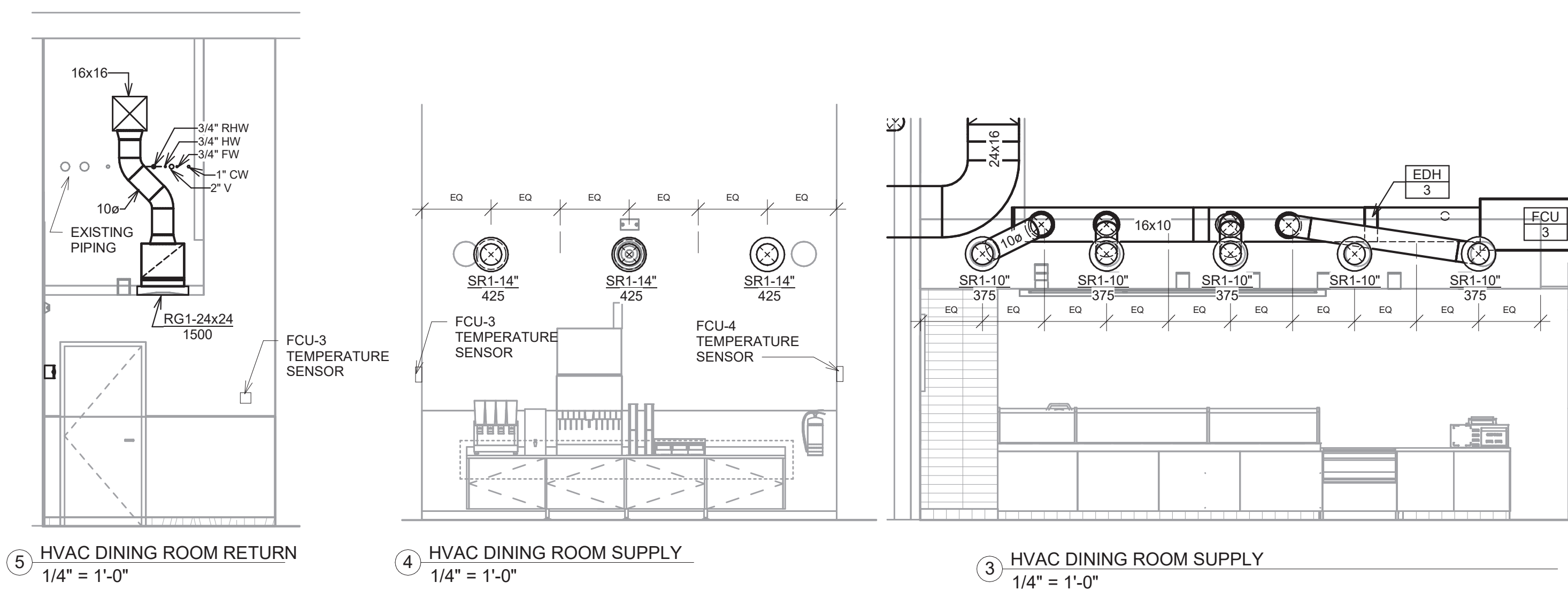


KEY NOTES:

- 1 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATION. TYPICAL.
- 2 PAINT DUCTWORK VISIBLE THROUGH DINING ROOM SUPPLY REGISTERS BLACK. TYPICAL.
- 3 18" Ø DUCT UP FROM HOOD THROUGH CHASE AND UP TO EF-1 ON ROOF. INSTALL IN COMPLIANCE WITH NFPA 96. NEW PREFABRICATED STAINLESS STEEL GREASE DUCT COMPLYING WITH UL-1978. PROVIDED BY MECHANICAL CONTRACTOR. ROUTE NEW GREASE DUCT UP TO NEW GREASE EXHAUST FAN ON ROOF. VERIFY EXACT LOCATION AND ROUTING IN FIELD. PROVIDE CLEAN-OUTS IN ACCESSIBLE LOCATION AT EVERY LEVEL IN CHASE PER NFPA 95 - COORDINATE ACCESS TO CHASE THRU ACCESS PANEL IN STUDY ROOM ON EACH LEVEL WITH LANDLORD REPRESENTATIVE AND GC.
- 4 EF-2 HUNG FROM ABOVE WITH VIBRATION ISOLATORS. COORDINATE CEILING ACCESS PANEL LOCATION WITH GC.
- 5 28/10 DUCT DOWN TO MAKEUP AIR PSP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL FOR 3.
- 6 8" DIA. DUCT DOWN TO AC PSP DUCT CONNECTION. TRANSITION TO SUPPLY PLENUM OPENING SIZE. TYPICAL.
- 7 INSTALL SINGLE-GANG VERTICAL J-BOX FOR GRIDPOINT THERMOSTATS FURNISHED BY TMS FOR FCU-1,2,3, & 4 AT THIS LOCATION AT 48" AFF. COORDINATE WITH ELECTRICAL SWITCHING IN THIS AREA. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 8 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TMS FOR FCU INDICATED AT THIS LOCATION 60" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 9 INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TMS FOR FCU INDICATED AT THIS LOCATION 66" AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 10 INSTALL GRIDPOINT SUPPLY PROBE FURNISHED BY TMS FOR FCU INDICATED IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 11 INSTALL REMOTE TEMPERATURE SENSOR FOR HOOD HD-1 AT THIS LOCATION 66" AFF. COORDINATE LOCATION WITH EQUIPMENT. PROVIDE (2) #18 G. THERMISTOR CABLE FROM TEMPERATURE SENSOR TO HOOD CONTROL PANEL.
- 12 NEW SPLIT SYSTEM FAN COIL UNIT (FCU-X). HANG FROM STRUCTURE ABOVE WITH VIBRATION ISOLATORS. VERIFY EXACT LOCATION IN FIELD. LOCATION ON DRAWINGS IS APPROXIMATE ONLY. SEE SCHEDULE FOR BALANCING DETAILS. PROVIDE MIN. 2" DEEP SECONDARY DRAIN PAN AND FLEXIBLE DUCT CONNECTION TO UNIT. MAINTAIN SERVICE CLEARANCE AND COORDINATE WITH GC TO PROVIDE ACCESS PANELS AS REQUIRED FOR SERVICE.
- 13 ROUTE 1" CONDENSATE PIPE W/ MIN. 3" DEEP P-TRAP AND 1" SECONDARY DRAIN PIPE FROM FCU TO NEAREST FLOOR SINK OR MOP SINK. TERMINATE WITH CODE APPROVED AIR GAP. PROVIDE ALL FITTINGS PER LOCAL CODES. VERIFY ROUTING AND LOCATION ON SITE.
- 14 NEW WALL LOUVER BY G.C. IN EXISTING BLANKED OFF WALL OPENINGS. LOUVER SHALL MATCH STYLE AND COLOR OF ADJACENT TENANT LOUVERS. APPROXIMATE LOUVER SIZE IS 5'-0" W X 1'-10" HIGH. VERIFY EXACT DIMENSIONS OF EXISTING OPENINGS IN FIELD. PROVIDE WITH BIRD SCREEN.
- 15 MECHANICAL CONTRACTOR TO INSTALL MIN. 8" DEEP INSULATED PLENUM BOX BEHIND EXTERIOR WALL LOUVER FOR OUTSIDE AIR DUCT CONNECTION. PLENUM BOX SHALL BE SEALED WATER-TIGHT AND BOTTOM SHALL BE SLOPED TOWARD TERROR FOR PROPER DRAINAGE. INSULATION LINER SHALL BE MIN. R-8 CLOSED CELL INSULATION, EQUAL TO AP ARMAFLEX BY ARMACELL. SEE ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.
- 16 MECHANICAL CONTRACTOR TO INSTALL MIN. 8" DEEP INSULATED PLENUM BOX BEHIND EXTERIOR WALL LOUVER AS LARGE AS NECESSARY FOR CONNECTION OF EXHAUST DUCT. EXTENT OF EXHAUST PLENUM BOX SHALL MAINTAIN MIN. 10'-0" FROM EDGE OF OUTDOOR AIR INTAKE LOUVER. PLENUM BOX SHALL BE SEALED WATER-TIGHT AND BOTTOM SHALL BE SLOPED TOWARD EXTERIOR FOR PROPER DRAINAGE. INSULATION LINER SHALL BE MIN. R-8 CLOSED CELL INSULATION, EQUAL TO AP ARMAFLEX BY ARMACELL. SEE ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.

KEY NOTES: CONT.

