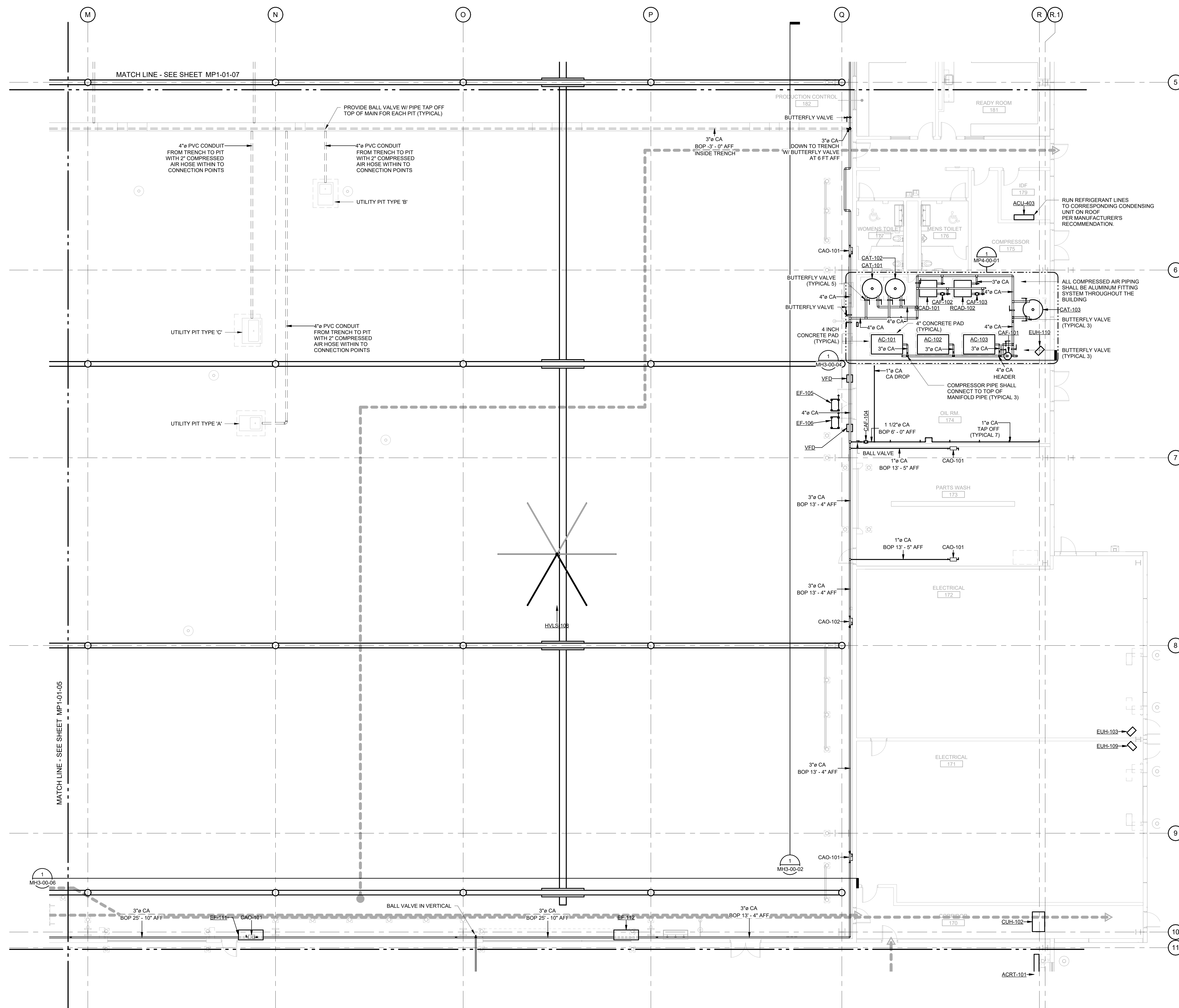
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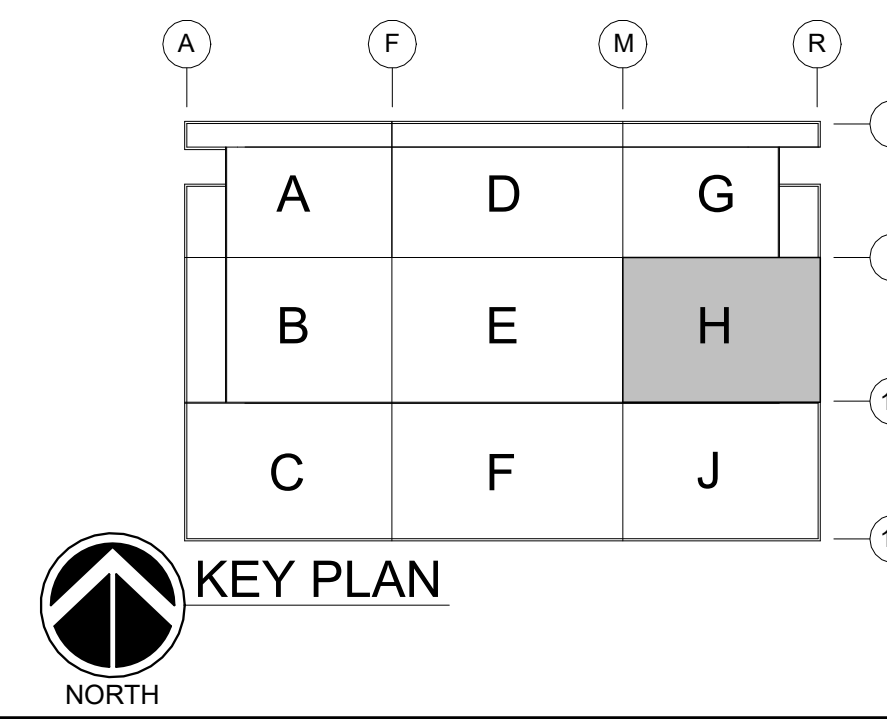
PROJECT #	241054
PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
PIPING PLAN  
FIRST FLOOR  
AREA H**

