# New Elementary School Kitchen Equipment

# Lake Local Schools

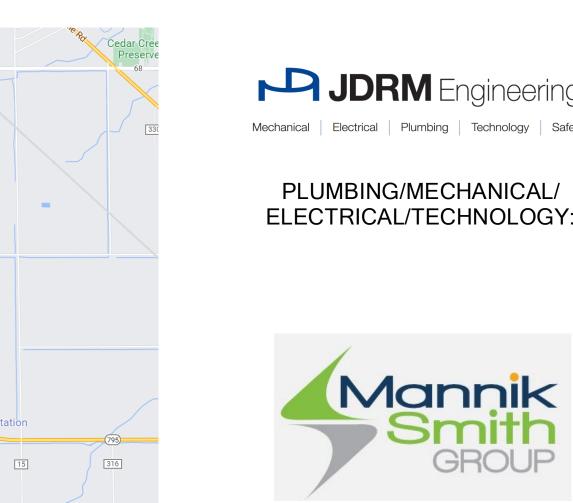
28150 Lemoyne Rd Millbury OH 43447





AREA MAP

PROJECT MAP













CONSTRUCTION:



#### **DRAWING INDEX:**

#### **EQUIPMENT-KITCHEN**

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	KITCHEN EQUIPMENT
00.19.2020	

TC JOB NO. 106986

One SeaGate, Park Level 118 Toledo, OH 43604 / 419.242.7405 213 South Main Street, Suite 200 Ann Arbor, MI 48104 / 734.922.8002

	No.	Revision/Issue	Date
	1	DESIGN DEVELOPMENT	9/7/2022
	2	VALUE ENGINEERED	11/3/2022
	3	OWNER REVISIONS	4/26/2023
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FOODSERVICE EQUIPMENT LAYOUT

Scale:  $1/4^{\parallel} = 1^{\parallel} - 0^{\parallel}$ 

	5 F		
	CONDENSING UNITS ON BUILDING ROOF OVER WALK-INS		
	3 (C)		
	2448 P. Y.		
TRIM BY KEC			
	WALK-IN		
2-TIER BUMPERS — BY KEC	FREEZER 6		
DRY FOODS	2442 2		
STORAGE	WALK-IN 6 7		
	COOLER	2A46 ENTRANCE	
12	TRIM BY KEC		
11	29A		
248	16	65	
(1) DRAWER	20		
17 A (1) DRAWER	51	EXIT	
18		57	60
(1) DRAWER	FULL- HEIGHT 49		59
WALL WALL	23A 23 34	56 EXIT	58
22	29 49	57 COI	ILING DOOR G.C.
	24 28	52 66	
26	(1) DRAWERS	51	
31	33	54	
	61	53	ENTRANCE
	(1) DRAWER B 16		
		50 49 47 48 45	
	DIETICIANS OFFICE RP-KA	C 42 43 43 40 41 42 42 43 43 43 43 43 44 42 42 43 43 43 43 43 43 43 43 43 43 43 43 43	
	RP-KB RP-KC	43A	
	2448	REST	TROOM
	36	LOCKERS 64	
· ·	37		

#### **EQUIPMENT SCHEDULE**

	Qty.	Description	Note:
1	1	WALK-IN COOLER/FREEZER 16'-4 1/2" X 21'-2"	
2	1	COOLER EVAPORATOR COIL	
3	1	COOLER CONDENSING UNIT	BUILDING ROOF
4	1	FREEZER EVAPORATOR COIL	
5	1	FREEZER CONDENSING UNIT	BUILDING ROOF
6	21	WALK-IN SHELVING	4-SHELVES
7	2	MILK CRATE DOLLIES	
8		SPARE NUMBER	
9	1	HI-DENSITY SHELVING	5-SHELVES
10	3	STORAGE SHELVING	5-SHELVES
			5-5HELVES
11	2	DUNNAGE RACKS	
12	2	CAN RACK	
13	1	MANUAL CAN OPENER	NOT SHOWN ON PLA
14	1	WALL SHELF 6'-0" X 12"	
15	1	WORK TABLE 6'-0" X 30"	
16	4	MOBILE CART	
17	1	FLAKER W/ BIN	
17A	1	WATER FILTRATION	FOR #17
18	1	MOBILE POT AND PAN STORAGE SHELVING	
19		SPARE NUMBER	
20	1	ISLAND PREP TABLE W/ SINK 10'-0" X 56"	
21		SPARE NUMBER	
-	-		
22		2-BURNER RANGE	
23	2	SINGLE DECK COMBI OVEN	
23A	2	WATER FILTRATION SYSTEM	FOR #23
24	2	SINGLE-DECK CONVECTION OVEN	
25	1	FLOOR TROUGH	
26	1	30 GAL. TILT SKILLET	
27	1	12'-0" EXHAUST HOOD W/ MAKE UP AIR PLENUM	
28	1	12'-0" EXHAUST HOOD W/ MAKE UP AIR PLENUM	
29	1	FIRE SUPPRESSION SYSTEM	
29A	1	FIRE SUPPRESSION PULL STATION	
30		SPARE NUMBER	
31	1	30 QT. MIXER	
32	'	ISLAND WORK TABLE W/ (1) SINK 101-0" X 56"	
33	'	OVERSHELF 7'-6" X 16"	
	1		
34	2	MOBILE PAN RACKS	
35	1	MOP SINK W/ SERVICE FAUCET	BY OTHERS
36	1	STORAGE SHELVING	4-SHELVES
37	1	CLOTHES DRYER	BY OTHERS
38	1	CLOTHES WASHER	BY OTHERS
39		SPARE NUMBER	
40	1	60" POT AND UTENSIL RACK	
41	1	CLEAN DISHTABLE	
42	2	VENT RISERS	
43	1	44" CONVEYOR DISHMACHINE W/ BOOSTER HEATER	
43A		WATER SOFTENER	FOR #43
	<del>                                     </del>		1 UN #43
44	<u> </u>	SPARE NUMBER	
45		SOILED DISHTABLE W/ PRERINSE SINK	
46		SPARE NUMBER	
47	1	48" POT AND UTENSIL RACK	
48	1	3-COMPARTMENT POT SINK	
49	4	HAND SINK W/ ELECTRONIC FAUCET	
50	1	EYE WASH STATION	
51	2	1-SECTION PASS-THRU HEATED CABINET	
52	2	1-SECTION PASS-THRU REFRIGERATOR	
53	2	MILK COOLER-16 CRATE CAPACITY	
54 54	2	74" MOBILE HOT FOOD SERVING COUNTER	
55	<u> </u>	SPARE NUMBER	
56	1	48" AIR SCREEN REFRIGERATOR	
57	2	74" MOBILE HOT/COLD FOOD SERVING COUNTER	
58	1	66" MOBILE ENERGY SPOT SERVING COUNTER	
59	1	MOBILE CASHIER STATION	BY OWNER
60	1	POINT-OF-SALE STATION	BY OTHERS
61	2	WORK TABLE 5'-0" X 30"	
62		SPARE NUMBER	
63	1	STAINLESS STEEL WALL CAP	
ひン	i i		BY OTHERC
/ /		LOCKERS	BY OTHERS
64 65	8	MOBILE CONDIMENT COUNTER	51 51112175