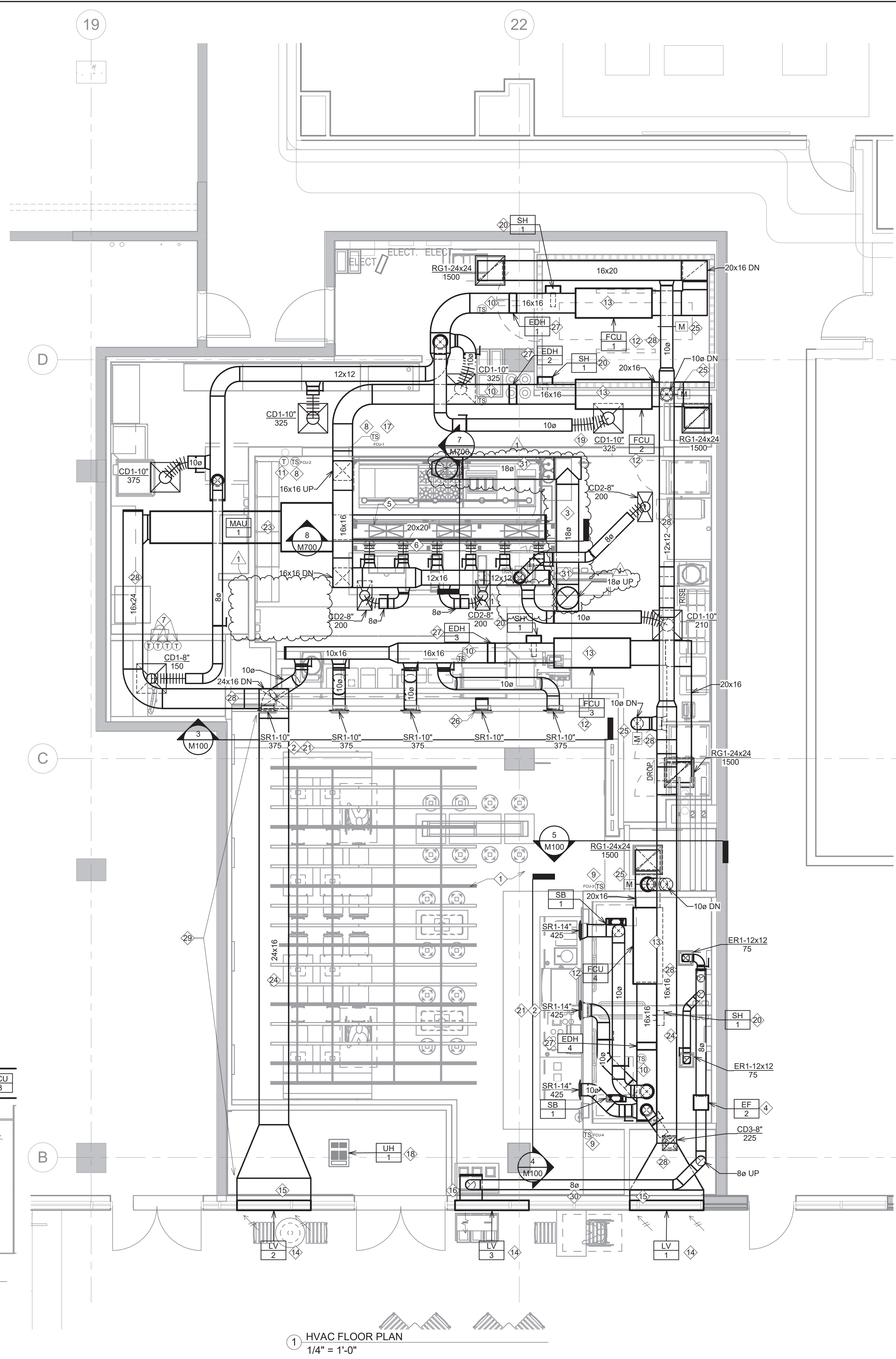
- 17 INSTALL KITCHEN HOOD, HD-1. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOOD ACCORDING TO THE REQUIREMENTS OF ITS LISTING. IN COMPLIANCE WITH NFPA 96, THE BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT COLLAR TEMPERATURE SENSOR TO AUTOMATICALLY ENERGIZE THE EXHAUST AND MAKEUP AIR FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE WELDED OR FACTORY-MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANOUTS PER CODE AND AS SHOWN - COORDINATE CLEANOUT LOCATION IN SHAFT AND SHAFT ACCESS WITH LANDLORD REPRESENTATIVE. INSTALL HOOD PER DETAILS 2, 4, AND 9/M700. CHIPOTLE WILL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.
- 18 CEILING UNIT HEATER - INSTALL PER MANUFACTURER INSTRUCTIONS.
- 19 PROVIDE SUPPLY DIFFUSER CONNECTION TO SUPPLY SYSTEM PER DETAIL 1/M700. TYPICAL.
- 20 INSTALL REME HALO AIR PURIFIER FURNISHED BY TUV IN DUCTWORK DOWNSTREAM OF FCU PER DETAIL 6/M700. SEE ELECTRICAL DRAWINGS FOR POWER CONNECTION INFORMATION. INSTALL UV WARNING STICKERS ON FACE OF ENCLOSURE PER DETAIL AND ON ANY FCU ACCESS DOOR(S) THROUGH WHICH THE REME HALO WOULD BE VISIBLE IF OPENED.
- 21 ADJUST SUPPLY REGISTERS SO THAT SUPPLY AIR HITS WALL ON OPPOSITE SIDE OF ROOM AT APPROXIMATELY 7' AFF WITH NO DRAFTS FELT IN THE DINING ROOM. TYPICAL OF ALL SR REGISTERS.
- 22 NOT USED
- 23 MAKE-UP AIR UNIT HUNG FROM ABOVE WITH VIBRATION ISOLATORS. MAINTAIN REQUIRED CLEARANCE AND COORDINATE WITH GC TO PROVIDE ACCESS PANELS IN CEILING AS NECESSARY FOR SERVICE. COORDINATE LOCATION WITH STRUCTURAL PLANS AND PER FIELD CONDITIONS. SEE DETAIL 12/M700.
- 24 MAKE-UP AIR AND OUTDOOR AIR INTAKE DUCT CROSS SPACE AS HIGH AS POSSIBLE. COORDINATE ROUTING WITH EXISTING PIPING IN FIELD.
- 25 EXTEND OUTDOOR AIR BRANCH DUCT FROM MAIN DOWN TO RETURN AIR DUCT ON FCU AND MAKE CONNECTION AS INDICATED. PROVIDE MOTORIZED DAMPER, POWER SUPPLY AND ALL OTHER ACCESSORIES NEEDED FOR PROPER OPERATION, AND INTERLOCK WITH THERMOSTAT TO OPEN TO MINIMUM POSITION IN OCCUPIED TIMES, AND CLOSE DURING UNOCCUPIED TIMES.
- 26 DIFFUSER INDICATED SHALL NOT BE CONNECTED TO SUPPLY AIR MAIN, IT IS FOR VISUAL SYMMETRY ONLY. DIFFUSER INLET TO BE CAPPED AND INTERIOR PAINTED BLACK.
- 27 PROVIDE DUCT HEATER. INSTALL PER MANUFACTURER INSTRUCTIONS. ENSURE ADEQUATE CLEARANCE FOR SERVICE AND COORDINATE WITH GC TO INSTALL REQUIRED CEILING ACCESS PANELS.
- 28 OUTDOOR AIR AND MAKE-UP AIR DUCT IN CONCEALED SPACES (INCLUDING RUN-OUT TO FCU) SHALL HAVE FSK DUCT INSULATION WRAP WITH MIN. R-12 VALUE. DUCT WRAP IS ONLY ALLOWED ON DUCTWORK NOT VISIBLE TO CUSTOMERS.
- 29 MAKE-UP AIR DUCT VISIBLE IN DINING AREA SHALL HAVE BRIGHT GALVANIZED FINISH AND BE LINED WITH MIN. R-8 CLOSED CELL INSULATION, EQUAL TO AP ARMAFLEX BY ARMACELL. DUCT DIMENSION SHOWN IS THE CLEAR INSIDE FREE AREA OF THE DUCT. DUCT LINER SHALL EXTEND PAST EXTENT OF DUCT WRAP TO ENSURE COMPLETE COVERAGE.
- 30 TOILET EXHAUST DUCT VISIBLE IN DINING AREA SHALL HAVE BRIGHT GALVANIZED FINISH AND BE LINED WITH INTERNAL DUCT LINER PER SPECIFICATIONS ON M010. DUCT DIMENSION SHOWN IS THE CLEAR INSIDE FREE AREA OF THE DUCT.
- 31 PROVIDE PYROSCAT DUCT WRAP XL (OR EQUAL). INSTALL PER MANUFACTURER'S INSTRUCTIONS TO COMPLY WITH ASTM E2336. SEE DETAIL 3/M200.



5 HVAC DINING ROOM RETURN
1/4" = 1'-0"

4 HVAC DINING ROOM SUPPLY
1/4" = 1'-0"

3 HVAC DINING ROOM SUPPLY
1/4" = 1'-0"



1 HVAC FLOOR PLAN
1/4" = 1'-0"



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PROJECT INFORMATION:

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1425 4TH STREET SE
SUITE B
MINNEAPOLIS, MN 55414

SEAL:

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Digitally signed by Todd A. Barnes
Date: 2024.08.05 10:42:00 -0400