**MP1-01-08**  
SHEET NUMBER



**MECHANICAL PIPING PLAN FIRST FLOOR AREA H**  
SCALE: 1/8" = 1'-0"



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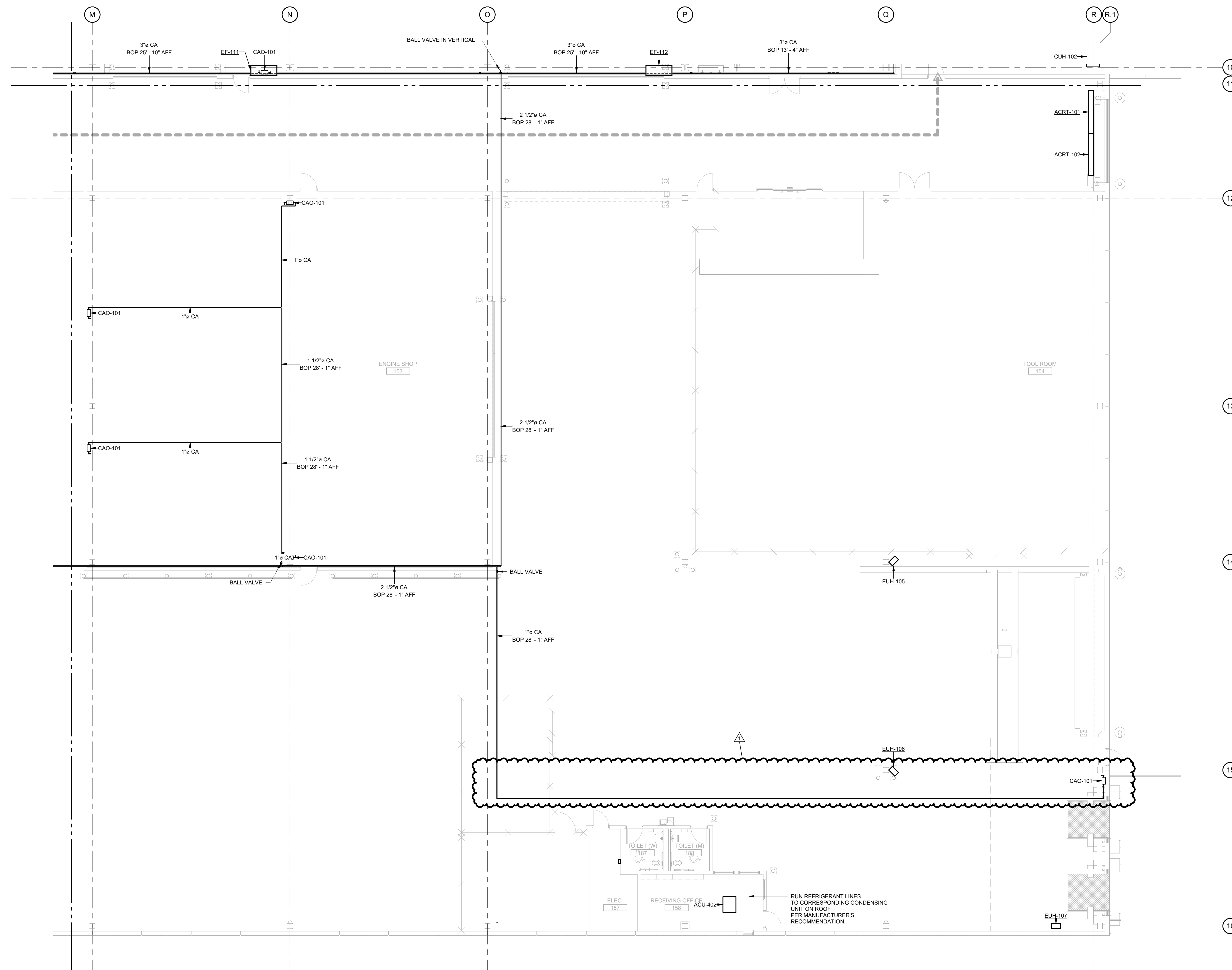
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REV	DATE	DOC REL ## - DESCRIPTION

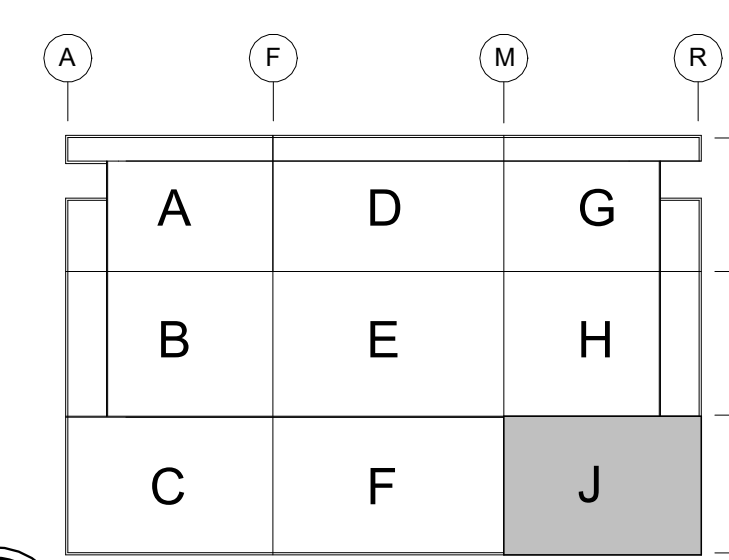
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PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
PIPING PLAN  
FIRST FLOOR  
AREA J**

**MP1-01-09**  
SHEET NUMBER



**MECHANICAL PIPING PLAN FIRST FLOOR AREA J**  
 SCALE: 1/8" = 1'-0"



**KEY PLAN**



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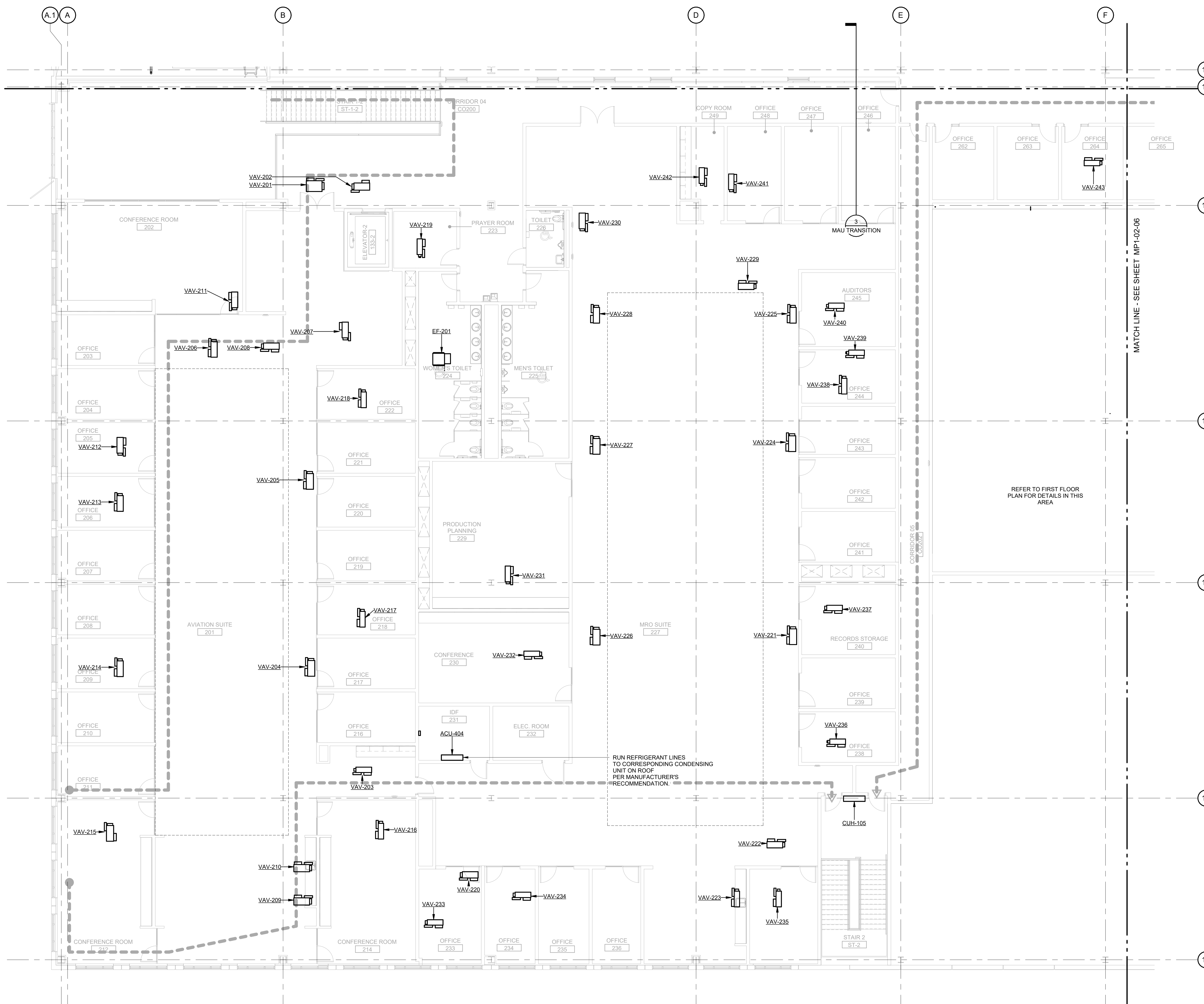
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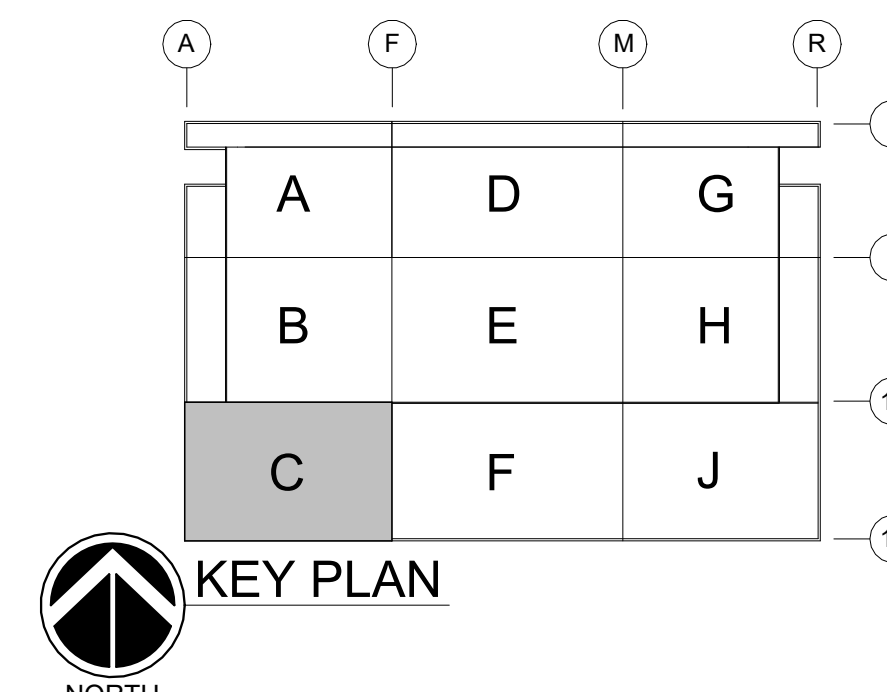
PROJECT #	241054
PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
 PIPING PLAN  
 SECOND FLOOR  
 AREA C**

