

HVAC SYMBOLS					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ACCESS DOORS, VERTICAL/HORIZONTAL		FREEZE STAT		RECTANGULAR DUCT W/ACOUSTICAL LINING
	BULLHEAD TEE WITH TURNING VANES		GAS METER		GAS PRESSURE REGULATOR
	CARBON DIOXIDE SENSOR		GAS PIPING		REFRIGERANT LIQUID LINE
	CONNECT TO EXISTING		GRAVITY BACKDRAFT DAMPER IN DUCT		REFRIGERANT SUCTION LINE
	CONCENTRIC TRANSITION, 15° MAXIMUM ANGLE		HVAC OCCUPANCY SENSOR		RELIEF/EXHAUST AIR (UP) [POSITIVE PRESSURE]
	EXHAUST AIR OR OUTSIDE AIR INTAKE (UP) [NEGATIVE PRESSURE]		LIQUID PROPANE GAS		RELIEF/EXHAUST AIR (DOWN) [POSITIVE PRESSURE]
	EXHAUST AIR OR OUTSIDE AIR INTAKE (DOWN) [NEGATIVE PRESSURE]		MANUAL VOLUME DAMPER IN DUCT		RETURN DUCT/TRANSFER AIR (UP)
	FIRE DAMPER IN DUCT		MOTORIZED OPERATED DAMPER IN DUCT		RETURN DUCT/TRANSFER AIR (DOWN)
	FIRE/SMOKE DAMPER IN DUCT		NATURAL GAS		ROUND DUCT WITH SIZE INDICATED
	FLEXIBLE DUCT		RADIUS ROUND ELBOW (RADIUS OF CENTERLINE OF DUCT EQUAL TO 1.5 X DUCT WIDTH OR DIAMETER)		SUPPLY DUCT (UP)
	FLEXIBLE CONNECTION IN DUCT		RECTANGULAR DUCT W/SIZE INDICATED		SUPPLY DUCT (DOWN)
			CO / NO2 GAS DETECTOR		SYMMETRICAL DOVE TAIL WYE
			SWITCH		TEMPERATURE SENSOR TO CONTROL EQUIPMENT X
					THERMOSTAT TO CONTROL EQUIPMENT X

HVAC ABBREVIATIONS					
NOTE: NOT ALL ABBREVIATIONS MAY BE USED ON THIS PROJECT					
ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
AD	ACCESS DOORS, VERTICAL/HORIZONTAL	ERV	ENERGY RECOVERY VENTILATION	LPS	LOW PRESSURE STEAM SUPPLY
AFF	ABOVE FINISHED FLOOR	ESP	EXTERNAL STATIC PRESSURE	LWT	LEAVING WATER TEMPERATURE
AFG	ABOVE FINISHED GRADE	EWT	ENTERING WATER TEMPERATURE	MH	MOUNTING HEIGHT
BB	BASEBOARD RADIATION	FFE	FINISHED FLOOR ELEVATION	MOD	MOTORIZED OPERATED DAMPER IN DUCT
CD	CONDENSATE DRAIN	FOR	FUEL OIL RETURN	MPC	MEDIUM PRESSURE CONDENSATE
CFH	CUBIC FEET PER HOUR	FOS	FUEL OIL SUPPLY	MPS	MEDIUM PRESSURE STEAM SUPPLY
CFM	CUBIC FEET PER MINUTE	FOV	FUEL OIL VENT	NG	NATURAL GAS
CO	CARBON MONOXIDE	FP	FILLER PANEL	NO2	NITROGEN DIOXIDE
CO2	CARBON DIOXIDE	FTR	FINNED TUBE RADIATION	OA	OUTSIDE AIR
CR	CONDENSER WATER RETURN	G	GAS PIPING	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
CS	CONDENSER WATER RETURN	HPC	HIGH PRESSURE CONDENSATE	PD	PRESSURE DROP
CHWR	CHILLED WATER RETURN	HPS	HIGH PRESSURE STEAM SUPPLY	RL	REFRIGERANT LIQUID LINE
CHWS	CHILLED WATER SUPPLY	HWS	HOT WATER HEATING SUPPLY	RS	REFRIGERANT SUCTION LINE
HCHWR	CHILLED WATER RETURN HIGH TEMPERATURE	HWR	HOT WATER HEATING RETURN	RA	RETURN AIR
HCHWS	CHILLED WATER SUPPLY HIGH TEMPERATURE	IG	INTERRUPTIBLE GAS PIPING	SA	SUPPLY AIR
DB/WB	DRY BULB/WET BULB	IE	INVERT ELEVATION	SF	SQUARE FEET
E___	EXISTING (SA, RA, EA, ETC.)	LAT	LEAVING AIR TEMPERATURE	TA	TRANSFER AIR
EA	EXHAUST AIR	LPG	LIQUID PROPANE GAS	TYP.	TYPICAL
EAT	ENTERING AIR TEMPERATURE	LPC	LOW PRESSURE CONDENSATE	UNO	UNLESS NOTED OTHERWISE
				ZD	PRESSURE INDEPENDENT ZONE DAMPER

MECHANICAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
M001	MECHANICAL SYMBOLS AND LEGEND
M300	GROUND FLOOR HVAC PLAN
M301	FIRST FLOOR HVAC PLAN
M302	SECOND FLOOR HVAC PLAN
M303	THIRD FLOOR HVAC PLAN
M400	ENLARGED UNIT HVAC PLANS
M401	ENLARGED UNIT HVAC PLANS
M501	MECHANICAL ROOF PLAN
M701	MECHANICAL DETAILS
M801	MECHANICAL SCHEDULES

- ### GENERAL HVAC NOTES
- THESE GENERAL NOTES SHALL APPLY TO ALL HVAC DRAWINGS.
  - MECHANICAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES BETWEEN THE 'AS-BUILT' CONDITIONS AND THESE DRAWINGS.
  - EXHAUST AIR DISCHARGE SHALL BE LOCATED A MINIMUM OF 10 FEET HORIZONTALLY FROM OUTSIDE AIR INTAKES AND 3 FEET FROM OPERABLE WINDOWS/DOORS.
  - ALL REQUIRED CONTROL WIRING NOT SHOWN ON ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK. WIRING IN HVAC PLENUM SPACES SHALL BE INSTALLED ACCORDING TO CODE REQUIREMENTS.
  - INSTALL FIRE DAMPERS IN ALL RATED WALL, FLOOR, AND CEILING DUCT PENETRATIONS AS APPLICABLE. INSTALL SMOKE DAMPERS IN ALL DUCT PENETRATIONS THROUGH SMOKE RATED WALLS AS APPLICABLE. WHERE DUCTS PENETRATE WALLS THAT CARRY BOTH SMOKE AND FIRE RATINGS, THE DAMPERS INSTALLED SHALL BE COMBINATION SMOKE AND FIRE DAMPERS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RATED ASSEMBLIES. PROVIDE ACCESS DOORS IN DUCT AT EACH DAMPER LOCATION. ALL DAMPERS SHALL BE UL 555 LABELED.
  - ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
  - ALL BRANCH DUCT SIZES ARE EQUAL TO THE NECK SIZE OF DIFFUSER UNLESS NOTED OTHERWISE.
  - ELBOWS SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF NOT LESS THAN 1-1/2 TIMES THE WIDTH OF THE DUCT. WHERE SPACE CONDITIONS DO NOT PERMIT THIS RADIUS OR WHERE INDICATED ON DRAWINGS, SQUARE ELBOWS WITH TURNING VANES SHALL BE USED.
  - MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE FIVE FEET.
  - ALL DUCT DIMENSIONS ARE NET CLEAR, INTERIOR DIMENSIONS.
  - ALL DUCT AND PIPE PENETRATIONS OF FIRE AND/OR SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED AS REQUIRED PER CODE TO MAINTAIN THE INTEGRITY OF RATED ASSEMBLIES.
  - ANY WALL, FLOOR, OR CEILING SURFACE THAT IS DISTURBED DURING THE COURSE OF THIS WORK SHALL BE REPAIRED TO EXISTING OR LIKE-NEW CONDITION.
  - MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL EQUIPMENT, DUCTWORK, AND PIPING TO FIT WITHIN THE SPACE ALLOWED BY ARCHITECTURAL AND STRUCTURAL CONDITIONS. PROVIDE PIPE AND DUCT OFFSETS AND TRANSITIONS AS REQUIRED TO ACCOMMODATE STRUCTURE AND ARCHITECTURE. CUTTING OR OTHERWISE ALTERING STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
  - PROVIDE BALANCING DAMPERS AS REQUIRED TO MEET FLOW REQUIREMENTS.
  - PROVIDE SHUTOFF VALVES AT ALL BRANCH PIPING RUNOUTS AND AT INLET AND OUTLET OF EACH PIECE OF MECHANICAL EQUIPMENT.
  - BALANCE SYSTEMS TO MEET DESIGN FLOW REQUIREMENTS.
  - SEAL AND INSULATE DUCTWORK PER ENERGY CODE REQUIREMENTS. INSULATE PIPING PER ENERGY CODE REQUIREMENTS.
  - LOCATE VALVES, DAMPERS, AND CONTROLS FOR EASE OF ACCESS.
  - LOCATE GAUGES AND THERMOMETERS FOR EASE OF OBSERVATION.
  - PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS AND IN WALL STRUCTURES TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF EQUIPMENT AND BALANCING OF SYSTEMS. COORDINATE EXACT SIZES AND LOCATIONS OF ACCESS PANELS WITH ARCHITECT DURING THE SHOP DRAWING PROCESS.
  - COORDINATE FINAL DUCT AND PIPE ROUTING WITH PLUMBING, FIRE SUPPRESSION, AND ELECTRICAL. COORDINATE FINAL GRILLE, REGISTER, AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLANS, LIGHTING, SPRINKLER HEADS, COMMUNICATION DEVICES, AND FIRE ALARM DEVICES.
  - VERIFY THERMOSTAT LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN AND INSTALLATION.
  - HVAC WORK SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT OR PANELS. COORDINATE WITH ELECTRICAL CONTRACTOR TO MAINTAIN ALL CODE REQUIRED ELECTRICAL CLEARANCES.
  - ROUTE CONDENSATE PIPING FROM EACH PIECE OF APPLICABLE MECHANICAL EQUIPMENT TO NEAREST FLOOR DRAIN, STANDPIPE, MOP SINK, WALL BOX, OR OTHER CODE-APPROVED PLUMBING RECEPTOR.
  - ALL MATERIALS, FITTINGS, AND EQUIPMENT INSTALLED IN RETURN AIR PLENUMS SHALL BE NON-COMBUSTIBLE AND RATED FOR USE IN RETURN AIR PLENUMS.
  - ROUTE REFRIGERANT LINE SETS FROM EACH EVAPORATOR COIL TO ASSOCIATED CONDENSING UNIT/HEAT PUMP PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
  - ROUTE COMBUSTION AIR AND FLUE PIPING FROM EACH FURNACE TO EXTERIOR OF BUILDING PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
  - ANY HVAC EQUIPMENT THAT IS CAPABLE OF PRODUCING CONDENSATE AND IS LOCATED ABOVE A HARD CEILING SHALL BE PROVIDED WITH A SECONDARY OVERFLOW CONDENSATE SWITCH.
  - ALL MECHANICAL SYSTEMS SHALL COMPLY WITH THE CURRENT MINNESOTA COMMERCIAL ENERGY CODE. COMPLIANCE PATH SHALL BE VIA ASHRAE 90.1-2016 UNLESS NOTED OTHERWISE.
  - REFER TO ARCHITECTURAL DRAWINGS FOR ALTERNATIVES.



322 1st Ave N, Suite #600  
 Minneapolis, MN 55401  
 phone: 612.746.4260  
 Facsimile: 612.746.4754  
 www.jlgarchitects.com  
 copyright © 2020

DESIGN TREE  
 engineering • land surveying  
 4001 University Avenue  
 Minneapolis, MN 55412

PRELIMINARY  
 NOT FOR CONSTRUCTION

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

LWO DEVELOPMENT, LLC  
**EASTGATE APARTMENTS**  
 OWATONNA, MN

DATE  
**04/27/2020**

PHASE  
**100% DESIGN DEVELOPMENT**

PROJECT  
**02220002**

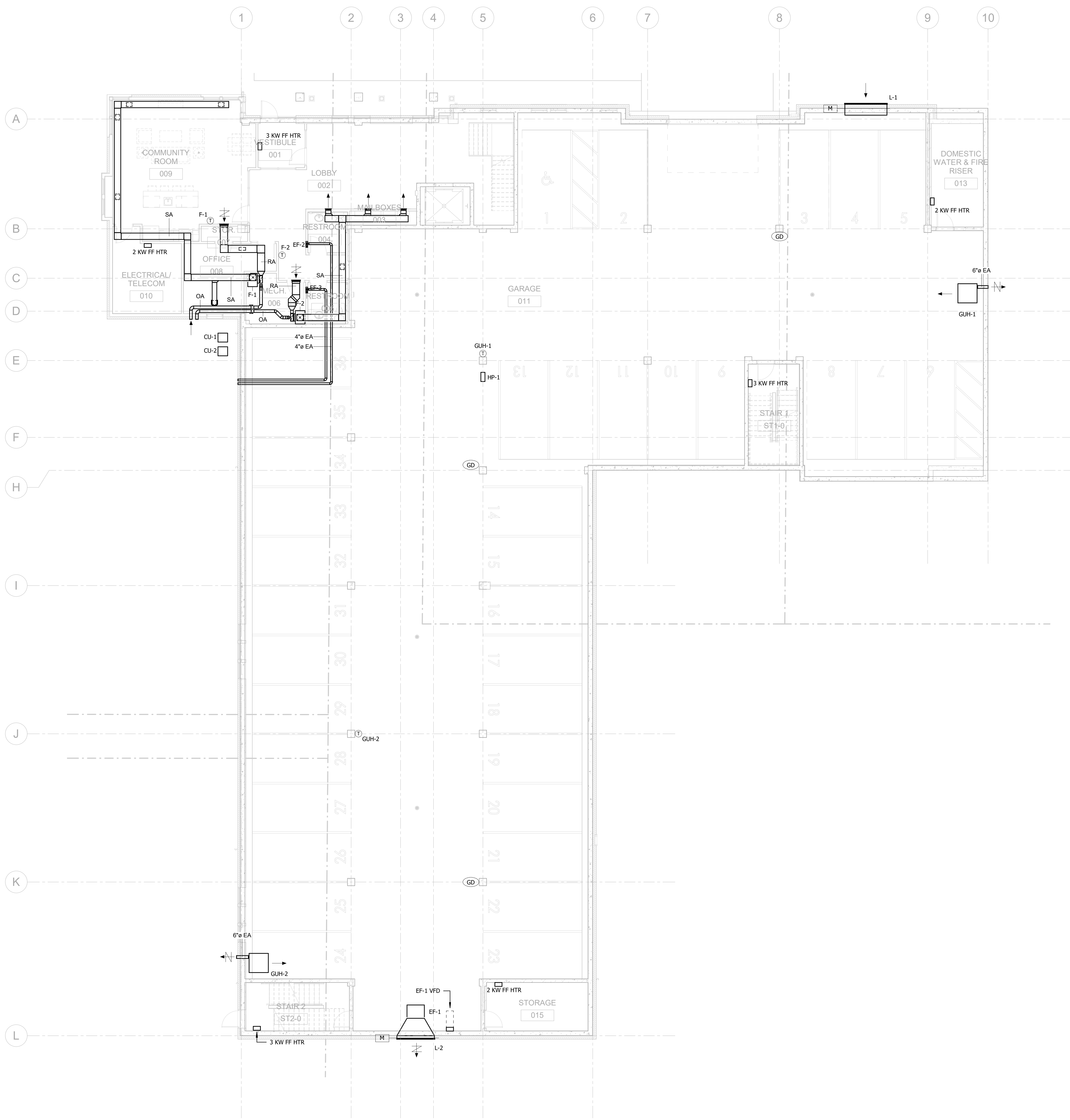
SHEET  
**M001**  
 MECHANICAL SYMBOLS AND LEGEND

THIS DRAWING AND THE INFORMATION THEREIN IS THE PROPERTY OF DESIGN TREE ENGINEERING INC. USE BY THE HOLDER OR DISCLOSURE TO OTHERS WITHOUT THE PERMISSION OF DESIGN TREE ENGINEERING INC. IS PROHIBITED. IT CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION OF DESIGN TREE ENGINEERING INC. REPRODUCTION OF THE MATERIAL HEREIN WITHOUT WRITTEN PERMISSION OF DESIGN TREE ENGINEERING INC. VIOLATES THE COPYRIGHT LAWS OF THE UNITED STATES AND WILL SUBJECT THE VIOLATORS TO LEGAL PROSECUTION.