Date: 8/19/2022

Scale:  $1/4^{\parallel} = 1^{\parallel} - 0^{\parallel}$ 

Shoot

FS=2.0

#### PLUMBING CONNECTION SCHEDULE

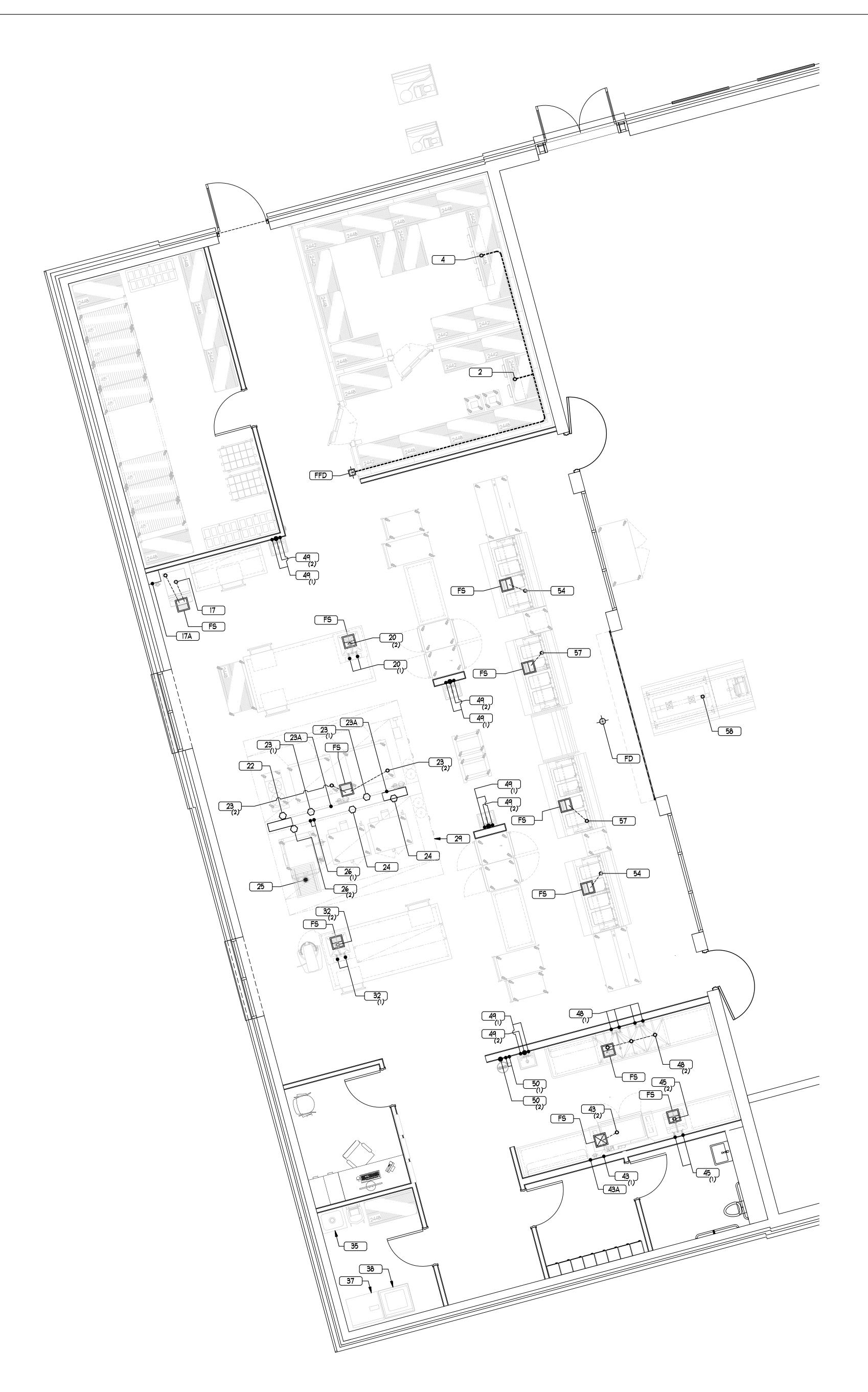
ITEM	CONN	# DESCRIPTION  (1) REQUIRED 3/4" INDIRECT WASTE; EXTEND TO FUNNEL FLOOR DRAIN;
2		(COOLER EVAPORATOR COIL)
4		(1) REQUIRED 3/4" INDIRECT WASTE; EXTEND TO FUNNEL FLOOR DRAIN; (FREEZER EVAPORATOR COIL) NOTE: DRAIN LINE HEAT TAPE REQUIRED WITHIN FREEZER COMPARTMENT
17		(1) REQUIRED (2) INDIRECT WASTES; EXTEND 3/4" BIN DRAIN, 1/2" ICE MAKING WATER DRAIN OUTLET TO FLOOR SINK; (ICE FLAKER)
17A		(1) REQUIRED $1/2$ " COLD WATER; AT $72$ " AFF; EXTEND TO WATER FILTER (ITEM $17A$ ); RUN $3/8$ " COLD WATER TO (ICE FLAKER #17) WATER INLET.
20	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; DFA. THROUGH KEC. PROVIDED UTILITY CHASE (WORK TABLE SINK) FAUCET; (SEE UTILITY CHASE NOTE #9 THIS SHEET).
20	(2)	(1) REQUIRED 2" INDIRECT WASTE; EXTEND TO FLOOR SINK; (WORK TABLE SINK)
22		(1) REQUIRED 3/4" NATURAL GAS; 90,000 BTU'S; CONNECTION AT GAS HEADER; SEE GAS HEADER NOTE - THIS SHEET. NOTE: PLUMBING CONTRACTOR TO INSTALL GAS QUICK DISCONNECT DEVICE & RESTRAINING CABLE PROVIDED WITH UNIT. (2-BURNER RANGE)
23	(1)	(1) REQUIRED 3/4" NATURAL GAS; 106,500 BTU'S; CONNECTION AT GAS HEADER; SEE GAS HEADER NOTE - THIS SHEET; (COMBI OVEN). NOTE: (2) LOCATIONS ON PLAN.
23	(2)	(1) REQUIRED 2" INDIRECT WASTE; EXTEND TO FLOOR SINK; NOTE: MUST USE HIGH TEMP RESISTANT PIPE FOR THIS DRAIN; (DOUBLE-STACKED COMBI OVEN DRAIN).  NOTE: (2) LOCATIONS ON PLAN.
23A		(1) REQUIRED 3/4" COLD WATER; AT 72" AFF; BRANCH TO WATER FILTER; EXTEND TO 3/4" TREATED WATER INLET CONNECTION; (COMBI OVEN). NOTE: (2) LOCATIONS ON PLAN.
24		(1) REQUIRED 3/4" NATURAL GAS; 72,000 BTU'S; CONNECTION AT GAS HEADER; SEE GAS HEADER NOTE - THIS SHEET. (CONVECTION OVEN). NOTE: (2) LOCATIONS ON PLAN.
25		(1) REQUIRED 4" DIRECT WASTE; (STUB UP) IN FLOOR SLAB RECESS; (FLOOR TROUGH); REFER TO MANUFACTURER'S SHOP DRAWING FOR SPECIFIC INFORMATION.
26	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; AT 12" AFF.; EXTEND TO FAUCET (30 GAL. TILT SKILLET).
26	(2)	(1) REQUIRED 3/4" NATURAL GAS; 125,000 BTU'S; CONNECTION AT GAS HEADER; SEE GAS HEADER NOTE - THIS SHEET. (30 GAL. TILT SKILLET)
29		FIRE SUPPRESSION SYSTEM. KEC TO FURNISH (I) MECHANICAL GAS SHUT-OFF VALVE. INSTALL VALVE IN AN ACCESSIBLE LOCATION.
32	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; DFA. THROUGH KEC. PROVIDED UTILITY CHASE (WORK TABLE SINK) FAUCET; (SEE UTILITY CHASE NOTE #9 THIS SHEET).
32	(2)	(I) REQUIRED 2" INDIRECT WASTE; EXTEND TO FLOOR SINK; (WORK TABLE SINK)
35		MOP SINK BY OTHERS
37		CLOTHES DRYER BY OTHERS
38		CLOTHES WASHER BY OTHERS
43	(1)	(1) REQUIRED 1/2" COLD WATER; AT 10" AFF. EXTEND TO (DISHWASHER) (DRAIN WATER TEMPERING DEVICE) SEE CONNECTION NOTE #43 (2).
43	(2)	(1) REQUIRED 2" INDIRECT WASTE; EXTEND TO FLOOR SINK. NOTE: MUST USE HIGH TEMP. RESISTANT PIPE FOR DRAIN; (DISHMACHINE) DRAIN. NOTE: DISHMACHINE PROVIDED WITH DRAIN WATER TEMPERING KIT SHIPPED LOOSE; (SEE CONNECTION NOTE #43 (1).
<b>43</b> A		(1) REQUIRED 1/2" HOT WATER (140°F MIN @ 20 PSI +/- 5 PSI); AT 10" AFF; EXTEND TO WATER SOFTENER (ITEM 43A); RUN 1/2" HOT WATER TO (DISHMACHINE #43) WATER INLET.
45	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; AT 14" AFF; (SOILED DISHTABLE PRERINSE FAUCET).
45	(2)	(1) REQUIRED 2" INDIRECT WASTE; EXTEND TO FLOOR SINK. (SOILED DISHTABLE SINK) DRAIN
48	(1)	(2) EACH REQUIRED 3/4" HOT WATER \$ 3/4" COLD WATER; AT 14" AFF; (3-COMPARTMENT POT SINK).
48	(2)	(1) REQUIRED 2" INDIRECT WASTES; MANIFOLD (3) SINK WASTES TO COMMON CONNECTION AND EXTEND TO FLOOR SINK; (3-COMPARTMENT POT SINK)
49	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; AT 18" AFF. EXTEND TO (HAND SINK) FAUCET. NOTE: (4) LOCATIONS THIS PLAN
49	(2)	(1) REQUIRED 1-1/2" (DIRECT) WASTE; AT 20" AFF. (HAND SINK). NOTE: (4) LOCATIONS THIS PLAN
50	(1)	(1) EACH REQUIRED 1/2" HOT WATER \$ 1/2" COLD WATER; AT 24" AFF. EXTEND TO (EYE WASH STATION) FAUCET.
50	(2)	(1) REQUIRED 1-1/4" (DIRECT) WASTE; AT 18" AFF. (EYE WASH STATION).
54		(1) REQUIRED 3/4" INDIRECT WASTE; EXTEND TO FLOOR SINK. (HOT FOOD SERVING COUNTER). NOTE: (2) LOCATIONS THIS PLAN.
57		(1) REQUIRED 3/4" INDIRECT WASTE; EXTEND TO FLOOR SINK. (HOT/COLD FOOD SERVING COUNTER). NOTE: (2) LOCATIONS ON PLAN.

