



PACKAGED ROOF TOP UNIT SCHEDULE

(LENNOX MODELS TO BE SPECIFIED)

Table with columns: UNIT SYMBOL, LOCATION, BLOWER (SA CFM, TSP), COOLING (TOTAL, SENSIBLE, AMBIENT, COIL ENTERING), HEATING, ELECTRICAL (POWER SUPPLY, COMPRESSOR, CONDENSER MOTOR, EVAPORATOR MOTOR, MIN. CIRCUIT AMPACITY). Includes notes on installation and performance.

EXHAUST FAN SCHEDULE

Table with columns: FAN NO., LOCATION, AREA SERVED, FAN DUTY, FAN TYPE, FAN ARRANGEMENT, MIN. WHEEL DIAMETER, PERFORMANCE (C.F.M., T.S.P., B.H.P., FAN R.P.M., MOTOR H.P.), MOTOR (ELEC. CHARACTERISTICS, MOTOR R.P.M., MOTOR SPECIAL FEATURES), ACCESSORIES, MANUFACTURER.

HVAC CONTROL SETTINGS

EACH HVAC UNIT SHALL BE PROVIDED WITH CONTROLS AS FOLLOWS:
THERMOSTAT: LENNOX COMMERCIAL PROGRAMMABLE THERMOSTAT WITH REMOTE TEMPERATURE SENSOR.
ALL THERMOSTATS SHALL HAVE MANUAL OVERRIDE.
CONTRACTOR SHALL DETERMINE OCCUPIED PERIOD FROM OWNER.
PROGRAMMED SETPOINTS (FOR EACH THERMOSTAT):
COOLING OCCUPIED: 75°F.
COOLING UNOCCUPIED: 85°F.
HEATING OCCUPIED: 68°F.
HEATING UNOCCUPIED: 50°F.

AIR CURTAIN SCHEDULE

Table with columns: EQUIP., MFR/MODEL, DESCRIPTION. Includes MARS STD242-1U-0B and QUICK-SERV CF-25.

MA-1 CONTROL SETTINGS

EACH UNIT CONTROL SHALL BE SET UP INITIALLY AS FOLLOWS:
FAN OPERATION SHALL BE CONTINUOUS DURING COOKING OPERATION INTERLOCK WITH KITCHEN EXHAUST FANS.
PROGRAMMED SETPOINTS:
COOLING: 85°F.
HEATING: 55°F.

MAKE-UP AIR UNIT SCHEDULE

Table with columns: MARK, MFR/MODEL, LOCATION, SERVICE AREA, GAS HEAT, TYPE, COOLING, CFM, ESP, MOTOR, REMARKS.

DIFFUSER & GRILLE SCHEDULE

Table with columns: DESIGNATION, MANUFACTURER, MODEL NO, TYPE, COLOR, NOM NECK SIZE, NOM FACE SIZE, FRAME TYPE, NC MAX, REMARKS.

NOTES:
*ALL SURFACE MOUNTED AIR DEVICES ARE FACTORY #26 WHITE FINISH AND ARE FIELD PAINTED AS NEEDED TO MATCH CEILING COLOR.
*ALL F AND H AIR DEVICES ARE TO BE FACTORY #26 WHITE FINISH FOR HOME STORE DESIGN AND FACTORY PANDA BRONZE FINISH FOR TRUE WARM & WELCOME DESIGN.

AIR BALANCE SCHEDULE

Table with columns: ITEM, SUPPLY AIR, RETURN AIR, MAKE-UP AIR, EXHAUST.

OSA VENTILATION CALCULATION-IMC 2018

Table with columns: AREA TYPE, TOTAL AREA (FT²), OCCUPANCY DENSITY (PEOPLE/FT²), TOTAL OCCUPANTS, OSA REQ'D PER SQ.FT. (CFM), OSA REQ'D PER PERSON (CFM), OSA REQ'D FOR THIS OCCUPANCY CLASSIFICATION (CFM).

BUILDING PRESSURE = +290 CFM

BALANCE TOLERANCES AS FOLLOWS:
KITCHEN EXHAUST HOODS: 0% TO +10%
OUTDOOR AIR: 0% TO +10%
SUPPLY & RETURN DIFFUSERS: ±10%
TOILET EXHAUST: ±10%
BALANCE RTU SUPPLY AND RETURN PRIOR TO TURNING ON EXHAUST FANS.
KITCHEN EXHAUST FANS SHALL BE BALANCED WITH VELOCITY MATRIX OR A 4" ANEMOMETER

MECHANICAL LEGEND

Table with columns: SYMBOL, ABBREVIATION, DESCRIPTION.

MECHANICAL SPECIFICATIONS

- 1. WORK INCLUDES INSTALLATION OF HVAC SYSTEMS, INCLUDING GREASE EXHAUST FANS AND MAKE-UP AIR UNIT FOR KITCHEN HOODS, SPACE HEATING/AIR CONDITIONING SYSTEMS, SUPPLY, RETURN, EXHAUST, AND GREASE EXHAUST DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, COMPLETE CONTROLS SYSTEM, INTERLOCK WIRING FOR OPERATION OF KITCHEN HOODS, EXHAUST FANS, AND MAKE-UP AIR UNIT, DUCT INSULATION, AND RELATED ITEMS NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM AS INDICATED ON THE PLANS.
2. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND REQUIRED EQUIPMENT. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS.
3. CODE COMPLIANCE: ALL WORK COVERED BY THIS SECTION SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
4. COORDINATE WORK WITH OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS AND OWNER REQUIREMENTS. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR INSTALLATION AND/OR TRADE COORDINATION.
5. DUCTWORK: DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED, SEALED AND INSULATED AS PROVIDED IN THE INT'L ENERGY AND MECHANICAL CODES.
6. INSTALL DUCT HIGH AS POSSIBLE WITHIN JOIST SPACE. CONSULT ARCHITECT AND ENGINEER FOR ALTERNATE ROUTING IF CONFLICT OCCURS.
7. SEAL ALL TRANSVERSE AND LONGITUDINAL DUCT SEAMS AIR-TIGHT. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 30 DEGREES.
8. GREASE EXHAUST SYSTEM: ALL GREASE EXHAUST DUCTS SHALL BE PREFABRICATED CAPTIVEAIRE DOUBLE WALL GREASE DUCT. PROVIDE RATED ACCESS DOORS AT ALL ELBOWS AND OFFSETS NECESSARY FOR COMPLETE CLEANING OF GREASE DUCT.
9. DUCT INSULATION: PROVIDE DUCT WRAP FOR ALL DUCTS ABOVE CEILING, INCLUDING VERTICAL, HORIZONTAL, RIGID AND FLEXIBLE DUCTS.
10. FLEX DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER.
11. PROVIDE INSULATION APPLIED TO COMPLETE BACKPAN OF AIR DEVICES.
12. ACCESS DOOR: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE SHOWN AND AS REQUIRED FOR ACCESS TO DAMPERS OR EQUIPMENT.
13. AUTOMATIC TEMPERATURE CONTROL: CONTRACTOR TO PROVIDE AND INSTALL 24/7 PROGRAMMABLE THERMOSTATS AND REMOTE SENSORS.
14. KITCHEN HOOD EQUIPMENT INTERLOCK: PROVIDE ALL INTERLOCK AND CONTROL WIRING FOR KITCHEN HOOD SYSTEMS, WHICH INCLUDES EF1, EF2, MAU1 AND ANSUL SYSTEM SHUT DOWN INTERLOCK TO MAKE-UP AIR FAN.
15. TEST AND ADJUST EACH PIECE OF EQUIPMENT AND EACH SYSTEM AS REQUIRED TO ASSURE PROPER AIR BALANCE AND OPERATION.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ECONOMIZERS INCLUDING INSTALLATION OF ALL NECESSARY SENSORS AND CONNECTIONS TO THERMOSTAT.

M-000

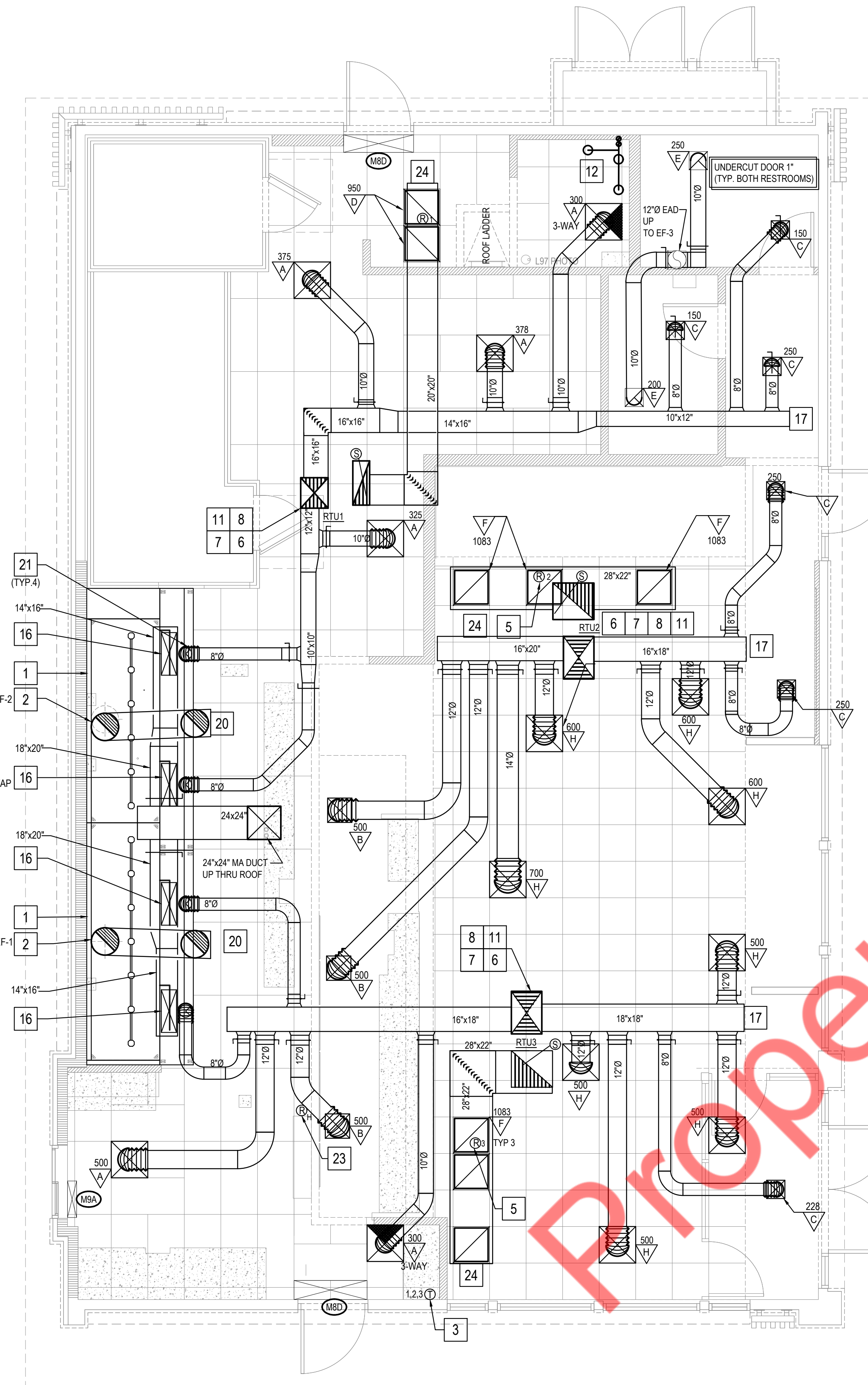
MECHANICAL NOTES SPECIFICATIONS & SCHEDULES



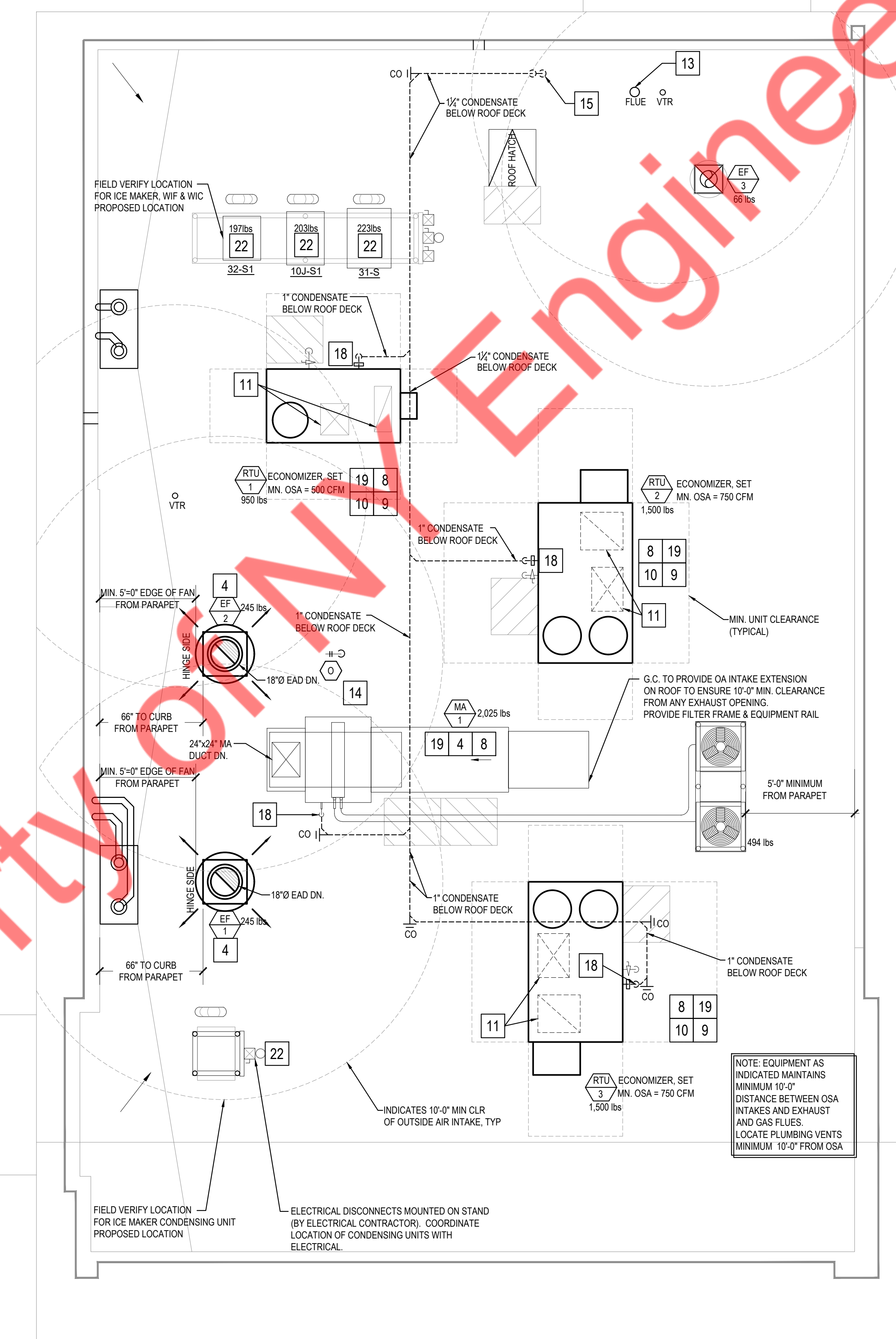
MECHANICAL KEY NOTES:

- 1 INSTALL GREASE EXHAUST HOODS FURNISHED BY PANDA. HOOD SHALL BE ONE CAPTIVEAIRE 4824-ND HOOD EXHAUSTING 3,450 CFM. SUPPORT FROM STRUCTURE ABOVE WITH UNISTRUT AND ALL THREAD ROD. MOUNT HOOD PER LOCAL CODE REQUIREMENTS. REFER TO PLAN FOR HOOD CONNECTIONS. SEE CODE COMPLIANCE DRAWINGS ON SHEET M-500 AND CAPTIVEAIRE HOOD DRAWINGS FOR ADDITIONAL REQUIREMENTS. (TWO SECTIONS TOTAL).
- 2 INSTALL MANUFACTURED CAPTIVEAIRE 18" GREASE EXHAUST DUCT. ROUTE ON TOP OF MAKE UP AIR DUCT. FROM INLET OF ROOF MOUNTED GREASE EXHAUST FAN, CONNECT TO EXHAUST HOOD COLLAR. FIELD VERIFY. SEAL DUCT TO THE ROOF CURB WITH FIRE CAULKING. SEE HOOD DETAIL DRAWINGS ON SHEET M-500 AND CAPTIVEAIRE DRAWINGS ON SHEETS M-400 TO M-411.
- 3 MOUNT THERMOSTAT AT MANAGER STATION. REFER TO DETAIL #1 ON SHEET E-200. SEE DWG FOR EXACT LOCATION OF REMOTE SENSOR. SEE ROOFTOP UNIT SCHEDULE AND TEMPERATURE CONTROL DIAGRAM DETAIL 5 ON SHEET M-501 FOR ADDITIONAL INFORMATION.
- 4 INSTALL GREASE EXHAUST FAN WITH CURB (EF-1 AND EF-2) AND MAKE UP AIR (MA-1) FURNISHED BY PANDA. COORDINATE LOCATION OF UNIT WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 5 PROVIDE AND INSTALL A REMOTE SENSOR FOR ROOFTOP UNIT AT THIS LOCATION. MOUNT REMOTE SENSOR IN RETURN AIR DUCTWORK. SEE TEMPERATURE CONTROL DIAGRAM ON SHEET M-501 FOR ADDITIONAL INFORMATION.
- 6 PROVIDE AND INSTALL DUCT MOUNTED SMOKE DETECTOR AT MAIN SUPPLY AIR DUCT PER UMC, SEC. 609, OR AT RETURN AIR DUCT PER IMC, SECTION 806.2.1. DETECTORS SHALL BE INTERLOCKED TO SHUT DOWN ROOFTOP UNITS UPON DETECTION OF SMOKE. PROVIDE ALL CONTROL WIRING NECESSARY TO PERFORM THIS OPERATION.
- 7 PROVIDE FLEXIBLE CONNECTION BETWEEN UNIT, ROUTE DUCT THRU ROOF CURB AND TRUSS.
- 8 FOR GAS OR WATER CONNECTION, SEE PLUMBING DRAWINGS.
- 9 PROVIDE FABRICATED CURB PER MANUFACTURERS REQUIREMENTS AND COORDINATE EXACT LOCATION OF UNIT IN FIELD. SHIM ROOF CURB LEVEL FOR PROPER CONDENSATE DRAINAGE.
- 10 FURNISH AND INSTALL ALL TEMPERATURE CONTROL WIRING FROM THE UNIT TO THE THERMOSTAT OR OTHER CONTROL DEVICES.
- 11 FULL SIZE SA AND RA UP TO RTU. TRANSITION AS REQUIRED TO RTU INLET/OUTLET SIZE.
- 12 PVC COMBINATION VENT AND COMBUSTION AIR PIPING PROVIDED AND INSTALLED BY PLUMBER FOR SEALED COMBUSTION WATER HEATER. REFER TO PLUMBING PLANS.
- 13 WATER HEATER CONCENTRIC VENT TERMINATION. REFER TO PLUMBING PLANS. OFFSET AS REQUIRED FOR CLEARANCE FROM AIR INTAKES.
- 14 ROOF HYDRANT. REFER TO PLUMBING DRAWINGS.
- 15 ROUTE CONDENSATE DRAIN IN CEILING SPACE OVER AND DOWN IN WALL. SLOPE 1/4" PER FOOT. STUB-OUT AND ELBOW DOWN OVER MOP SINK. TERMINATE WITH MINIMUM 2" AIR GAP.
- 16 MA DUCT (BELOW MAKE UP AIR) CONNECT TO 28"x10" RISER FROM SUPPLY PLENUM.
- 17 PROVIDE DUCT EXTERNAL INSULATION WRAP AT TRUNK, TYPICAL.
- 18 CONDENSATE DRAIN LINE DOWN THRU ROOF. REFER TO DETAIL 7/P-500.
- 19 PROVIDE AND INSTALL ALL EQUIPMENT WITH MANUFACTURERS RECOMMENDED CLEARANCES FOR MAINTENANCE. MAINTAIN MINIMUM CLEARANCES TO ELECTRICAL AND SERVICE ACCESS PANELS AND DISCONNECTS.
- 20 GREASE DUCT CLEANOUT LOCATION. PROVIDE ACCESS TO CLEANOUT ABOVE CEILING. REFER TO MECHANICAL SPECIFICATIONS SHEET M-500.
- 21 8" CONNECTION TO HOOD RTU SUPPLY PLENUM COLLAR. BALANCE TO 236 CFM.
- 22 PROVIDE AND INSTALL ACR TUBING, SIZED AND ROUTED PER MANUFACTURERS INSTRUCTIONS. FROM REMOTE REFRIGERANT CONDENSERS TO WALK-IN COOLER AND FREEZER FAN COILS, AND ICE MAKER. TEST, PURGE, EVACUATE AND CHARGE LINES AS REQUIRED BY MANUFACTURER. (START-UP FOR ICE MAKER IS BY OWNER'S REPRESENTATIVE). ROUTE REFRIGERANT LINES THROUGH "ATR HUB" PROVIDED AND INSTALLED BY GC (REFER TO ARCH. ISO 3 AND 4, SHEET A-108). UNITS SECURED TO RACK BY G.C.
- 23 ROOM AIR SENSOR FROM CAPTIVEAIRE HOOD ON BACK OF MENU BOARD WALL, AS CLOSE TO CEILING AS POSSIBLE.
- 24 TRANSITION FULL SIZE RETURN PLENUM DOWN TO GRILLES AS REQUIRED. INSIDE RETURN AIR PLENUM WITH 1" LINER PAINTED FLAT BLACK. RE: 1/M-501

NOTE: MAXIMUM FLEXIBLE DUCT LENGTH ALLOWED SHALL BE PER LOCAL CODE AND AMENDMENTS. IMC HAS NO LIMITATIONS FOR FLEXIBLE DUCT LENGTHS.



HVAC FLOOR PLAN 2
Scale: 1/4"=1'-0" M-100



HVAC ROOF PLAN 1
Scale: 1/4"=1'-0" M-100

M-100

H.V.A.C. FLOOR PLAN & H.V.A.C. ROOF PLAN



FOR QUESTIONS, CALL THE
Southern CA National Accounts
REGION 83
PHONE: (714) 677 - 2963
EMAIL: reg83@captiveaire.com

PATENT NUMBERS
EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435 C.

HOOD INFORMATION - JOB#6711089

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG				
										WIDTH	LENG	HEIGHT	DIA			CFM	VEL	SP	END TO END	ROW
1		4824 ND-2	CAPTIVEAIRE	13' 0"	600 DEG	I	HEAVY	262	3400			4'	18"	3400	1924	-1.202'	0	430 SS WHERE EXPOSED	LEFT	ALONE
2		4824 ND-2	CAPTIVEAIRE	11' 2"	600 DEG	I	HEAVY	260	2900			4'	18"	2900	1641	-0.897'	0	430 SS WHERE EXPOSED	RIGHT	ALONE
3		226 MISC ACPSP-ONLY	CAPTIVEAIRE	11' 9"	300 DEG	I	N/A	0	0								2520	430 SS WHERE EXPOSED	ALONE	ALONE
4		226 MISC ACPSP-ONLY	CAPTIVEAIRE	14' 4"	300 DEG	I	N/A	0	0								2520	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT	
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	SIZE			ELECTRICAL MODEL #
1		CAPRATE SOLD FILTER	9	20"	16'	85% SEE FILTER SPEC	7	L55 SERIES E26	NO						YES	545 LBS
2		CAPRATE SOLD FILTER	8	20"	16'	85% SEE FILTER SPEC	6	L55 SERIES E26	NO	RIGHT	20"x48"x24"				YES	558 LBS
3							0								NO	163 LBS
4							0								NO	186 LBS

HOOD OPTIONS

HOOD NO	TAG	OPTION
1		LEFT END STANDOFF (FINISHED) 3' WIDE 48" LONG.
2		RISER SENSOR INSTALL 6IN PLEN.
2		RISER SENSOR INSTALL 6IN PLEN.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG	DIA	CFM
3	Front	141'	10'	6'	AC			8"	236	0.135'
					AC			8"	236	0.135'
	Back	141'	12'	6'	MUA	10"	28"		1260	0.530'
					MUA	10"	28"		1260	0.530'
4	Front	172'	10'	6'	AC			8"	236	0.122'
					AC			8"	236	0.122'
	Back	172'	12'	6'	MUA	10"	28"		1254	0.497'
					MUA	10"	28"		1254	0.497'

WALL-MOUNT UTILITY CABINET

HOOD NO	LOCATION	SIZE	UTILITY CABINET(S)				WEIGHT
			FIRE SYSTEM TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	
1	WALL MNT	12"x72"x24"	TANK FS	4.0/4.0/4.0/4.0	DCV-2111	1 LIGHT 1 FAN	540.00 LBS

FIRE SYSTEM INFORMATION - JOB#6711089

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0/4.0/4.0	80	74	WALL UTILITY CABINET LEFT	N/A

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	2.000	CAPTIVEAIRE SYSTEMS

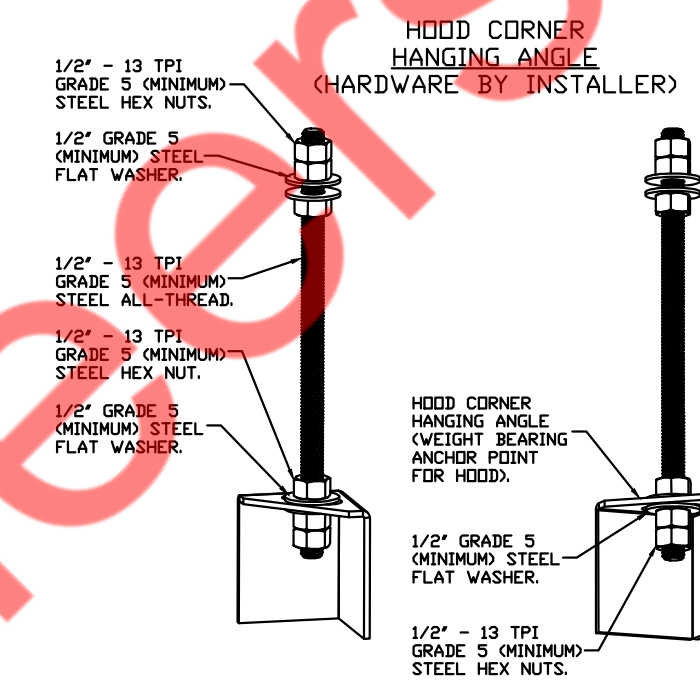
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DOUBLE WALL DUCT BY MECHANICAL PLEASE USE CONTACT BELOW FOR PRICING

ANSUL GAS VALVE:

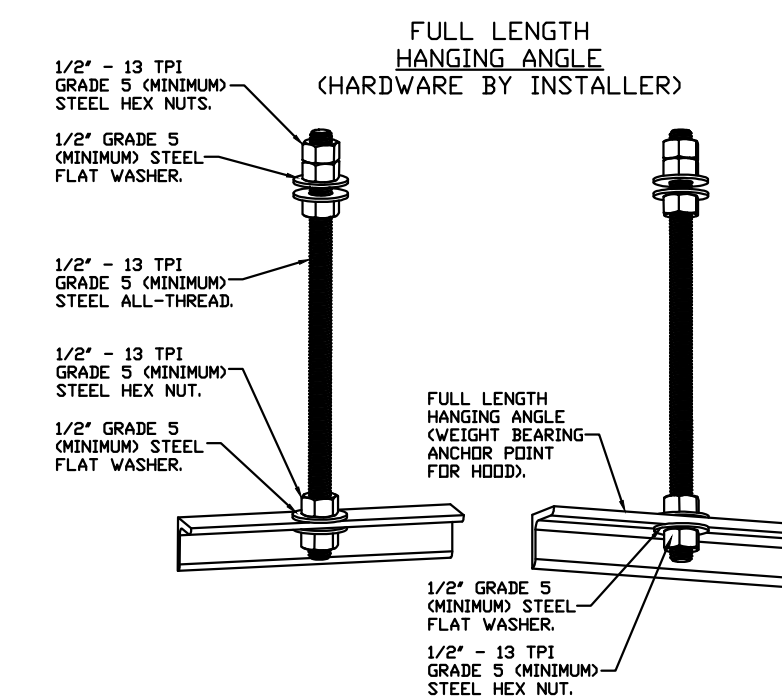
THE ANSUL GAS VALVE IS PROVIDED BY CAPTIVEAIRE SYSTEMS. CONTACT OUR OFFICE WITH THE VALVE SIZE 3 DAYS IN ADVANCE OF WHEN IT IS NEEDED ON SITE.

FOR QUESTIONS CALL THE CAPTIVEAIRE SOUTHERN CA NATIONAL ACCOUNTS OFFICE
3002 DOW AVENUE, SUITE 202
TUSTIN, CA 92780
TEL: 714-677-2963 EMAIL: REG83@CAPTIVEAIRE.COM



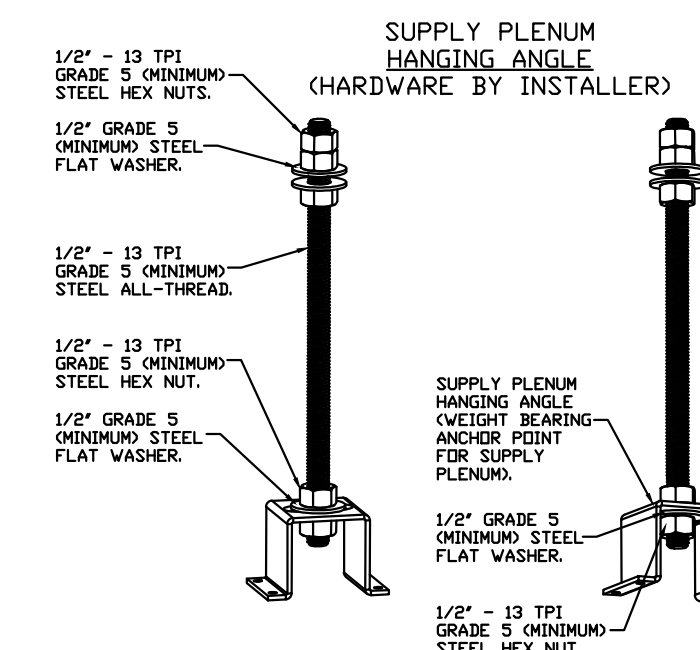
ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

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REVISIONS

DESCRIPTION	DATE

DATE: 4/1/2024
DWG.#: 6711089
DRAWN BY: AH-83
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
1

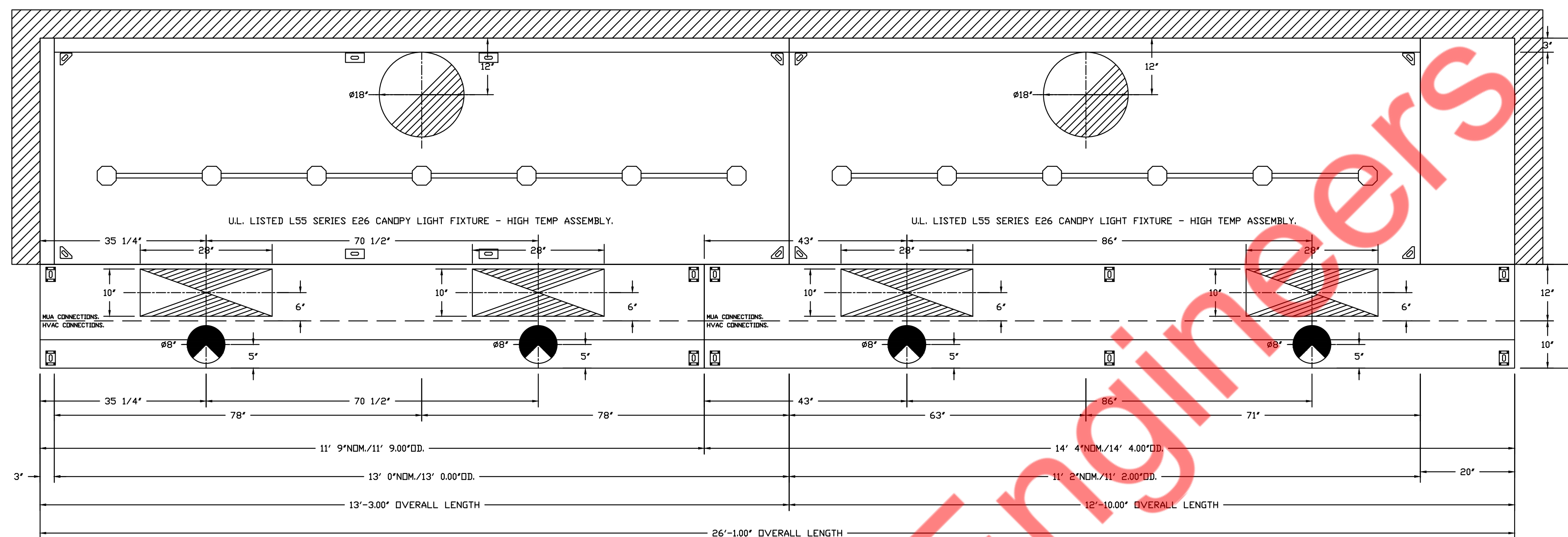
CAPTIVEAIRE
Southern CA National Accounts
3002 Dow Ave., Suite 202, Tustin, CA 92780 PHONE: (714) 677 - 2963 EMAIL: reg83@captiveaire.com

Property of NY Engineers

M-400

HOOD DETAIL PLAN

PANDA HOME 2700 R1



PLAN VIEW - HOOD #1
13' 0.00" LONG 4824ND-2
NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12" AND LONGER.

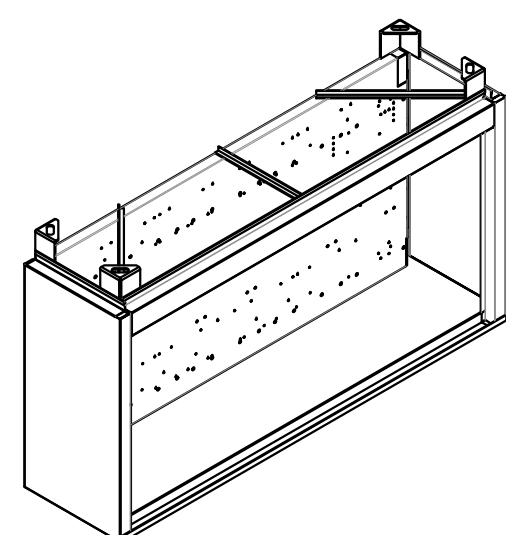
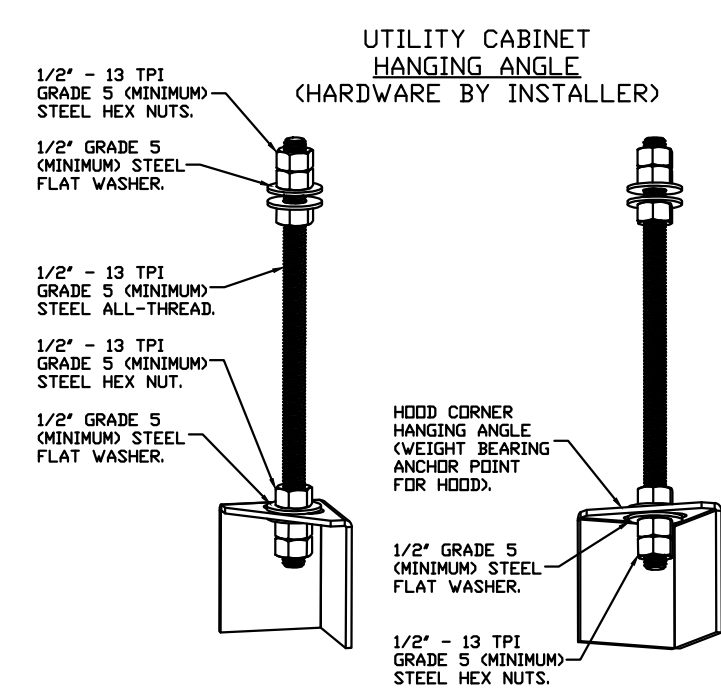
PLAN VIEW - HOOD #2
11' 2.00" LONG 4824ND-2

PLAN VIEW - HOOD #3
11' 9.00" LONG 226MISC ACPSP-ONLY

PLAN VIEW - HOOD #4
14' 4.00" LONG 226MISC ACPSP-ONLY

WALL-MOUNT UTILITY CABINET ASSEMBLY INSTRUCTIONS

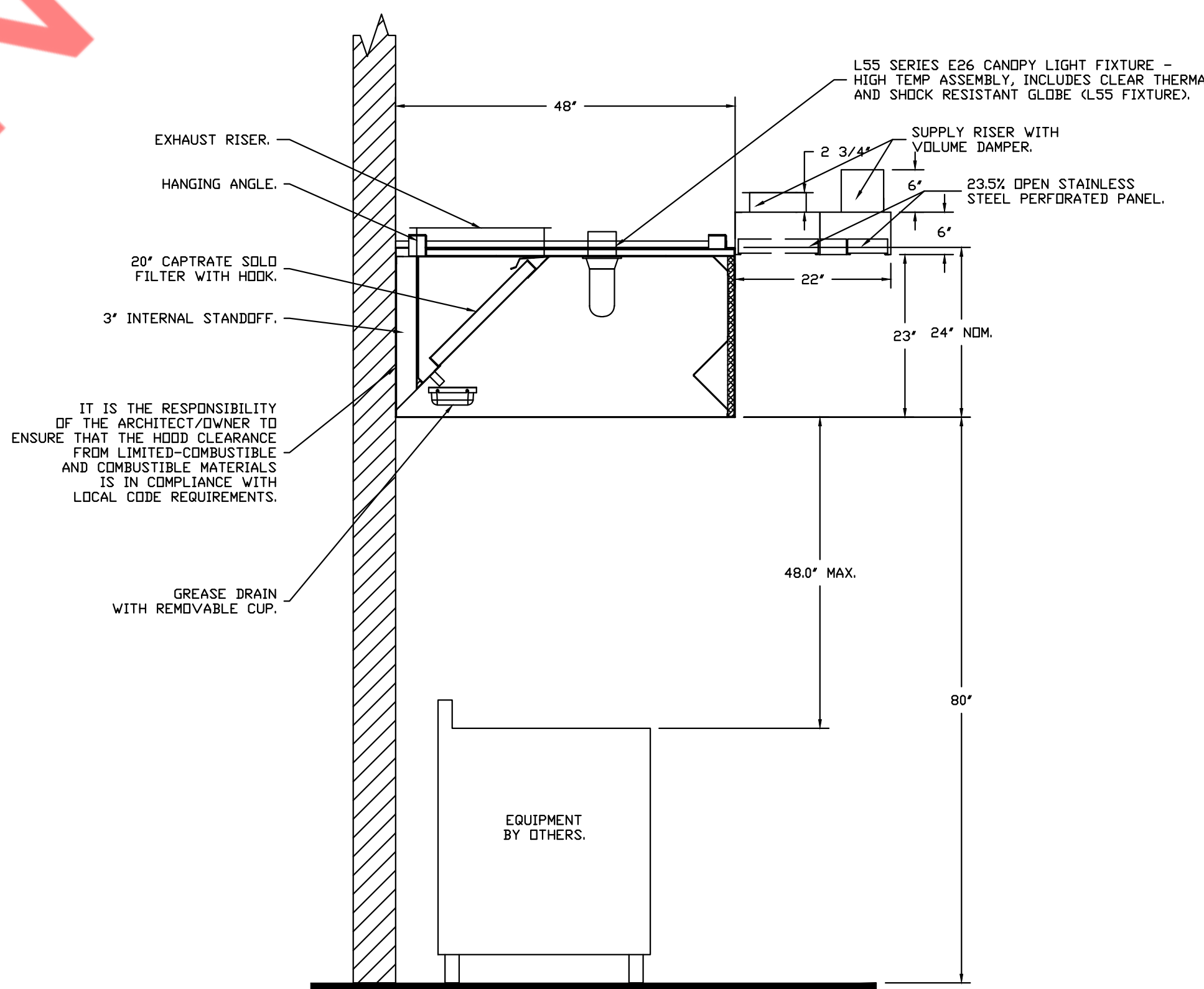
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CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH UL 710 AND NFPA 96 AND ARE RECOGNIZED BY ONE OR MORE OF THE FOLLOWING:

ETL SANITATION LISTED

ETL LISTED
FILE# 102900319PRT-001



SECTION VIEW - MODEL 4824ND-2-ACPSP-F
HOOD - #1

NOTE: UNLESS OTHERWISE STATED, PANDA RESTAURANT GROUP SHALL PROVIDE ALL EQUIPMENT ON THE FOLLOWING CAPTIVEAIRE SHEETS, INCLUDING HOODS, FIRE SYSTEM, EXHAUST FANS, SUPPLY FAN, BATHROOM FAN AND ELECTRICAL INTERLOCK PACKAGE

DOUBLE WALL DUCT BY MECHANICAL PLEASE USE CONTACT BELOW FOR PRICING

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REVISIONS	
DESCRIPTION	DATE

CAPTIVEAIRE

Southern CA National Accounts
3002 Dow Ave., Suite 202, Tustin, CA 92780 PHONE: (714) 677-2963 EMAIL: REG83@CAPTIVEAIRE.COM

DATE: 4/1/2024
DWG.#: 6711089
DRAWN BY: AH-83
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 2

Property of NY Engineers

M-401

HOOD DETAIL PLAN



EXHAUST FAN INFORMATION - JOB#6711089

Table with columns: FAN UNIT NO, TAG, QTY, FAN UNIT MODEL #, MANUFACTURER, CFM, ESP, RPM, MOTOR ENCL, HP, BHP, PHASE, VOLT, FLA, DISCHARGE VELOCITY, WEIGHT (LBS), SDNES

CONDENSER DETAILS

Table with columns: FAN UNIT NO, TAG, FAN UNIT MODEL #, CONDENSER NO, TONNAGE, VOLTAGE, PHASE, FREQUENCY, MCA, RLA, MAX FUSE SIZE, MIN WIRE SIZE, SEER

MUA FAN INFORMATION - JOB#6711089

Table with columns: FAN UNIT NO, TAG, QTY, FAN UNIT MODEL #, BLOWER, HOUSING, MIN CFM, DESIGN CFM, ESP, RPM, MOTOR ENCL, HP, BHP, PHASE, VOLT, FLA, MCA, MDCCP, WEIGHT (LBS), SDNES

COILS - JOB#6711089

Table with columns: FAN UNIT NO, TAG, COIL TYPE, DESIGN CFM, COOLING (ENTERING DB TEMP, ENTERING WB TEMP, LEAVING DB TEMP, LEAVING WB TEMP, ENTERING FLUID TEMP, LEAVING FLUID TEMP, FLUID FLOW RATE, PERCENT GLYCOL, TOTAL CAPACITY, SENSIBLE CAPACITY, LATENT CAPACITY), HEATING (ENTERING DB TEMP, LEAVING DB TEMP, ENTERING FLUID TEMP, LEAVING FLUID TEMP, FLUID FLOW RATE, PERCENT GLYCOL, STEAM PRESSURE, TOTAL CAPACITY, SENSIBLE CAPACITY)

GAS FIRED MAKE-UP AIR UNIT(S)

Table with columns: FAN UNIT NO, TAG, INPUT BTUs, OUTPUT BTUs, TEMP RISE, REQUIRED INPUT GAS PRESSURE, GAS TYPE, BURNER EFFICIENCY(%)

FAN OPTIONS

Table with columns: FAN UNIT NO, TAG, QTY, DESCRIPTION

FAN ACCESSORIES

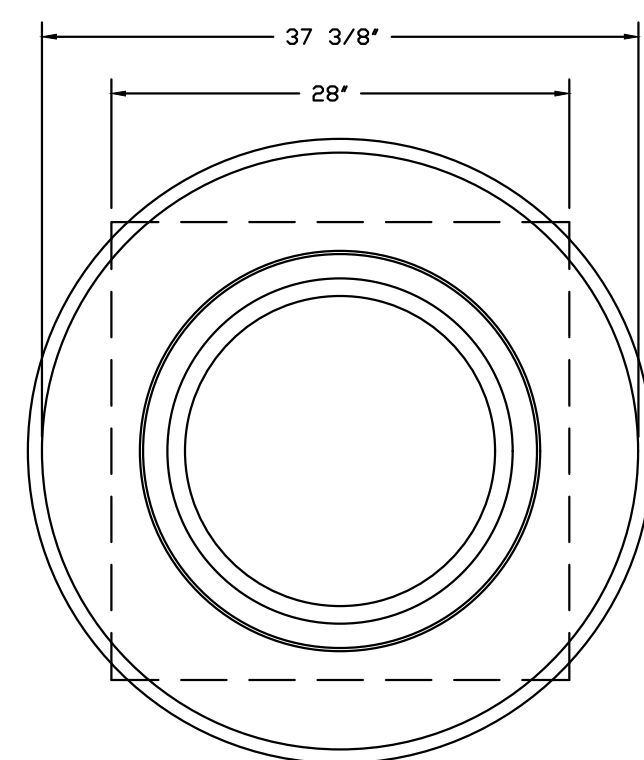
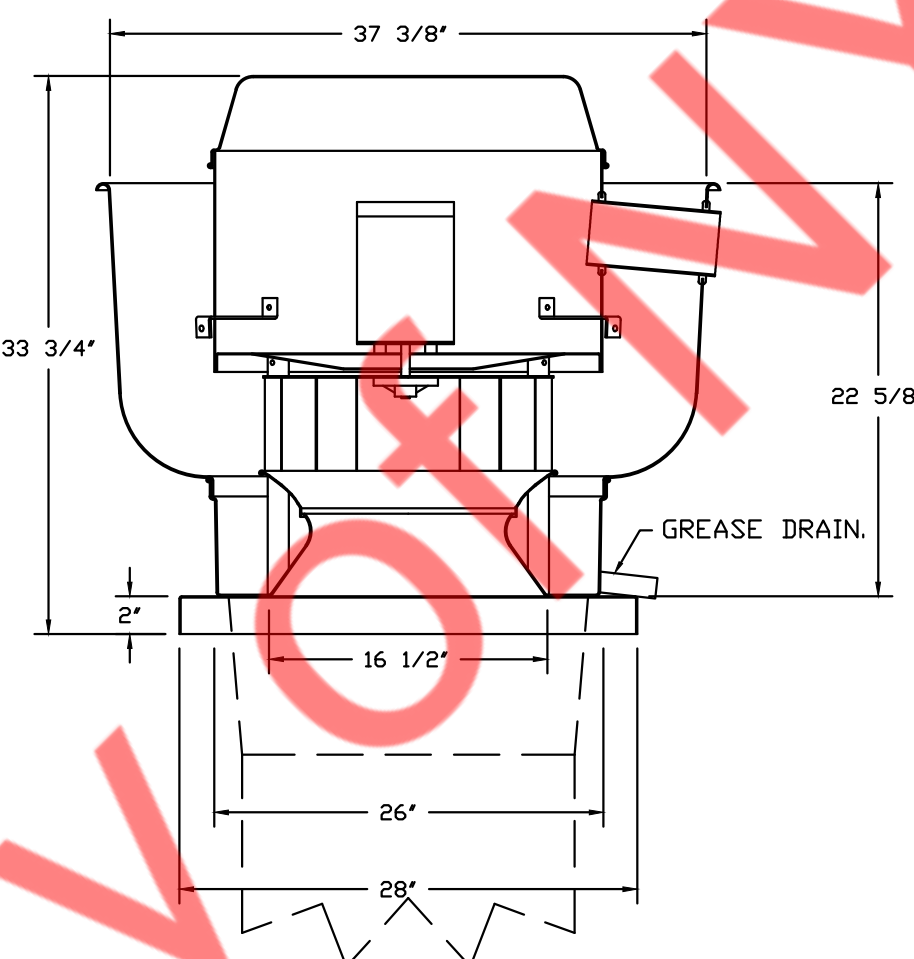
Table with columns: FAN UNIT NO, TAG, EXHAUST (GREASE CUP, GRAVITY DAMPER, WALL MOUNT, SIDE DISCHARGE), SUPPLY (GRAVITY DAMPER, MOTORIZED DAMPER, WALL MOUNT)

CURB ASSEMBLIES

Table with columns: NO, DN FAN, TAG, WEIGHT, ITEM, SIZE

HMI SCHEDULE table with columns: UNIT NUMBER, HMI #, HMI LOCATION, TEMP AVERAGING, MODBUS ADDRESS

FANS #1 (FRYERS), #2 (RICE) - DU180HFA EXHAUST FAN



TOP VIEW

FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST

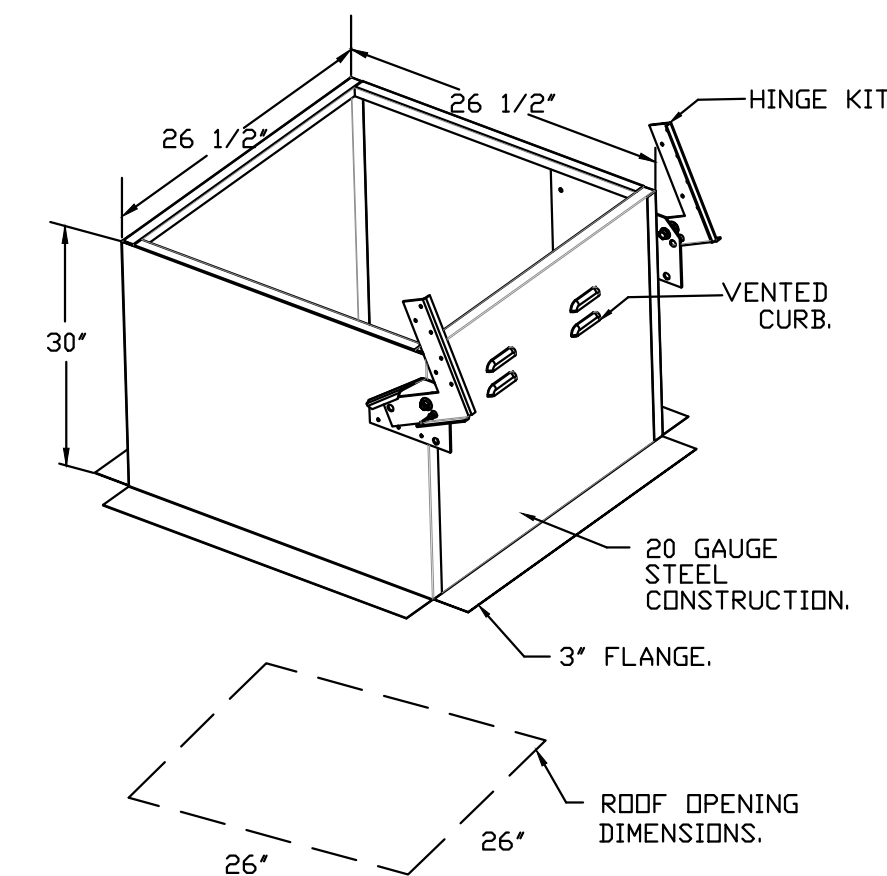
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST

EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

- GREASE BDX.
- UPBLAST FAN WHEEL ACCESS PORT.
- FAN BASE CERAMIC SEAL - DU/DR180HFA
- INSTALLED AT PLANT - FOR GREASE DUCTS.
- 2 YEAR PARTS WARRANTY.



REVISIONS

Table with columns: DESCRIPTION, DATE



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DATE: 4/1/2024

DWG #: 6711089

DRAWN BY: AH-83

SCALE: 3/4\"/>

MASTER DRAWING

SHEET NO. 3

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DOUBLE WALL DUCT BY MECHANICAL PLEASE USE CONTACT BELOW FOR PRICING

ANSUL GAS VALVE:

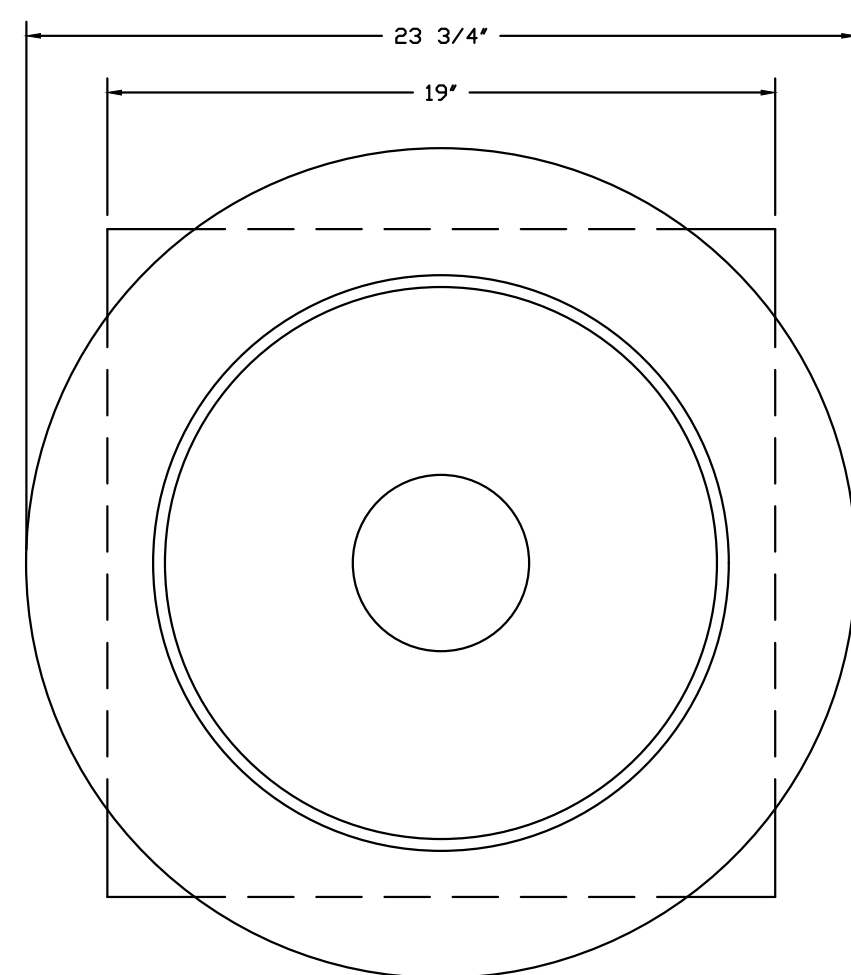
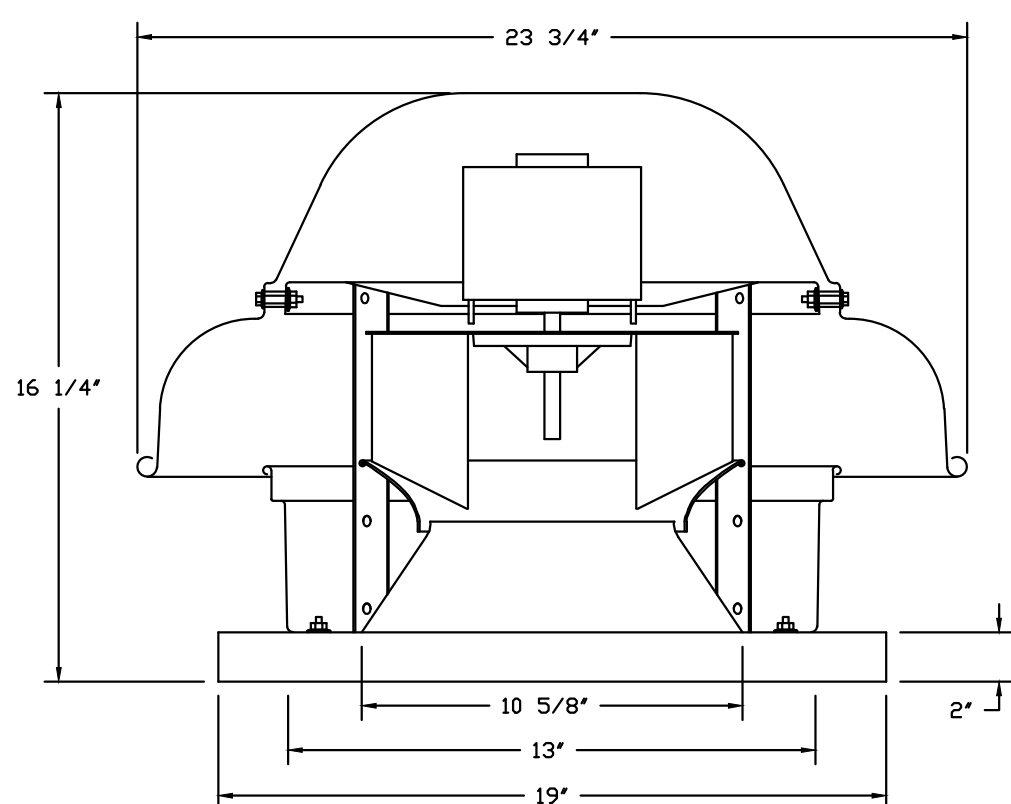
THE ANSUL GAS VALVE IS PROVIDED BY CAPTIVEAIRE SYSTEMS. CONTACT OUR OFFICE WITH THE VALVE SIZE 3 DAYS IN ADVANCE OF WHEN IT IS NEEDED ON SITE.

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M-402

HOOD DETAIL PLAN

FAN #3_DR12HFA - EXHAUST FAN



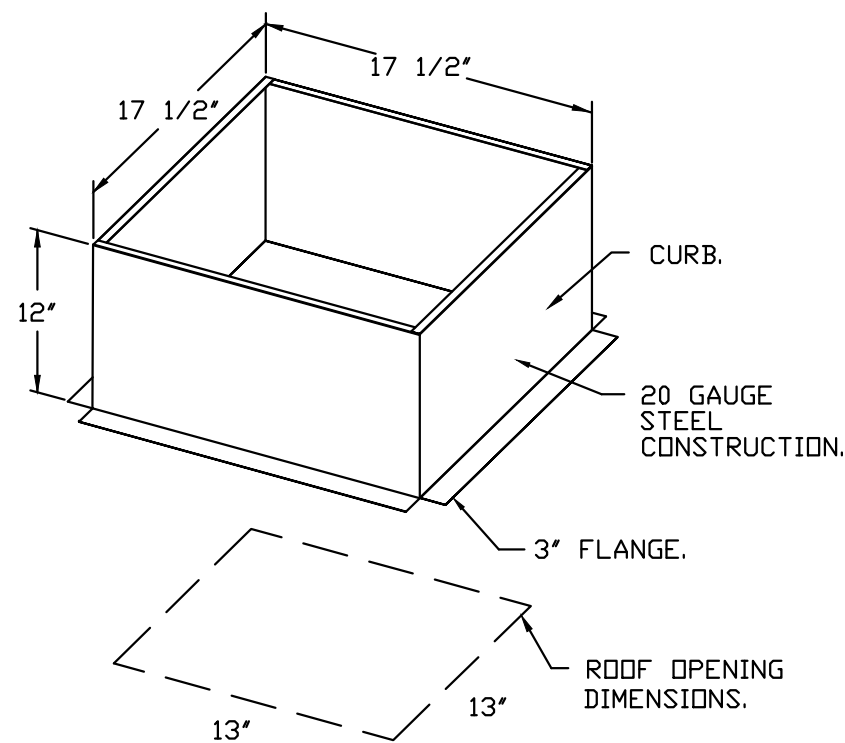
TOP VIEW

FEATURES:

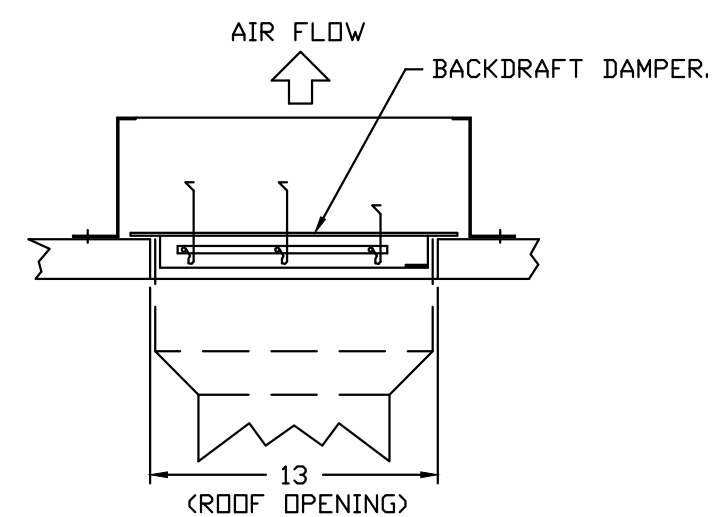
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).

OPTIONS:

- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL.
- RTG - (FIELD MOTOR), CCW ROTATION.
- 1 12-8DD DAMPER.
- 2 YEAR PARTS WARRANTY.



BACKDRAFT DAMPER INSTALLATION



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SHEET NO.
4

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M-403

HOOD DETAIL PLAN



- FAN #4 A3-D500-24D-MPU - HEATER
- DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 24" MIXED FLOW DIRECT DRIVE FAN AND 12" BURNER.
 - INTAKE HOOD WITH EZ FILTERS.
 - DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
 - GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE.
 - GAS PRESSURE GAUGE, -5 TO +15 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE.
 - MOTORIZED BACK DRAFT DAMPER 30" X 30" FOR SIZE 3 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, NFBP-S ACTUATOR INCLUDED.
 - 10 TON, DUAL CIRCUIT (S/S) MODULAR PACKAGED COOLING OPTION FOR SIZE 3 DF/EH MODULAR PACKAGED UNIT. INCLUDES CONDENSER, DX COIL, FILTER/DRYER KIT, THERMAL EXPANSION VALVE, (3.600 TO 6.000 CFM) WHEN ORDERED WITH OPPOSITE AIRFLOW CONDENSERS ACCESS AND COIL PIPING WILL REMAIN IN STANDARD POSITION. DRAIN AND SLEDS WILL MOVE TO THE OPPOSITE SIDE. ANY OTHER CHANGE WILL REQUIRE CLI. CONDENSERS REQUIRE SEPARATE 208V, 3 PHASE POWER SUPPLY UNLESS ORDERED WITH SINGLE POINT CONNECTION COIL = 9E20602M.
 - DOWNTURN PLENUM FOR SIZE 3 COOLING COIL MODULE - REQUIRED FOR DOWN DISCHARGE COOLING COIL APPLICATIONS.
 - SHIP CONDENSERS LOOSE. THE REFRIGERATION LINES WILL NEED TO BE STUBBED OUT 12 INCHES. THE SUCTION LINES NEEDS TO BE INSULATED INSIDE THE COIL MODULE. ROTARY DISCONNECT SHOULD NOT BE INSTALLED ON THE POST, BLANK POST SHOULD BE USED IN PLACE. ALL PIPING AND WIRING BETWEEN INDOOR AND OUTDOOR UNITS BY OTHERS.
 - BUTTERFLY MOD VALVE OPTION FOR MOD SIZE 3 (1" MOD VALVE).
 - LOW FIRE START. ALLOWS THE BURNER CIRCUIT TO ENERGIZE WHEN THE MODULATION CONTROL IS IN A LOW FIRE POSITION.
 - UNIT MOUNTED VFD FOR USE WITH ECPM03.
 - HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/MPU SECTION).
 - 2 YEAR PARTS WARRANTY.

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 24" X 24".

NOTE: CONDENSERS SHIPPED LOOSE FOR REMOTE MOUNTING. ALL WIRING AND PIPING BETWEEN INDOOR AND OUTDOOR UNIT TO BE COMPLETED BY OTHERS.