COPYRIGHT © 2020 BY DESIGN TREE ENGINEERING

E  
D  
C  
B  
A

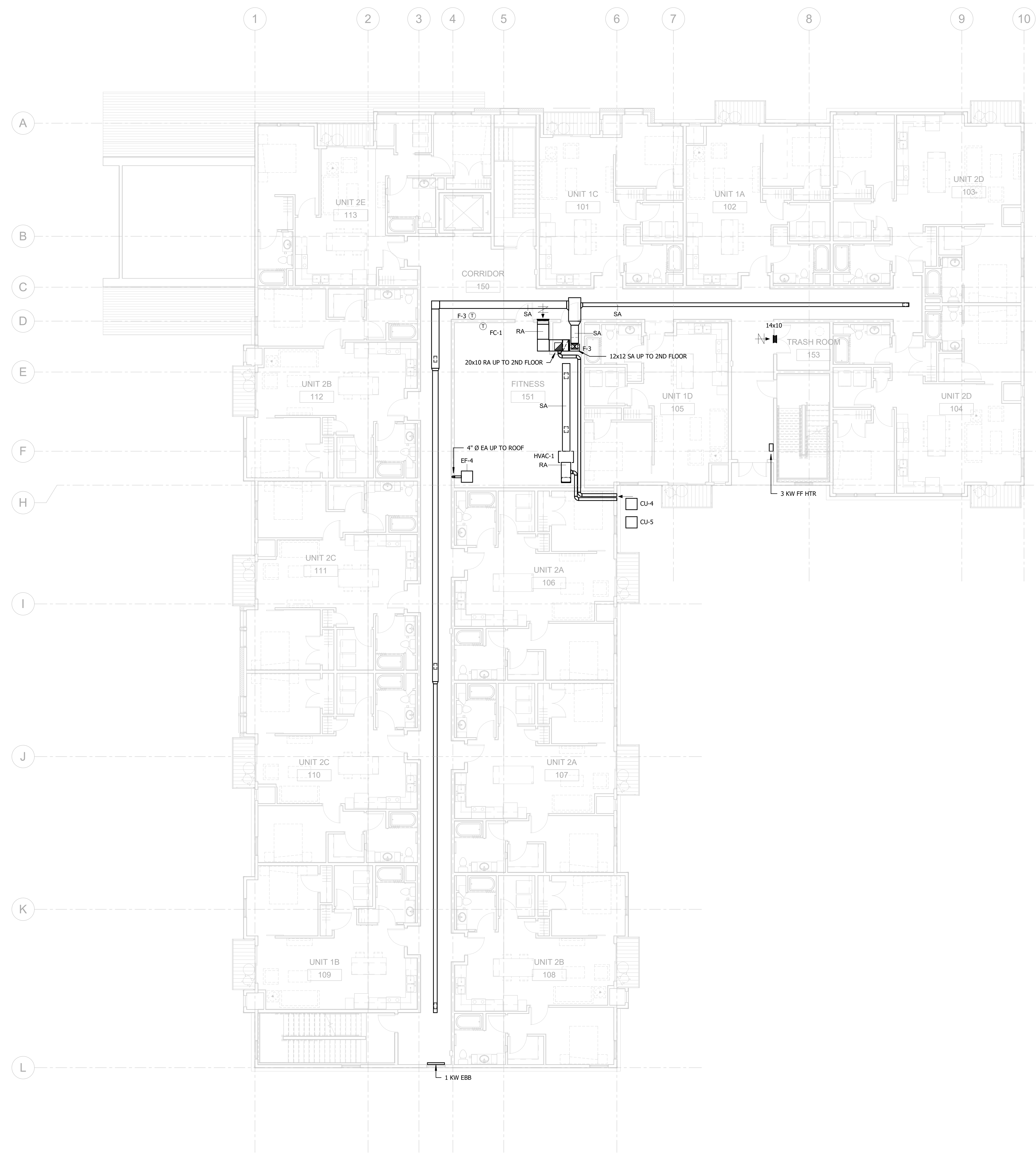
3/27/2020 2:11:47 PM



1 GROUND FLOOR - HVAC PLAN  
0 4' 8' 16'

LWO DEVELOPMENT, LLC  
**EASTGATE APARTMENTS**  
OWATONNA, MN

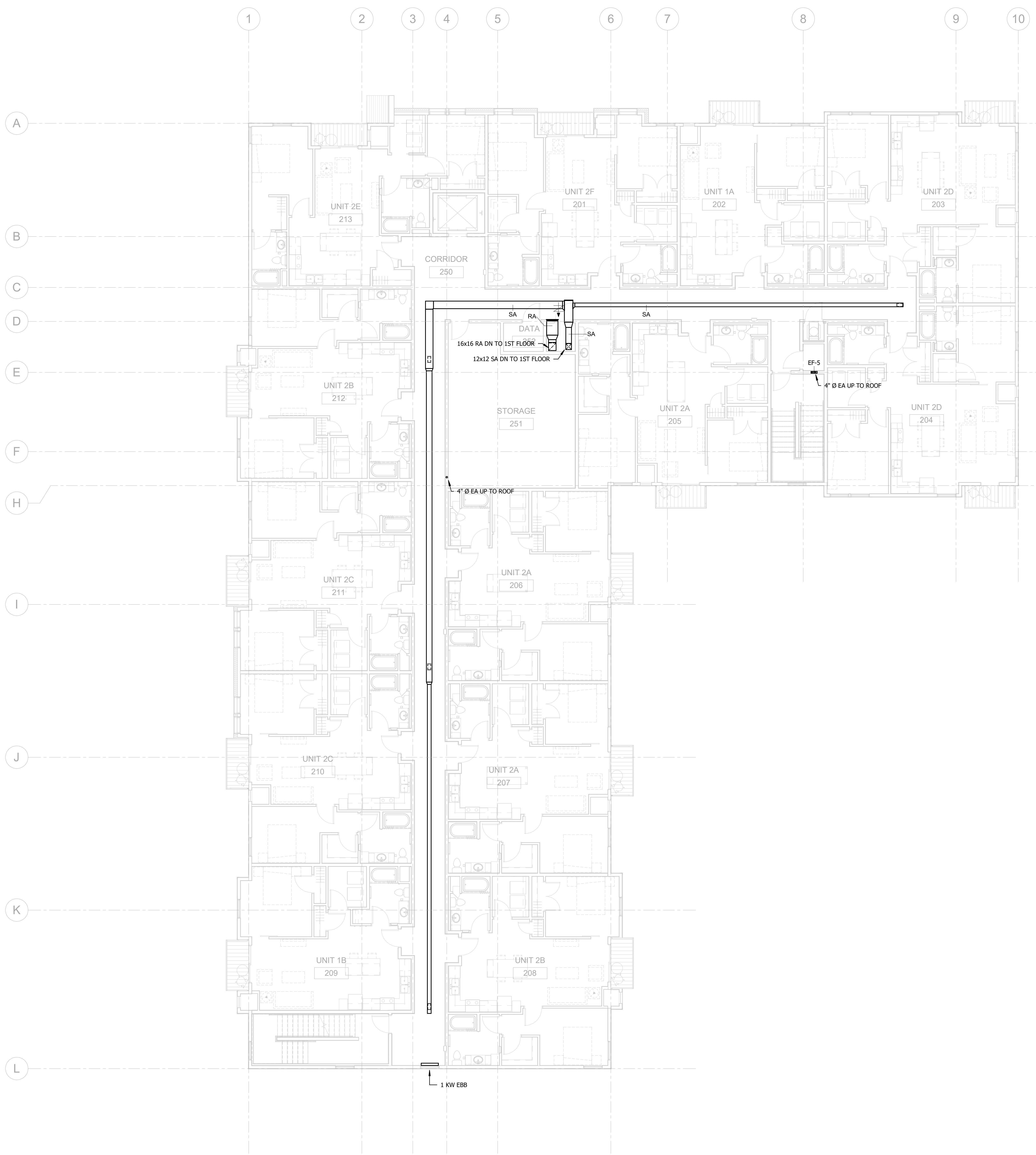
DATE	04/27/2020
PHASE	100% DESIGN DEVELOPMENT
PROJECT	02220002
SHEET	M300
GROUND FLOOR HVAC PLAN	



**1** FIRST FLOOR - HVAC PLAN

0 4' 8' 16'