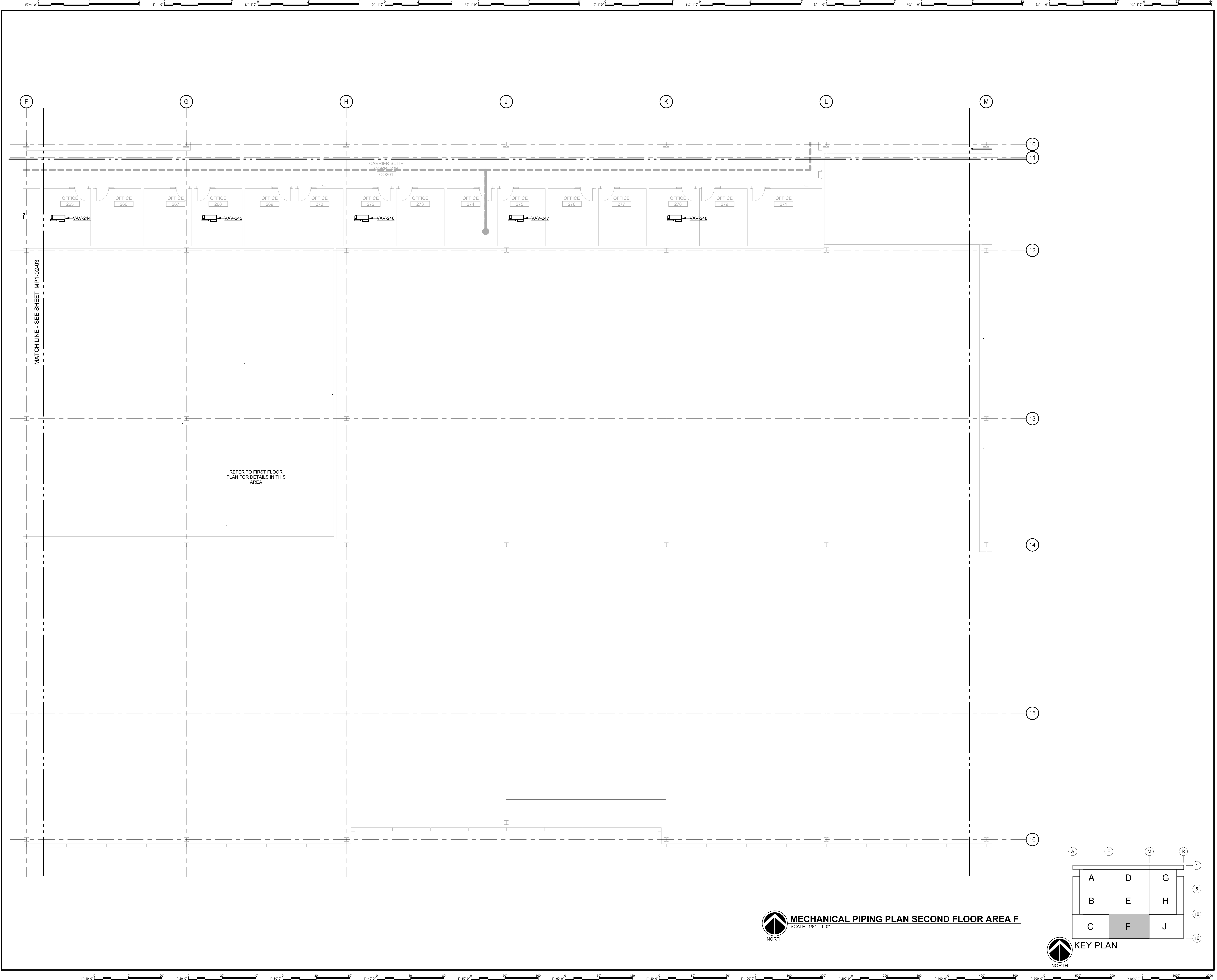
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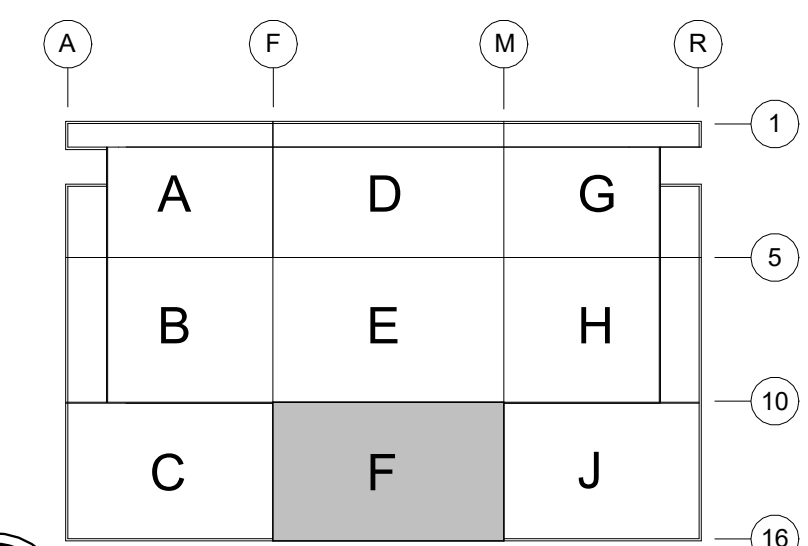
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 NORTH