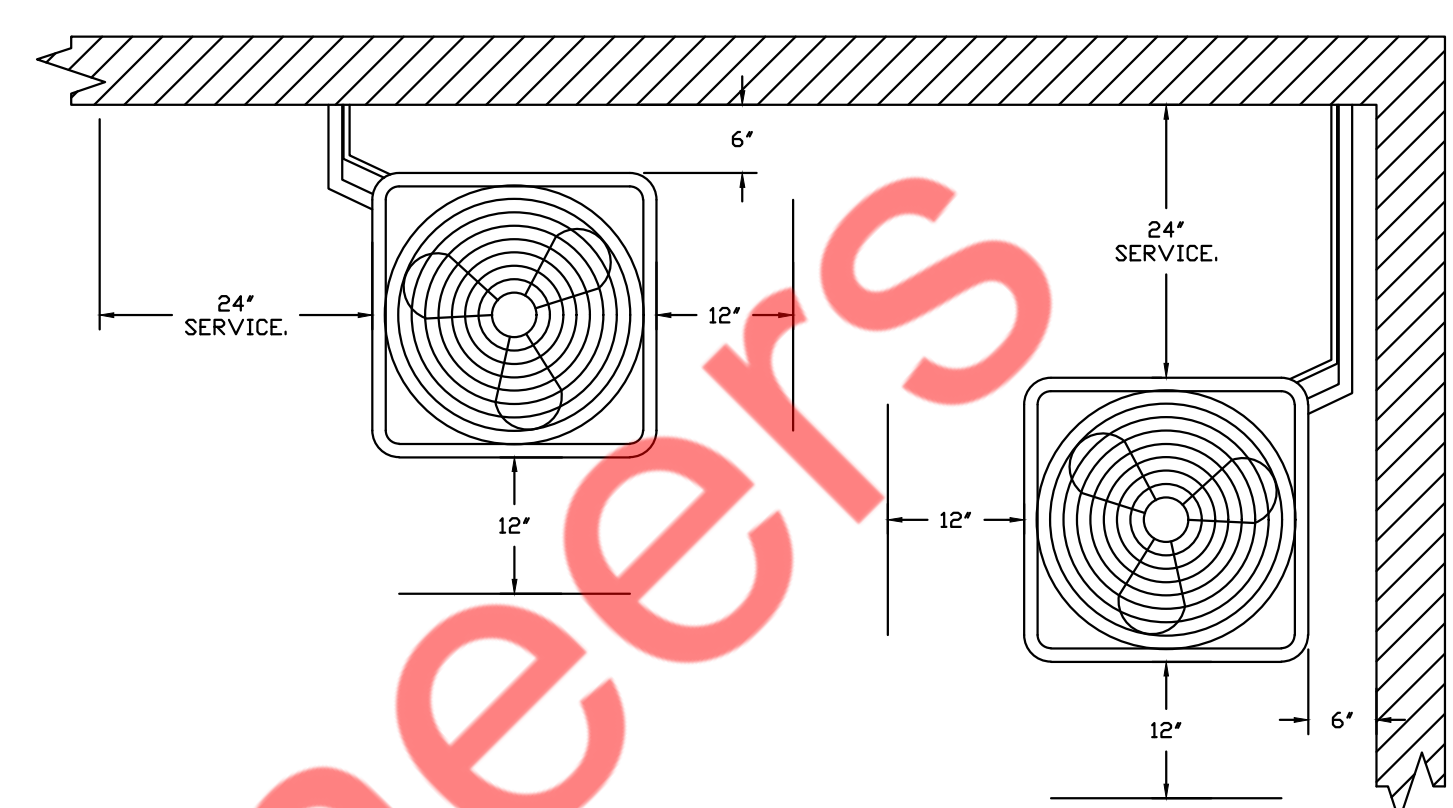
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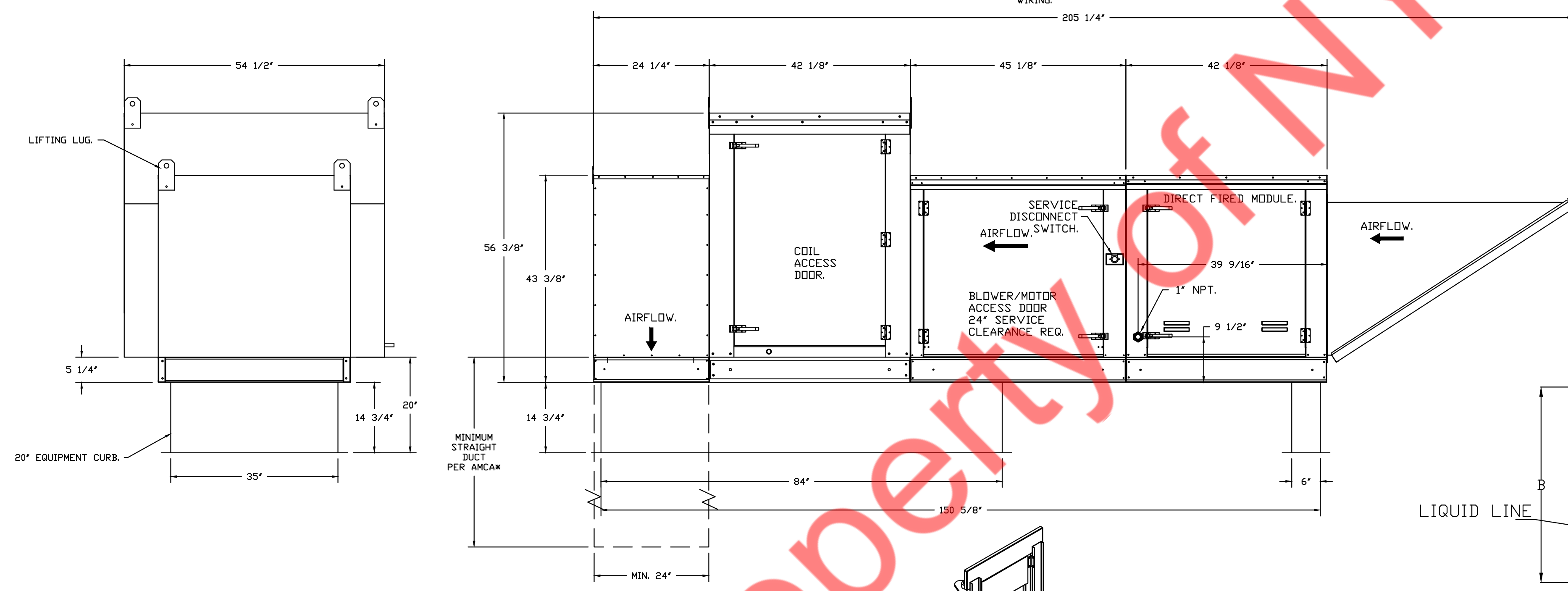
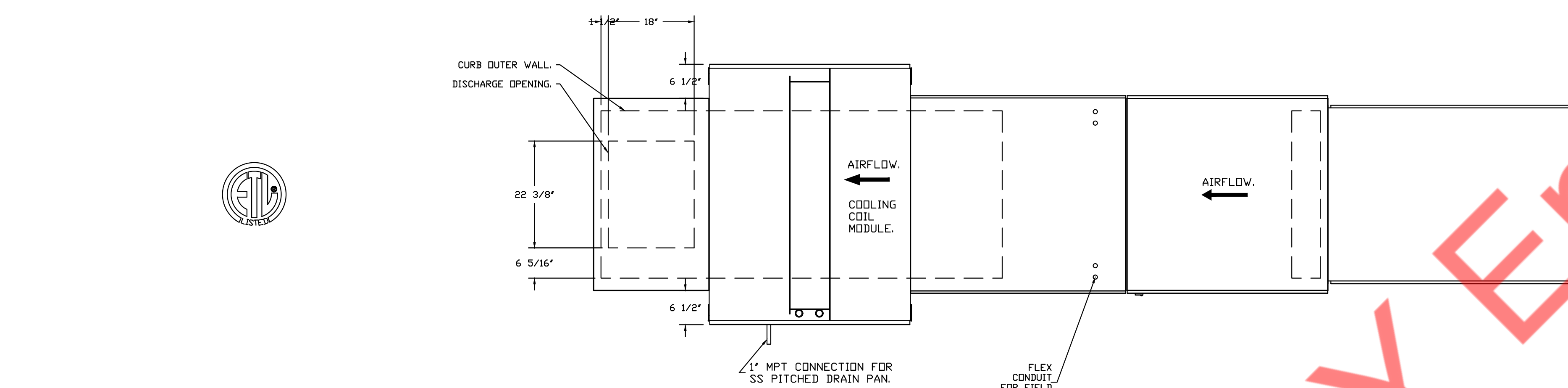
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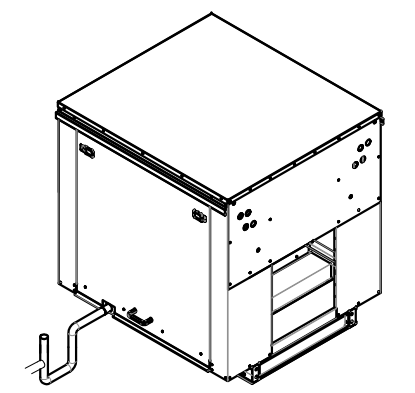
SUPPLY SIDE HEATER INFORMATION
WINTER TEMPERATURE = 20°F. TEMP. RISE = 100°F.
BTUS CALCULATED OFF ACTUAL AIR DENSITY.
OUTPUT BTUS AT ALTITUDE OF 0.0 FT. = 496644.
INPUT BTUS AT ALTITUDE OF 0.0 FT. = 539830.



CONDENSER CLEARANCES
48" CLEARANCE REQUIRED ABOVE CONDENSERS.
(NOTE: **CONDENSERS SHOWN HERE ARE NOT DRAWN AT SCALE.)



TYPICAL DRAIN TRAP INSTALL



RECOMMENDED COOLING COIL DRAIN TRAP CONFIGURATION

Refer to Plumbing Detail P-500 for AC Unit Condensate Drain

- NOTES: Important! Copper above roof deck where it is exposed. PVC below roof deck
- 1" DIAMETER PVC PIPE ONLY.
 - USE ONLY LOW PROFILE COUPLINGS.
 - ADD CLEAN OUT AS SHOWN.

DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY
DIRECT FIRED PROFILE PLATE ASSEMBLY (DF) - (SEE DRAWING)
DESCRIPTION: BURNERS SHALL HAVE PATENTED GAS PATENT NO. US6469592B2. SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER. PROFILE PLATES SHALL ALLOW BURNERS TO MAINTAIN CLEAN COMBUSTION FLAMELINE BY PROVIDING LEVELS TO A UNIT SHALL BE CONSIDERED WITH THE BURNER. THE BURNER IS LOCATED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CLEAN, CONSISTENT BURNER. (SEE DRAWING)
APPLICATION: BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM, WITHOUT THE NEED FOR ANY MOTOR OR ACTUATOR TO MECHANICALLY ADJUST THEM WITH THIS FEATURE, ALL OF UNITS ARE DESIGNED FOR BURNER CONTROL VENTILATION (BURNER) REQUIREMENTS.
CERTIFICATION: BURNER PROFILE PLATE ASSEMBLY SHALL BE INCLUDED IN THE DF UNITS ETL LISTING AND COMPLY WITH CORNED SHEET STANDARD AND CSA AND CSA 3.7 OVEN-REGULATING OF HEATERS AND ANSI Z39.9 (REGULATING OF HEATERS).
GENERAL CONSTRUCTION: PROFILE PLATES SHALL BE FORMED FROM 600 GALVANIZED STEEL.
-PROFILE PLATES SHALL HAVE A 1/2" RADIUS ON THE UNIT.
-PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER.
-SEALS SHALL INCORPORATE PROPERLY SIZED, FORWARDLY MOUNTED SPRING HINGES.
-SPRING HINGES SHALL BE MADE FROM PLATED STEEL.

ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

MODEL	WEIGHT	UNIT DIMENSIONS					CONNECTION SIZES		NOMINAL TONNAGE
		A	B	C	D	E	SUCTION	LIQUID	
24ABB360	190 LBS	31-3/16	25-1/2	9-1/8	24-11/16	6-9/16	7/8	3/8	5

ELECTICAL INFORMATION

MODEL	V-PH	RLA	MCA	FUSE SIZE
24ABB360	208/230-3	16.0	21.4	30

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DESCRIPTION	DATE

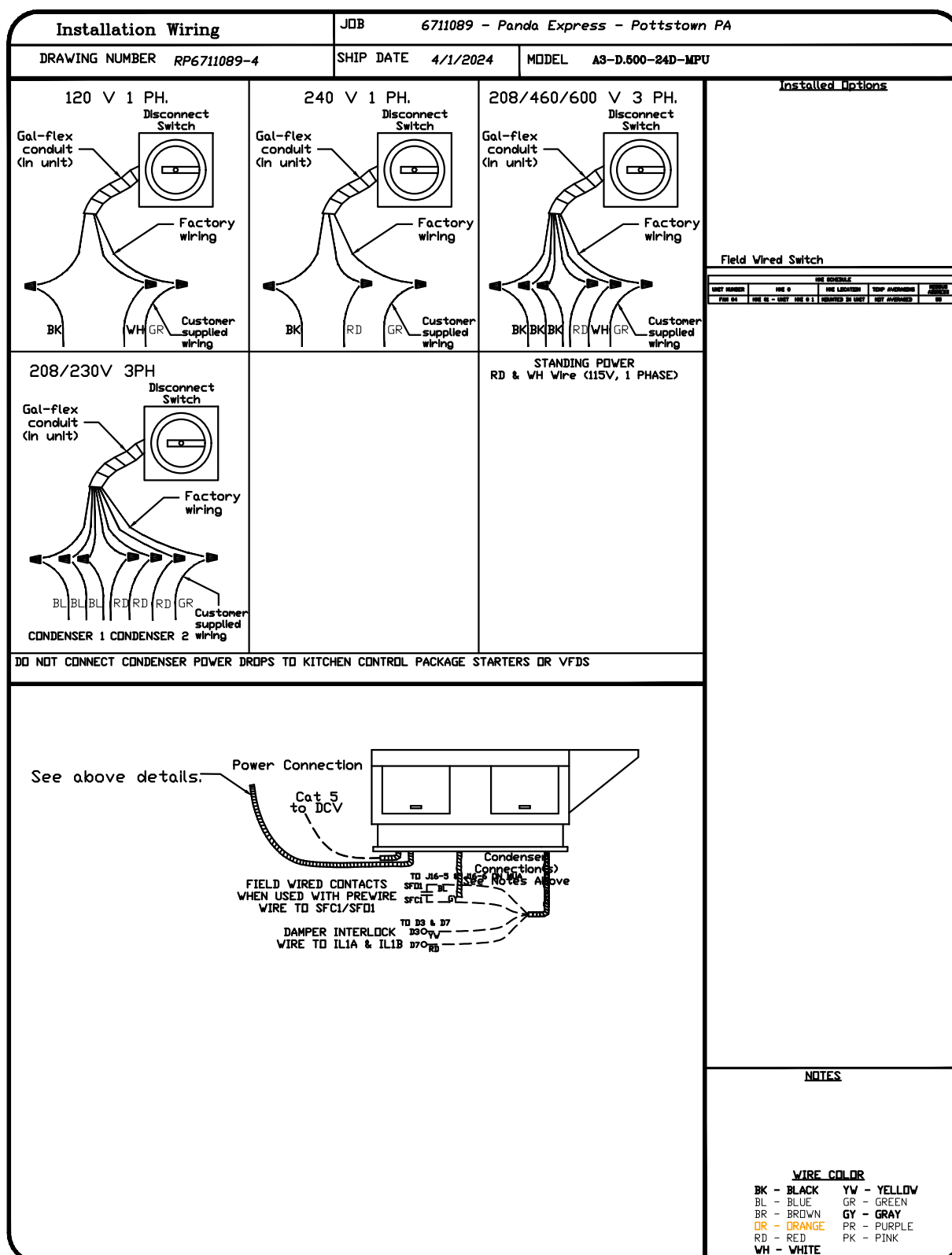
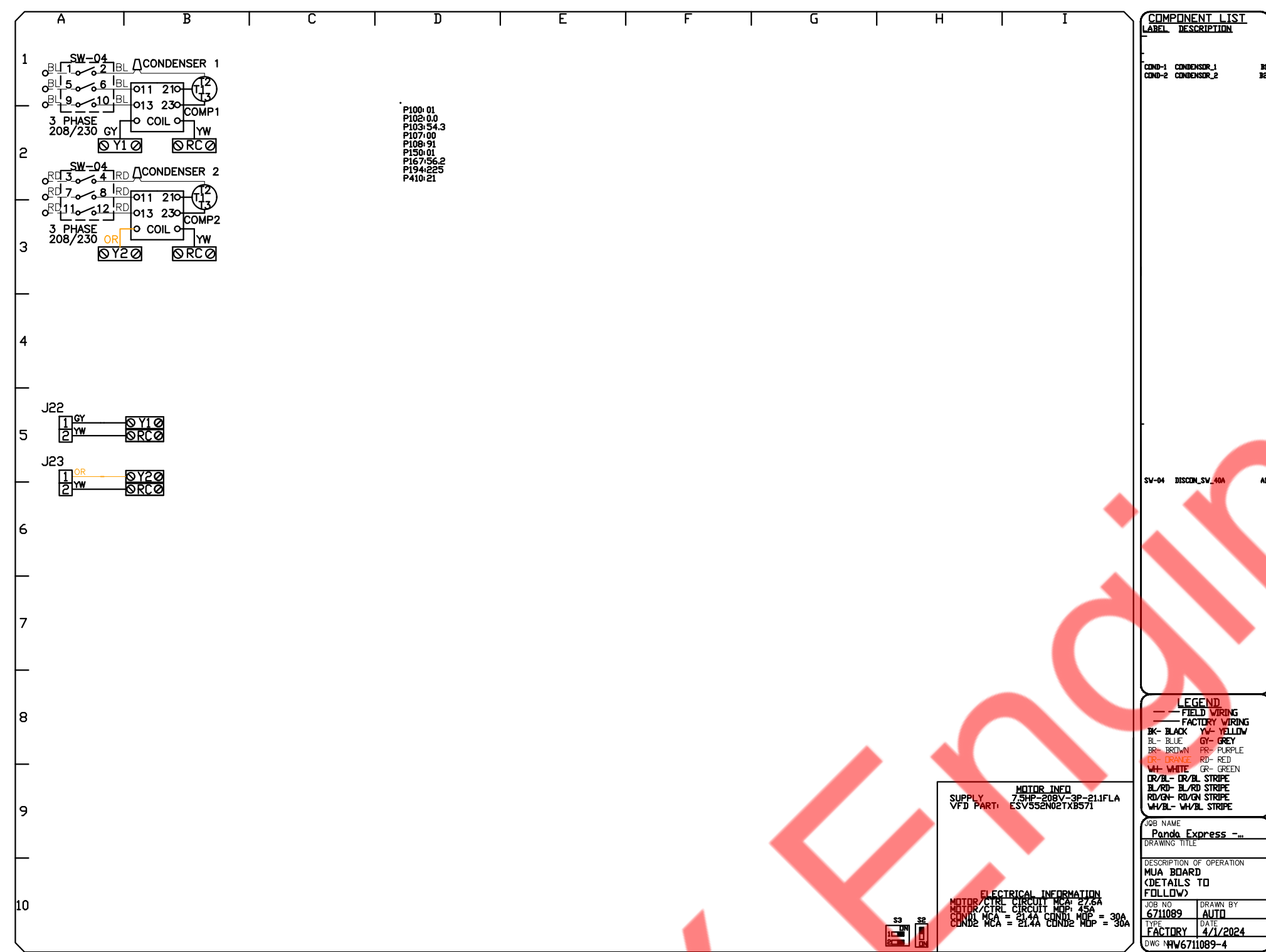
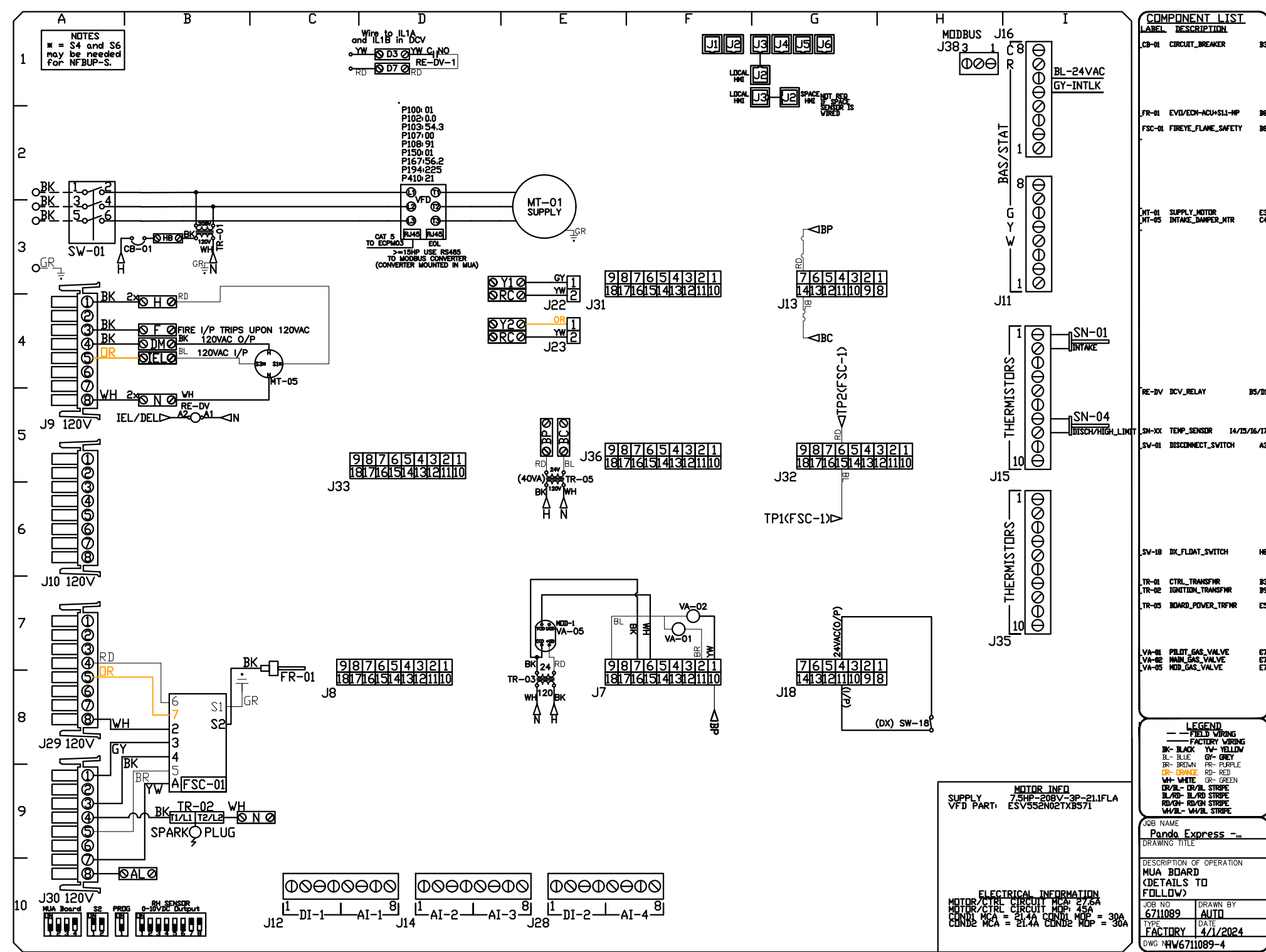
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SCALE: 3/4" = 1'-0"
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SHEET NO. 5

M-404

HOOD DETAIL PLAN

PANDA HOME 2700 R1



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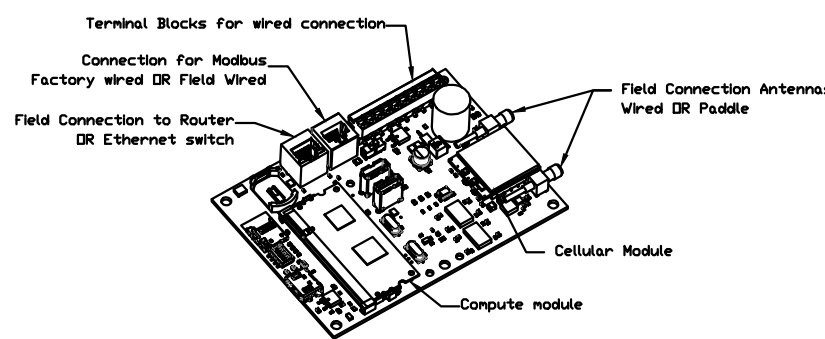
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SHEET NO. 6



ELECTRICAL PACKAGE -- JOB#6711089

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED							
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT	FLA			
1		DCV-2111	WALL UTILITY CABINET LEFT	SHIP LOSSE W/ PREVIRE	1 LIGHT	SMART CONTROLS DCV								

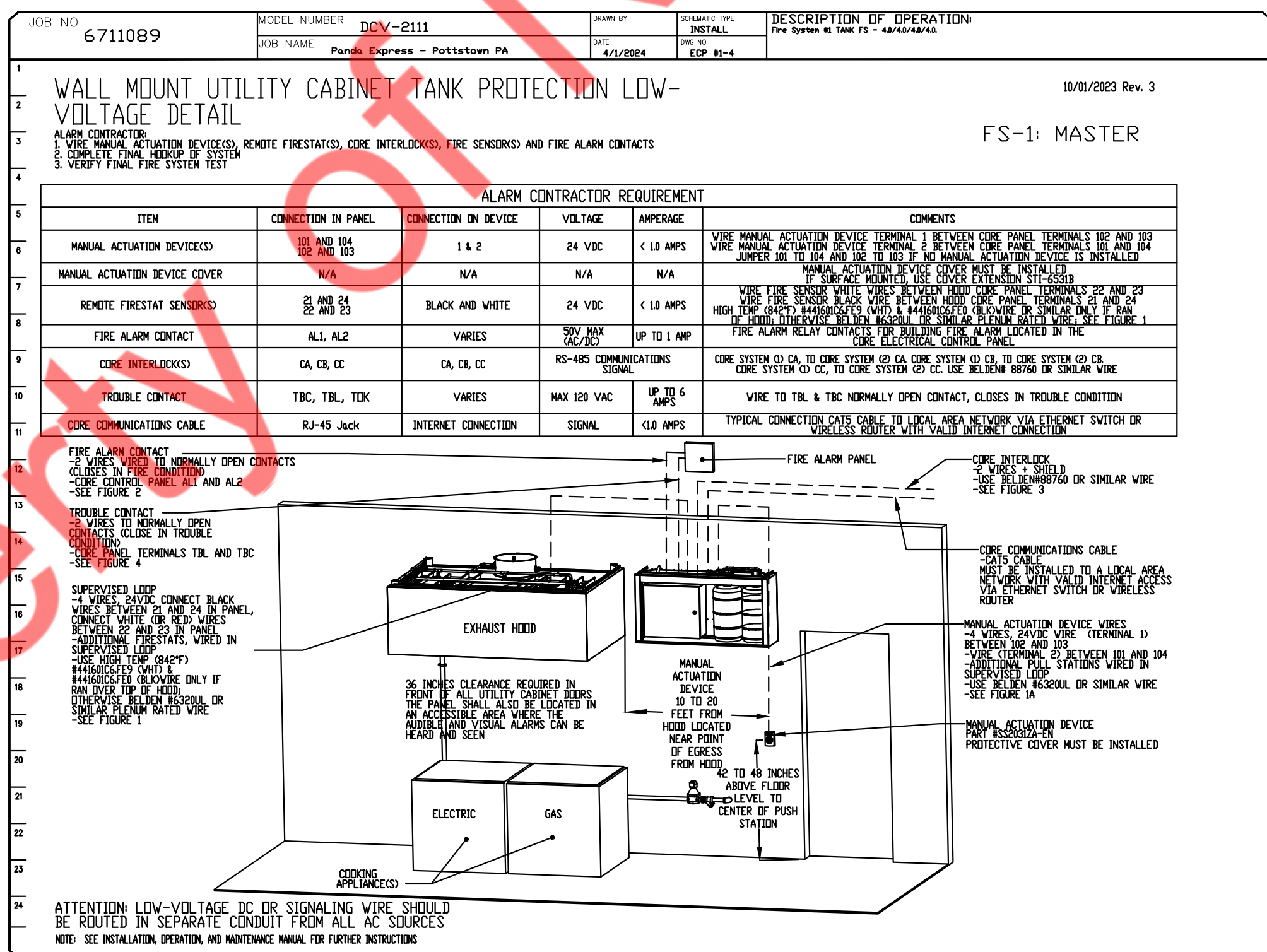
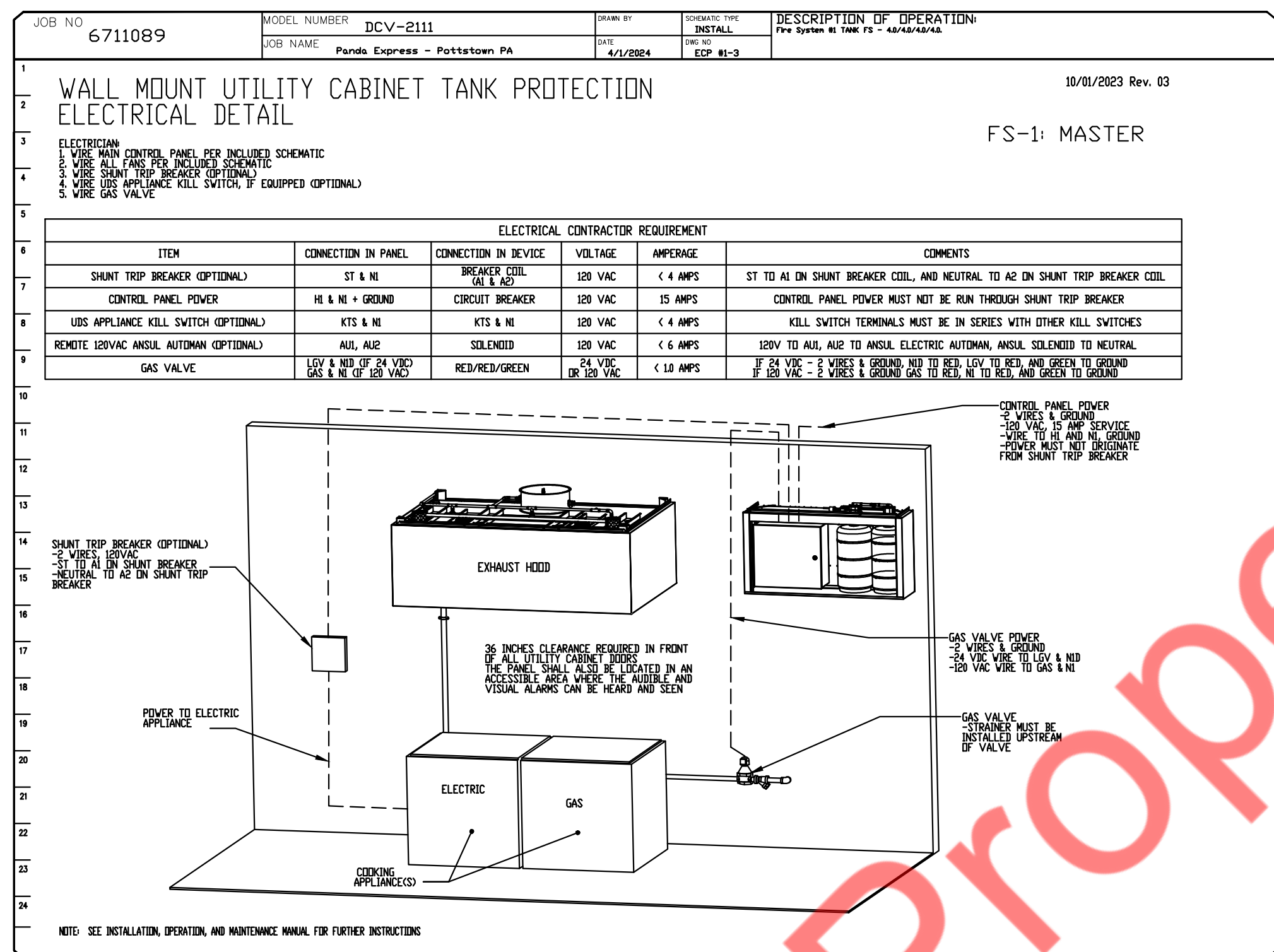
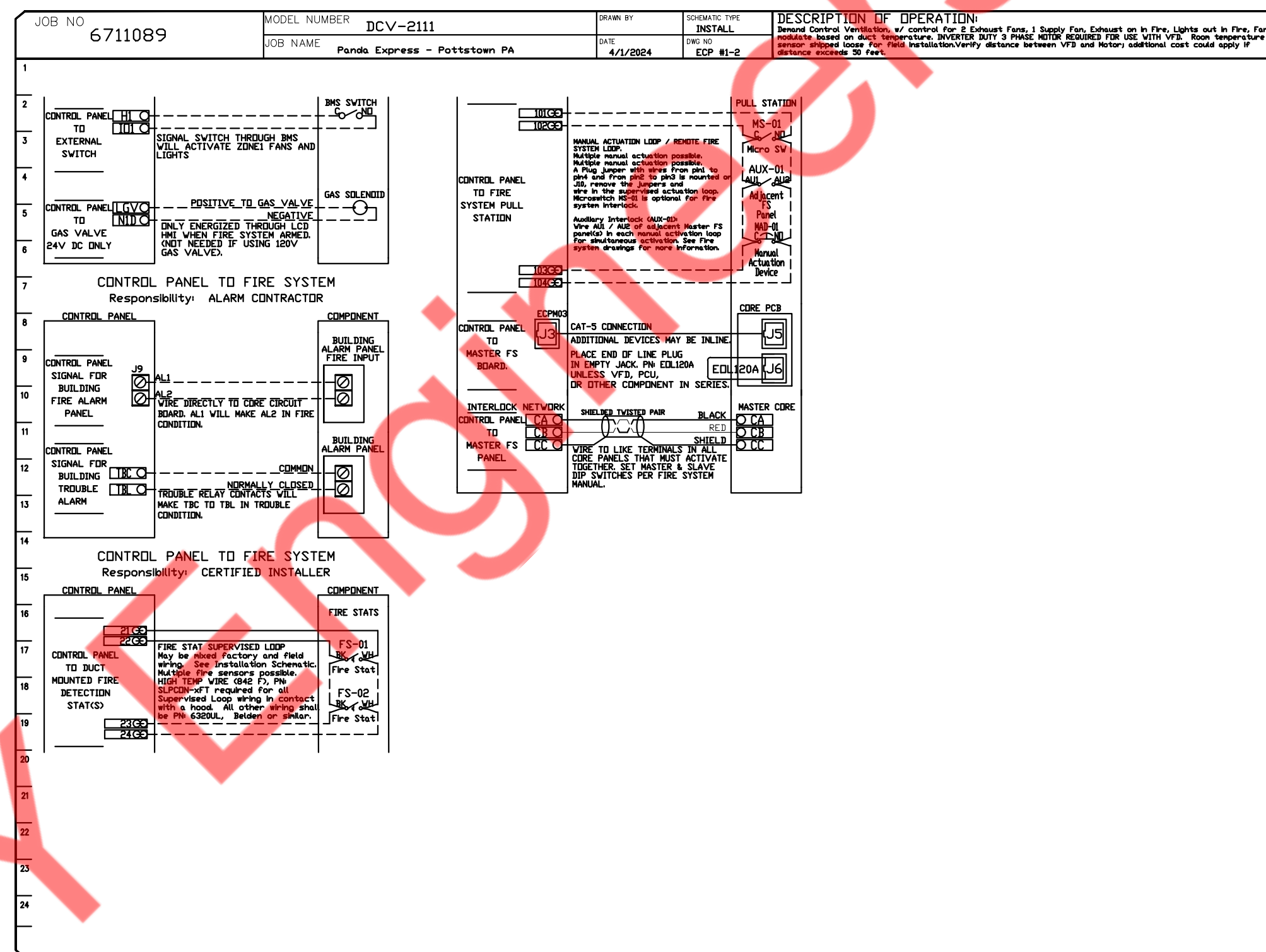
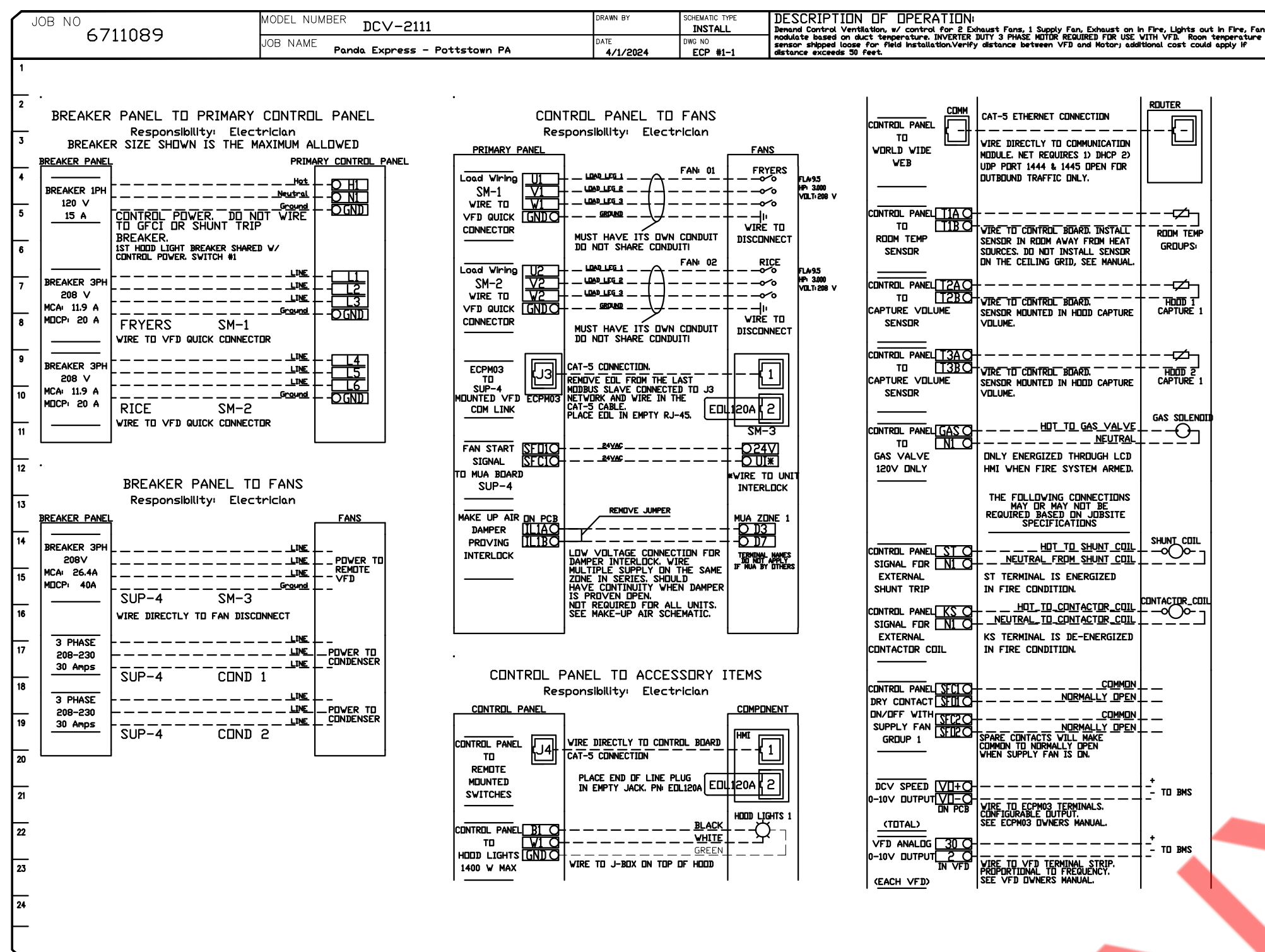


CASlink Monitor and Control

Head control panel to support communications to cloud-based Building Management System.
Head Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.
Head Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.
Head Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.

MONITORING AND CONTROL POINTS LIST

DCV Packages	Function	SC Packages	Function
Room Temperature	MONITOR	Room Temperature(s)	MONITOR
Duct Temperature(s)	MONITOR	Duct Temperature(s)	MONITOR
MHA Discharge Temperature	MONITOR	MHA Discharge Temperature	MONITOR
Riskless RTU Discharge Temperature	MONITOR	Riskless RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR	Condenser Fan(s)	MONITOR
Fan Amperage	MONITOR	Fan Fan(s)	MONITOR
Fan Power	MONITOR	Fan Status	MONITOR
VFD Fan(s)	MONITOR	PCV Fan(s)	MONITOR
Condenser Fan(s)	MONITOR	PCV Filter Clog Percentage	MONITOR
Fan Fan(s)	MONITOR	Fan Condition	MONITOR
Fan Status	MONITOR	CO2 Ppt System	MONITOR
PCV Fan(s)	MONITOR	Building Pressure	MONITOR
PCV Filter Clog Percentage	MONITOR	PCV Filter Clog Percentage	MONITOR
Fan Condition	MONITOR	Fan Button(s)	MONITOR & CONTROL
CO2 Ppt System	MONITOR	Light Button(s)	MONITOR & CONTROL
Building Pressure	MONITOR	Peak Button	MONITOR & CONTROL
Prep Time Button	MONITOR & CONTROL		
Fan Button	MONITOR & CONTROL		
Light Button	MONITOR & CONTROL		
Peak Button	MONITOR & CONTROL		



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NO	DESCRIPTION	DATE

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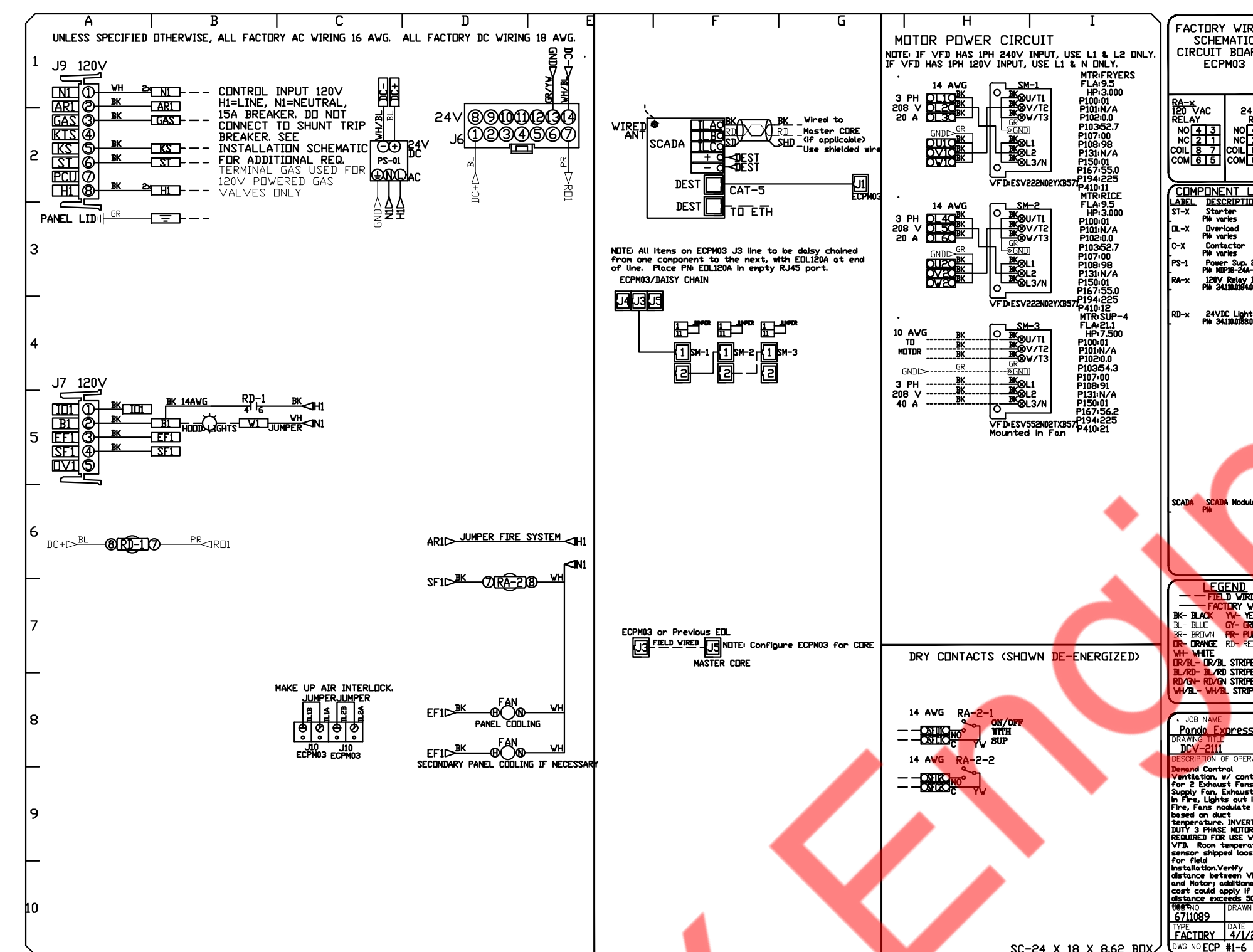
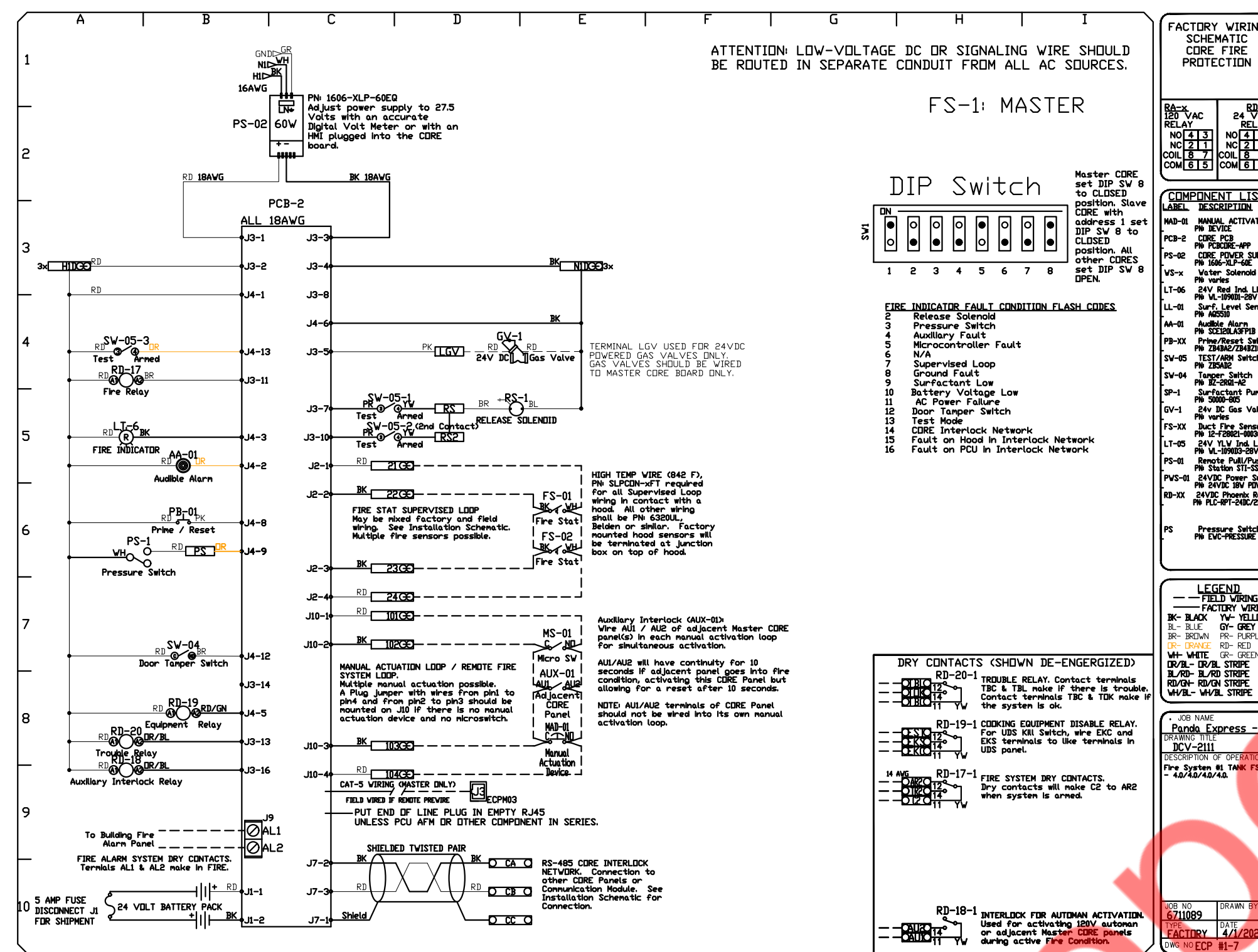
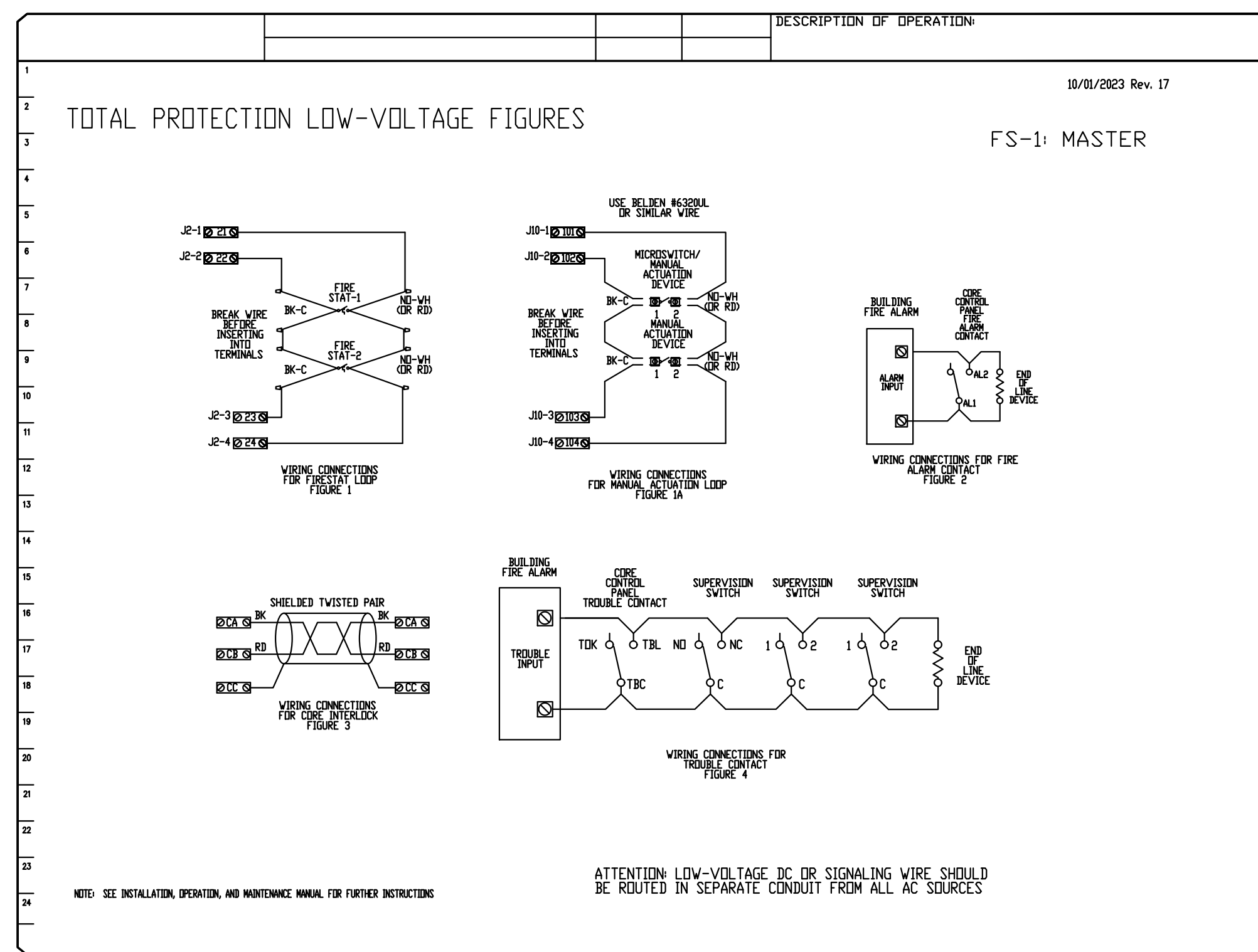
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HOOD DETAIL PLAN



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DUCTWORK #1 PARTS - JOB#6711089 DOUBLE WALL

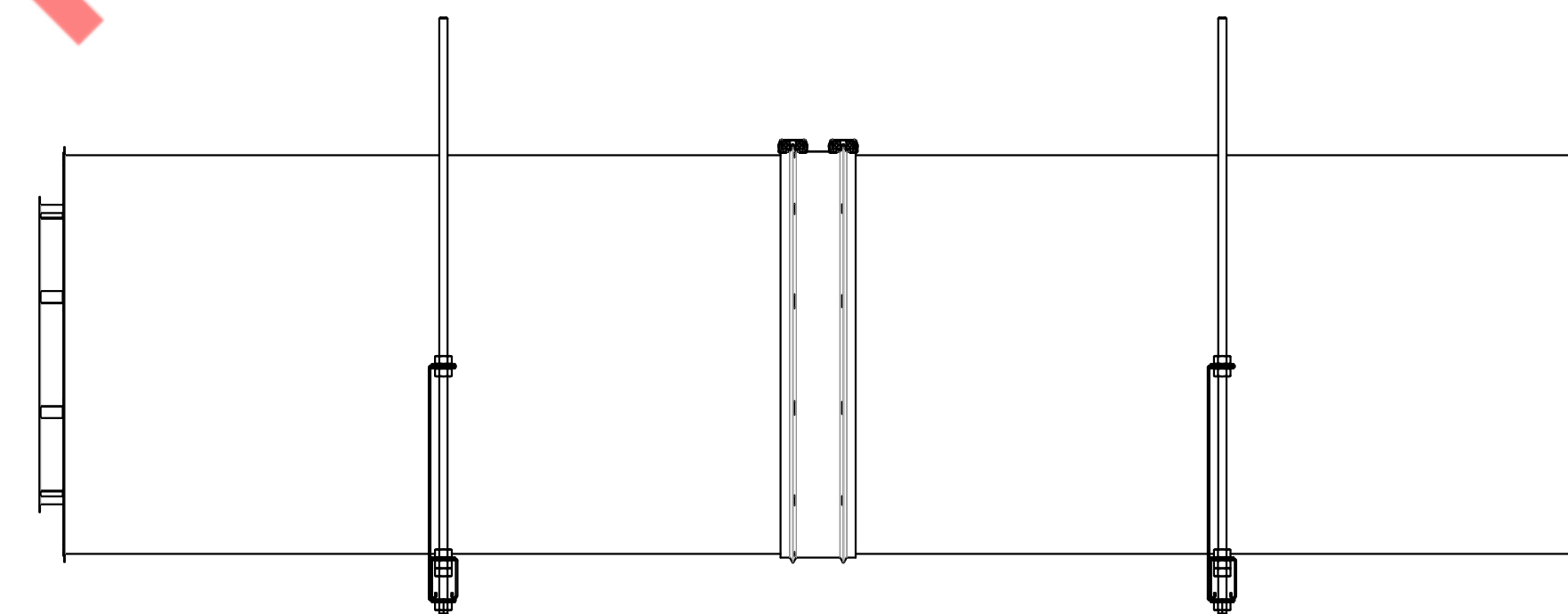
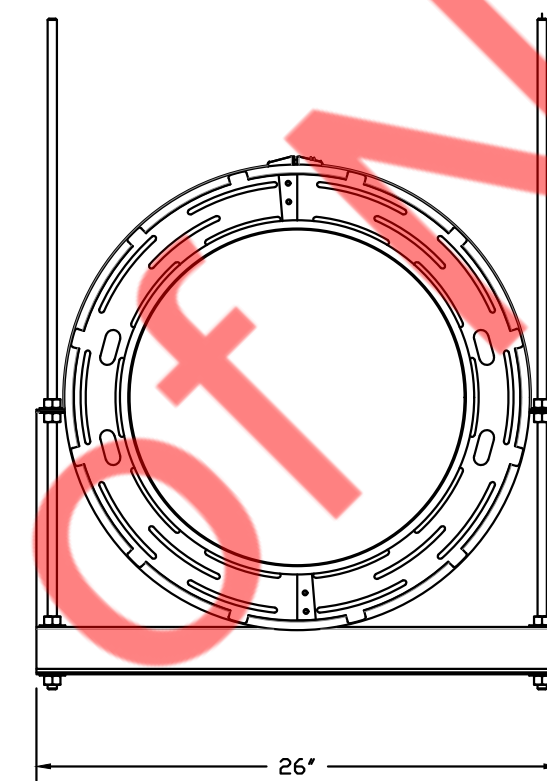
TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
HI-E1	DW222WRISER-2R-S	3400				-1.202	10.73	0.00	1	DOUBLE WALL RISER COVER - USED ON 18" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	DW1829DWLT-2R-S	3400				-0.009	50.46	1924.01	1	DOUBLE WALL DUCT - 18" INNER DUCT, 29' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P2	DW1847DWAJD-2R-S	3400				-0.009	107.98	1924.01	1	DOUBLE WALL ADJUSTABLE DUCT - 18" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3	DW1890DWASY-2R-S	3400				-0.115	45.59	1924.01	1	DOUBLE WALL DUCT - 18" INNER 90 DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P4	DW1847DWAJD-2R-S	3400				-0.011	107.98	1924.01	1	DOUBLE WALL ADJUSTABLE DUCT - 18" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P5	DW2226SADKIT						8.80		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 22" DD - INCLUDES UNI-STRUT CUT TO LENGTH, DW2226SAD, & HARDWARE BAG 4.
P6 ASSEMBLED W/P7	DW18DWTEASY-2R-S	3400		1		-0.23	55.68	1924.01	1	DOUBLE WALL DUCT - 18" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P7 ASSEMBLED W/P6 O=S	DW18DWACCDORCOV-2R-S						26.16		1	DOUBLE WALL DUCT - 18" INNER ACCESS DDOOR & 22" ACCESS DDOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P8 ASSEMBLED W/P9	DW1835DWLTP-2R-S	3400				-0.011	58.74	1924.01	1	DOUBLE WALL DUCT - 18" INNER DUCT, 35' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATES
P9 ASSEMBLED W/P8 O=B	DW2618TPDBEX	3400					9.00	1924.01	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 26 1/2" CURB TO 18" DUCT, 16 GA ALUMINIZED. USED ON NCA16FA / NCA16HPFA & NCA18FA / NCA18HPFA. TRANSITION PLATE DD IS 27.00" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
SYSTEM AT P9						-1.587	0.00			
RC1	DW222WRISER-2R-S						10.73		1	DOUBLE WALL RISER COVER - USED ON 18" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	3M-2000PLUS						0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW18DWCLASY-2R-S						8.70		1	DUCT - 18" DUCT - 22" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							502.95			

DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5'-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5'-24")	10'	24'	24'
3Z (26" -36")	10'	20'	20'



SUPPORT SYSTEM DETAILS #1
DW2226SADKIT - HORIZONTAL SUPPORTS

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

Ductwork is responsibility of mechanical or general email reg83@captiveaire.com for pricing

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DOUBLE WALL DUCT BY MECHANICAL PLEASE USE CONTACT BELOW FOR PRICING

ANSUL GAS VALVE:

THE ANSUL GAS VALVE IS PROVIDED BY CAPTIVEAIRE SYSTEMS. CONTACT OUR OFFICE WITH THE VALVE SIZE 3 DAYS IN ADVANCE OF WHEN IT IS NEEDED ON SITE.