4/27/2020 2:11:58 PM



1 SECOND FLOOR - HVAC PLAN  
0 4' 8' 16'

LWO DEVELOPMENT, LLC  
**EASTGATE APARTMENTS**  
OWATONNA, MN

DATE	04/27/2020
PHASE	100% DESIGN DEVELOPMENT
PROJECT	02220002
SHEET	M302
SECOND FLOOR HVAC PLAN	

4/27/2020 2:11:53 PM

**PRELIMINARY**  
NOT FOR CONSTRUCTION

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE



**1** THIRD FLOOR - HVAC PLAN  
0 4' 8' 16'

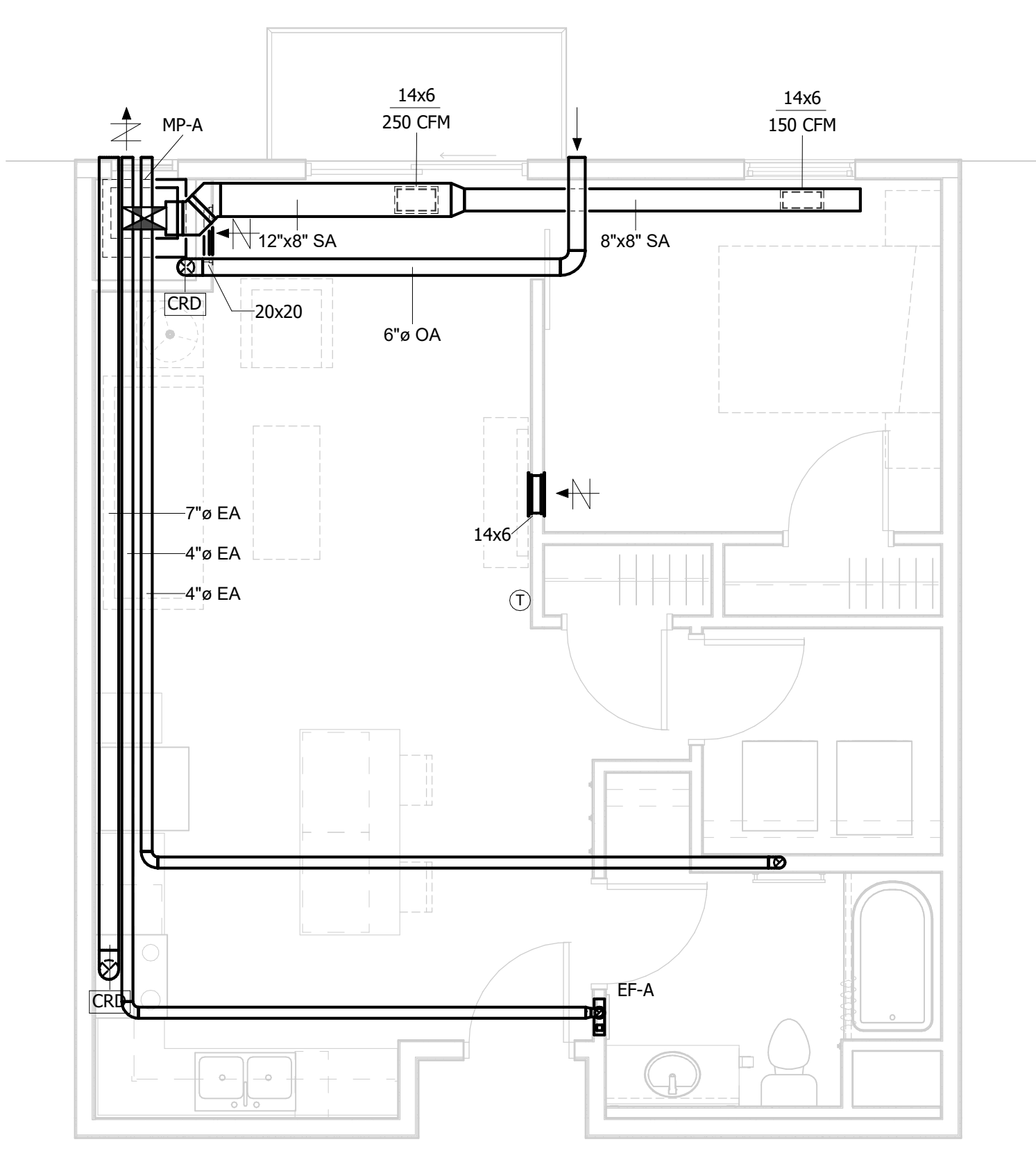
LWO DEVELOPMENT, LLC  
**EASTGATE APARTMENTS**  
OWATONNA, MN

DATE	04/27/2020
PHASE	100% DESIGN DEVELOPMENT
PROJECT	02220002
SHEET	<b>M303</b>
THIRD FLOOR HVAC PLAN	

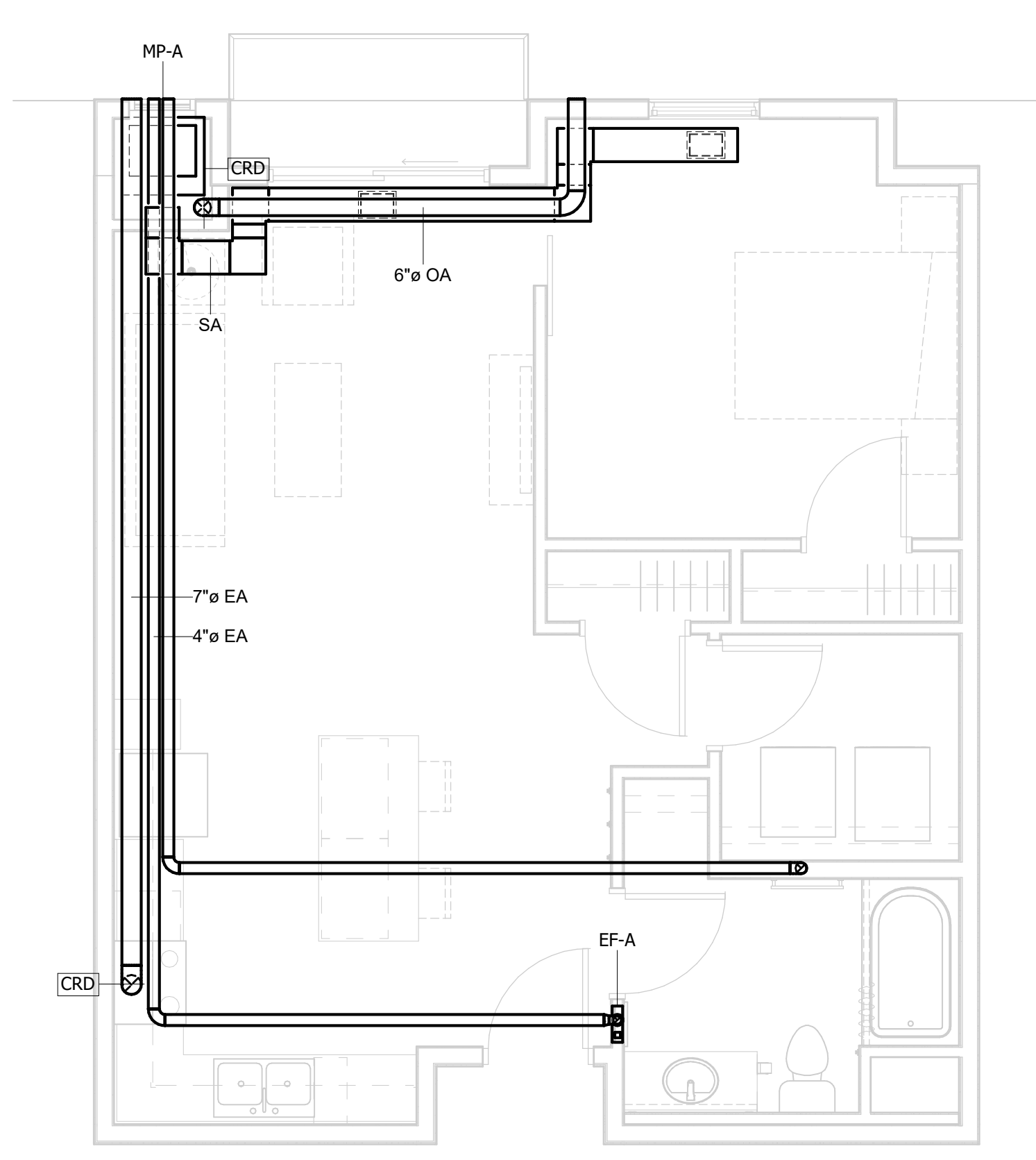
4/27/2020 2:11:52 PM

**PRELIMINARY**  
NOT FOR CONSTRUCTION

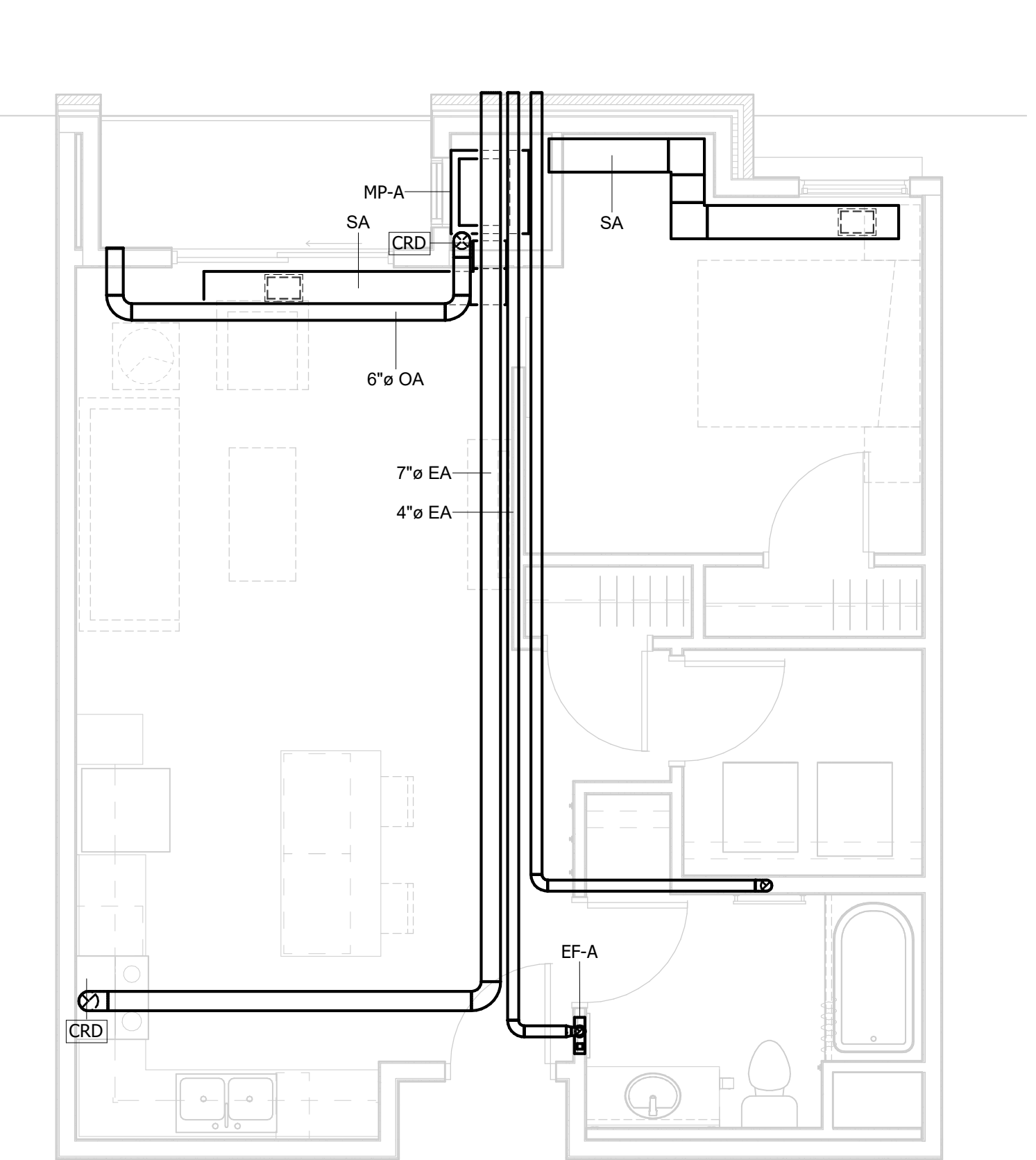
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE



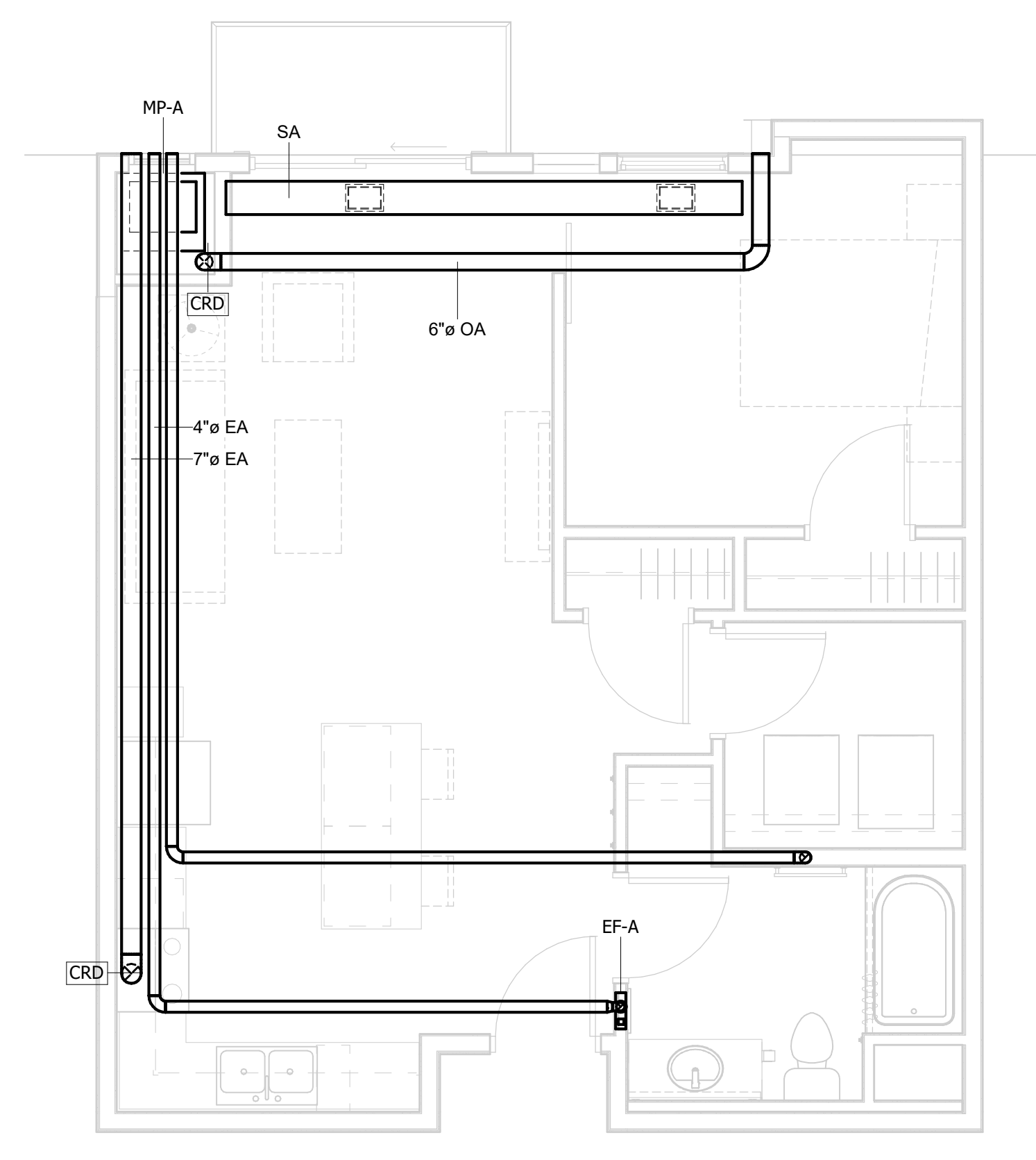
1 UNIT 1A  
0 2' 4' 8'



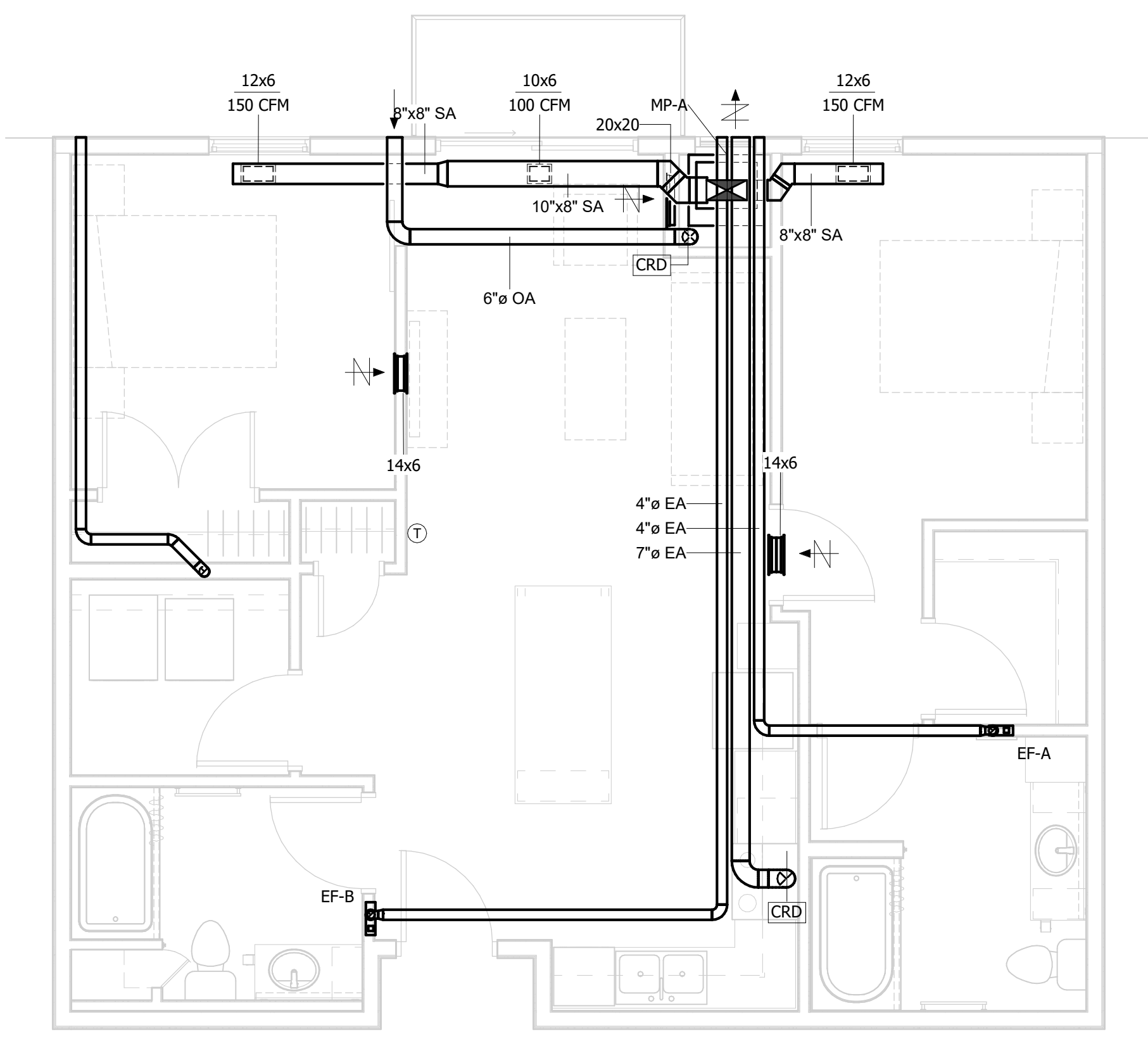
2 UNIT 1B  
0 2' 4' 8'