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**MECHANICAL PIPING PLAN SECOND FLOOR AREA F**  
 SCALE: 1/8" = 1'-0"  
 NORTH



**KEY PLAN**  
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**DHL**

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**MECHANICAL PIPING PLAN SECOND FLOOR AREA F**

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CONTRACTOR INFORMATION

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**PERFECTION GROUP**  
 2649 COMMERCE BLVD.  
 CINCINNATI, OHIO 45241  
 TEL +1.513.772.7545

ARCHITECT/ENGINEER INFORMATION

**GHAFFARI**

122 SOUTH MICHIGAN AVENUE  
 SUITE 1600  
 CHICAGO, IL 60603-8152 USA  
 TEL +1.312.984.2300  
 www.ghaffari.com

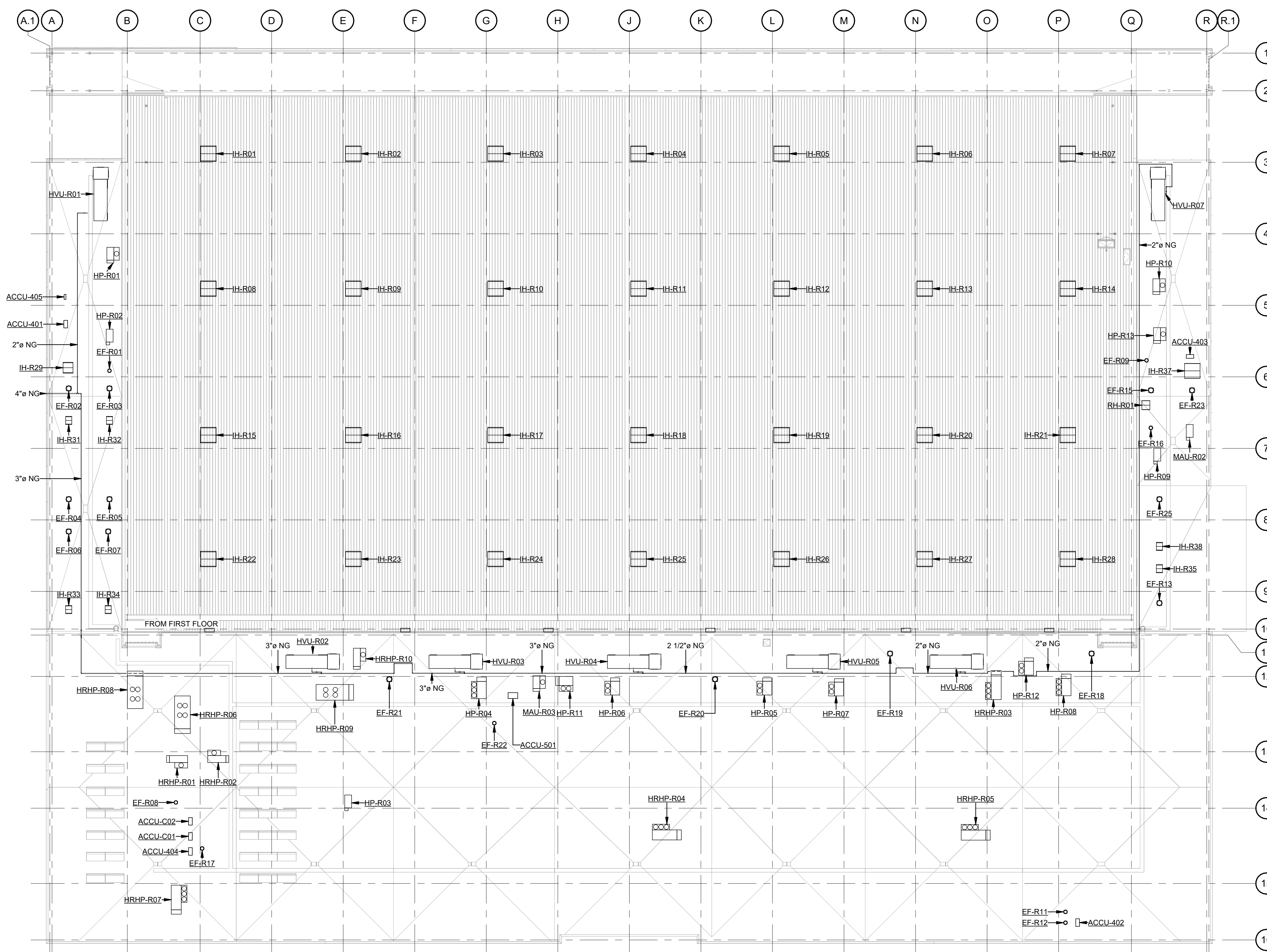
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1	01/02/25	ISSUED FOR CONSTRUCTION
REV	DATE	DOC REL ## - DESCRIPTION

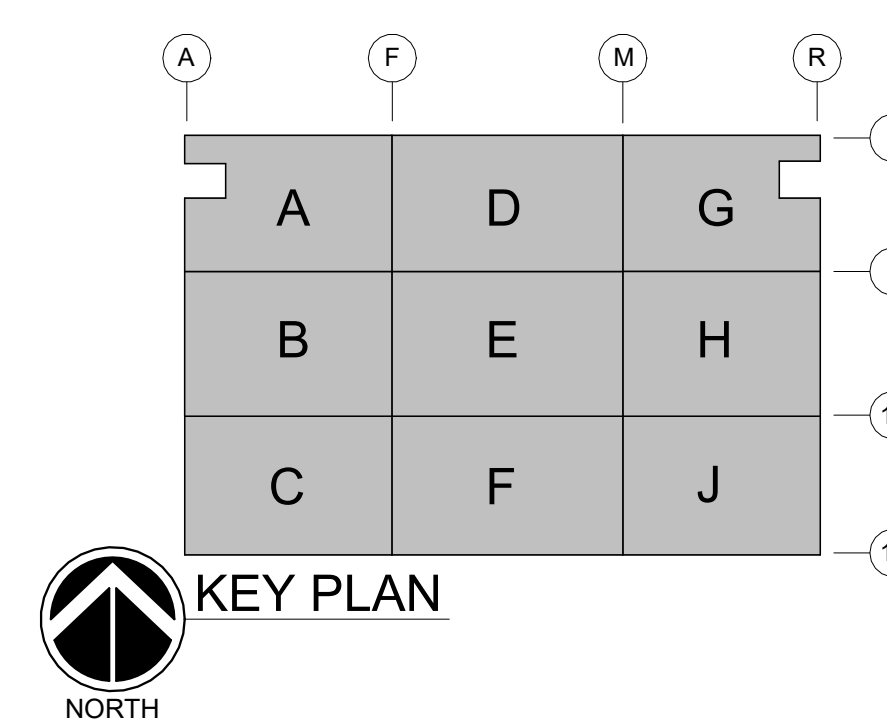
PROJECT #	241054
PROJECT MANAGER	E. RICE
DESIGNED BY	T. JANZEN
DRAWN BY	T. JANZEN
QUALCHECK	C. LONG
SHEET TITLE	