Signature
Todd A. Barnes
Typed or Printed Name
49039 08/05/2024
License # Date

PROJECT NO. 0425794-001
DRAWN BY TAB/TSB
CHECKED BY GMS

ISSUE RECORD:
06.12.2024 90% CHECK SET
06.18.2024 PERMIT SET
08.02.2024 CONSTRUCTION SET

REVISIONS:
1 08.02.2024 Tenant Revisions

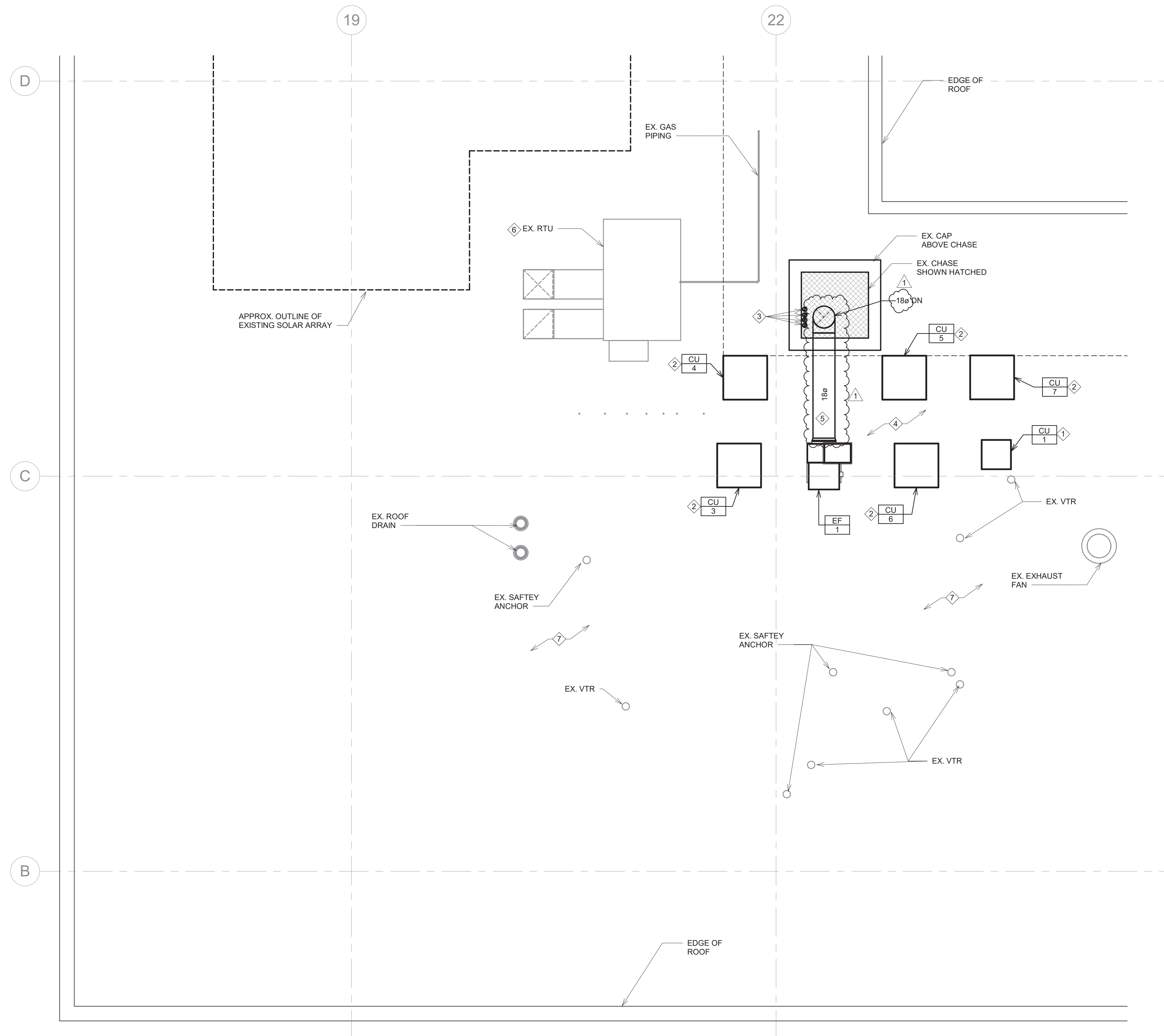
TITLE:
HVAC PLAN

SHEET NUMBER:

M100

KEY NOTES:

- 1 INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER ON ROOF AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. FURNISH AND INSTALL REFRIGERANT LINES IN STRICT ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. INSTALL THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINES DOWN SHAFT AND TO EVAPORATOR UNIT - COORDINATE ROUTING IN FIELD. CUT 2-1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND SEAL PER THE COOLER MANUFACTURER'S INSTALLATION INSTRUCTIONS AFTER LINE SET IS INSTALLED.
- 2 INSTALL REMOTE CONDENSING UNIT FOR FCU AND MAKE-UP AIR UNIT ON ROOF AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. FURNISH AND INSTALL REFRIGERANT LINES IN STRICT ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. INSTALL THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING AS REQUIRED PER MANUFACTURER. TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINES DOWN SHAFT AND TO CORRESPONDING FCU OR MAU COIL - COORDINATE ROUTING IN FIELD.
- 3 TERMINATE WATER HEATER FLUE AND COMBUSTION AIR INTAKE PER MANUFACTURER INSTRUCTIONS. MAINTAIN 10'-0" CLEARANCE BETWEEN WATER HEATER FLUE TERMINATION AND ANY ADJACENT OUTSIDE AIR INTAKES.
- 4 INSTALL ROOFTOP EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. ENSURE MINIMUM SERVICE CLEARANCES ARE MAINTAINED. COORDINATE EXACT LOCATION IN FIELD.
- 5 EXTEND GREASE EXHAUST DUCT ACROSS ROOF. SLOPE DUCT BACK TO HOOD OR TO FAN. PROVIDE LANDLORD APPROVED ROOF SUPPORTS AS REQUIRED. MAINTAIN MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS.
- 6 EXISTING LANDLORD RTU TO REMAIN - SHOWN FOR REFERENCE ONLY.
- 7 EXISTING VENT AND ANCHOR POINTS SHOWN FOR REFERENCE. VERIFY EXACT LOCATIONS IN FIELD.



1 MECHANICAL ROOF PLAN
1/4" = 1'-0"

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1	08.02.2024	Tenant Revisions

TITLE:
MECHANICAL ROOF PLAN

SHEET NUMBER:
M140

OUTDOOR AIR CALCULATION BASED ON 2018 INTERNATIONAL MECHANICAL CODE

SPACE NAME	SPACE AREA Az (FT2)	OCCUPANCY CLASSIFICATION	ZONE POPULATION Pz(1)	O.A. RATE Rp (CFM/PERSON)	OCCUPANT O.A. Rp x Pz (CFM)	AREA O.A. RATE Ra (CFM/FT2)	AREA O.A. Ra x Az (CFM)	BREATHING ZONE O.A. Vbz=RpPz + RaAz (CFM)	ZONE DISTRIBUTION EFFECTIVENESS (Ez)	ZONE O.A. Voz=Vbz/Ez (CFM)
DINING + ENTRY PASSAGE	791	FOOD AND BEVERAGE: DINING ROOMS	34	7.5	255	0.18	142.4	397.4	0.8	496.8
KITCHEN + SCULLERY OFFICE	970	FOOD AND BEVERAGE: KITCHENS (COOKING)	6	7.5	45	0.12	116.4	161.4	0.8	201.8
OFFICE	39	OFFICES: OFFICE SPACES	1	5	5	0.06	2.3	7.3	0.8	9.1
TOTAL O.A. REQUIRED										707.7
TOTAL O.A. PROVIDED										1070

FOOTNOTES:
 (1) - ZONE POPULATION BASED ON NET OCCUPIABLE FLOOR AREA, OR NUMBER OF FIXED SEATS IN RESTAURANT DINING AREAS

EXHAUST AIR CALCULATION BASED ON 2018 INTERNATIONAL MECHANICAL CODE

SPACE NAME	SPACE AREA (FT2) OR PER WC/URINAL	OCCUPANCY CLASSIFICATION	EXHAUST AIRFLOW RATE (CFM/FT2) OR PER WC/URINAL	REQUIRED EXHAUST (CFM)	PROVIDED EXHAUST (CFM)
KITCHEN	970	FOOD AND BEVERAGE: KITCHENS (COOKING)	0.7	679	2550
TOILETS	2	PUBLIC SPACES: TOILET ROOMS (INTERMITTENT EXHAUST)	70	140	150
TOTALS				819	2700

AIR BALANCE SCHEDULE

TAG	SUPPLY FLOW (CFM)	RETURN FLOW (CFM)	EXHAUST FLOW (CFM)	SUBTOTAL (CFM)
EF-1	0	0	2550	-2550
EF-2	0	0	150	-150
MAU-1	1725	0	0	1725
FCU-1	1500	1240	0	260
FCU-2	1500	1240	0	260
FCU-3	1500	1225	0	275
FCU-4	1500	1225	0	275
NET PRESSURIZATION (CFM)				95

CONTROL FUNCTIONS

- A. THE MAIN COOKING EXHAUST FAN AND MAKE-UP AIR UNIT SHALL BE INTERLOCKED TO OPERATE TOGETHER. THIS CONTROL CIRCUIT IS ACTIVATED BY A SWITCH AND INCLUDES A FIRE PROTECTION OVERRIDE.
- B. THE TEMPERATURE IN EACH ZONE IS CONTROLLED BY SPACE TEMPERATURE SENSORS CONNECTED TO THE THERMOSTATS LOCATED IN THE OFFICE. ALL ZONES SHALL OPERATE WITH CONTINUOUS FAN OPERATION DURING OCCUPIED TIMES AND INTERMITTENTLY AS NEEDED TO MAINTAIN SET POINTS DURING UNOCCUPIED TIMES. OUTSIDE AIR DAMPERS SHALL BE OPEN CONTINUOUSLY WHEN EITHER IN OCCUPIED MODE OR WHEN THE HOOD SYSTEM IS ON AND SHALL BE CLOSED DURING UNOCCUPIED PERIODS.
- C. THE THERMOSTATS SHALL DETERMINE OCCUPIED/UNOCCUPIED STATUS BASED ON THE SCHEDULE IN THE ENERGY MANAGEMENT SYSTEM.



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FAN SCHEDULE

TAG	DESCRIPTION	AIRFLOW	ESP (IN W.C.)	WEIGHT (LBS)	MOTOR POWER	V / P / H	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
EF 1	EXHAUST - FAN HOOD	2550 CFM	2.0 IN-WG	475 LB	2.0 HP	208/3/60	HS	GC	CAPTIVE-AIRE	USBI20D-RM	UTILITY SET-TYPE GREASE EXHAUST FAN FURNISHED WITH WEATHERPROOF DISCONNECT, 24" DISCHARGE EXTENSION AND VENTED ROOF CURB
EF 2	EXHAUST FAN - RESTROOM	150 CFM	0.6 IN-WG	30 LB	0.222 HP	120/1/60	HS	GC	CAPTIVE-AIRE	CFA 250CA	INLINE TOILET EXHAUST FAN LOCATED IN CEILING SPACE ABOVE TOILET ROOMS.

UNIT HEATER SCHEDULE

EQUIPMENT TAG	APPLICATION	ELECTRICAL DATA	CAPACITY (KW)	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
UH 1	CEILING-MOUNTED UNIT HEATER	208/1/60	3.0	GC	GC	INDEECO	931U04000V	PROVIDE WITH CONTROLS REQUIRED TO MEET MN ENERGY CODE.