FOR QUESTIONS CALL THE CAPTIVEAIRE SOUTHERN CA NATIONAL ACCOUNTS OFFICE
3002 DDV AVENUE, SUITE 202
TUSTIN, CA 92780
TEL: 714-677-2963 EMAIL: REG83@CAPTIVEAIRE.COM

DATE: 4/1/2024
DWG.#: 6711089
DRAWN BY: AH-83
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 9

REVISIONS
DESCRIPTION DATE

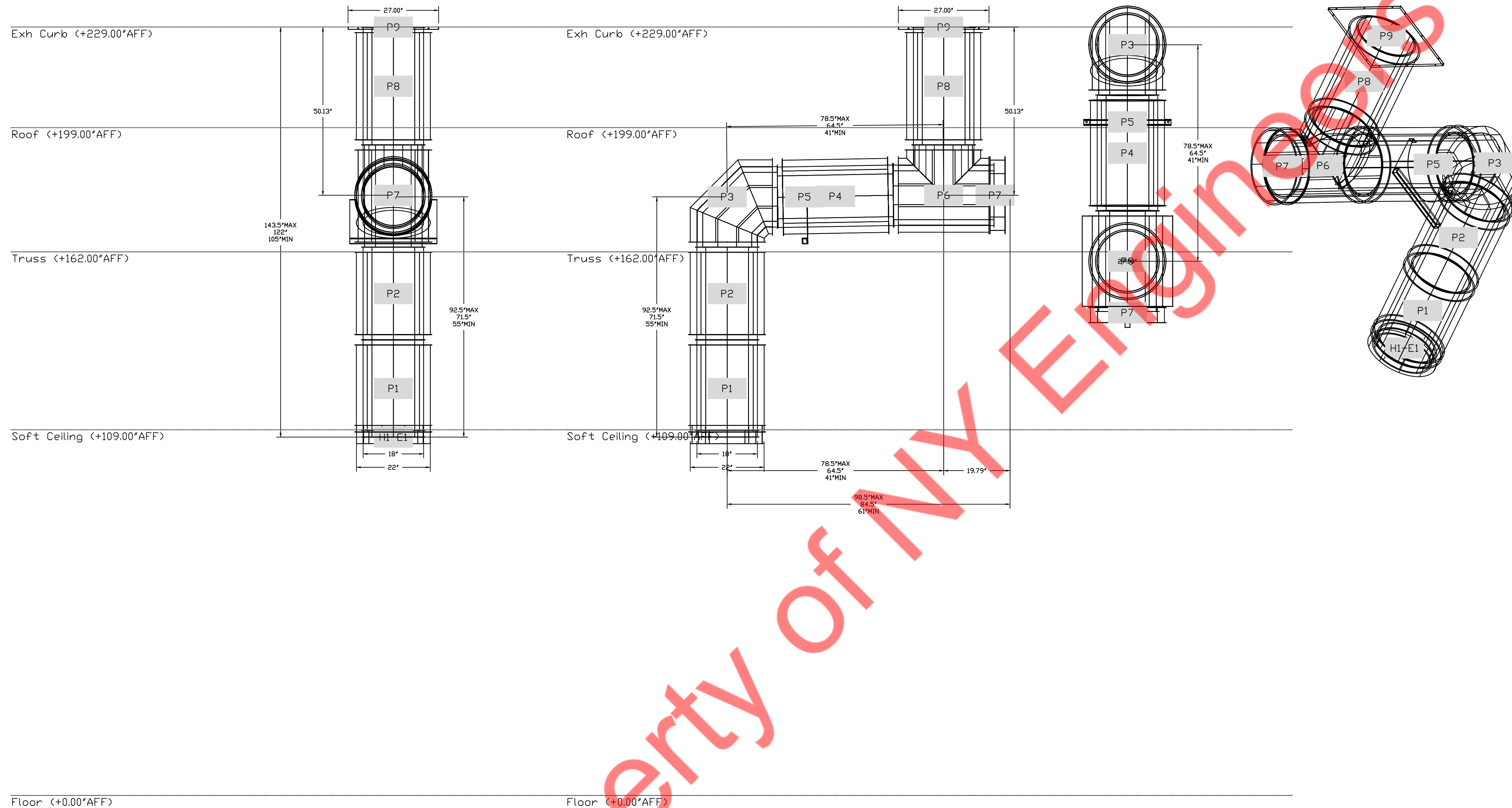
CAPTIVEAIRE
Southern CA National Accounts
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DUCTWORK #1 FRONT VIEW

DUCTWORK #1 SIDE VIEW

DUCTWORK #1 TOP VIEW DUCTWORK #1 SE VIEW



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DUCTWORK #2 PARTS - JOB#6711089 DOUBLE WALL

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
H2-E1	DW222WRISER-2R-S	2900				-0.897	10.73	0.00	1	DOUBLE WALL RISER COVER - USED ON 18" INNER RISER, 4' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	DW1829DWLT-2R-S	2900				-0.007	50.46	1641.06	1	DOUBLE WALL DUCT - 18" INNER DUCT, 29' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P2	DW1847DWAJD-2R-S	2900				-0.006	107.98	1641.06	1	DOUBLE WALL ADJUSTABLE DUCT - 18" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3	DW1890DWASY-2R-S	2900				-0.084	45.59	1641.06	1	DOUBLE WALL DUCT - 18" INNER 90 DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P4	DW1847DWAJD-2R-S	2900				-0.008	107.98	1641.06	1	DOUBLE WALL ADJUSTABLE DUCT - 18" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11' / MAX LENGTH = 48.5' / ADJUSTMENT = 30.5' / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P5	DW2226SADKIT						8.80		1	DUCT - HORIZONTAL SADDLE SUPPORT KIT, USED WITH 22" DD - INCLUDES UNI-STRUT CUT TO LENGTH, DW2226SAD, & HARDWARE BAG 4.
P6 ASSEMBLED W/P7	DW18DWTEASY-2R-S	2900		1		-0.168	55.68	1641.06	1	DOUBLE WALL DUCT - 18" INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P7 ASSEMBLED W/P6 0=S	DW18DWACDDDRCDV-2R-S						26.16		1	DOUBLE WALL DUCT - 18" INNER ACCESS DDDR & 22" ACCESS DDDR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P8 ASSEMBLED W/P9	DW1835DWLTP-2R-S	2900				-0.008	58.74	1641.06	1	DOUBLE WALL DUCT - 18" INNER DUCT, 35' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATES
P9 ASSEMBLED W/P8 0=B	DW2618TPDBEX	2900					9.00	1641.06	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 26 1/2" CURB TO 18" DUCT, 16 GA ALUMINIZED. USED ON NCA16FA / NCA16HPFA & NCA18FA / NCA18HPFA. TRANSITION PLATE DD IS 27.00" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
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TOTAL WEIGHT							502.95			

DOUBLE WALL FACTORY BUILT DUCTWORK

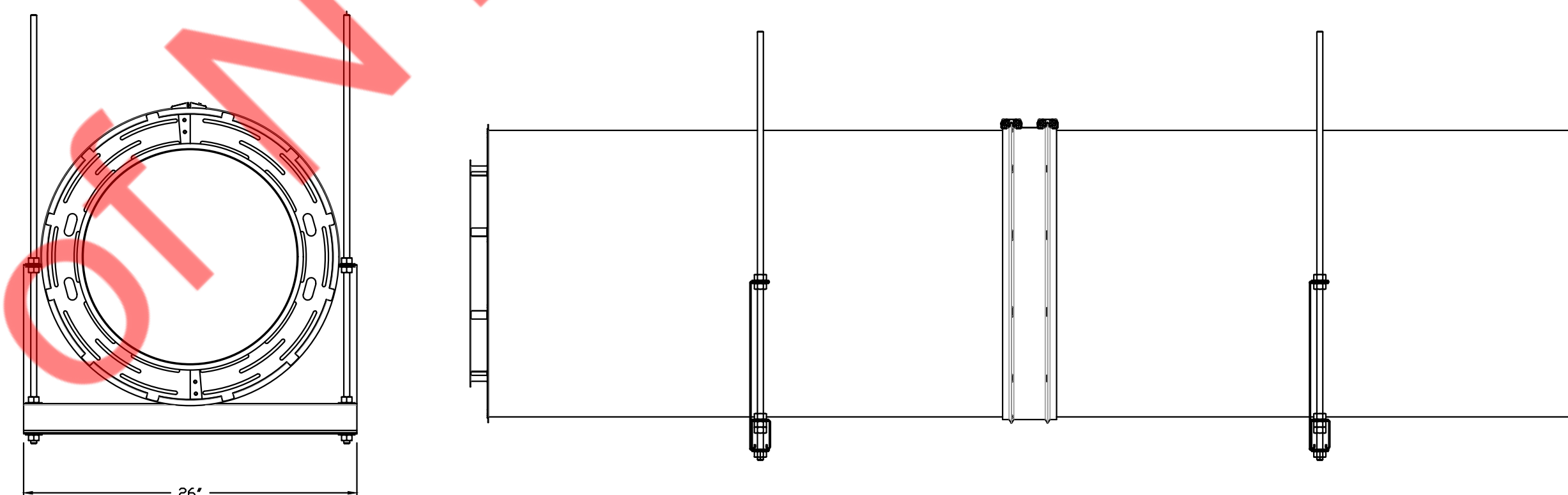
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SUPPORT SYSTEM DETAILS #2

DW2226SADKIT - HORIZONTAL SUPPORTS



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M-410

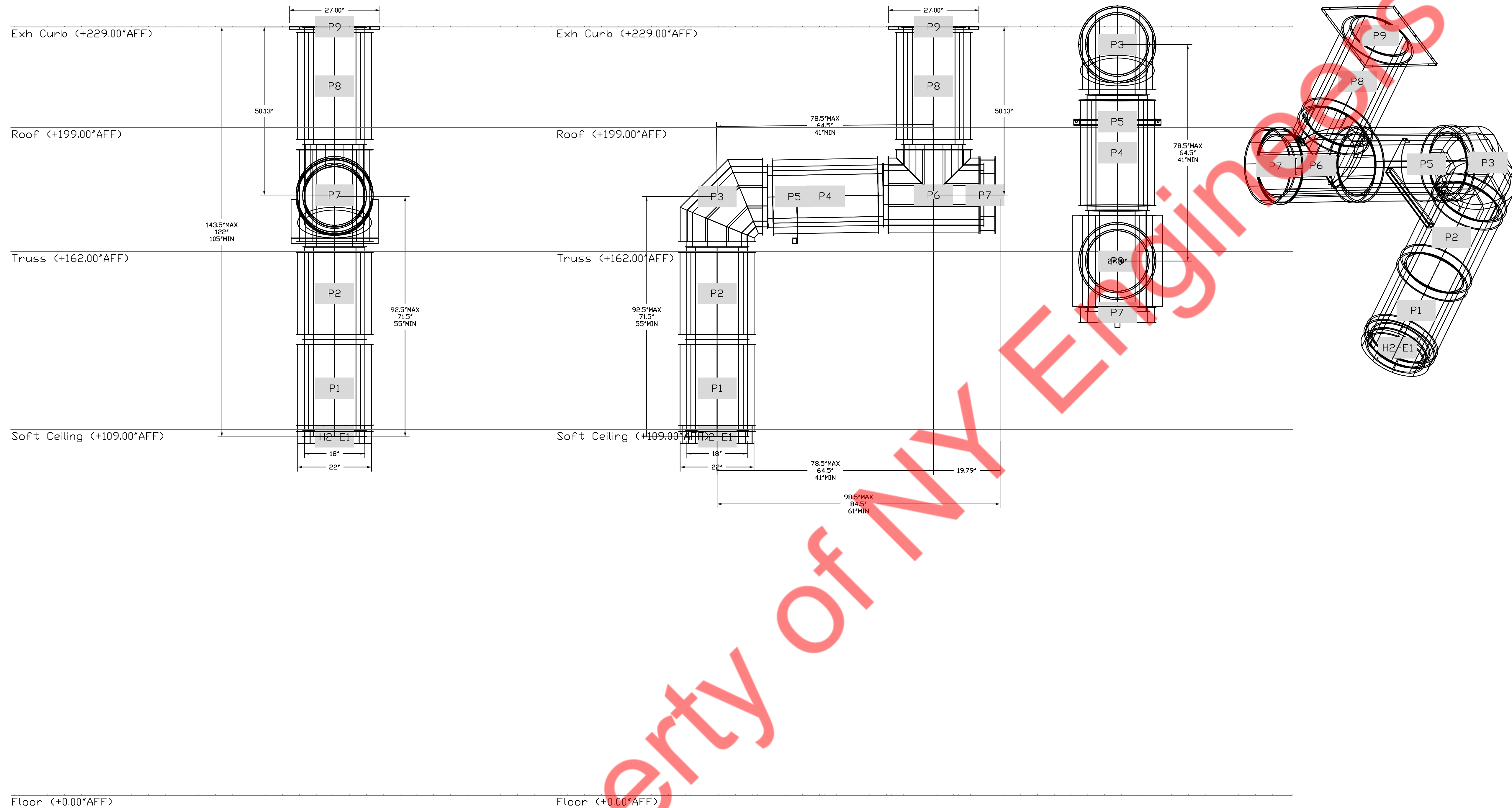
HOOD DETAIL PLAN



DUCTWORK #2 FRONT VIEW

DUCTWORK #2 SIDE VIEW

DUCTWORK #2 TOP VIEW DUCTWORK #2 SE VIEW



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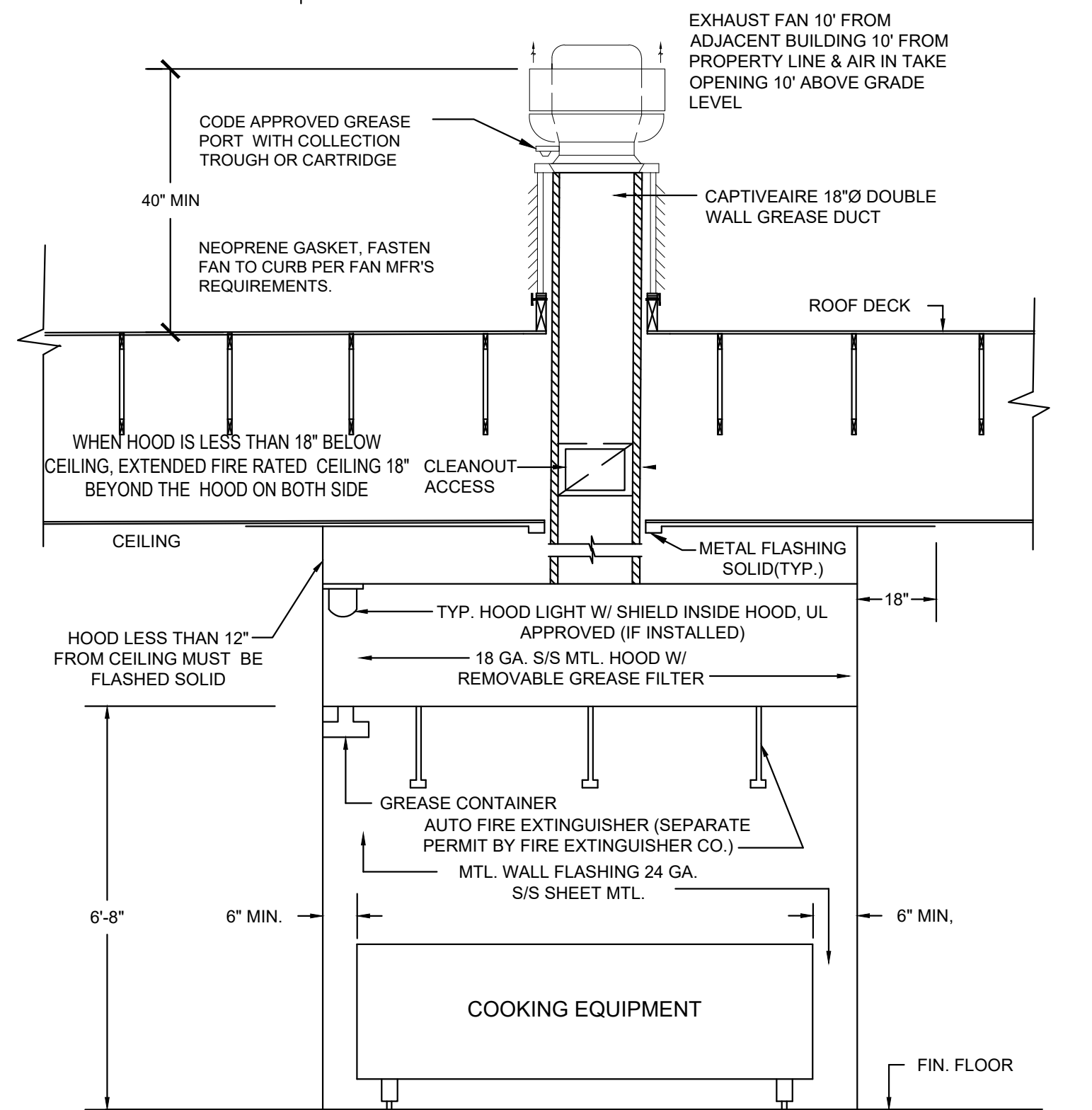
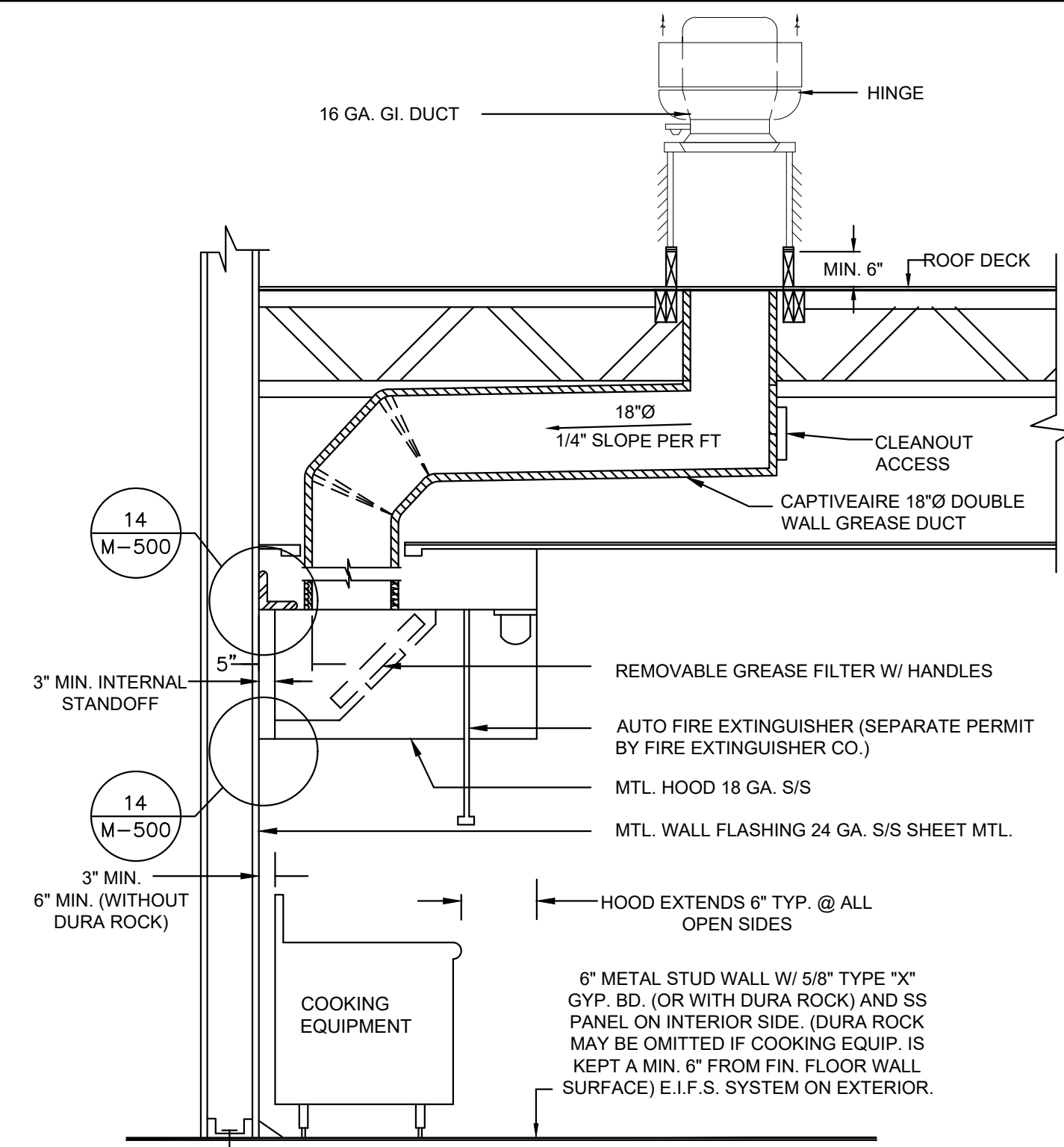
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DWG.#: 6711089
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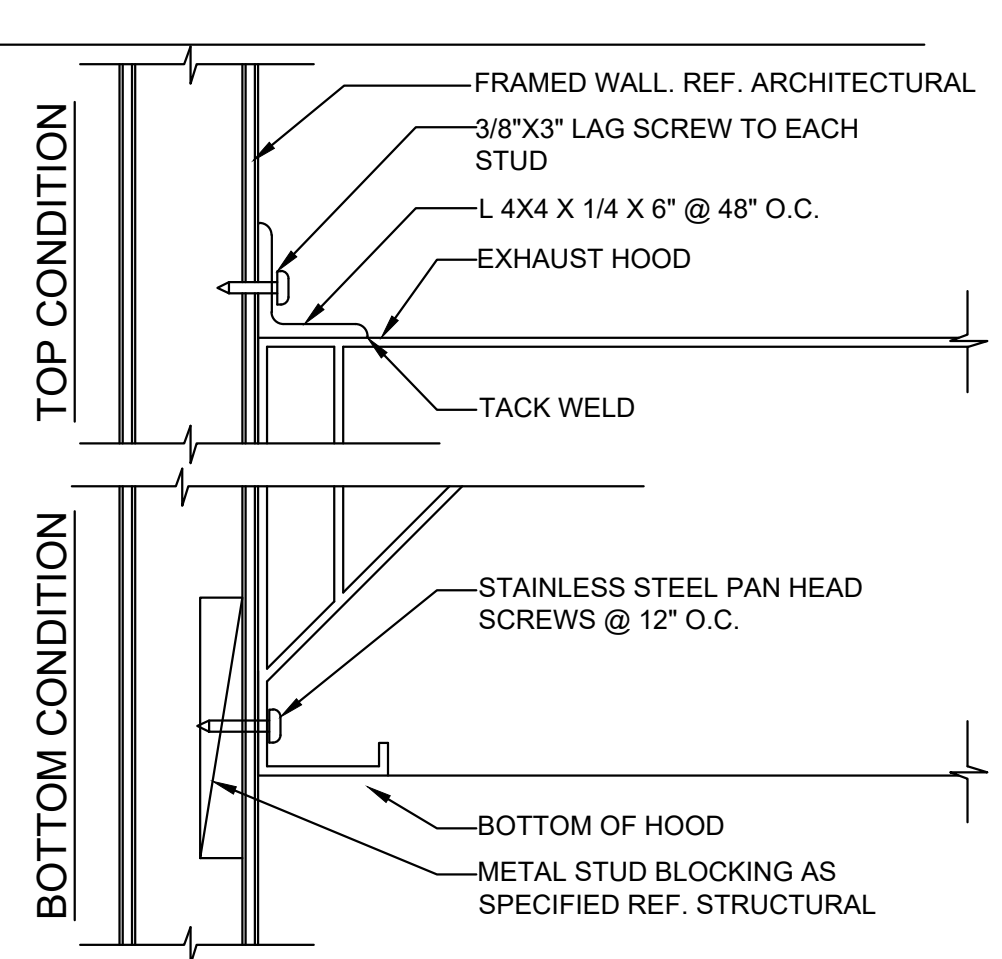
M-411

HOOD DETAIL PLAN



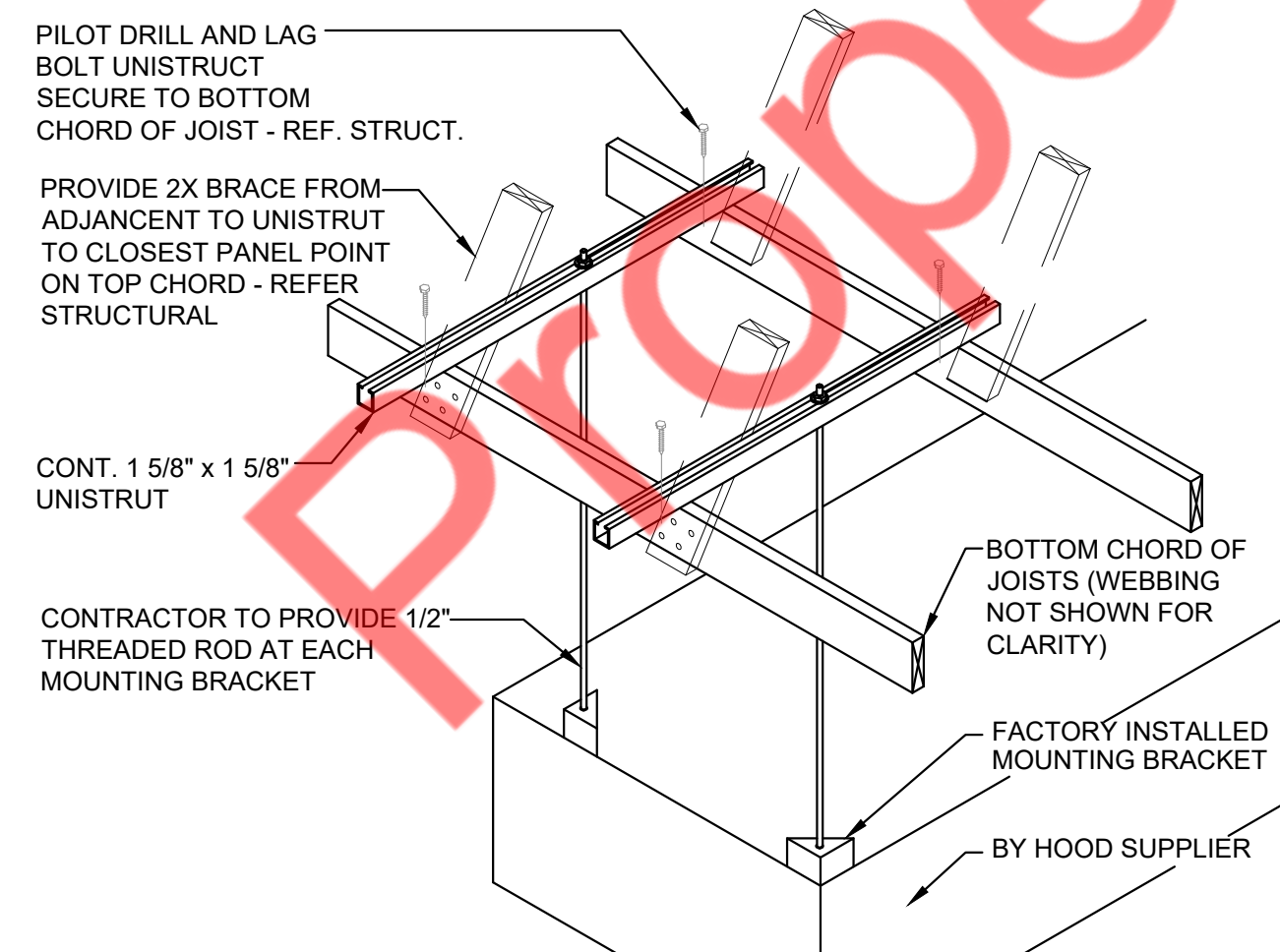
HOOD SECTIONS 6

Scale: NO SCALE M-500



HOOD CLIP AT WALL 5

Scale: NO SCALE M-500



HOOD SUPPORT AT TRUSS 4

Scale: NO SCALE M-500

PERFORMANCE TEST FOR LISTED MECHANICAL HOOD IS REQUIRED PER UMC 509.11

GREASE HOOD SYSTEM CALCULATION

1. TYPE : CANOPY TYPE I, STAINLESS STEEL 18 GAUGE.
2. COOKING EQUIPMENT: (2) CHINESE RANGE, (2) DEEP FRYER, RICE COOKER
3. SIZE: 23'-0" x 4'-0" + 2'-0" MAKEUP AIR PLENUM
4. MIN. REQ'D CAPACITY CFM: (2) U.L.L. LISTED HOOD @ 3,450 CFM EACH
5. PROPOSED (2) EXHAUST FAN & (1) MAKE-UP AIR UNIT. EF1 & EF2 (3,450 CFM EACH); MAU1 (5,520 CFM, 80% OF EXHAUST)
6. EXHAUST DUCT SIZE: 18"Ø
7. EXHAUST VELOCITY @ EXHAUST DUCT 1952
8. EXHAUST FAN (EF1 & EF2) AND MAKE-UP AIR UNIT (MAU1) SHALL BE ELECTRICALLY INTERLOCKED
9. FOR CODE COMPLIANCE SEE DETAIL
10. FOR FILTER INFORMATION SEE CAPTIVEAIRE DWG #M-400.
11. INTERLOCK RTU FANS TO OPERATE WITH KEF'S FOR MAKEUP AIR.

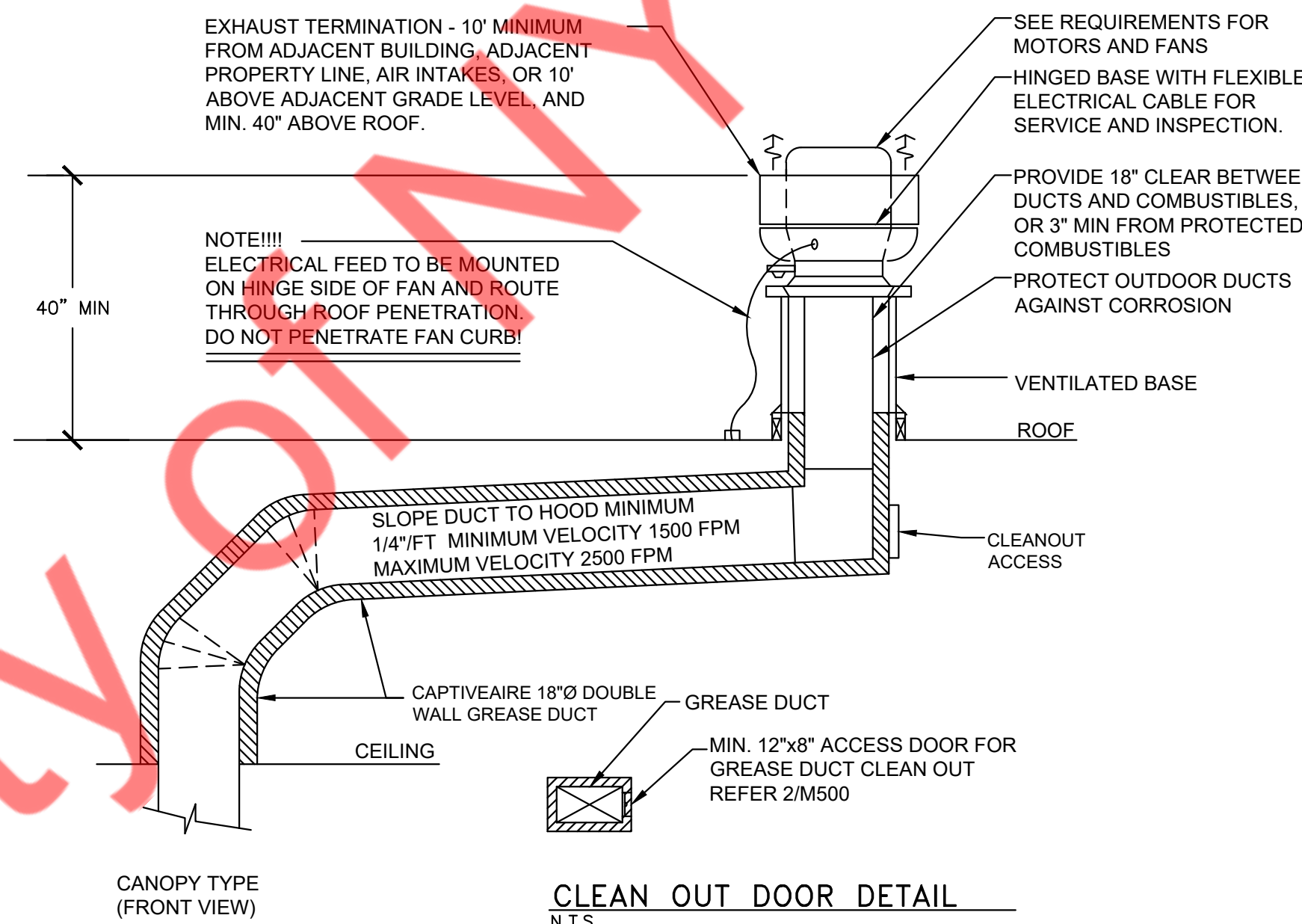
INFORMATIONAL GUIDE FOR COMMERCIAL COOKING HOODS

1. STAINLESS STEEL TO BE NO. 18 U.S. GAGE.
2. WHEN GUTTERS ARE PROVIDED THEY SHALL DRAIN TO A COLLECTING PAN WHICH IS READILY ACCESSIBLE FOR CLEANING
3. SEE TABLE 507.11 FOR MINIMUM DISTANCE BETWEEN LOWER EDGE OF GREASE FILTER AND THE COOKING OR HEATING SURFACE.
4. GREASE FILTERS SHALL BE OF STEEL CONSTRUCTION AND READILY ACCESSIBLE FOR CLEANING.
5. ALL JOINTS AND SEAMS SHALL BE GREASE TIGHT
6. HOODS SHALL BE SECURELY FASTENED IN PLACE BY INCOMBUSTIBLE SUPPORTS.

NOTES

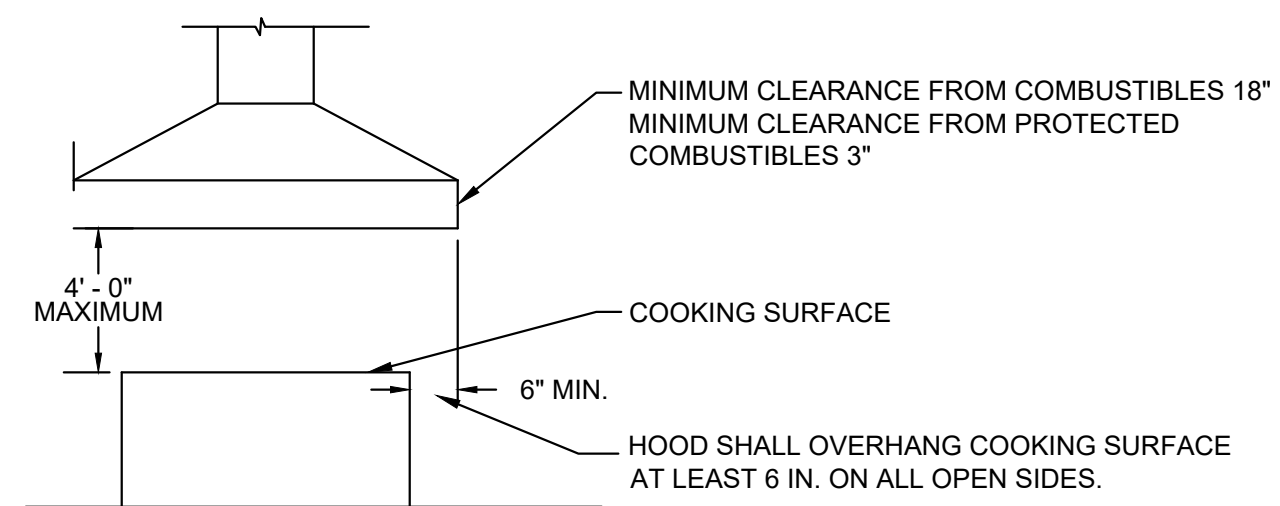
1. PROVIDE ADEQUATE CLEANOUT OPENINGS FOR THOROUGH CLEANING OF DUCT SYSTEM.
2. PROVIDE ADEQUATE MAKE-UP AIR FOR PROPER OPERATION.
3. PROVIDE A SEPARATE DUCT SYSTEM FOR EACH HOOD.
4. THICKNESS OF DUCTS SHALL BE:

DUCT AREA	U.S. GAGE STEEL
UP TO 4 SQ. FT.	16 GA
OVER 4 SQ. FT.	14 GA
5. SUPPORT THE DUCTS AS REQUIRED. DO NOT PENETRATE DUCT WALLS WITH SCREWS, NAILS, ETC.
6. SECTIONS OF DUCT SHALL NOT CONTAIN GREASE POCKETS.



CLEAN OUT DOOR DETAIL

N.T.S.



(FOR REFERENCE ONLY)

HOOD VENTILATION AND SECTION 3

Scale: NO SCALE M-500

NOT USED 2

M-500

NOT USED 1

Scale: NO SCALE M-500

M-500

KITCHEN HOOD DETAILS



- 20
Scale: NO SCALE M-501

- 16
Scale: NO SCALE M-501

- 19
Scale: NO SCALE M-501

- 15
Scale: NO SCALE M-501

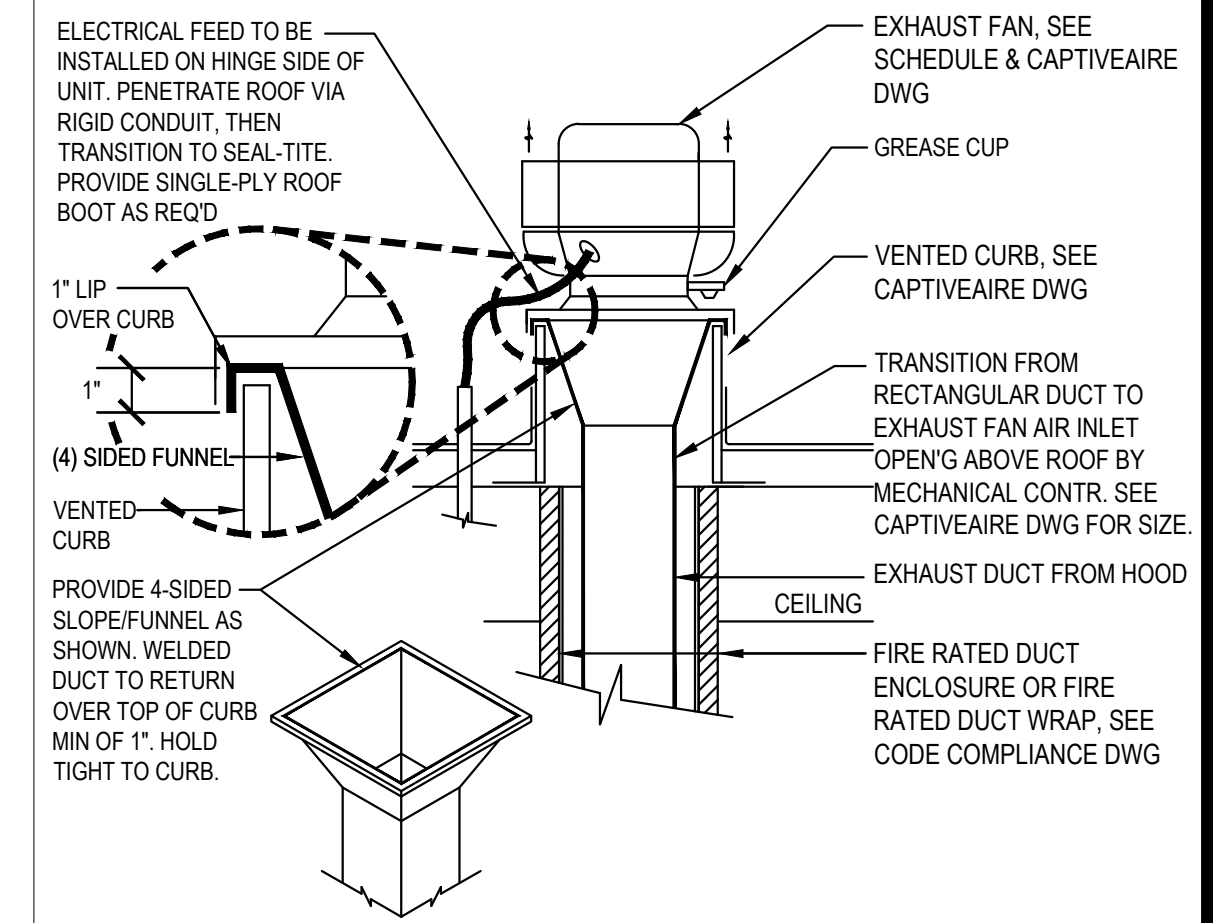
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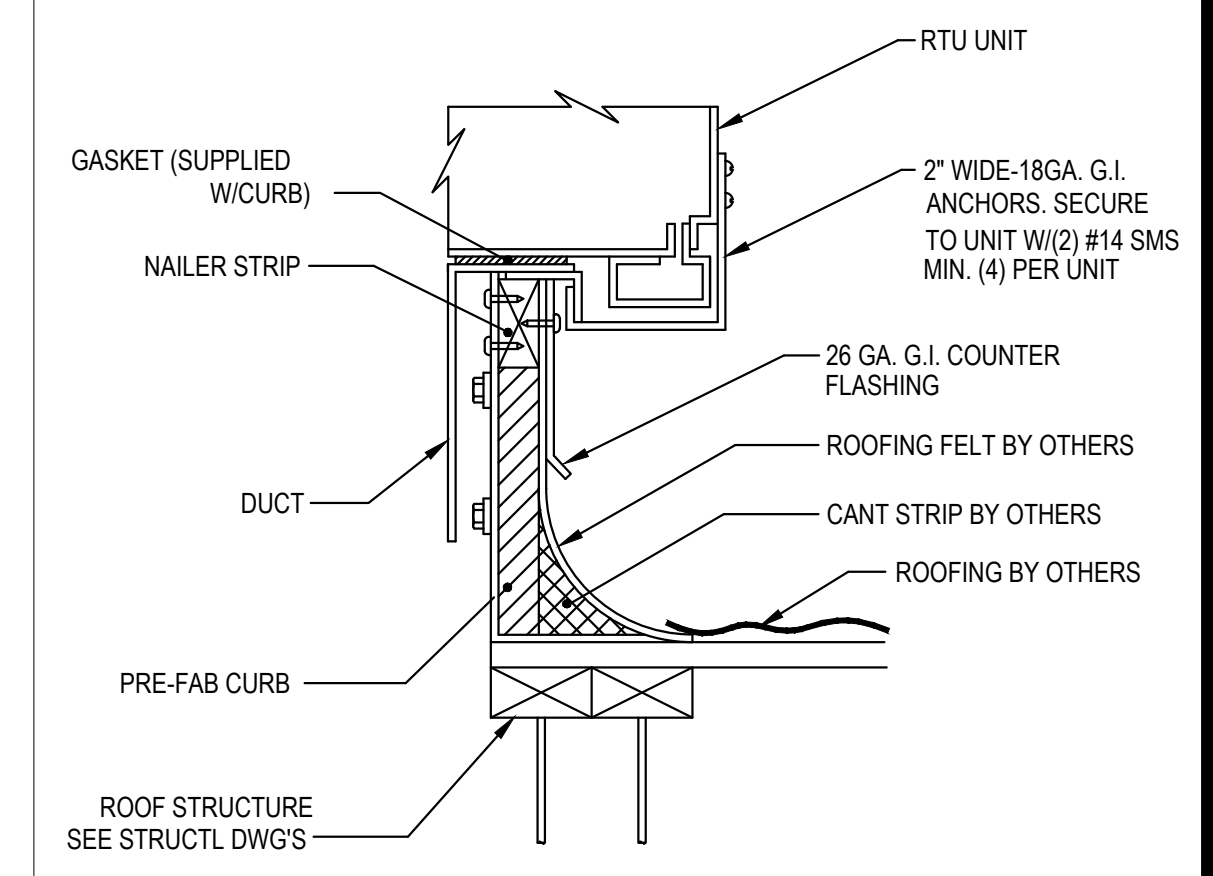
- 17
Scale: NO SCALE M-501

- 13
Scale: NO SCALE M-501

- 4
Scale: NO SCALE M-501

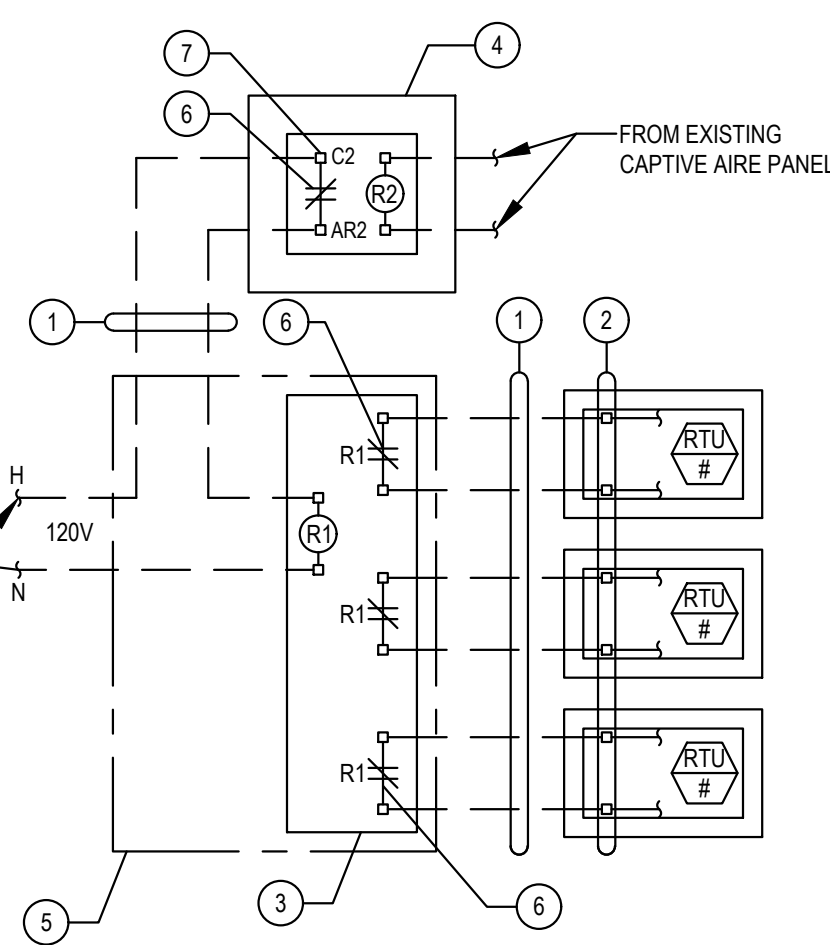


GREASE EXHAUST FAN DETAIL 3
Scale: NO SCALE M-501



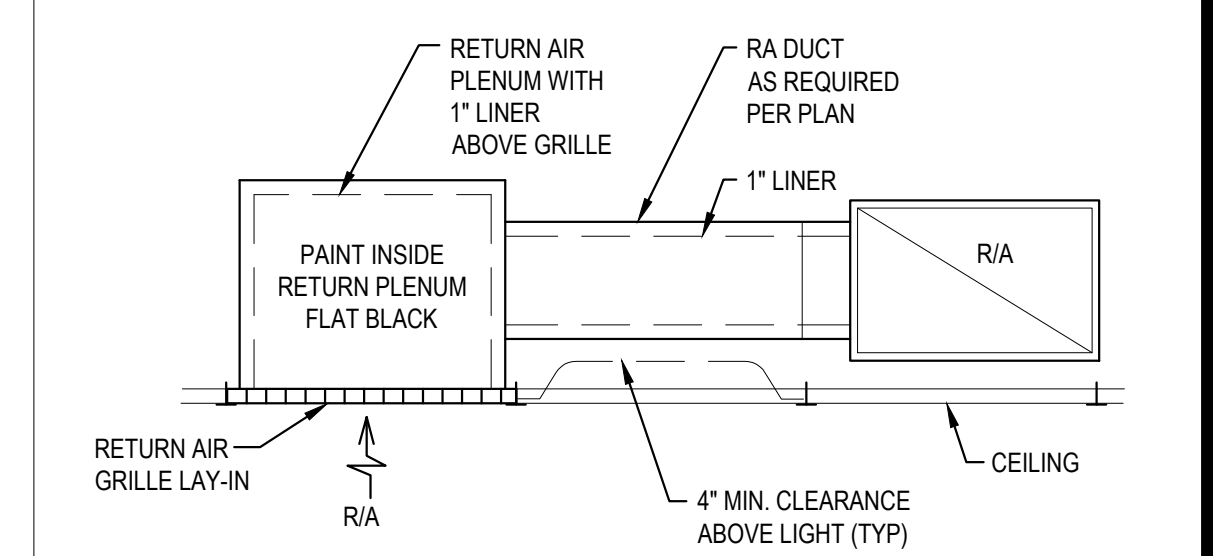
RTU UNIT CURB DETAIL 2
Scale: NO SCALE M-501

SEQUENCE OF OPERATIONS:
UPON ACTIVATION OF THE KITCHEN HOOD ANSUL SYSTEM, THE DRY CONTACT WITHIN THE HOOD CONTROL PANEL SHALL OPEN AND SEND A CONTROL SIGNAL FOR ROOFTOP UNIT SHUTDOWN. SHUTDOWN SHALL OCCUR VIA AN ISOLATION RELAY TO THE (3) ROOFTOP UNITS SUPPLYING MAKE-UP AIR TO THE HOOD. E.C. TO PROVIDE CABINET, RELAY, TRANSFORMER AND ALL NECESSARY CONDUIT AND WIRING IN ORDER TO PROVIDE A COMPLETE, FULLY FUNCTIONING SYSTEM.



- LEGEND
- (2) #12 CONTROL WIRES IN 1/2" CONDUIT BY E.C.
 - M.C. TO CONNECT INTO REMOTE UNIT SHUTDOWN TERMINAL ON CARRIER ROOFTOP UNIT CONTROL BOARD AND REMOVE JUMPER. REFER TO MANUFACTURER FOR ADDITIONAL INFORMATION.
 - DPDT 120V RATED RELAY BY E.C. ENERGIZE FOR FAILSAFE OPERATION.
 - HOOD CONTROL PANEL AT KITCHEN.
 - 12X12X6 NEMA 1 CABINET MOUNTED ON WALL ADJACENT TO KITCHEN HOOD BY E.C.
 - N.O. DRY CONTACT (SHOWN ENERGIZED) THAT OPENS IN FIRE CONDITIONS.
 - 120V RATED DRY CONTACT WITHIN CAPTIVE AIRE PANEL.

RTU CONTROL WIRING DIAGRAM 5
Scale: NO SCALE M-501



RETURN PLENUM 1
Scale: NO SCALE M-501

M-501

MECHANICAL DETAILS



EQUIPMENT SCHEDULE											
ELECTRICAL						DESCRIPTION					
D	DIRECT CONNECTION					O	OWNER(PANDA EXPRESS,INC.)			S	SERVING AREA
C	CONVINIENT OUTLET					GC	GENERAL CONTRACTOR			K	KITCHEN
FSO	FLOOR STUB OUT					EC	ELECTRICAL CONTRACTOR			(E)	EXISTING
DC	DROPPED CORD					KEC	KITCHEN EQUIPMENT COMPANY			UC	UNDER COUNTER
CONNECTION	LOAD (VA)	AMP.	PHASE	H.P.	VOLT	REMARKS	MANUFACTURE	MODEL NO.	EQUIPMENT DESCRIPTION	TAG	
D	475	3.95	1		120		KEC	PER MFG	44" SNEEZE GUARD ASSEMBLY	1S2B1	
D	425	3.54	1		120		KEC	PER MFG	58" SNEEZE GUARD ASSEMBLY	1S2B2	
C	650	5.41	1		120		I/O CONTROLS CORP.	ABC-065-14	INDUCTION WELL - 17QT	3F	
C	650	5.41	1		120		I/O CONTROLS CORP.	ABC-065-10	INDUCTION WELL - 11QT	3G	
C	1116	9.3	1		120		CORNELIUS	IDC-255	BEVERAGE DISPENSER	4A	
C	864	7.2	1		120		WELBILT	16-2172	WATER BOOSTER	4S3	
C	1776	14.8	1		120		BUNN	TB3	ICED TEA BREWER (2)	9D	
C	132	1.1	1		120		MANITOWOC	IBF0820C-161	825 LB ICE CUBE MACHINE	10K	
C			1		115		MANITOWOC	IYT0620A	CUBER HALF DICE CUBE	10L	
D			1		208/230		MANITOWOC	CVDF0900A-261	REMOTE CONDENSER	10KS1	
C	840	7	1		120		KEC	PER MFG	42" CHINESE RANGE	20R	
C			1		120		FRYMASTER	21814GF	2-FRYER POT UNIT	21F	
C			1		120		NCC	TNC-T9028-NC01	FRYER TIMER	21S4	
C	3600	17.3	1		208		VULCAN	VMCS-101	(2) ELECTRIC GRIDDLE TOP	23E	
C	1776	14.8	1		120		WINSTON	HA4005	RICE HOLDING ROLLING CABINET	24HR	
C	610	5.3	1	1/2	115		RANDELL	9205F-290-PE-N	60" WORKTOP FREEZER	30K2N	
D	416	2	1	1.5	208	3	IMPERIAL BROWN/GRE	CUSTOM	WALK-IN COOLER UNIT	31	
D	3120	15	1	1.5	208	3	IMPERIAL BROWN/GRE	CUSTOM	WALK-IN COOLER COND.	31S	
D	2080	10	1	1.5	208	3	IMPERIAL BROWN/GRE	CUSTOM	WALK-IN FREEZER(POWERED FROM COND. UNIT)	32	
D	500	4.16	1		120	2	IMPERIAL BROWN/GRE	CUSTOM	WALK-IN FREEZER COND.	32S1	
C	1035	9	1	3/8	115		RANDELL	PT84-36W-L-PEN-DL-N	84" REF. PREP. TABLE	34A2LN	
C	1080	9	1	1/3	120		RANDELL	PT48-18W-L-PE-N	48" REF. PREP. TABLE	34D2N	
C	1520	7.3	1	2	208		ELECTROLUX	727998	THAWING CABINET	40T	
C	1200	10	1		120		ELECTROLUX	DITO-TRS24	FOOD PROCESSOR	53	
C	105	0.875	1		120		WELBON	WRS-1088BS	RICE WARMER	54A	
C	19090	53	3	4	208		HOBART	PW10SER	POT WASHER	70D	
D	1800	8.65	1		208		SHARP	R-CD1800M	MICROWAVE	55A	
C	100	0.83	1		120		DELL OPTIPLEX	Xe2	COMPUTER	83A	
C	100	0.83	1		120				POS PRINTERS	86A	
C	500	4.16	1		120				CASH REGISTER SYSTEM	94	
D	587	5.1	1	1/2	115		MARS	STD242-1U	AIR CURTAIN DOOR	M8D	
D	587	5.1	1	1/2	115		MARS	STD242-1U	AIR CURTAIN DOOR	M8C	
D	4160	20	1		120,208		QUIK-SERV	CF-25 NON-HEATED	DT WINDOW AIR CURTAIN	M9A	
D	2400	20	1		120		QUIK-SERV	SST-4860E	DT WINDOW	M10	
C	960	8	1		120		RINNAI	MTO-00247	GAS TANKLESS WATER HEATER	P3	
C	50	0.416	1		120		HYPERACTIVE		HYPERACTIVE TIMER SYS.	941A	
C	50	0.416	1		120		DELL (17")		LCD MONITOR-MANAGER	94216	
C	50	0.416	1		120		HME		HME INTERCOM SYS.	9431	
C	60	0.5	1		120		POSIFLEX		LCD DT MONITOR	94W	
C	50	0.416	1		120		TOSHIBA (TIME LAPSE)		SECURITY VCR	954S2	
C	50	0.416	1		120		DELL (17" COLOR)		SECURITY MONITORS	954S3	
C	100	0.833	1		120				MUSIC SYSTEM	955	
C	130	1.08	1		120		LG	PER MFG	LCD DISPLAY MONITOR	963B	
C	130	1.08	1		120		LG	55WS50BS-B	LCD DISPLAY MONITOR	96-3B	

NOTE: - CONTACTOR TO COORDINATE WITH MANUFACTURER FOR EXACT POWER REQUIREMENTS AND CONNECTION TYPE OF THE EQUIPMENT AND PROVIDE ACCORDINGLY. E.C. TO PROVIDE SHUNT TRIP BREAKERS WHEREVER THEY ARE REQUIRED.

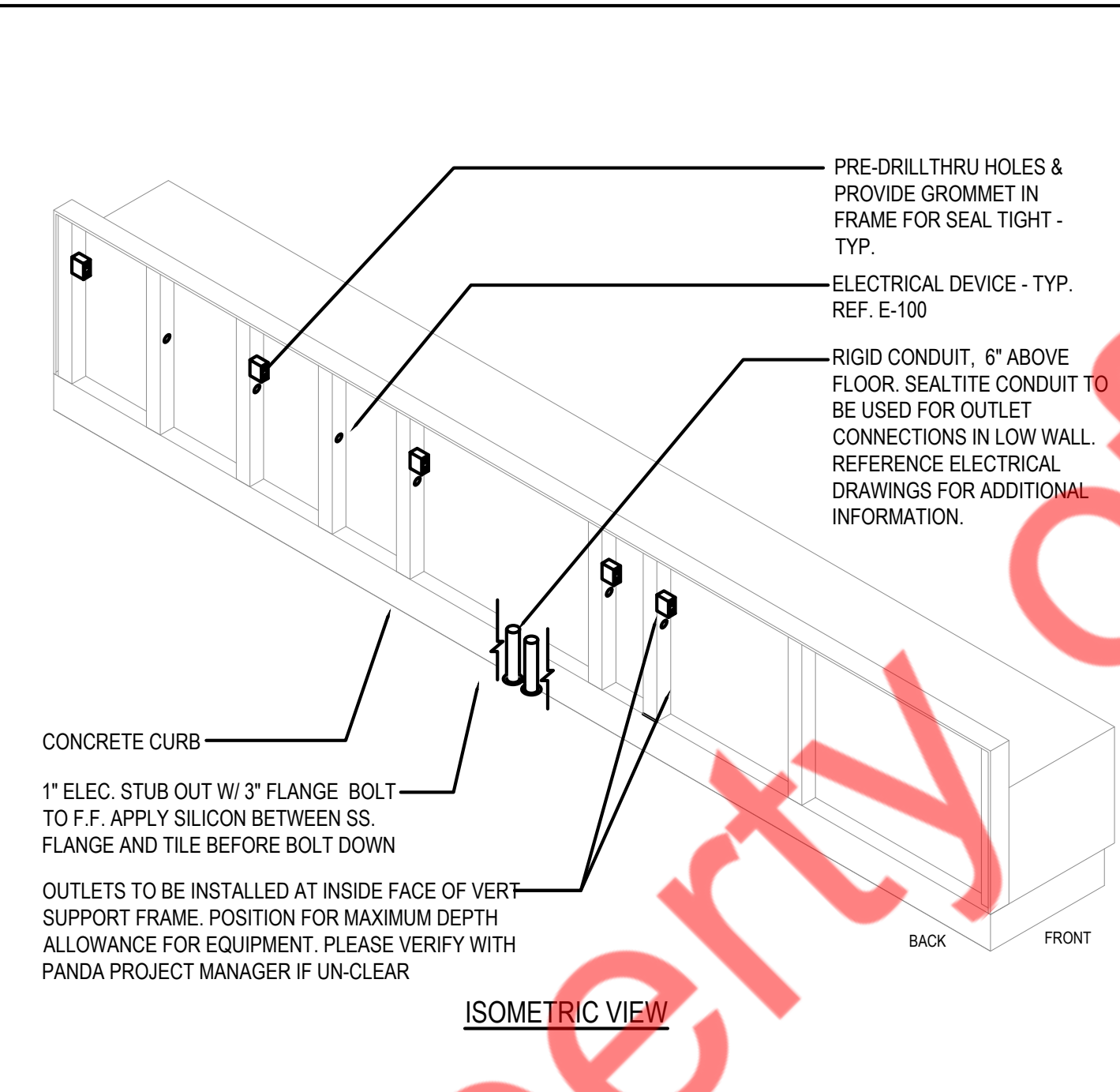
1. PROVIDE SO CORD DROP WITH STRAIN RELIEF. REFER TO ELECTRICAL POWER PLAN.
2. FURNISHED WITH CONTROL BOX. CONNECT ALL COMPONENTS.
3. PROVIDE WP DISCONNECT SWITCH. VERIFY RATING WITH ACTUAL EQUIPMENT.