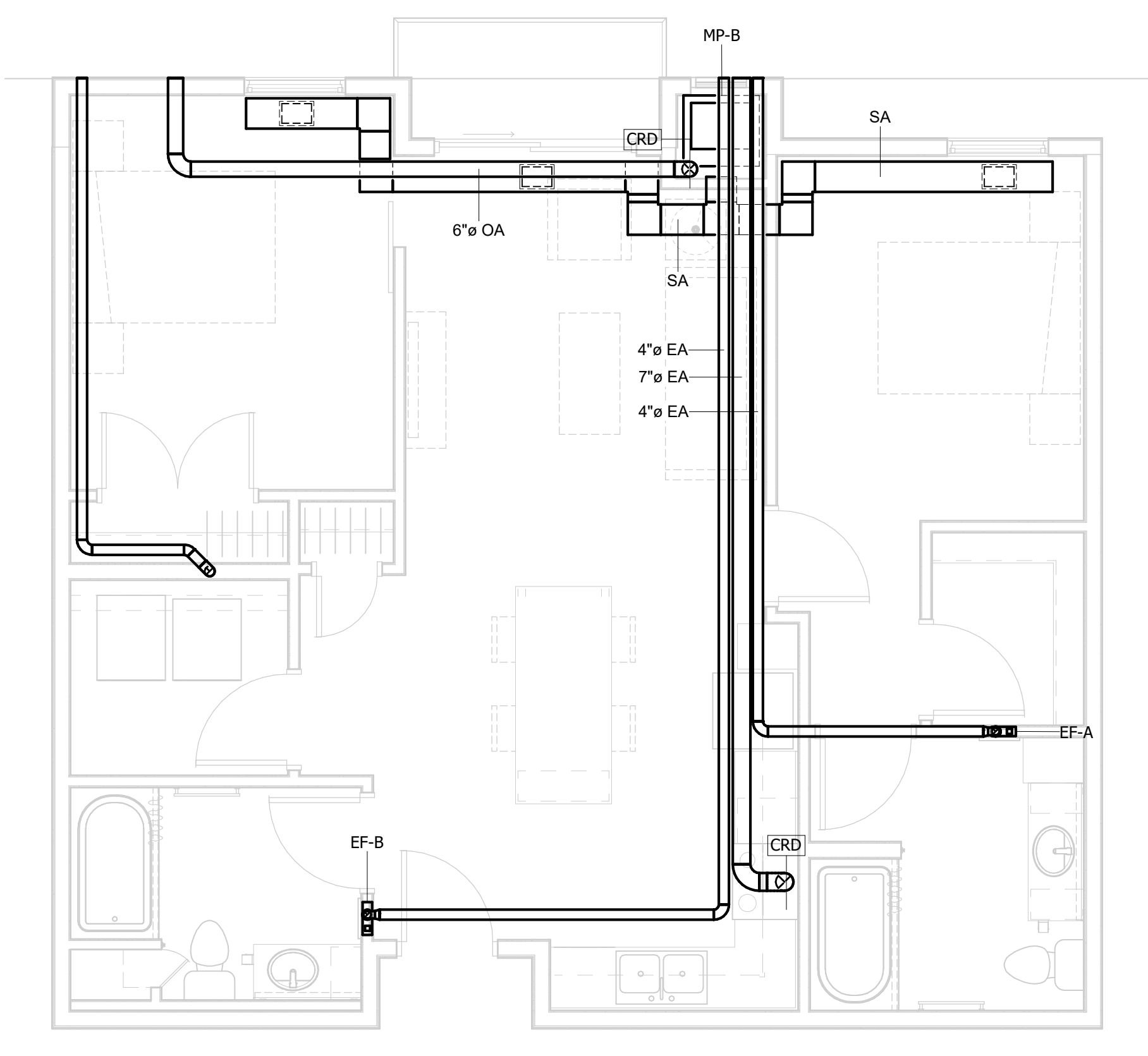
3 UNIT 1C  
0 2' 4' 8'



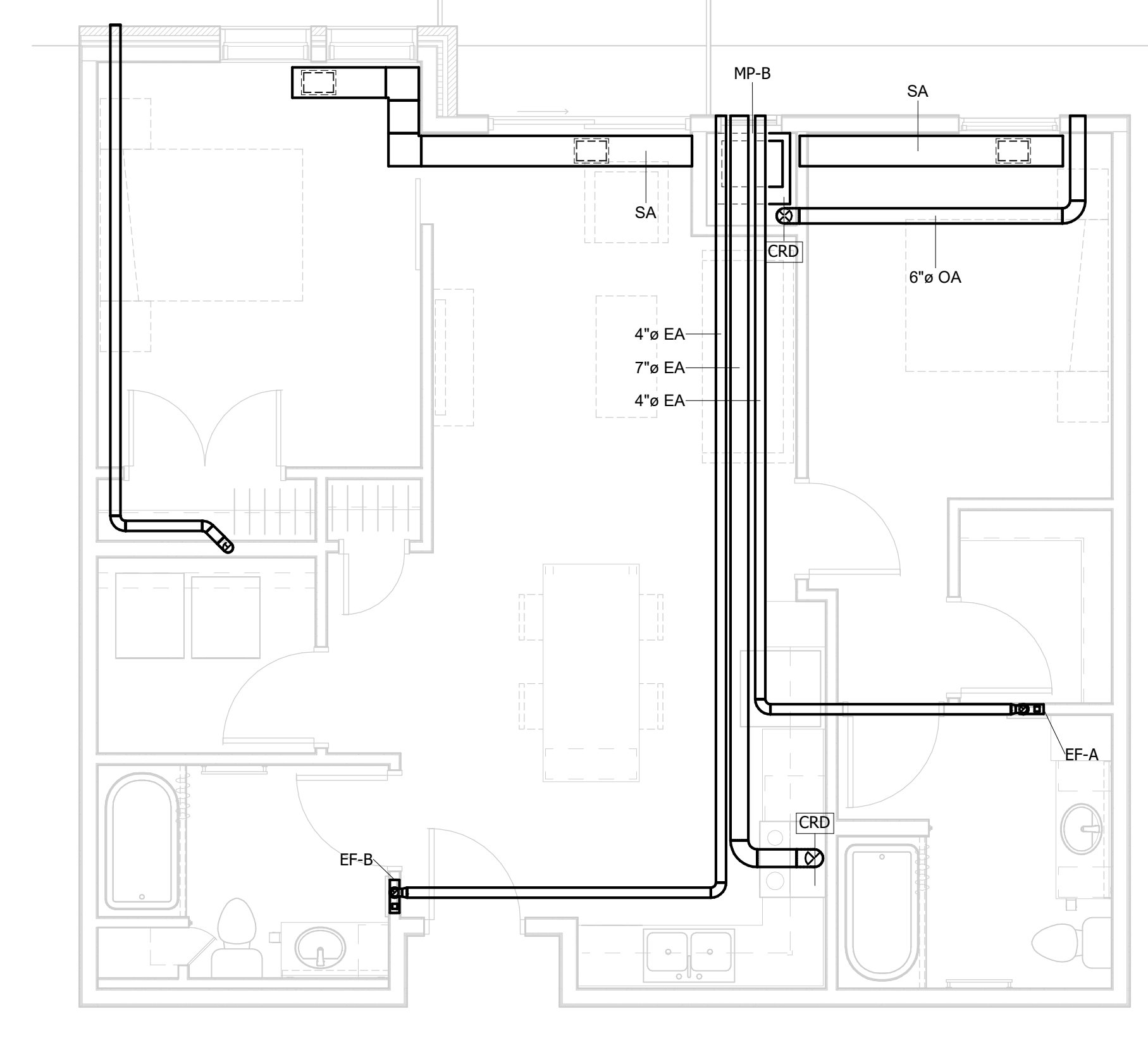
4 UNIT 1D  
0 2' 4' 8'



5 UNIT 2A  
0 2' 4' 8'



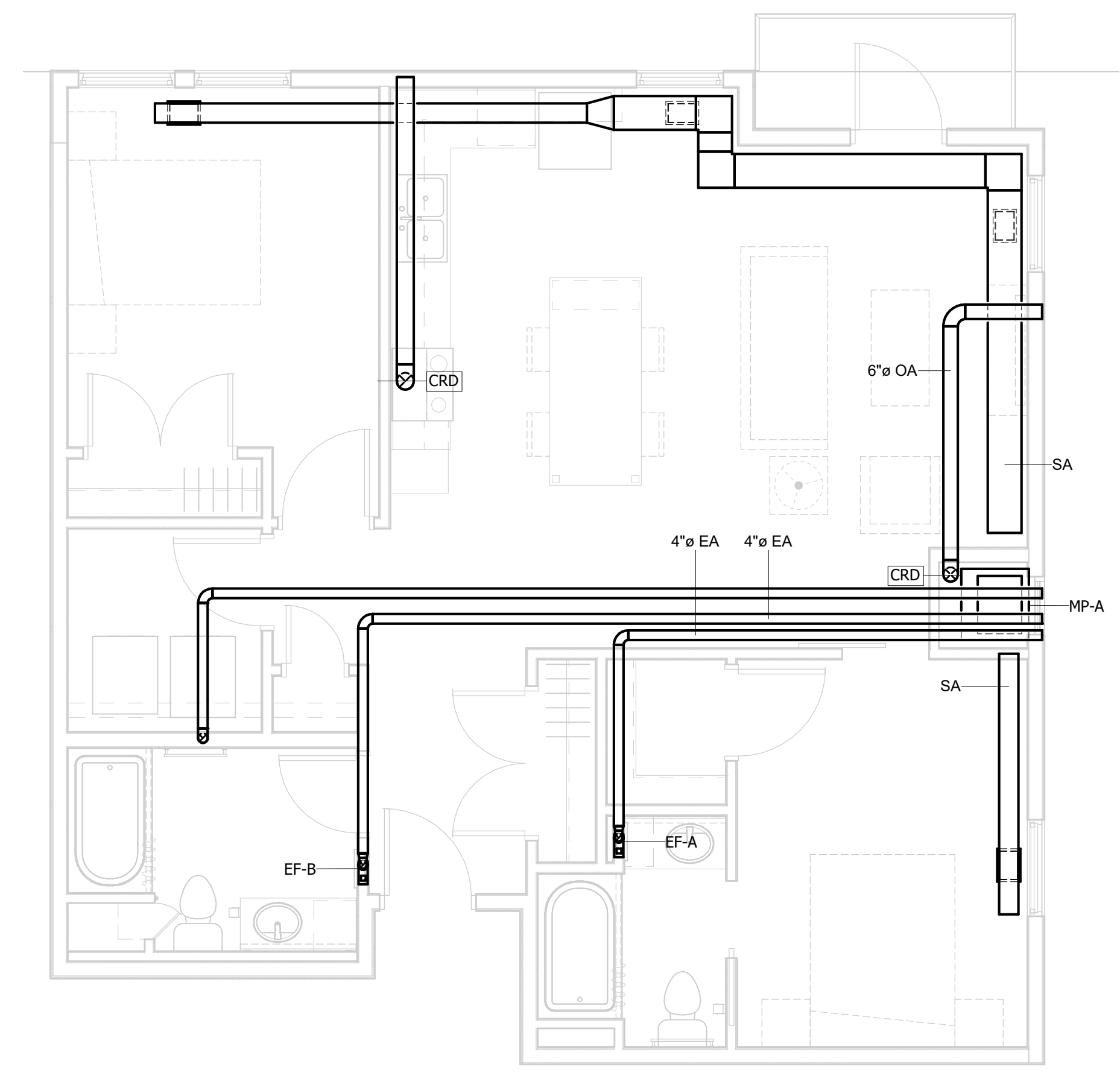
6 UNIT 2B  
0 2' 4' 8'



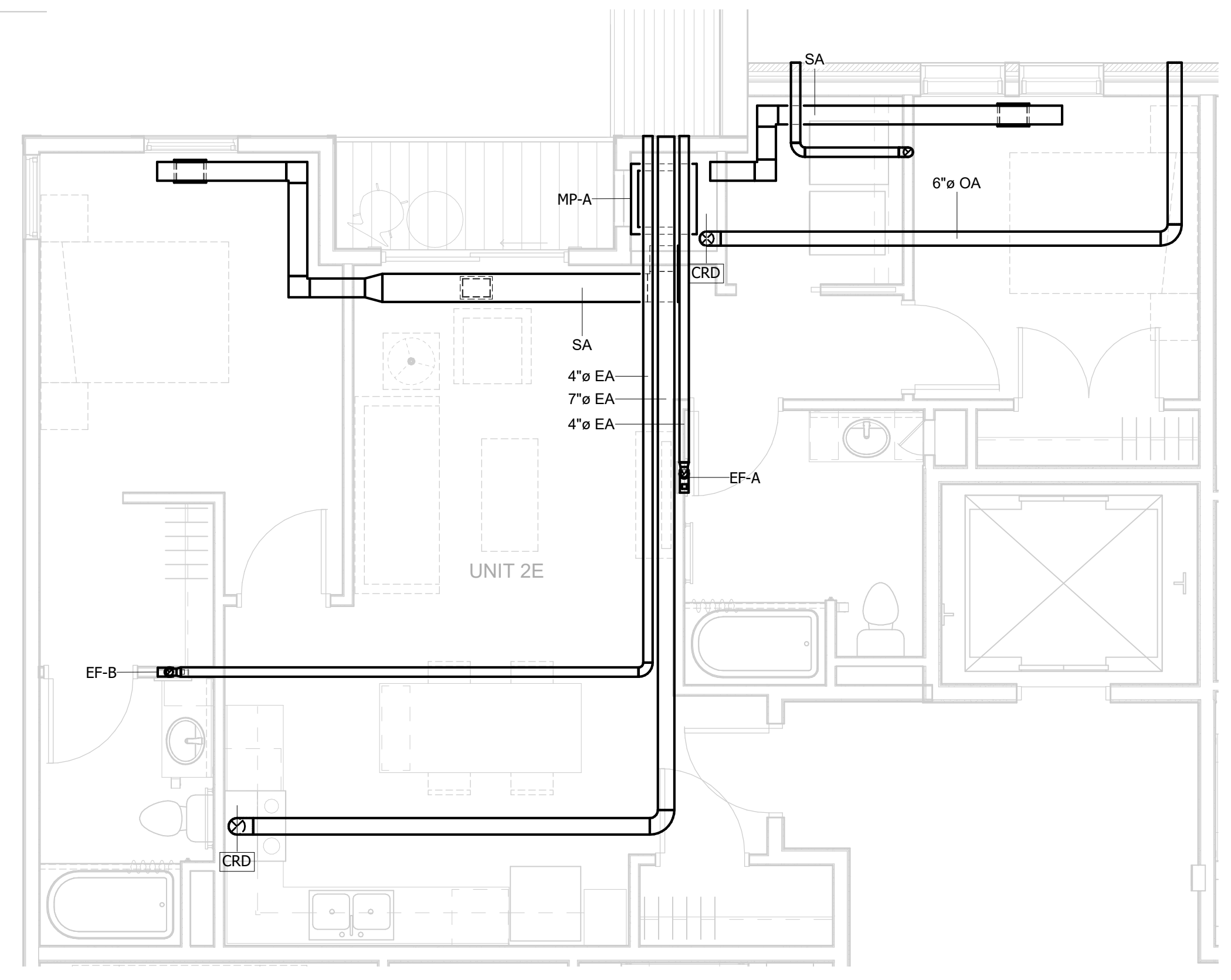
7 UNIT 2C  
0 2' 4' 8'