AIR TERMINAL SCHEDULE

TAG	DESCRIPTION	FACE SIZE	MATERIAL	FINISH	MOUNTING	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
CD1	PERFORATED CEILING DIFFUSER	24" X 24"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4320A TYPE L	PROVIDE WITH INTEGRAL OBD
CD2	PERFORATED CEILING DIFFUSER	24" X 12"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4320A TYPE L	PROVIDE WITH INTEGRAL OBD, REMOVE 4-WAY DEFLECTORS
CD3	PERFORATED CEILING DIFFUSER	24" X 24"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4320A TYPE S	PROVIDE WITH INTEGRAL OBD
ER1	PERFORATED CEILING EXHAUST	12" X 12"	ALUMINUM	WHITE	SURFACE MOUNT	GC	GC	NAILOR	4330R TYPE S	PROVIDE WITH INTEGRAL OBD
RG1	PERFORATED CEILING RETURN	48" X 24"	ALUMINUM	WHITE	LAY-IN CEILING	GC	GC	NAILOR	4330R TYPE L	-
RG2	PERFORATED CEILING RETURN	48" X 24"	ALUMINUM	WHITE	SURFACE MOUNT	GC	GC	NAILOR	4330R TYPE S	-
SR1	ADJUSTABLE TURBO NOZZLE	SEE NECK SIZE	ALUMINUM	WHITE	WALL	GC	GC	AIR CONCEPTS	ANR-14	PROVIDE WITH CONCEALED MOUNTING AND FACE-ACCESSIBLE OBD

CONDENSING UNIT SCHEDULE

TAG	DESCRIPTION/UNIT SERVED	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AMBIENT TEMPERATURE (F)	NUMBER OF COMPRESSORS	CIRCUITS	MCA	FLA	V/PH	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
CU 1	CONDENSING UNIT - WALK-IN COOLER	-	-	-	1	1	15	9	208/3/60	WCS	GC	HARFORD	KPCL99M20P-3E	FURNISHED WITH WALK-IN COOLER
CU 3	ROOFTOP CONDENSING UNIT SERVING FCU-1	48.5	32.5	95	1	1	18		208/3/60	GC	GC	TRANE	4TTA3048D3	FURNISH WITH LOW AMBIENT CONTROL PACKAGE AND HAIL GUARDS
CU 4	ROOFTOP CONDENSING UNIT SERVING FCU-2	48.5	32.5	95	1	1	18		208/3/60	GC	GC	TRANE	4TTA3048D3	FURNISH WITH LOW AMBIENT CONTROL PACKAGE AND HAIL GUARDS
CU 5	ROOFTOP CONDENSING UNIT SERVING FCU-3	48.5	34.2	95	1	1	18		208/3/60	GC	GC	TRANE	4TTA3048D3	FURNISH WITH LOW AMBIENT CONTROL PACKAGE AND HAIL GUARDS
CU 6	ROOFTOP CONDENSING UNIT SERVING FCU-4	48.5	34.2	95	1	1	18		208/3/60	GC	GC	TRANE	4TTA3048D3	FURNISH WITH LOW AMBIENT CONTROL PACKAGE AND HAIL GUARDS
CU 7	ROOFTOP CONDENSING UNIT SERVING MAU-1	30.6	21.5	95	1	1	14.5		208/3/60	HS	GC	CAPTIVEAIRE	A1-D.250-15D-MPU	FURNISHED BY HOOD SUPPLIER. REFER TO HOOD PLANS FOR MORE INFORMATION

MAKE UP AIR UNIT SCHEDULE

TAG	DESCRIPTION	AIRFLOW (CFM)	E.S.P. IN W.G.	GAS INPUT (MBH)	GAS OUTPUT (MBH)	EAT DB (F)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	WEIGHT (LBS)	FAN HP	V/PH	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
MAU 1	INDOOR MAKE-UP AIR UNIT	1725	1	162	148	-16	30.6	21.5	1100	3	208/3/60	HS	GC	CAPTIVE AIRE	A1-D.250-15D-MPU	DIRECT FIRED, FURNISHED WITH MOTORIZED BACKDRAFT DAMPER, FREEZE STAT, AND 3-TON COOLING SYSTEM, AND INDOOR HANGING OPTION. CONDENSER SHIPPED LOOSE.

FAN COIL UNIT SCHEDULE - DX

EQUIPMENT TAG	APPLICATION/ UNIT SERVED	FAN			COOLING COIL				FILTER				MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES			
		NUMBER OF FANS	MOTOR HP (EACH)	TOTAL CFM	OUTSIDE AIR CFM	ESP (IN W.C.)	EAT DB (F)	EAT WB (F)	LAT DB (F)	LAT WB (F)	REFRIGERANT TYPE	SENSIBLE CAPACITY (MBH)				TOTAL CAPACITY (MBH)	TYPE	MERV RATING
FCU 1	BACK-OF-HOUSE, CU-3	1	0.5	1500	260	0.5 IN-WG	76.6	64.7	57.8	55.9	R410A	32.6	45.9	22x20x1	MERV 8	TRANE	GAM5B0C48M41	PROVIDE WITH FILTER RACK AND LOW AMBIENT CONTROL
FCU 2	BACK-OF-HOUSE, CU-4	1	0.5	1500	260	0.5 IN-WG	76.6	64.7	57.8	55.9	R410A	32.6	45.9	22x20x1	MERV 8	TRANE	GAM5B0C48M41	PROVIDE WITH FILTER RACK AND LOW AMBIENT CONTROL
FCU 3	FRONT-OF-HOUSE, CU-5	1	0.5	1500	275	0.5 IN-WG	77.8	65.1	57.0	55.4	R410A	34.2	47.5	22x20x1	MERV 8	TRANE	GAM5B0C48M41	PROVIDE WITH FILTER RACK AND LOW AMBIENT CONTROL
FCU 4	FRONT-OF-HOUSE, CU-6	1	0.5	1500	275	0.5 IN-WG	77.8	65.1	57.0	55.4	R410A	34.2	47.5	22x20x1	MERV 8	TRANE	GAM5B0C48M41	PROVIDE WITH FILTER RACK AND LOW AMBIENT CONTROL

KITCHEN EXHAUST HOOD SCHEDULE

TAG	DESCRIPTION	MAX COOKING TEMP.	AIRFLOW (CFM)	EXHAUST PLENUM			PERFORATED SUPPLY PLENUMS						NO. OF LIGHT FIXTURES	WEIGHT (LBS)	FURNISHED BY	INSTALLED BY	BASIS FOR DESIGN		MECHANICAL NOTES						
				E.S.P. IN (IN W.G.)	NO.	WIDTH	LENGTH	MAU PLENUM DUCT COLLARS	AC PLENUM DUCT COLLARS	NO.	DIAMETER	MANUFACTURER					MODEL NUMBER								
HD 1A	TYPE I CANOPY HOOD WITH PERFORATED MAU AND AC SUPPLY PLENUMS	600°F	2550 CFM	0.97 IN-WG	1	10"	2'-0"	12'-9"	4'-3"	13'-9"	1'-10"	1725	3	10"	2'-4"	690	6	8"	8	1300	HS	GC	CAPTIVE-AIRE	5424 ND-2-ACPSP-F	MATL: 18 GA. TYPE 430 SS. FURNISHED WITH VERTICAL END PANELS, VAPORPROOF INCANDESCENT LIGHT FIXTURES, 16" TALL HE SS FILTERS, INTEGRAL UTILITY CABINET, KITCHEN EXHAUST SUPPRESSION SYSTEM, DUCT COLLAR TEMPERATURE SENSOR, PREWIRE PACKAGE, SPARE FIRE SYSTEM DRY CONTACT, AND 4-POLE 20A CONTACTOR.

SANITIZING EQUIPMENT SCHEDULE

TAG	DESCRIPTION	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL	MECHANICAL NOTES
SB 1	BATHROOM AIR PURIFICATION UNIT	TUV	GC	RGF ENVIRONMENTAL GROUP	BRU ASSEMBLY	SEE ELECTRICAL SHEETS FOR CONNECTION INFORMATION.
SH 1	HVAC AIR PURIFICATION UNIT	TUV	GC	RGF ENVIRONMENTAL GROUP	REME-HALO	SEE DETAIL 6/M700 FOR INSTALLATION INFORMATION.
SI 1	ICE MACHINE TREATMENT SYSTEM	TUV	GC	RGF ENVIRONMENTAL GROUP	IMS-B-GA	SEE PLUMBING DRAWINGS FOR INSTALLATION INFORMATION.

ELECTRIC DUCT HEATER SCHEDULE

EQUIPMENT TAG	SIZE (W"xH")	HEATING DATA			ELECTRICAL DATA	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NUMBER	MECHANICAL NOTES
		INPUT (KW)	OUTPUT (MBH)	STAGES						
EDH 1	16" X 16"	15	51.1	2	208/360	GC	GC	INDEECO	QUA	1
EDH 2	16" X 16"	15	51.1	2	208/360	GC	GC	INDEECO	QUA	1
EDH 3	16" X 16"	20	68.2	2	208/360	GC	GC	INDEECO	QUA	1
EDH 4	16" X 16"	20	68.2	2	208/360	GC	GC	INDEECO	QUA	1

MECHANICAL NOTES:
 1. PROVIDE CONTROL PACKAGE "G", WHICH SHALL INCLUDE AUTOMATIC AND MANUAL RESET THERMAL CUTOUTS, DIFFERENTIAL PRESSURE AIRFLOW SWITCH, MAGNETIC CONTACTORS FOR EACH HEATER STAGE, CONTROL CIRCUIT TRANSFORMER, BUILT-IN SNAP-ACTING DISCONNECT SWITCH WITH DOOR INTERLOCK.