**MECHANICAL  
 PIPING PLAN  
 ROOF  
 COMPOSITE**

**MP1-R1-00**  
 SHEET NUMBER



**MECHANICAL PIPING PLAN ROOF COMPOSITE**  
 SCALE: 1" = 30'-0"



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**DHL CVG AMC**  
 CINCINNATI/NORTHERN KENTUCKY  
 INTERNATIONAL AIRPORT  
 410 WENDELL H. FORD BLVD  
 ERLANGER, KY 41018

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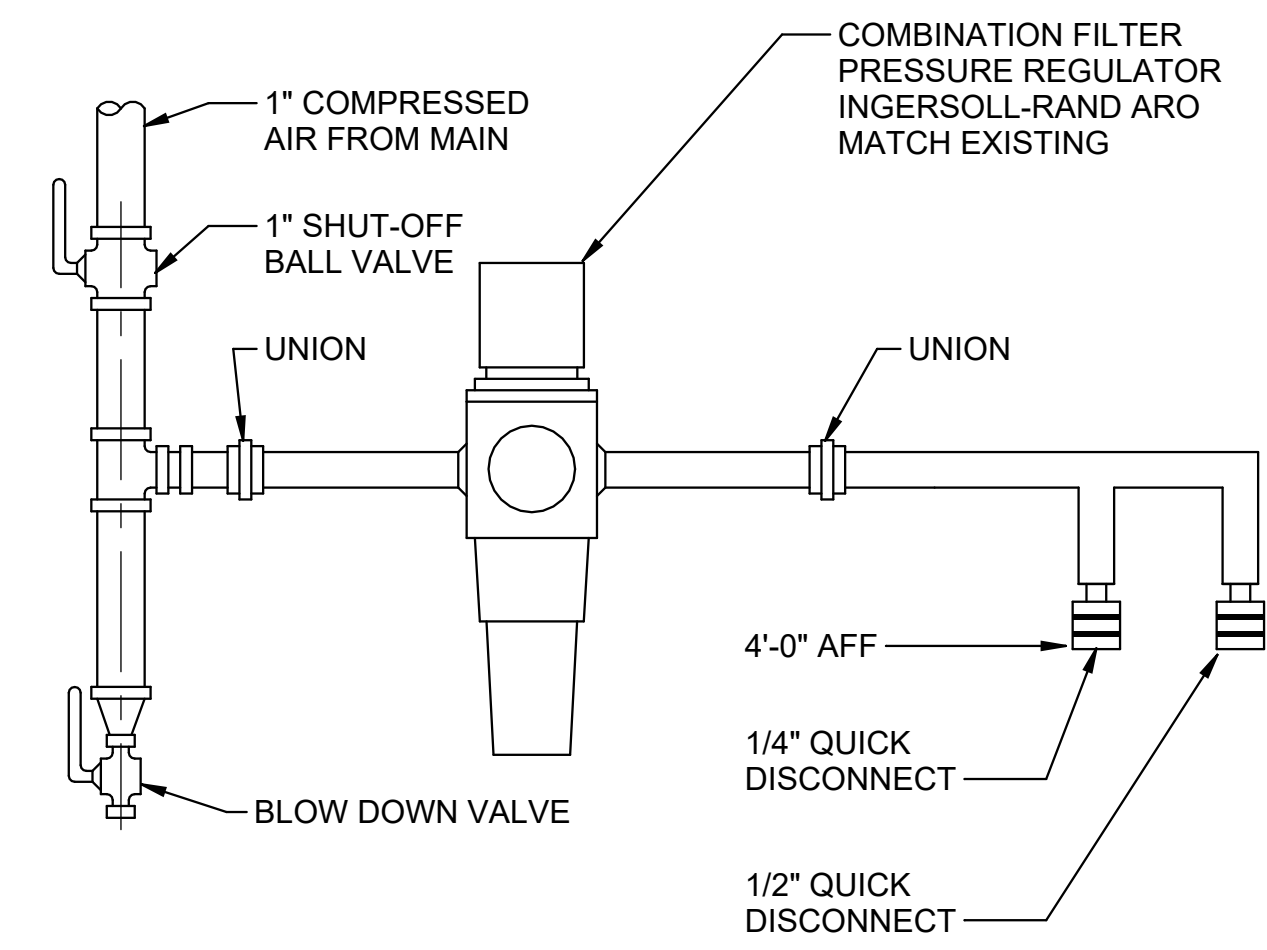
**SHOP DRAWING**

REV	DATE	DOC REL ## - DESCRIPTION
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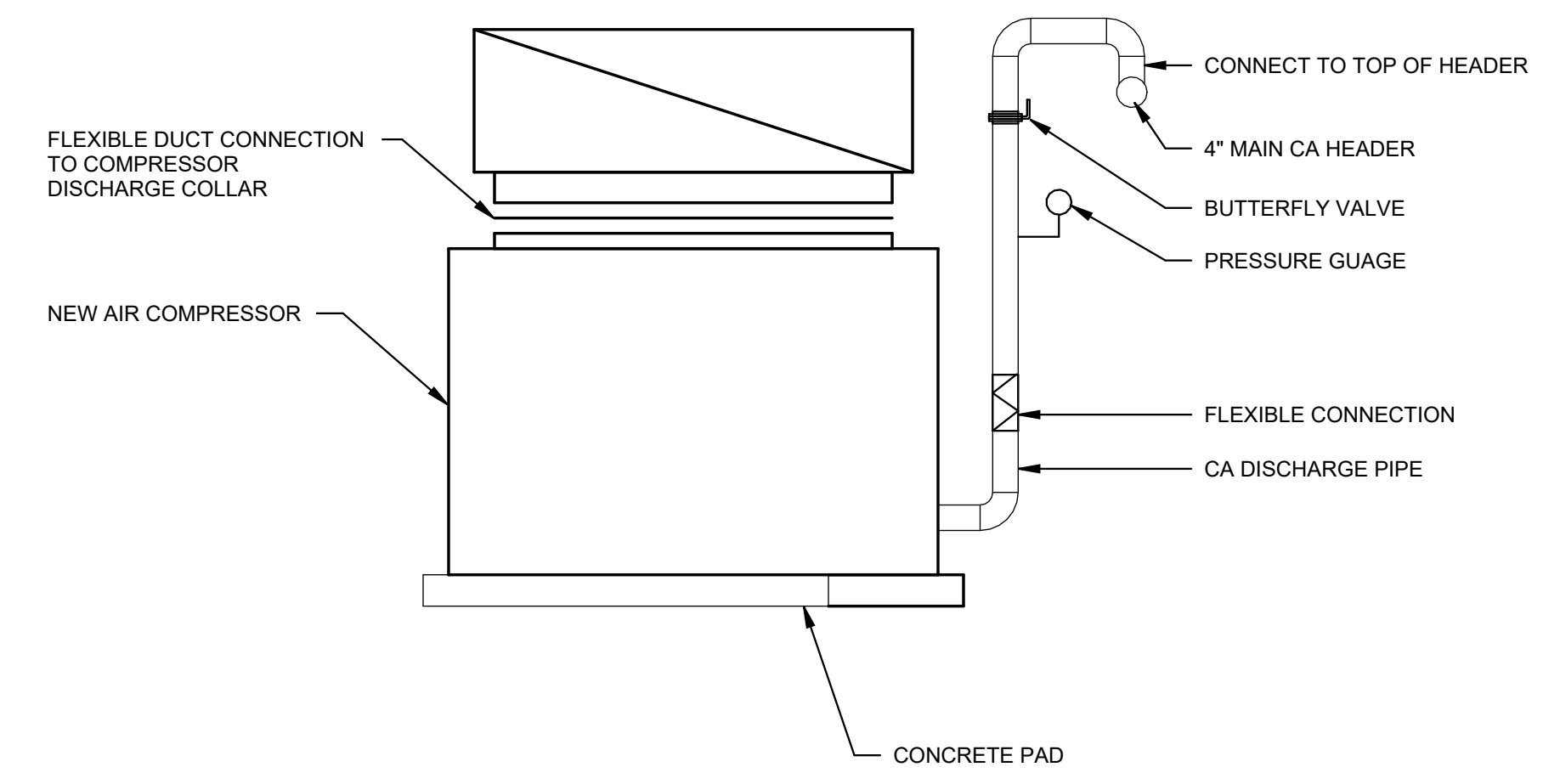
PROJECT # 241054  
 PROJECT MANAGER E. RICE  
 DESIGNED BY T. JANZEN  
 DRAWN BY T. JANZEN  
 QUALCHECK C. LONG  
 SHEET TITLE