LIGHTING FIXTURE SCHEDULE				PROVIDED FOR INFORMATION ONLY. VERIFY AND INSTALL PER ELECTRICAL DRAWING	03-04-22
SYMBOL	DESCRIPTION	QTY.	MFR. & CAT. NO.	REMARK	
INTERIOR LIGHTING ITEM					
LT	T-BAR CEILING RECESSED MOUNTED LED LIGHTING FIXTURE, 2' X 4', 120V BAKED-ON WHITE ENAMEL FINISH.	13	ELITE FIXTURE: 24-FPL-BL-LED-3000L/4000L/5000L-DIM10-MVOLT-35K/40K/50K-85	KITCHEN CEILING LIGHTS FURNISHED BY OWNER INSTALLED BY GC	
LTET	T-BAR CEILING RECESSED MOUNTED LED LIGHTING EMERGENCY FIXTURE, 2' X 4', 120V BAKED-ON WHITE ENAMEL FINISH.	4	ELITE FIXTURE: 24-FPL-BL-LED-3000L/4000L/5000L-DIM10-MVOLT-35K/40K/50K-85-INTGO-O-EMG-LED-10W	EMERGENCY KITCHEN CEILING LIGHTS FURNISHED BY OWNER INSTALLED BY GC	
L4HD	UNIVERSAL MOUNT EXIT SIGN, LED LIGHTED, 120/277V WITH BATTERY PACK, 2 FACE, GREEN LETTER	4	EXITRONIX GVEX-U-BP-WB-BL-R6	EXIT SIGN FURNISHED BY OWNER, INSTALLED BY GC	
L8A	HOOD LIGHT	12	FURNISHED & INSTALLED BY EQUIPMENT SUPPLIER	LIGHTS SUPPLIED & PRE-WIRED BY HOOD VENDOR. ELECTRIC CONTRACTOR TO CONNECT MAIN WIRES TO SHUNT TRIP BREAKER AND HOOD CONTROL PANEL	
L8B	WALK-IN COOLER FLUORESCENT LIGHT, 120 V 48"	3	KASON FIXTURE: # 11810LCT400	FURNISHED BY WIC VENDOR, G.R.E., INSTALLED BY GC	
L19	DOWN LIGHT, RECESSED IN CEILING	24	ELITE HOUSING: LDBIC-AT ELITE TRIM: RL631-950L-DIMTR-120-30K-90-RL631-RT-W-WH	FURNISHED BY OWNER, INSTALLED BY GC	
L19B	DOWN LIGHT, RECESSED IN CEILING "B" SHALL DESIGNATE BLACK TRIM	9	ELITE HOUSING: LDBIC-AT ELITE TRIM: RL631-950L-DIMTR-120-30K-90-RL631-RT-MB-BK	FURNISHED BY OWNER, INSTALLED BY GC	
L19EM	EMERGENCY DOWN LIGHT, RECESSED IN CEILING	6	ELITE HOUSING: LDBIC-AT ELITE TRIM: RL631-950L-DIMTR-120-30K-90-RL631-RT-W-WH	EMERGENCY RECESSED DOWN LIGHT - NORMALLY ON INVERTER UNIT - ISOLITE, IMI-12-LC-V1 FURNISHED BY OWNER INSTALLED BY GC	
L20W	4" ADJUSTABLE MR16 DOWN LIGHT, RECESSED IN CEILING "W" SHALL DESIGNATE WHITE TRIM	6	ELITE HOUSING: BL4-50-M-120-AT-W ELITE TRIM: B1406-WH	FURNISHED BY OWNER, INSTALLED BY GC	
L20B	4" ADJUSTABLE MR16 DOWN LIGHT, RECESSED IN CEILING "B" SHALL DESIGNATE BLACK TRIM	10	ELITE HOUSING: BL4-50-M-120-AT-W ELITE TRIM: B1406-BK	FURNISHED BY OWNER, INSTALLED BY GC	
L30	WHITE LED AT DINING ROOM CANOPY	22.3 L.F.	ZLED FIXTURE: VIL-SIGN-60W-WHT-DC-66MOD-STRING-KIT	FURNISHED BY OWNER, INSTALLED BY GC	
L33	WHITE LED AT FIXTURE LOW WALL	22.3 L.F.	NOVA FLEX - DESIGN SERIES FIXTURE: NF-CH-1707-CLEAR/30-2M	FURNISHED BY OWNER, INSTALLED BY GC	
L49	BRONZE SWOOP LIGHT	5	FIXTURE - TBD	DINING AREA - FURNISHED BY OWNER, INSTALLED BY GC	
L50R	12" DIA. PENDANT	3	KAI PENDANT 2 BULB: LED EDISON LAMP:1173467	FURNISHED BY OWNER, INSTALLED BY GC	
L100	MICRO INVERTER	1	EVENLITE #PW112LC	FURNISHED BY OWNER, INSTALLED BY GC	
L97	SPEAKER	2	-	FURNISHED BY MUSIC VENDOR, INSTALLED BY MUSIC VENDOR	
NIGHT LIGHTING REQUIREMENTS: "NL" DESIGNATION INDICATED NIGHT LIGHT ON UNSWITCHED CIRCUIT.					
1. ONE NL BY SERVICE COUNTER, POS / CASHIER					
2. ONE NL BY POS / CASHIER AT DRIVE THRU STATION IF APPLICABLE					
3. ONE NL BY EACH EXIT DOORS IN DINNING ROOM & BACK OF HOUSE					
EXTERIOR LIGHTING					
L40	LINEAR LIGHT AT EXTERIOR STORAGE ROOM	1	COOPER MX-4VT2-LD4-6-DR-UNV-L840-CD1-WL-U	FURNISHED BY OWNER, INSTALLED BY GC	
L85	WALL MOUNTED OVER SERVICE DOOR FIXTURE	1	ORACLE: OWP-FC-116-LED-3500L-DIM10-MVOLT-50K-BK	OVER EXTERIOR SERVICE DOOR. REFER ELEVATIONS FOR HEIGHT FURNISHED BY OWNER, INSTALLED BY GC	
L88	NAVILITE EMERGENCY LIGHT	4	EXITRONIX MLED1-G-WIP	OVER EXTERIOR ENTRANCE & SERVICE DOORS. REFER ELEVATIONS FOR HEIGHT. FURNISHED BY OWNER, INSTALLED BY GC	
L90B	DECORATIVE LED WALL SCENCE	4	HINKLEY LIGHTING, ATLANTIS: BLACK: 1649SK-LED	AT ENTRY DOORS. REFER ELEVATIONS FOR HEIGHT FURNISHED BY OWNER, INSTALLED BY GC	
L97	LED MOTION SECURITY FLOODLIGHT	4	LITHONIA LIGHTING HGX LED 2RH 40K 120 MO DDB M2	INTERIOR LIGHT SENSOR TO BE WALL MOUNTED AT +142" FURNISHED BY OWNER, INSTALLED BY GC	



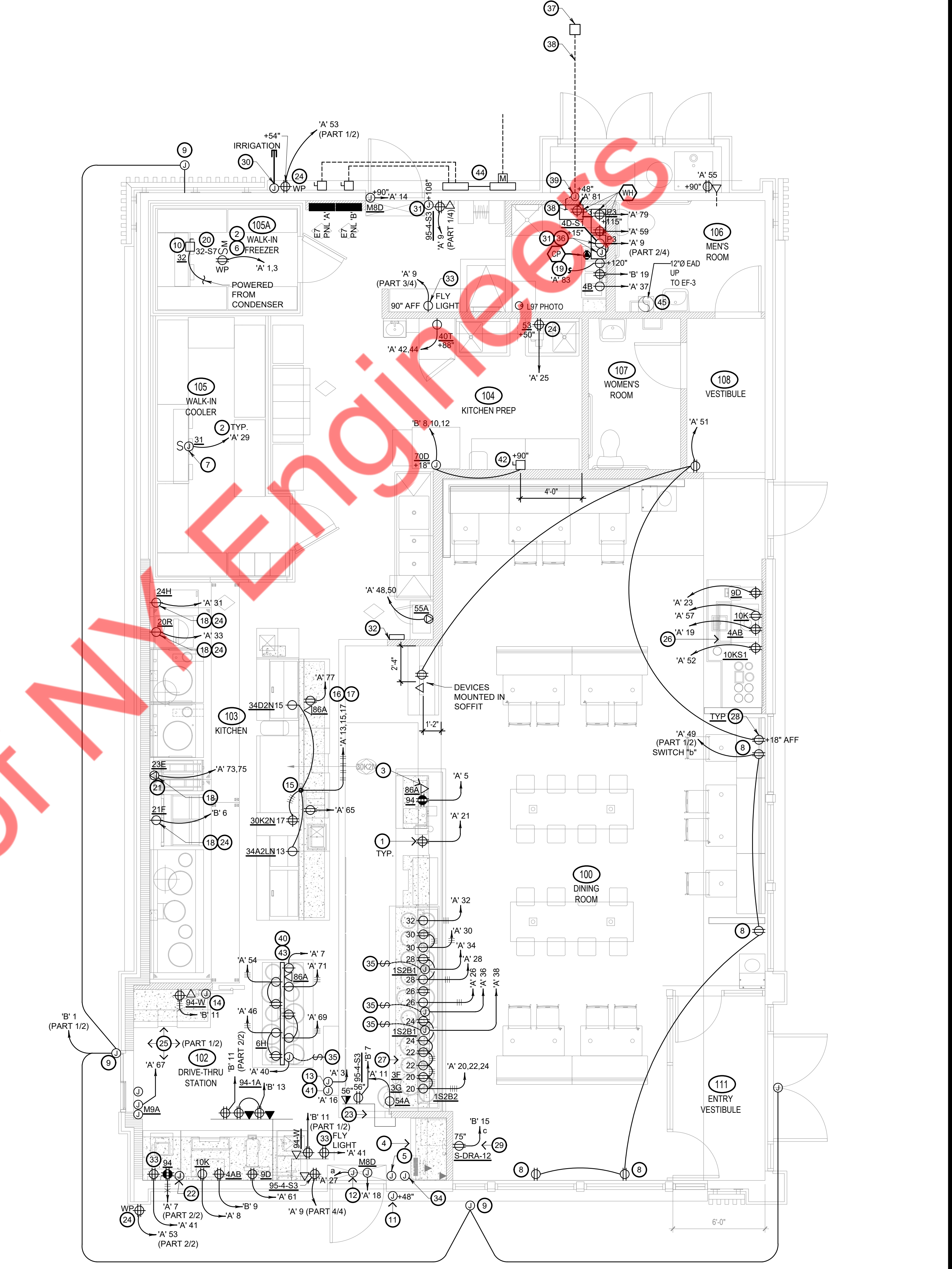
- ALL CIRCUITRY/CONDUIT FOR FRONT LINE EQUIPMENT TO BE ROUTED IN CASEWORK TO J-BOX IN WALL AND CONCEALED IN WALL.
- PROVIDE SEALS AND EXPANSION COUPLINGS ON ALL CONDUITS ENTERING OR LEAVING AREA OF TEMPERATURE DIFFERENCE. REFER TO WIRING NOTES 6/E-400 FOR ADDITIONAL INFORMATION.
- PROVIDE (2) 1-1/2" CONDUITS WITH PULL STRINGS FROM CASH REGISTER TO MANAGER STATION. SEE P.O.S. AND SERVICE LINE ELEVATIONS, 6/E-200.
- SEE 'MANAGER STATION ELEVATION' 1/E-200 FOR ADDITIONAL OUTLETS AND J-BOXES.
- ANSUL PULL STATION. REFER TO DETAIL, 2/E-400.
- REFER TO 'LTG AND DOOR HEATER' WIRING DIAGRAM, 10/E-400.
- REFER TO 'COOLER EVAPORATOR COIL' WIRING DIAGRAM, 8/E-400.
- SHOW WINDOW RECEPTACLE SHALL BE CONTROLLED VIA SWITCH "b". REFER TO LIGHTING SWITCHBANK SCHEDULE, SHEET 4/E101. RECEPTACLE SHALL BE MOUNTED IN WALL AS CLOSE TO TOP OF STRUCTURAL HEADER AS POSSIBLE. CENTER ABOVE WINDOW ROUGH OPENING.
- BUILDING SIGNAGE/LOGO DEDICATED/PROPOSED W.P. J-BOX FOR SIGNAGE. COORDINATE LOCATION WITH ARCHITECT / OWNER / SIGN PACKAGE PRIOR TO ROUGH-IN. SIGN DISCONNECT PROVIDED BY SIGN CONTRACTOR.
- REFER TO 'FREEZER EVAPORATOR COIL' WIRING DIAGRAM, 9/E-400. THE FAN COIL UNIT IS POWERED FROM THE CONDENSER UNIT VIA DISCONNECT CONNECTION. HEAT TAPE PROVIDED AND INSTALLED BY ELECTRICIAN.
- PROVIDE PULL STRING TO ABOVE CEILING FOR DOOR KEYPAD CONTROL WIRING.
- J-BOX CIRCUIT ABOVE CEILING TO POWER ELEC. DOOR HARDWARE SYSTEM SHALL BE CONNECTED TO SWITCH 'A'. REFER 4/E-101 FOR SWITCHBANK DETAIL.
- HOOD CONTROL PANEL/ANSUL SYSTEM CABINET. MOUNT CABINET DIRECTLY BELOW T-BAR CEILING.
- PROVIDE 2-GANG J-BOX @ 42" AFF FOR HOOD CONTROL SWITCHES. REFER TO M-400 AND M-401.
- 1" CONDUIT STUB UP LOCATION IN STAINLESS STEEL POWER PANEL FOR ISLAND KITCHEN EQUIPMENT CONNECTION. REFER TO DETAIL 2/A-109. COORDINATE LOCATION WITH ARCHITECT / OWNER.
- ROUTE CABLING / CIRCUITRY THROUGH 1" CONDUIT IN SLAB.
- UTILIZE SEAL TIGHT CONDUIT FOR ALL WIRING INCLUDED ALONG LOW WALL PANEL.
- ALL DEVICES UNDER HOOD TO BE PROVIDED AND INSTALLED WITH GROUND FAULT CIRCUIT BREAKER AND WATERPROOFING BOX (RED DOT #CKSLV). REFER TO COOKLINE ELECTRICAL ELEVATIONS, 3/E-200. ROUTE HOMERUN THROUGH CONTRACTOR INTERFACED WITH THE HOOD FIRE SUPPRESSION SYSTEM. REFERENCE 13/E-400 FOR ADDITIONAL INFORMATION.
- SIMPLEX RECEPTACLE TO BE CONNECTED TO BACK-OF-HOUSE LIGHTING CIRCUITRY/CONTROL. CONTRACTOR TO PROVIDE PIGTAIL FROM CIRCULATION PUMP. COORDINATE FINAL DEVICE PLACEMENT W/ PLUMBING CONTRACTOR PRIOR TO INSTALL.
- PROVIDE WEATHERPROOF RECEPTACLE FOR HEAT TAPE. COORDINATE FINAL LOCATION WITH REFRIGERATION INSTALLER.
- ELECTRIC GRIDDLE '23E': FEED WITH (2) #6, (1) #10 GROUND, 3/4" CONDUIT. REFER TO 12/E-400.
- SEE DRIVE THRU ELEVATION 2/E-200 FOR CONDUIT SIZES AND CONFIGURATIONS.
- SEE TICKET PRINTER ELEVATIONS, 4/E-200.
- PROVIDE WATERPROOFING, COVER, IN-USE RED DOT (#CKSUV).
- SEE FOR DRIVE-THRU ELEVATIONS, 2/E-200.
- SEE DRINK STATION ELEVATIONS, 5/E-200.
- SEE 6/E-200 FOR SERVICE LINE ELEVATIONS.
- SEE DEVICE / RECEPTACLE SCHEDULE 3/E400.
- SEE DINING ROOM ELEVATION, DETAIL 7/E-200.

- PROVIDE AND INSTALL 3/4" CONDUIT AND PULL STRING FROM CLOSEST LANDSCAPE AREA, THROUGH WALL UP TO EMPTY FLUSH MOUNTED JUNCTION BOX @ 54" A.F.F. (FOR IRRIGATION CONTROLS). CLOSE OFF CONDUIT IN LANDSCAPE AREA WITH REMOVABLE CAP. UTILIZE WP CIRCUIT A-53 NEAR ENTRY POINT.
- REFER TO 8/E-200 FOR LOCATION/INSTALLATION OF C02 DEVICE.
- SEE SWITCH BANK ELEVATION, DETAIL 1/E-200.
- FLY LIGHT RECEPTACLE SHALL BE INSTALLED WITH A RECESSED CLOCK SIMPLEX OUTLET. TYP OF ALL LOCATIONS.
- SEE SECURITY KEY PAD ELEVATION 1/E200.
- CONNECT HEAT LAMPS TO COUNTER-MOUNTED SWITCH PROVIDED AND INSTALLED BY CONTRACTOR. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT PROVIDER.
- PANDA EXPRESS TO PROVIDE C02 MONITOR, E.C. TO MOUNT OVER J-BOX WITH WIRING THROUGH WALL CONDUIT FOR CLEAN INSTALLATION. PROVIDE ALL OTHER REQUIRED CONNECTIONS AND COMPONENTS FOR FULLY WORKING SYSTEM.
- PROVIDE IN-GRADE QUARTZITE 8"x8" PC STYLE POLYMER CONCRETE BOX OR EQUAL FOR UNDERGROUND CABLE REQUIRED FOR THE STORE. PART NO. PC081XXXXX OR SIMILAR. REFER TO ELECTRICAL SITE PLAN 1/E105.
- PROVIDE 1" CONDUIT FOR CABLE DEDICATED FOR ENTIRE STORE FROM IN-GRADE 8X8 QUARTZITE BOX TO EXTERIOR CLOSET 6X6 FLUSH MOUNTED JUNCTION BOX. TERMINATE INTERIOR ABOVE CEILING.
- PROVIDE FLUSH MOUNTED NEMA 1 6X6 JUNCTION/PULL BOX AT +48" - HUBBELL OR EQUAL. ROUTE CABLE FROM EXTERIOR 6X6 IN 1" CONDUIT THROUGH BUILDING. TERMINATE INTERIOR ABOVE CEILING.
- PROVIDE A (1) 3/4" UNDERGROUND CONDUIT AND PULLSTRING FOR LOW VOLTAGE WIRING. CONDUIT AND PULLSTRING TO RUN UNDERGROUND FROM HOTWELL CABINET AND STUB-UP THROUGH WALL AND ABOVE CEILING ADJACENT TO MANAGER STATION.
- FIRE SUPPRESSION SHUTDOWN CONTACTOR LOCATED ABOVE CEILING, REFER TO 13/E-400.
- ELECTRICIAN TO WALL MOUNT A NEMA ELECTRICAL DISCONNECT BOX AT +90". ELECTRICIAN TO SUPPLY A WIRE WHIP FROM BOX TO MACHINE. FINAL CONNECTIONS BY HOBBART SERVICE.
- PROVIDE (1) 1" UNDERGROUND CONDUIT AND PULLSTRING FOR HOTWELL CABINET. CONDUIT AND PULLSTRING TO RUN UNDERGROUND FROM HOTWELL CABINET AND STUB-UP BENEATH ELECTRICAL PANEL. REFER TO PANEL SCHEDULE.
- PROVIDE (1) 3/4" CONDUIT AND PULLSTRING FOR OLO PRINTER AND TICKET PRINTER. CONDUIT AND PULLSTRING TO RUN FROM OLO PRINTER & SCANNER TO TABLET & STICKER PRINTER. STUB-UP THROUGH WALL.
- EXHAUST FAN POWER SUPPLY TO BE TAKEN FROM NEARBY LIGHTING CIRCUIT.



REFRIGERATION LINE ELEC DETAIL 4
Scale= NTS E-100

- VERIFY QUANTITIES AND REQUIREMENTS OF ALL HVAC & KITCHEN EQUIPMENT PRIOR TO ROUGH IN.
- ALL TELEPHONE/DATA TV CABLES AND WIRES, AND TERMINATIONS OF ALL REQUIRED CABLE AND JACKS WILL BE INSTALLED BY THIRD PARTY
- POWER SUPPLY FOR COMPUTER AND CASH REGISTER (86A & 94) SHALL BE ON THE SAME CIRCUIT BREAKER. WISOLATED GROUND & ORANGE RECEPTACLE.
- ALL CIRCUITRY SHOWN WITHOUT TICKS SHALL HAVE (2) WIRES PLUS EQUIPMENT GROUNDING CONDUCTOR.
- WHEN WORKING IN JURISDICTIONS WHICH HAVE ADOPTED THE 2017 NEC OR LATER, ALL MULTI-WIRE BRANCH CIRCUITS SHALL HAVE SEPARATE NEUTRALS TO MEET THE REQUIREMENTS OF 2017 NEC 210.4(B).
- TRANSFORMERS SHALL BE MOUNTED ABOVE CEILING BELOW TRUSSES WITH LOW VOLTAGE WIRING FEEDING TO ALL EXTERIOR LIGHTS.
- ALL UNDERGROUND CONDUIT SHALL BE 12" BELOW F.F.



POWER PLAN KEYED NOTES 3
NOT TO SCALE E-100

POWER PLAN GENERAL NOTES 2
NOT TO SCALE E-100

POWER FLOOR PLAN 1
Scale: 1/4"=1'-0" E-100

E-100

POWER FLOOR PLAN



- CONTRACTOR SHALL PROVIDE ALL REQUIRED HARDWARES, BRACKETS, ETC. FOR A COMPLETE LIGHTING FIXTURE INSTALLATION.
- FIXTURES THAT ARE TO BE ROUTED VIA TIMECLOCKS ARE SHOWN ON DETAIL 11/E400. SEQUENCE OF OPERATION: TIMECLOCK WIRED FIRST FOR DESIGNATED CONTROL. SWITCHES ARE SERIES WIRED WITH THE CONTACTORS. UTILIZE DIGITAL OVERRIDE TIMER SWITCH (DOTS) TO OVER-RIDE THE TIMECLOCK FOR CLEANING AND AFTER HOURS AS NEEDED. SEE DETAIL 11/E400
- ALL LIGHTING FIXTURES SHALL BE SUPPORTED PER N.E.C. 410-16(C). SEE DETAIL 4/E400.
- CONTRACTOR SHALL INSTALL ALL LIGHTING FIXTURES INCLUDING OWNER-FURNISHED FIXTURES.
- ALL FIXTURE BALLASTS SHALL BE U.L. LISTED.
- E.C. SHALL INSTALL OWNER SUPPLIED LED STRIP LIGHTING & CUT TO PROPER LENGTH. COORDINATE WITH OWNER FOR EXACT LENGTHS AND FINAL LOCATIONS.
- WHEN WORKING IN JURISDICTIONS WHICH HAVE ADOPTED THE 2008 NEC OR LATER, ALL MULTI-WIRE BRANCH CIRCUITS TO HAVE SEPARATE NEUTRALS TO MEET THE REQUIREMENTS OF 2008 NEC 210.4(B).
- ALL CIRCUITRY SHOWN WITHOUT TICKS SHALL HAVE (2) WIRES PLUS EQUIPMENT GROUNDING CONDUCTOR.
- 'N.L.' DESIGNATION INDICATES NIGHT LIGHT ON UNSWITCHED CIRCUIT.

- SWITCHBANK 'A'. REFER TO SCHEDULE 4/E-101.
- ROUTE HOMERUN THROUGH LIGHTING SWITCHBANK 'A' (SWITCHES AS NOTED IN LOWER CASE). REFER TO SCHEDULE 4/E-101 FOR MORE INFORMATION.
- ROUTE THROUGH CONTACTS IN HOOD CONTROL PANEL 'M4' FOR CIRCUIT POWER. REFER TO 3/E-401.
- PROVIDE SEPARATE UNSWITCHED HOT CONDUCTOR (SAME CIRCUIT, NOT CONTROLLED BY SWITCH IN SWITCHBANK) TO LOCALLY SWITCHED FIXTURES AND EMERGENCY FIXTURE BATTERY TRIGGER LEADS.
- DUPLEX RECEPTACLE FOR LED ROPE. INSTALL ABOVE CEILING. REFER TO 8&9/A-402 FOR MORE INFORMATION.
- WALK-IN COOLER LIGHT FIXTURES AND PILOT LIGHT SWITCH PROVIDED WITH COOLER INSTALLED BY E.C. REFER TO 'COOLER EVAPORATOR COIL' WIRING DIAGRAM, 8/E-400.
- WALK-IN FREEZER LIGHT FIXTURE AND PILOT LIGHT SWITCH PROVIDED WITH FREEZER INSTALLED BY E.C. REFER TO 'FREEZER LTG AND DOOR HEATER WIRING DIAGRAM, 10/E-400.
- NOT USED.
- FIXTURES IN THIS ROOM SHALL BE LOCALLY SWITCHED.
- LIGHTING INVERTER FOR EMERGENCY LIGHTING TO BE MOUNTED TO BULKHEAD. RE: 9/E200.
- LED TRANSFORMER FOR LED ROPE LIGHTING LOCATION, MOUNT ABOVE CEILING.
- NOT USED.
- PROVIDE JUNCTION BOX ABOVE CEILING FOR THE BZ-150 UNIVERSAL POWER PACK REQUIRED FOR EXTERIOR MOTION CONTROL LED FIXTURES. PROVIDE LOW VOLTAGE CONNECTIONS AS REQUIRED TO LIGHTSAVER LS-102 SWITCHING PHOTOSENSOR SO THAT WHEN STORE OPERATIONS ARE OFF THIS EXTERIOR SECURITY LIGHT IS ACTIVATED BY EXTERIOR MOTION ONLY. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS FOR WIRING DIAGRAM. VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- PROVIDE WALL MOUNTED JUNCTION BOX AT +142" FOR INSTALLATION. INSTALL LIGHTSAVER LS-102 SWITCHING PHOTOSENSOR FOR EXTERIOR MOTION CONTROL SECURITY FIXTURES TYP OF 2 LOCATIONS. CONTROL TIMES OF CONTROL SO THAT WHEN STORE OPERATIONS ARE OFF INTERIOR LIGHTS GO OFF AND THE EXTERIOR MOTION LIGHTS ARE ACTIVATED WITH ANY MOTION DETECTED AFTER STORE HOURS. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS FOR WIRING DIAGRAM. VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION.

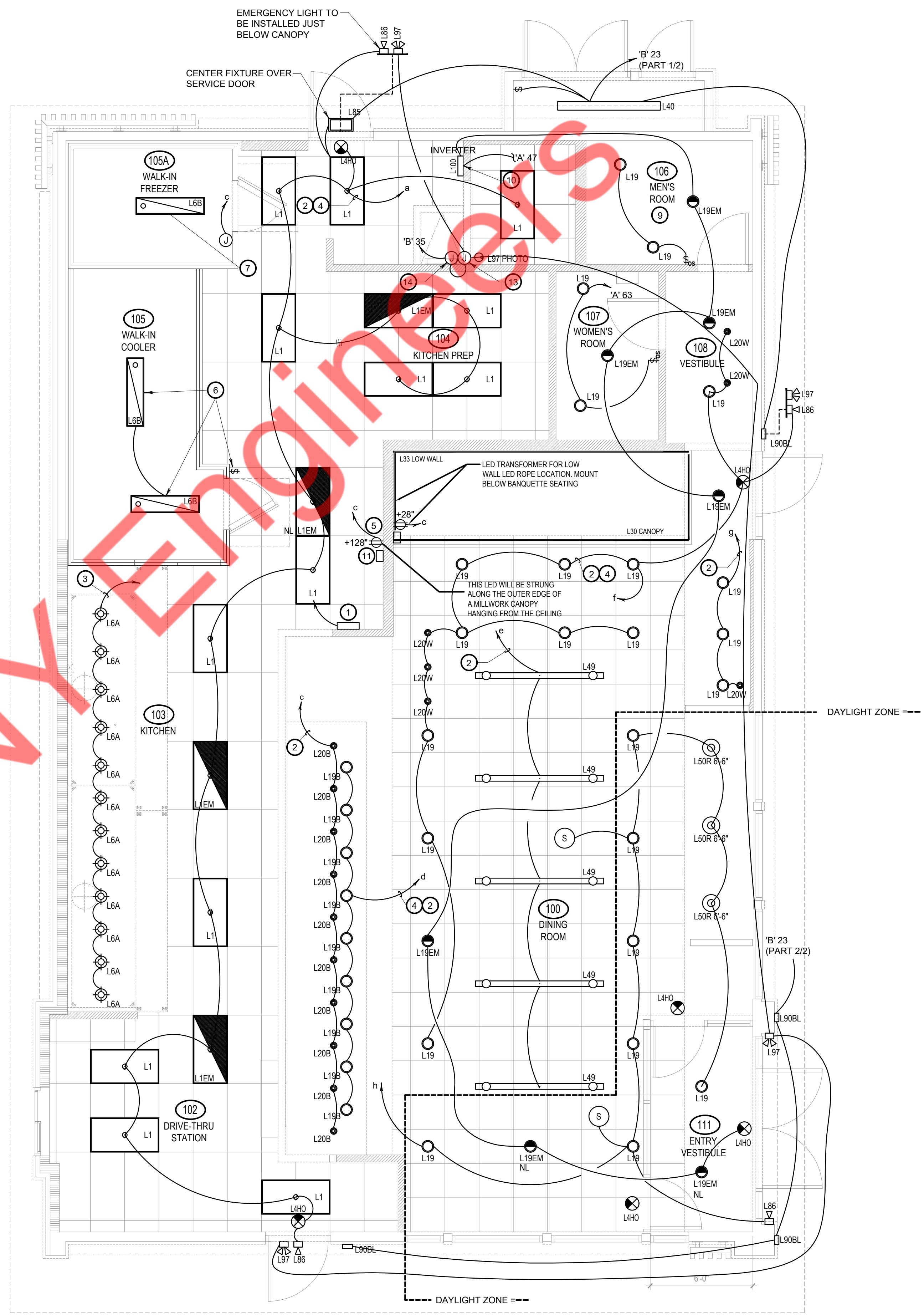
LIGHTING GENERAL NOTES 2 **LIGHTING KEYED NOTES** 3
 NOT TO SCALE E-101 NOT TO SCALE E-101

- NOTE:
ALL SWITCHES/DEVICES TO BE STANDARD SINGLE POLE. DO NOT USE "DECORA" TYPE SWITCH/DEVICE
- NOTE:
FIXTURES TO BE ROUTED VIA TIME TIMECLOCKS ARE SHOWN ON DETAIL 11/E400.
- NOTE:
CONTRACTOR TO INSTALL (2) 5 GANG SWITCH BOXES AS SHOWN BELOW. DO NOT INSTALL SEPERATE/INDIVIDUAL BOXES FOR EACH SWITCH

(a)	(b)	(c)	(d)	(e)
BACK OF HOUSE LTG & EX. FAN & RECIRC PUMP	SHOW WINDOW RECEPTS	WALK-IN, MENU LED ACCENTS	SERVING LINE SOFFIT	DINING PENDANTS
(f)	(g)	(h)	(i)	(j)
INTERIOR DINING	BEVERAGE COUNTER	DAYLIGHT HARVEST	SPARE	INTERIOR LIGHTING SHUT DOWN OVERRIDE

TAG	SWITCH TYPE	AREA SERVED / SWITCH LABEL	CIRCUIT	LOAD
a	TOGGLE SWITCH	BACK-OF-HOUSE / RR FANS	'A' 45	530 VA
b	TOGGLE SWITCH	SHOW WINDOW RECEPT	'A' 49	720 VA
c	TOGGLE SWITCH	WALK-INS, MENU, LED ACCENTS	'A' 1	275 VA
d	TOGGLE SWITCH	SERVING LINE SOFFIT	'A' 45	140 VA
e	TOGGLE SWITCH	DINING PENDANTS	'A' 47	24 VA
f	TOGGLE SWITCH	INTERIOR DINING	'A' 47	118 VA
g	TOGGLE SWITCH	BEVERAGE COUNTER	'A' 47	16 VA
h	TOGGLE SWITCH	DAYLIGHT HARVESTING ZONE	'A' 47	219 VA
i	SPARE			
j	TIMER SWITCH	INTERIOR LIGHTING SHUT DOWN OVERRIDE	'A' 47	118 VA

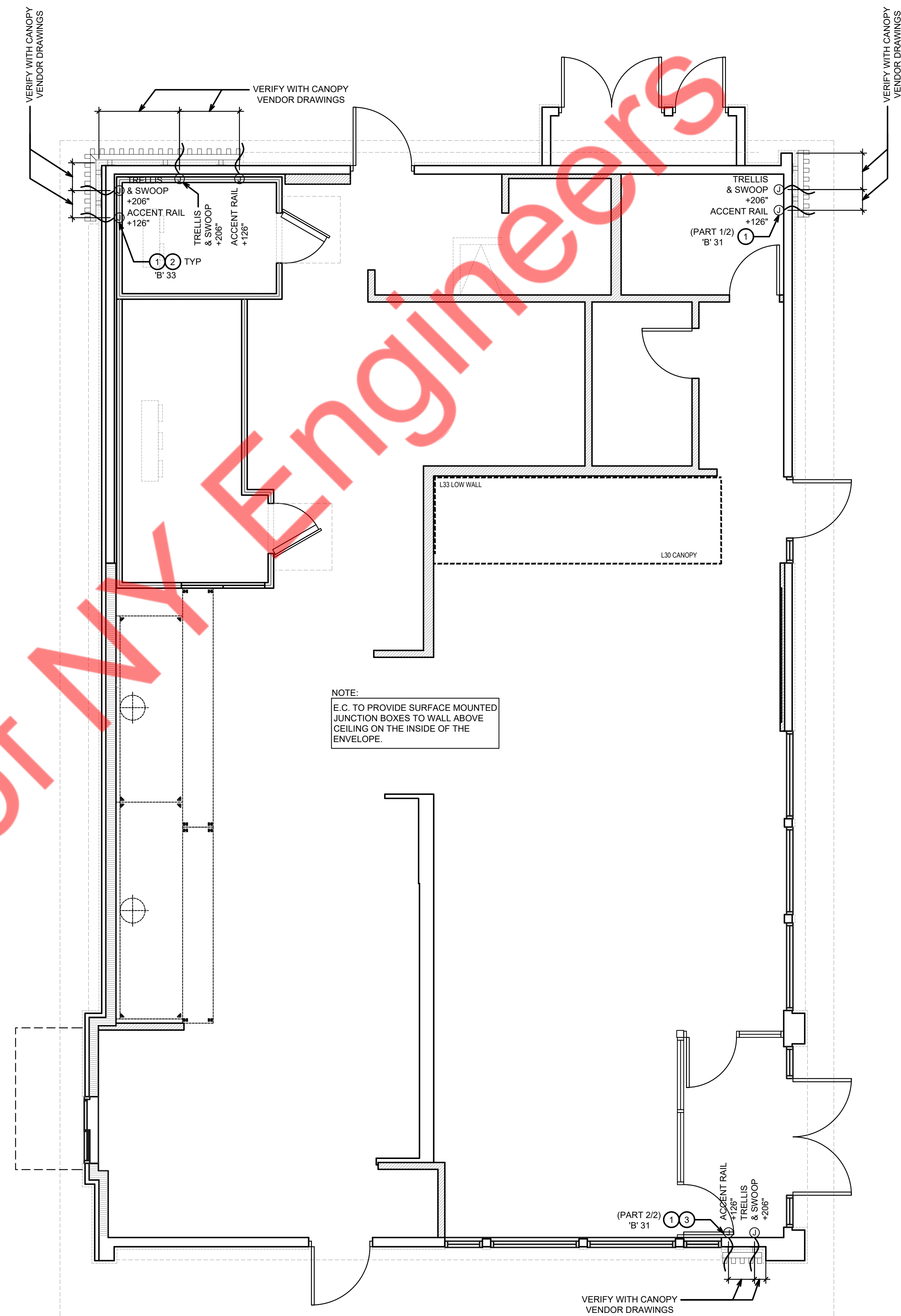
INTERIOR / EXTERIOR LTG CONTACTORS SCHEDULE 4
 NOT TO SCALE E-101



LIGHTING FLOOR PLAN 1
 Scale: 1/4"=1'-0" E-101

E-101

LIGHTING FLOOR PLAN

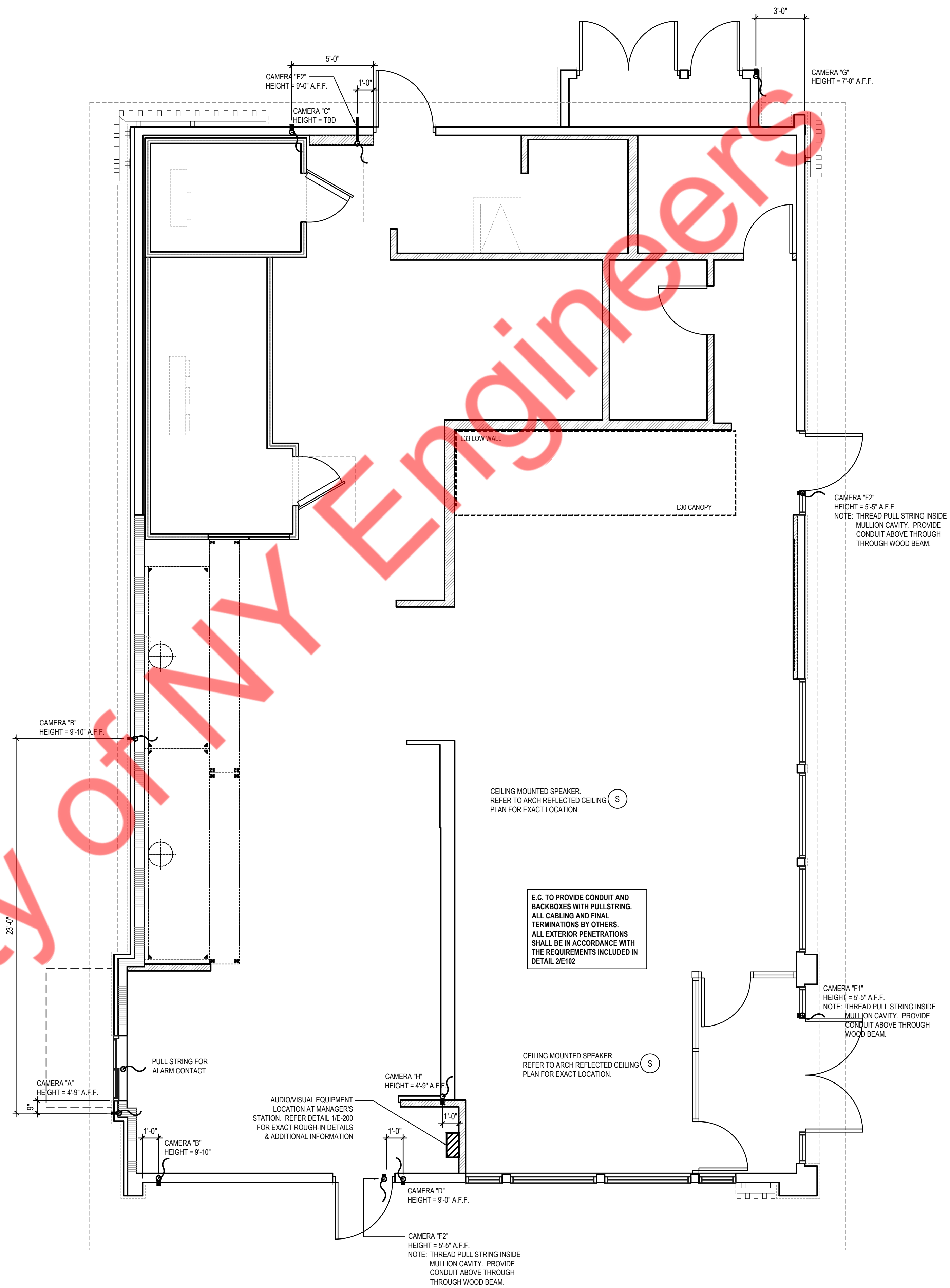
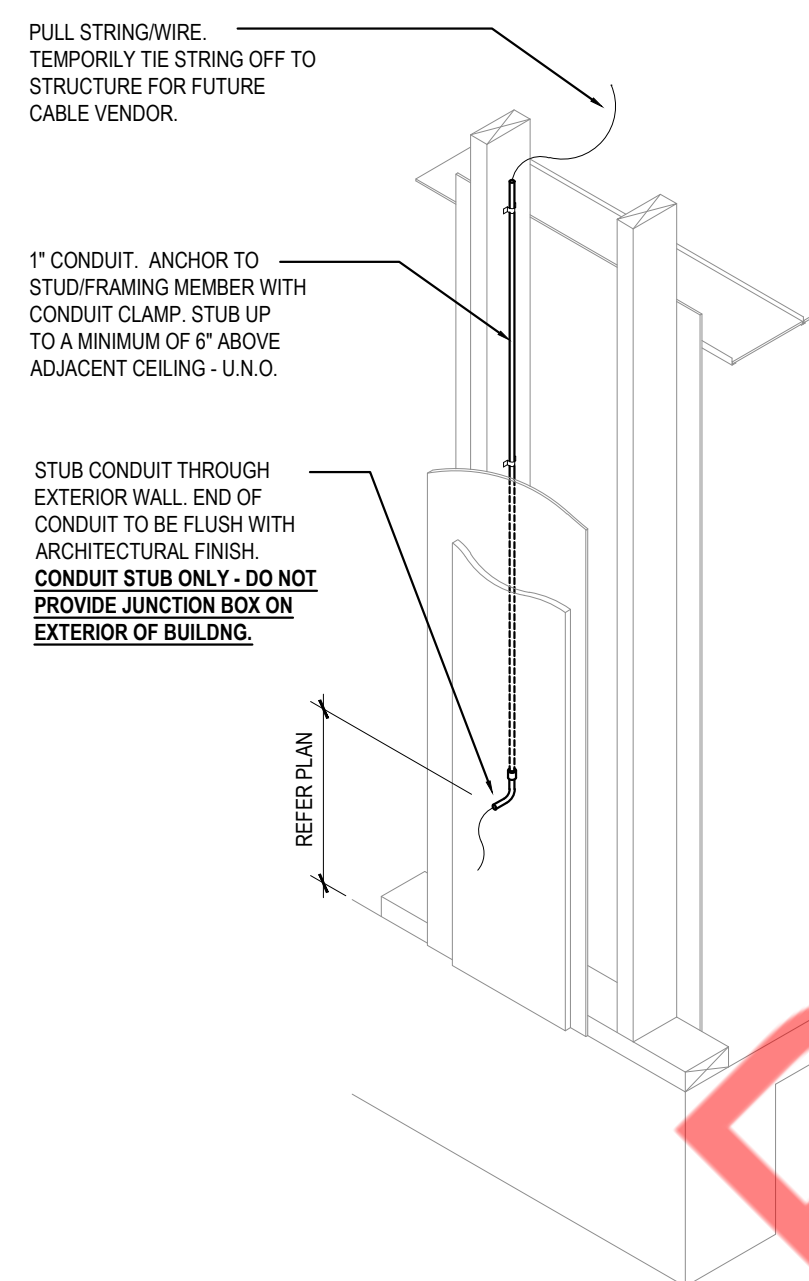


1. E.C. TO PROVIDE J-BOX WITH 3' WHIP FOR CONNECTION TO PANDA EXPRESS PROVIDED LIGHTED CANOPY. E.C. TO MAKE FINAL CONNECTION.	2
2. E.C. TO PROVIDE J-BOX WITH 3' WHIP FOR CONNECTION TO PANDA EXPRESS PROVIDED LIGHTED DRIVE THRU CANOPY. E.C. TO MAKE FINAL CONNECTION.	
3. ALL JUNCTION BOXES ON THIS SHEET TO BE RECESS MOUNTED.	
Ⓢ CANOPY LIGHTING KEYED NOTES	2
NOT TO SCALE	E-101.1

CANOPY LIGHTING PLAN	1
Scale: 1/4"=1'-0"	E-101.1

E-101.1

CANOPY LIGHTING PLAN



CONDUIT ROUGH-IN DETAIL 2
NOT TO SCALE E-102

SECURITY CAMERA PLAN 1
Scale= 1/4" = 1'-0" E-102

E-102

SECURITY CAMERA PLAN



- ALL ROOF MOUNTED EQUIPMENT SHALL BE IN NEMA-3R ENCLOSURES.
- ALL CONDUIT RUNS SHOWN ON THE ROOF SHALL BE RUN BELOW IN THE CEILING SPACE WHERE AMBIENT TEMPERATURE WILL BE BELOW 30° C. FINAL CONNECTIONS TO THE ROOF EQUIPMENT IS LIMITED TO 5'-0" OF DIRECT SOLAR EXPOSURE.
- VERIFY ALL FUSE SIZES AND TYPES WITH THE MECHANICAL EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
- REVIEW THE MECHANICAL PLANS FOR HVAC CONTROL REQUIREMENTS AND SCOPE OF WORK PRIOR TO BIDDING AND INCLUDE ALL COSTS IN BID.
- VERIFY CONNECTION POINTS OF ALL HVAC EQUIPMENT PRIOR TO INSTALLATION. PROVIDE CONTROL VOLTAGE CONNECTION TO DUCT MTD, SMOKE DETECTOR AS REQUIRED BY MECHANICAL DRAWING M-100 AND INTERLOCK WITH FIREALARM.
- SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT AND THERMOSTATS. PROVIDE RACEWAY SYSTEM FOR ALL CONTROL WIRING AS REQUIRED BY MECHANICAL DRAWING M-100.
- E.C. COORDINATE ELECTRICAL, MECHANICAL, FIRE ALARM (IF REQUIRED) FOR INTERLOCK SEQUENCE FOR FIRE SUPPRESSION.
- RESTROOM EXHAUST FAN TO BE POWERED FROM BACK OF HOUSE LIGHTING CIRCUIT. SEE DETAIL 5/E400 FOR ADDITIONAL INFORMATION.

ROOF PLAN GENERAL NOTES 2
NOT TO SCALE E-104

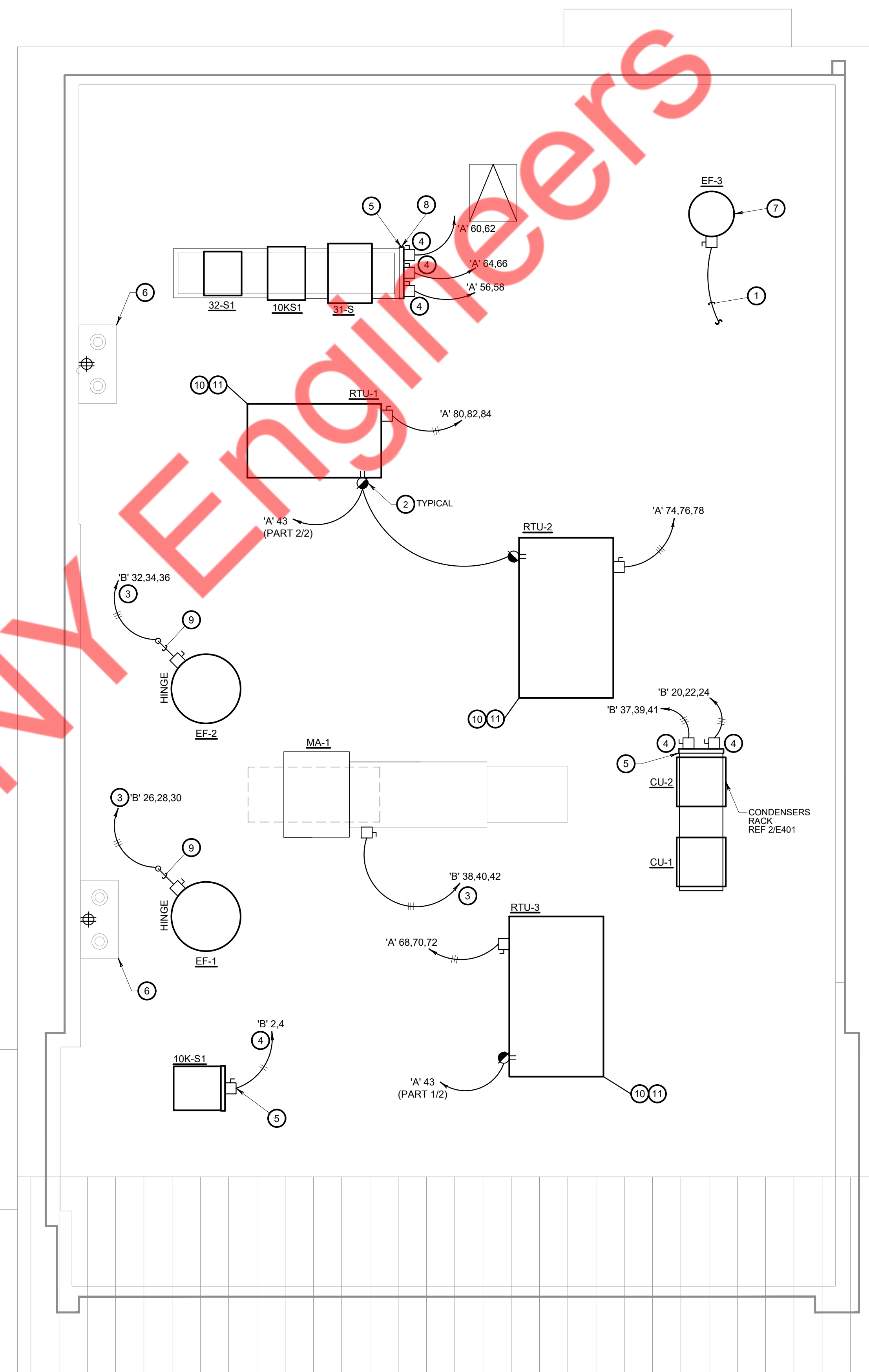
- ROUTE HOMERUN THROUGH BACK OF HOUSE LIGHTING CIRCUIT. REFER TO LIGHTING CONTACTOR SCHEDULE, 4/E-101. FAN TO BE CONTROLLED BY SWITCH FOR BACK OF HOUSE LIGHTING.
- DUCT SMOKE DETECTOR, FURNISHED BY MECHANICAL/FACTORY, WIRED BY ELECTRICAL / FIRE ALARM CONTRACTOR. FURNISH AND INSTALL ALL RACEWAY, WIRING, AND ADDITIONAL ACCESSORIES REQUIRED FOR CODE COMPLIANCE AND UNIT SHUTDOWN.
- CIRCUIT FEEDS FROM PANELBOARD - THROUGH HOOD CONTROL PANEL - UP TO ROOF. REFER TO DETAIL, SHEET 3/E-401 & KITCHEN HOOD SUBMITTAL DATA.
- REFER TO CONDENSING UNIT WIRING DIAGRAM, 7/E-400.
- STRUT RACK SUPPORT FOR EQUIPMENT DISCONNECT SWITCHES. REFER TO DETAIL, SHEET 2/E-401.
- PROVIDE OUTLET WITH RED DOT INUSE COVER AT PARAPET +24" ABOVE ROOF FOR HEAT TAPE. HEAT TAPE PROVIDED BY OTHERS.
- DO NOT INSTALL UNTIL BACK DRAFT DAMPER INSTALLATION IS COMPLETE. UTILIZE FACTORY KNOCKOUTS FOR ELECTRICAL RUN FOR THIS FAN. REFER TO SHEET M-402.
- MOUNT PHOTOCELL AS DETAILED ON EQUIPMENT DISCONNECT SWITCH SUPPORT DETAIL 12/E400 ON CONDENSER RACK.
- STUB ELECTRICAL FEED FOR EF-1 & EF-2, THROUGH ROOF ON HINGE SIDE OF EXHAUST FANS. IN LOCATION AS SHOWN ON POWER ROOF PLAN. REFER TO DETAIL 3/M-501 FOR ADDITIONAL DETAILS.
- ROUTE POWER FEEDS VIA FACTORY PROVIDED THRU-BASE CONNECTION AREA. COORDINATE WITH MECHANICAL.
- UNIT INCLUDES FACTORY MOLDED CASE DISCONNECT SWITCH (NO OCP). VERIFY WITH MECHANICAL SUBMITTAL DATA. PROVIDE DISCONNECT IF / AS REQUIRED.

ROOF PLAN KEYED NOTES 3
NOT TO SCALE E-104

MECHANICAL EQUIPMENT SCHEDULE									
TAG	VOLTAGE	PHASE	LOAD			CONDUCTOR & CONDUIT	CONNECTION	DISC. SW. WITH RK1 FUSES PER MFR'S REQ'S	REMARK
			KW	HP	FLA				
RTU-1	208	3	11.53	-	-	3#6 + 1#10G, 3/4"C	DISCONNECT SWITCH	45A,3P,3F,WP	1,2
RTU-2	208	3	18.73	-	-	3#6 + 1#10G, 3/4"C	DISCONNECT SWITCH	60A,3P,3F,WP	1,2
RTU-3	208	3	18.73	-	-	3#6 + 1#10G, 3/4"C	DISCONNECT SWITCH	60A,3P,3F,WP	1,2
EF-1	208	3	2.24	3	-	3#12 + 1#12G, 3/4"C	DISCONNECT SWITCH	20A,3P,3F,WP	1,4
EF-2	208	3	2.24	3	-	3#12 + 1#12G, 3/4"C	DISCONNECT SWITCH	20A,3P,3F,WP	1,4
MA-1	208	3	5.6	7.5	-	3#12 + 1#12G, 3/4"C	DISCONNECT SWITCH	20A,3P,3F,WP	1,4
CU-1	208-230	3	7.71	-	-	3#10, 1#10G, IN 3/4"C	DISCONNECT SWITCH	20A,3P,3F,WP	1,4
CU-2	208-230	3	7.71	-	-	3#10, 1#10G, IN 3/4"C	DISCONNECT SWITCH	20A,3P,3F,WP	1,4
P3WH-1	120	1	0.96	-	-	2#12, 1#12G, IN 3/4"C	COMBINATION DISCONNECT	20A,1P,1F	3
P3WH-2	120	1	0.96	-	-	2#12, 1#12G, IN 3/4"C	COMBINATION DISCONNECT	20A,1P,1F	3
P3WH-3	120	1	0.96	-	-	2#12, 1#12G, IN 3/4"C	COMBINATION DISCONNECT	20A,1P,1F	3
31-S	208	1	3.12	1.5	-	2-8 + 1#10G, 3/4"C	DISCONNECT SWITCH	35A,2P,1F,WP	1
32-S1	208	1	2.08	1.5	-	2-8 + 1#10G, 3/4"C	DISCONNECT SWITCH	40A,2P,1F,WP	1
10KS1	208/230	1	2.46	-	-	2-12 + 1#12G, 3/4"C	DISCONNECT SWITCH	20A,2P,1F,WP	1
CP-1	120	1	0.5	-	-	2#12, 1#12G, IN 3/4"C	DISCONNECT SWITCH	20A,1P,1F	3

NOTE:- E.C. TO COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT LOCATION, POWER REQUIREMENTS AND CONTROLS. PROVIDE ACCORDINGLY.

1	DISCONNECT SWITCH PROVIDED WITH UNIT.
2	ELECTRICAL FEEDS ARE TO BE ROUTED FROM PLENUM SPACE, UP THROUGH EQUIPMENT CURB, INTO BOTTOM OF EQUIPMENT, THROUGH FACTORY INSTALLED WATER TIGHT CONNECTIONS
3	ADJACENT TO WH-1. DO NOT INSTALL BELOW WH-1.
4	SEE HOOD DETAILS.



HVAC EQUIPMENT SCHEDULE 4
NOT TO SCALE E-104

ROOF POWER PLAN 1
1/4" = 1'-0" E-104

E-104

ROOF POWER PLAN

SITE LIGHTING SCHEDULE														
SYMBOL	KEY	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	COLOR TEMPERATURE	IP/RCS	LUMENS	LF	FIXTURE CATALOGUE NO.	POLE DESCRIPTION	POLE LENGTH	POLE SPACING
A	1	UNIVERSAL LIGHTING	SSD-SERIES 100-1	DOUBLE PYLE WIDE LIGHT	25'	100W LED	4000K	TYPE 5 WET	14,384	0.00	SSD LED P3-400-84 WFLY WEA-08-00	ROUND STRAIGHT STEEL	22'	SSD 22-4-98 WFLY WEA-08-00 5-POURCE FIXTURE
B	2	UNIVERSAL LIGHTING	SSD-SERIES 100-1	DOUBLE PYLE WIDE LIGHT	25'	100W LED	4000K	TYPE 4 WET	8,336	0.00	SSD LED P3-400-84 WFLY WEA-08-00	ROUND STRAIGHT STEEL	24'-4"	SSD 24-4-98 WFLY WEA-08-00 5-POURCE FIXTURE
C	3	UNIVERSAL LIGHTING	SSD-SERIES 100-1	DOUBLE PYLE WIDE LIGHT	25'	100W LED	4000K	TYPE 4 WET	14,372	0.00	SSD LED P3-400-84 WFLY WEA-08-00	ROUND STRAIGHT STEEL	22'	SSD 22-4-98 WFLY WEA-08-00 5-POURCE FIXTURE
D	4	UNIVERSAL LIGHTING	SSD-SERIES 100-1	DOUBLE PYLE WIDE LIGHT	25'	100W LED	4000K	TYPE 2 WET	9,860	0.00	SSD LED P3-400-84 WFLY WEA-08-00	N/A	N/A	N/A
E	4	UNIVERSAL LIGHTING	SSD-SERIES 100-1	DOUBLE PYLE WIDE LIGHT	25'	100W LED	4000K	TYPE 4 WET	14,336	0.00	SSD LED P3-400-84 WFLY WEA-08-00	N/A	N/A	N/A

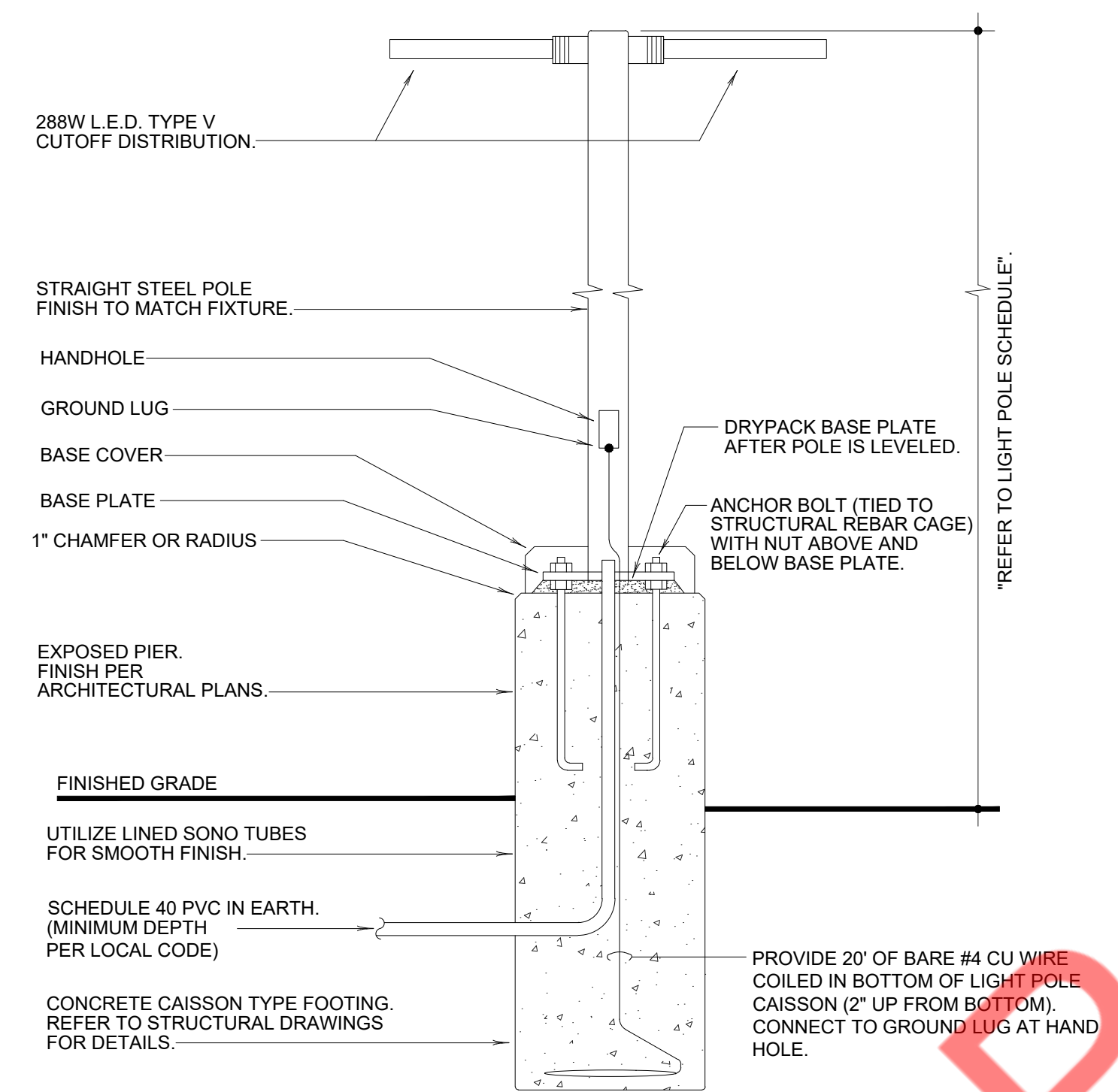
NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR CANOPY MOUNTED LIGHTS

- COORDINATE SERVICE ENTRANCE SECTION, TRANSFORMER, PRIMARY SERVICE, SECONDARY SERVICE, AND SWITCHING CABINET OR POWER POLE LOCATIONS WITH SERVING UTILITY COMPANY AND COMPLY AS REQUIRED.
- CONTRACTOR TO BE RESPONSIBLE FOR COORDINATING AND PROVIDING REQUIRED WORK FOR SUPPLYING ELECTRICAL POWER AND TELEPHONE UTILITIES TO THE BUILDING.
- CONTRACTOR SHALL HAVE ALL EXISTING UNDERGROUND UTILITIES LOCATED PRIOR TO TRENCHING. ALL UNDERGROUND UTILITIES DAMAGED DURING TRENCHING SHALL BE REPAIRED TO THE SATISFACTION OF INVOLVED UTILITY AT CONTRACTOR'S EXPENSE.
- MINIMUM CONDUCTOR SIZE THIS SHEET TO BE #10 CU, 1" CONDUIT.

SITE PLAN GENERAL NOTES 2
E-105

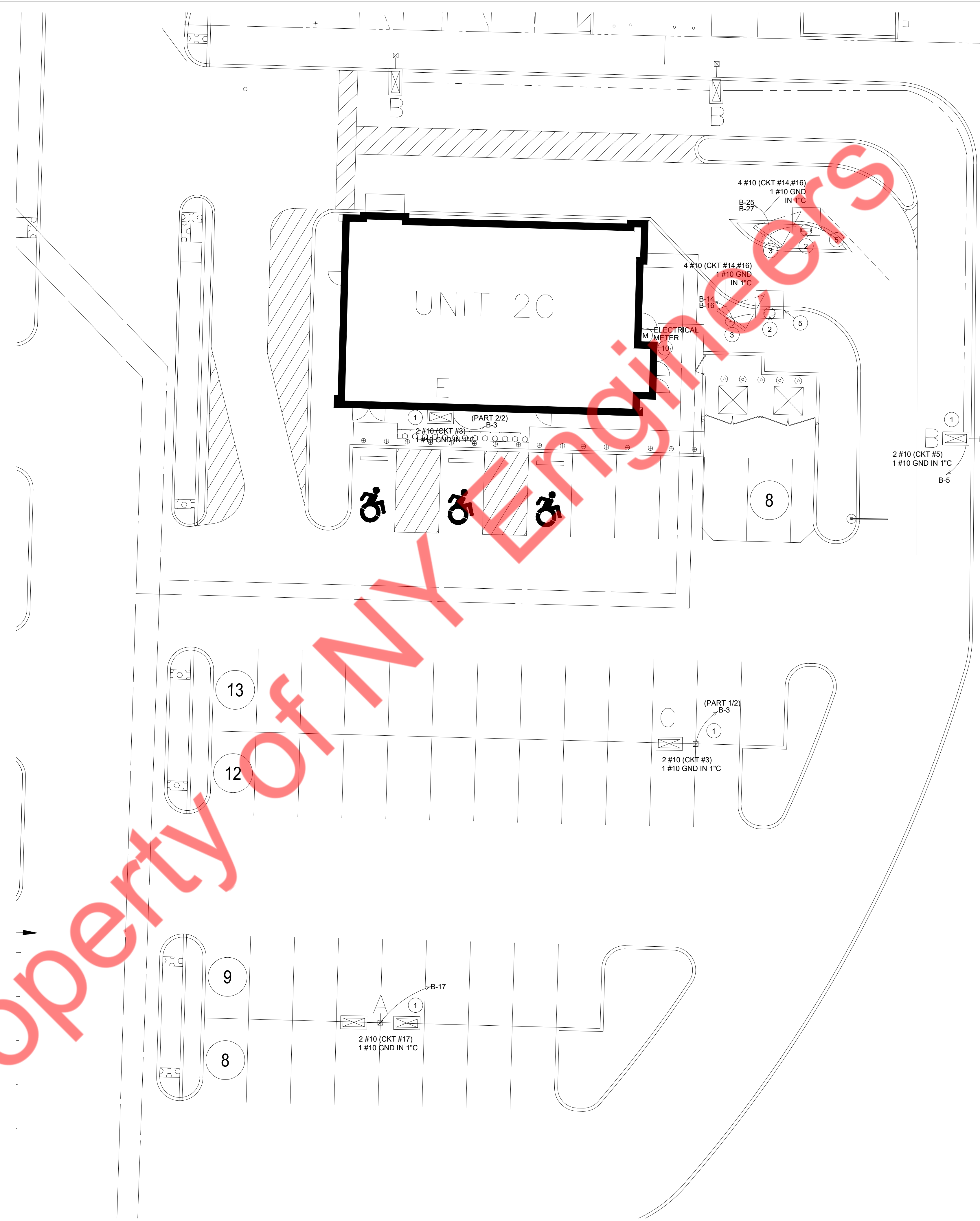
- FEED THROUGH LIGHTING CONTACTOR. REF: 11/E400.
- STUB UP LOCATION FOR (3) 3/4" CONDUITS & PULL STRINGS, TO ENTER BUILDING & UP TO 6" ABOVE CEILING. REFER TO SHEET 11/E401.
- STUB-UP LOCATION FOR MENU BOARD. SIGN DISCONNECT PROVIDED BY SIGN CONTRACTOR. COORDINATE PRECISE LOCATION WITH ARCHITECT / OWNER.
- DRIVE-THRU SENSOR LOOP. COORDINATE LOCATION. REFER TO DETAIL 1 / E401.
- STUB-UP FOR DRIVE-THRU ORDER CONFIRMATION MONITOR. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- STUB UP LOCATION FOR PYLON SIGN OR MONUMENT SIGN. ELECTRICAL CONTRACTOR TO PROVIDE NON-FUSED DISCONNECT AT BASE OF SIGN. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER. CONNECT TO EXTERIOR BUILDING SIGN TIMER CONTROL. REFERENCE 11/E400.
- SEE POLE MOUNTING DETAIL, REFER TO 4/E105.
- CABLE PULL BOX; REFERENCE 11/E100. INSTALL MINIMUM 3' FROM SIDEWALK. DO NOT INSTALL IN SIDEWALK CONCRETE.
- REF: 11/E400 FOR GROUNDING DETAIL.
- E.C. TO COORDINATE EXACT LOCATION OF TRANSFORMER.

SITE PLAN KEYED NOTES 3
E-105



NOTE: THIS DETAIL IS FOR ELECTRICAL INSTALLATION ONLY. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.