SEAL:
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Digitally signed by Todd A. Barnes
 Date: 2024.09.09 10:42:40 -0400
 Signature
 Todd A. Barnes
 Typed or Printed Name
 49039 08/05/2024
 License # Date

PROJECT NO. 0425794-001
 DRAWN BY TAB/TSB
 CHECKED BY GMS

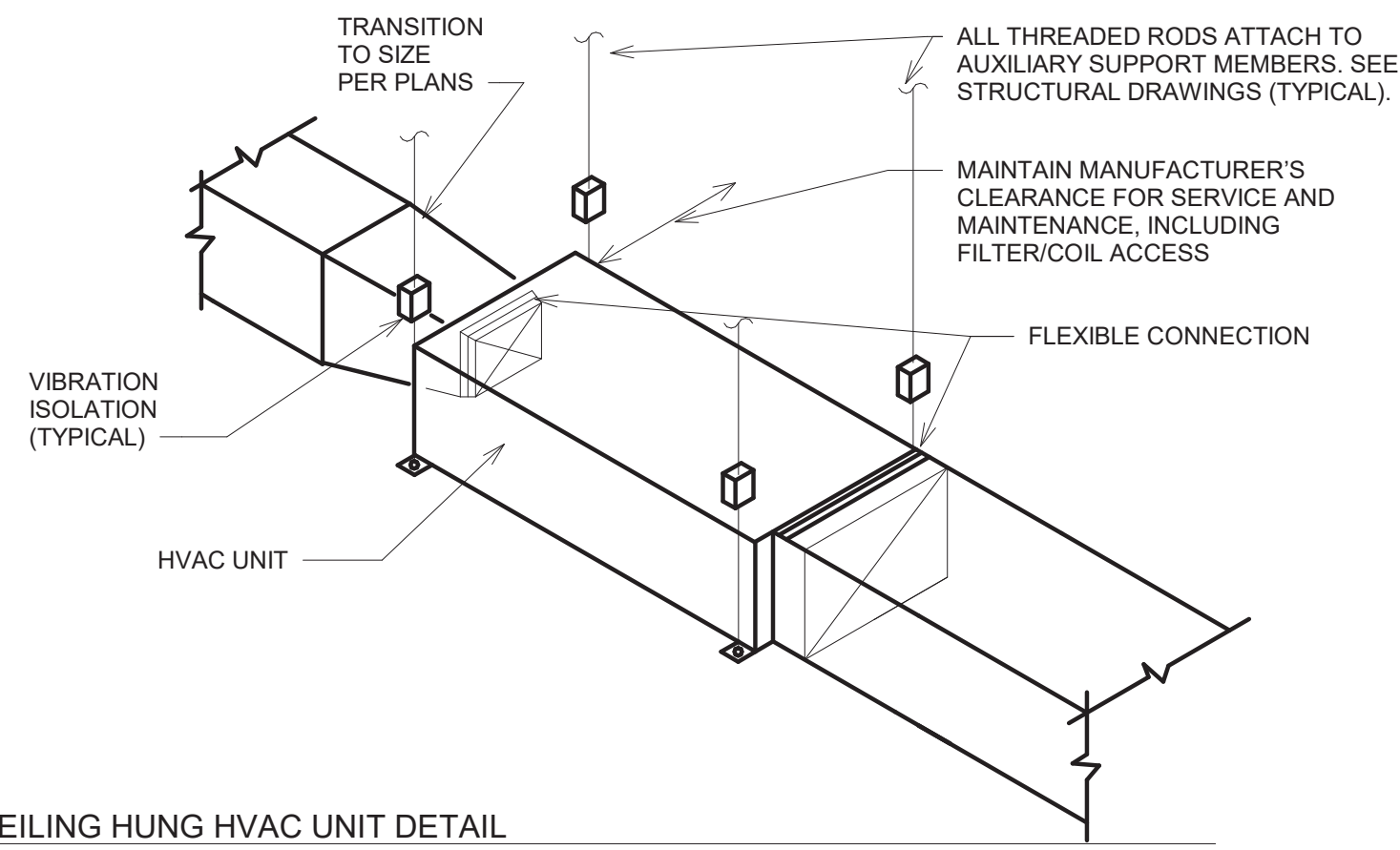
ISSUE RECORD:
 06.12.2024 90% CHECK SET
 06.18.2024 PERMIT SET
 08.02.2024 CONSTRUCTION SET

REVISIONS:

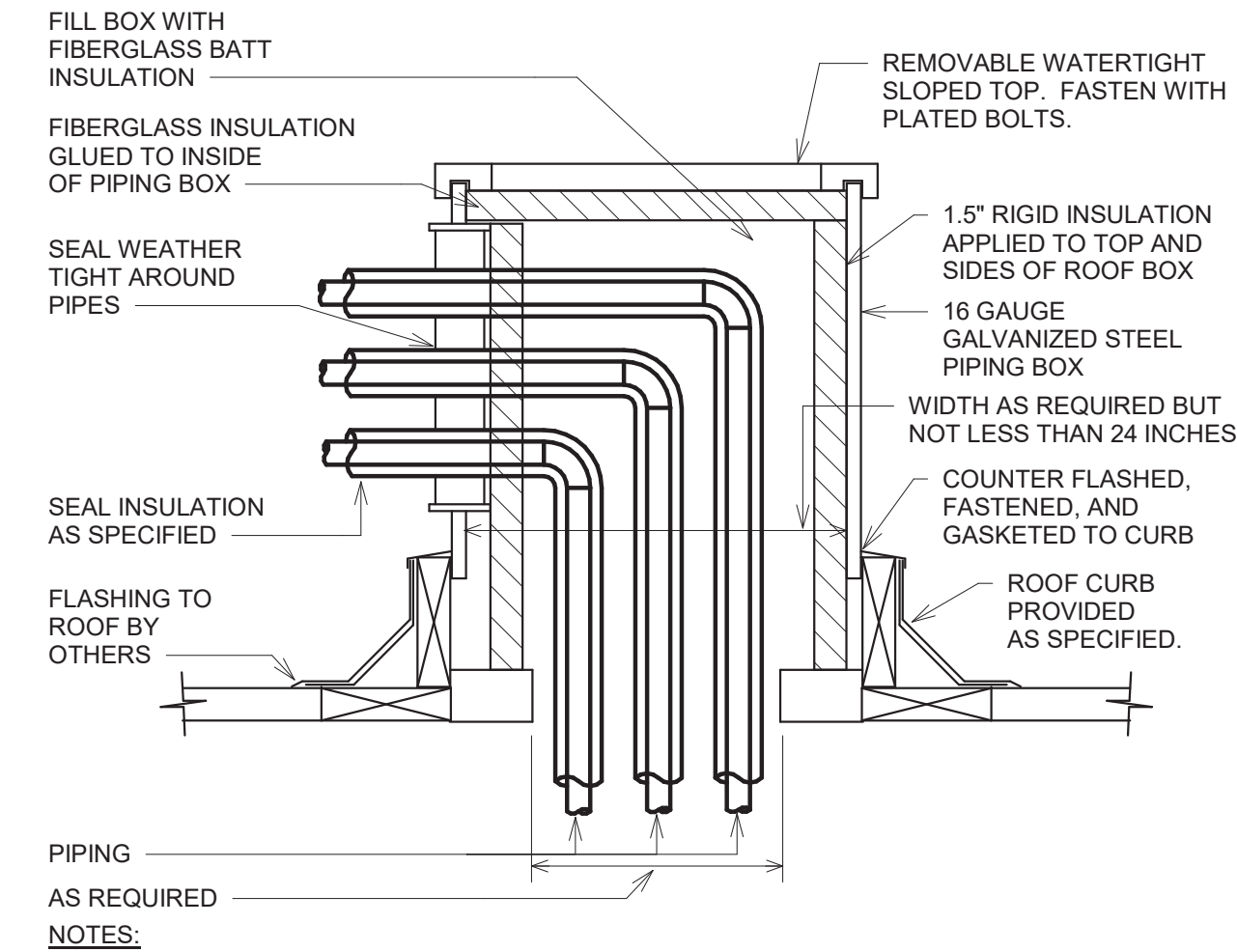
TITLE:
 HVAC SCHEDULES

SHEET NUMBER:
M600

12 CEILING HUNG HVAC UNIT DETAIL
NO SCALE

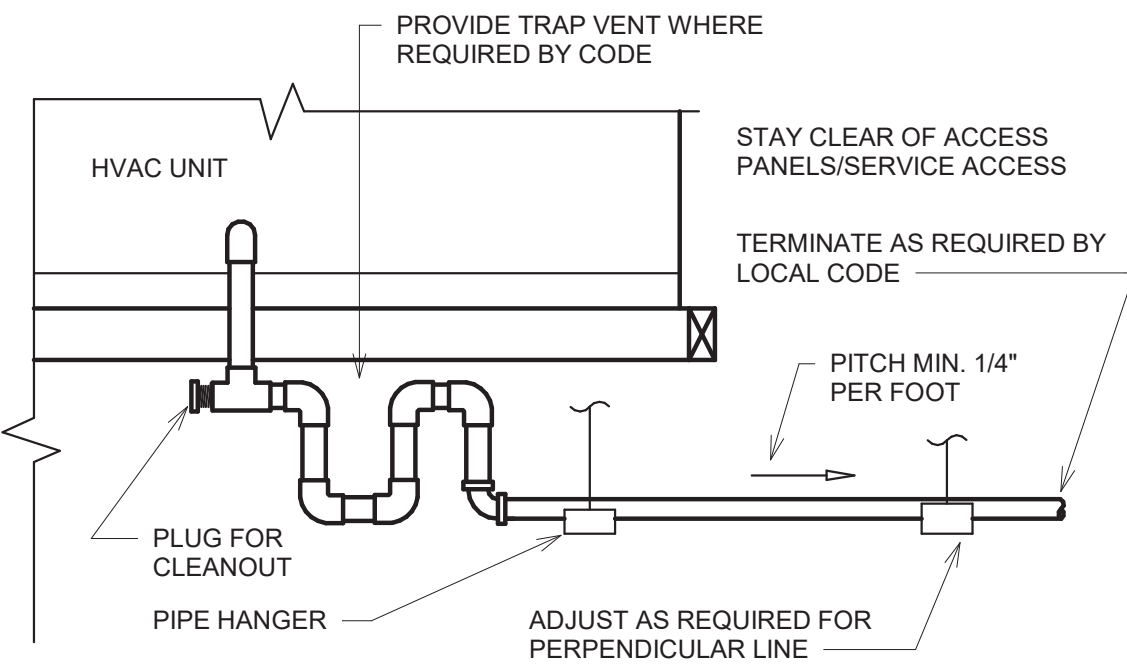


11 ROOF BOX PIPING DETAIL
NO SCALE

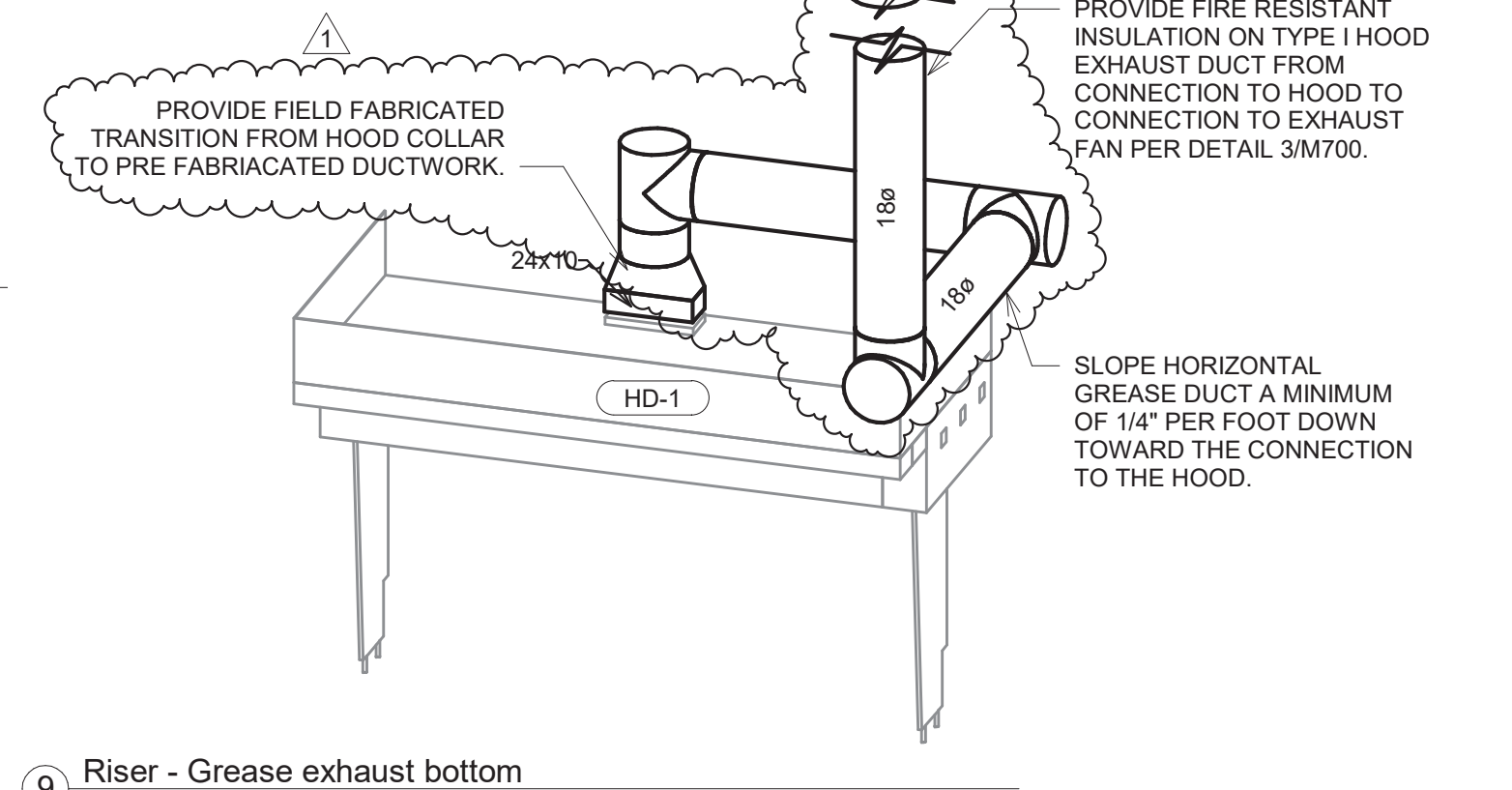


- BOX AND SUPPORT TO BE PAINTED WITH ONE COAT ZINC CHROMATE PRIMER AND TWO COATS OF COLOR AND PAINT TYPE SPECIFIED OR LEAVE AS GALVANIZED SHEET METAL.
- MOUNT CURB ON BLOCKING SO BOTTOM IS LEVEL WITH TOP OF ROOF INSULATION.

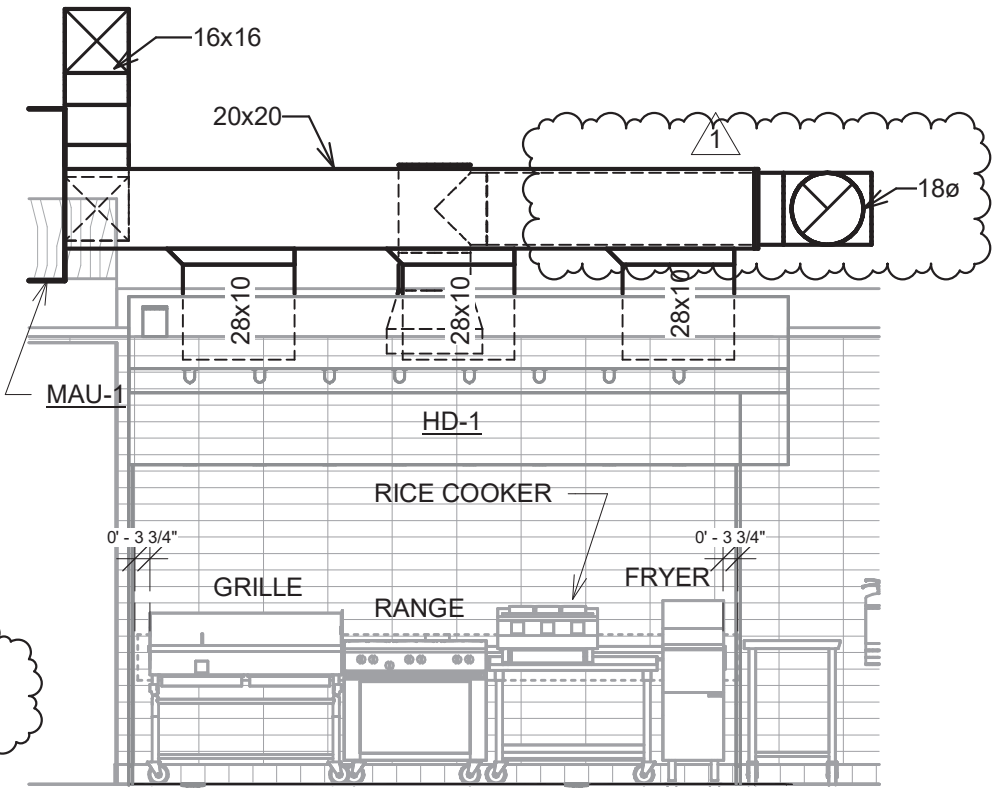
10 CONDENSATE PIPING DETAIL (AHU)
NO SCALE



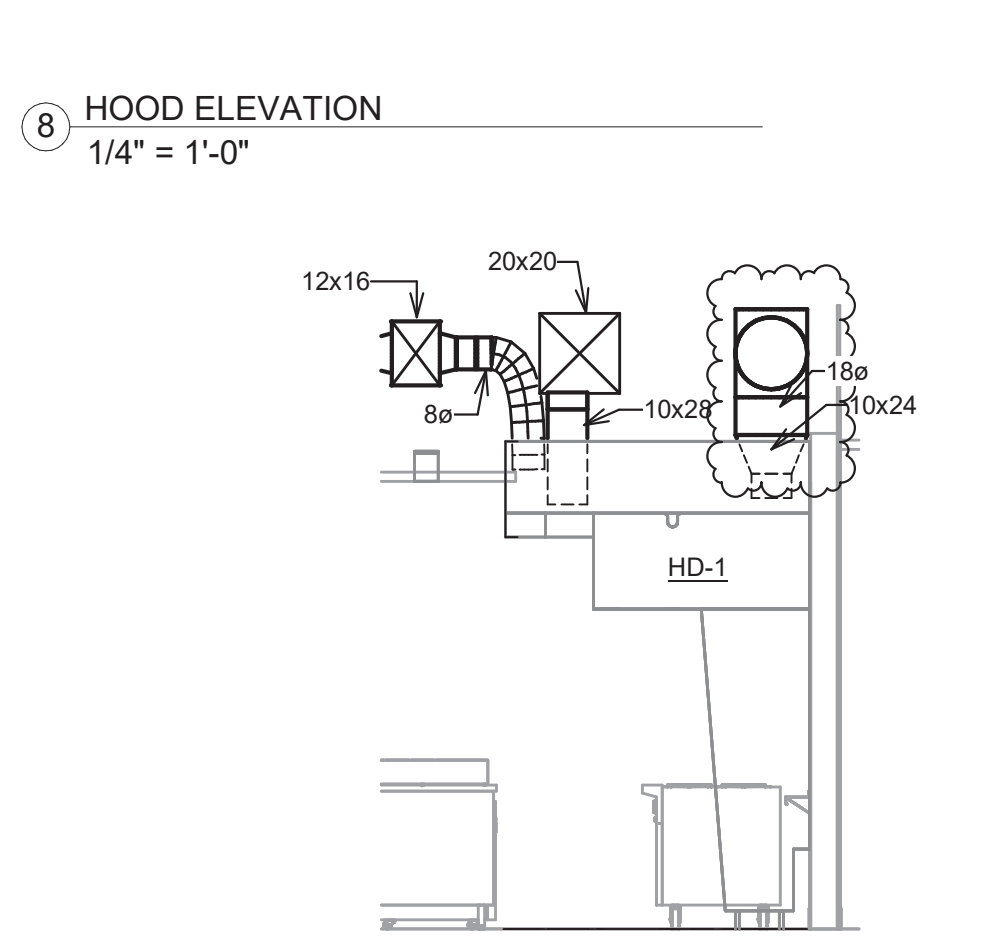
9 Riser - Grease exhaust bottom
NO SCALE