**MECHANICAL PIPING DETAILS**

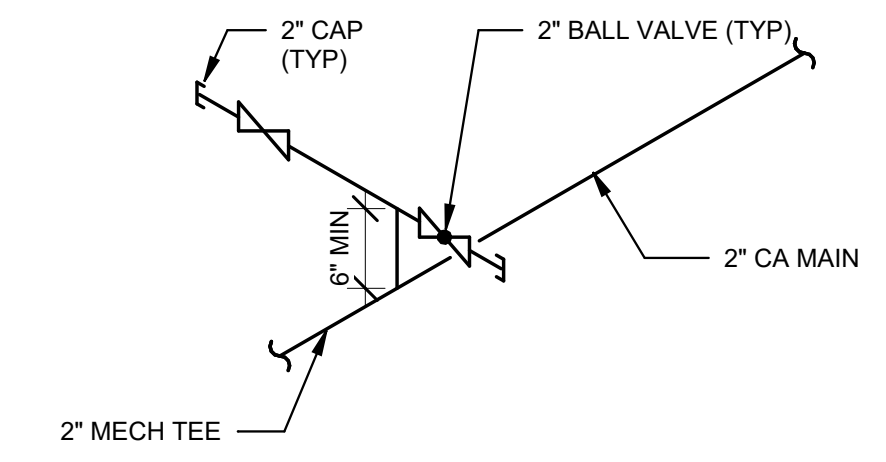
**MP5-00-01**  
 SHEET NUMBER



**COMPRESSED AIR DROP DETAIL**  
 NOT TO SCALE

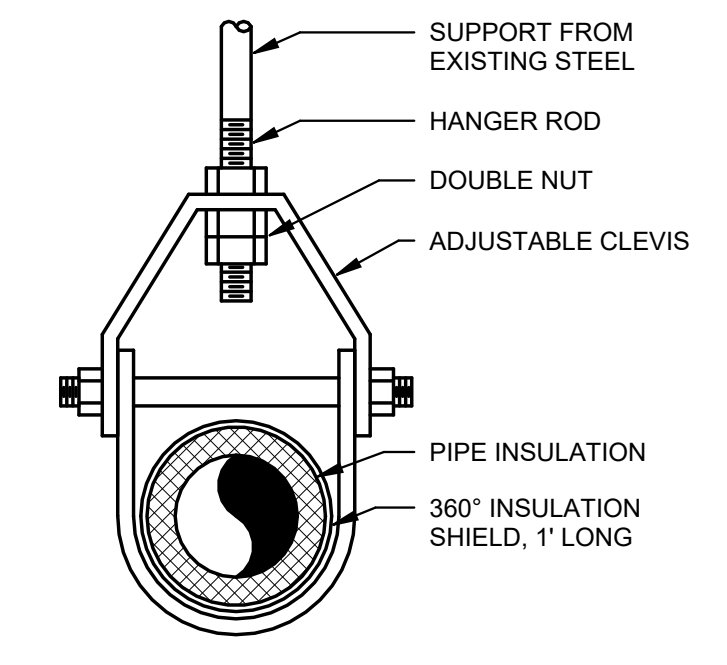


**COMPRESSOR DETAIL**  
 NOT TO SCALE

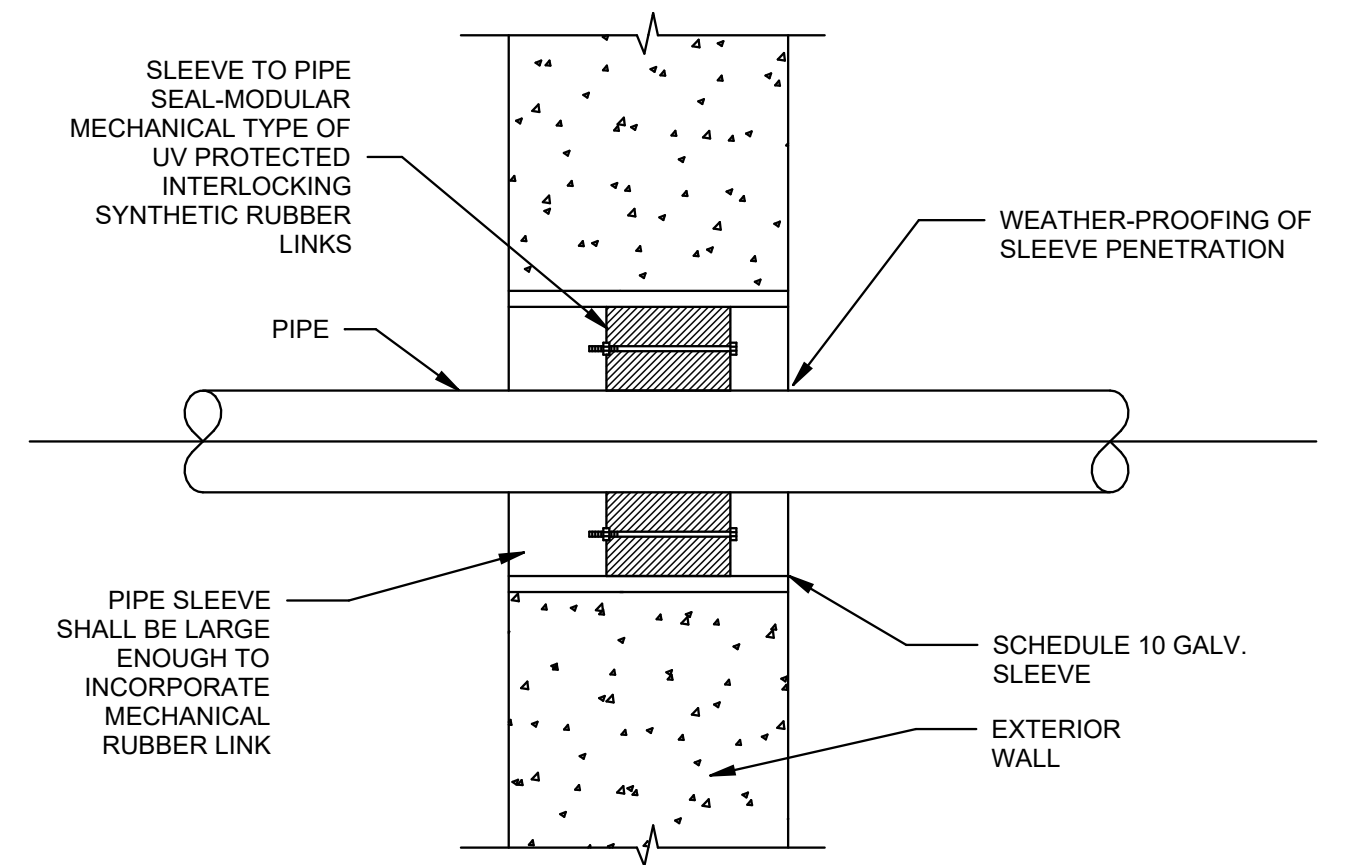


**NOTE:**  
 1. ALL PIPING TO BE PROVIDED BY GENERAL CONTRACTOR.

**COMPRESSED AIR VALVED OUTLET CONNECTIONS**  
 NOT TO SCALE

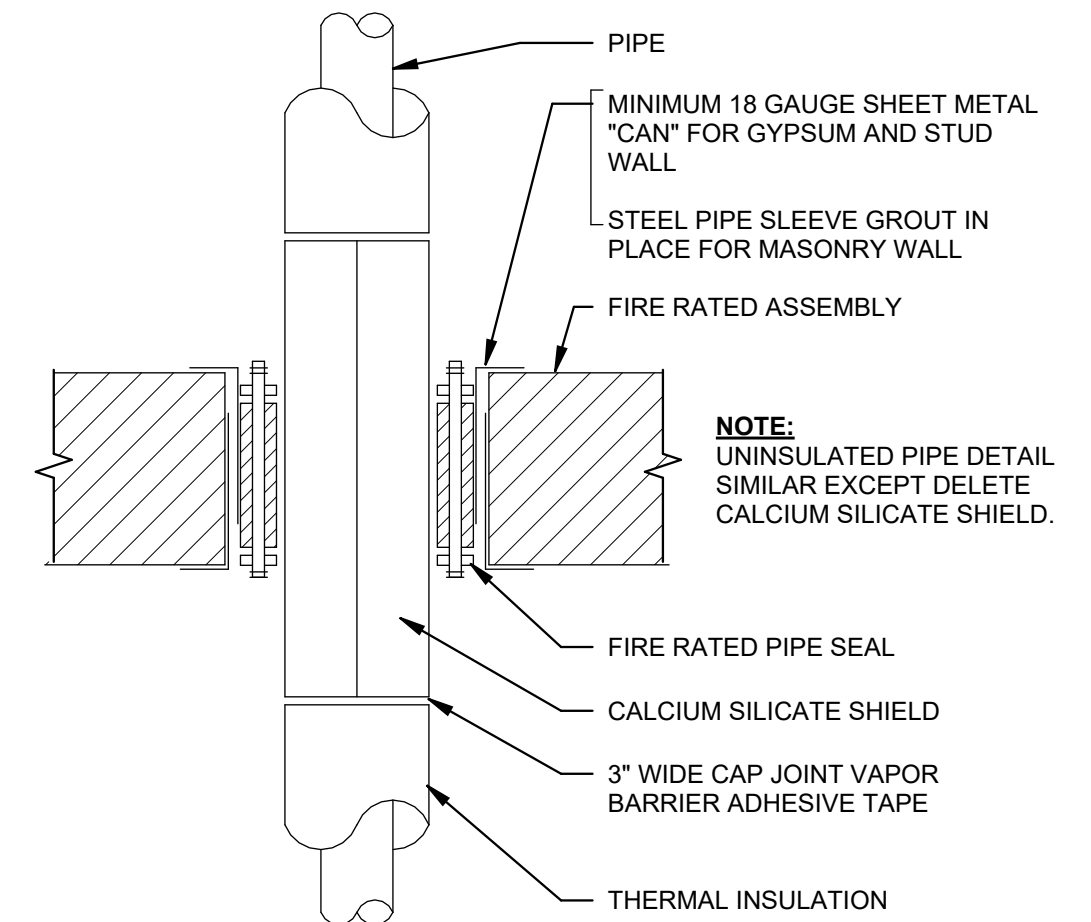


**INSULATED PIPE**  
 NOT TO SCALE