POLE MOUNTING DETAILS 4
NO SCALE E-105

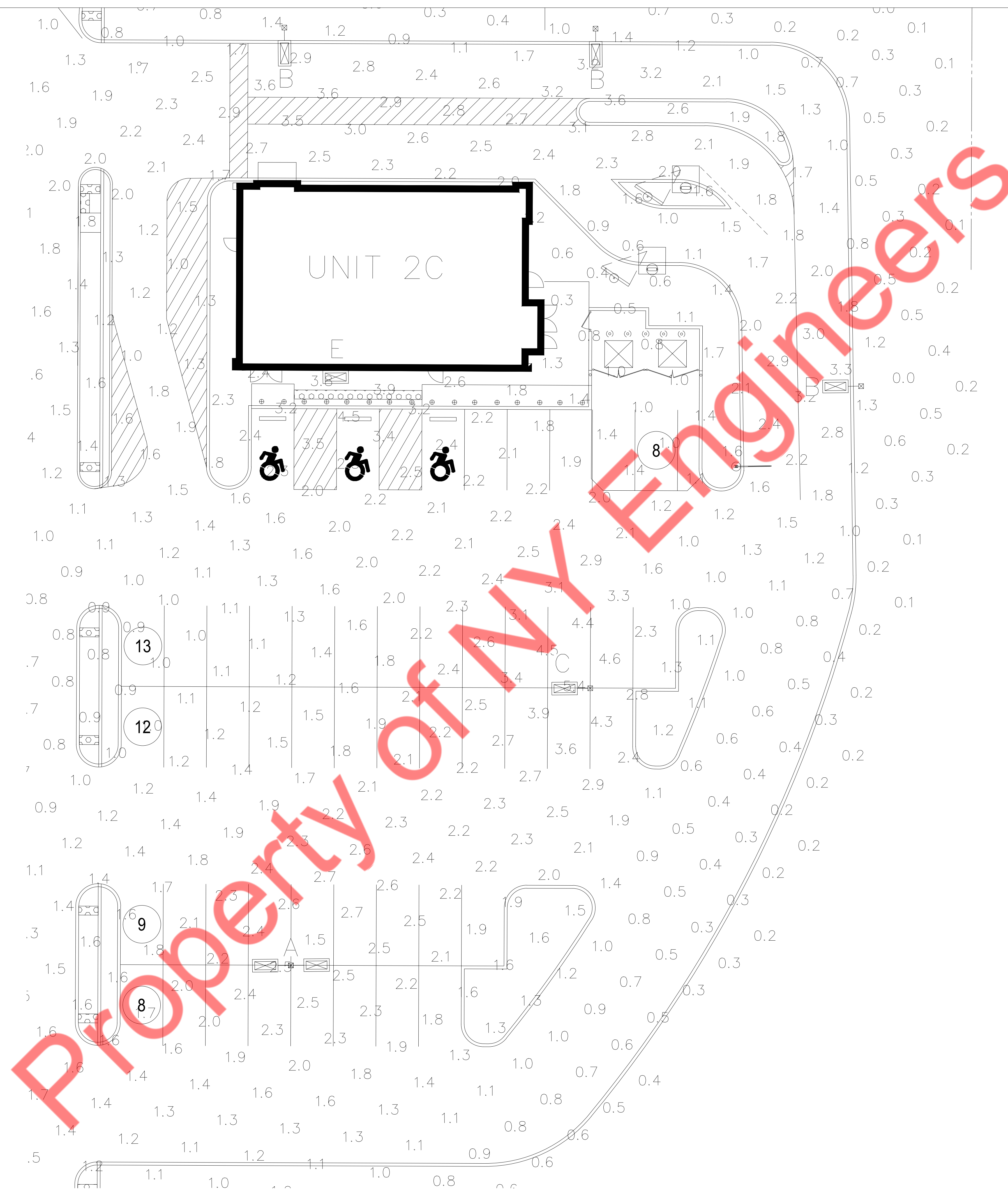


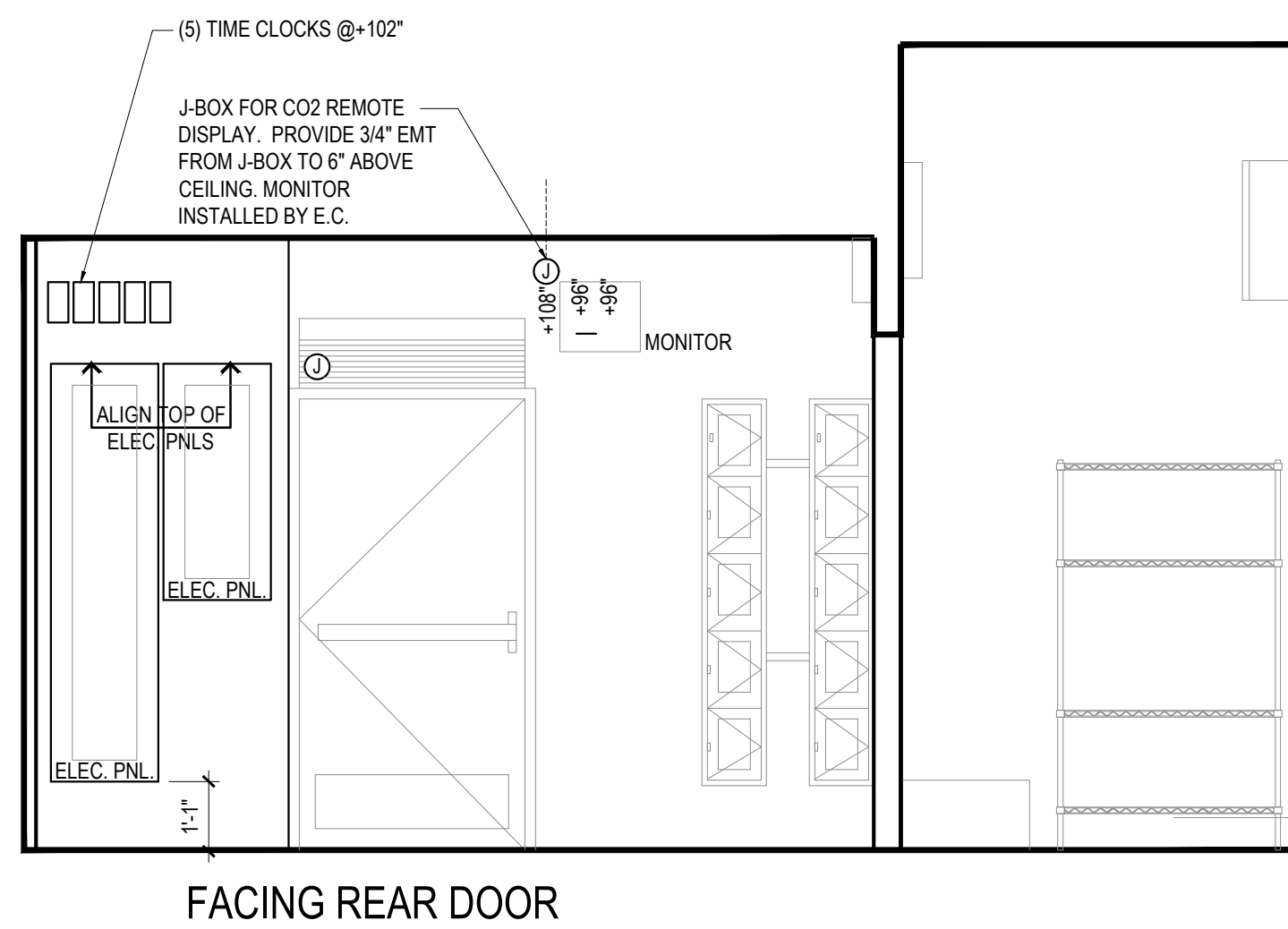
SITE & EXTERIOR LIGHTING PLAN 1
1" = 1'-0" E-105



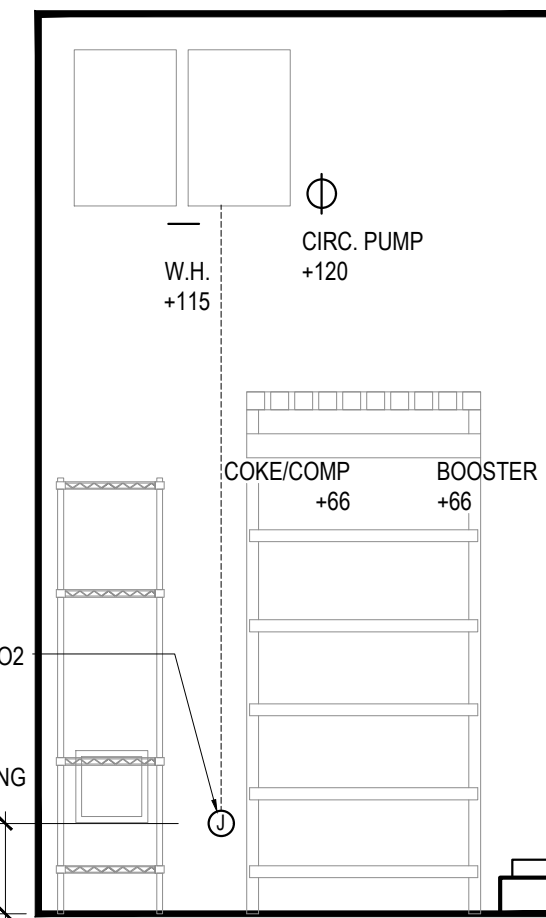
E-105

SITE & EXTERIOR LIGHTING PLAN

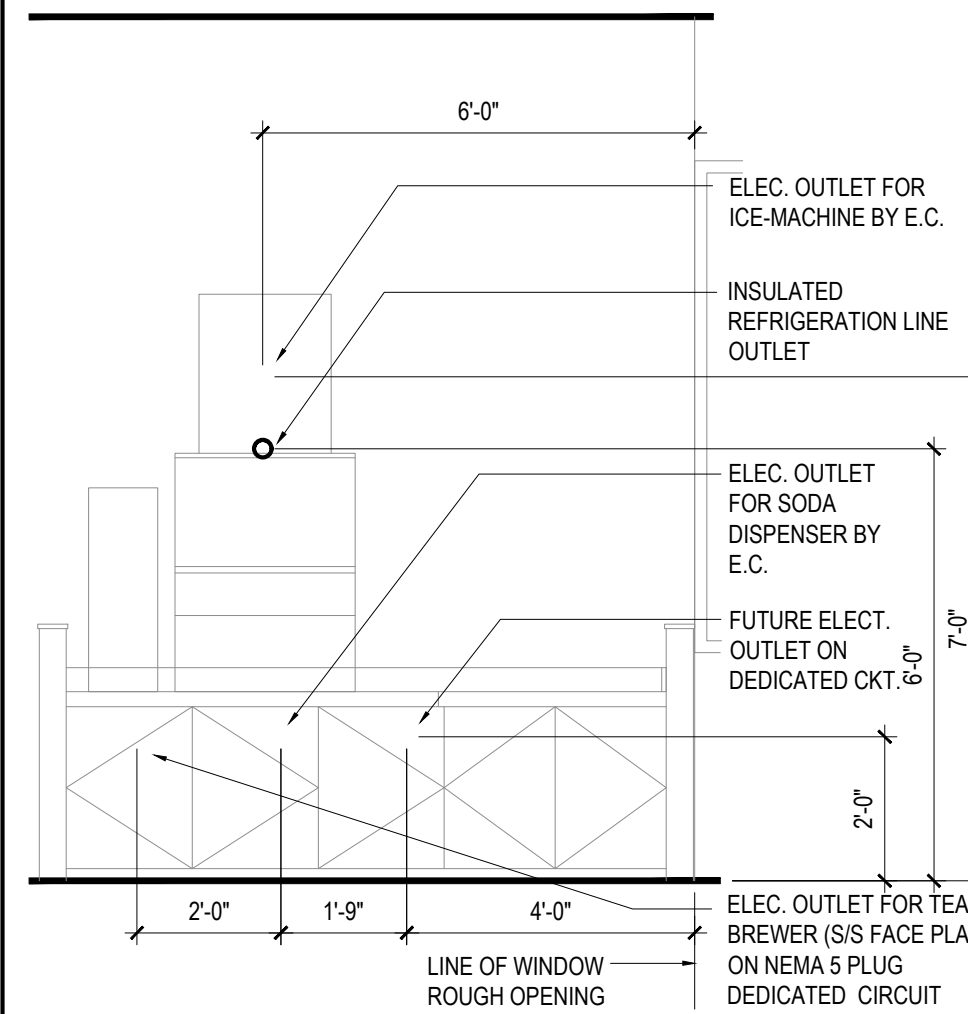




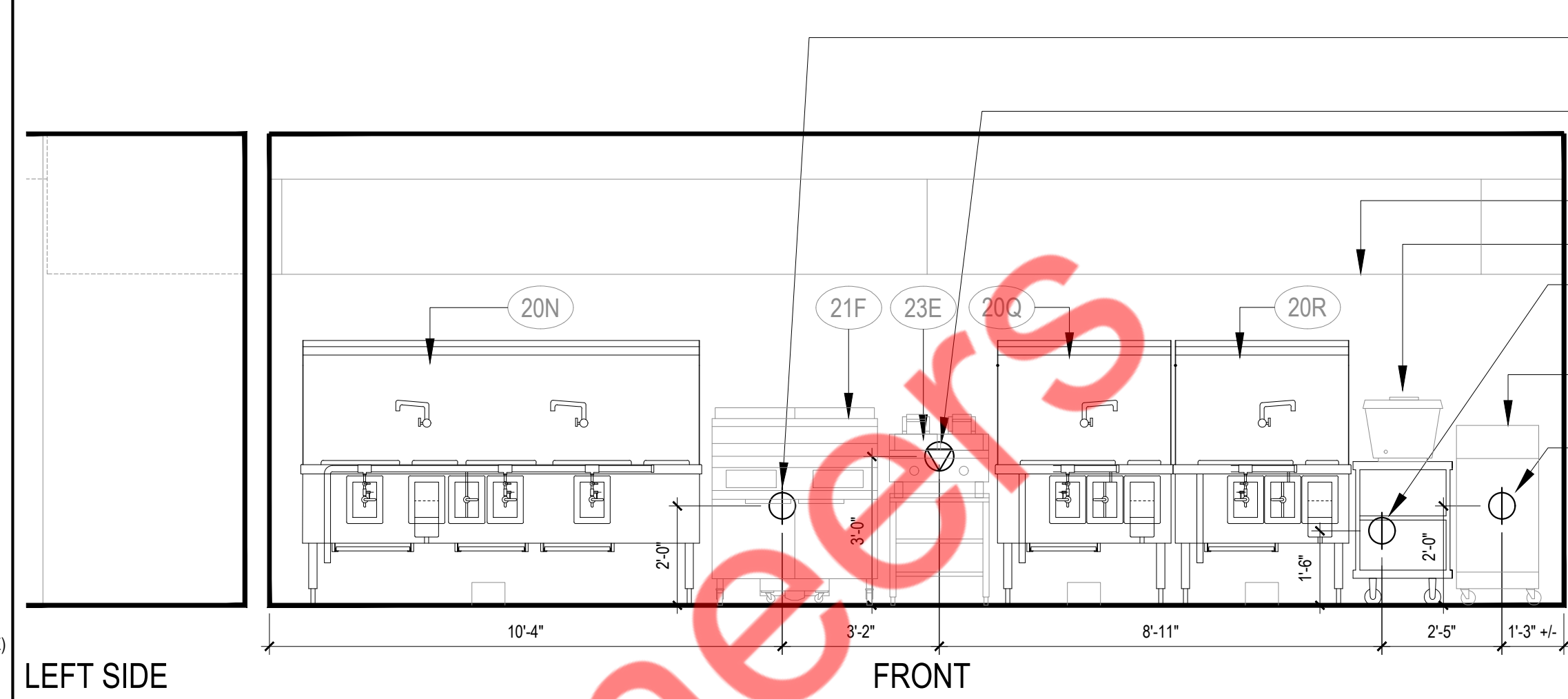
B.O.H AREA 9
Scale= 3/8" = 1'-0" E-200



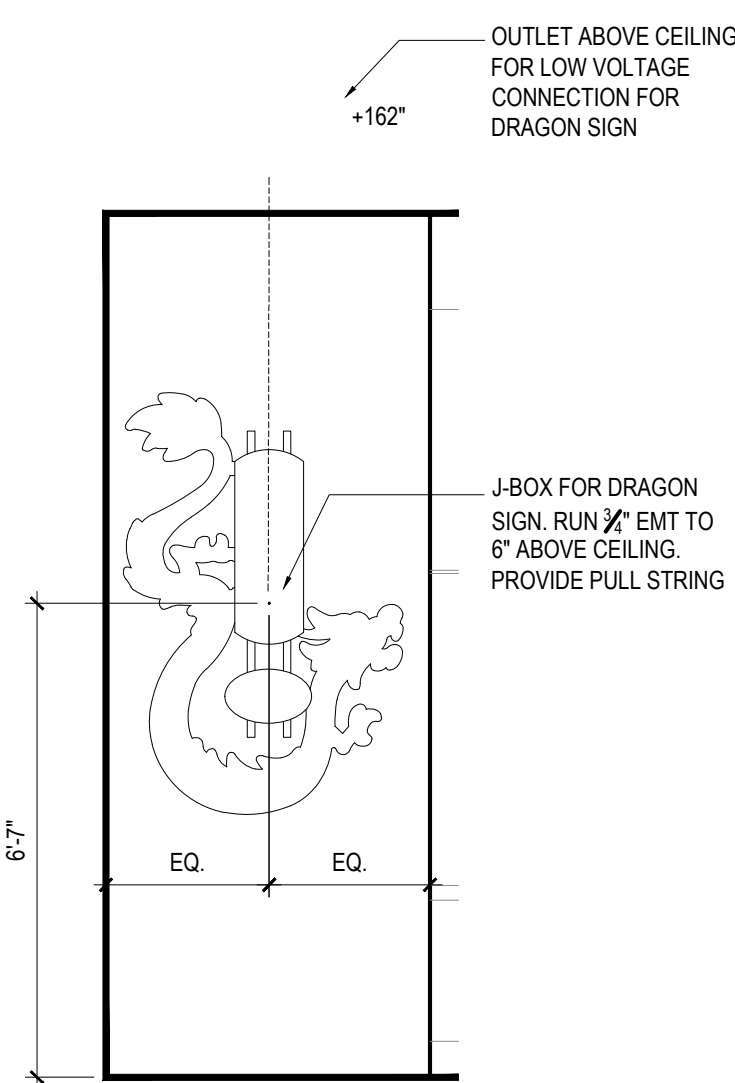
WATER HEATERS 8
Scale= 3/8" = 1'-0" E-200



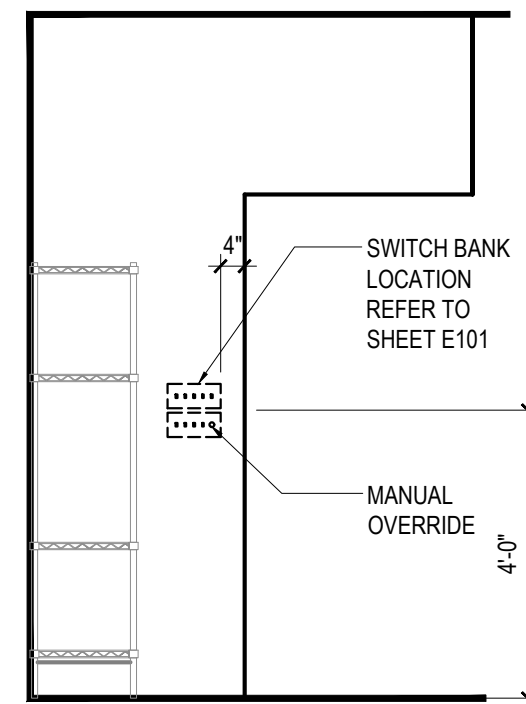
BEVERAGE STATION 5
Scale= 3/8" = 1'-0" E-200



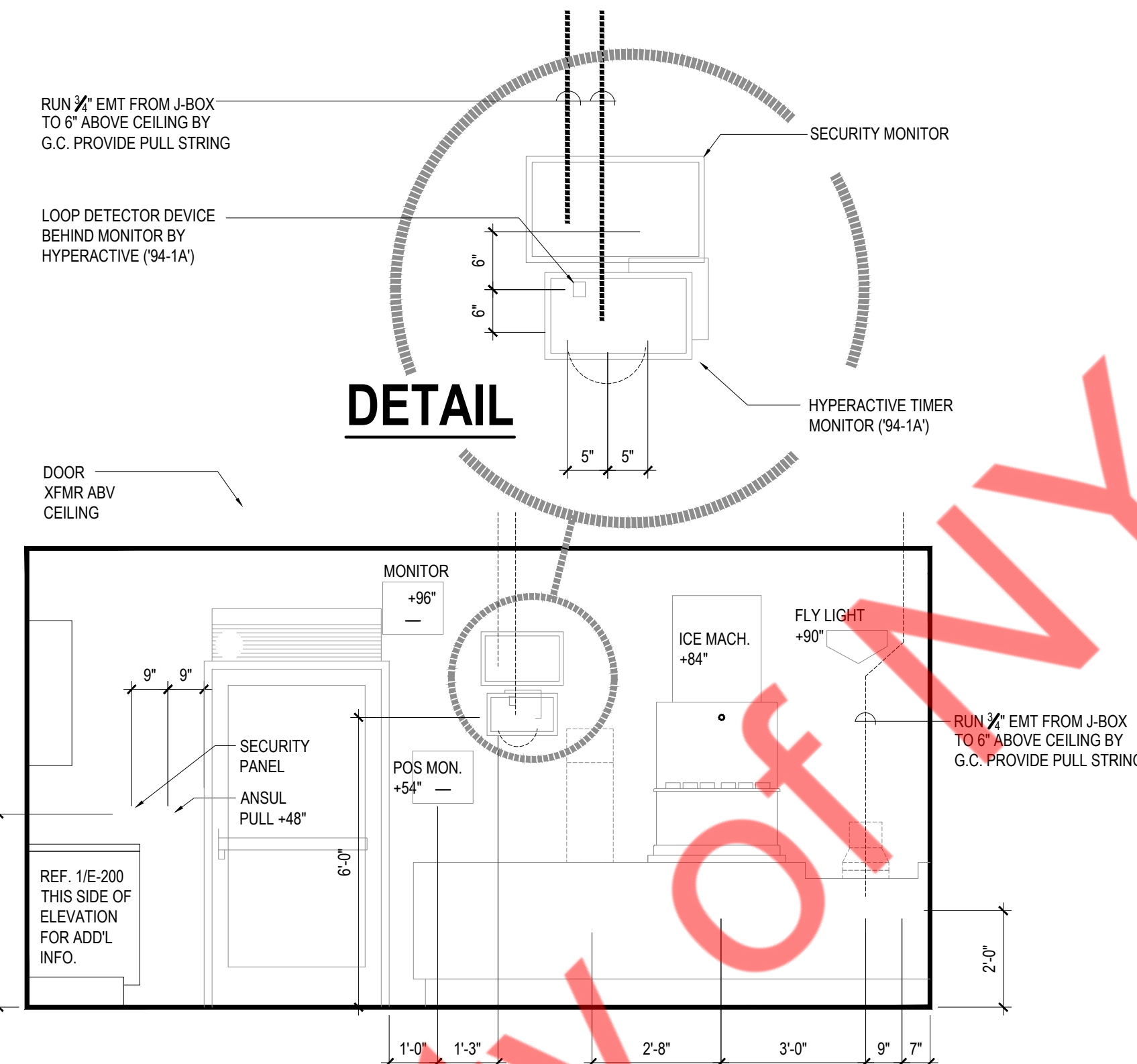
COOKLINE 3
Scale= 3/8" = 1'-0" E-200



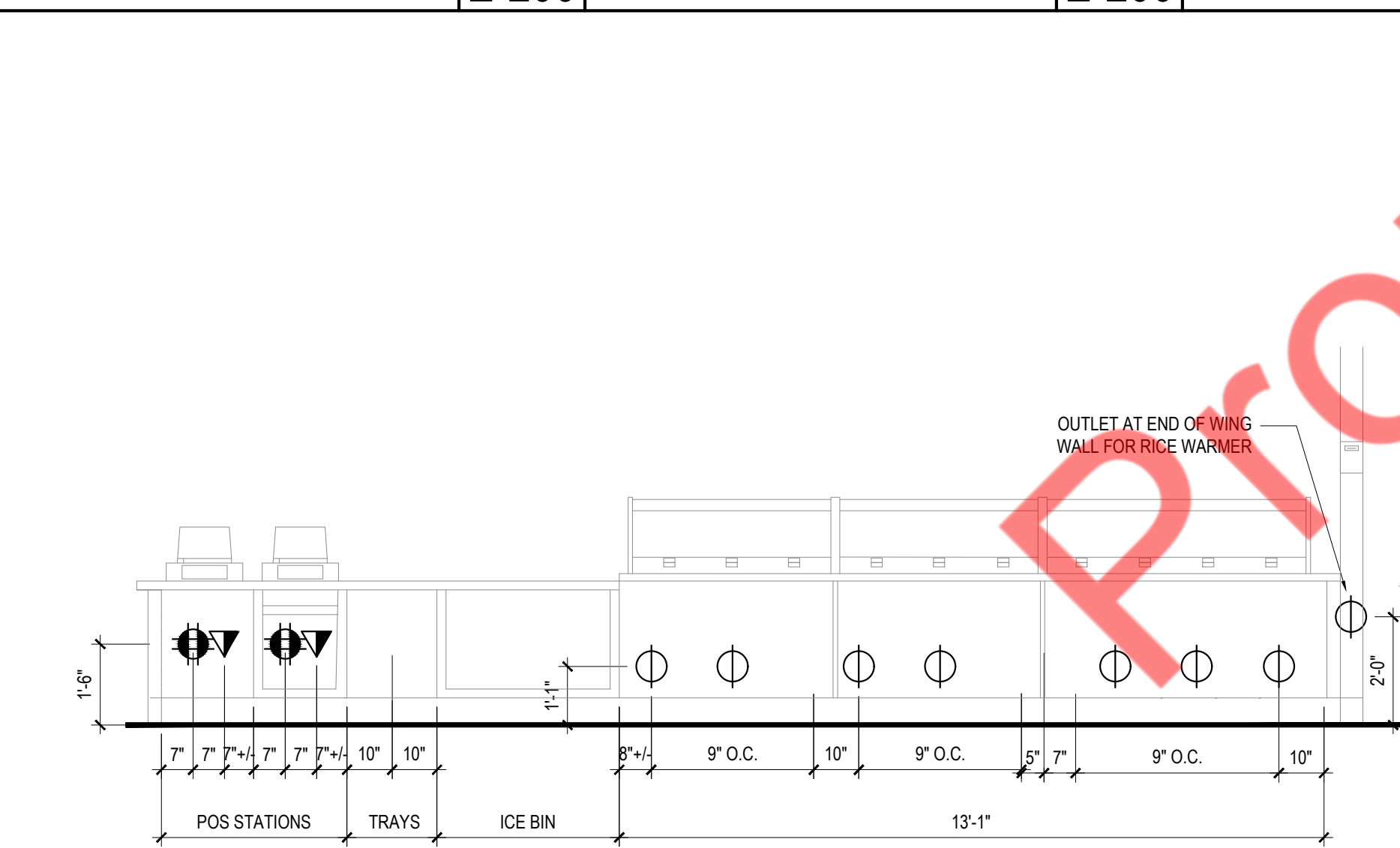
DRAGON SIGN 7
Scale= 3/8" = 1'-0" E-200



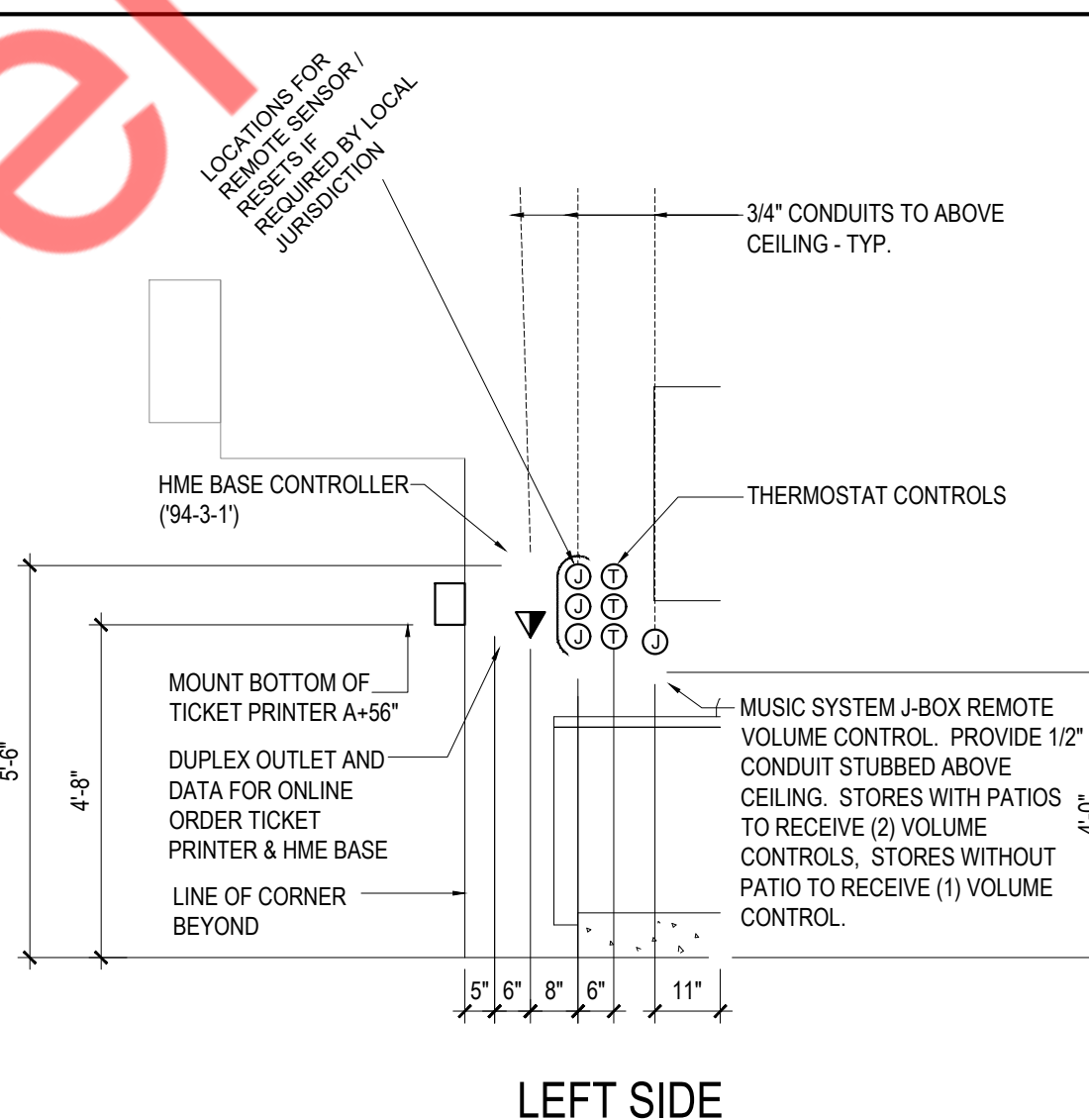
SWITCHBANK 4
Scale= 3/8" = 1'-0" E-200



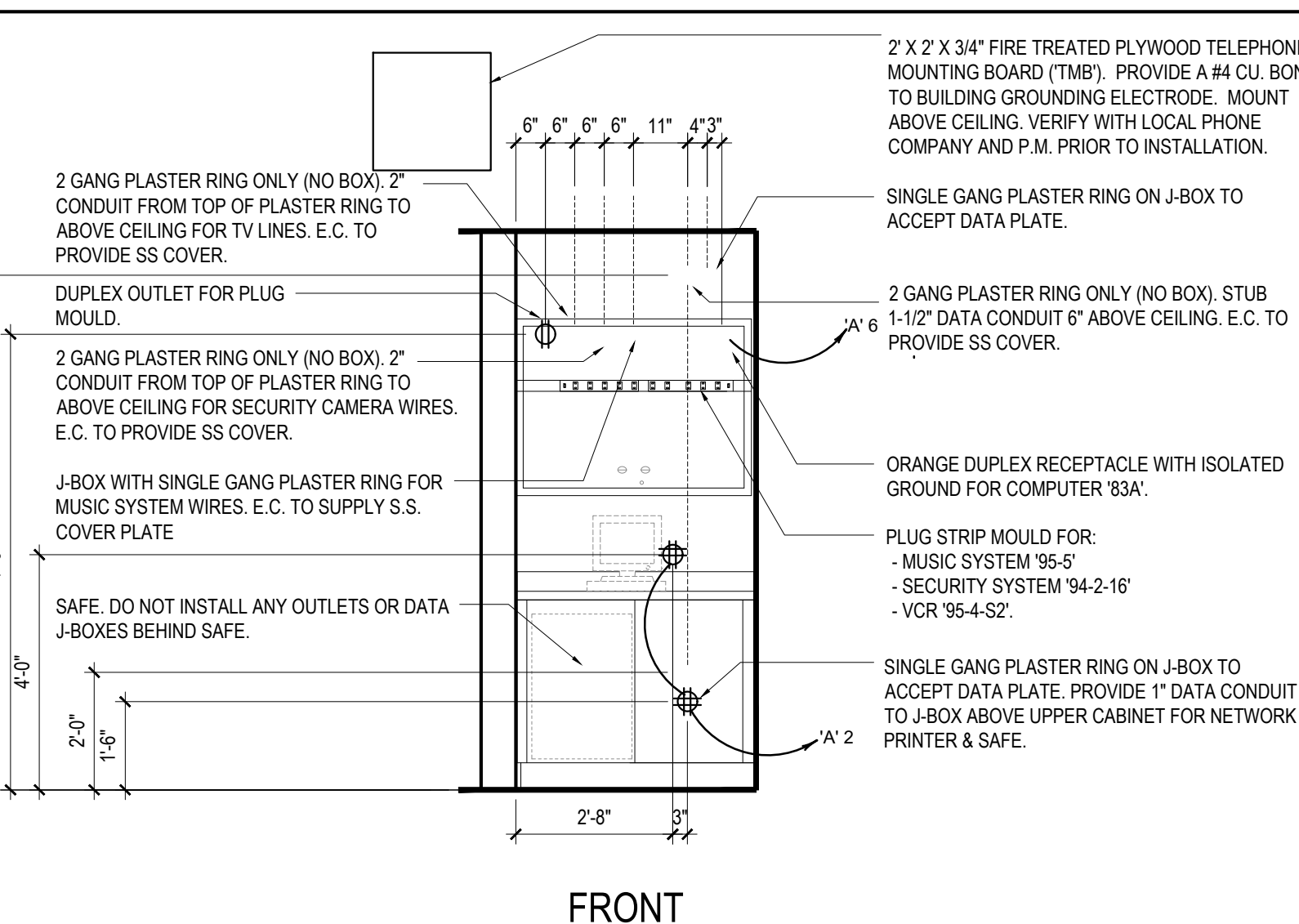
DRIVE THROUGH AREA 2
Scale= 3/8" = 1'-0" E-200



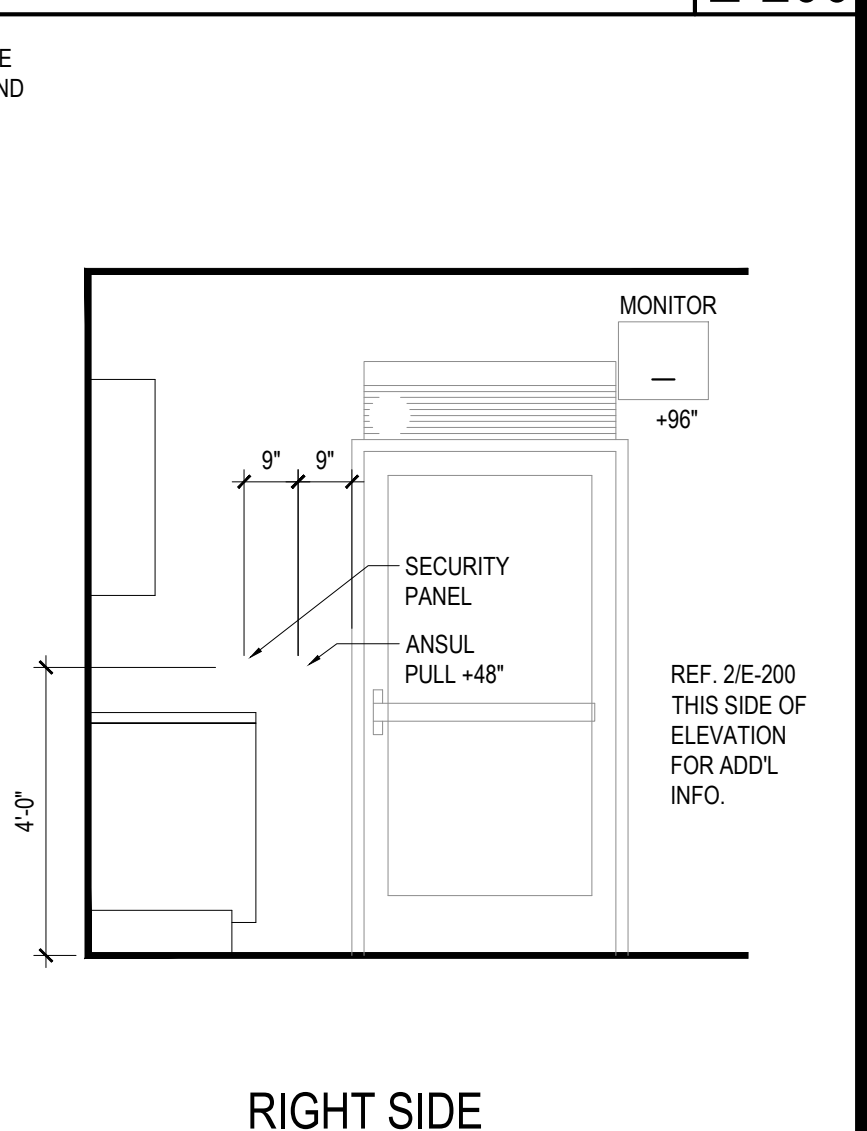
SERVICE COUNTER 6
Scale= 3/8" = 1'-0" E-200



LEFT SIDE



FRONT

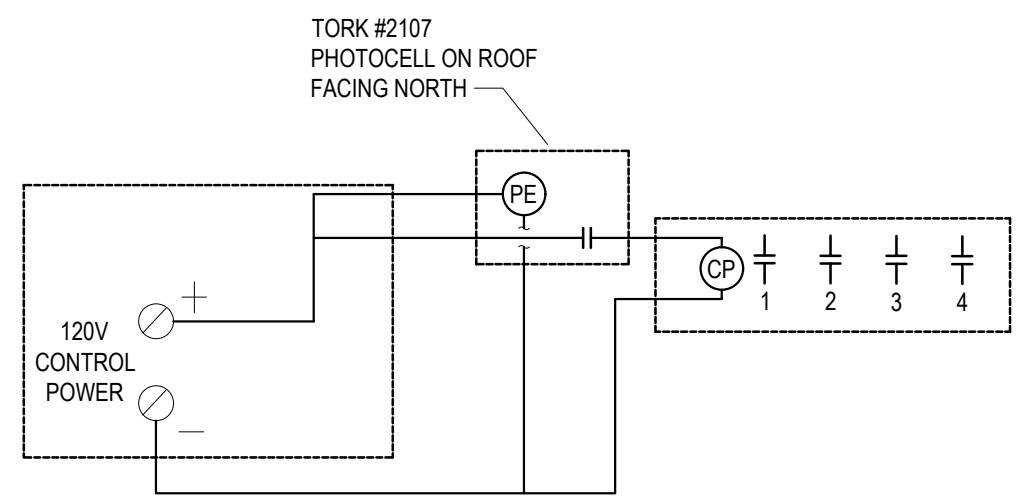


RIGHT SIDE

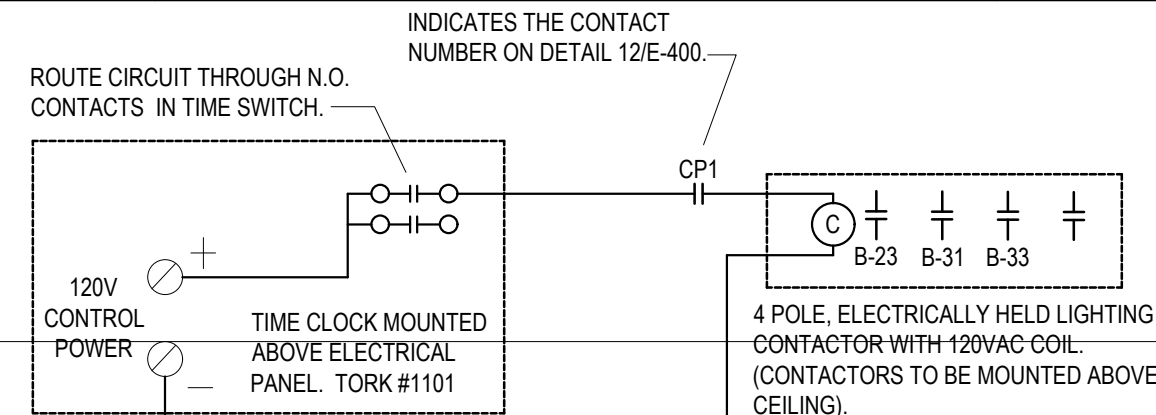
MANAGER'S STATION/SWITCH BANK ELEVATIONS 1
Scale= 3/8" = 1'-0" E-200

E-200

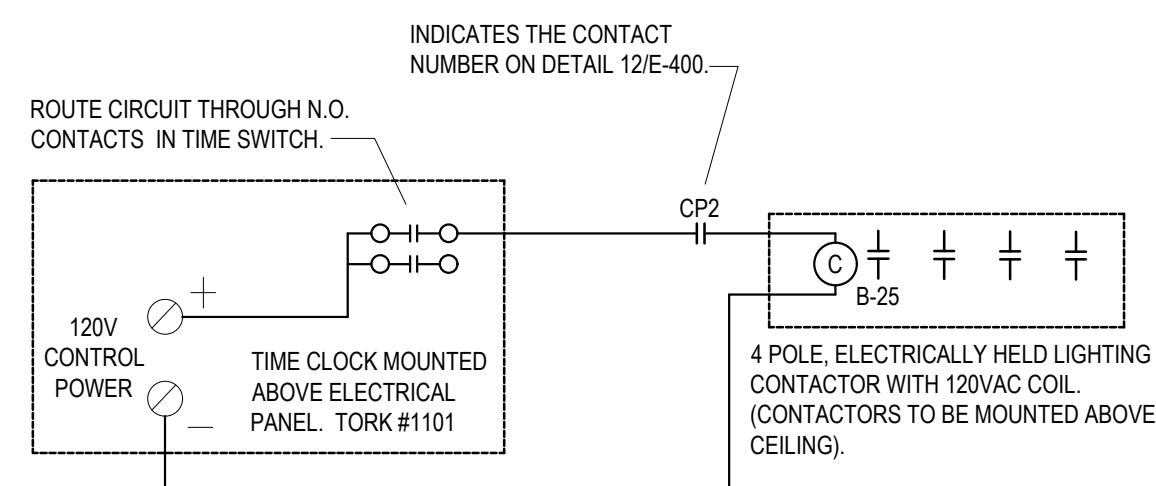
ELECTRICAL ELEVATIONS



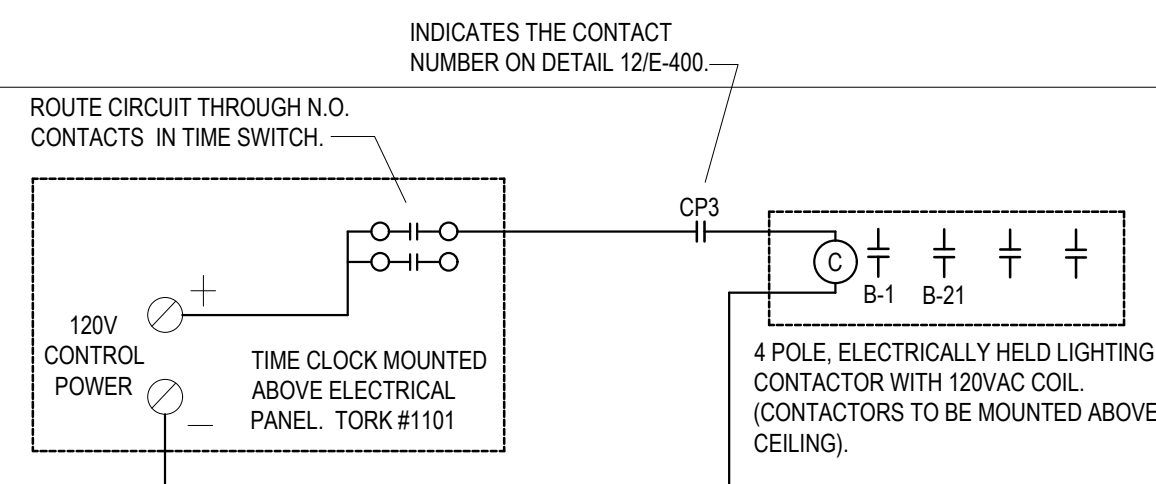
PHOTOCELL/TIME CLOCKS 12
NOT TO SCALE E-400



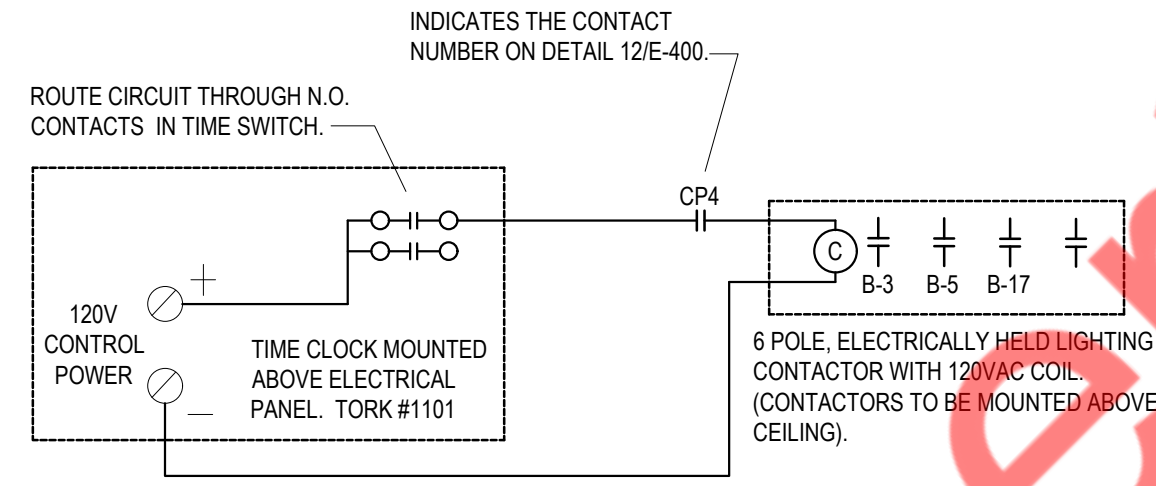
CONTRACTOR TO LABEL TIMECLOCK "BUILDING LIGHTS" (A)



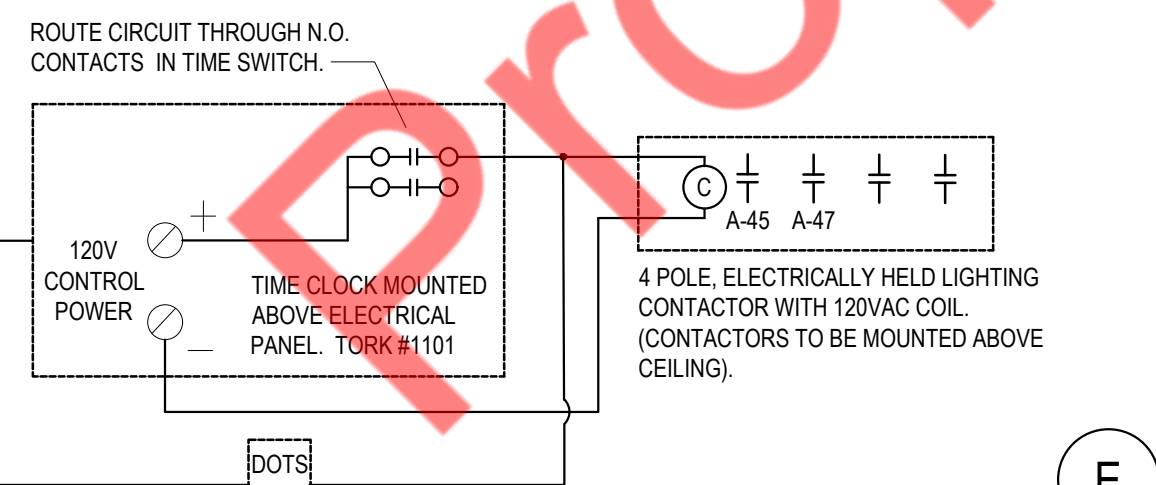
CONTRACTOR TO LABEL TIMECLOCK "DRIVE THROUGH" (B)



CONTRACTOR TO LABEL TIMECLOCK "SIGNS" (C)

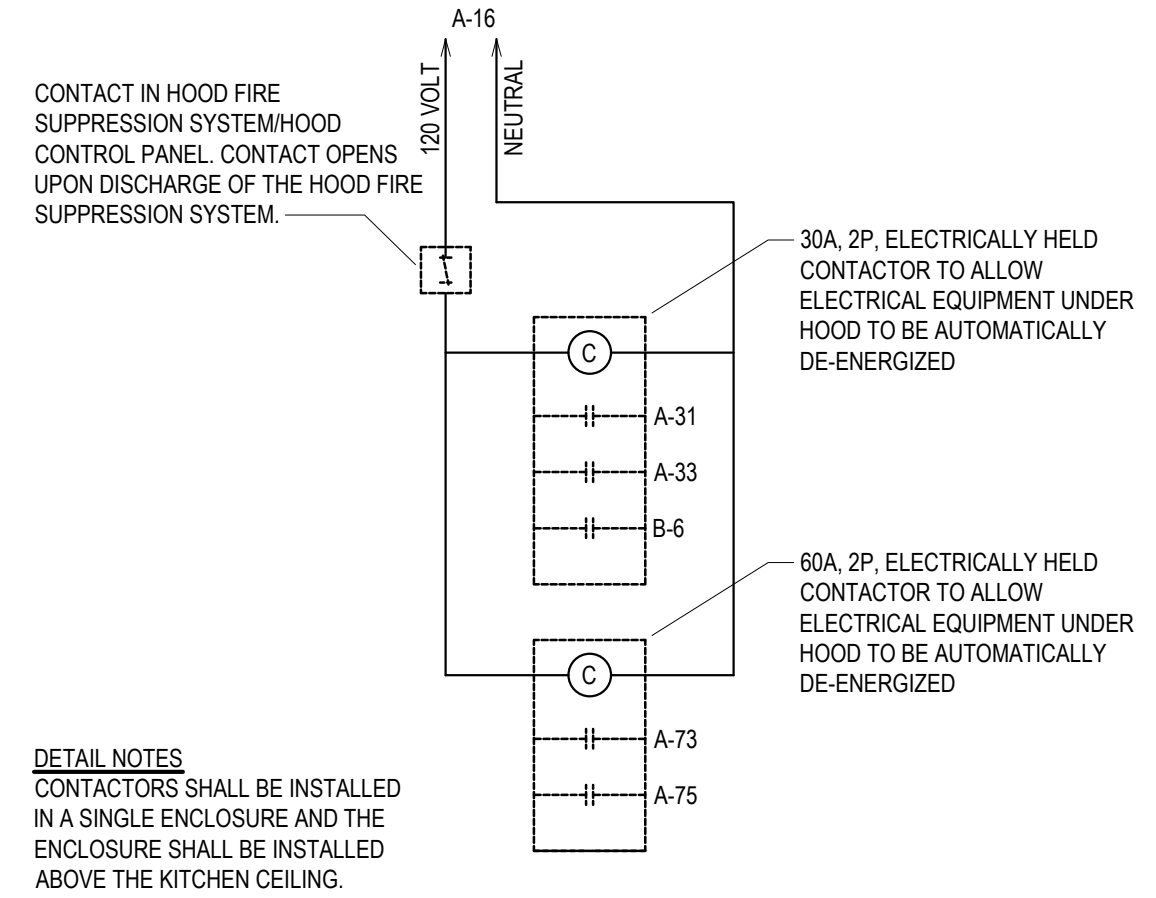


CONTRACTOR TO LABEL TIMECLOCK "PARKING LOT" (D)



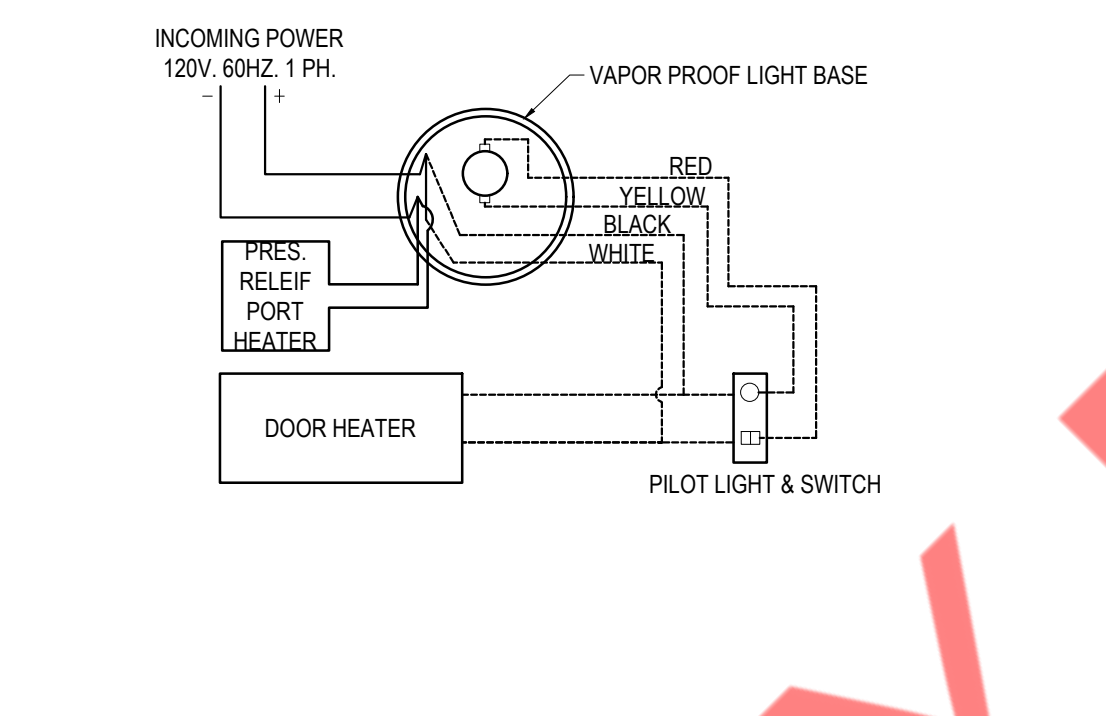
CONTRACTOR TO LABEL TIMECLOCK "INSIDE LIGHTS" (E)

FIRE SUPPRESSION SHUTDOWN 13
NOT TO SCALE E-400

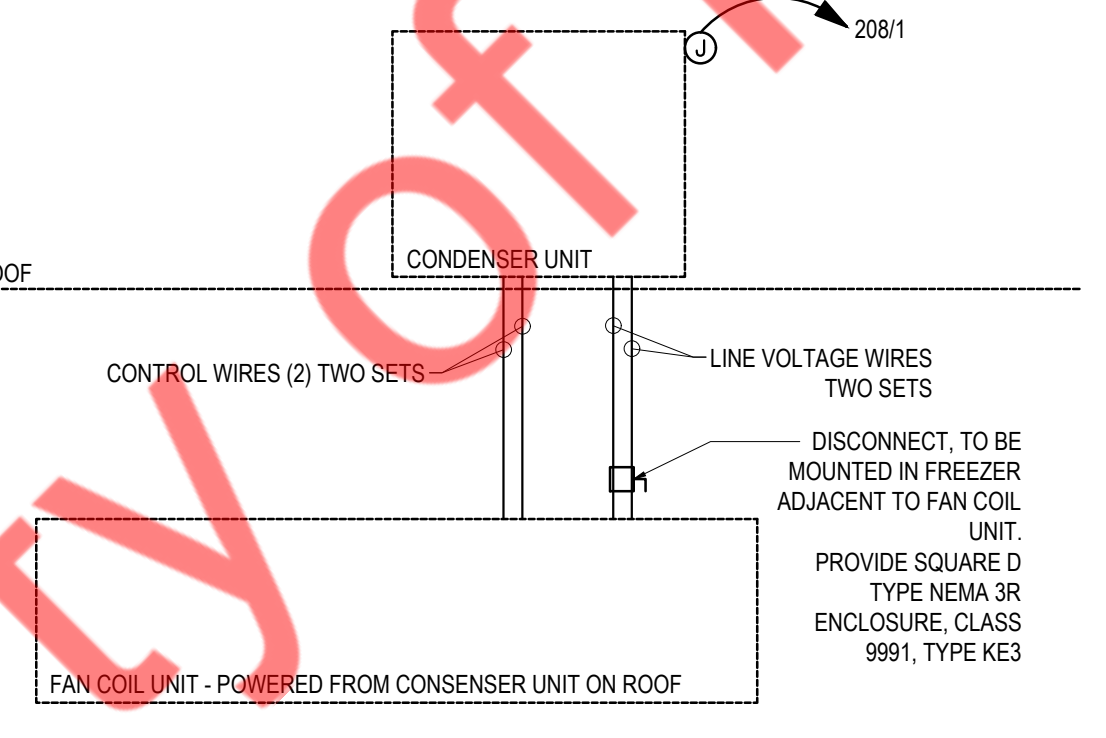


DETAIL NOTES
CONTACTORS SHALL BE INSTALLED IN A SINGLE ENCLOSURE AND THE ENCLOSURE SHALL BE INSTALLED ABOVE THE KITCHEN CEILING.