**PRELIMINARY**  
NOT FOR CONSTRUCTION

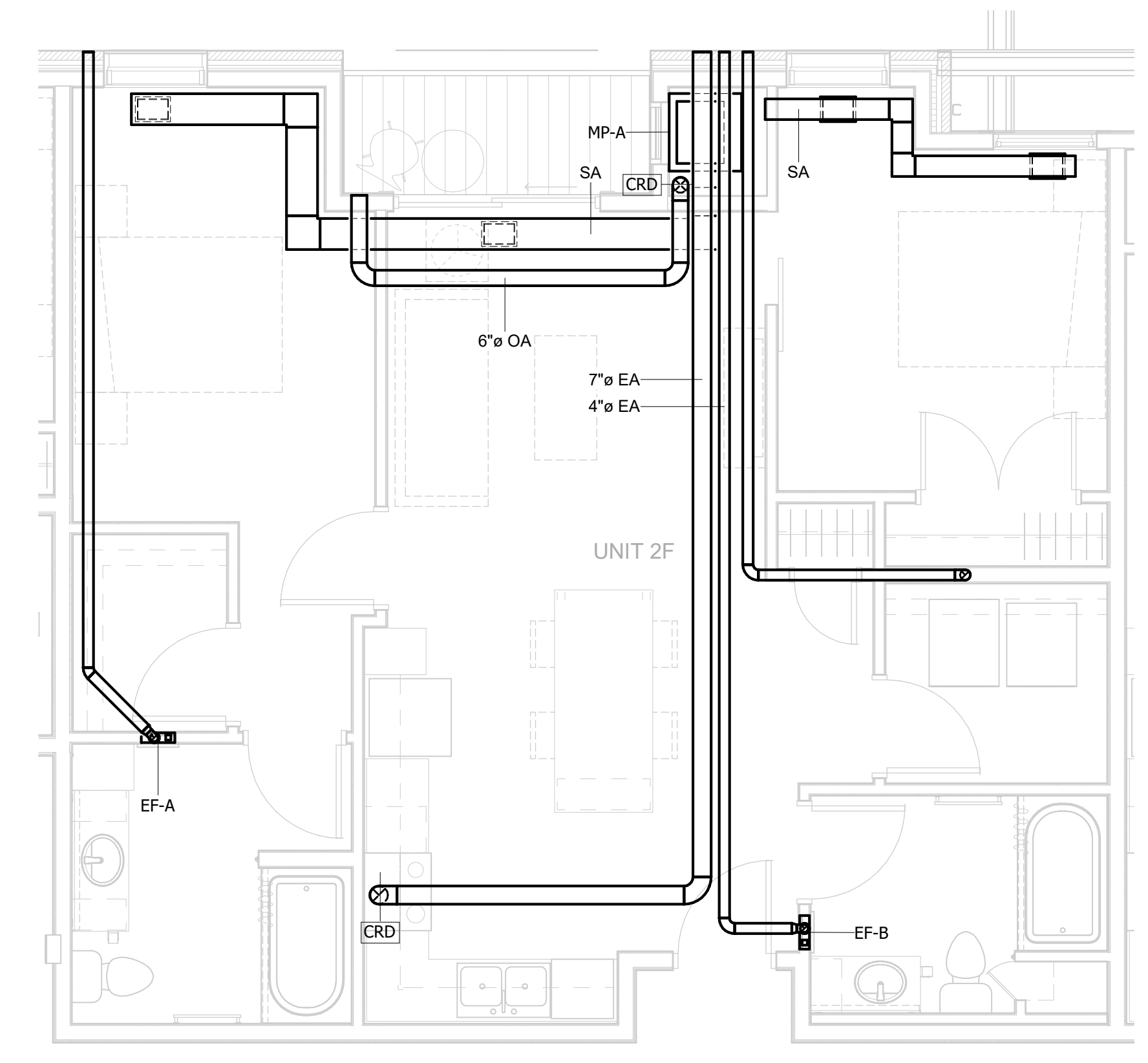
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE



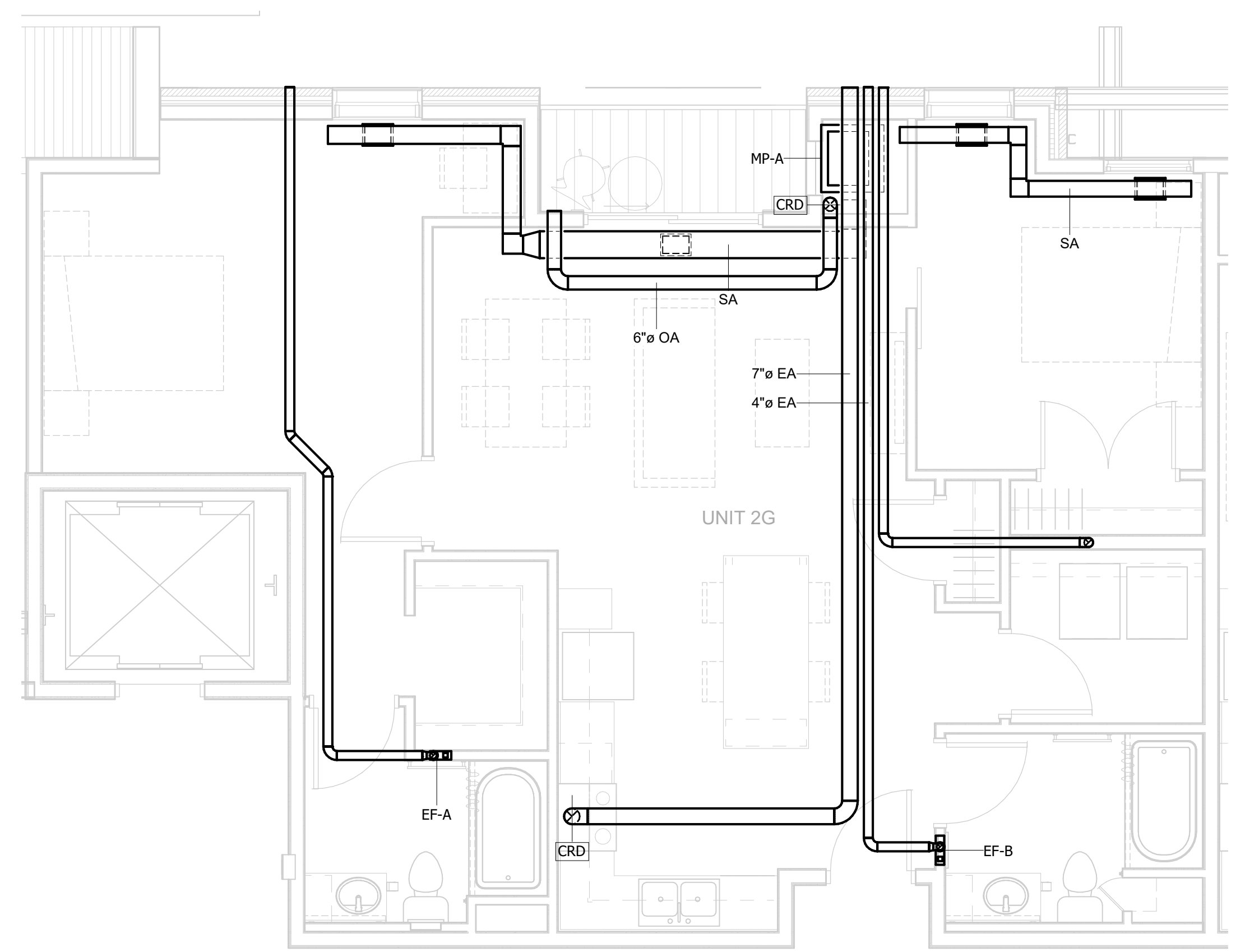
1 UNIT 2D  
0 2' 4' 8'



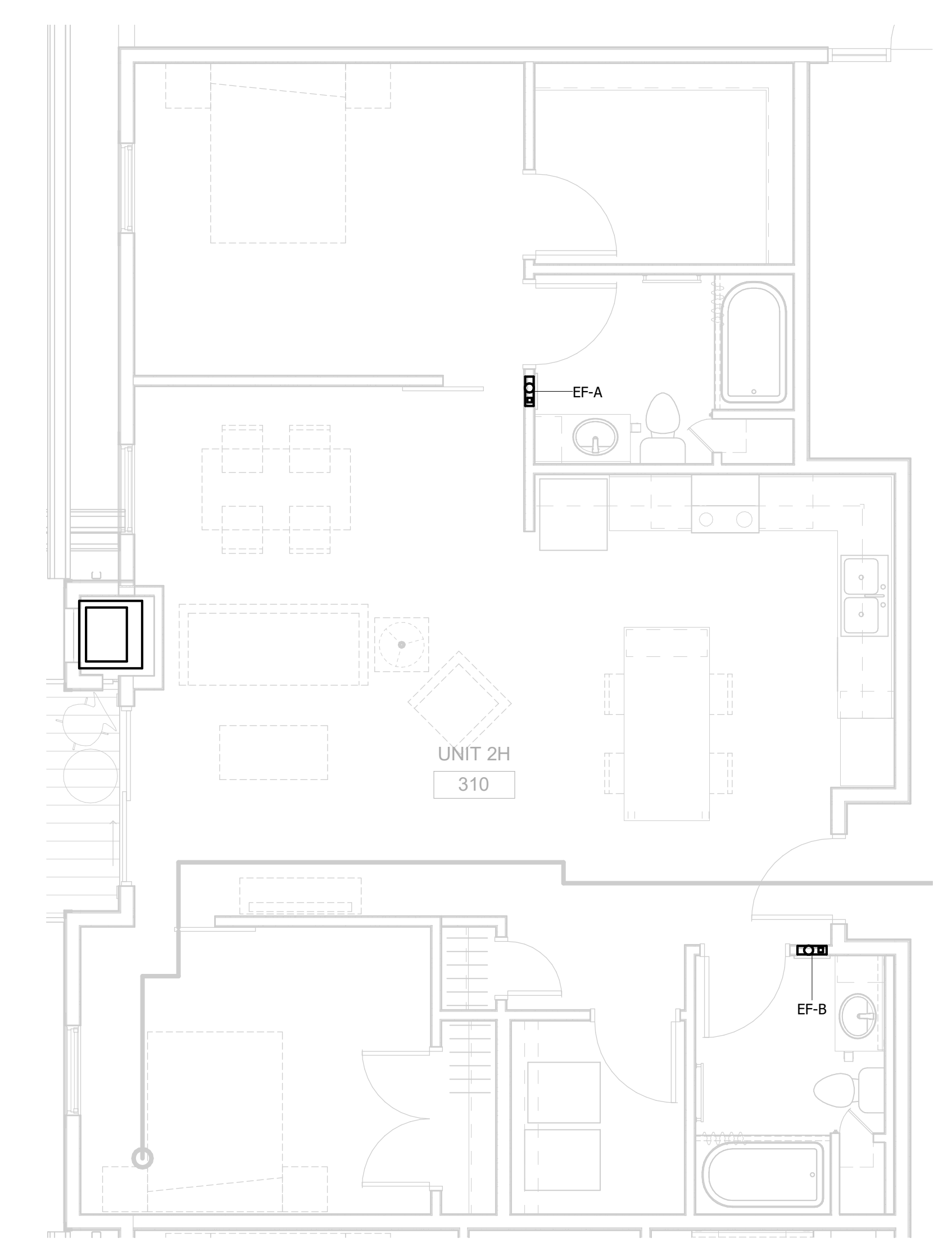
2 UNIT 2E  
0 2' 4' 8'



3 UNIT 2F  
0 2' 4' 8'



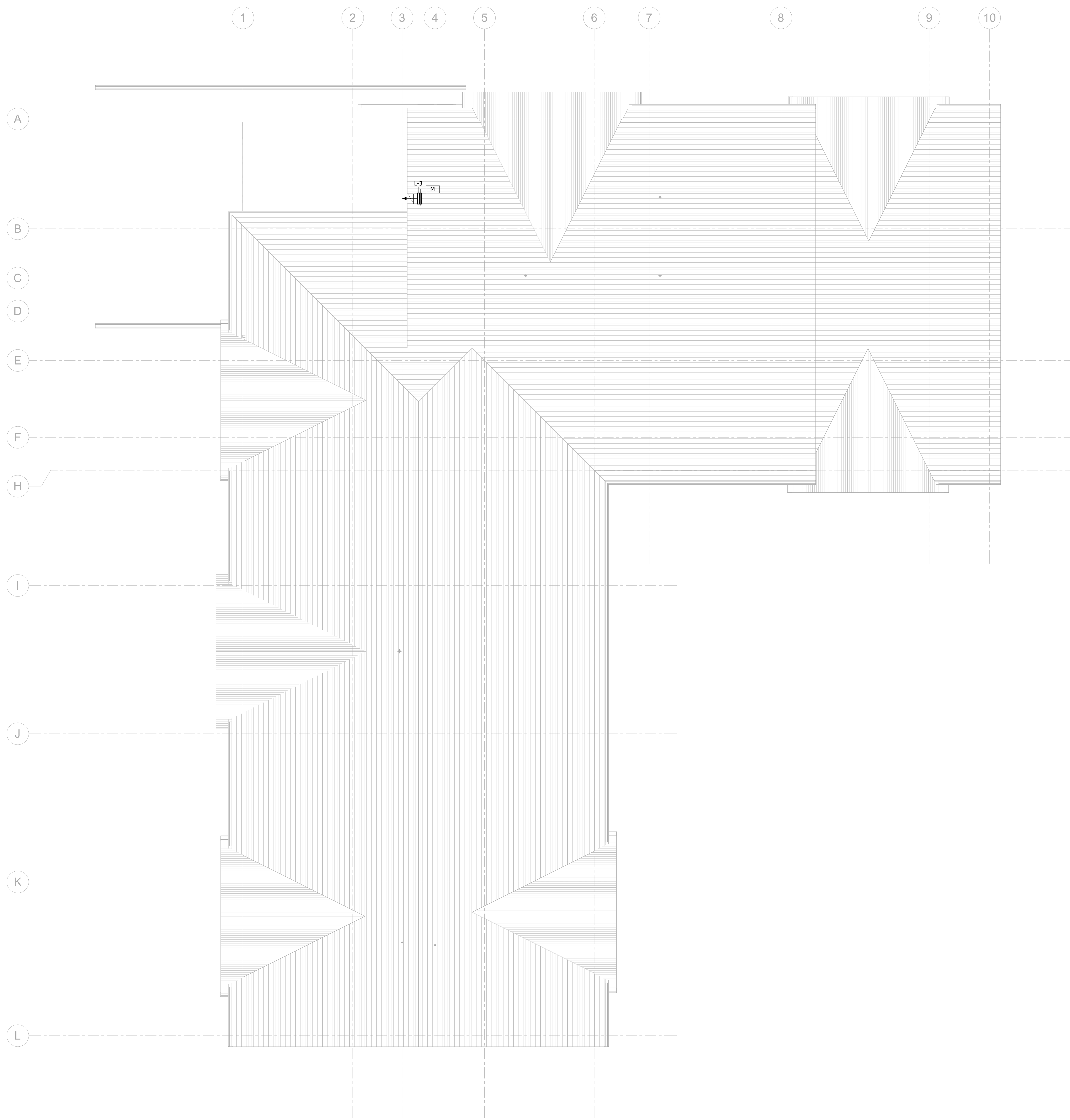
4 UNIT 2G  
0 2' 4' 8'