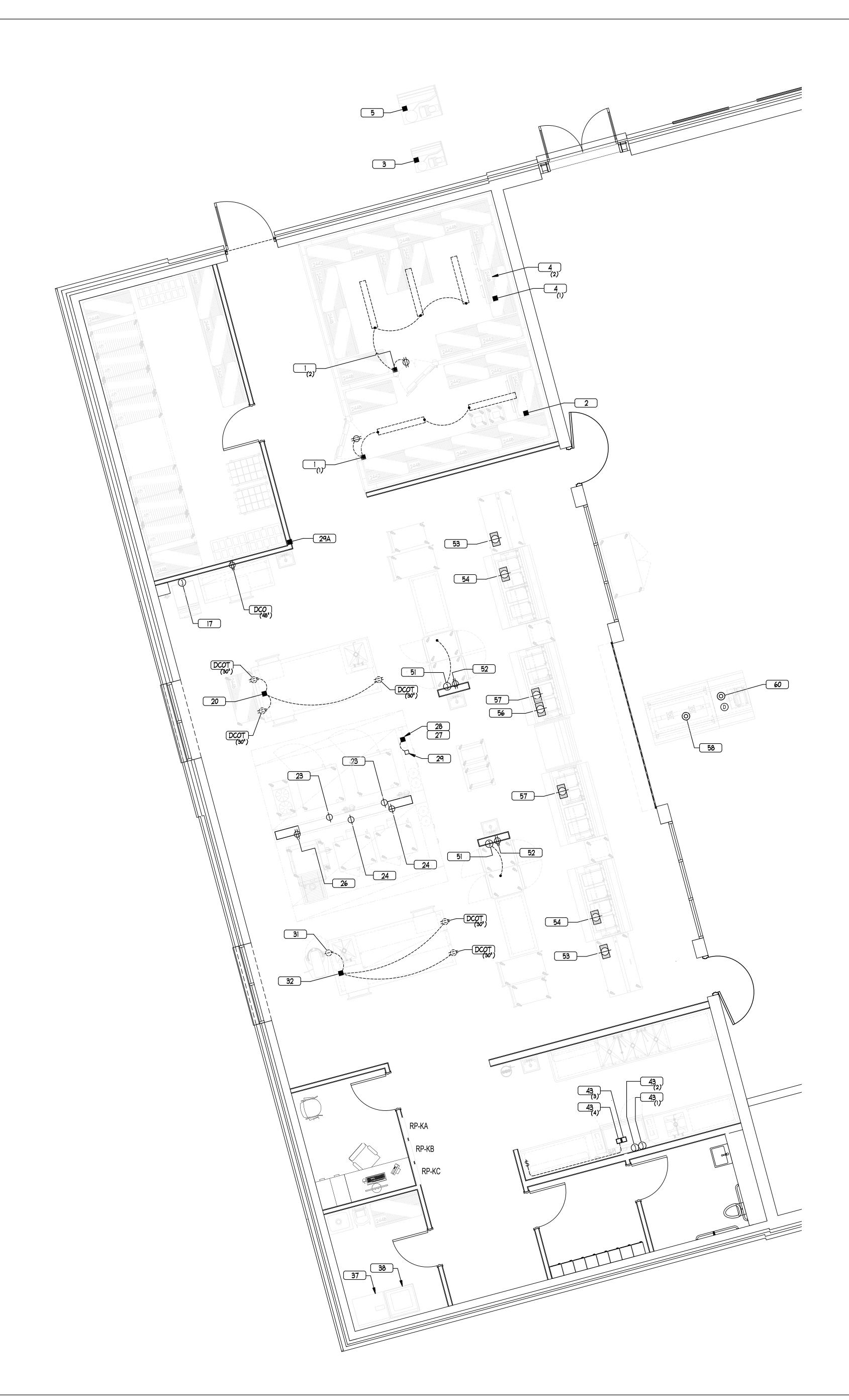
#### **LEGEND**

•	C.W	COLD WATER
•	π.Χ	HOT WATER
•	Σ	WASTE (DIRECT CONNECTED)
•	N.G	NATURAL GAS
0	N.I	INDIRECT WASTE
$\phi$	F.D	FLOOR DRAIN - SEE PLUMBING PLAN
	F.S	FLOOR SINK - SEE PLUMBING PLAN
<del> </del>	F.F.D	FUNNEL FLOOR DRAIN - SEE PLUMBING PLAN
0	<i>o</i> sd	OPEN SITE DRAIN - SEE PLUMBING PLAN
	AFF	ABOVE FINISHED FLOOR
	DFA	DOWN FROM ABOVE
	BTU	BRITISH THERMAL UNIT
	CWS	CHILLED WATER SUPPLY
	CWR	CHILLED WATER RETURN

#### PLUMBING NOTES

- 1...ALL CONNECTIONS SHOWN ARE RELATIVE TO FOOD SERVICE FACILITIES EQUIPMENT ONLY. SEE ARCHITECTS/ENGINEERS PLAN FOR ADDITIONAL REQUIREMENTS.
- 2...THIS PLAN INDICATES ACTUAL ROUGH IN LOCATIONS. ABOVE FINISHED FLOOR HEIGHTS SHOWN INDICATE THE CENTER OF ROUGH IN.
- 3...THE DESIGN OF BUILDING MECHANICAL/PLUMBING SYSTEMS TO ACCOMMODATE THESE REQUIREMENTS IS THE RESPONSIBILITY OF OTHERS AND IS TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND MEET WITH THE APPROVAL OF ALL GOVERNING AUTHORITIES.
- 4...WHEN ROUGH IN IS SHOWN AS OUT OF WALL, THIS INDICATES CONCEALED LINES. DO NOT RUN ANY EXPOSED LINES WHERE POSSIBLE. IF EXISTING CONDITIONS REQUIRE THAT LINES BE EXPOSED, THE PLUMBING CONTRACTOR SHALL CONSULT THE ARCHITECT AND/OR OWNER PRIOR TO ROUGH IN INSTALLATION.
- 5...ALL DIMENSIONS INDICATED ON THIS PLAN ARE TAKEN FROM FINISHED FLOORS, FINISHED WALLS, OR COLUMN CENTER LINES.
- 6...GENERAL WATER PRESSURE IN KITCHEN AREA IS NOT TO EXCEED (50 PSI). FURNISH AND INSTALL PRESSURE REDUCING VALVES FOR WATER PRESSURES EXCEEDING 50 PSI.