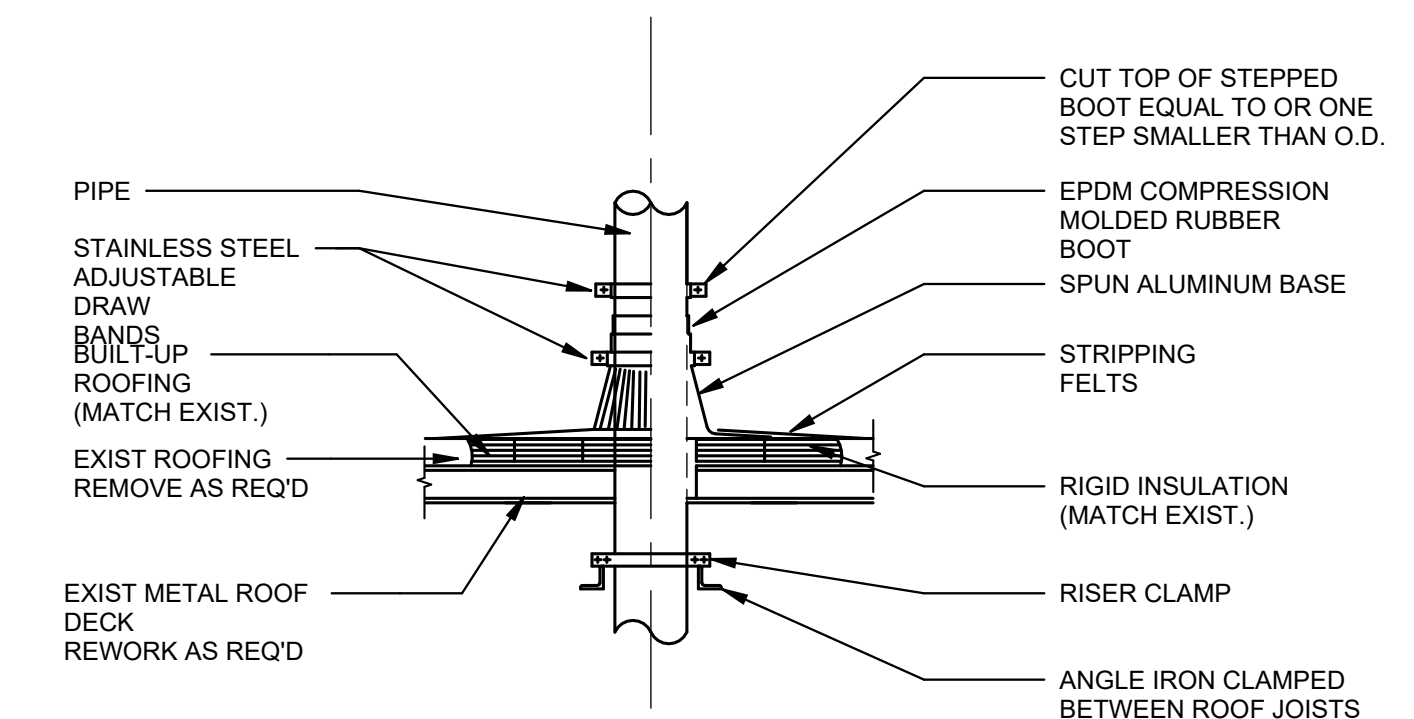
**SLEEVES**  
 A. STEEL SLEEVES: SCHEDULE 10 GALVANIZED, WELDED STEEL PIPE, ASTM A 53, GRADE A.  
 B. MECHANICAL SLEEVE SEALS: MODULAR MECHANICAL TYPE, CONSISTING OF INTERLOCKING SYNTHETIC RUBBER LINKS SHAPED TO CONTINUOUSLY FILL ANNULAR SPACE BETWEEN PIPE AND SLEEVE. CONNECTED WITH BOLTS AND PRESSURE PLATES WHICH CAUSE RUBBER SEALING ELEMENTS TO EXPAND WHEN TIGHTENED, PROVIDING WATER TIGHT SEAL. MODEL "T" LINK-SEAL MODULAR SEAL OR EQUIVALENT.