5 UNIT 2H  
0 2' 4' 8'

**PRELIMINARY**  
NOT FOR CONSTRUCTION

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

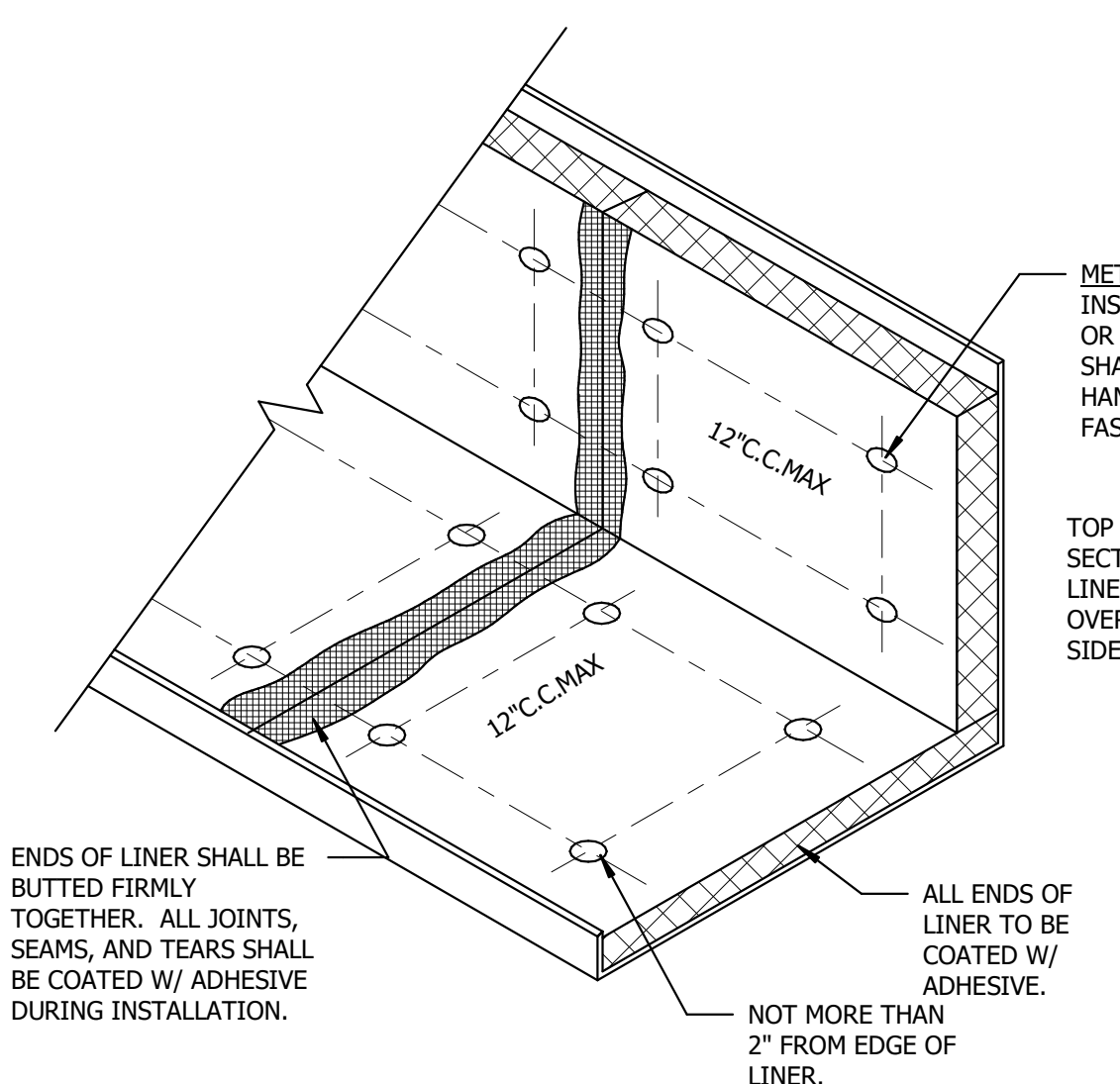


**MECHANICAL ROOF PLAN**  
1  
0' 4' 8' 16'

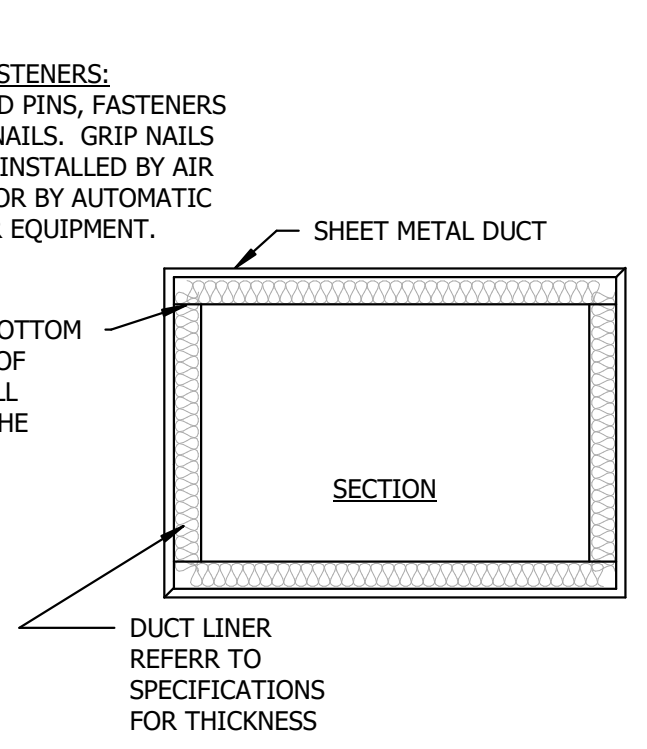
LWO DEVELOPMENT, LLC  
**EASTGATE APARTMENTS**  
OWATONNA, MN

DATE: 04/27/2020  
PHASE: 100% DESIGN DEVELOPMENT  
PROJECT: 02220002

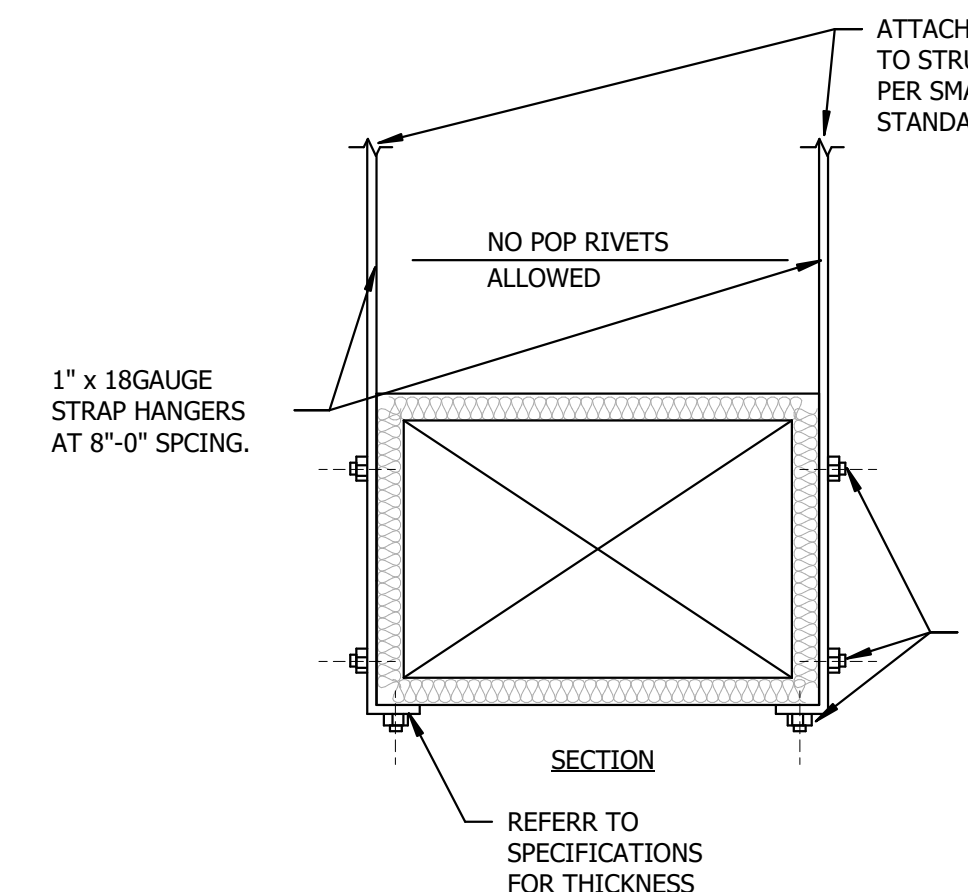
SHEET  
**M501**  
MECHANICAL ROOF PLAN



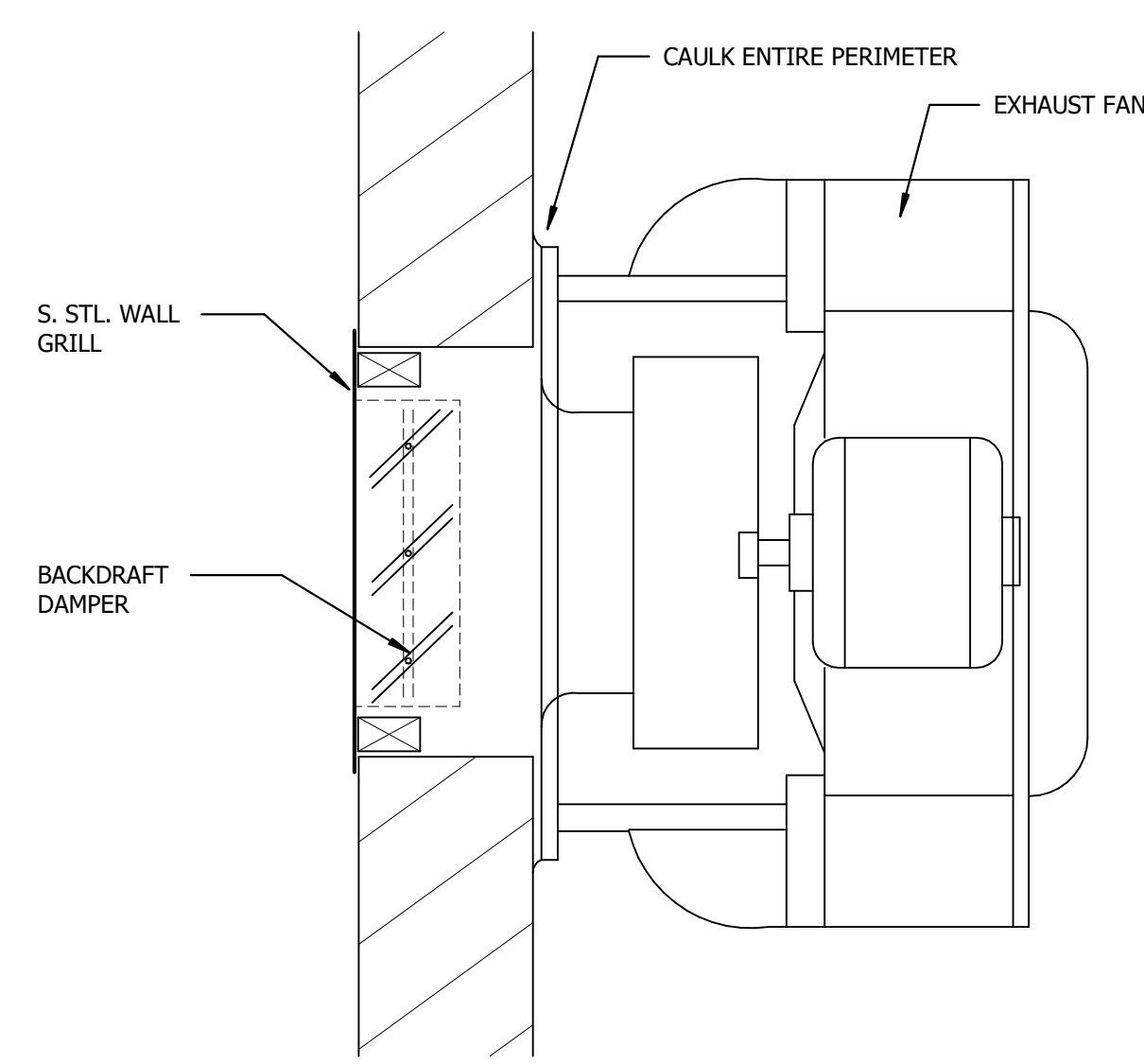
**1** DUCT LINER DETAIL  
NO SCALE



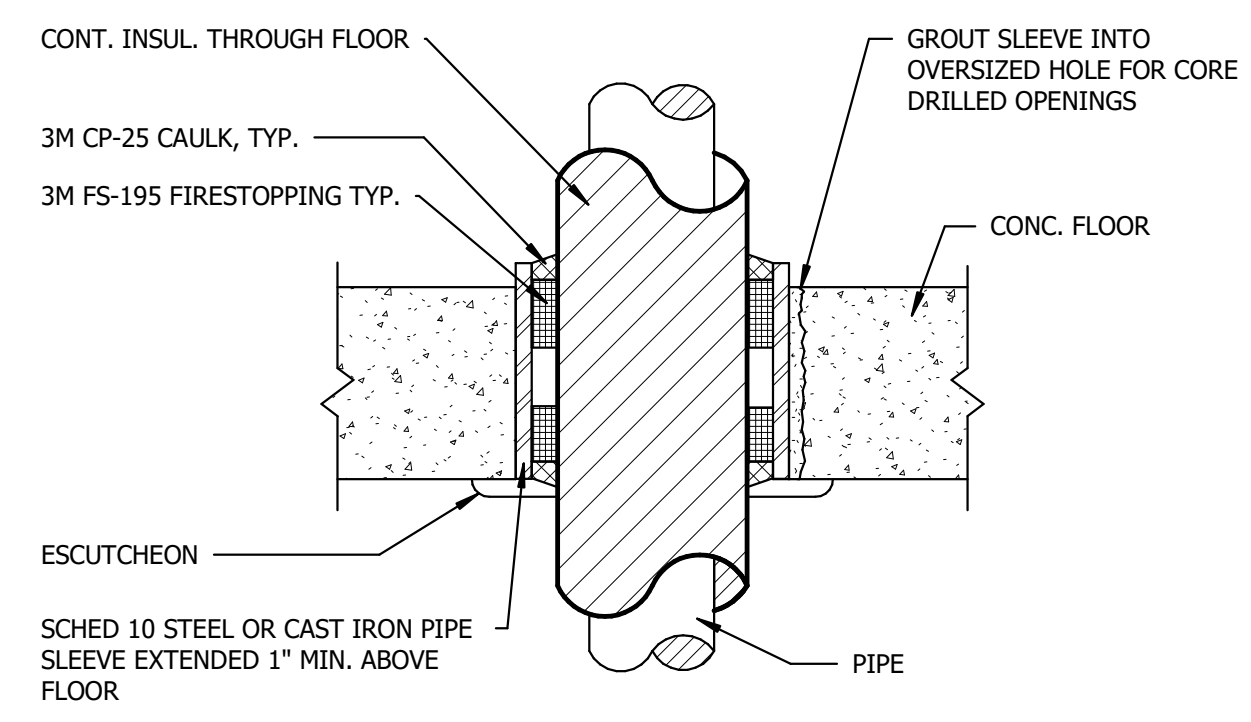
**2** DUCT STRAP HANGER DETAIL  
NO SCALE