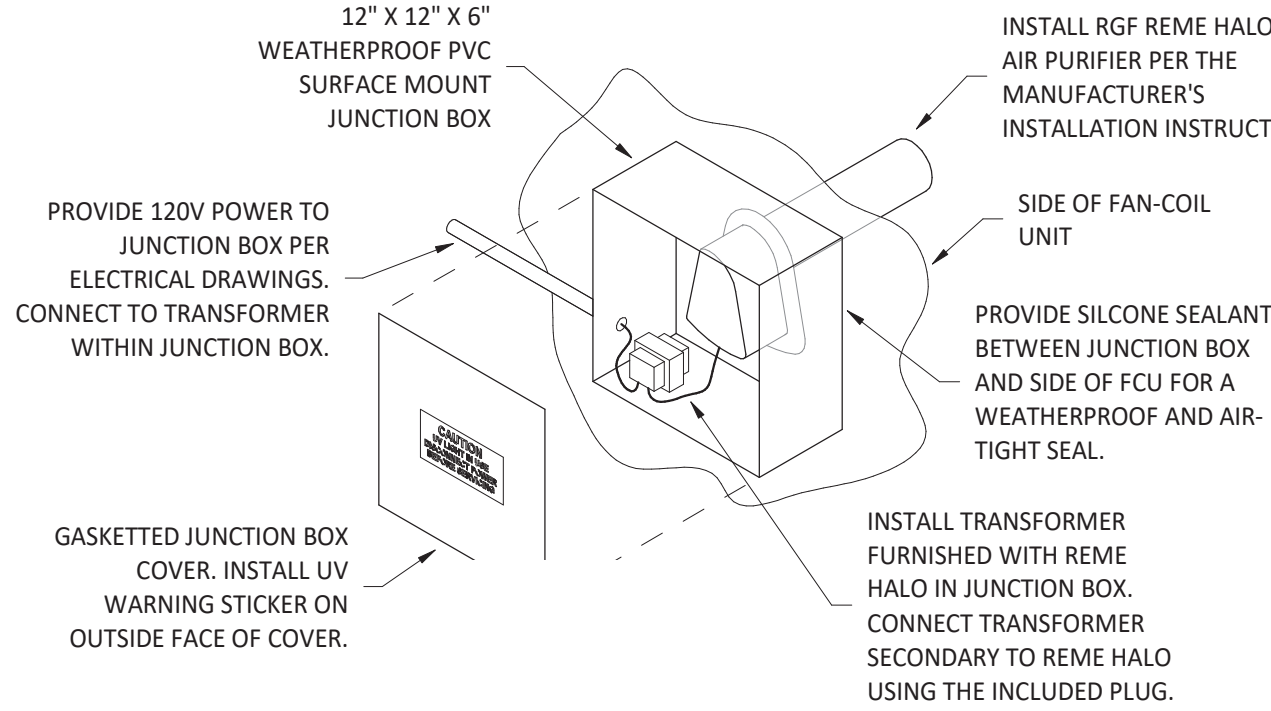
8 HOOD ELEVATION
1/4" = 1'-0"



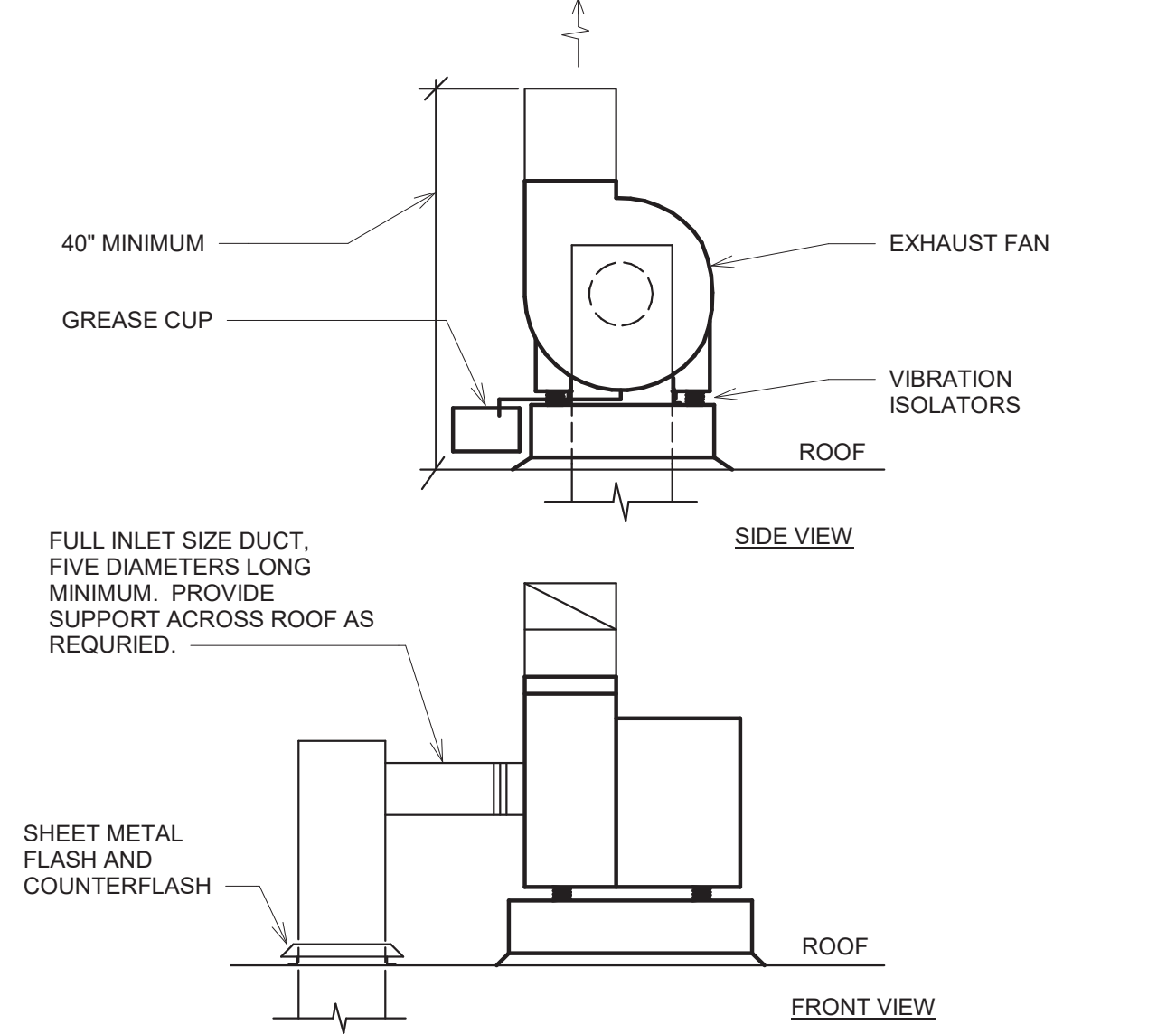
7 DUCT SECTION AT HOOD
1/4" = 1'-0"