( )		(1) REQUIRED DUPLEX CONVENIENCE OUTLET; 120V-1; 16.0 AMPS
DCO )		HÉIGHT AS INDICATED.  (5) REQUIRED DUPLEX CONVENIENCE OUTLET; 120V-1; 16.0 AMPS
(DCOT)		PROVIDED BY KEC.
	(1)	(1) REQUIRED E.C.; 120V-1; 16.0 AMPS; DOWN FROM ABOVE TO TOP OF WALK-IN COOLER AT APPROX. 112" AFF.; INSTALL LIGHT FIXTURES PROVIDED LOOSE WITH WALK-IN ASSEMBLY; NOTE: SEE WALK-IN PENETRATION DETAIL - THIS SHEET; (WALK-IN LIGHTS) ALL CONDUIT MUST BE FABOVE AND ON THE OUTSIDE OF THE WALK-IN.  NOTE: REFER TO WALK-IN MANUFACTURER'S SHOP DRAWING FOR ADDITIONAL INFORMATION PRICES TO ROUGH-IN.
1	(2)	(1) REQUIRED E.C.; 120V-1; 16.0 AMPS; DOWN FROM ABOVE TO TOP OF WALK-IN FREEZER AT APPROX. 112" AFF.; INSTALL LIGHT FIXTURES PROVIDED LOOSE WITH WALK-IN ASSEMBLY; NOTE: SEE WALK-IN PENETRATION DETAIL - THIS SHEET; (WALK-IN LIGHTS, DOOR FRAME HEATER, PI ALL CONDUIT MUST BE RUN ABOVE AND ON THE OUTSIDE OF THE WALK-IN. NOTE: REFER TO WALK-IN MANUFACTURER'S SHOP DRAWING FOR ADDITIONAL INFORMATION PRICTO ROUGH-IN.
1	(1)	(1) REQUIRED E.C.; 120V-1; 16.0 AMP CIRCUIT; DOWN FROM ABOVE TO JUNCTION BOX TOP OF WALK-IN COOLER; INSTALL ADDITIONAL LIGHT FIXTURES PROVIDED LOOSE WITH WALK-IN ASSEMBLY. SEE WALK-IN PENETRATION DETAIL THIS SHEET. ALL CONDUIT MUST BE RUN ABOVE AND ON THE OUTSIDE OF THE WALK-IN. (WALK-IN COOLER LIGHTS, TEMPERATURE MONITORING/CONTROL). NOTE: TEMPERATURE CONTROLLER WILL REQUIRE A D.R. MOUNTED ON OF WALK-IN NEAR ELECTRICAL PENETRATION BY DOOR. UTILIZE SAME CIRCUIT AS LIGHTS.
1	(2)	(1) REQUIRED E.C.; 120V-1; 16.0 AMP CIRCUIT; DOWN FROM ABOVE TO JUNCTION BOX TOP OF WALK-IN FREEZER; INSTALL ADDITIONAL LIGHT FIXTURES PROVIDED LOOSE WITH WALK-IN ASSEMBLY. SEE WALK-IN PENETRATION DETAIL THIS SHEET. ALL CONDUIT MUST BE RUN ABOVE AND ON THE OUTSIDE OF THE WALK-IN. (WALK-IN COOLER LIGHTS, TEMPERATURE MONITORING/CONTROL). NOTE: TEMPERATURE CONTROLLER WILL REQUIRE A D.R. MOUNTED ON OF WALK-IN NEAR ELECTRICAL PENETRATION BY DOOR. UTILIZE SAME CIRCUIT AS LIGHTS.
2		(1) REQUIRED E.C.; 120V-1; 1.6 AMPS; DOWN FROM ABOVE; PENETRATE COOLER CEILING PANEL AT APPROX. 108" AFF. EXTEND TO CONNECTION (COOLER EVAPORATOR COIL) PROVIDE DISCONN. SWITCH. NOTE: REFER TO PENETRATION DETAIL - THIS SHEET AND MANUFACTURER'S SHOP DRAWINGS FOR ADDITIONAL INFORMATION PRIOR TO ROUGH-IN.
3		(1) REQUIRED E.C.; 208V-3; 5.9 AMPS; AT (REMOTE LOCATION) KEC TO PROVIDE DISCONNECT SWITCH. (COOLER CONDENSING UNIT)
4	(1)	(1) REQUIRED E.C.; 208V-1; 14.3 AMPS; DOWN FROM ABOVE; PENETRATE FREEZER CEILING PAN AT APPROX. 108" AFF. EXTEND TO CONNECTION (FREEZER EVAPORATOR COIL) PROVIDE DISCONNECT SWITCH. NOTE: REFER TO PENETRATION DETAIL - THIS SHEET AND MANUFACTURES SHOP DRAWINGS FOR ADDITIONAL INFORMATION PRIOR TO ROUGH-IN.
4	(2)	ELECTRICAL CONTRACTOR TO INTERWIRE DRAIN LINE HEAT TRACE (FURNISHED BY REFRIGERAT CONTRACTOR) TO FREEZER COIL "HOT" TERMINAL.  (1) REQUIRED E.C./DISCONNECT; 208V-3; 14.9 AMPS; AT (REMOTE LOCATION) KEC TO PROVID
5		(1) REQUIRED E.C./DISCONNECT; 208V-3; 14.4 AMPS; AT (REMOTE LOCATION) REC TO PROVID DISCONNECT SWITCH.  (FREEZER CONDENSING UNIT)  (1) REQUIRED J.B.; 120V-1; 12.8 AMPS; AT 72" AFF.
		(ICE FLAKER)
20		ISLAND PREP TABLE; THREE (3) 16.0 AMP, 120V-1; SU 4"AFF. WIRE IN SEAL-TIGHT CONDUIT FRE ROUGH-IN TO A FACTORY MOUNTED JUNCTION BOX ON THE TABLE. RECEPTACLES MOUNTED TABLE TO BE INSTALLED AND WIRED TO THE JUNCTION BOX BY THE EQUIPMENT FABRICATOR. PROVIDE THE FOLLOWING; CONVENIENCE OUTLETS (3) 120V-1, 16.0 AMPS (NEMA 5-20P)
23		(1) REQUIRED S.R.; (6-20P); 208V-1; 4.4 AMPS; AT 36" AFF.; (COMBI OVEN). NOTE: (2) LOCATIONS ON PLAN.
24		(1) REQUIRED S.R. (5-15P); 120V-1; 7.9 AMPS; AT 36" AFF.; (CONVECTION OVEN). NOTE: (2) LOCATIONS ON PLAN.
26		(1) REQUIRED D.R. (5-15P); 120V-1; 1.4 AMPS; AT 16" AFF.; (30 GAL. TILTING SKILLET).
27 28		EXHAUST HOOD AND EXHAUST SYSTEM COMPONENTS SYSTEM COMPONENTS HAVE SPECIFIC ELECTRICAL AND WIRING REQUIREMENTS, REFER TO DRAWINGS SHEETS FS-5.0 THRU FS-5.4 FOR DETAILED REQUIREMENTS AND WIRING DIAGRAMS. (EXHAUST HOOD LIGHTS, EXHAUST FAN, SUPFFAN, TEMP SENSOR, DUCT SENSOR AND CAT-5)
29		FIRE SUPPRESSION SYSTEM INTERWIRING TO COME FROM HOOD CONTROL PANEL LOCATED IN EXHAUST HOOD (#27); REFER TO DRAWING FS-5.5 $\$$ FS-5.4 FOR COMPLETE SYSTEM WIRING INFORMATION.
29A		(I) REQUIRED ANSUL PULL STATION; PROVIDE OCTAGONAL J-BOX AND CONDUIT CONCEALED WALL AT THIS LOCATION AND EXTEND 1/2" EMT CONDUIT FROM TOP OF J-BOX TO 6" ABOVE FINISHED CEILING. BALANCE OF CONDUIT, S/S/ CABLE, AND PULLEY ELBOWS WILL BE PROVIDE AND INSTALLED BY THE ANSUL INSTALLER. MOUNT CENTERLINE OF J-BOX AT 48" AFF. MOUNTING SCREWS FOR FACEPLATE MUST BE PLACED AT 2 O'CLOCK AND 8 O'CLOCK SO THAT THE ANSUL PULL COVER PLATE CAN BE ORIENTED PROPERLY.
31		30 QT. MIXER; 208V-1; 9.5 AMPS (5-20P); SERVICE FROM RECEPTACLE MOUNTED ON ITEM 32. ISLAND WORK TABLE
32		ISLAND WORK TABLE; THREE (3) 16.0 AMP, 120V-1; SU 4" AFF. WIRE IN SEAL-TIGHT CONDUIT FROM ROUGH-IN TO A FACTORY MOUNTED JUNCTION BOX ON THE TABLE. RECEPTACLES MOUNT! TABLE TO BE INSTALLED AND WIRED TO THE JUNCTION BOX BY THE EQUIPMENT FABRICATOR. PROVIDE THE FOLLOWING; ITEM #31 MIXER (1) 120V-1, 9.5 AMPS (NEMA 5-20P)
37		CONVENIENCE OUTLETS (2) 120V-1, 16.0 AMPS (NEMA 5-20P)  CLOTHES DRYER BY OTHERS VERIFY REQUIREMENTS PRIOR TO ROUGH-IN
38		CLOTHES WASHER BY OTHERS VERIFY REQUIREMENTS PRIOR TO ROUGH-IN
43	(1)	(1) REQUIRED J.B.; 480V-3; 27.9 AMPS; AT 72" AFF; EXTEND TO (DISHMACHINE MOTORS AND
43	(2)	TANK HEAT) CONNECTION; VERIFY DISCONNECT SIZE AND PLACEMENT PRIOR TO ROUGH-IN.  (I) REQUIRED J.B.; 480V-3; 15 KW, 20.0 AMPS; AT 72" AFF; EXTEND TO (DISHMACHINE BOOST HEATER) CONNECTION; VERIFY DISCONNECT SIZE AND PLACEMENT PRIOR TO ROUGH-IN.
43	(3)	DISH MACHINE FAN INTERLOCK; E.C.; AT 72" AFF. NOTE: THE DISHMACHINE IS PROVIDED WITH EXHAUST FAN INTERLOCK WHICH WILL INTERLOCK EXHAUST FAN OPERATION WITH DISHMACHINE ACTIVATION.
43	(4)	CLEAN DISHTABLE PROVIDED WITH "LIMIT SWITCH"; INTERWIRE LIMIT SWITCH WITH DISHMACHINE CONTROLS.  (1) RECUIRED LR. 2007-1, 7.2 AMPS: AT 60" AFE
51		(1) REQUIRED J.B.; 208V-1; 7.2 AMPS; AT 90" AFF.  (PASS-THRU HEATED CABINET); NOTE (2) LOCATIONS SHOWN ON PLAN.
52		(1) REQUIRED D.R. (5-15P); 120V-1; 5.5 AMPS; AT 90" AFF.  (PASS-THRU REFRIGERATOR); NOTE (2) LOCATIONS SHOWN ON PLAN
53		(1) REQUIRED FLOOR PEDESTAL S.R. (5-15P); 120V-1; 2.7 AMPS; STUB-UP; PEDESTAL OVERA HEIGHT NOT TO EXCEED 4 1/2" AFF; (MILK COOLER); NOTE (2) LOCATIONS ON PLAN  (1) REQUIRED FLOOR PEDESTAL S.R. (14-20P); 120/208V-1; 13.5 AMPS; STUB-UP; PEDESTAL
54		OVERALL HEIGHT NOT TO EXCEED 4 1/2" AFF; (MOBILE HOT FOOD SERVING COUNTER); NOTE (2) LOCATIONS SHOWN ON PLAN.
56		(1) REQUIRED FLOOR PEDESTAL J.B.; 120V-1; 24.0 AMPS; STUB-UP; PEDESTAL OVERALL HEIGH NOT TO EXCEED 4 1/2" AFF; (AIR SCREEN REFRIGERATOR).
57	(1)	(1) REQUIRED FLOOR PEDESTAL S.R. (14-20P); 120/208V-1; 15.0 AMPS; STUB-UP; PEDESTAL OVERALL HEIGHT NOT TO EXCEED 4 1/2" AFF; (MOBILE HOT/COLD FOOD SERVING COUNTER); NO
		(2) LOCATIONS ON PLAN.  (1) REQUIRED FLUSH FLOOR RECEPTACLE D.R. (5-15P); 120V-1; 7.4 AMPS;