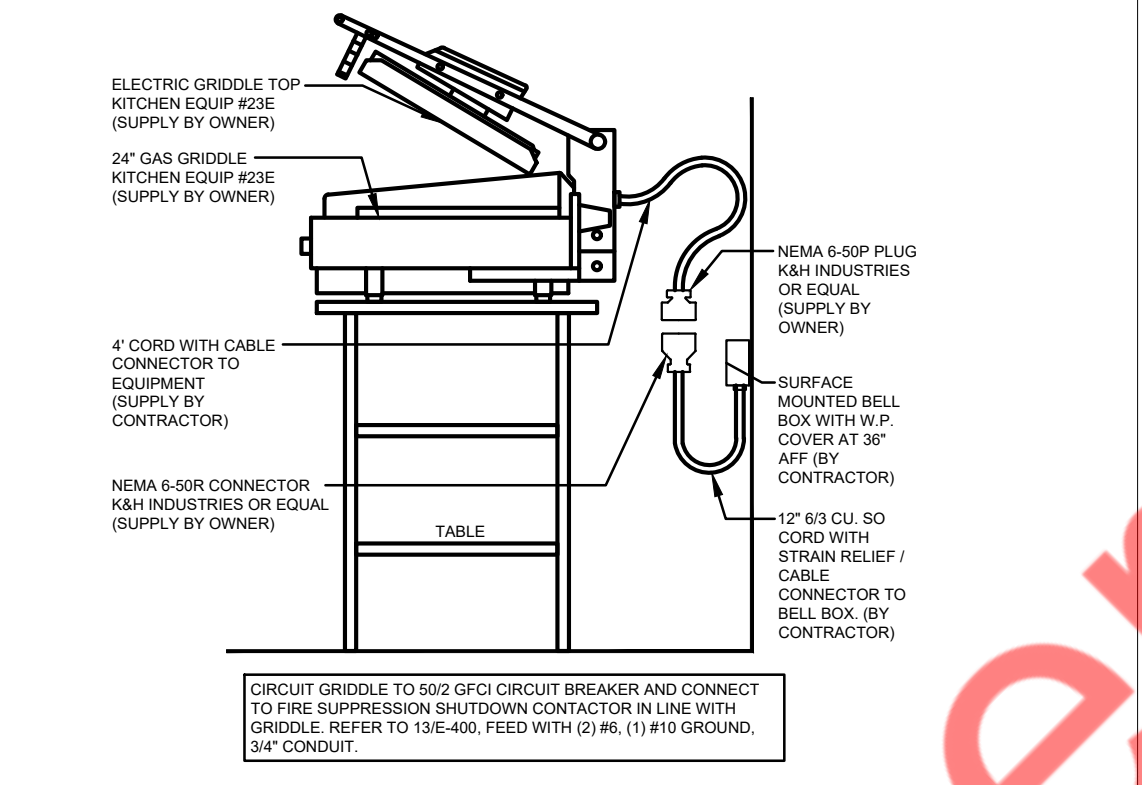
FREEZER LTG & DOOR HTR WIRING DIAGRAM 10
NOT TO SCALE E-400



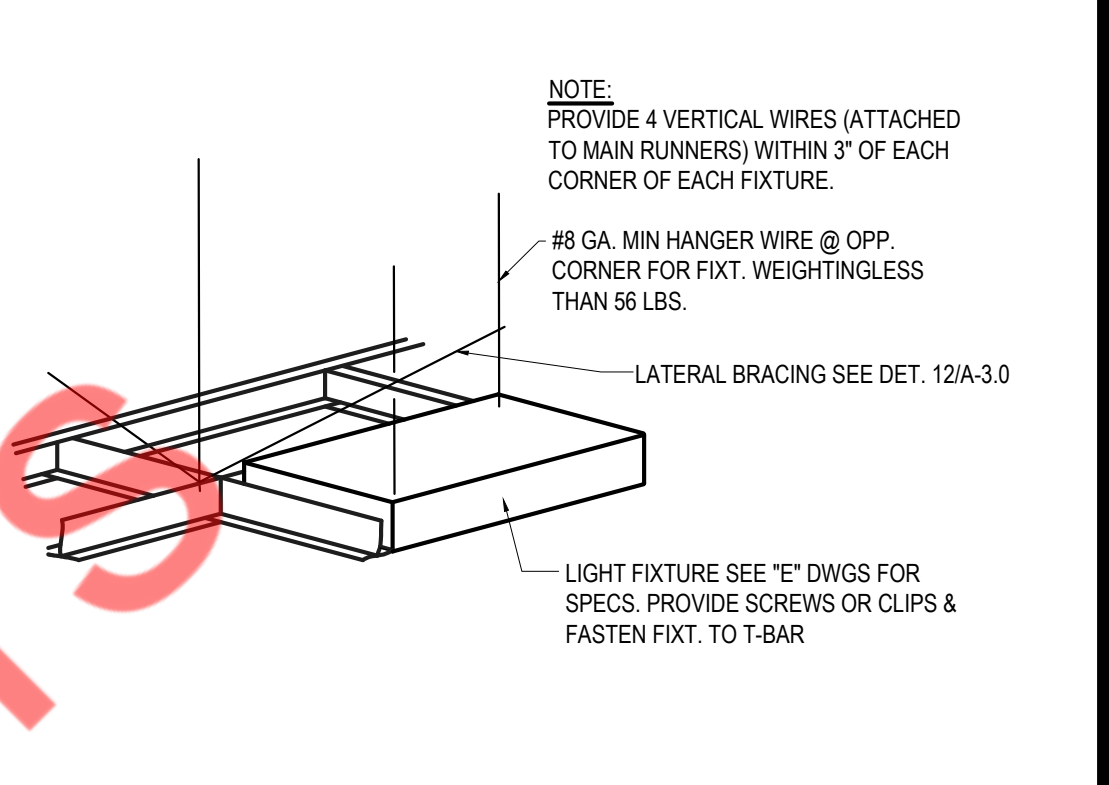
FREEZER EVAPORATOR COIL 9
NOT TO SCALE E-400



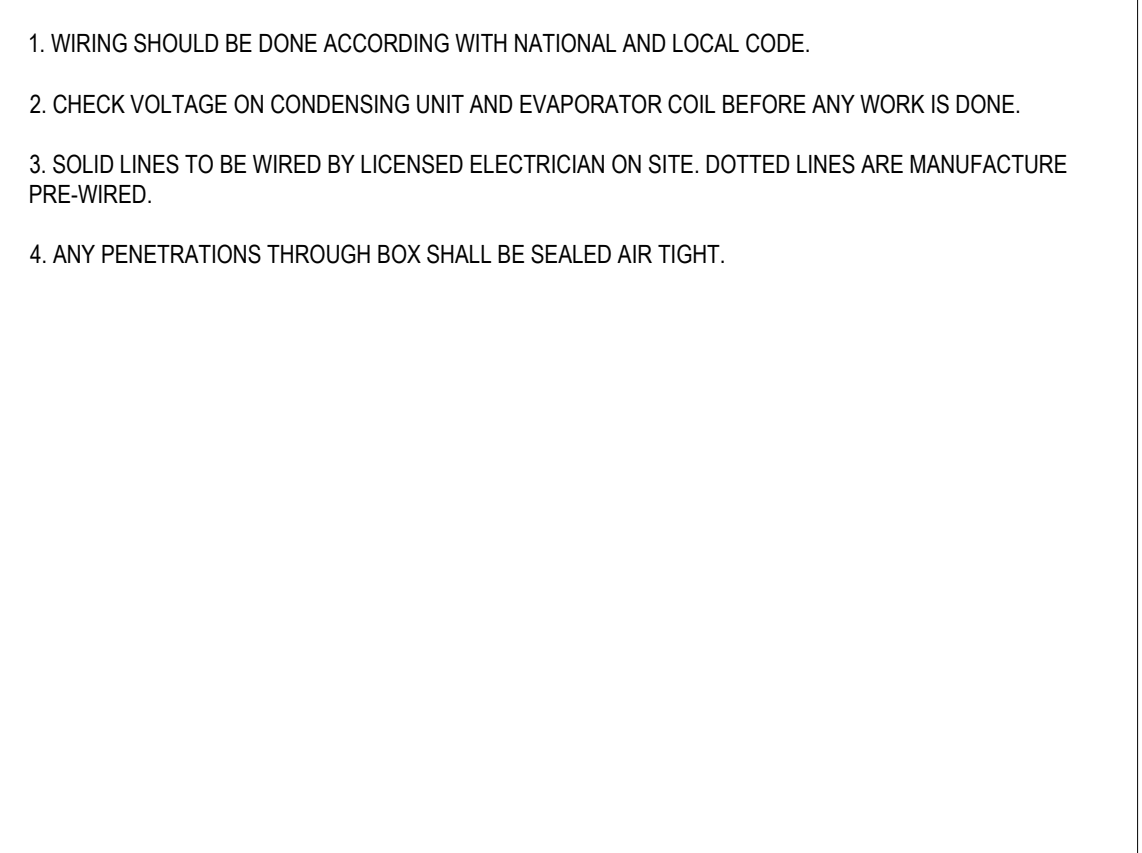
GRIDDLE 23E 14
NOT TO SCALE E-400



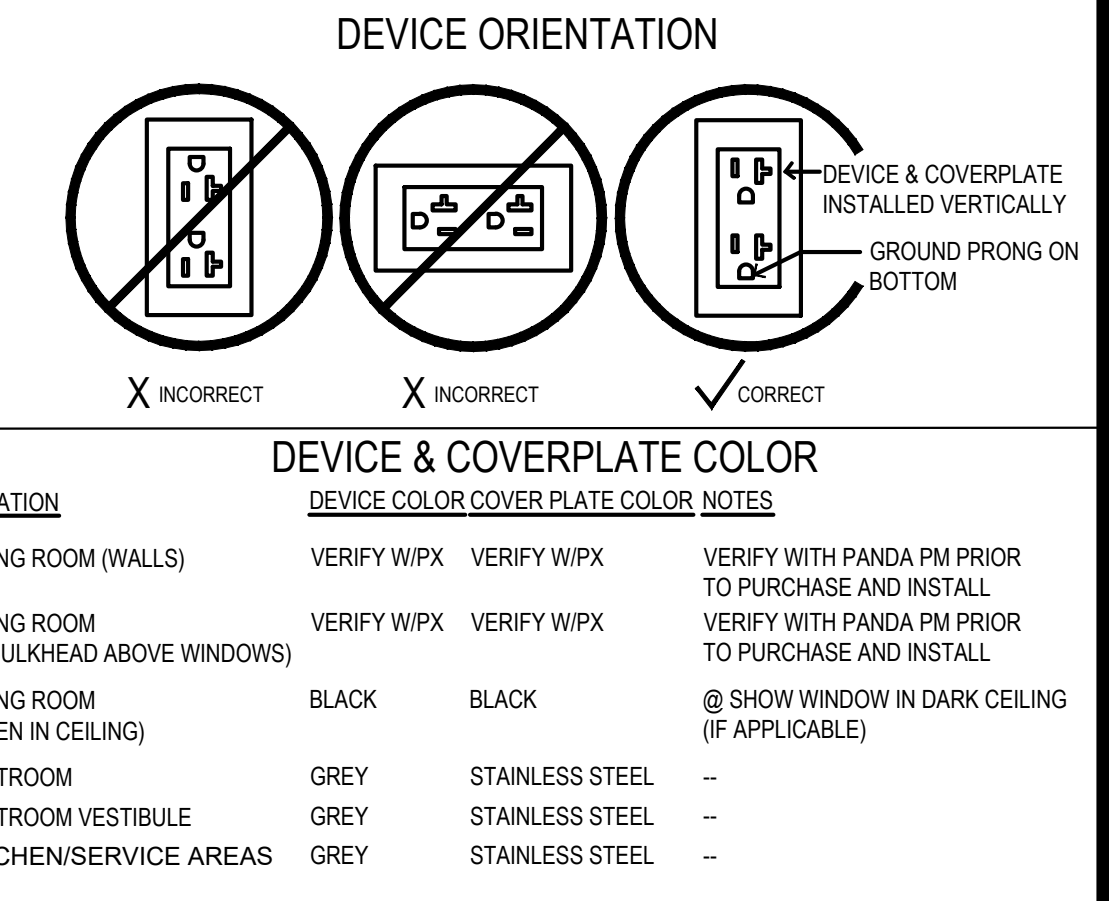
LIGHT FIXTURE DETAIL 4
NOT TO SCALE E-400



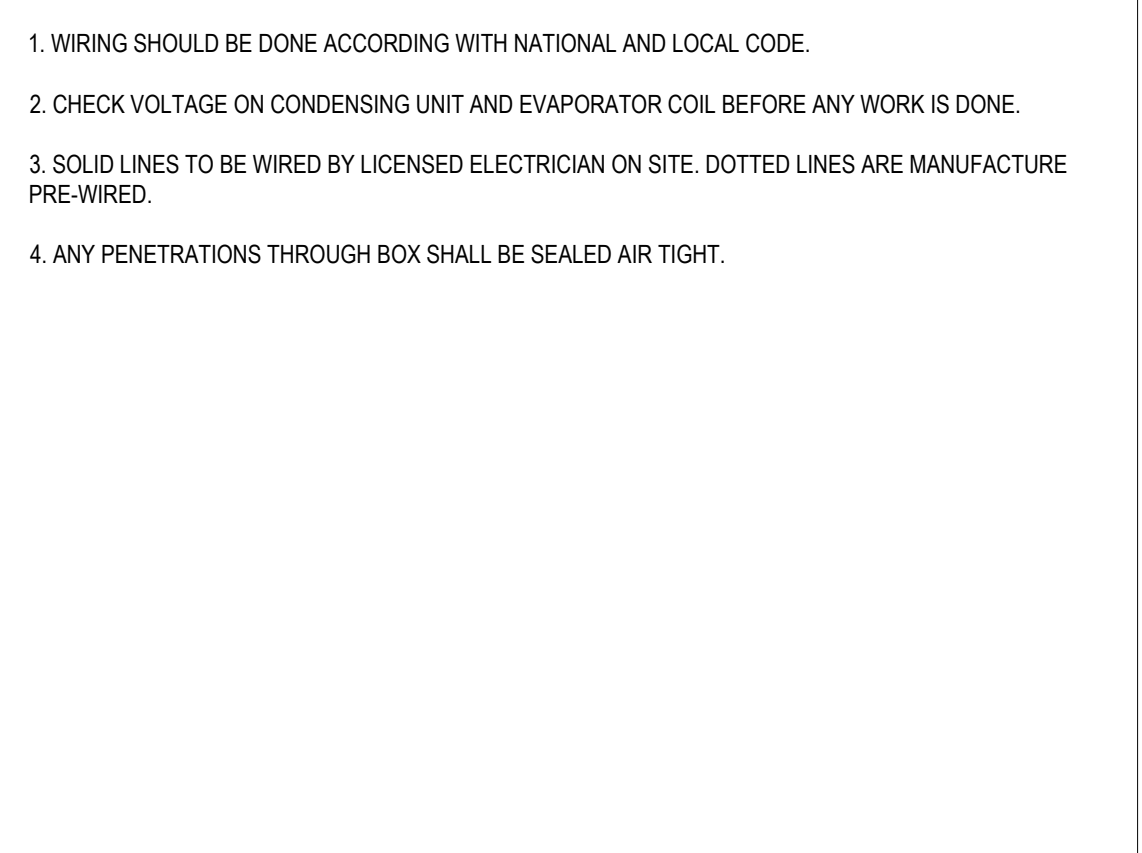
CONDENSING UNIT 7
NOT TO SCALE E-400



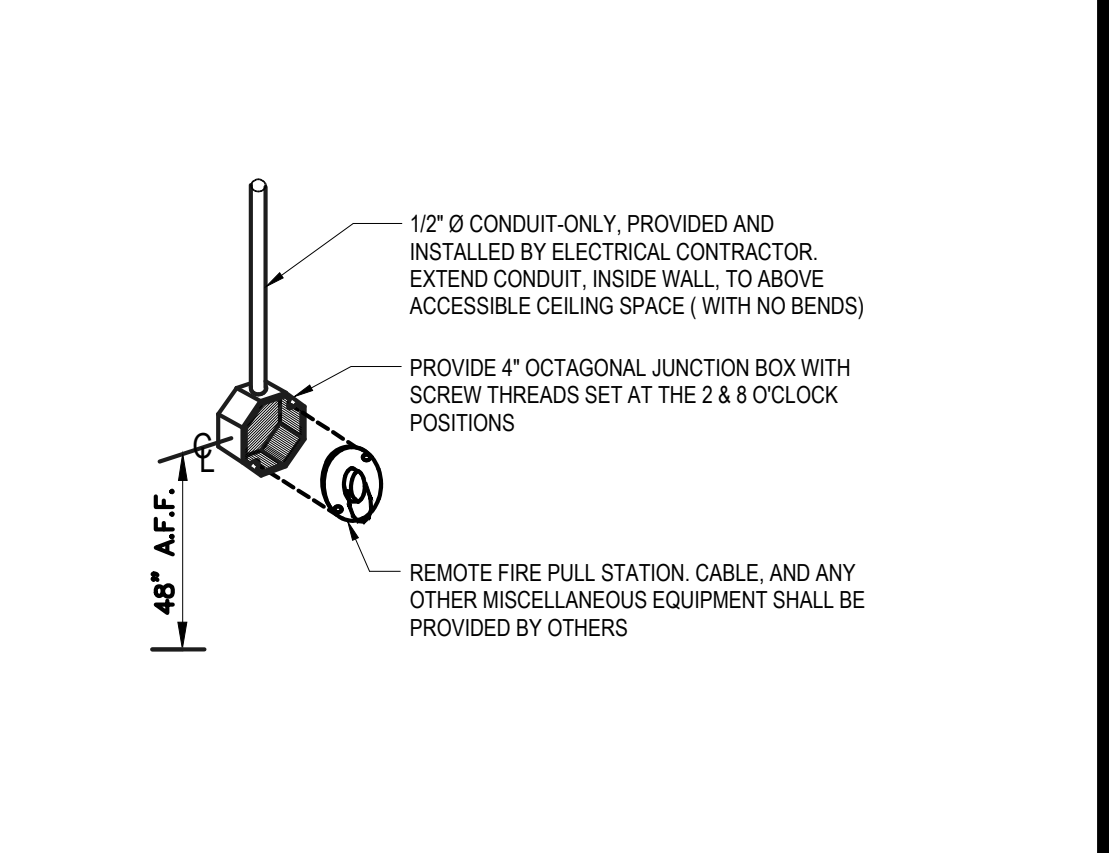
DEVICE / RECEPTACLE SCHEDULE 3
NOT TO SCALE E-400



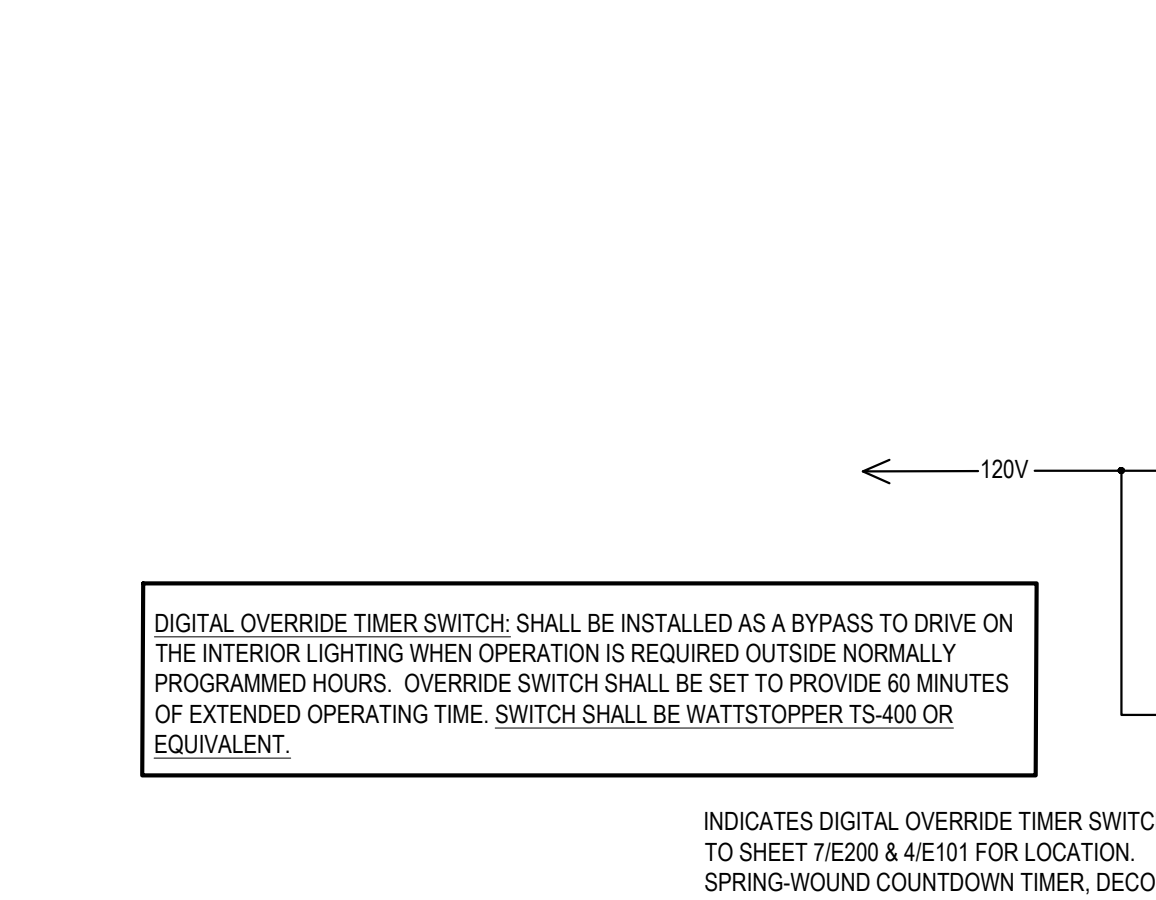
WIC / WIF WIRING NOTES 6
NOT TO SCALE E-400



ANSUL PULL STATION DETAIL 2
NOT TO SCALE E-400

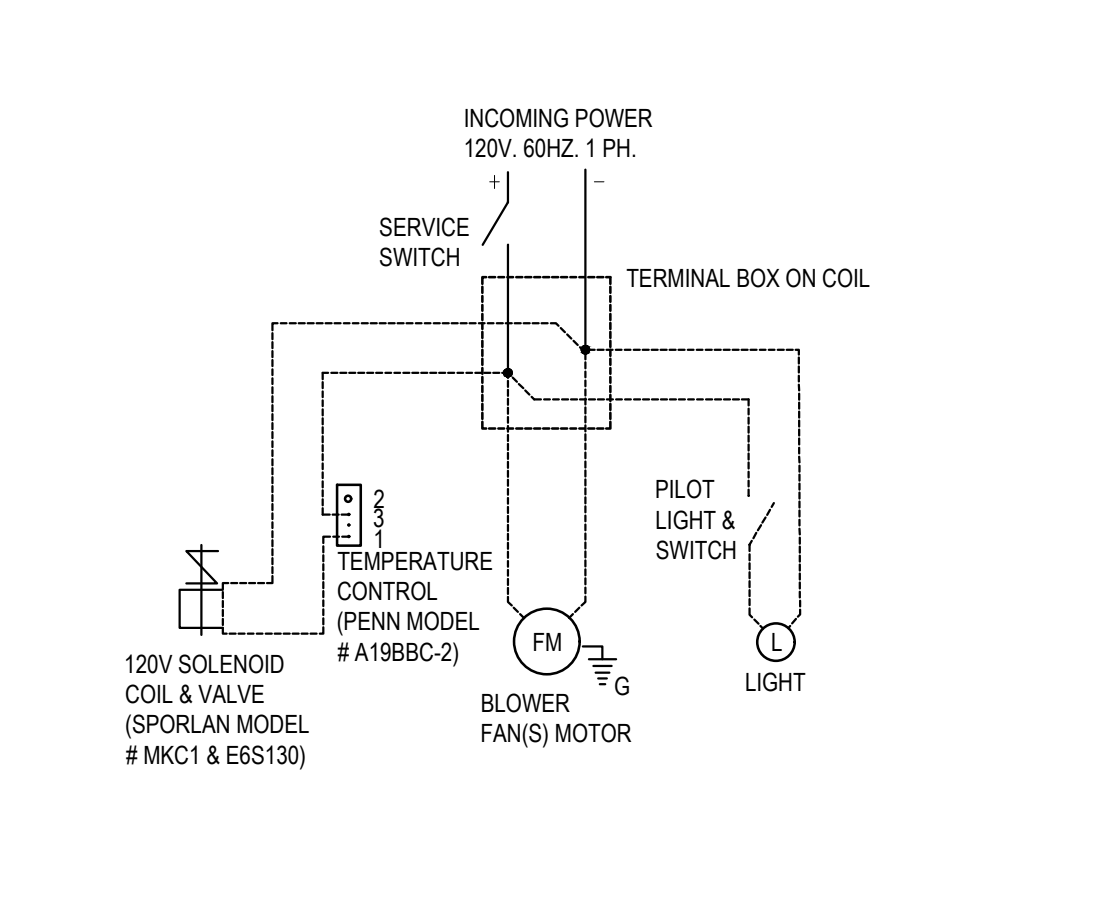


TIME CLOCKS 11
NOT TO SCALE E-400

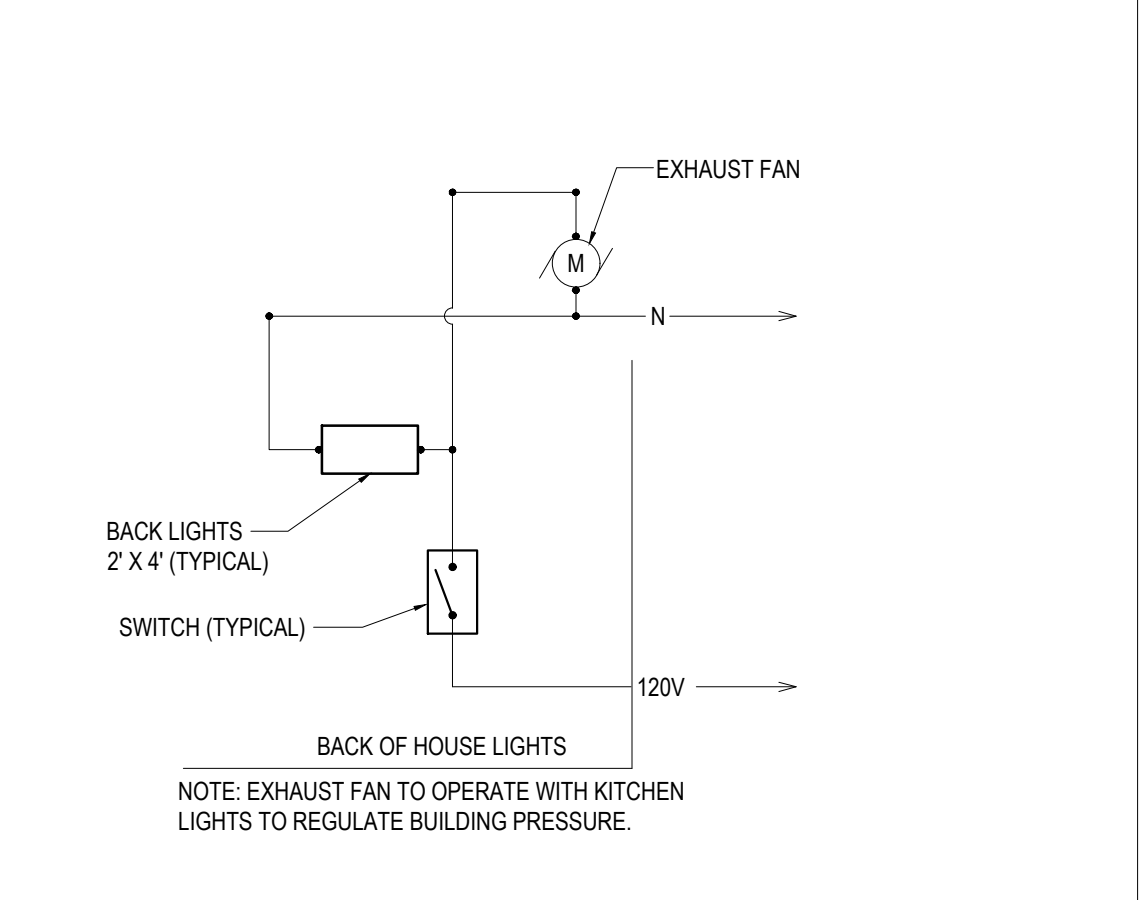


DIGITAL OVERRIDE TIMER SWITCH: SHALL BE INSTALLED AS A BYPASS TO DRIVE ON THE INTERIOR LIGHTING WHEN OPERATION IS REQUIRED OUTSIDE NORMALLY PROGRAMMED HOURS. OVERRIDE SWITCH SHALL BE SET TO PROVIDE 60 MINUTES OF EXTENDED OPERATING TIME. SWITCH SHALL BE WATTSTOPPER TS-400 OR EQUIVALENT.

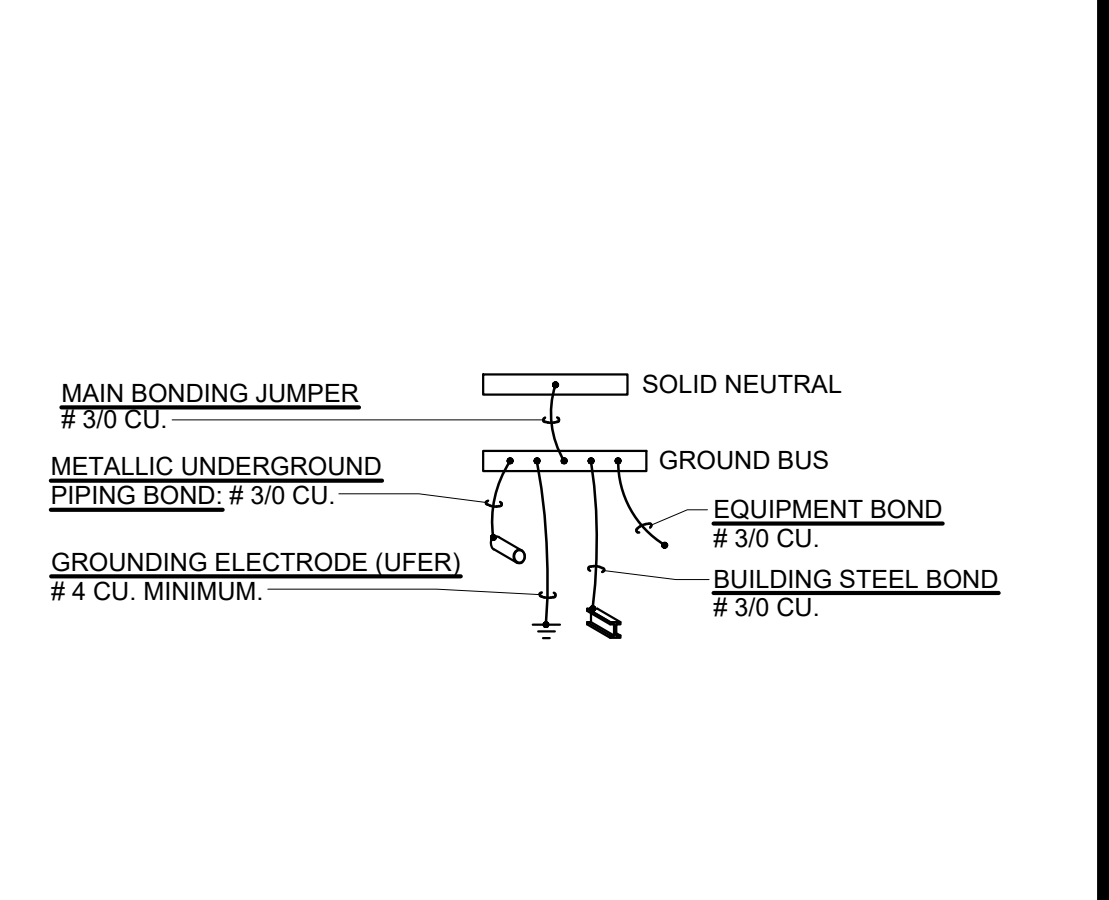
COOLER EVAPORATOR COIL 8
NOT TO SCALE E-400



EXHAUST FAN CONTROL DIAGRAM 5
NOT TO SCALE E-400



GROUNDING DETAIL 1
NOT TO SCALE E-400

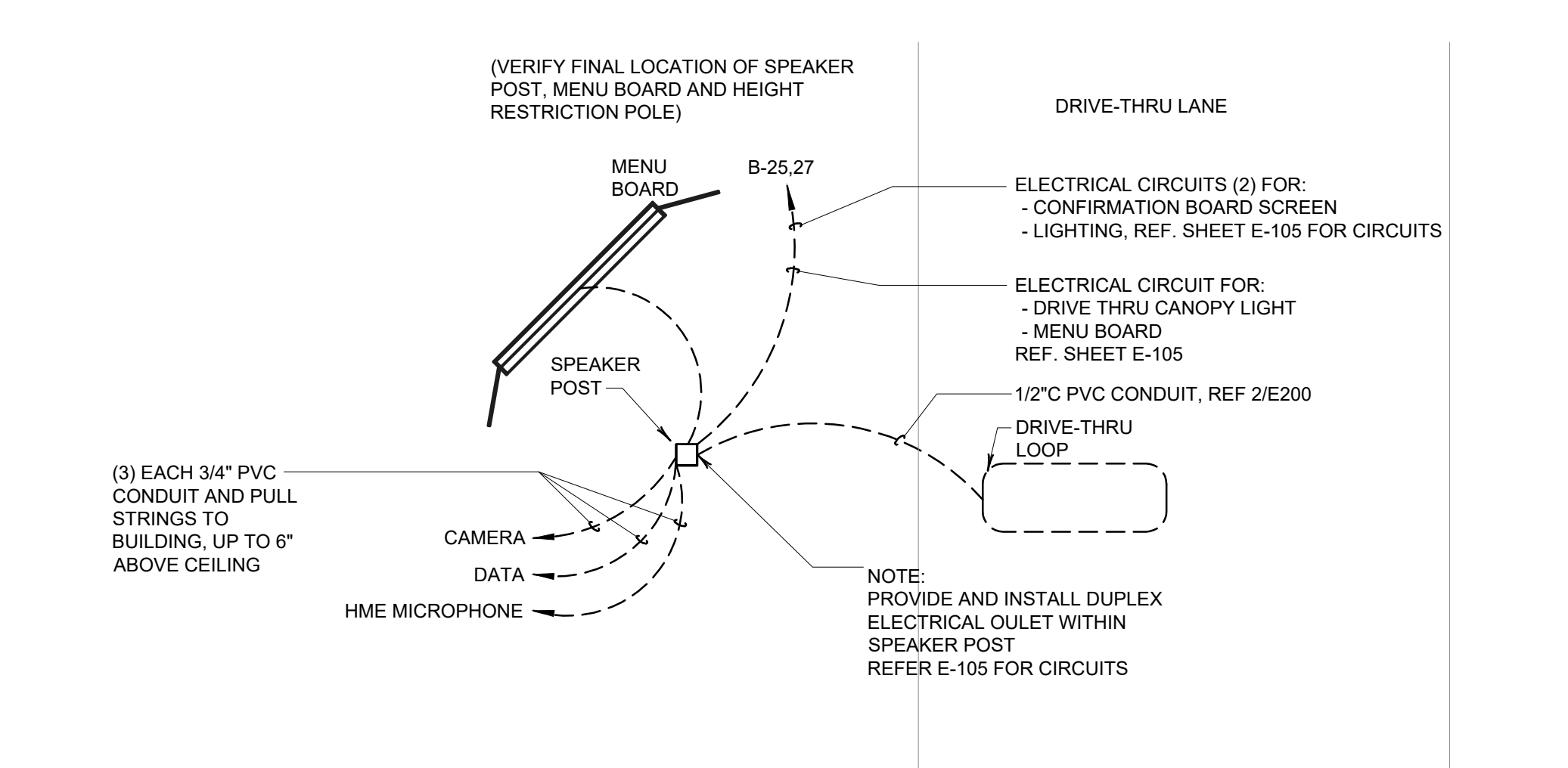
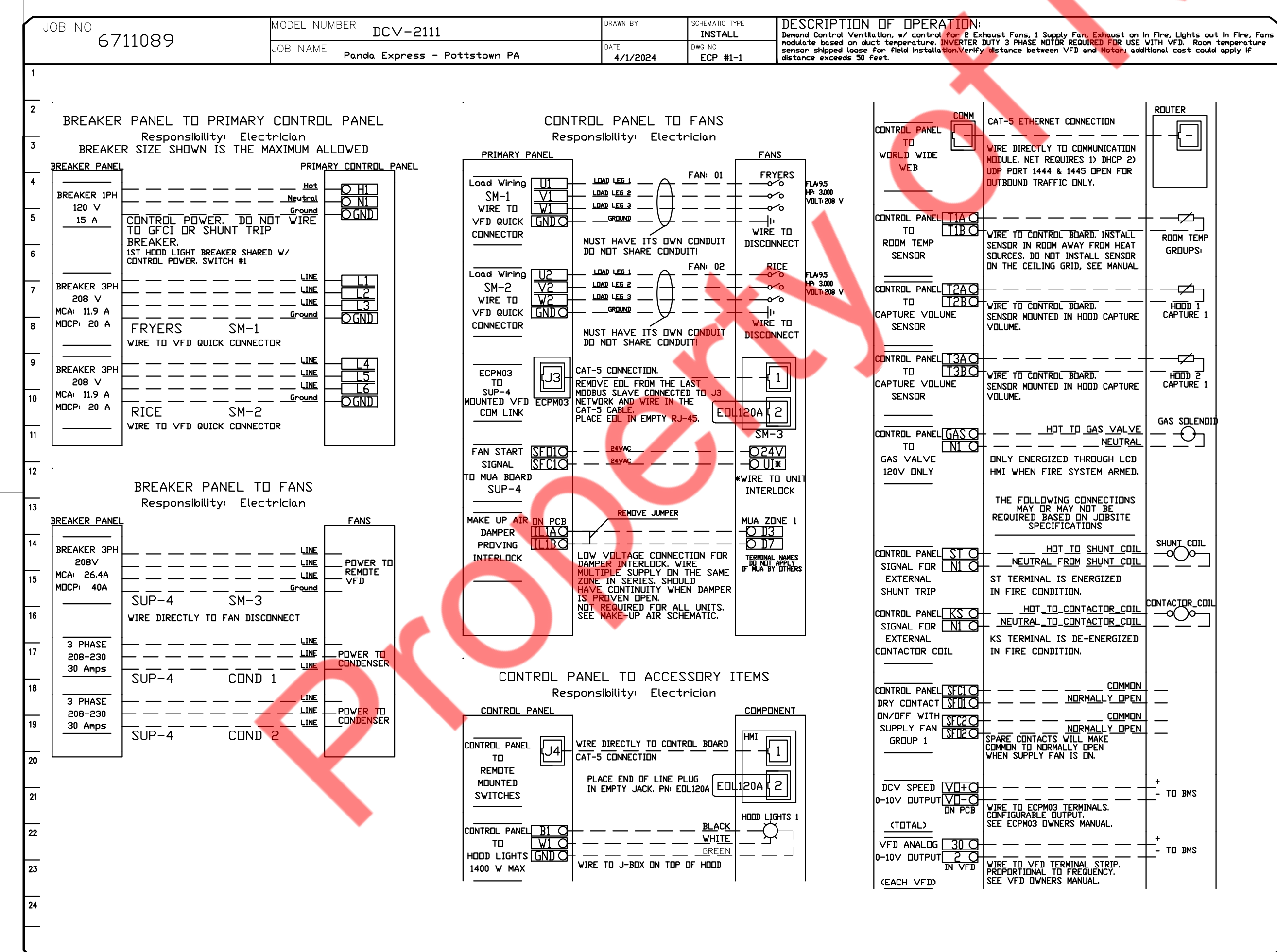
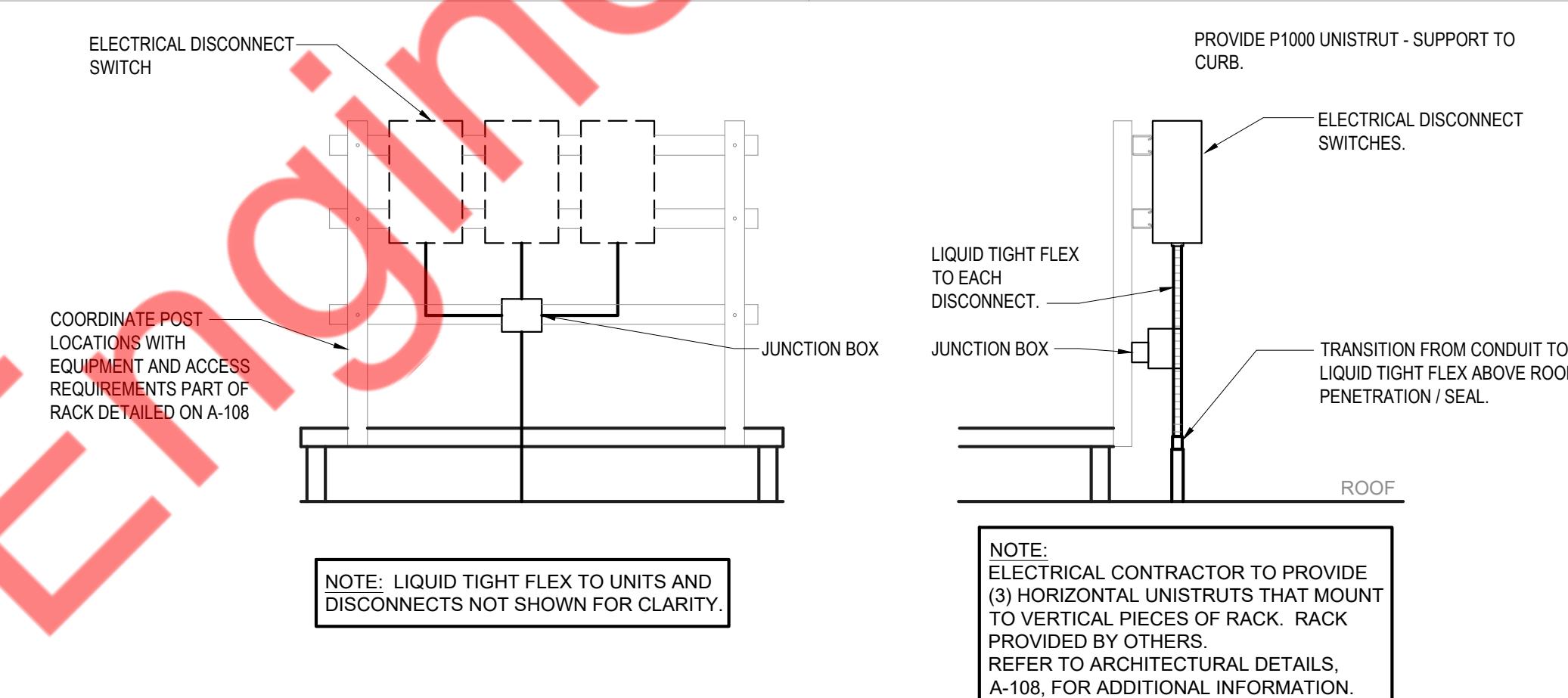


E-400

HOT - MEDIUM ELECTRICAL DETAILS, DIAGRAMS



PROTECTED BY PATENT ENGINEERS





GENERAL PLUMBING NOTES

- A. FOOD SERVICE EQUIPMENT: REFER TO OTHER PORTIONS OF PLANS AND SPECIFICATIONS FOR FURTHER INFORMATION...
B. HEALTH DEPARTMENT: COMPLY WITH LOCAL HEALTH DEPARTMENT (HD) REGULATIONS...
C. WORKMANSHIP SHALL BE FIRST CLASS, ACCEPTABLE TO OWNER.
D. MAKE COMPLETE: PROVIDE ITEMS AND WORK AS REQUIRED TO COMPLETE THE INSTALLATION OF PLUMBING SYSTEMS TO FIXTURES AND EQUIPMENT...
E. VERIFY LOCATIONS: EXISTING PIPING, POC SHOWN ON DRAWINGS HAS BEEN LOCATED FROM INFORMATION PROVIDED BY OTHERS...
F. BACKFLOW PREVENTION: PROVIDE BACKFLOW PREVENTERS (BFP) IN WATER LINES ONLY IF REQUIRED BY LOCAL AUTHORITIES...
G. RESTROOM TRAP PRIMERS: SOUX CHIEF 'TRAP EASE' MODEL 200-990 TRAP PRIMER TAIPICE...
H. WATER CONSERVATION: CONTRACTOR SHALL PROVIDE WATER FLOW LIMITING FEATURES ON FIXTURES IF AS REQUIRED BY LOCAL AUTHORITIES...
I. COLD WATER: CONNECT TO DOMESTIC COLD WATER VALVED STUB. EXTEND COLD WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS...
J. HOT WATER: PROVIDE COMMERCIAL TYPE WATER HEATER, DESIGN PER PLAN. RUN HOT WATER PIPE, SUSPENDED FROM STRUCTURE ABOVE CEILING AND DOWN IN PARTITIONS TO SERVE FIXTURE AND EQUIPMENT...
K. SANITARY: CONNECT TO SANITARY WASTE LINE.
L. BRANCHES: PROVIDE HOT AND/OR COLD WATER PIPES DOWN IN PARTITION TO SERVE VARIOUS EQUIPMENT PER 'KITCHEN EQUIPMENT SCHEDULE'.
M. SODA CONDUIT: PROVIDE 6" CONDUIT BELOW FLOOR FROM SODA STORAGE TO SODA DISPENSER.
N. CONDENSATE: PROVIDE 1" INSULATED PRIMARY AND SECONDARY CONDENSATE DRAIN PIPES FROM FAN-COIL UNIT ABOVE CEILING TO NEAREST FLOOR SINK.
O. GAS SERVICE: PROVIDE ALL PIPES, VALVES AND CONNECTION TO GAS METER. FOR NATURAL GAS SERVICE, COORDINATE WITH GAS UTILITY COMPANY FOR METER REQUIREMENTS, PERMITS AND FEES...
P. INDIRECT DRAIN: AN AIR GAP TWICE THE SIZE OF THE DRAIN LINE MUST BE PROVIDED BETWEEN THE DRAIN LINE AND THE SANITARY SEWER.
Q. LIQUID WASTE FROM ALL EQUIPMENT MUST BE DISCHARGED TO THE SANITARY SEWER.
R. FLOOR DRAIN MUST BE PLACED ADJACENT TO EQUIPMENT WHICH DISCHARGES WASTE. FLOOR DRAIN INSTALLATION MUST NOT INTERFERE WITH PROPER FLOOR MAINTENANCE.
S. EXPOSED UTILITY LINES ON FLOORS ARE PROHIBITED. UTILITY LINES MUST NOT BE UNNECESSARILY EXPOSED ON WALLS.
T. ALL WATER AND GAS CONNECTIONS TO ALL PLUMBING FIXTURES TO BE HARD PIPED, NO FLEX PIPE.
U. ALL PIPES 6" A.F.F. NO FLOOR SUPPORTS ALLOWED.
V. ALL WATER PIPES IN EXPOSED AREAS OUTSIDE WALLS AND BELOW CEILING MUST BE COPPER UNLESS NOTED OTHERWISE.

PLUMBING KEY NOTES

- 1. 2" G DOWN TO WATER HEATER W/ SOV (SHUT OFF VALVE).
2. (2) 3/4" G DOWN TO RICE COOKER W/ SOV. PROVIDE 6" LENGTH OF RIGID PIPE BETWEEN RICE COOKER AND FLEXIBLE GAS LINE.
3. CW SHUT OFF BALL VALVE LOCATED WITHIN WALL. REFER ARCH INTERIOR ELEVATIONS FOR HEIGHT. PROVIDE ACCESS PANEL.
4. 1-1/2" G DOWN TO DEEP FRYER W/ SOV.
5. 1-1/2" G DOWN TO CHINESE RANGE "20" W/ SOV. LOCATE STUB OUT BEHIND THE END OF RANGE FOR EASY ACCESS.
6. 1-1/4" G DOWN TO CHINESE RANGE "20Q" OR "20R" W/ SOV.
7. EXHAUST & INTAKE VENTS UP TO ROOF. COORDINATE WITH MECHANICAL DRAWINGS AND DETAIL #10 ON SHEET P-500.
8. ROUTE NEW PIPING IN WALL.
9. GAS ANSUL VALVE PROVIDED BY OWNER (G.C. CALL CAPITVEAIRE FOR DELIVERY). INSTALL GAS ANSUL VALVE ABOVE CEILING AS ALLOWED BY LOCAL CODE IN LOCATION PER PLAN P100.
10. 1/2" WATER PIPE UP IN CURB. VALVE AND CAP.
11. 1" G UP TO ROOF W/ SOV. FOR ROOFTOP UNIT 1.
12. 1/2" CW TO TRAP PRIMER. PROVIDE WALL ACCESS PANEL. RUN 1/2" CW BELOW FLOOR TO FLOOR DRAIN. SEE DETAIL #17 ON PLAN P-500.
13. 3/4" GAS DOWN FOR EQUIPMENT.
14. SHUT OFF VALVE W/ HANDLE AT THE CEILING, EASILY ACCESSIBLE. G.C. TO INSTALL LOCATION INDICATOR STICKER PROVIDED BY PANDA EXPRESS.
15. 2" GAS UP TO MAKE-UP AIR UNIT ON ROOF.
16. 1/2" HW & CW TO FAUCET (40B) FOR CHEMICAL FEED SYSTEM. LEFT SIDE PLUMBING ROUGH AT 24" OFF LEFT END OF SINK. SEE DETAIL 16 SHEET P-500.
17. GAS HEADER - INSTALL TIGHT TO WALL AND TIGHT TO BOTTOM OF TRUSSES.
18. COLD WATER MANIFOLD "C" BELOW CEILING. REF ARCH ELEVATIONS.
19. COLD WATER MANIFOLD "D" BELOW CEILING. REF ARCH ELEVATIONS.
20. HOT WATER MANIFOLD "A" BELOW CEILING. REF ARCH ELEVATIONS.
21. SEE HOT WATER SYSTEM DIAGRAM S/P-400.
22. 3/4" GALVANIZED PIPE, THREADED AT BOTH ENDS. ROUTE ABOVE CEILING FROM FRYERS TO GREASE STORAGE TANK.
- ROUGH-IN HEIGHT AT STORAGE ROOM: 90" AFF
- ROUGH-IN HEIGHT AT COOKLINE: 18" AFF
- VERTICAL RISE AT FRYER LOCATION HIGH AS POSSIBLE, BUT NOT TO EXCEED 15' IN HEIGHT
- SLOPE OF PIPE TO BE STEEP AS POSSIBLE, BUT NO LESS THAN 1/2" PER LINEAR FOOT
23. 1/2" CW UP TO "O" ROOF HYDRANT. LOCATE PER OWNER REQUIREMENTS.
24. CONNECTIONS TO POT WASHER TO BE LOCATED UNDER THE DRAIN BOARD OF 3-COMP SINK. SEE DETAIL 20 ON SHEET P-500.
25. COORDINATION GAS SECONDARY WALL PENETRATION LOCATION WITH GC & SIGN VENDORS SHOP DRAWINGS. PENETRATION TO BE LOCATED BETWEEN VERTICAL SIGNAGE SLATS IN FIELD.
26. 1-1/4" G UP TO ROOF W/ SOV. FOR ROOFTOP UNIT 2 AND 3.
27. CONTRACTOR TO FIELD VERIFY THE AVAILABILITY, SIZE AND LOCATION OF EXISTING RPZ AND WATER METER, PROVIDE NEW IF NOT EXISTING. BASE BID ACCORDINGLY.

PLUMBING SPECIFICATIONS

- 1. WORK INCLUDES CONNECTION OF PLUMBING UTILITIES TO DEVELOPER OR LANDLORD'S UTILITIES AND INSTALLATION OF A COMPLETE PLUMBING SYSTEM WITHIN SPACE. PROVIDE NEW MATERIALS, FITTINGS, ACCESSORIES, FIXTURES AND EQUIPMENT NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING SYSTEM AS SHOWN ON PLANS AND AS REQUIRED. WORK INCLUDES FINAL CONNECTIONS TO EQUIPMENT AND FIXTURES PROVIDED BY OTHERS. FURNISH ALL NEW MATERIALS, WORK SHALL BE PERFORMED BY EXPERIENCED TRADESMEN, AND THEIR WORKMANSHIP SHALL BE HIGH STANDARD, ACCEPTABLE TO OWNER.
2. CODES: ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS, OR ORDINANCES. PAY FOR ANY PERMITS REQUIRED, AND CALL FOR ANY REQUIRED INSPECTIONS TO BE MADE BY LOCAL AUTHORITIES.
3. INTENT OF DRAWINGS IS TO INDICATE GENERAL EXTENT OF WORK REQUIRED FOR PROJECT. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING GENERAL LOCATION, TYPE, PIPING, FIXTURES AND EQUIPMENT REQUIRED. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FULFILL INTENT OF PLANS. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. USE DIMENSIONED ARCHITECTURAL DRAWINGS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURES, AND TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
4. FSE ROUGH-IN DRAWINGS: REFER TO ROUGH-IN DRAWINGS FURNISHED BY THE FOOD SERVICE EQUIPMENT SUPPLIER. FOR EXACT LOCATION OF WATER PIPING SUPPLIES AND DRAIN LOCATIONS TO SERVE FOOD SERVICE EQUIPMENT. DO NOT LAYOUT WORK OF THIS SECTION WITHOUT SUCH DRAWINGS.
5. COORDINATE WITH WORK OF OTHER SECTIONS AND TRADES, WITH EQUIPMENT FURNISHED BY OTHERS, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE.
6. MISCELLANEOUS EXPENSES SUCH AS HOOK-UP CHARGES, PERMITS, INSPECTIONS, AND OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING SYSTEM ARE INCLUDED AS PART OF THIS SECTION.
7. PIPING SYSTEMS, GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. SEAL PIPE PENETRATIONS OF FIVE FLOORS AND FIREWALLS WITH FIREPROOF PUTTY OR GROUT. PROVIDE SUMNER OR EQUIVALENT PIPE HANGING SYSTEM IN CHASES. PROVIDE HANGERS AS RECOMMENDED BY HANGER MANUFACTURER AND MSS-SP-58, 69 AND 89.
8. WASTE PIPING: PROVIDE ALL DRAIN, WASTE AND SEWER PIPING WITHIN PROJECT SPACE WITH CONNECTION TO SANITARY WASTE SYSTEM ON SITE. PROVIDE A COMPLETE SYSTEM OF WASTE PIPING, CONSISTING OF SCH 40 PVC PIPE, CONNECTORS AND FITTINGS ALL PIPING SHALL BE SLOPED UNIFORMLY AT 2% UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS.
8.1. CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT APART.
8.2. CLEANOUTS SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A SINGLE PIPE RUN, ONLY ONE (1) CLEANOUT SHALL BE REQUIRED FOR EVERY 40 FEET OF DEVELOPED LENGTH.
9. VENTS: PROVIDE A COMPLETE SYSTEM OF VENT PIPING, CONSISTING OF SCH 40 PVC PIPE, CONNECTORS AND FITTINGS. COMBINE THE VENT RISERS IN THE CEILING SPACE. CONNECT TO VENT THROUGH ROOF.
10. WATER PIPING: CONNECT TO EXISTING WATER PIPING AND PROVIDE A NEW DOMESTIC HOT AND COLD WATER PIPING SYSTEM INSIDE THE BUILDING AS SHOWN ON DRAWINGS. LAY OUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE ZURN PEX (ASTM F876, CSA B137.5, ASTM F877, SDR 9 TUBING) WITH ZURN PEX PRE-ASSEMBLED MANIFOLDS, FITTINGS AND JOINTS FOR PEX-A TUBE. ASTM F990 COMPATIBLE COLD EXPANSION FITTINGS, MATCHING PEX TUBE DIMENSIONS. USE BLUE COLOR PEX FOR COLD WATER AND RED COLOR PEX FOR HOT WATER. PEX PIPING SHALL BE CONTINUOUS FROM MANIFOLD CONNECTION TO COPPER STUB-OUT AT EACH FIXTURE. PEX PIPING SHALL NOT BE SPLICED WITHIN WALLS. FLUSH WATER PIPING CLEAR OF DEBRIS AND CLEAN AERATORS AND STRAINERS AT TERMINATION OF INSTALLATION.
11. NATURAL GAS PIPING: INSIDE AND OUTSIDE THE BUILDING ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL, ASTM A-33 PIPE WITH 125 LB MALLEABLE IRON SCREWED FITTINGS WHERE EXPOSED. PRIMER AND PAINT EXTERIOR GAS PIPING YELLOW TO PREVENT RUST. PROVIDE ALL UNIONS, SHUT OFF VALVES AND DRIP LEGS REQUIRED BY NFPA-54 AND GOVERNING CODES. PROVIDE ALL TESTS, INSPECTIONS, HANGERS AND APPURTENANCES REQUIRED FOR A COMPLETE OPERATING SYSTEM. TAP ON UTILITY GAS MAIN AND GAS METER SHALL BE BY GAS COMPANY. EXTEND PIPING FROM METER TO EQUIPMENT AS DETAILED ON DRAWINGS. PROVIDE ROUTING, HANGING, AND PENETRATIONS PER OWNER'S REQUIREMENTS.
12. PIPE INSULATION: INSULATE ALL COLD WATER AND CONDENSATE PIPING WITH 2" AND HOT WATER PIPING WITH 1" PREFORMED FIBERGLASS WITH ALL-SERVICE JACKET WITH VAPOR BARRIER (BY CT, OC, JM, PPG, OR KNAUF), AT CONTRACTOR'S OPTION, PLENUM-RATED ELASTOMERIC INSULATION (BY ARMSTRONG, RUBATEX OR EQUAL) MAY BE USED.
13. PIPE MARKING:
13.1. IDENTIFY ALL PIPING WITH ANSISMAE A13.1 2007 APPROVED PIPE MARKER SYSTEM USING EZ ARROWS AND ARROW BANDING TAPE IN CONJUNCTION WITH EZ PIPE MARKERS. PRODUCTS AVAILABLE AT PIPEMARKER.COM 822-274-6271. INSTALL PER MANUFACTURERS INSTRUCTIONS.
13.2. IDENTIFY ALL MANIFOLDS AND ALL VALVES ON THE MANIFOLDS FOR CORRESPONDING FIXTURES.
14. SHUT-OFF VALVES: WITH UNIONS SHALL BE PROVIDED AT BRANCHES TO GROUPS OF MORE THAN TWO FIXTURES, AND AT THE WATER HEATER, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. USE CHROME-FINISHED FORGED BRONZE BODY BALL VALVE, WITH TEFLON SEATS AND PACKING, 400 LB WOG, WITH SOLDER ENDS, EQUAL TO JENKINS #902-F. GAS VALVES SHALL BE ALL BRONZE LUBRICATED PLUG COOKS FOR SCREWED PIPE, BY WALWORTH, ROCKWELL, NORDSTROM OR APPROVED EQUIVALENT.

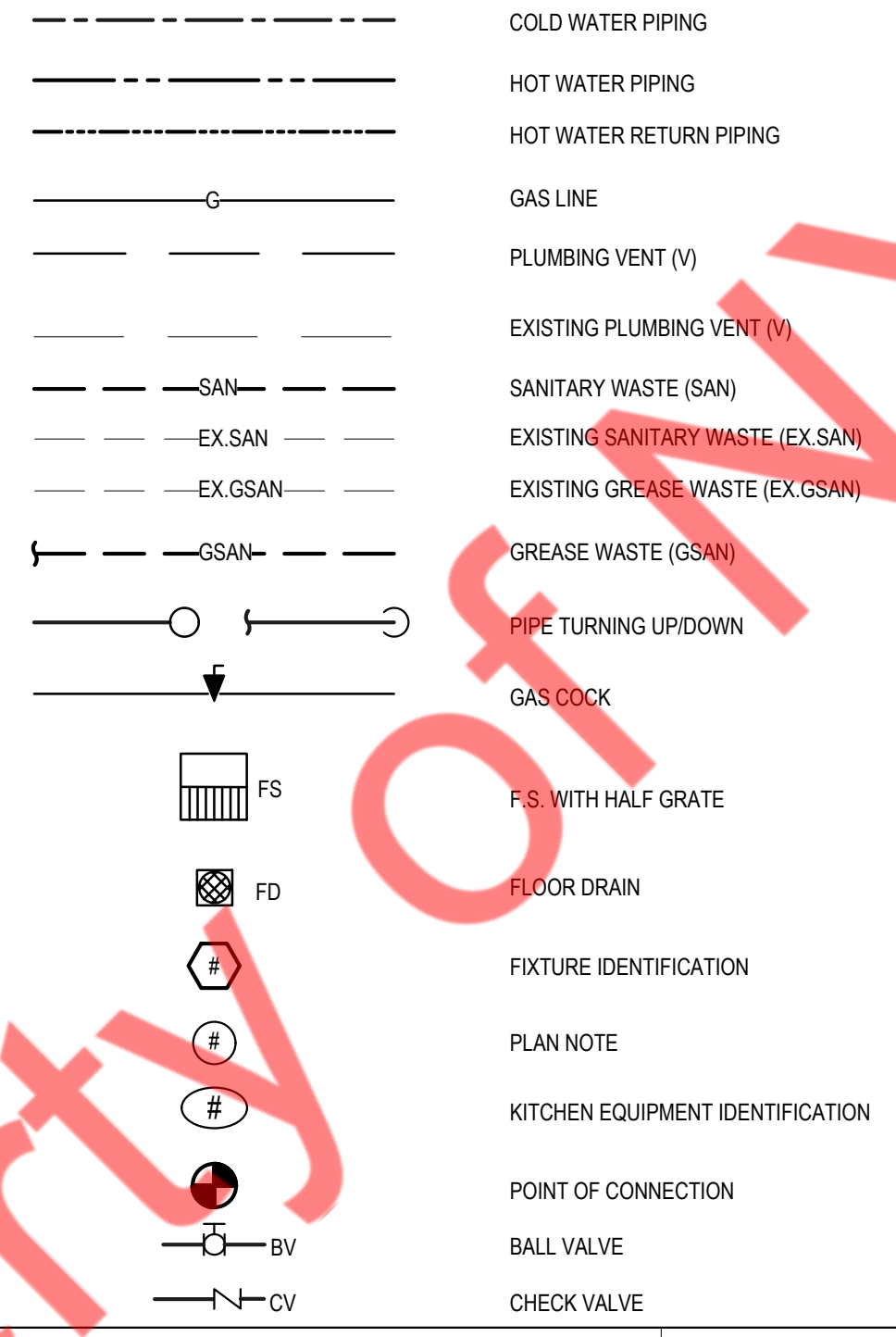
NOTES:

- 1. ALL WATER LINES SERVING WATER HEATERS SHALL RUN DOWN FROM CEILING SPACE IN WALL OFFSET OVER THROUGH WALL 6" BELOW CEILING, ABOVE WATER HEATER, THEN DROP DOWN TO HEATER.
2. AVOID RUNNING WATER VALVES DIRECTLY ABOVE WATER HEATER, TO AVOID DAMAGE TO WATER HEATER CAUSED BY POSSIBLE LEAKS.
3. REFER TO PIPING RISER DIAGRAMS, SHEET P-400 FOR ALL PIPE SIZING NOT SHOWN ON FLOOR PLAN.
4. DO NOT RUN ANY PIPING HORIZONTAL IN WALL SPACE, U.N.O.
5. REFER TO RISER DIAGRAMS, SHEET P-400.
6. ALL PEX PIPING TO BE CONTINUOUS FROM MANIFOLD TO COPPER STUB OUT OF WALL. DETAIL 11/P-400.

ENERGY CONSERVATION NOTES

- 1. ALL DOMESTIC WATER PIPING ABOVE GRADE SHALL BE INSULATED WITH FIRE-RETARDANT, FACTORY-APPLIED JACKET. PROVIDE COLD WATER PIPING WITH FACTORY-APPLIED VAPOR BARRIER. INSULATION REQUIREMENT SHOULD COMPLY WITH INTERNATIONAL ENERGY CONSERVATION CODE 2018 SECTION C403.11.3 & TABLE C403.11.3 REFER BELOW TABLE.
MINIMUM PIPE INSULATION THICKNESS
FLUID OPERATING TEMP. RANGE AND USAGE (°F) INSULATION CONDUCTIVITY CONDUCTIVITY BTU IN./ (H.F.T2 °F) MEAN RATING TEMPERATURE, °F
105-140 0.21-0.28 100 1.0 1.0 1.5 1.5 1.5
40-60 0.21-0.27 75 0.5 0.5 1.0 1.0 1.0
2. AS PER INTERNATIONAL ENERGY CONSERVATION CODE 2018 C404.6.1 HEATED-WATER CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A CIRCULATION PUMP. THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE. CONTROLS FOR CIRCULATING HOT WATER SYSTEM PUMPS SHALL START THE PUMP BASED ON THE IDENTIFICATION OF A DEMAND FOR HOT WATER WITHIN THE OCCUPANCY. THE CONTROLS SHALL AUTOMATICALLY TURN OFF THE PUMP WHEN THE WATER IN THE CIRCULATION LOOP IS AT THE DESIRED TEMPERATURE AND WHEN THERE IS NO DEMAND FOR HOT WATER.
3. WATER DISTRIBUTION SYSTEM AS PER INTERNATIONAL ENERGY CONSERVATION CODE 2018 C404.7, HAVING ONE OR MORE RE-CIRCULATION PUMPS THAT PUMP WATER FROM A HEATED-WATER SUPPLY PIPE BACK TO THE HEATED-WATER SOURCE THROUGH A COLD-WATER SUPPLY PIPE SHALL BE A DEMAND RE-CIRCULATION WATER SYSTEM. PUMPS SHALL HAVE CONTROLS THAT COMPLY WITH BOTH OF THE FOLLOWING:
a. THE CONTROL SHALL START THE PUMP UPON RECEIVING A SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE, SENSING THE PRESENCE OF A USER OF A FIXTURE OR SENSING THE FLOW OF HOT OR TEMPERED WATER TO A FIXTURE FITTING OR APPLIANCE.
b. THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD-WATER PIPING TO 104°F (40°C).

PLUMBING SYMBOLS

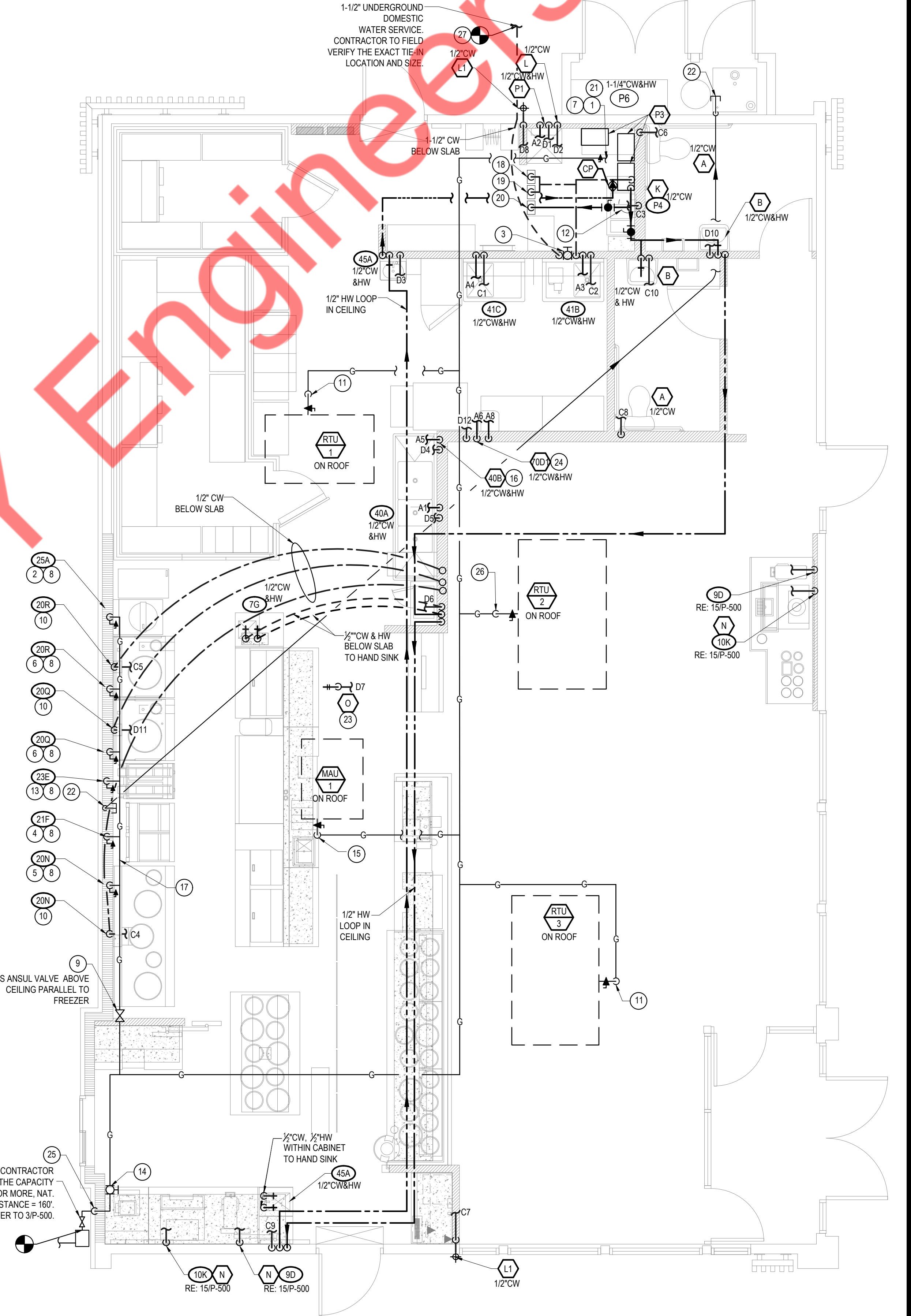


PLUMBING ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes VTR (Vent Thru Roof), AFF/AFG (Above Finished Floor/GraDE), CO (Cleanout), WCO (Wall Cleanout), FCO (Flush Floor Cleanout), TYP (Typical), (E) (Existing), and GW (Grease Waste).

ENERGY CONSERVATION NOTES

Table showing Maximum Piping Length (Feet) for different nominal pipe sizes (1/2", 3/4", 1", 1 1/4", 1 1/2") for Public Lav and Other Fixtures.