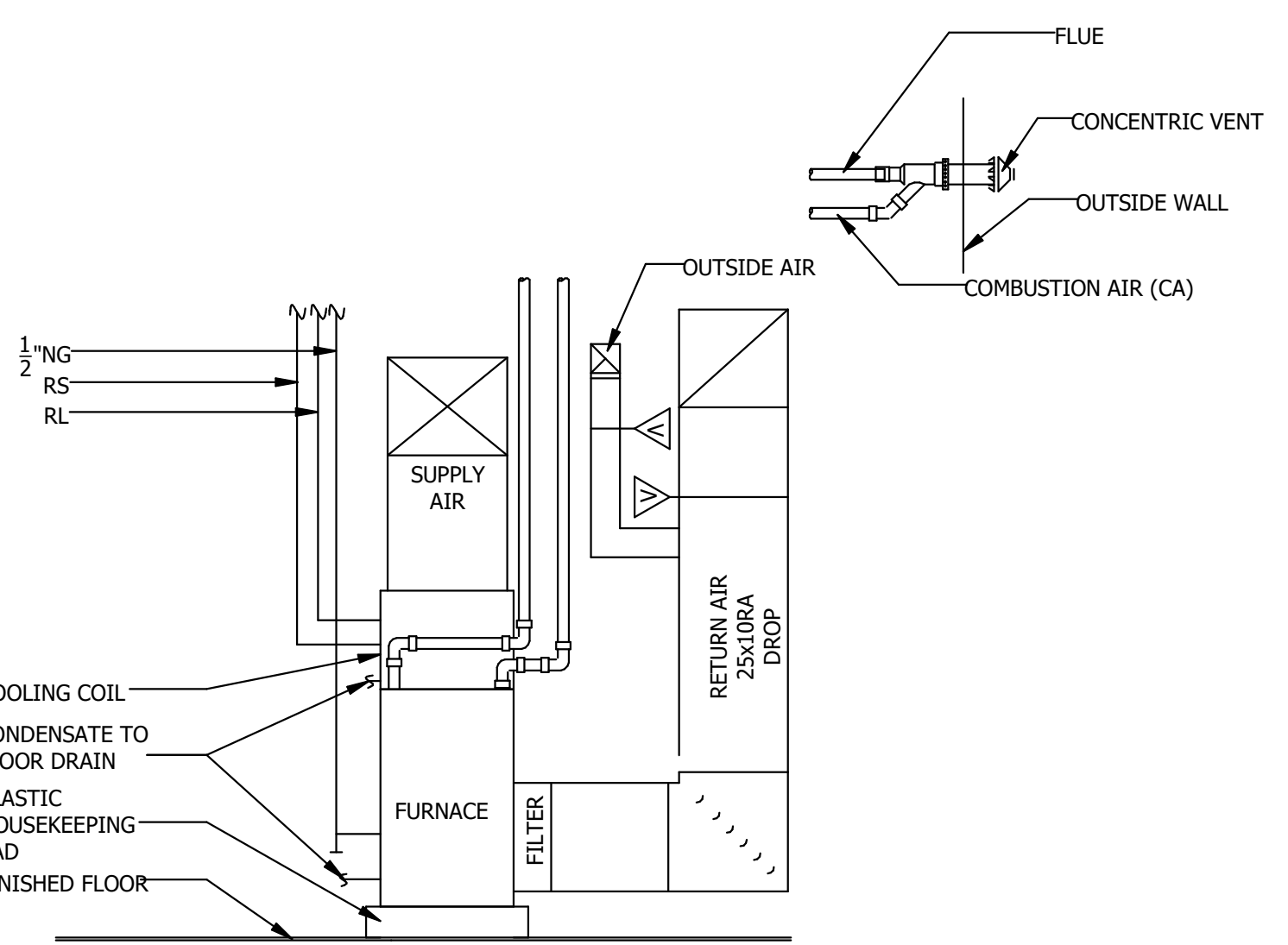
**3** DUCT TRANSITION DETAIL  
NO SCALE



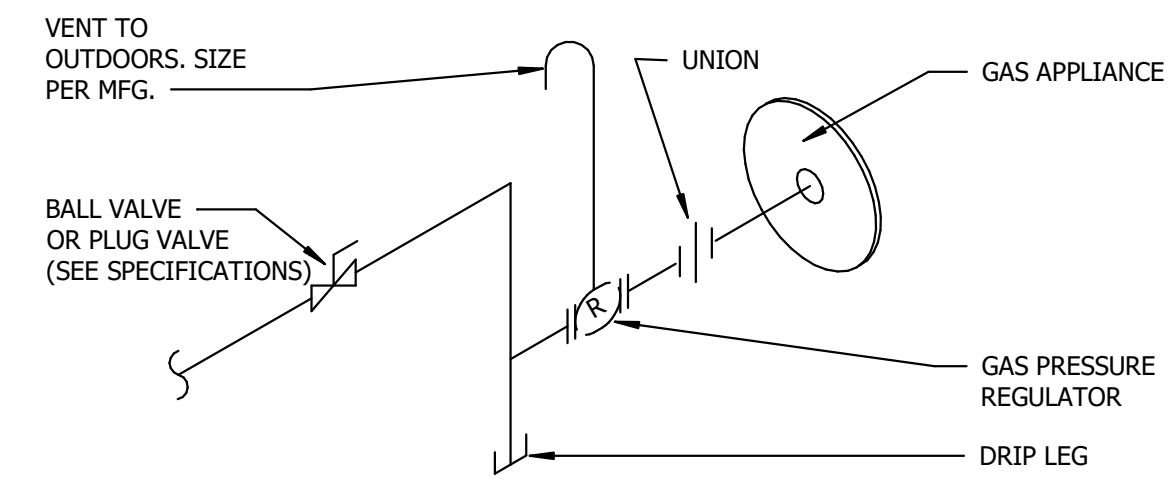
**4** WALL MOUNTED EXHAUST FAN  
NO SCALE