(VERIFY LOAD); (CASH REGISTER). NOTE: REVIEW ALL NETWORK REQUIREMENTS WITH SYSTEM SUPPLIER PRIOR TO ROUGH-IN.

#### LEGEND

$\ominus$	D.R	DUPLEX RECEPTACLE
$\phi$	S.R	SINGLE RECEPTACLE
①	J.B.	JUNCTION BOX
	E.C	ELECTRICAL CONNECTION
		INTERCONNECTION
€)		RECEPTACLE BY KEC
•	D.C	DROP CORD
ф		FLOOR PEDESTAL
0		FLUSH FLOOR RECEPTACLE
D		DATA RECEPTACLE-WALL MOUNT
0		DATA RECEPTACLE
\$	S	SWITCH
	H.P	HORSE POWER
	А	AMPERE
	٧	VOLTAGE
	Ø	PHASE
	М	WATTAGE
	KW	KILOWATTS
	DFA	DOWN FROM ABOVE
	AFF	ABOVE FINISHED FLOOR
NIk	KEC	NOT IN KITCHEN EQUIPMENT CONTRACT

#### **ELECTRICAL NOTES**

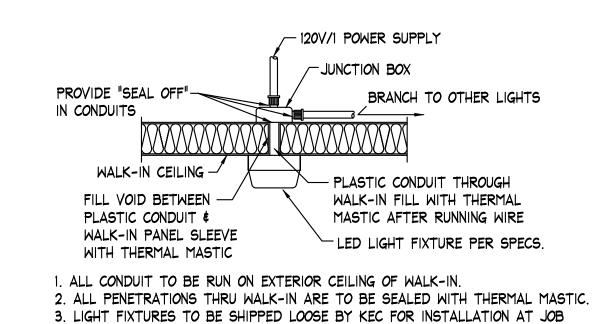
- 1...ALL CONNECTIONS SHOWN ARE RELATIVE TO FOOD SERVICE FACILITIES EQUIPMENT ONLY. SEE ARCHITECTS/ENGINEERS PLAN FOR ADDITIONAL DETAILS NOT SHOWN ON THIS PLAN.
- 2...THIS PLAN INDICATES UTILITY CONNECTION LOCATIONS. ABOVE FINISHED FLOOR HEIGHTS SHOWN INDICATE THE CENTER OF
- 3...THE DESIGN OF BUILDING ELECTRICAL SYSTEMS TO ACCOMMODATE THESE REQUIREMENTS SHOWN IS THE RESPONSIBILITY OF OTHERS AND IS TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES, AND MEET WITH THE APPROVAL OF ALL GOVERNING AUTHORITIES.
- 4...WHEN ROUGH IN IS INDICATED AS OUT OF WALL, THIS INDICATES CONCEALED LINES. DO NOT RUN ANY EXPOSED LINES WHERE POSSIBLE.
- 5...ALL DIMENSIONS INDICATED ON THIS PLAN ARE TAKEN FROM FINISHED FLOORS, FINISHED WALLS, OR COLUMN CENTER LINES.
- 6...UNLESS OTHERWISE NOTED OR SPECIFICALLY SPECIFIED, THE EQUIPMENT INDICATED IS NOT PROVIDED WITH A DISCONNECT SWITCH (POWER INTERRUPTION DEVICE), THE ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL ALL NECESSARY DISCONNECT SWITCHES.
- 7...PROVIDE ALL CONDUIT AND WIRING BETWEEN FUEL LINE SHUT OFF VALVES, SHUNT TRIP BREAKERS, CONTACTOR AND FIRE PROTECTION
- 8...PROVIDE ALL ROUGH IN WORK AND FINAL CONNECTIONS (INCLUDING COMPONENTS SHIPPED LOOSE) TO ALL FOOD FACILITIES EQUIPMENT. ALL WORK IS TO BE IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES AS APPLICABLE.
- 9...PROVIDE AND INSTALL ALL JUNCTION BOXES, OUTLETS, OUTLET COVER PLATES, AND SWITCHES NOT BUILT INTO FIXTURES AND/OR EQUIPMENT.