PLUMBING FIXTURE SCHEDULE

- A TANK WATER CLOSET (HANDICAPPED): AMERICAN STANDARD 2467.016, FLUSH TANK WITH TRIP LEVER ON OPEN SIDE OF TOILET. FLOOR MOUNTED, STANDARD WHITE FINISHED, ELONGATED FRONT BOWL. PRESSURE ASSISTED 1.6 GPF. RIM 16 1/2" A.F.F. AM. STD. 4142.600 TANK COVER LOCKING DEVICE AM. STD. 3901.100.020 OPEN FRONT SEAT LEAS COVER.
B LAVATORY: ZURN MODEL Z534, 20"x18" WALL HUNG LAVATORY, VITREOUS CHINA, WITH 4" CENTER FAUCET HOLES & ZURN Z-1231 CONCEALED ARM CARRIER. FAUCET: TOTO T28S11E#CP STANDARD ECOPOWER FAUCET. SENSOR, 1.0 GPM, 0.18gpc. 4" COVER PLATE #THP3158B#P. THERMOSTATIC MIXING VALVE: TOTO TL110R. PROVIDED & INSTALLED BY CONTRACTOR CONTACT CHRISTINE MCALEXANDER 800-459-7099 PANDARG@HJCI.COM
C NOT USED
D FLOOR DRAIN: ZURN # ZB415-B5 CAST IRON DRAIN WITH 5" ROUND POLISHED BRONZE TOP, MEMBRANE FLASHING CLAMP. PROVIDE 3" OUTLET WITH P-TRAP. CLEAN AND POLISH AFTER INSTALLATION. REFER TO DETAIL 17/P-500. PROVIDE TRAP PRIMER
D1 FLOOR DRAIN: ZURN # ZB415-B5 CAST IRON DRAIN WITH 5" ROUND POLISHED BRONZE TOP, MEMBRANE FLASHING CLAMP. PROVIDE 3" OUTLET WITH P-TRAP. CLEAN AND POLISH AFTER INSTALLATION. REFER TO DETAIL 9/P-500. PROVIDE TRAP PRIMER
E FLOOR SINK: ZURN # Z1902-31, RECEPTOR WITH 12" SQUARE TOP x 10" DEEP CAST IRON BODY WITH ACID-RESISTING ENAMEL INTERIOR, RECEPTOR OWNER SUPPLIED STAINLESS STEEL MESH LINER FOR BUCKET WITHOUT GRATE.
E1 FLOOR SINK: ZURN # Z1902-2-32, RECEPTOR WITH 12" SQUARE TOP x 10" DEEP CAST IRON BODY WITH ACID-RESISTING ENAMEL INTERIOR, RECEPTOR PROVIDED WITH PORCELAIN ENAMEL LOOSE-SET 1/2" GRATE AND ALUMINUM DOME STRAINER
F NOT USED
G FLOOR DRAIN WITH FUNNEL: ZURN # ZB415-AR-4 ACID RESISTING EPOXY COATED CAST IRON DRAIN WITH 5" ROUND POLISHED BRONZE TOP, 4" FUNNEL. PROVIDE 2" OUTLET WITH P-TRAP. CLEAN AND POLISH AFTER INSTALLATION. REFER TO DETAIL. PROVIDE TRAP PRIMER
H NOT USED
I GREASE INTERCEPTOR: EXISTING GREASE INTERCEPTOR.
J NOT USED
K PROVIDE ZURN 375ST STAINLESS STEEL REDUCED PRESSURE PRINCIPLE ASSEMBLY AT BAG-N-BOX. REFER TO 15P-500
L HOSE BIBB: ACORN #8121 WITH VACUUM BREAKER, CHROME PLATED.
L1 HOSE BIBB: WOODFORD MB65 FREEZELESS COMMERCIAL BOX TYPE WALL HYDRANT IN SECURE LOCK STYLE MODULAR BOX. SINGLE CHECK ANTI SIPHON VACUUM BREAKER. CHROME HEAD, BRASS VALVE BODY HYDRANT WITH 3/4" HOSE CONNECTION 18" A.F.F.
L2 NOT USED.
M TRENCH DRAIN: ZURN #Z-886-RFS, 6" WIDE x 80" LONG, TRENCH DRAIN SYSTEM. MODULAR CHANNEL SECTIONS SHALL BE MADE OF HIGH DENSITY POLYETHYLENE WITH INTERLOCK ENDS, A RADIUS BOTTOM AND REINFORCED STAINLESS STEEL SLOTTED GRATE.
M1 TRENCH DRAIN: ZURN #Z-664-ZN, 6" WIDE x 12" LONG SECTION, TRENCH DRAIN SYSTEM. 24" TOTAL LENGTH. PROVIDE (ONE) BOTTOM OUTLET MODULE AND (ONE) EXTENSION MODULE WITH INTERLOCK ENDS, STAINLESS STEEL SLOTTED HEEL-PROOF GRATE.
N PROVIDE WATTS SD-3 DUAL CHECK VALVE WITH ATMOSPHERIC PORT AND STRAINER AFTER EACH BV.
O FREEZE PROOF ROOF HYDRANT: WOODFORD MODEL: SRH-MS
P1 MOP SINK: GSW # SE2424FM 24"x24" STAINLESS STEEL UNIT, 18 GA. STAINLESS STEEL. CHICAGO FAUCET #897 WITH INTEGRAL STOPS IN SHANKS, WALL BRACE, HOSE THREADS, PAIL HOOK, VACUUM BREAKER, ROUGH BRASS FINISH; THREE FOOT RUBBER HOSE. 3" TRAPPED AND VENTED WASTE CONNECTION. PROVIDE 3/4" HW & CW R1 8" OC, 36" A.F.F. PROVIDE 3/4" CW HOSE BIBB, ACORN #8121 W/ VACUUM BREAKER, 48" A.F.F. FOR CHEMICAL CONNECTION.
P3 TANKLESS GAS WATER HEATER SYSTEM. MFG: RINNAI TRX-02CU (3 CU199), 597,000 BTU/HK. GAS INPUT: 4.2 GPM @ 30" RISE. SEE SHEET P-400. INCLUDE ALL PIPING, VENTING, WALL MOUNTING BRACKET AND ANY ACCESSORIES NECESSARY TO COMPLETE SYSTEM INSTALL. PLUMBER SHALL REGISTER PRODUCT WITH RINNAI AT TIME OF INSTALLATION TO VALIDATE WARRANTY. CONTACT: STACEY PETERSON, RINNAI AMERICA CORPORATION CORPORATE ACCOUNTS MANAGER (909-631-8297) SPETERSON@RINNAI.US
CP HW CIRC. PUMP - MFG: GRINDFOS, UP 15-1885, 125 HP, 115 VOLT, 2 GPM @ 7' HEAD OR APPROVED EQUIVALENT.
RD RD - ROOF DRAIN: J.R. SMITH #1010 CAST IRON ROOF DRAINS WITH FLASHING COLLAR AND CAST IRON DOME. FURNISH EXTENSION (SUFFIX-E) FOR INSULATED ROOFS. SUMP RECEIVER (SUFFIX-R) AND UNDER-DECK CLAMP (SUFFIX-C) FOR ALL BUT POURED-IN-PLACE INSTALLATIONS. OUTLET CONNECTION TYPE SHALL BE COMPATIBLE WITH PIPING SYSTEM. PLUMBER TO PROVIDE AND INSTALL HEAT TAPE, RADIANT SOLUTIONS #HSF-30-1 ON BOTH DRAINS IN COLD CLIMATES.
OD OD - OVERFLOW ROOF DRAIN: J.R. SMITH #1070 WITH SAME FEATURES AS DESCRIBED FOR "ROOF DRAINS". STANDPIPES SHALL BE ADJUSTED AND SECURED SO THAT AFTER THE INSTALLATION OF THE DRAIN ASSEMBLY, THE TOP OF THE STANDPIPE SHALL BE (2") ABOVE THE ADJACENT ROOF SURFACE.
40B FAUCET FOR CHEM: T&S BRASS MODEL #B-0689-POL, PROVIDED BY G.C.

KITCHEN EQUIPMENT SCHEDULE

- ITEMS IN THIS SCHEDULE ARE FURNISHED BY THE OWNER (J.N.O.) AND INSTALLED BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE AND CONNECTED TO THE PLUMBING UTILITIES BY THE PLUMBING CONTRACTOR, WHO SHALL INSTALL ALL PLUMBING DEVICES FURNISHED WITH EQUIPMENT.
WASTE: FS = FLOOR SINK, CFD = CONDENSATE FLOOR DRAIN, VB = VACUUM BREAKER, FLEX = A SIX FOOT COILED LENGTH OF FOOD QUALITY FLEXIBLE REINFORCED PLASTIC TUBING CONNECTED FROM THE ROUGH IN TO THE EQUIPMENT WITH ALL REQUIRED ADAPTERS AND HOSE CLAMPS.
ALL PIPES MUST MAINTAIN A MINIMUM CLEARANCE OF 6" AFF AND MUST BE WELL SUPPORTED. NO FLOOR SUPPORTS ALLOWED.
4A BEVERAGE COUNTER MOUNTED SODA MACHINE WITH ICE MACHINE: PROVIDE 3/4" COPPER PIPE IW FROM COUNTER TROUGH DRAIN TO FS WITH 1" AIR GAP. INSULATE WATER TO SODA MACHINE TO BE PROVIDED THROUGH BUNDLE FROM FILTER AND RACK IN KITCHEN BY SODA MACHINE INSTALLER. NO LEGS TO BE INSTALLED. MACHINE TO SET DIRECTLY ON COUNTER.
P4 WATER FILTER: PROVIDE 1/2" CW AT 96" AFF WITH BV, PROVIDE FLEX AND REDUCED PRESSURE STAINLESS STEEL BACKFLOW PREVENTOR, OR OTHER DEVICE AS REQUIRED BY LOCAL CODE. INSTALL OWNER PROVIDED WATER FILTER AND MAKE CONNECTIONS TO BACKFLOW PREVENTOR AND WATER SUPPLY. PROVIDE ALL REQUIRED FITTINGS TO ALLOW SODA MACHINE INSTALLER TO HOOK UP BOOSTER PUMP TO WATER FILTER. REFER TO DETAIL 15P-500.
7G 22"D REAR COUNTER WITH HAND SINK, PROVIDE 1/2" CW AND 1/2" HW AT 24" AFF AND 8" OC WITH CHROME-PLATED, 1/4" TURN BALL VALVES. CONNECT TO OWNER SUPPLIED FAUCETS WITH METAL FLEX BALL VALVES. CONNECT TO OWNER SUPPLIED FAUCETS WITH METAL FLEX BALL VALVES. PROVIDE 2" DRAIN PIPE WITH P-TRAP AND WALL MOUNTED CLEAN-OUT. ALL EXPOSED DRAIN PIPES AND FITTINGS TO BE CHROME PLATED, NOT P.V.C.
9D ICE TEA MAKER: PROVIDE 1/2" CW @ 24" A.F.F. PROVIDE ALL REQUIRED FITTINGS TO ALLOW ICE TEA INSTALLER TO HOOK UP ONE BV, OTHER BV FOR OTHER EQUIPMENT.
10K SODA MACHINE MOUNTED ICE MACHINE: PROVIDE 1/2" CW AT 24" A.F.F. WITH BV. PROVIDE ALL REQUIRED FITTINGS TO ALLOW ICE MACHINE INSTALLER TO HOOK UP ICE MACHINE TO CW.
20N CHINESE RANGE: PROVIDE 1/2" CW AT 10" AFF WITH BV. PROVIDE PRESSURE TYPE VB OR OTHER BACKFLOW DEVICE AS REQUIRED BY LOCAL CODE, AND CONNECT TO OWNER SUPPLIED FAUCETS. PROVIDE 2" COPPER PIPE IW TO FS WITH 2" AIR GAP. PROVIDE 1-1/2" GAS SUPPLY AT 9" AFF WITH EASILY ACCESSIBLE SHUT-OFF VALVE. INSTALL OWNER SUPPLIED GAS REGULATOR AND ADJUST GAS LEVEL TO BURNERS.
20Q CHINESE RANGE: PROVIDE 1/2" CW AT 10" AFF WITH BV. PROVIDE PRESSURE TYPE VB OR OTHER BACKFLOW DEVICE AS REQUIRED BY LOCAL CODE, AND CONNECT TO OWNER SUPPLIED FAUCETS. PROVIDE 2" COPPER PIPE IW TO FS WITH 2" AIR GAP. PROVIDE 1-1/4" GAS SUPPLY DOWN TO 9" AFF REDUCE TO 3/4" AT EQUIPMENT CONNECTION WITH EASILY ACCESSIBLE SHUT-OFF VALVE. INSTALL OWNER SUPPLIED GAS REGULATOR AND ADJUST GAS LEVEL TO BURNERS.
20R CHINESE RANGE AUTO WOK: PROVIDE 1/2" CW AT 10" AFF WITH BV. INSTALL OWNER SUPPLIED GAS REGULATOR AND ADJUST GAS LEVEL TO BURNERS. CONTRACTOR TO PROVIDE AND INSTALL THE FOLLOWING: BACKFLOW DEVICE PER LOCAL CODE WATER FAUCET (FISHER 36161) CMI LEAD FREE BRASS BALL VALVE STREAMLINE COPPER-IRON TUBE 2" COPPER PIPE IW TO FS WITH 2" AIR GAP 1-1/4" GAS SUPPLY DOWN TO 9" AFF, REDUCE TO 3/4" AT EQUIPMENT CONNECTION WITH EASILY ACCESSIBLE SHUT-OFF VALVE.
21F FRYER: PROVIDE 1-1/2" GAS SUPPLY DOWN TO 14" AFF THEN TRANSITION TO 1" WITH 90° ANGLE AND SHUT OFF VALVE. PROVIDE ALL REQUIRED FITTINGS AND INSTALL OWNER SUPPLIED QUICK DISCONNECT FLEXIBLE PIPE AND CONNECT TO UNITS WITH 90° ANGLE. SEE DETAIL ON P-500
23E GRIDDLE: PROVIDE 3/4" GAS SUPPLY DOWN TO 20" AFF WITH EASILY ACCESSIBLE SHUT-OFF VALVE. PROVIDE ALL REQUIRED FITTINGS. CONNECT TO UNIT WITH OWNER SUPPLIED QUICK DISCONNECT (3/4"x48", (1) SWIVEL KIT)
25A RICE COOKER: PROVIDE 3/4" GAS SUPPLY AT 30", AND 3/4" GAS SUPPLY AT 10" AFF WITH SHUT OFF VALVES, ONE FOR EACH UNIT. PROVIDE ALL REQUIRED FITTINGS AND INSTALL OWNER SUPPLIED QUICK DISCONNECT FLEXIBLE PIPE AND CONNECT TO UNITS.
31 WALK-IN COOLER: PROVIDE 1" COPPER PIPE IW FROM DRAIN PAN ON EACH UNIT TO FLOOR DRAIN WITH P-TRAP AND 1" AIR GAP. MOUNT ALL PIPES WITHIN WALK-IN BOX WITH 1" HOLD-OFF SUPPORTS.
32 WALK-IN FREEZER: PROVIDE 1" COPPER PIPE IW FROM DRAIN PAN ON EACH UNIT TO FLOOR DRAIN WITH P-TRAP AND 1" AIR GAP. MOUNT ALL PIPES WITHIN WALK-IN BOX WITH 1" HOLD-OFF SUPPORTS. PROVIDE HEAT TRACE REFER TO ELECTRICAL DRAWING.
40A POT SINK: PROVIDE 1/2" CW AND 1/2" HW AT 14" AFF AND 8" OC WITH BVS & CV. CONNECT TO OWNER SUPPLIED FAUCET WITH COPPER PIPING. PROVIDE 1-1/2" COPPER PIPE IW TO FS WITH 2" AIR GAP, OR, IF REQUIRED BY LOCAL CODE, INSTALL 2" COPPER PIPE DIRECTLY TO SEWER SYSTEM. INSTALL OWNER SUPPLIED LEVER DRAIN STOPS. SEE DETAIL ON SHEET P-500.
40T THAWING CABINET: 1-DOOR, STAINLESS STEEL GRIDS, 177GAL (670L), 28 - 50°F FULLY PRESSED BOTTOM PLATE AND ROUNDED CORNERS; IT IS SUPPLIED WITH 15 AISI 304 GRIDS 2/1 AND THE RACK SUPPORT CAN BE REMOVED WITHOUT TOOLS. THE 3 FACTORY PRESET AND 1 FREE PROGRAMS. BUILT-IN REFRIGERATION UNIT WITH R134A GAS IN REFRIGERATION CIRCUIT. MEETS HACCP REQUIREMENTS. DELIVERED ON WHEELS.
41B SINGLE BOWL PREP SINK: PROVIDE 1/2" CW AND 1/2" HW AT 14" AFF AND 8" OC WITH BVS. CONNECT TO OWNER SUPPLIED FAUCETS WITH COPPER PIPING. PROVIDE 2" COPPER PIPE IW TO FS WITH 2" AIR GAP, OR, IF REQUIRED BY LOCAL CODE, INSTALL 2" COPPER PIPE DIRECTLY TO SEWER SYSTEM. INSTALL OWNER SUPPLIED LEVER DRAIN STOPS.
41C SINGLE BOWL PREP SINK: PROVIDE 1/2" CW AND 1/2" HW AT 14" AFF AND 8" OC WITH CHROME-PLATED, 1/4" TURN BALL VALVES. CONNECT TO OWNER SUPPLIED FAUCETS WITH METAL FLEX PIPING. PROVIDE 2" DRAIN PIPE WITH P-TRAP AND WALL MOUNTED CLEAN-OUT. ALL EXPOSED DRAIN PIPES AND FITTINGS TO BE CHROME PLATED, NOT P.V.C.
45A HAND SINK, PROVIDE 1/2" CW AND 1/2" HW AT 24" AFF AND 8" OC WITH CHROME-PLATED, 1/4" TURN BALL VALVES. CONNECT TO OWNER SUPPLIED FAUCETS WITH METAL FLEX PIPING. PROVIDE 2" DRAIN PIPE WITH P-TRAP AND WALL MOUNTED CLEAN-OUT. ALL EXPOSED DRAIN PIPES AND FITTINGS TO BE CHROME PLATED, NOT P.V.C.
70D POT WASHER: HOBART PW10SER ADVANSYS VENTLESS POT PAN UTENSIL WASHER W/ BOOSTER HEATER, INTERNAL CONDENSING SYSTEM, VENTLESS ENERGY RECOVERY SYSTEM. HOOD NOT REQUIRED. PROVIDE (2) BRASS HOSE BIB @ 20" AFF. HOT WATER HB WITH RED HANDLE. COLD WATER HB WITH BLUE HANDLE.
70D1 WATER SOFTENER: HOBART WS-40, COMPACT CABINET SOFTENER. PROVIDE ON COLD WATER SIDE ONLY.
P6 FILTER AT WATER HEATER: EDCO SECURE SCALE PROTECTION SYSTEM #EDCO-HP1-SPE-S-(L OR R), SUPPLIED BY PANDA. PROVIDE TRANSITION FITTINGS AT INLET AND OUTLET OF FILTER. SEE DETAIL SIP-400.

PLUMBING KEY NOTES

- 1. SODA CONDUIT: PROVIDE 6" PVC CONDUIT BELOW FLOOR FROM THE SIDE OF SODA STORAGE RACK TO SODA DISPENSER PER DETAIL #4 ON SHEET P-500.
2. CONDENSATE: ROUTE SHARED CONDENSATE LINE THROUGH WALK-IN COOLER. DO NOT RUN THROUGH WALK-IN FREEZER. PROVIDE 1" INSULATED CONDENSATE DRAIN PIPE FROM THE EVAPORATIVE COIL. DISCHARGE TO FLOOR SINK OR MOP SINK WITH AIR GAP OF TWICE PIPE DIAMETER. INSTALL AT MINIMUM 76" HEIGHT A.F.F. REFER TO DETAIL #2 ON SHEET P-500.
3. PROVIDE TRAP PRIMER FOR FLOOR DRAIN. SEE DETAIL 17/P-500.
4. RDL & ODL LINES ON IN WALL. TERMINATE ODL THRU WALL AS CLOSE TO BOTTOM PLATE AS POSSIBLE. EXTEND 1/2" PAST ARCH FINISH. WATER PROOF SEAL ALL AROUND. TERMINATE RDL & ODL WITH 4" PVC LAMB'S TONGUE NOZZLE. COLOR ANTIQUE BRONZE. ARKMAN MODEL #PN4-4. (IF AVAILABLE TIE RDL TO STORM SEWER UNDERGROUND)
5. COMBINATION WASTE/VENT
6. LAV. TAILPIECE WITH TRAP PRIMER, RUN 1/2" CW BELOW FLOOR TO FLOOR DRAIN. SEE DETAIL #9 ON PLAN P-500.
7. (AAV) STUDOR MINI-VENT AIR ADMITTANCE VALVE- INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8. WYE WITH CLEANOUT ON TOP.
9. INDIRECT WASTE FROM 3 CS AND 1 CS SINK TO ADJACENT EXISTING FLOOR SINK WITH APPROVED AIR GAP.
10. CONTRACTOR TO FIELD VERIFY THE SIZE AND LOCATION OF THE EXISTING GREASE INTERCEPTOR. CONTRACTOR TO FIELD VERIFY THE CAPACITY OF EXISTING GREASE INTERCEPTOR IS EQUAL TO 1000 GALLONS OR MORE, UPGRADE IF REQUIRED.
11. CONNECT NEW 4" SANITARY LINE TO EXISTING SANITARY LINE. CONTRACTOR TO FIELD VERIFY THE EXACT EXISTING SANITARY TIE-IN LOCATION, SIZE, AND INVERT LEVEL.
12. CONNECT NEW 4" GREASE SANITARY LINE TO EXISTING GREASE SANITARY LINE. CONTRACTOR TO FIELD VERIFY THE EXACT EXISTING GREASE SANITARY TIE-IN LOCATION, SIZE, AND INVERT LEVEL.

FIXTURE UNIT SCHEDULE

Table with columns: ITEM, FIXTURE, QTY, WATER FU (EACH, TOTAL), SEWER FU (EACH, TOTAL). Rows include: WATER CLOSET (2, 5, 10, 4, 8), LAVATORY (2, 2, 4, 1, 2), FLOOR DRAIN 3" TRAP (4, 5, 20), FLOOR SINK 3" TRAP (12, 5, 60), MOP SINK (1, 3, 2, 2), FLOOR DRAIN W/ FUNNEL 2" TRAP (2, 3, 6), HOSE BIBB (4, 4, 16), TRENCH DRAIN 3" TRAP (2, 5, 10), FILTER SYSTEM (1, 1, 1, FS), ICE TEA BREWER (2, 1, 2, FS), 400 LB ICE MACHINE (2, 1, 2, FS), CHINESE RANGE (1, 2, 2, FS), CHINESE RANGE (2, 2, 4, FS), POT SINK (3 COMP.) (1, 4, 4, FS), PREP. SINK (1 COMP.) (2, 4, 8, FS), HAND SINK (3, 2, 6, 1, 3), THAWING CABINET (1, FS), POT WASHER (1, 4, 4, FS). TOTAL: 66, 106.

FIXTURE UNIT SUMMARY

Table with columns: SERVICE, TOTAL F.U. Rows: DOMESTIC WATER (66), SANITARY SEWER (106).

SERVICE REQUIREMENTS

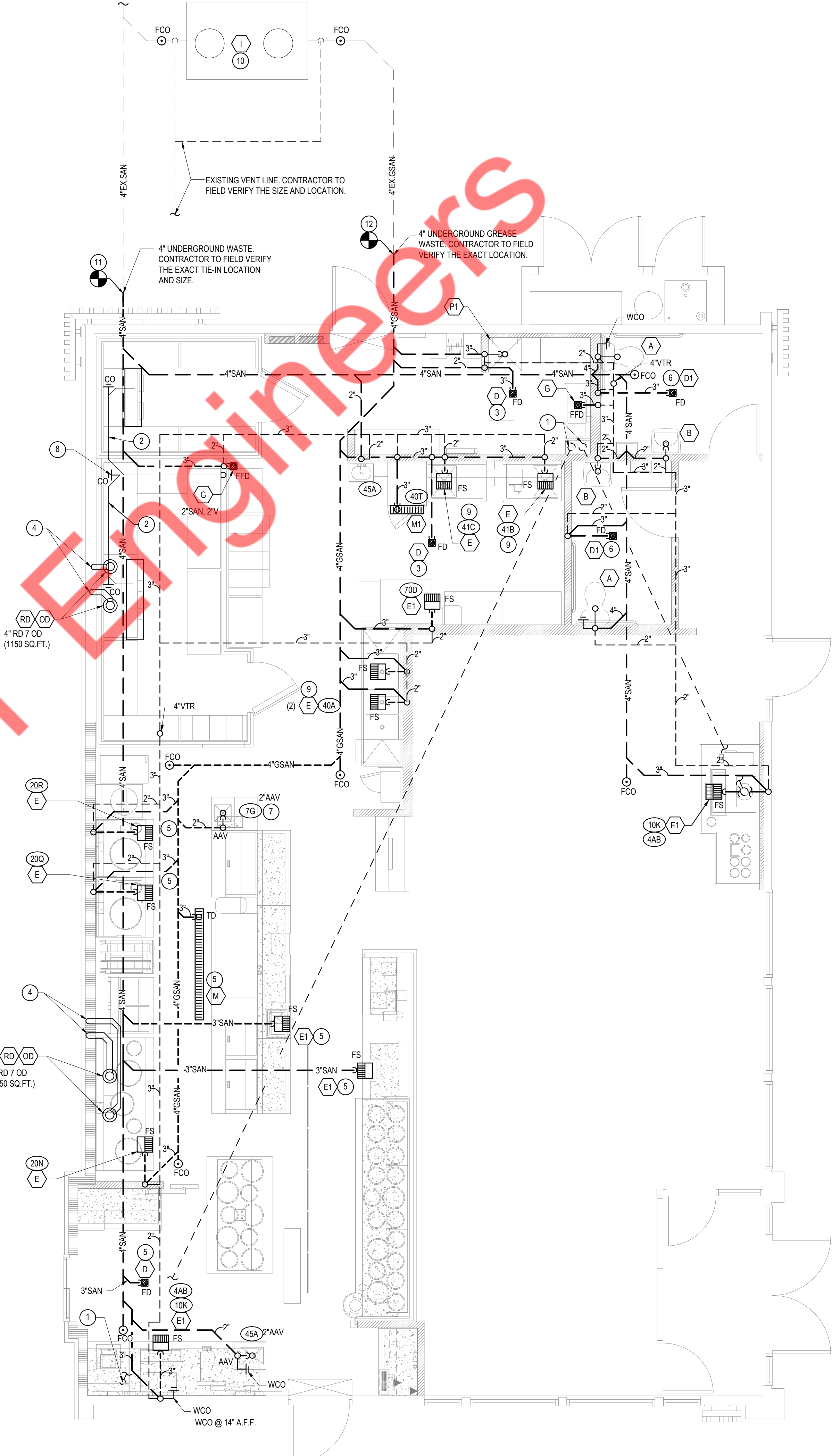
Table with columns: SERVICE, SIZE MAIN, CAPACITY. Rows: DOMESTIC WATER (1-1/2 INCH, 33 GPM), SANITARY SEWER (4 INCH, 106 F.U.), FUEL GAS (3 INCH, 2,570 CFH).

GREASE INTERCEPTOR CALCULATION

Table with columns: FIXTURE, QTY., FU, FU TOTAL. Rows: FLOOR DRAIN/FLOOR SINK 3" TRAP (8, 5, 40), TRENCH DRAIN 3" TRAP (1, 5, 5), MOP SINK (1, 2, 2), TOTAL (47 (24 GPM)). Text: FIXTURE UNIT VALUE BASED ON IPC, SECTION 709. FLOW THROUGH TYPE GREASE INTERCEPTOR MINIMUM SIZE WILL BE: 50 POUND GREASE CAPACITY PER 2009 IPC, TABLE 1003.3.4.1. GRAVITY TYPE GREASE INTERCEPTOR SIZE BASED ON 24 GPM WITH 30 MINUTE RETENTION TIME (24*30=720) TO BE SIZED AT 1000 GALLONS.

PIPE MATERIAL SCHEDULE

Table with columns: SERVICE, UNDERGROUND, ABOVE GROUND. Rows: COLD & HOT WATER (TYPE "K" OR "L" HARD DRAWN COPPER TUBE, PEX), SANITARY WASTE (*SCH. 40 PVC, *SCH. 40 PVC), SANITARY VENT (*SCH. 40 PVC, *SCH. 40 PVC), GAS (BLACK STEEL, SCHEDULE 40), INDIRECT DRAIN (HARD DRAWN COPPER TUBE TYPE "M").



FIXTURE BRANCH SCHEDULE

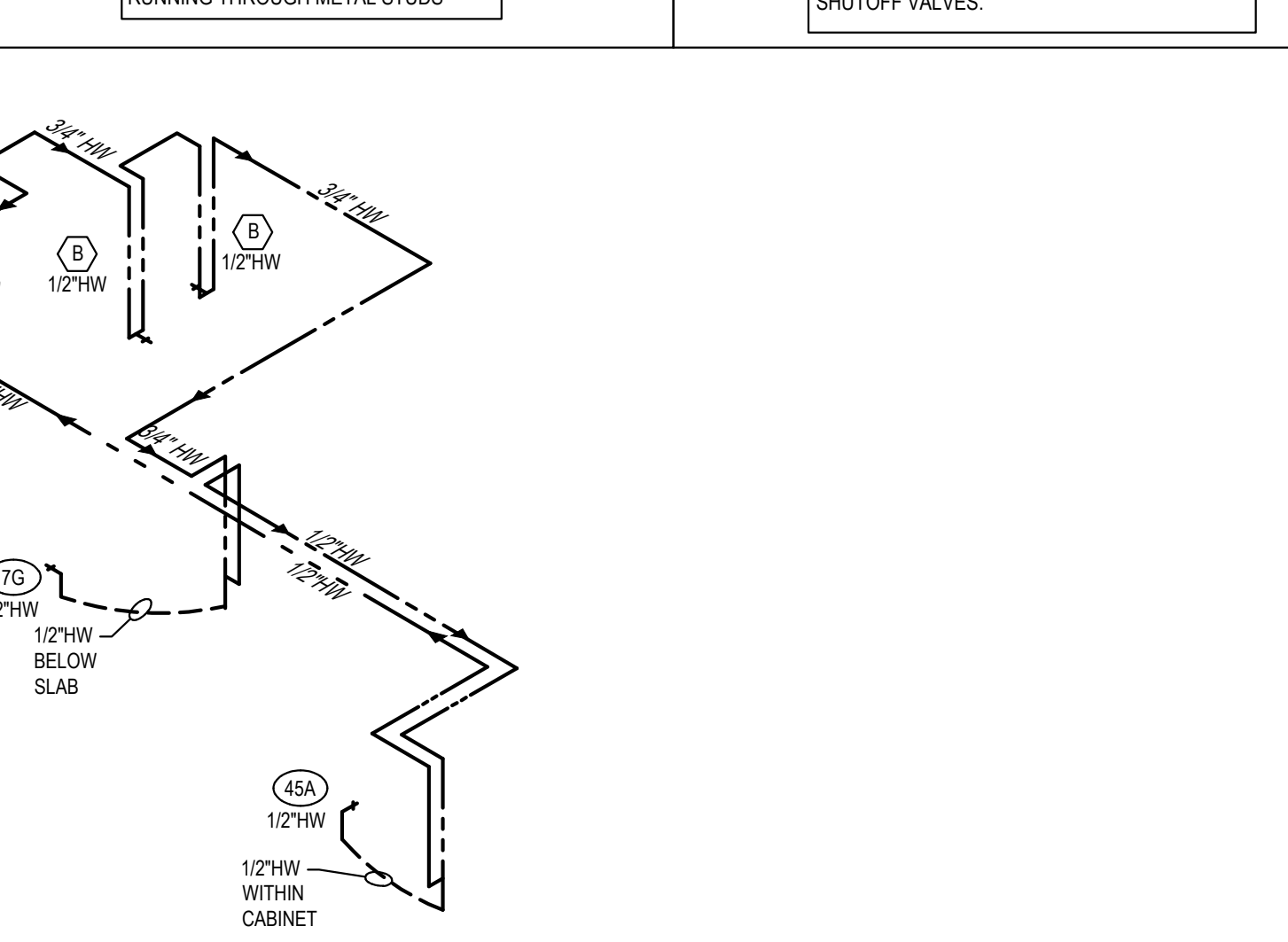
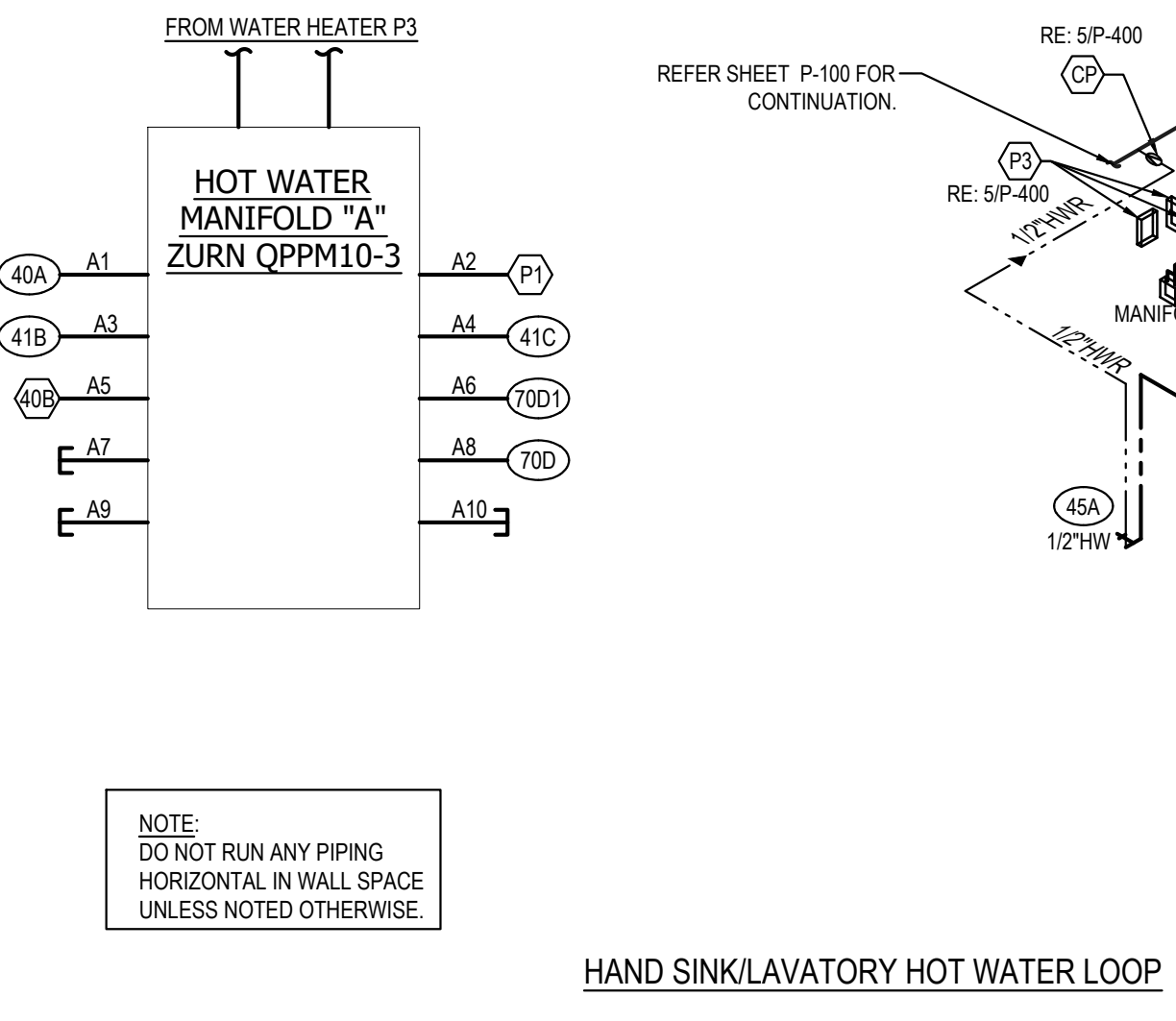
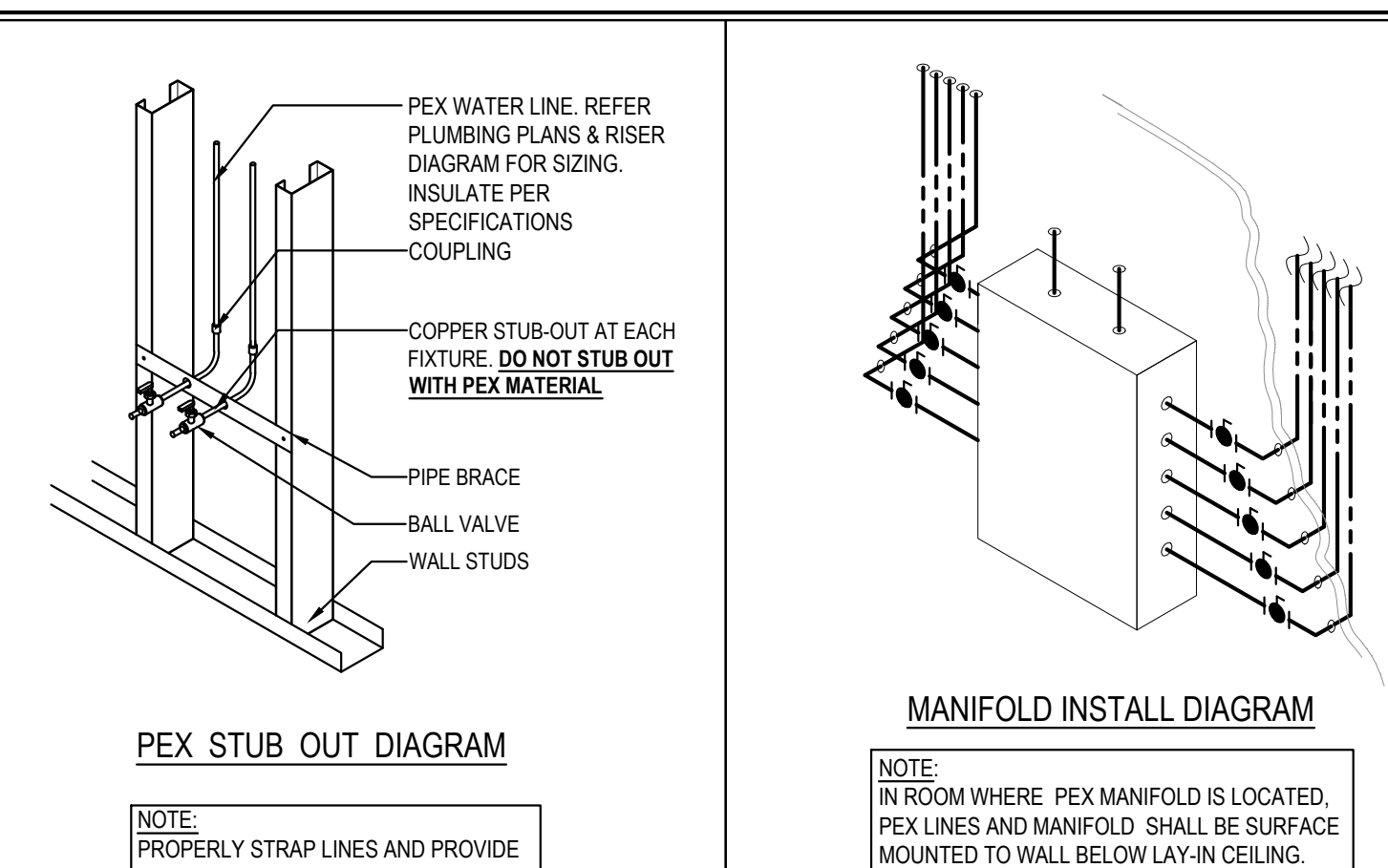
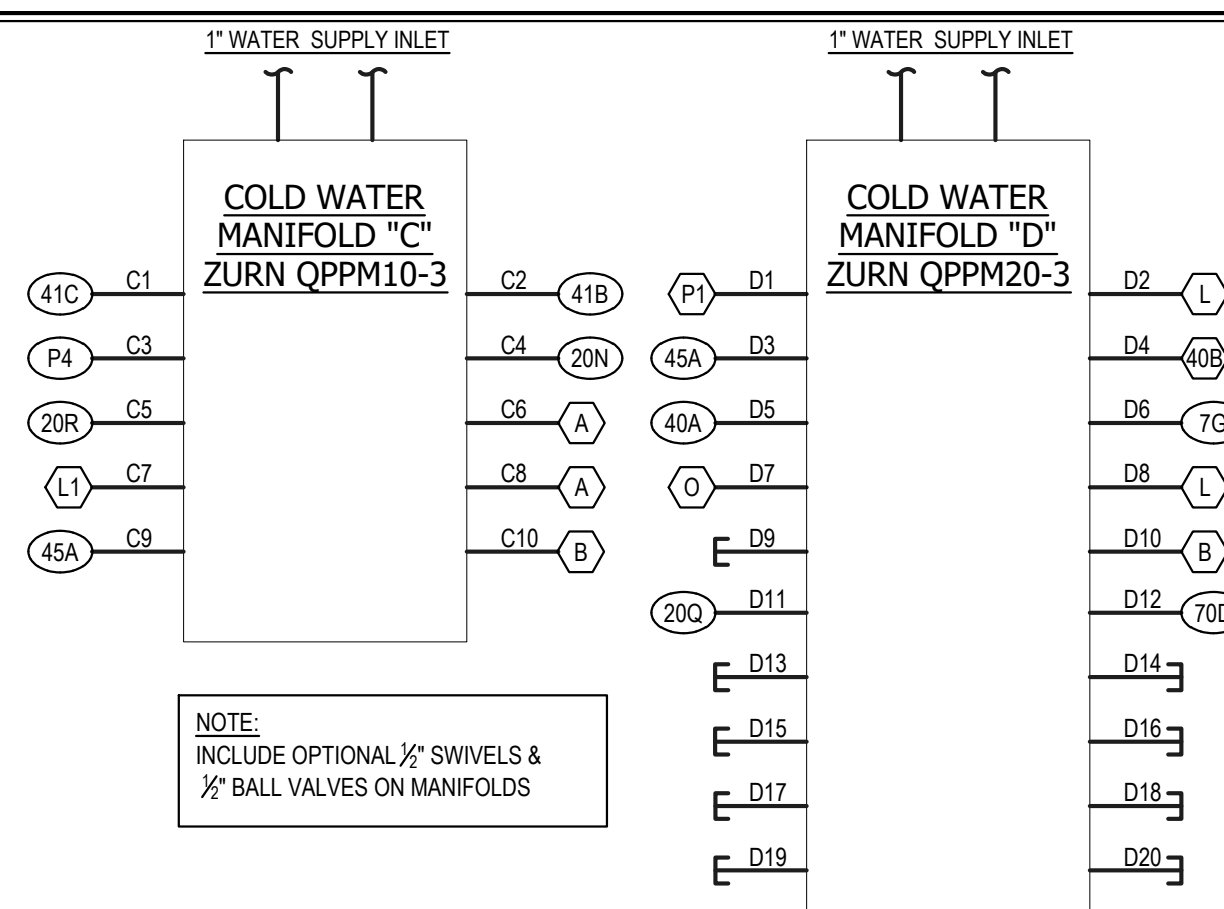
Table with columns: FIXTURE, COLD WATER, HOT WATER, WASTE, VENT. Rows: WATER CLOSET (HANDICAPPED) (1/2", --, 4", 2"), LAVATORY (1/2", 1/2", 2", 1 1/2"), 2 AND 3 - COMP SINK (1/2", 1/2", 3", 2"), HAND SINK (1/2", 1/2", 2", 1 1/2"), MOP SINK (J.S.) (1/2", 1/2", 3", 2"), EQUIPMENT (1/2", --, --, --), FLOOR DRAIN/SINK (2" OR 3", 2").

WASTE & VENT PLAN 1

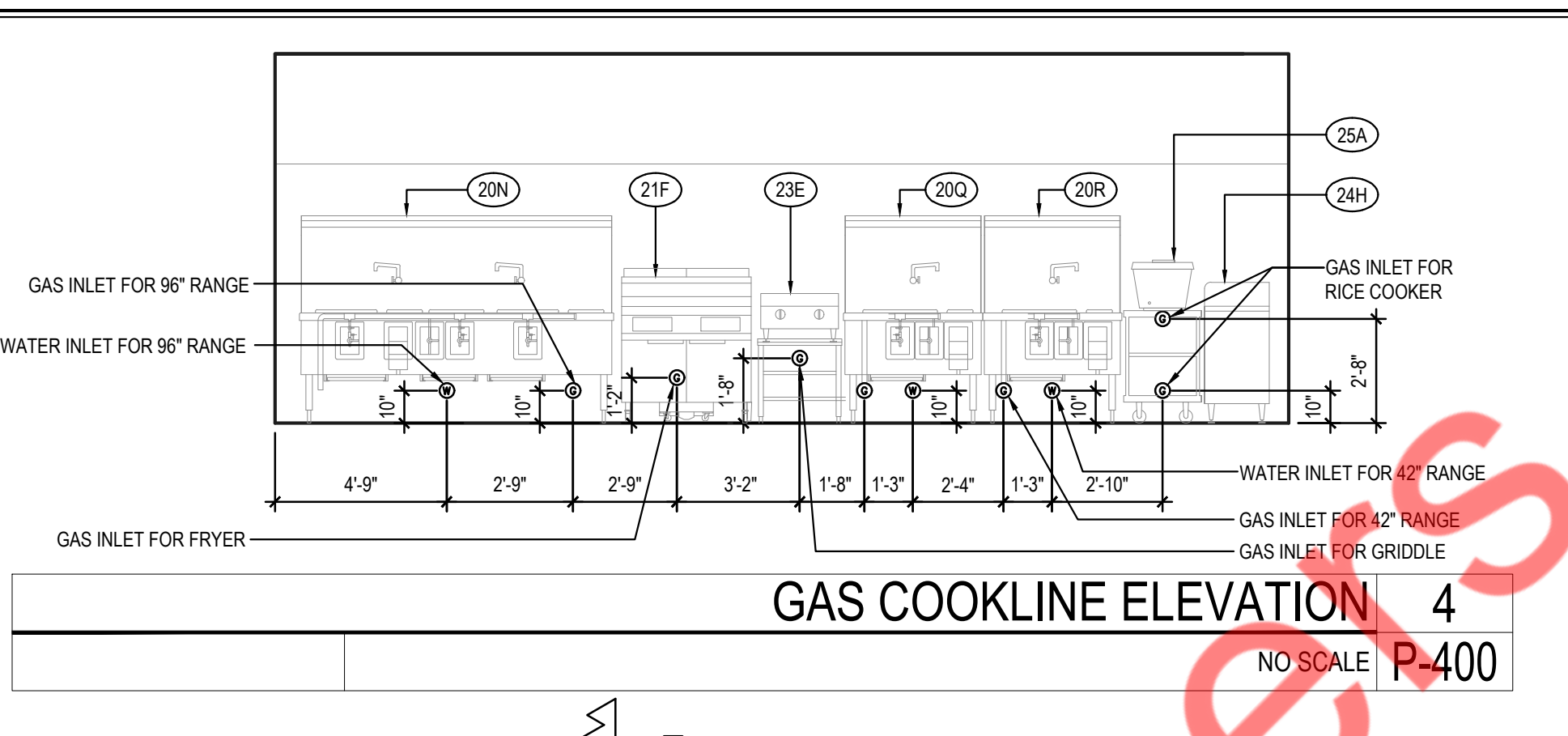
Scale: 1/4"=1'-0" P-101

P-101

WASTE & VENT PLAN

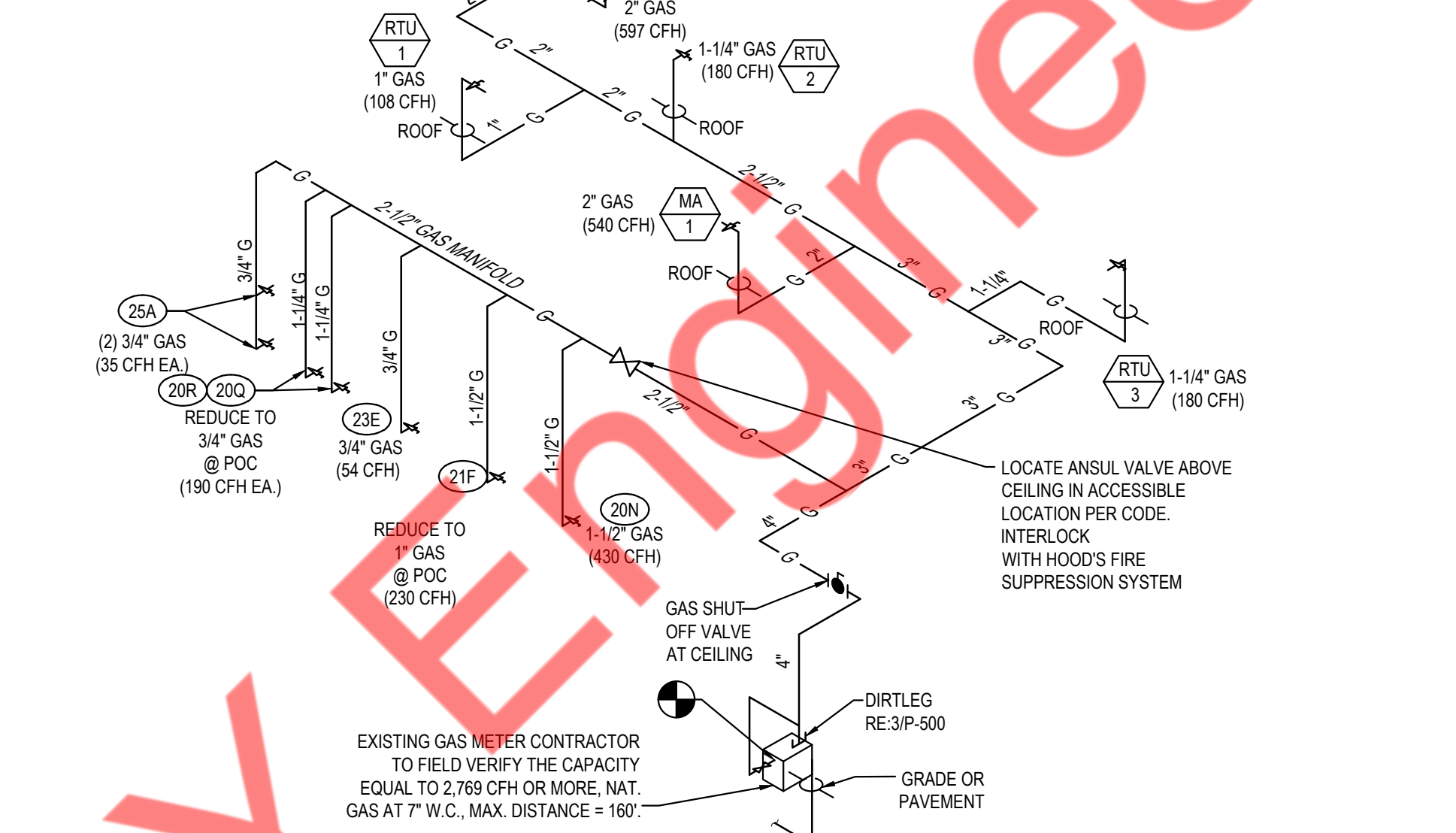


WATER RISER DIAGRAM 11
NO SCALE P-400

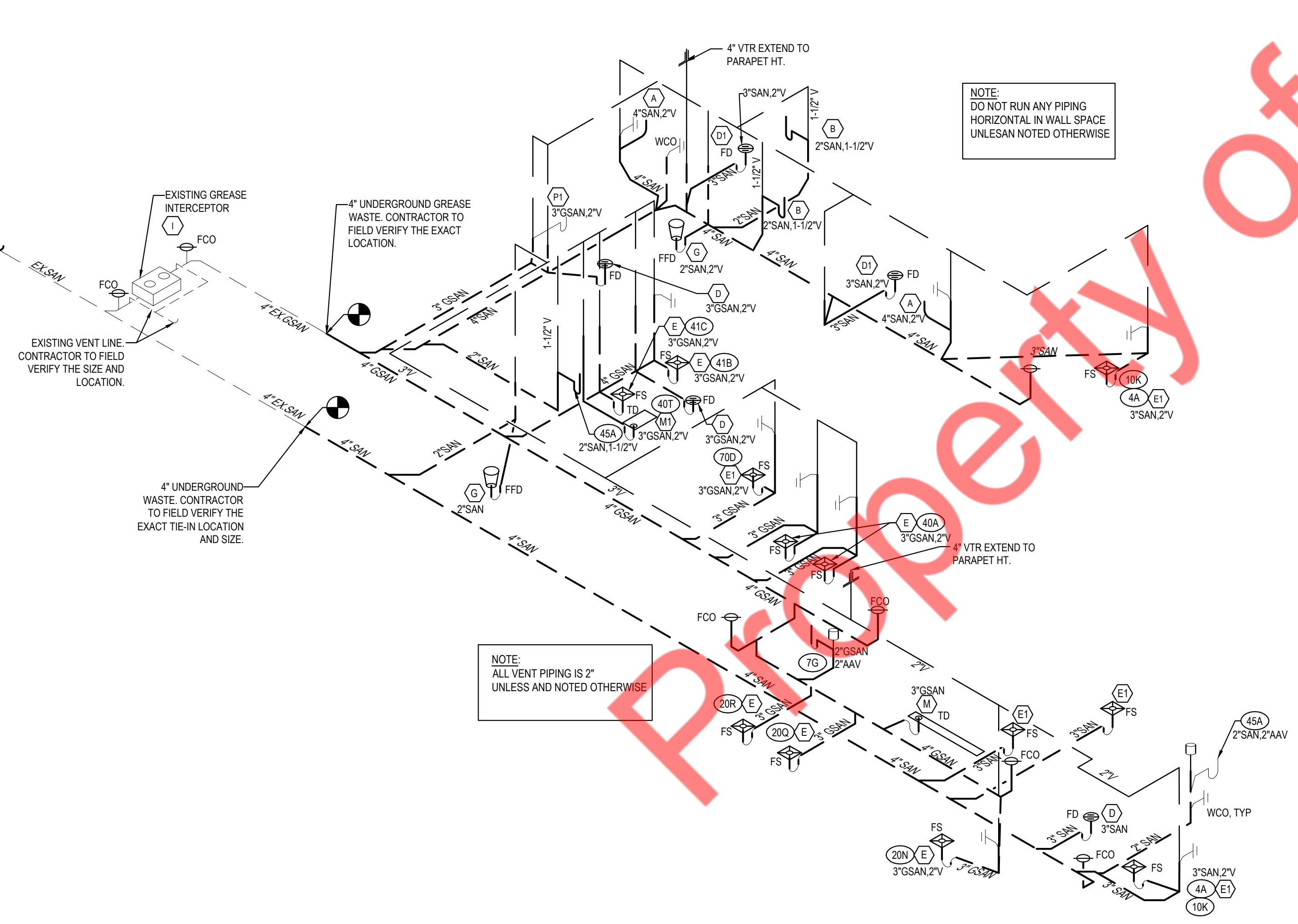


GAS EQUIPMENT SCHEDULE				
ITEM	QTY	EQUIPMENT	MBH	CFH
			EACH	TOTAL
P3	3	WATER HEATER	199	597
20N	1	CHINESE RANGE	430	430
20Q	2	CHINESE RANGE	190	380
21F	2	DEEP FRYER	115	230
23E	1	GRIDDLE	54	54
25A	2	RICE COOKER	35	70
RTU-1	1	AIR CONDITIONER	108	108
RTU-2,3	2	AIR CONDITIONER	180	360
MAU-1	1	MAKE-UP AIR	540	540
TOTAL			2,769	

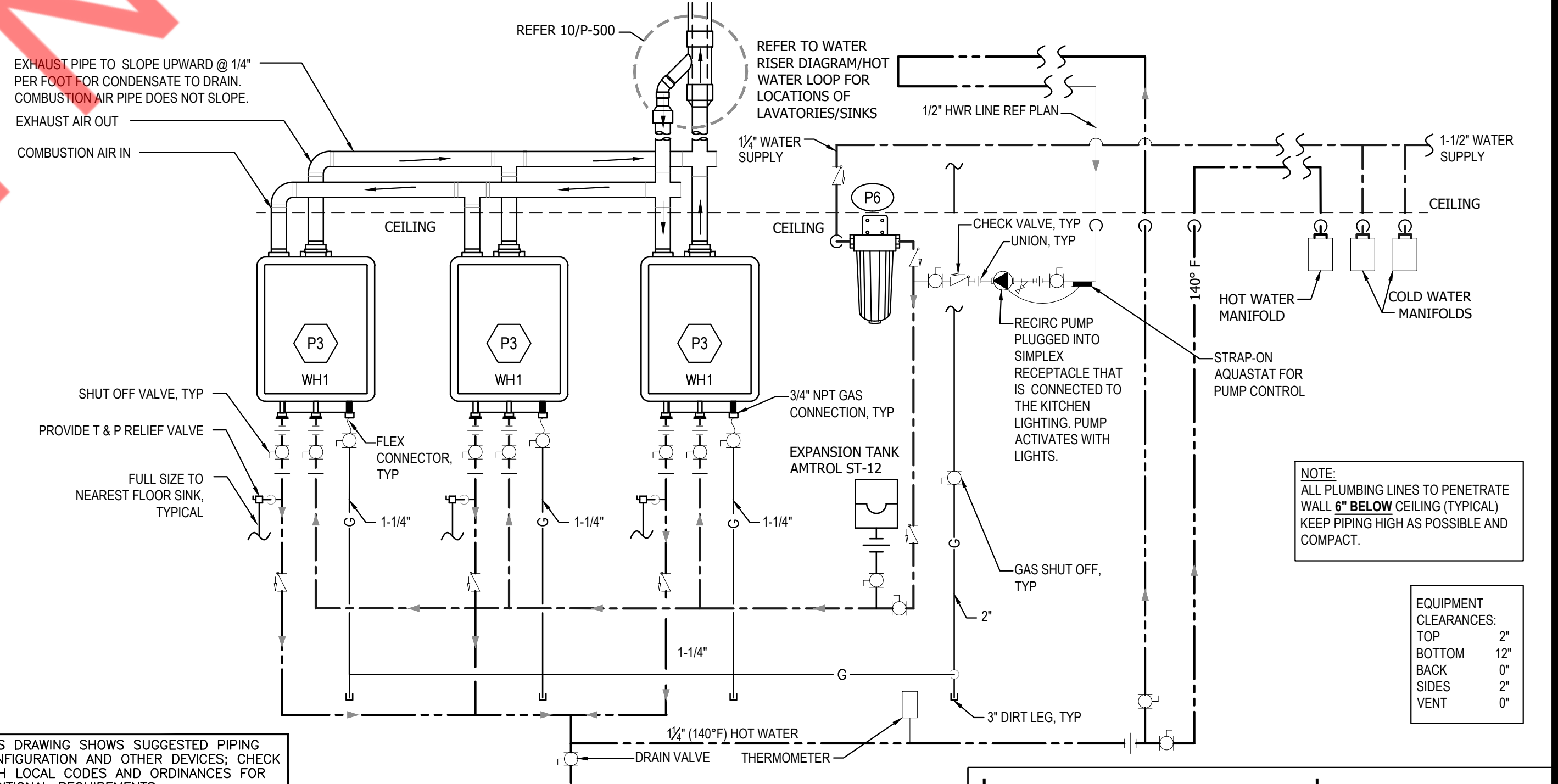
LOW PRESSURE NATURAL GAS CALCULATION:
SIZED PER 2009 IFGC TABLE 402.4(2)
TOTAL DEVELOPED LENGTH: 160'
TOTAL LOAD: 2,769 CFH
NOTE:
DO NOT RUN ANY PIPING
HORIZONTAL IN WALL SPACE



GAS RISER DIAGRAM 3
NO SCALE P-400



WASTE AND VENT RISER DIAGRAM 9
NO SCALE P-400



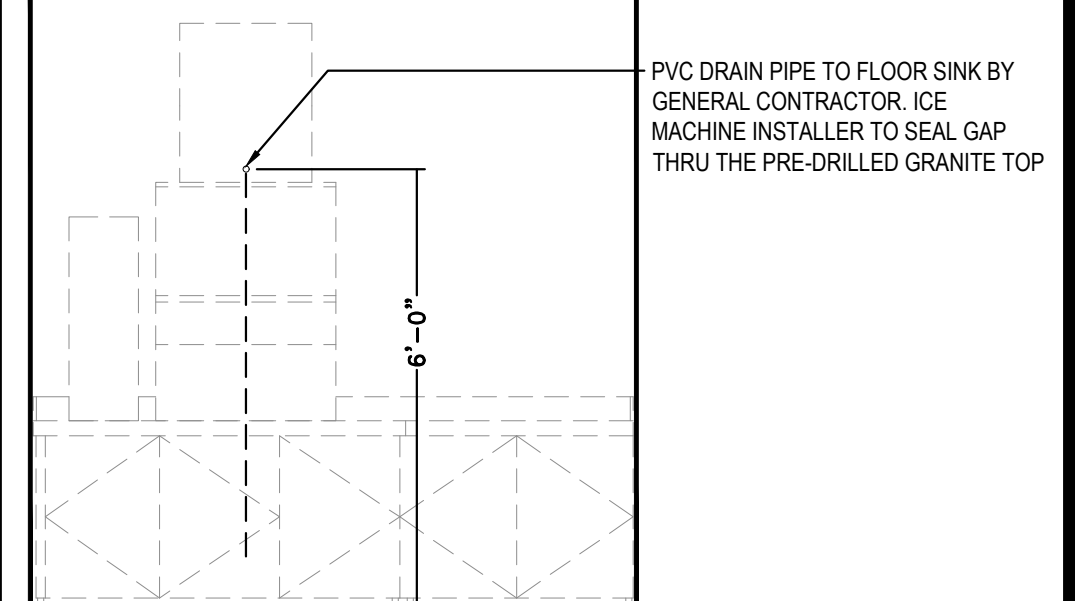
THIS DRAWING SHOWS SUGGESTED PIPING CONFIGURATION AND OTHER DEVICES. CHECK WITH LOCAL CODES AND ORDINANCES FOR ADDITIONAL REQUIREMENTS.

NOTES:

- ALL VENT PIPING SERVING WATER HEATERS SHALL TRANSITION TO 3" IMMEDIATELY AFTER CONNECTION. MANIFOLD BOTH VENTS TOGETHER AND ROUTE PIPING UP THROUGH THE CEILING TO THE ROOF. AVOID UNNECESSARY BENDS.
- AVOID RUNNING WATER PIPING DIRECTLY ABOVE WATER HEATER TO AVOID DAMAGE TO WATER HEATER CAUSED BY POSSIBLE LEAKS.
- DO NOT INSTALL VALVES, EQUIPMENT OR PIPING MAINS DIRECTLY OVER THE WATER HEATERS P3.
- ALL WATER PIPES IN EXPOSED AREAS OUTSIDE WALLS AND BELOW CEILING MUST BE COPPER UNLESS NOTED OTHERWISE.
- ADJUST LAYOUT TO SPECIFIC FLOOR PLAN AND FOLLOW CONNECTIONS PER THIS DIAGRAM.
- INSTALL ALL DEVICES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION. THE TEMPERATURE AND PRESSURE RELIEF VALVE SETTING SHALL NOT EXCEED PRESSURE RATING OF ANY COMPONENT IN THE SYSTEM.
- SERVICE VALVES ARE SHOWN FOR SERVICING UNIT. HOWEVER, LOCAL CODES SHALL GOVERN THEIR USAGE.
- REF. TO DETAIL 13/P-500 FOR ALL LINES TO BE INSULATED.
- REF. TO PLUMBING FIXTURE SCHEDULE ON SHEET P-101.
- INSTALL EXPANSION TANK AS CLOSE TO THE CEILING AS POSSIBLE.
- ALL PIPING BELOW IS TO BE HELD AS TIGHT TO THE BOTTOM OF THE TANKS AS POSSIBLE.