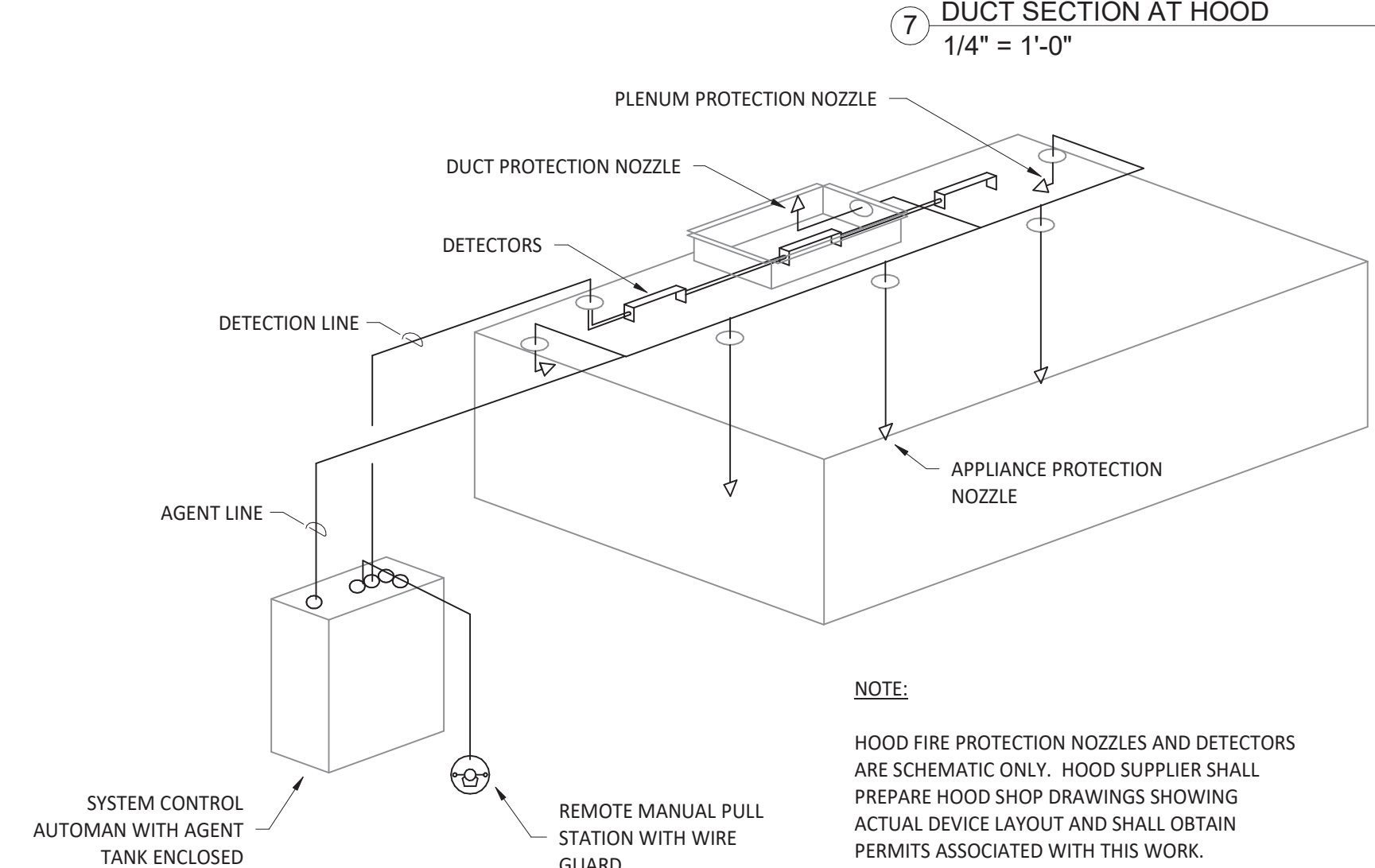
6 UV AIR PURIFIER INSTALLATION
NO SCALE



5 UTILITY SET EXHAUST FAN ROOF MOUNTING
NO SCALE



4 FIRE SUPPRESSION SYSTEM SCHEMATIC
NO SCALE



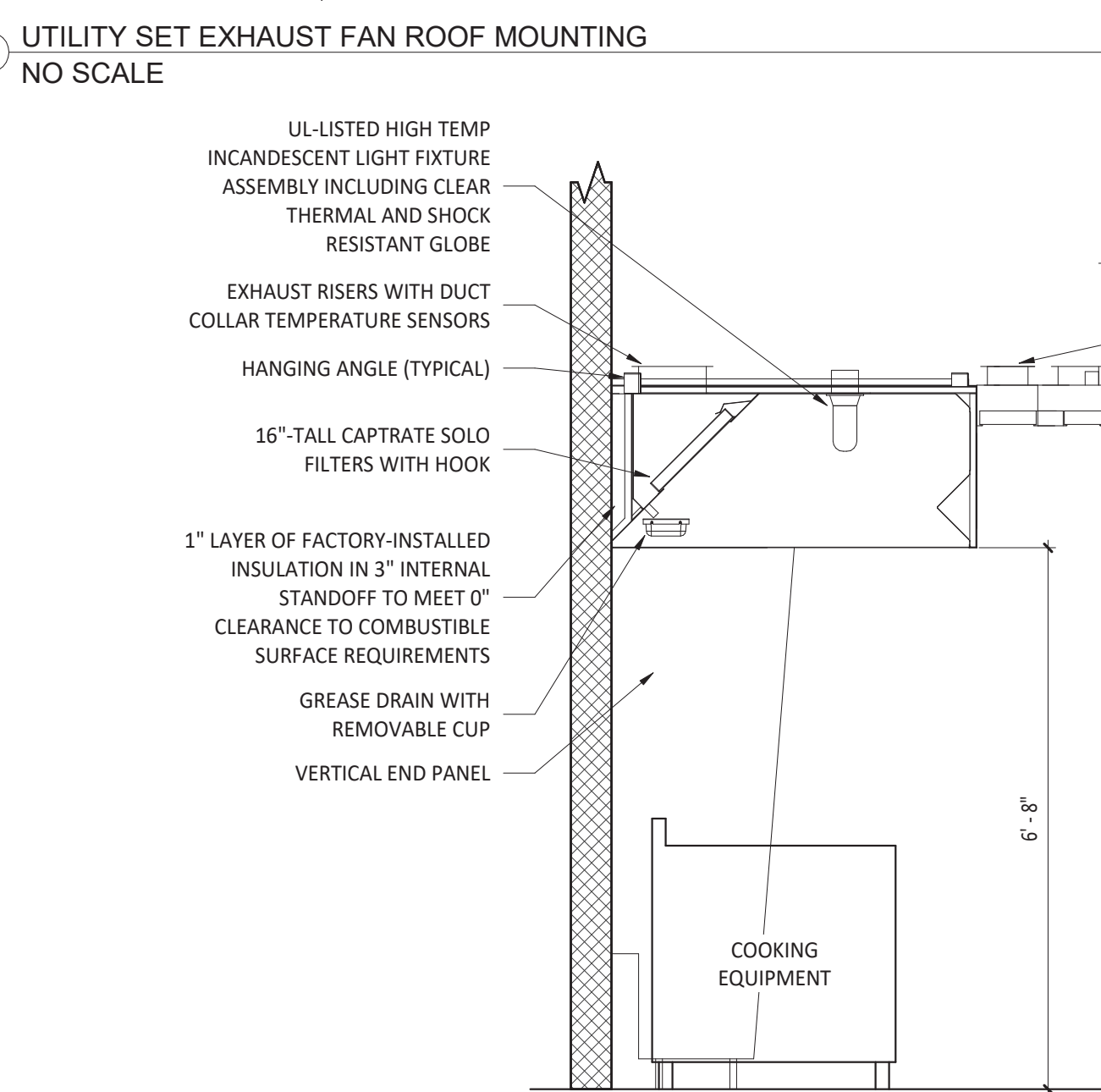
3 GREASE DUCT WRAP DETAIL 1
NO SCALE

Grease and HVAC Duct Enclosure System 1 or 2 Hour Shaft Alternative / Zero Clearance to Combustibles

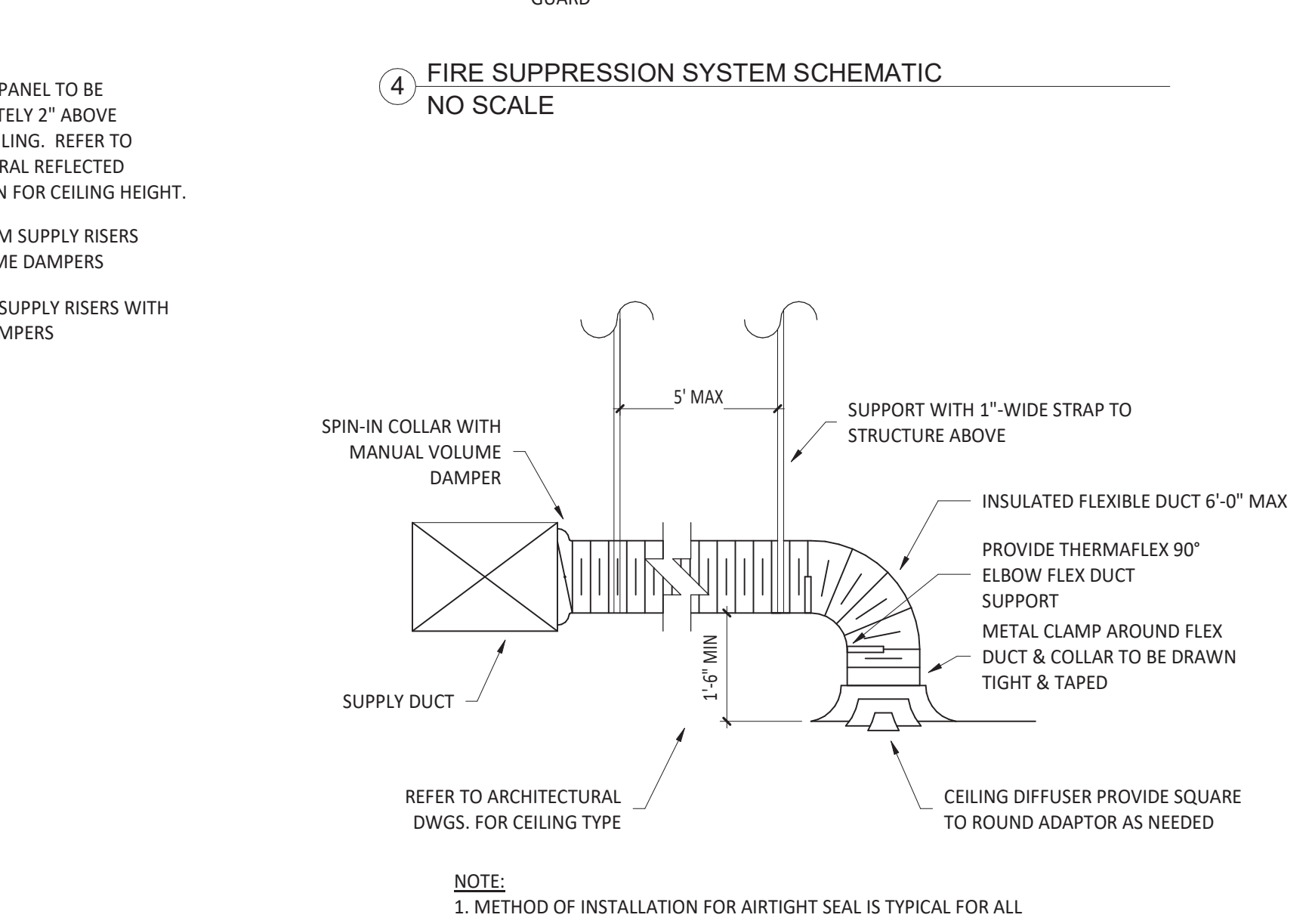
TWO LAYER INSTALLATION (Grease Duct per ASTM E2336 and CAN/ULC S144)

LEGEND	
1	Two Layers of XL Insulation for ASTM E2336 and CAN/ULC S144 Grease Duct Enclosures
2	Steel banding minimum 1/2" (13) wide by 0.015" (0.4) thick.
3	Tight butt joints (no overlap) at perimeter and longitudinal joints, both layers for grease ducts
4	Min. 3" (75) overlap on perimeter and between adjacent blankets
5	Optional 6" XL collar
6	Hangers - size dependent weight of assembly (see datasheet Section G)
7	Trapeze Supports - size dependent on weight of assembly (see datasheet Section G)
8	Steel Rectangular or Round Duct (size, gage and construction dependent per Listed Design)

2 HOOD SECTION VIEW
NO SCALE



1 DIFFUSER CONNECTION
NO SCALE



CONSULTANT

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PROJECT INFORMATION:

STORE NO.: 5453
"DINKYTOWN"
1425 4TH STREET SE
SUITE B
MINNEAPOLIS, MN 55414

SEAL:

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Digitally signed by Todd A. Barnes
Date: 2024.08.05 10:45:00 -0400

Signature
Todd A. Barnes
Typed or Printed Name
49039 08/05/2024
License # Date

PROJECT NO. 0425794-001
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08.02.2024 CONSTRUCTION SET

REVISIONS:
1 08.02.2024 Tenant Revisions

TITLE:
HVAC DETAILS

SHEET NUMBER:
M700