#### EXHAUST HOOD CONTROL PANEL

(SEE CAPTIVE AIRE SHOP DRAWINGS FOR VOLTAGES & WIRING DETAILS)
A PRE-WIRED ELECTRICAL CONTROL PACKAGE SHALL BE PROVIDED TO OPERATE THE HOOD LIGHTS AND FANS. THE PRE-WIRED CONTROL PANEL, LOCATED INSIDE THE UTILITY CABINET ON HOOD #27, SHALL INCLUDE A STAINLESS STEEL SWITCH PANEL CONSISTING OF LIGHT SWITCH(ES) AND RED-LIGHTED FAN SWITCH(ES), A STARTER/OVERLOAD ASSEMBLY FOR EACH 3 PHASE FAN, NUMBERED INPUT/OUTPUT TERMINAL STRIPS, AND A TERMINAL STRIP FOR DOUBLE-DUAL FIRE SYSTEM MICROSWITCH CONNECTION. ONE MICROSWITCH IS WIRED TO A RELAY FOR SUPPLY FAN SHUTDOWN AND A RELAY FOR ADDITIONAL FIRE SYSTEM ACTIVATED DRY CONTACTS, AND THE OTHER MICROSWITCH REMAINS OPEN FOR CONNECTION OF BUILDING FIRE ALARM SYSTEM (DRY CONTACTS). A WIRING DIAGRAM SHOWING THE CONNECTIONS OF THESE PARTS IS LOCATED ON THE DOOR. ELECTRICAL CONDUIT DROPS FROM THE FAN(S) SHALL BE CONNECTED TO THE NUMBERED TERMINAL STRIP. PROVIDE CONDUIT BETWEEN THE PRE-WIRE PACKAGE AND THE FAN(S).

#### FIRE SUPPRESSION NOTE

(1) REQUIRED .. E.C.; 120V-1; 15.0 AMP CIRCUIT; \$ J.B. (PULL BOX); FIRE SYSTEM CABINET IS LOCATED INSIDE UTILITY CABINET ON HOODS #27 \$ #28. ROUGH-IN JUST BELOW CEILING. EXTEND FROM (PULL BOX) TO ELECTRICAL PANEL FOR INTERWIRE OF SHUNT TRIP CIRCUITS. NOTE: EXHAUST FAN INTERWIRE REQUIRED. VERIFY COMPLETE SYSTEM REQUIREMENTS WITH FIRE PROTECTION CONTRACTOR. REMOTE FIRE SYSTEM EMERGENCY PULL STATIONS CONSISTING OF AN OCTAGONAL J.B. AT 48" AFF WITH EMPTY CONDUIT TO ABOVE DROP CEILING ARE REQUIRED. LOCATIONS AND QUANTITY OF EMERGENCY PULL STATIONS ARE TO BE COORDINATED WITH THE FIRE SYSTEM CONTRACTOR PRIOR TO ROUGH-IN.



WALK-IN LIGHTING AND PENETRATION DETAIL

2 ENGINEERED 11/3/2022
3 REVISED SCOPE OF WORK 12/13/2022
4 OWNER REVISIONS 4/26/2023

**DEVELOPMENT** 

Breckenridge
Kitchen Equipment & Design

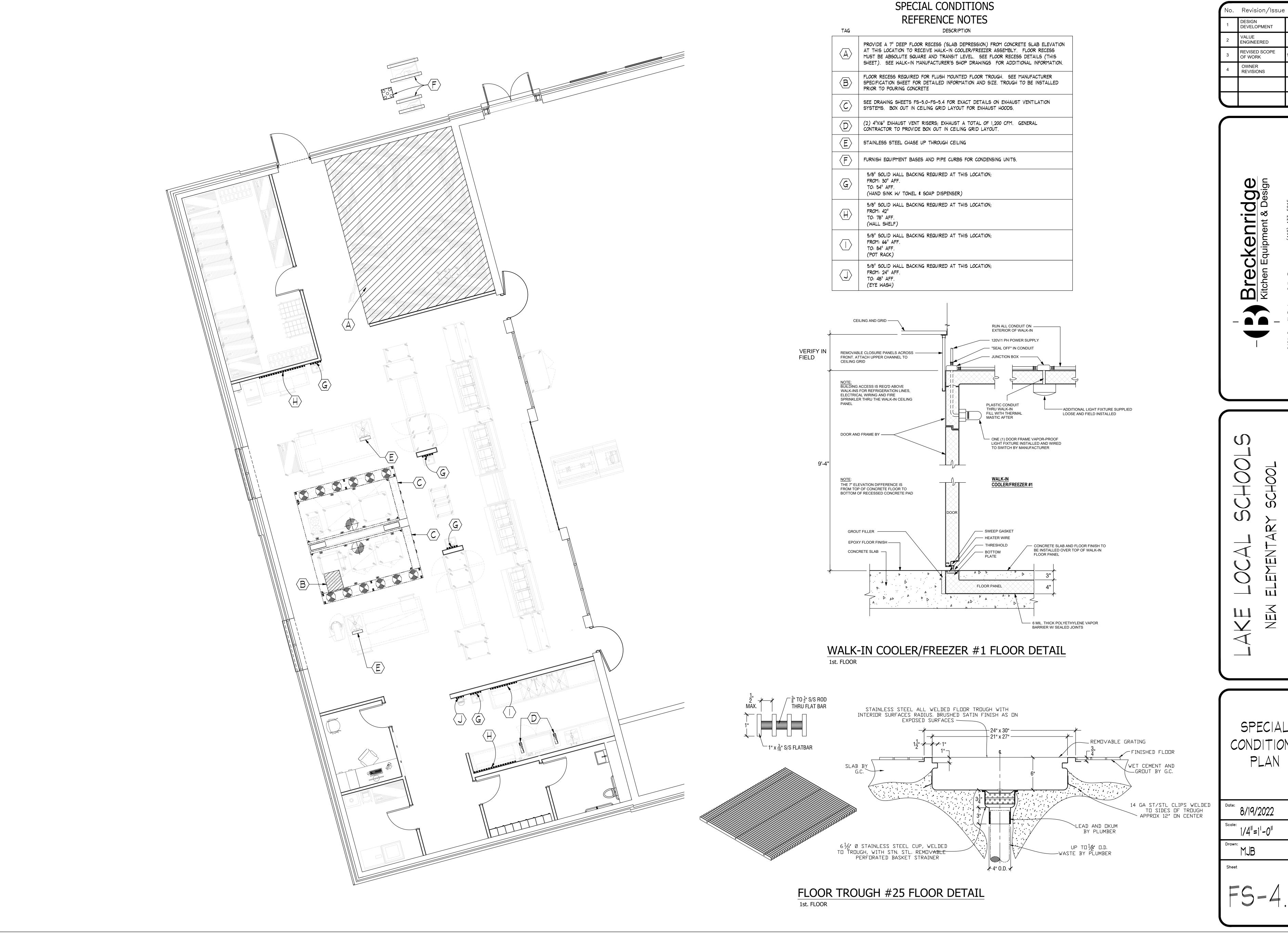
LAKE LOCAL SCHOOLS
NEM ELEMENTARY SCHOOL

ELECTRICAL CONNECTION PLAN

8/19/2022

 $1/4^{\parallel} = 1^{\parallel} - 0^{\parallel}$ 

=5=3.0



No. Revision/Issue Date

SPECIAL

HEAVY

HEAVY

225

225 2700

CAPTIVEAIRE 12' 0"

Approved with NO Exception Taken

HOOD STYLE DIM FROM REAR

VHB/VHB-G 36"X36"

ND2

ND2-PSP-F

BACKSHELF

BD-2

<u>MATERIAL</u>

COMBUSTIBLE

<u>INSTALLATION</u>

NON-COMBUSTIBLE

LIMITED-COMBUSTIBLE

GENERAL NOTES

INSTALLING CONTRACTORS.