**PENETRATION - PRECAST EXTERIOR WALL PIPE SLEEVE**  
 NOT TO SCALE



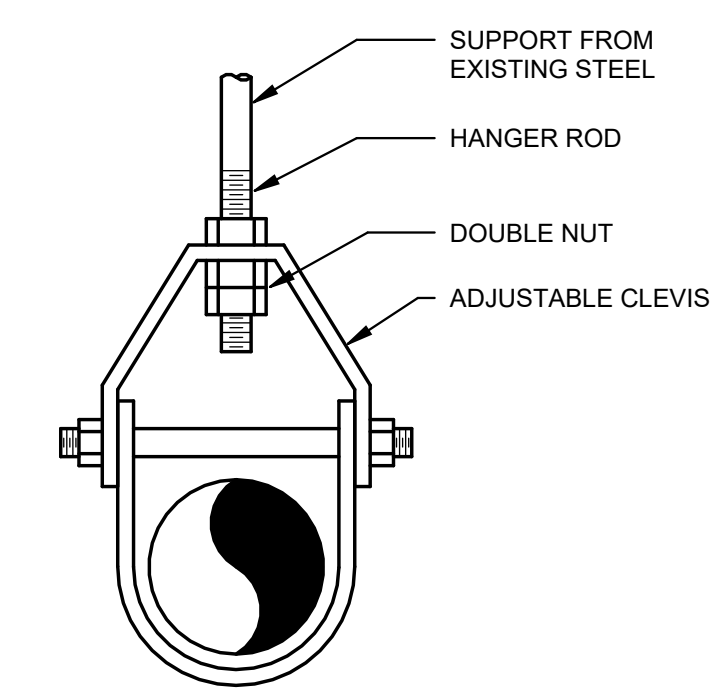
**NOTE:**  
 UNINSULATED PIPE DETAIL SIMILAR EXCEPT DELETE CALCIUM SILICATE SHIELD.

**PIPE PENETRATION THRU FIRE RATED WALL**  
 NOT TO SCALE



**NOTE:**  
 PROVIDE ADDITIONAL SUPPORT AT BOTTOM CHORD OF TRUSS

**PIPE PENETRATION THRU ROOF**  
 NOT TO SCALE



**PIPE SUPPORT**  
 NOT TO SCALE





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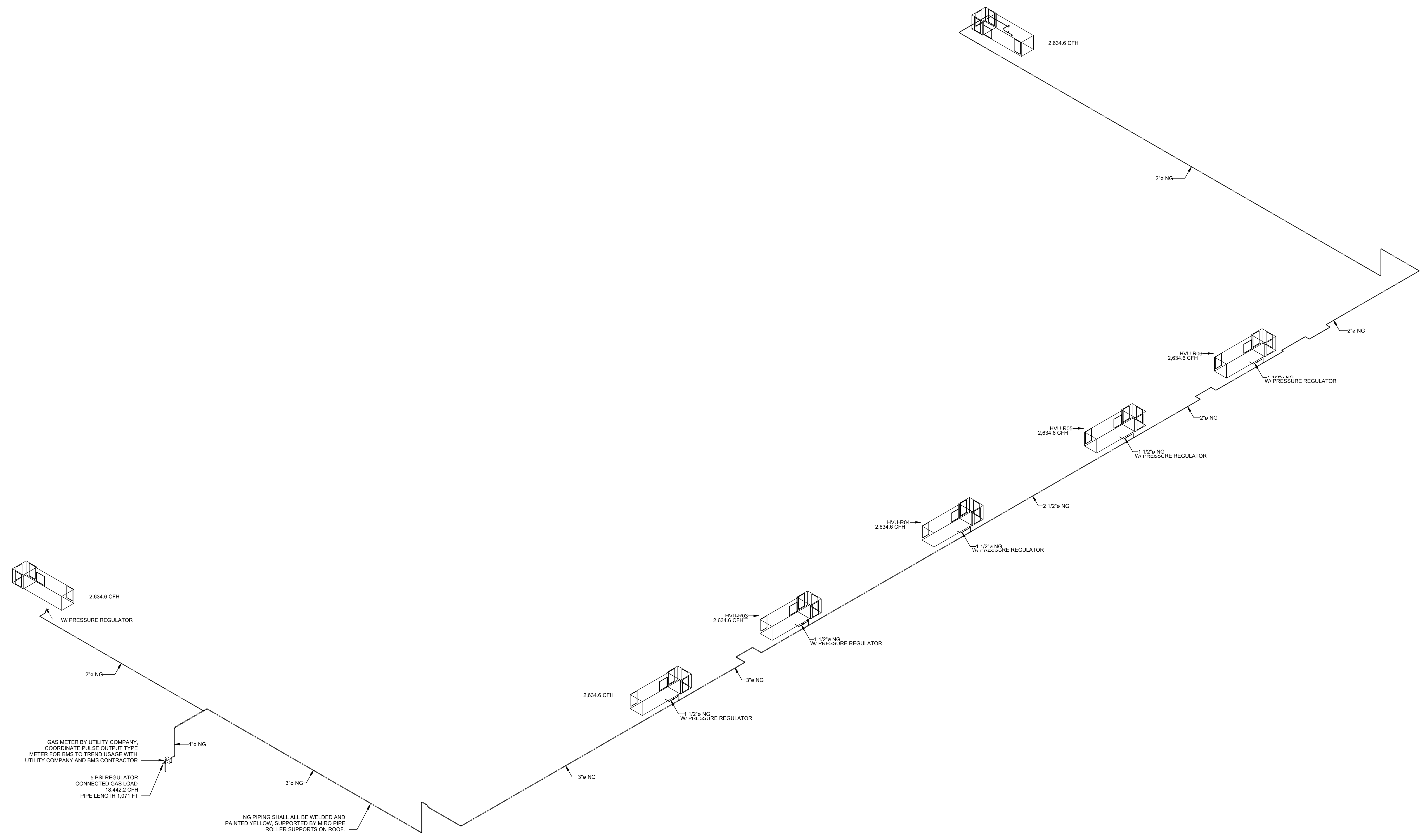
**SHOP DRAWING**

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 PROJECT MANAGER E. RICE  
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 DRAWN BY T. JANZEN  
 QUALCHECK C. LONG  
 SHEET TITLE

**MECHANICAL PIPING ISOMETRICS**

**MP9-00-01**  
 SHEET NUMBER



**MECHANICAL PIPING 3D - NATURAL GAS**  
 NOT TO SCALE



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