PVC DRAIN PIPE TO FLOOR SINK BY GENERAL CONTRACTOR. ICE MACHINE INSTALLER TO SEAL GAP THRU THE PRE-DRILLED GRANITE TOP

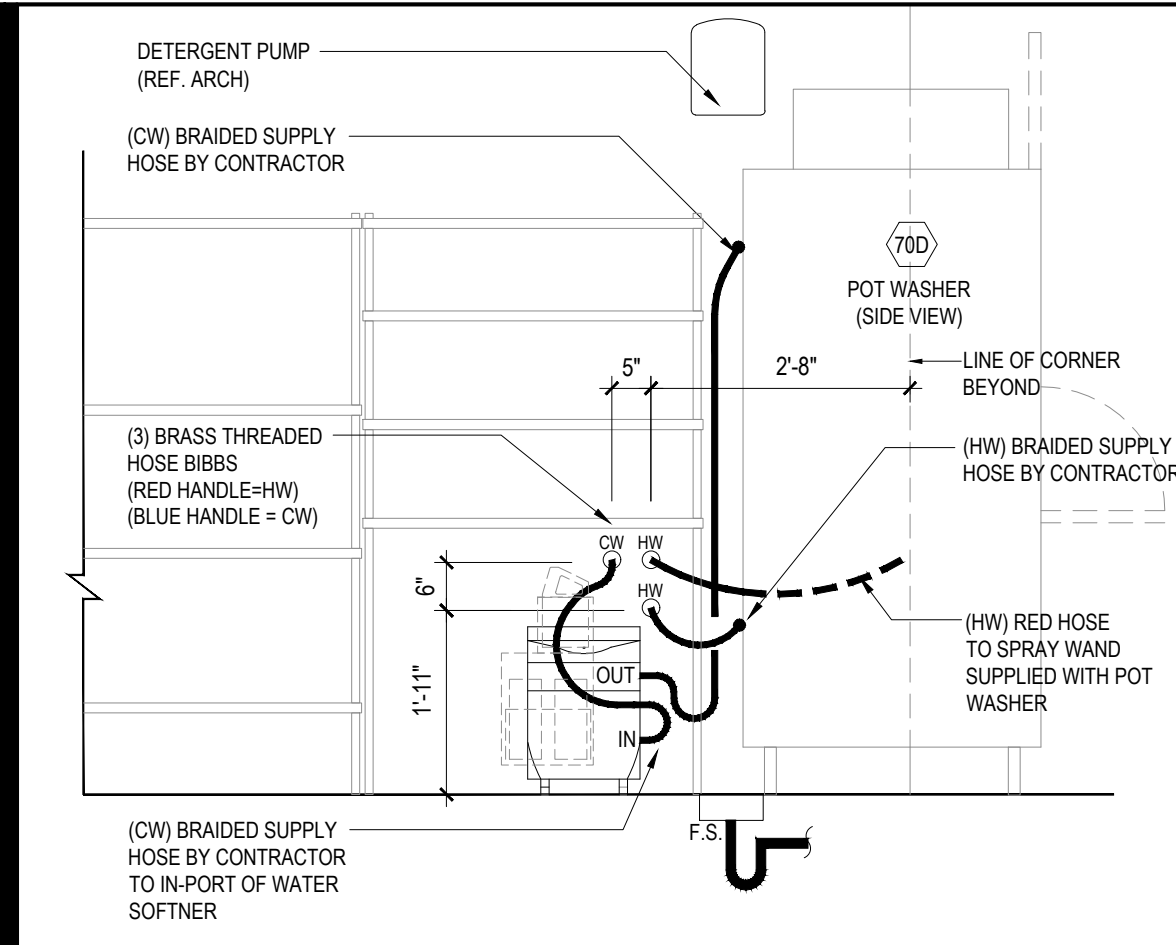
HOT WATER SYSTEM DIAGRAM 5
NO SCALE P-400



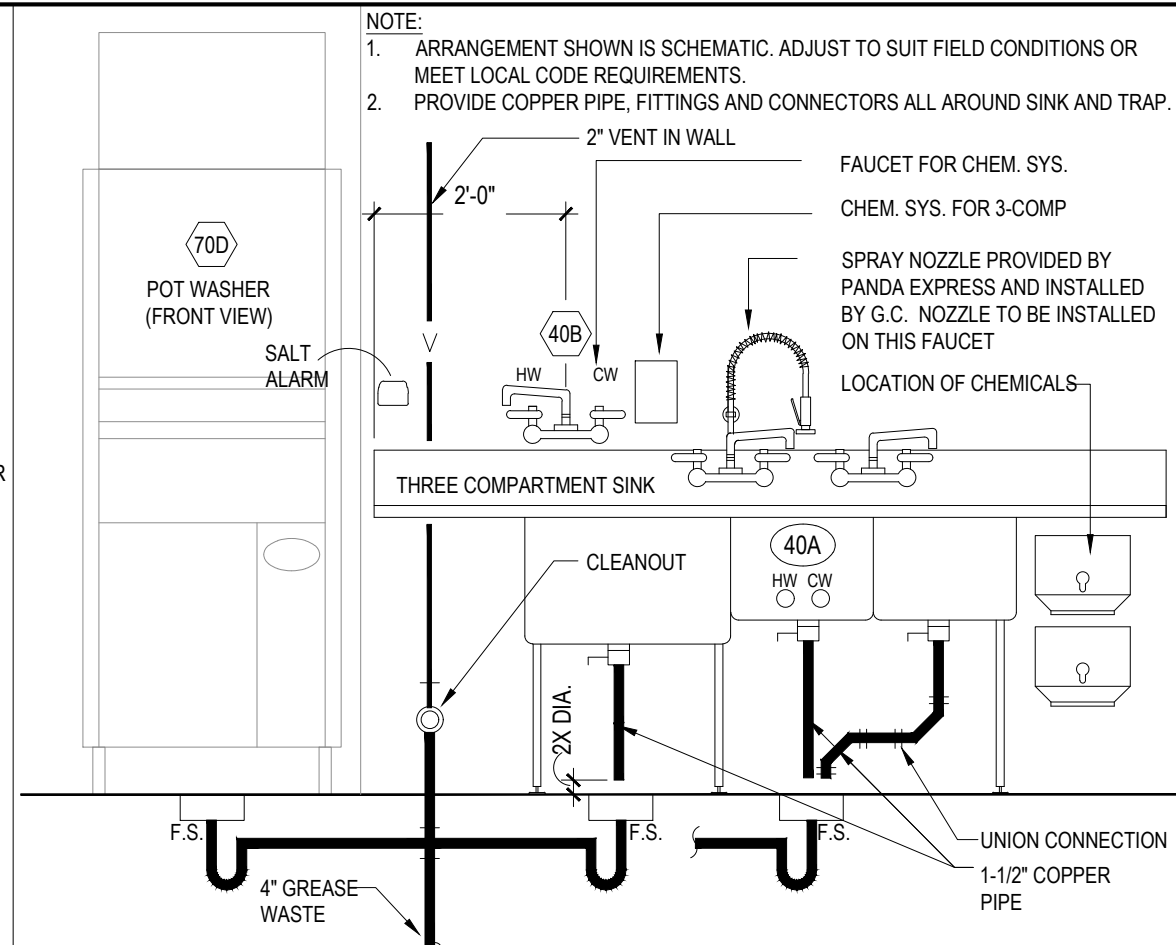
DRINK STATION PLUMBING 1
NO SCALE P-400

P-400

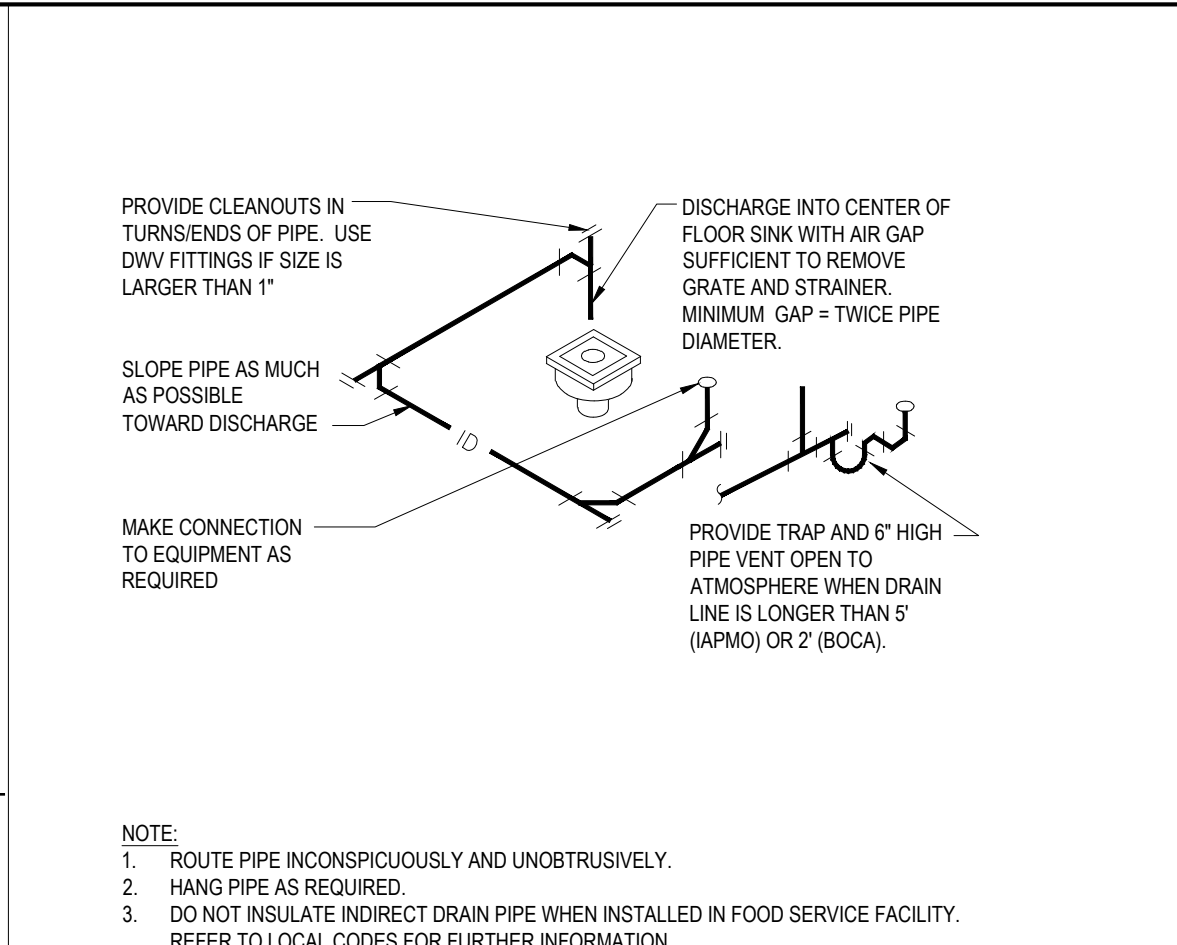
WATER, GAS, WASTE & VENT RISER DIAGRAMS



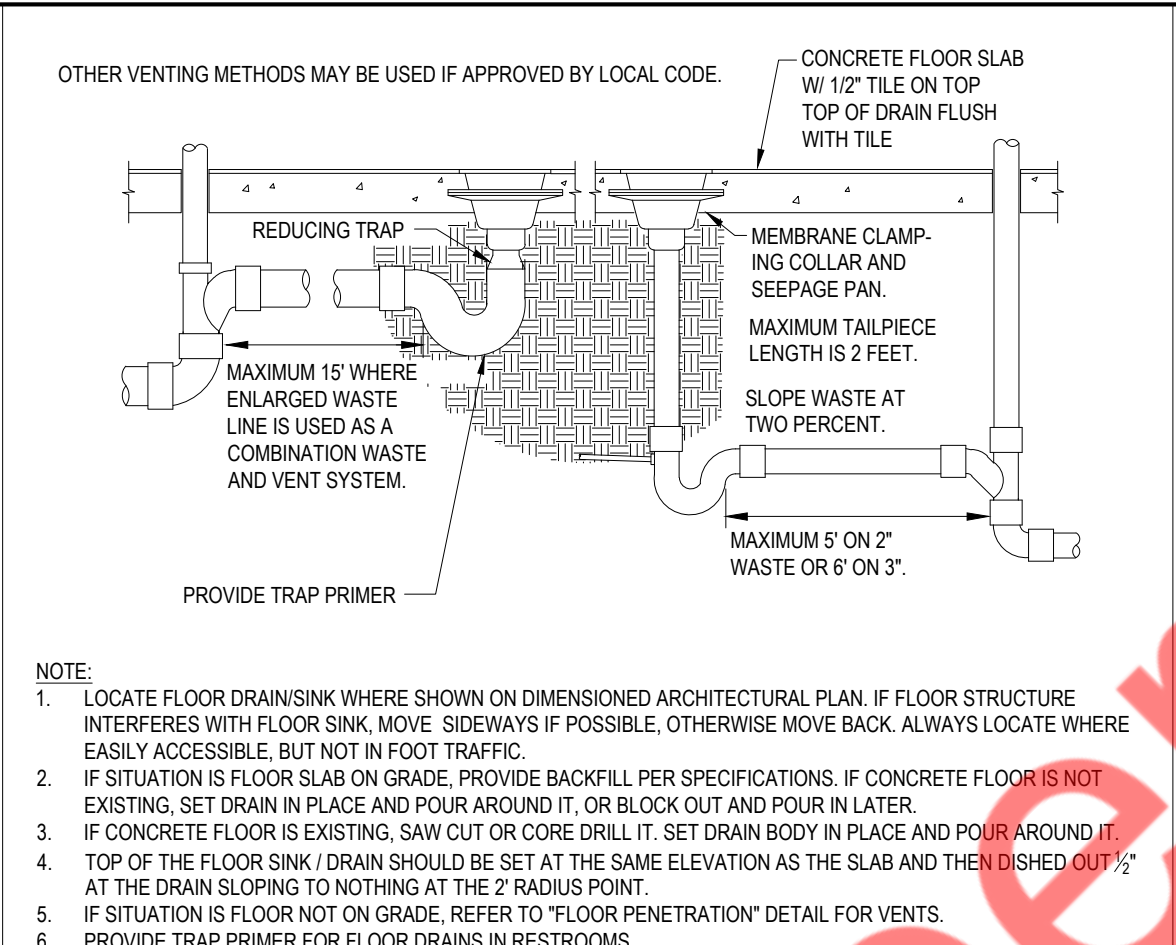
W. SOFTNR/POT WSH'R HOSE DIAG. 19
Scale: NO SCALE P-500



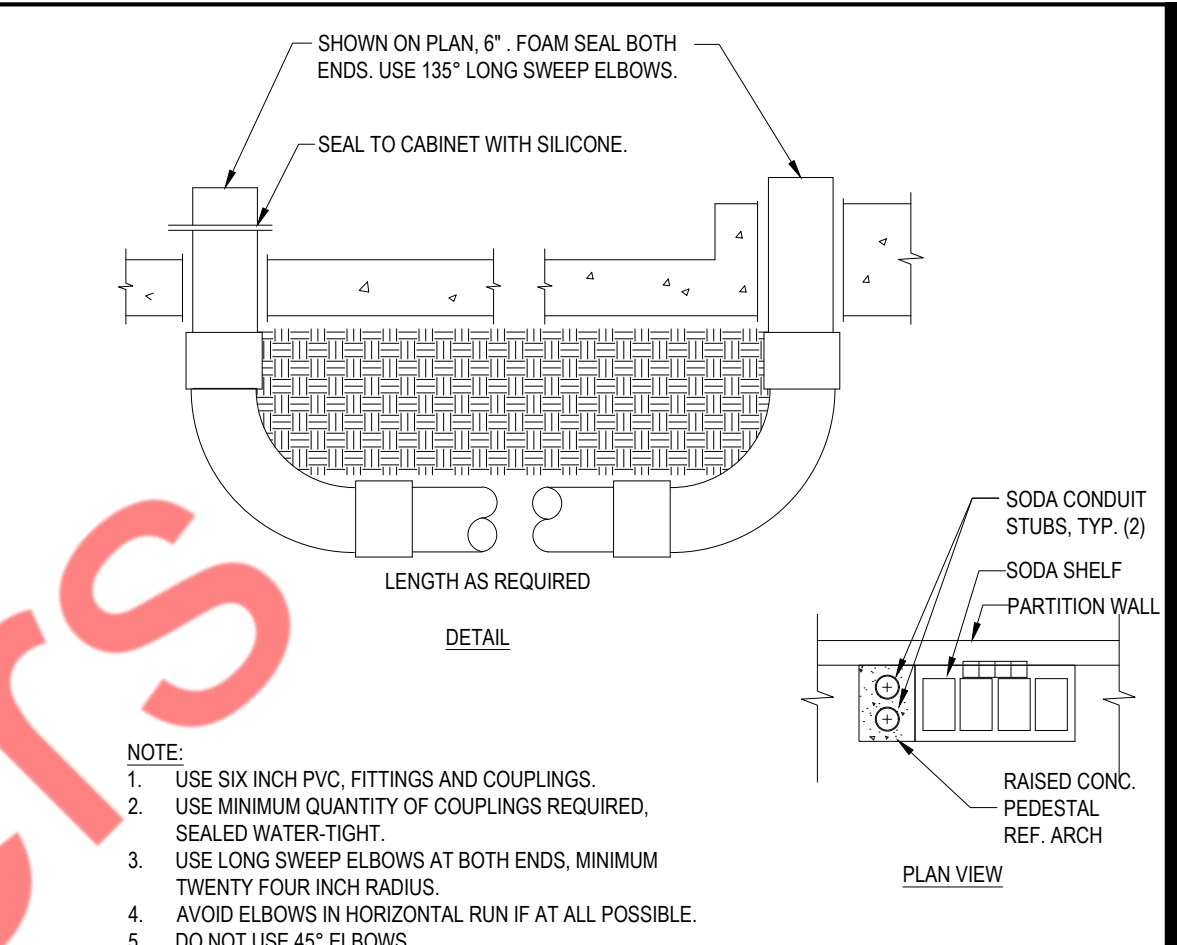
3-COMP SINK DIAGRAM 16
Scale: NO SCALE P-500



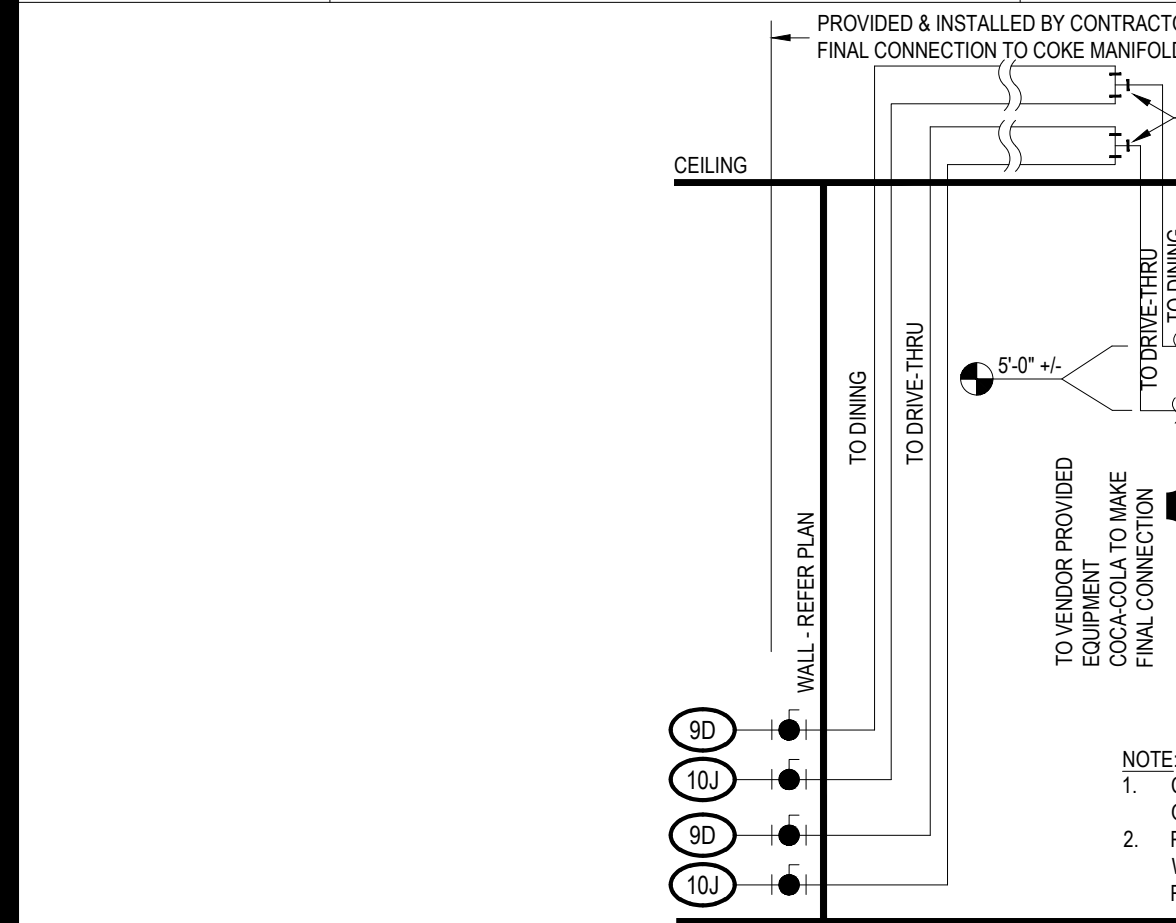
INDIRECT DRAIN 12
Scale: NO SCALE P-500



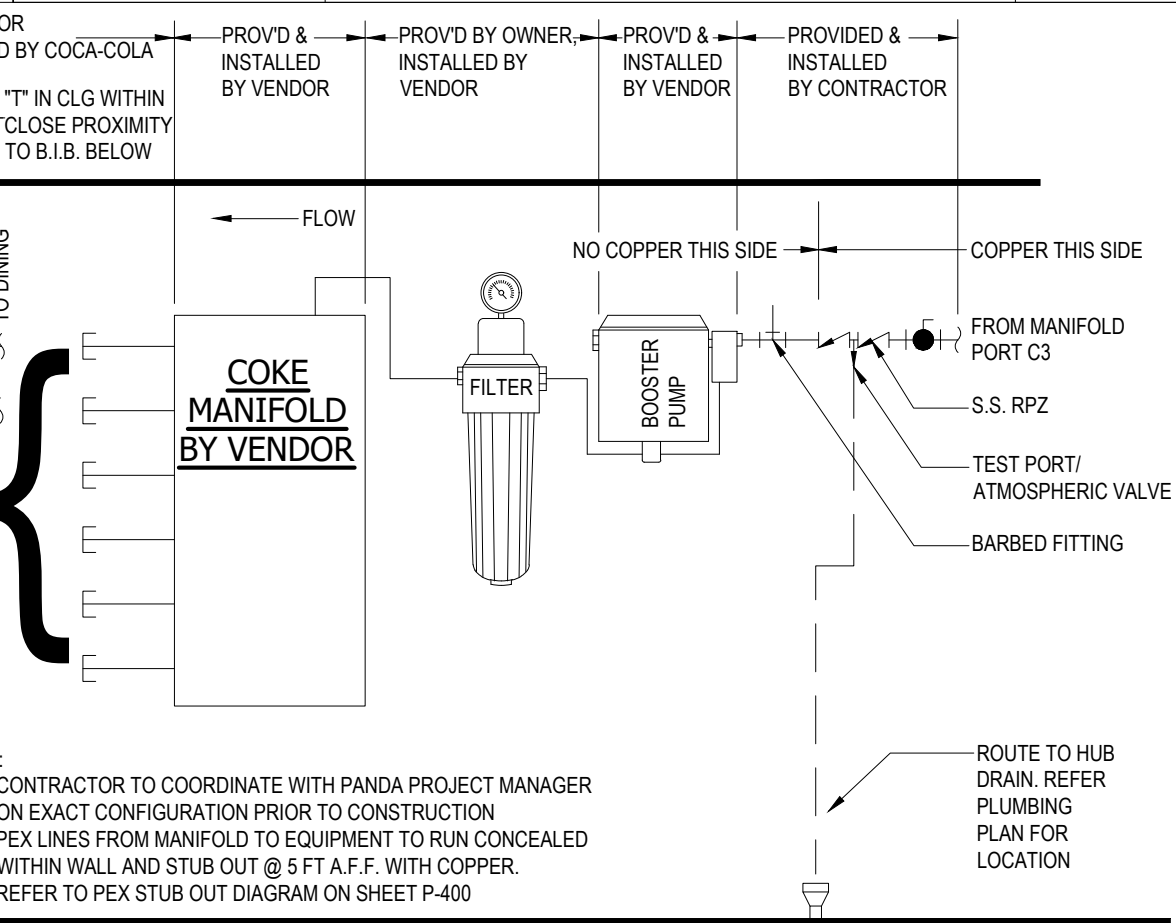
FLOOR DRAIN/SINK 8
Scale: NO SCALE P-500



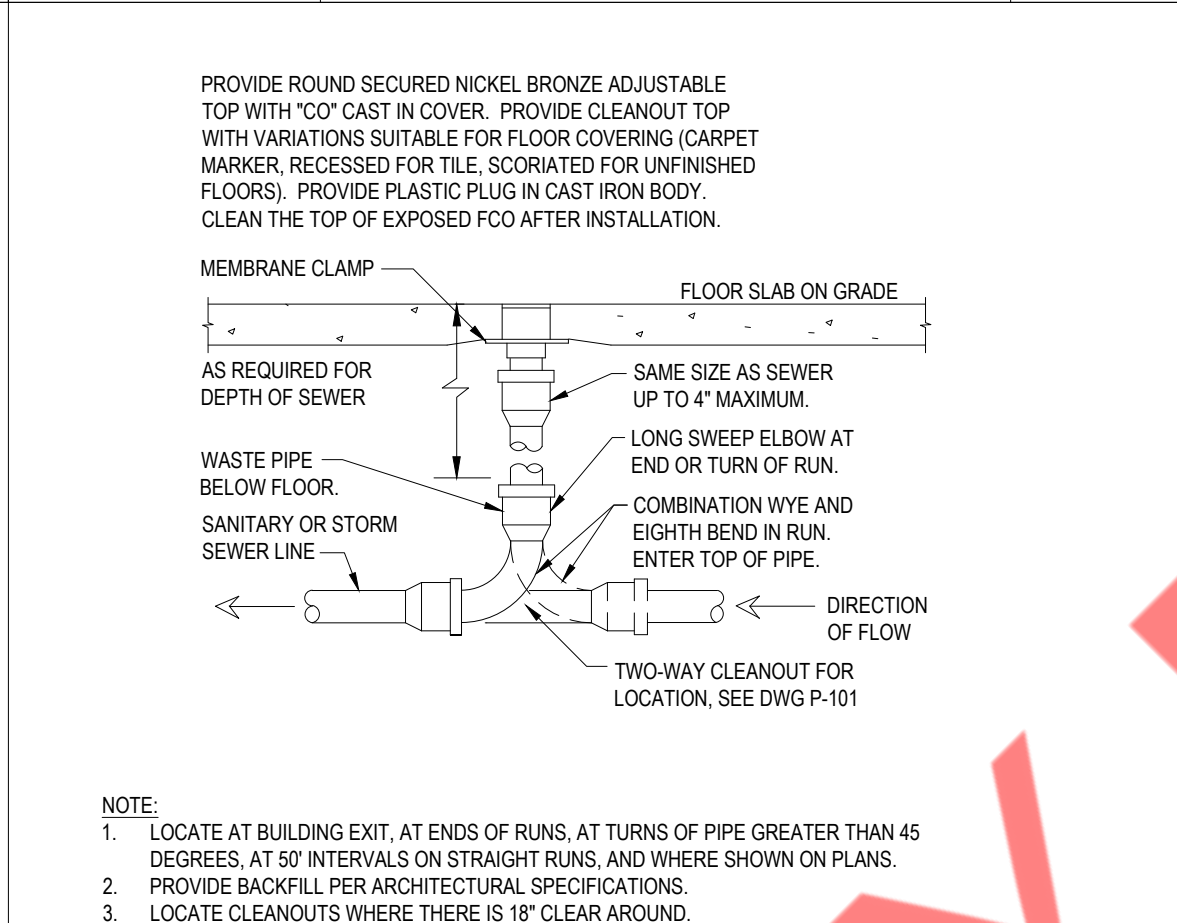
BELOW-GROUND SODA CONDUIT 4
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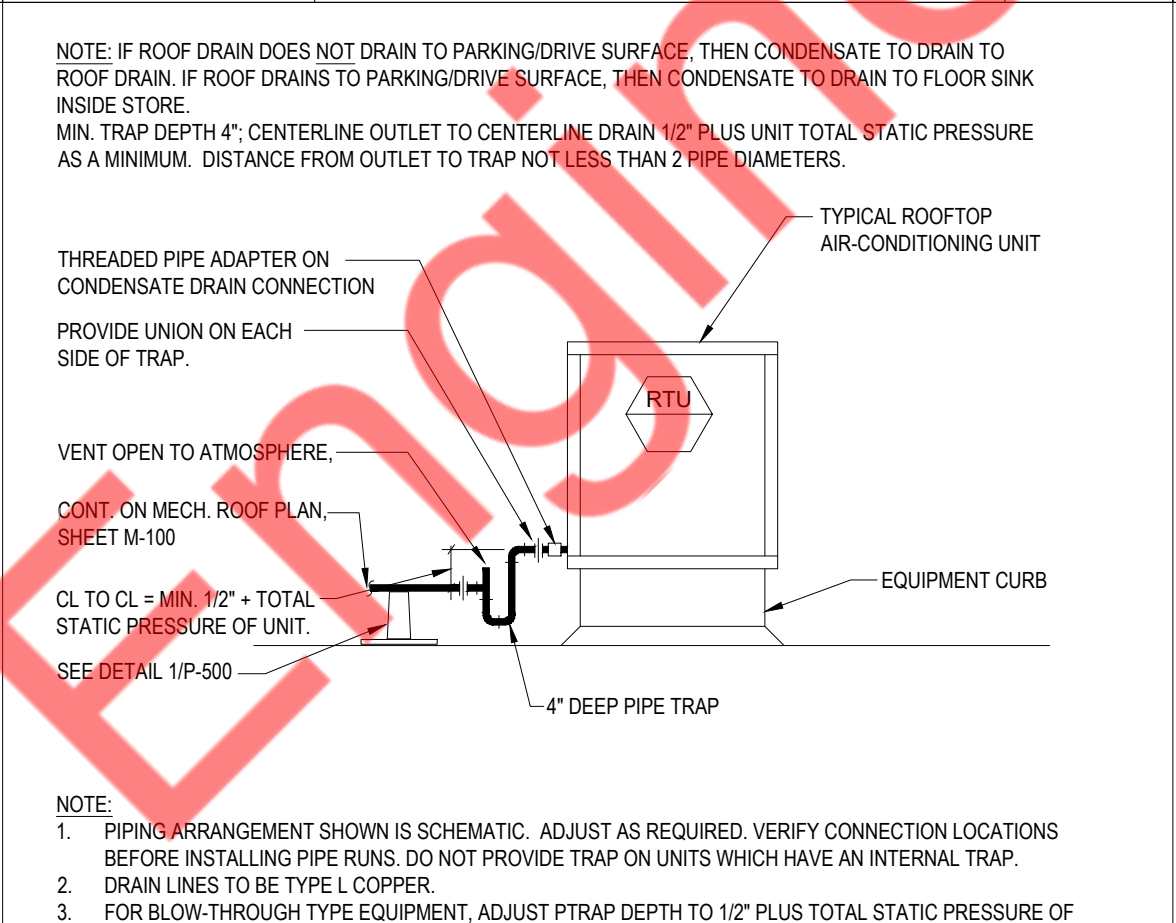
BAG-N-BOX DETAIL 15
Scale: NO SCALE P-500



FLOOR CLEANOUT 11
Scale: NO SCALE P-500



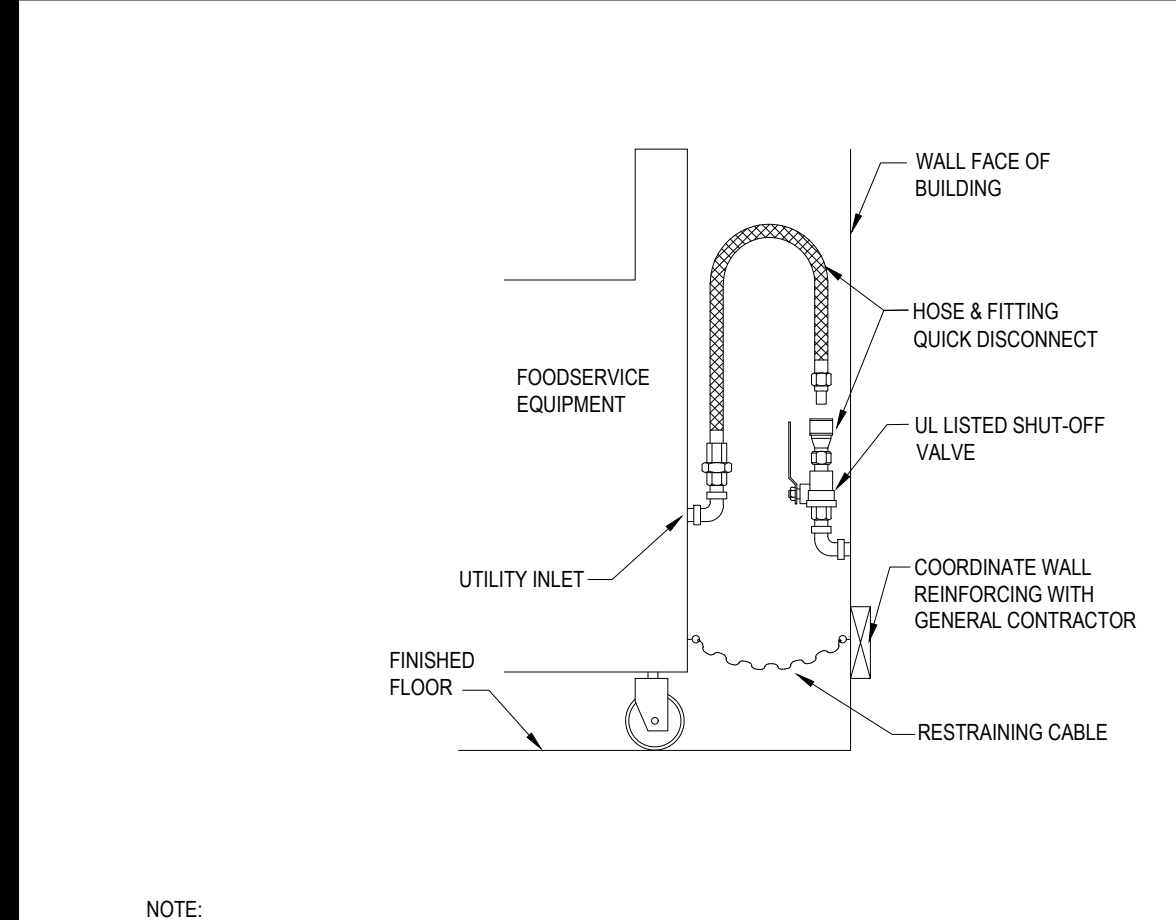
A.C. UNIT CONDENSATE DRAIN 14
Scale: NO SCALE P-500



NOT USED 3
Scale: NO SCALE P-500



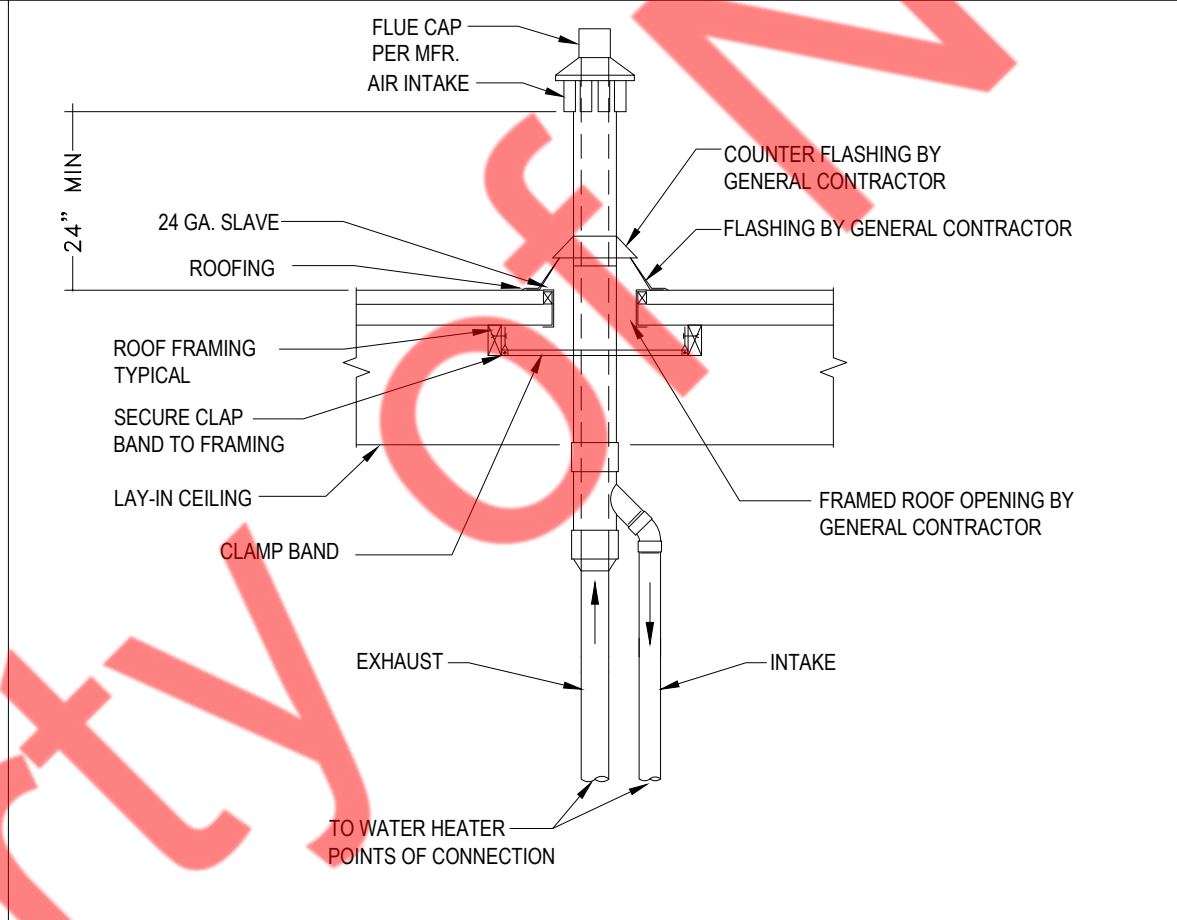
QUICK DISCONNECT 18
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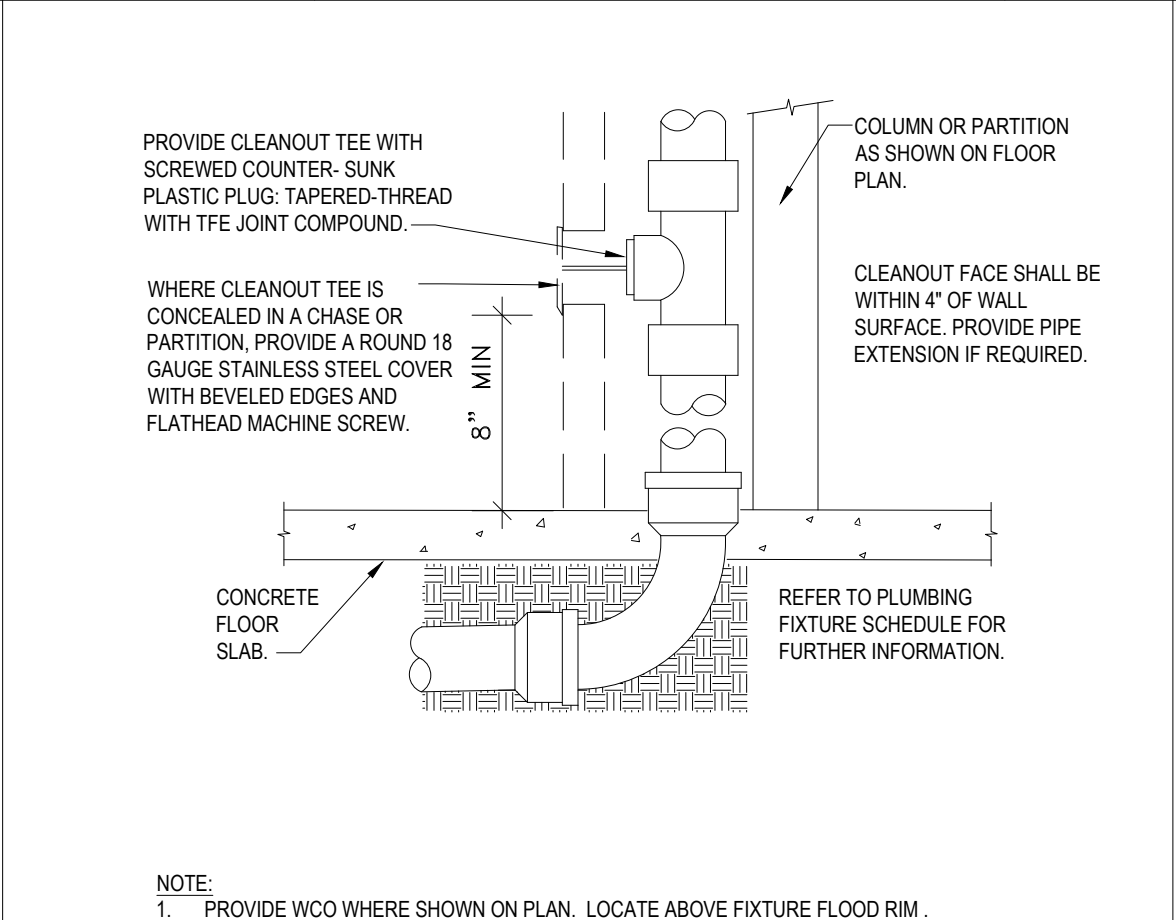
WALK - IN BOX CONDENSATE DRAIN 2
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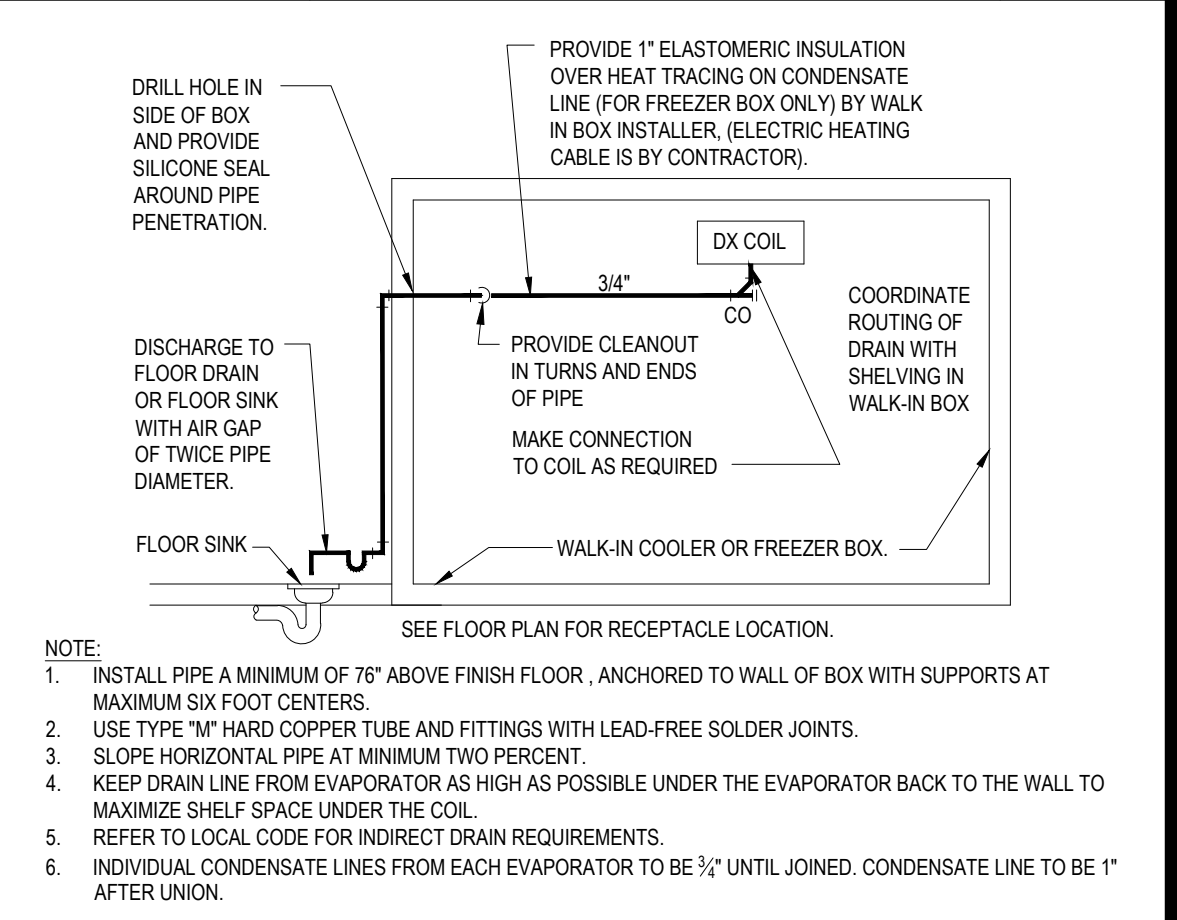
CONCENTRIC VENT DETAIL 10
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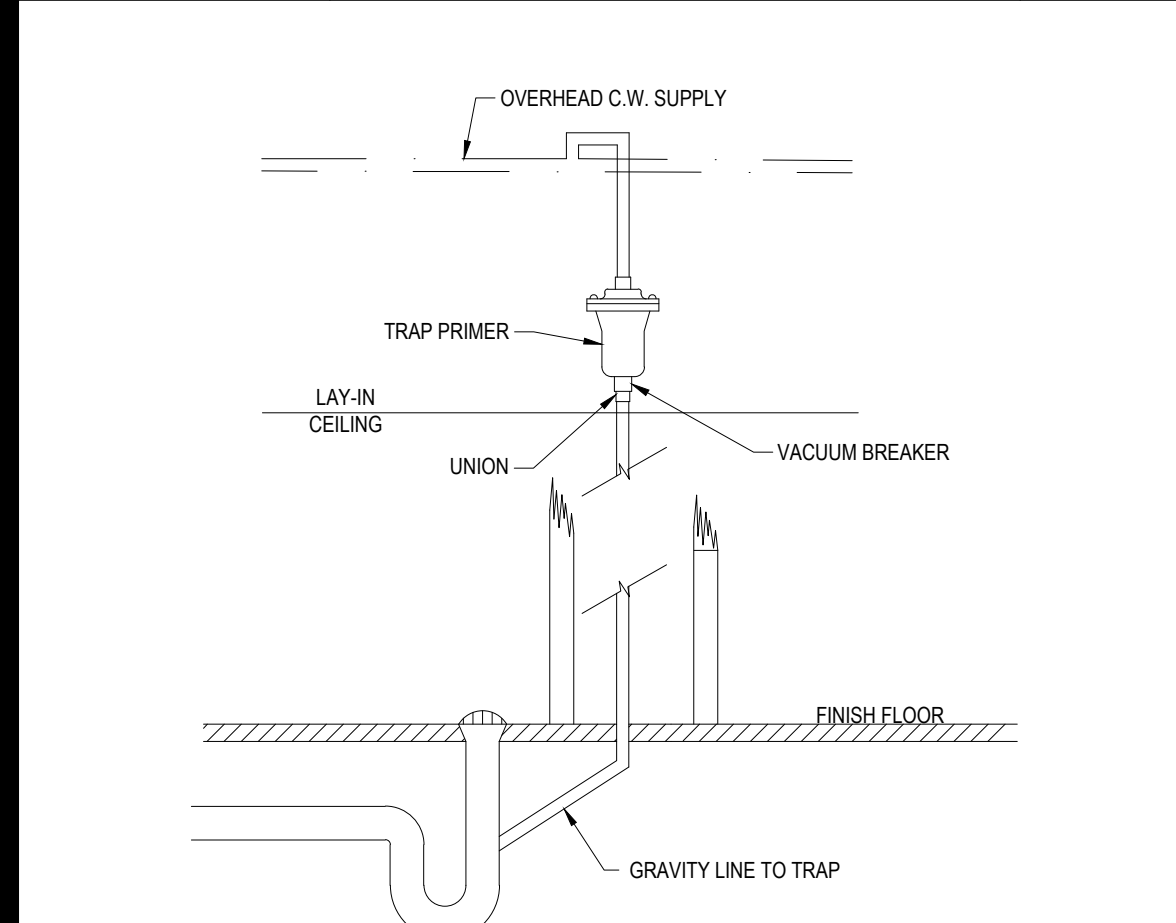
WALL CLEANOUT 6
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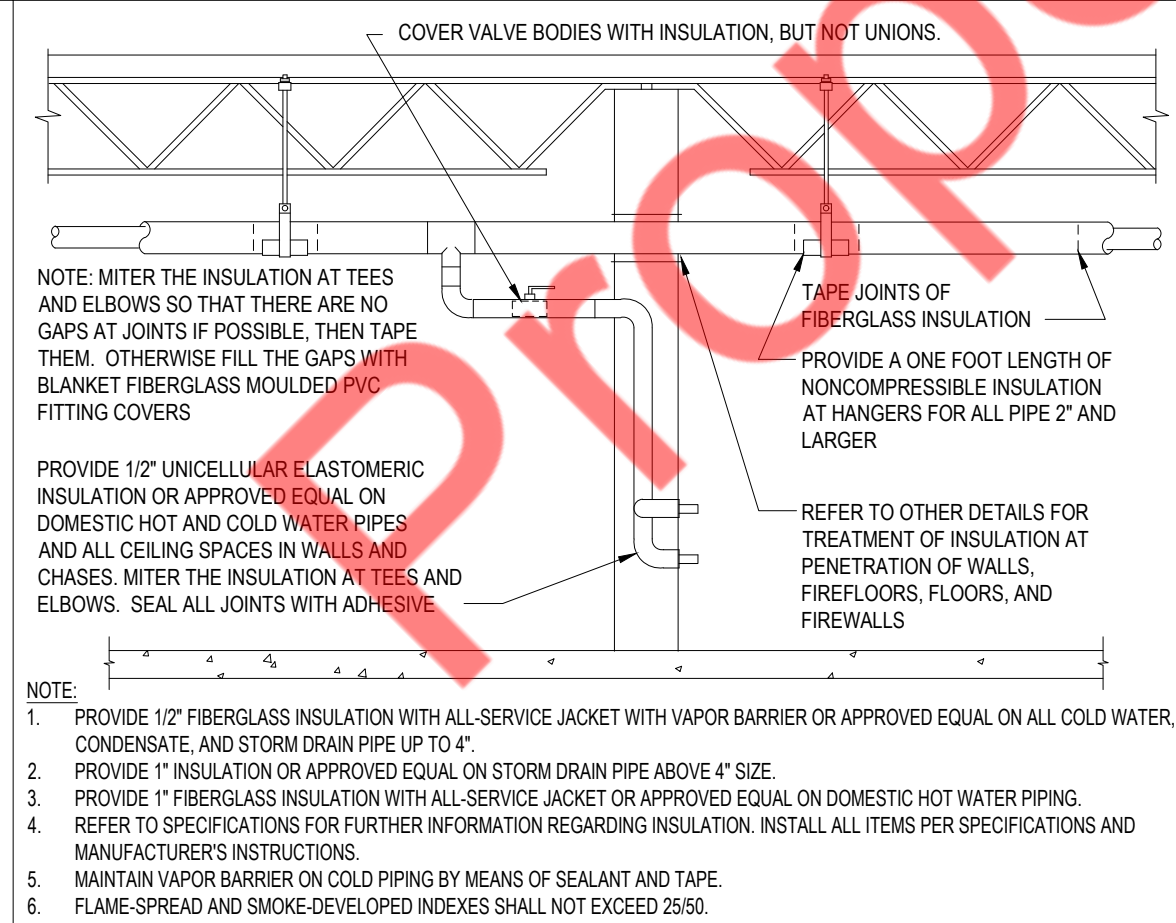
PREP. AREA TRAP PRIMER DETAIL 17
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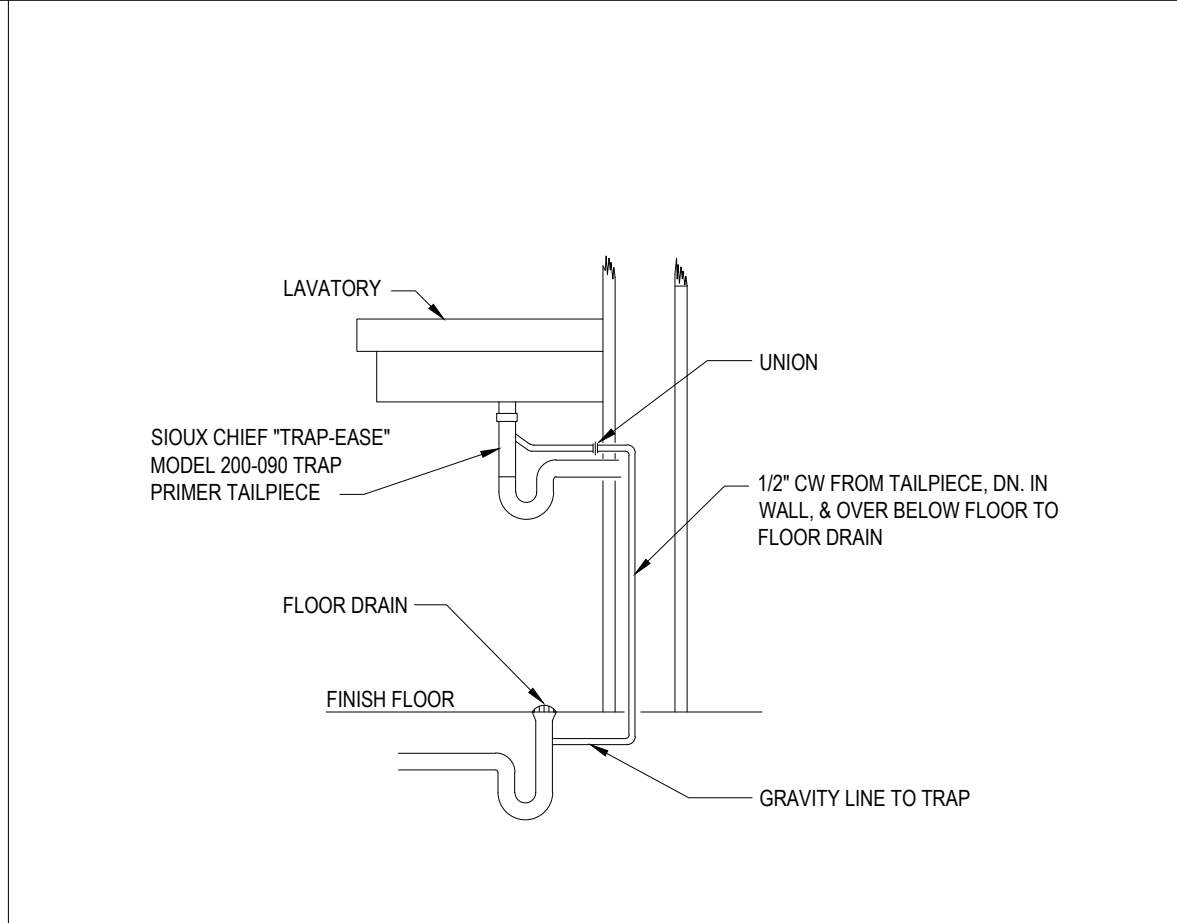
PIPE INSULATION 13
Scale: NO SCALE P-500



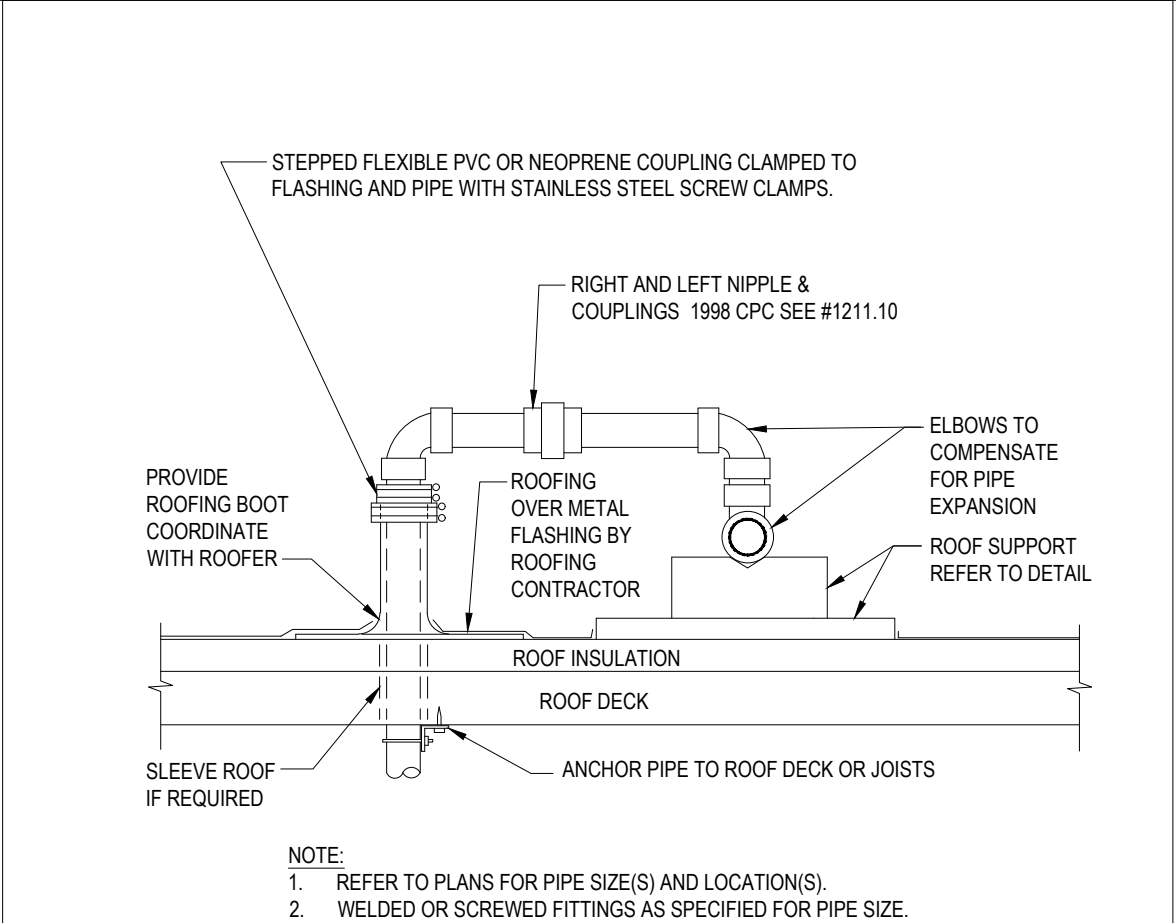
RESTROOM TRAP PRIMER DETAIL 9
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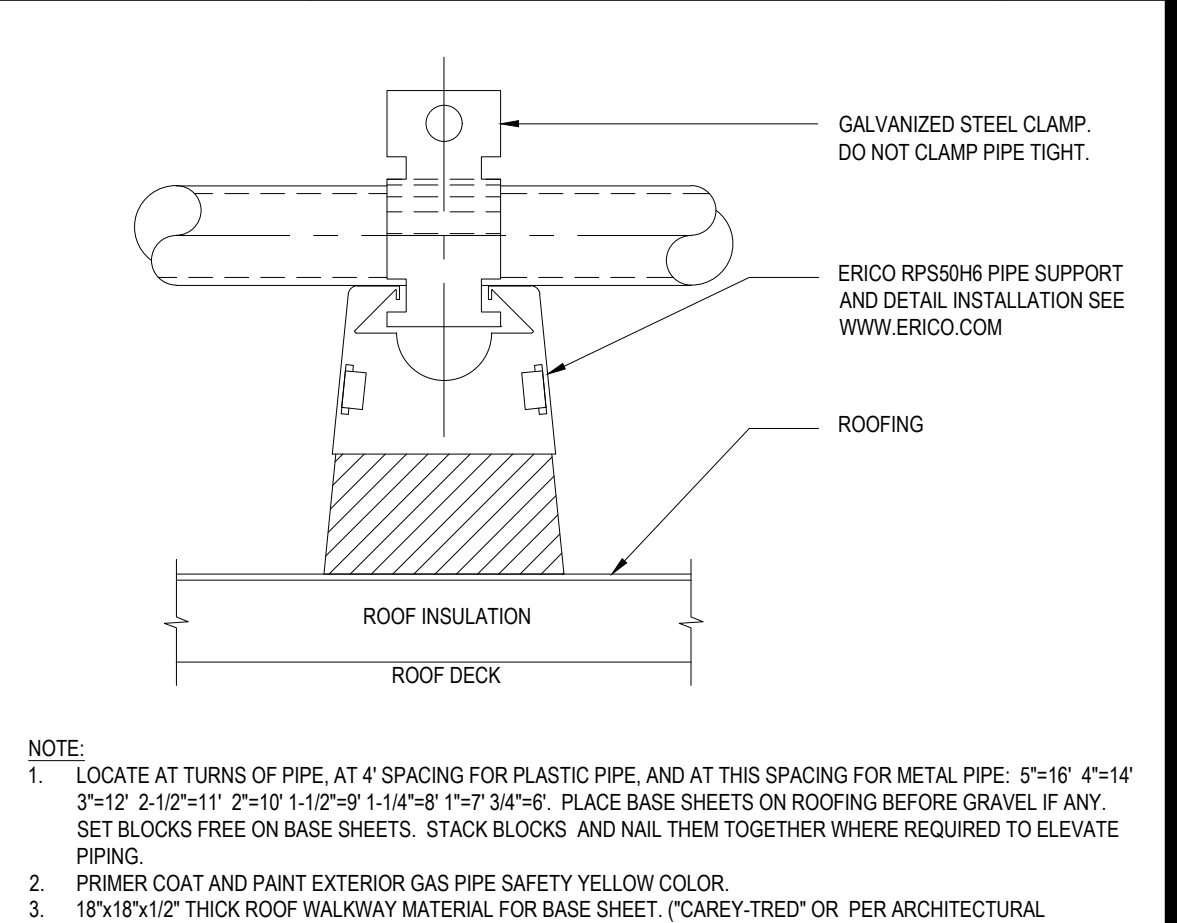
GAS PIPE ROOF PENETRATION 5
Scale: NO SCALE P-500



ROOF PIPE SUPPORT 1
Scale: NO SCALE P-500



PANDA HOME 2700 R1



PLUMBING DETAILS