HANGING ANGLE LOCATIONS

4.166"

4.166"

4.166"

CALCULATIONS UTILIZED

#3054804-001 STANDARD 710 Intertek

# #3054804-002 Intertek

Listed under ETL File number 3054804-001/002

CLEARANCE TO COMBUSTIBLES

CAPTIVE-AIRE HOODS HAVE OPTIONAL CLEARANCE

REDUCTION SYSTEMS AVAILABLE AS FOLLOWS:

ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS.

ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS. HANGING BRACKETS LOCATED AND WELDED AS SHOWN ON PLANS. ALL OTHER HANGER MATERIALS PROVIDED BY

ALL CONNECTIONS FROM CAPTIVE—AIRE DUCT PER MECHANICAL CONTRACTORS'S PLANS. COOKING EQUIPMENT TO SHUTOFF IN EVENT OF FIRE.

5. EXHAUST FANS TO TURN ON IN EVENT OF FIRE.

SEISMIC RESTAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.

INSTALLING CONTRACTOR.

10. INSTALLING CONTRACTORS ASSUME ALL RELATED REPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.

11. KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.

14. WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.

SIGNED AND "APPROVED" COPIES OF THIS DOCUMENT MUST BE RECEIVED BY THE FACTORY PRIOR TO COMMENCEMENT OF FABRICATION.

12. KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DINING AREA.

13. RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

. ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE—AIRE ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.

LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.

NONE REQUIRED

3" UNINSULATED STANDOFF

1" INSULATED STANDOFF

CLEARANCE REDUCTION SYSTEM

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)

SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED

\*CAPTIVE-AIRE DUCT CONNECTION SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1500-1800 FPM AND A SUPPLY VELOCITY OF 300-400 FPM.

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:

2.246"

2.246"

42"X42"

2.246"

BUILT IN ACCORDANCE WITH NFPA No. 96

		1																	
OOL	<u>INFOI</u>	RMATION			-					117.60					THE LITTLE OA DINET (O)				1
	TAG			FILTER(		EFFICIENCY @ 7		_		HT(S)	AVERAGE FOOT CANDLES @ 36	Γ			TILITY CABINET(S) SYSTEM	ELECTRICAL	SWITCHES	FIRE SYSTEM	HOUD
NΠ	1110	TYPE	QTY	HEIGHT 	LENGTH	MICRONS	QTY		TYPE	GUARD	CANDLES @ 36 <sup>-</sup> AFF	" LOCATION	SIZE	TYPE	SIZE	MODEL #	QUANTITY	PIPING	
1	Item 28	CAPTRATE SOLO FILTER	9	20"	16"	85% SEE FILTER SPEC	6	RECESS	SED ROUND		52	RIGHT	12"×66"×24"	TANK FS	4.0/4.0			YES	1045 LBS
2	Item 27	CAPTRATE SOLO FILTER	9	20"	16"	85% SEE FILTER SPEC	6	RECESS	SED ROUND	) NO	52	LEFT	12"×66"×24"			DCV-2111	1 LIGHT 1 FAN	YES	831 LBS

1/2" - 13 TPI GRADE 5 (MINIMUM) -STEEL HEX NUTS.

1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL ALL-THREAD.

1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUT.

1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.

1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.

4" | 18" | 2700 | 1528 | -0.771" | 2160

4" | 18" | 2700 | 1528 | -0.771" | 2160

۷	27	CAPTRAT	E SULU FILIE	_R   9	20"	16"	SPEC			
HOOD OPTIONS										
	TAG				IPTION					
1	T+ 20	FIELD	WRAPPER	18.00″	HIGH	FRONT	, LEFT, RIGHT.			
I I I tem 28		BACK S	TANDOFF (FLA	T) 1	2″ WIDE	15	66" LONG.			
2	Item 27	FIELD	WRAPPER	18.00″	HIGH	FRONT	, LEFT, RIGHT.			
		OOD OPTIO OOD TAG  1 Item 28	TOOD OPTIONS  TAG  1 Item 28 FIELD  BACK ST	TOOD OPTIONS  DDD TAG  1 Item 28 FIELD WRAPPER  BACK STANDOFF (FLA	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	TOOD OPTIONS  TOOD TAG DPTION  1 Item 28 FIELD WRAPPER 18.00" HIGH  BACK STANDOFF (FLAT) 12" WIDE	TOOD OPTIONS  TOOD TAG DPTION  1 Item 28 FIELD WRAPPER 18.00" HIGH FRONT BACK STANDOFF (FLAT) 12" WIDE 15			

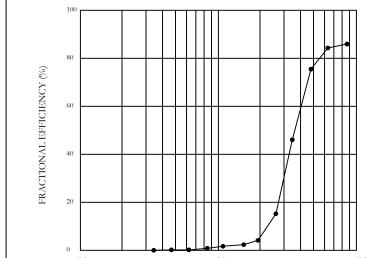
PER	PERFORATED SUPPLY PLENUM(S)										
HOOD				•	HEIGHT				RISERC	(2	
ND	TAG	POS	LENGTH	WIDTH		TYPE	WIDTH	LENG	DIA	CFM	SP
						MUA			14"	360	0.116"
						MUA			14"	360	0.116"
	Item 28	Front	156″	16″	6″	MUA			14"	360	0.116"
1	1 1 1 20	5 Front	136	16	6	MUA			14"	360	0.116"
						MUA			14"	360	0.116"
						MUA			14"	360	0.116″
						MUA			14"	360	0.116"
						MUA			14"	360	0.116"
2	Item 27	Front	156″	16″	6"	MUA			14"	360	0.116"
	Item 27	Front	136	16		MUA			14"	360	0.116"
						MUA			14"	360	0.116"
						MUA			14"	360	0.116"

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER. EFFICIENCY VS. PARTICLE DIAMETER

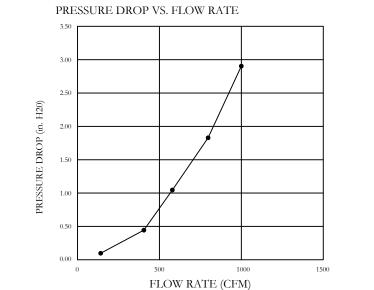


NSF STANDARD #2.

ULC-S649.

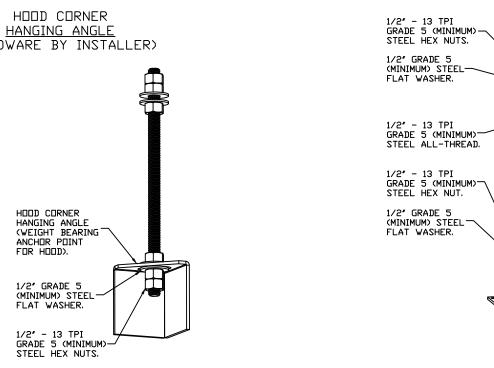
UL STANDARD #1046. INT. MECH. CODE (IMC).

PARTICLE DIAMETER (UM) CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH: NFPA #96.



FLOW RATE (CFM)

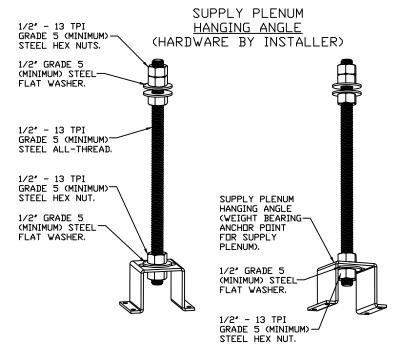




ALONE FRONT

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

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 ABOVE CEILING ANCHORS, SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES, MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

#### SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE

ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS

 $\mathsf{T}\square$ RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK, SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER, SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED, THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.



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**DATE:** 1/17/2023

DRAWN BY: RTG - 52

SCALE: 3/4" = 1'-0"

**MASTER DRAWING** 

SHEET NO.