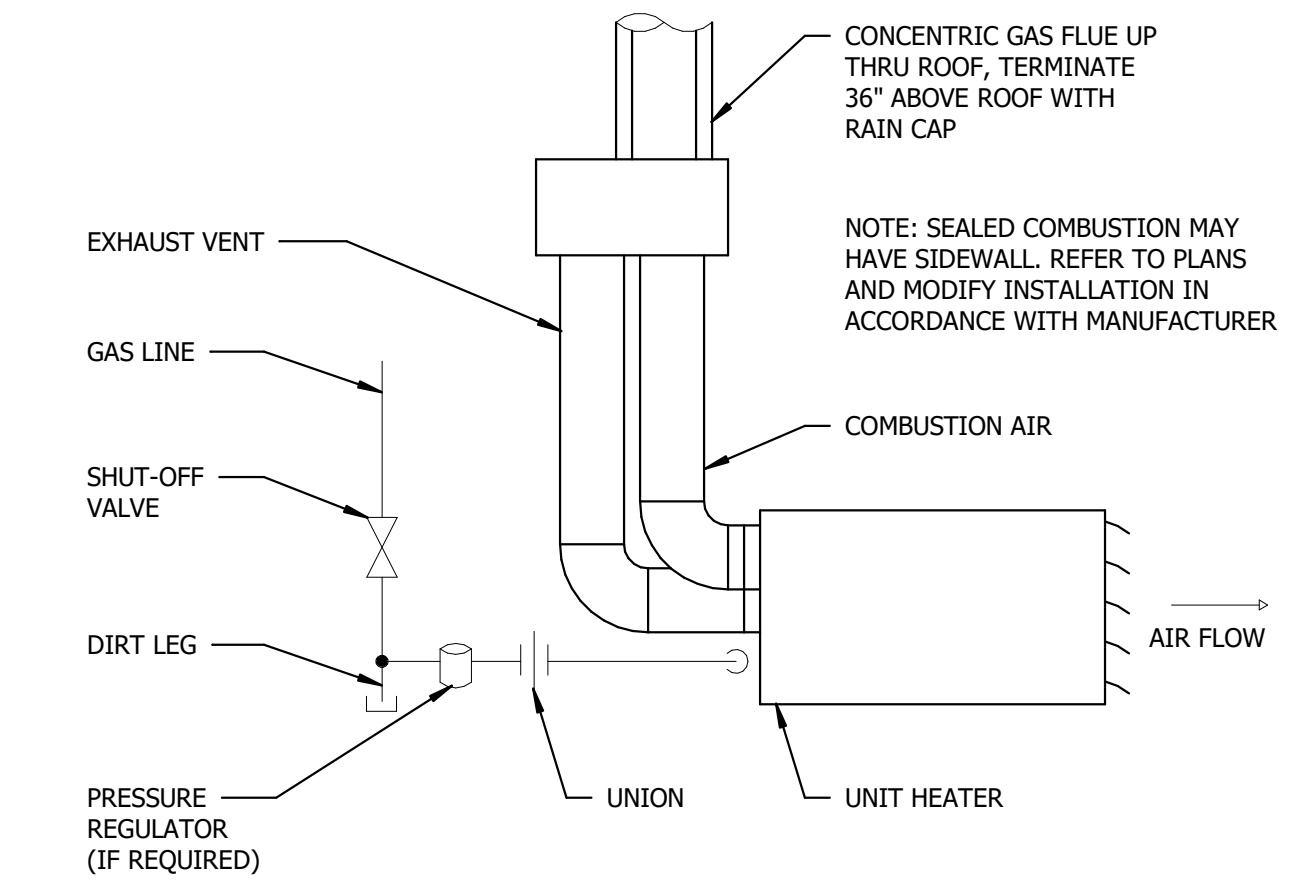
**5** FLOOR PENETRATION  
NO SCALE



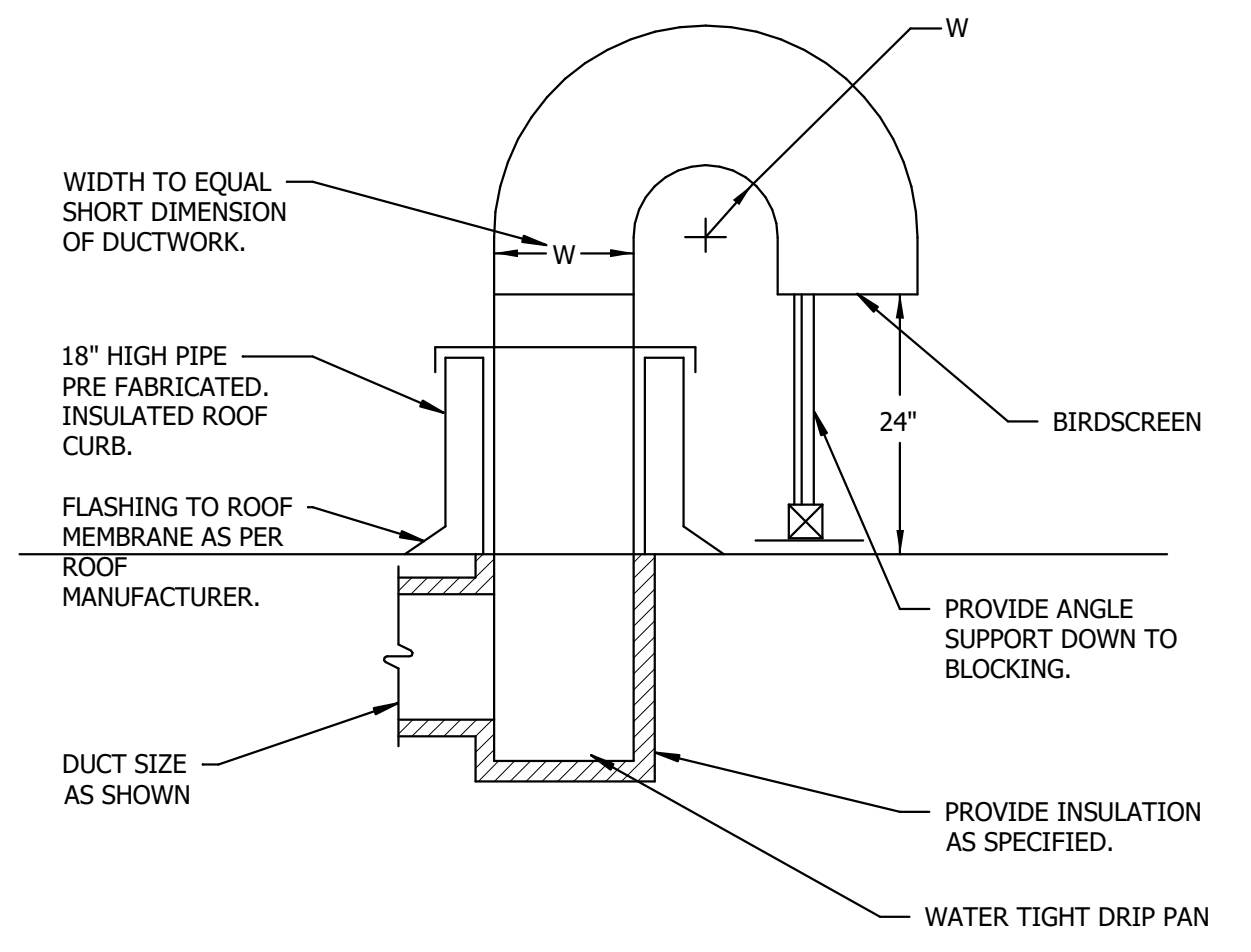
**6** FURNACE DETAIL  
NO SCALE



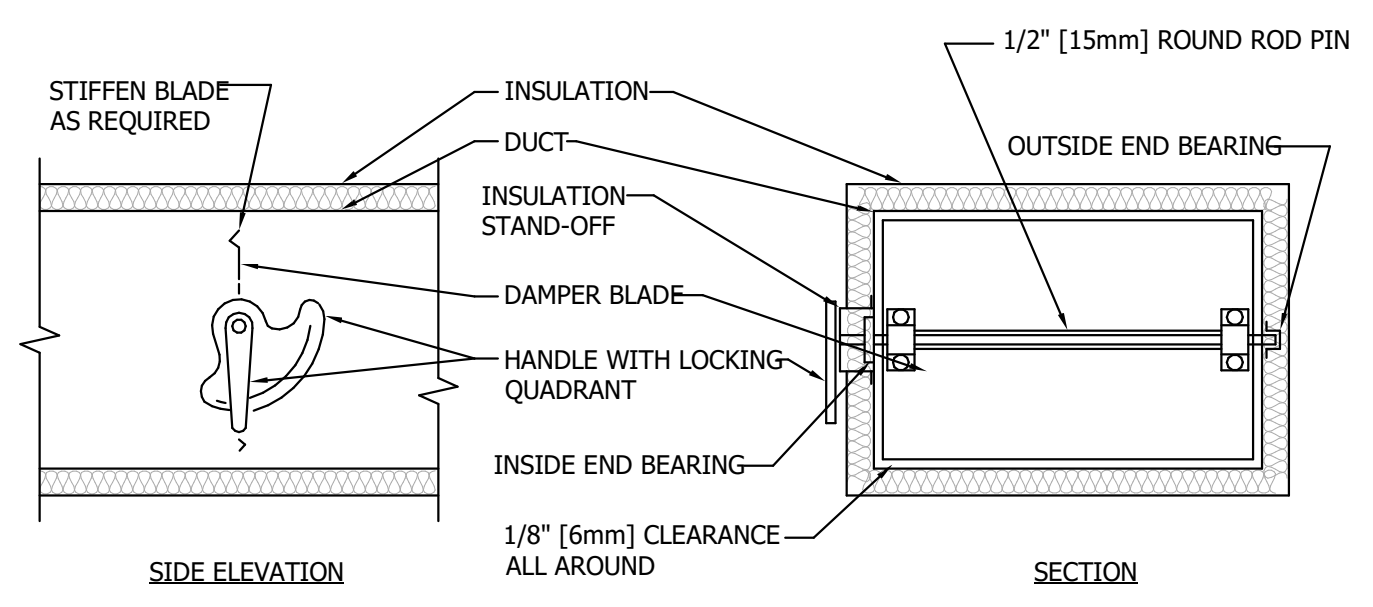
**7** GAS PIPE CONNECTION DETAIL  
NO SCALE



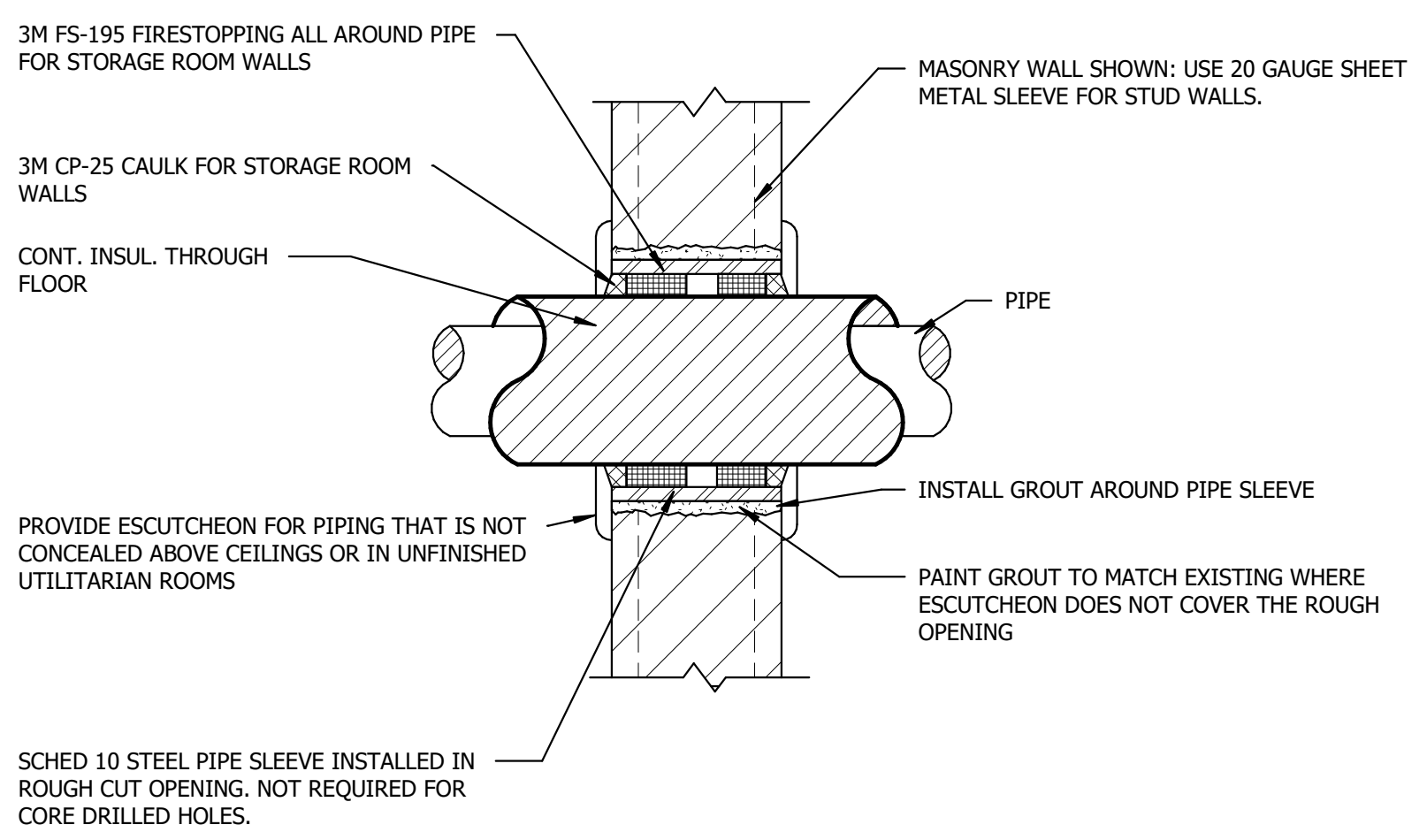
**8** GAS-FIRED UNIT HEATER  
NO SCALE



**9** GOOSENECK DETAIL  
NO SCALE



**10** VOLUME DAMPER DETAIL  
NO SCALE



**11** WALL PENETRATION  
NO SCALE

**LOUVER SCHEDULE**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	CFM	FRAME SIZE (WxH)	FREE AREA (SQ.FT.)	VELOCITY (FPM)	BPWP (FPM)	PRESSURE (IN WG)	NOTES
L-1	GARAGE	GARAGE OA	GREENHECK	ESD-435	10,000	92X50	18.22	549	989	0.05	1
L-2	GARAGE	EF-1	GREENHECK	ESD-435	10,000	82X52	16.79	596	989	0.05	1
L-3	ROOF	HOISTWAY RELIEF	GREENHECK	ESD-435	-	24x36	3.04	-	989	-	1

1. VERIFY LOUVER FINISH WITH ARCHITECT.

**UNIT HEATER SCHEDULE (GAS)**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	HEATING INPUT CAPACITY (BTU/HR)	HEATING OUTPUT CAPACITY (BTU/HR)	THERMAL EFFICIENCY (%)	GAS CONNECTION DIAMETER (INCHES)	VENT CONNECTION DIAMETER (INCHES)	ELECTRICAL DATA										WEIGHT (LBS)	NOTES
										EAT (°F)	LAT (°F)	V	PH	HZ	MHP	FLA					
GUH-1	GARAGE	GARAGE	REZNOR	UDAP-300	300,000	249,000	83	3/4	6	65	125	115	1	60	1/2	11.0	269	-			
GUH-2	GARAGE	GARAGE	REZNOR	UDAP-300	300,000	249,000	83	3/4	6	65	125	115	1	60	1/2	11.0	269	-			

NOTES:

**EXHAUST FAN SCHEDULE**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	FAN TYPE	PERFORMANCE DATA				MOTOR DATA				SOUND DATA			CONTROL	WEIGHT (LBS)	NOTES
						FLOW (CFM)	ESP (IN WG)	RPM	BHP	DRIVE TYPE	MHP	ELECTRICAL DATA			SONES				
												V	PH	HZ					
EF-1	GARAGE	GARAGE	GREENHECK	SBE-2L30-15	SIDEWALL PROPELLER	10,000	0.35	1,725	1.51	BELT	1 1/2	208	3	60	22	VFD	105	-	
EF-2	RESTROOM 004	RESTROOM 004	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH	6.8	-	
EF-3	RESTROOM 005	RESTROOM 005	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH	6.8	-	
EF-4	FITNESS 151	FITNESS 151	GREENHECK	SP/SO	CEILING VENTILATOR	-	0.35	-	-	ECM	-	115	1	60	-	SWITCH	-	-	
EF-5	CUSTODIAL CLOSET 255	CUSTODIAL CLOSET 255	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH	6.8	-	
EF-6	CUSTODIAL CLOSET 354	CUSTODIAL CLOSET 354	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH	6.8	-	
EF-7	TRASH CHUTE	TRASH CHUTE	FANTECH	FG-8	INLINE	200	0.25	2,491	69 W	PSC	FRAC.	120	1	60	7.1	CONTINUOUS	11	-	
EF-A	APARTMENT BATHROOMS	MASTER BATHROOMS	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH/TIMER	6.8	-	
EF-B	APARTMENT BATHROOMS	OTHER BATHROOMS	PANASONIC	FV-0510VS1	WALL	50	0.25	1,025	-	ECM	FRAC.	115	1	60	0.5	SWITCH	6.8	-	

NOTES:  
1. PROVIDE WALL MTD-SPEED CONTROLLER.

**FURNACE SCHEDULE**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	SUPPLY AIR	ESP	SUPPLY FAN HP	MINIMUM OUTDOOR AIR (CFM)	COOLING CAPACITY (MBH)	HEATING INPUT (MBH)	HEATING OUTPUT (MBH)	AFUE	QUANTITY	FUEL TYPE	VOLTAGE/PHASE	MCA	MOP	NOTES
F-1	MECH 006	COMMUNITY ROOM, OFFICE 008	DAIKIN	DM96VE0804CNA	1600	-	3/4	-	48	80	76.8	96	1	NG	120/1	11.6	15	-
F-2	MECH 006	LOBBY	DAIKIN	DM96VE0804CNA	1600	-	3/4	-	48	80	76.8	96	1	NG	120/1	11.6	15	-
F-3	MECH 253	1ST/2ND FL CORRIDOR	DAIKIN	DM96VE0804CNA	1600	-	3/4	-	48	80	76.8	96	1	NG	120/1	11.6	15	-
F-4	MECH 352	3RD FL CORRIDOR	DAIKIN	DM96VE0603CNA	1200	-	1/2	-	36	60	57.6	96	1	NG	120/1	8	15	-

NOTES:

**SPLIT SYSTEM UNIT SCHEDULE**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	STYLE	INDOOR UNIT			ELECTRICAL DATA				DIMENSIONS			QUANTITY	OPERATING WEIGHT (LBS)	NOTES
						SUPPLY AIR FLOW	ESP (IN H2O)	MIN. OUTSIDE AIR (CFM)	V	PH	HZ	MCA	H (IN)	W (IN)	D (IN)			
HVAC-1	FITNESS	FITNESS	CARRIER	40MBDQ24-3	DUCTED	800	-	-	208	1	60	1.2	44	10	31	1	-	-

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	OUTDOOR HEAT PUMP UNIT				EFFICIENCIES				ELECTRICAL DATA				QUANTITY	OPERATING WEIGHT (LBS)	NOTES			
					COOLING... NOM. CAP. @ 95°F	HEATING DATA (MBH) NOM. CAP. @ 47°F	@ 20°F	@ 5°F	@ -4°F	ENERGY STAR	SEER	EER	HPSF	COP	V	PH				HZ	MCA	MOP
HP-1	GARAGE	HVAC-1	CARRIER	38MAQB24-3	24.0	29.2	21.9	16.4	13.2	YES	19.0	12.5	10.5	3.2	208	1	60	15	25	1	-	-

NOTES:

**MAGIC-PAK SCHEDULE (DX/GAS)**

UNIT TAG	LOCATION/SERVES	MFGR.	MODEL	SUPPLY AIR VOLUME (CFM)	MIN. OUTDOOR AIR (CFM)	COOLING		HEATING		ELECTRICAL DATA				QUANTITY	DIMENSIONS			UNIT WEIGHT (LBS)	QUANTITY	NOTES	
						CAPACITY (MBH)	EER	INPUT (MBH)	OUTPUT (MBH)	THERMAL EFFICIENCY	V/PH/HZ	HP	MCA		MOP	LENGTH (IN)	WIDTH (IN)				HEIGHT (IN)
MP-A	APARTMENT UNITS	MAGIC-PAK	HWC9N2211P12	400	-	11.8	11.0	22.0	20.5	95%	208/1/60	1/2	7.4	15	14	29	27	43	290	-	1, 2
MP-B	APARTMENT UNITS	MAGIC-PAK	HWC9N3311P18	600	-	17.0	11.0	33.0	31.0	94%	208/1/60	1/2	10.7	15	22	29	27	43	310	-	1, 2

NOTES:  
1. REFER TO VENTILATION CALCULATIONS FOR MINIMUM OUTDOOR AIR REQUIRED.  
2. PROVIDE CONDENSATE NEUTRALIZATION KIT.

**AIR-COOLED CONDENSING UNIT SCHEDULE**

UNIT TAG	LOCATION	SERVICE	MFGR.	MODEL	COOLING DATA			REFRIGERANT	COMPRESSOR DATA		ELECTRICAL DATA				OPERATING WEIGHT	NOTES	
					COOLING CAPACITY (MBH)	AMBIENT TEMP. (°F)	SEER		QTY.	TYPE	V	PH	HZ	MCA			MOP
CU-1	LL2 GARAGE	F-1	CARRIER	24AB8348ABN3	48	95	13	R-410A	1	SCROLL	208	1	60	28.4	40	197	-
CU-2	LL2 GARAGE	F-2	CARRIER	24AB8348ABN3	48	95	13	R-410A	1	SCROLL	208	1	60	28.4	40	197	-
CU-3	LL2 GARAGE	F-3	CARRIER	24AB8348ABN3	48	95	13	R-410A	1	SCROLL	208	1	60	28.4	40	197	-
CU-4	LL2 GARAGE	F-4	CARRIER	24AB8336ABN3	36	95	13	R-410A	1	SCROLL	208	1	60	21.9	35	167	-

NOTES:

E  
D  
C  
B  
A