DWG.#: 5604938

**REVISIONS** 

8/19/2022

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No. Revision/Issue Date

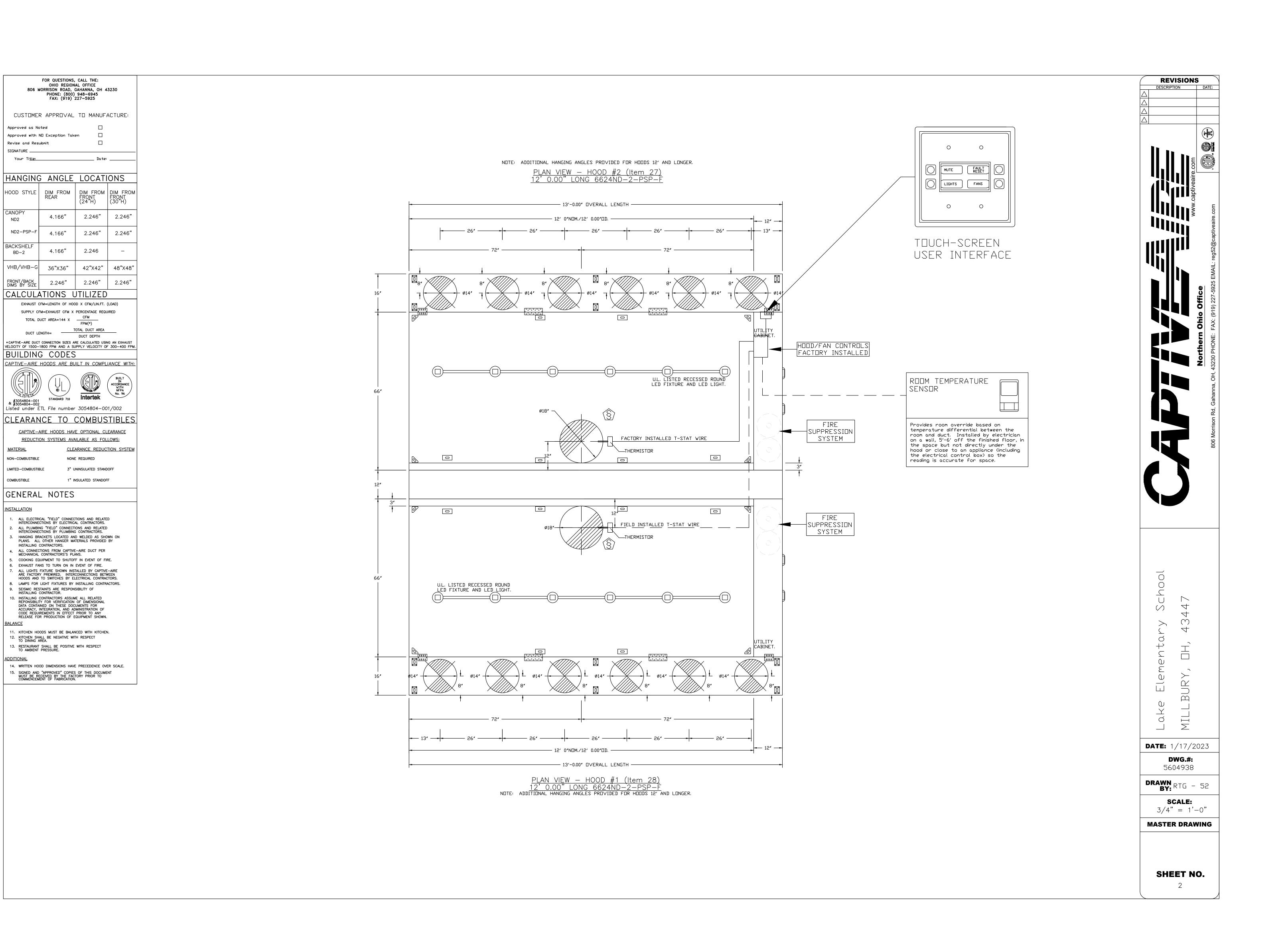
DEVELOPMENT

OWNER REVISIONS

Breckenridg Kitchen Equipment & Desi

VENTILATION

DETAILS



ND2

BD-2

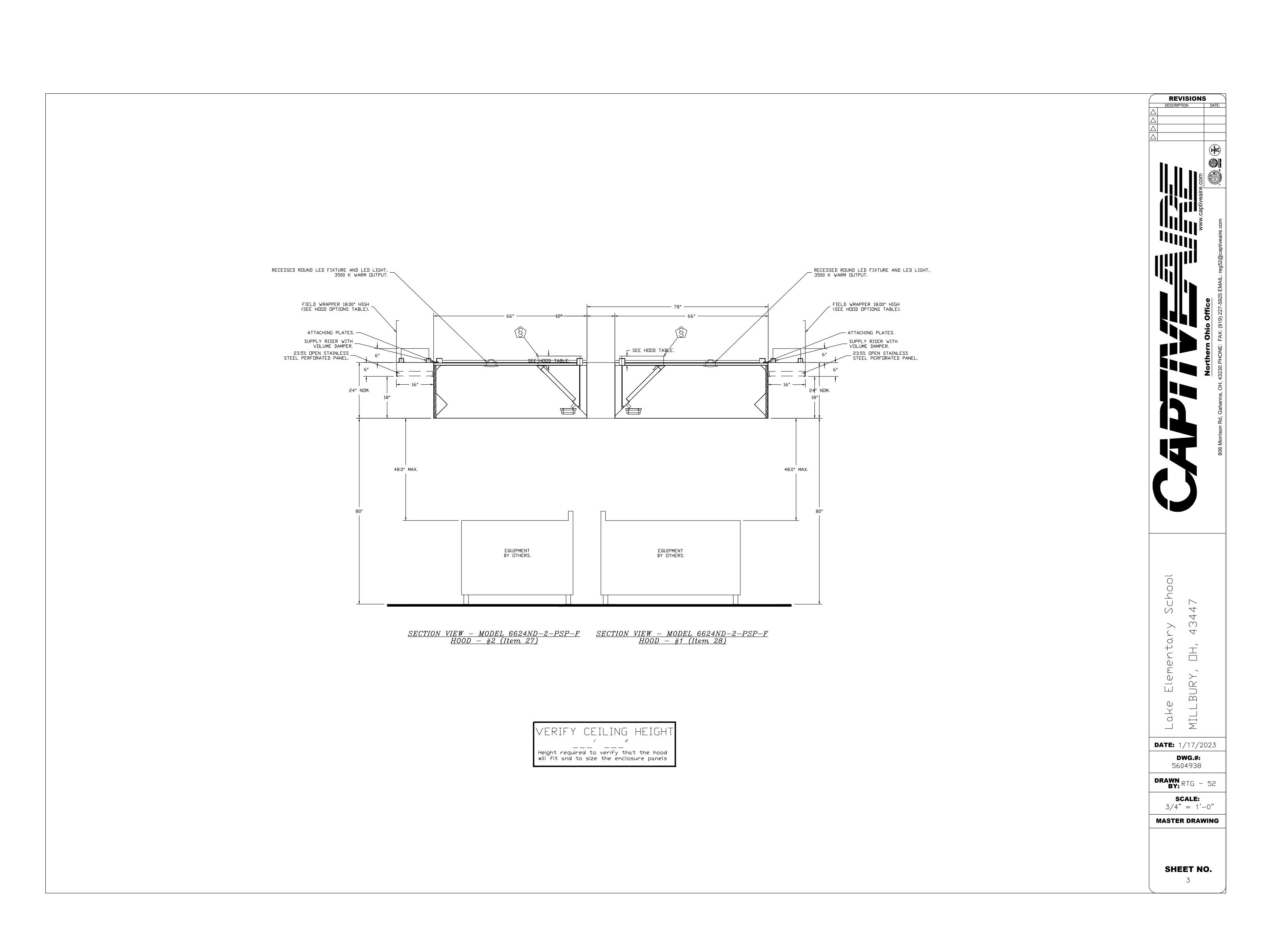
<u>MATERIAL</u>

No. Revision/Issue Date DEVELOPMENT OWNER REVISIONS

Breckenridge
Kitchen Equipment & Design

VENTILATION DETAILS

Date: 8/19/2022



No. Revision/Issue Date

1 DESIGN DEVELOPMENT 9/7/2022

2 OWNER REVISIONS 4/26/2023

Breckenridge

Kitchen Equipment & Design

Sawmill Parkway, Suite 7 (419) 433–5915

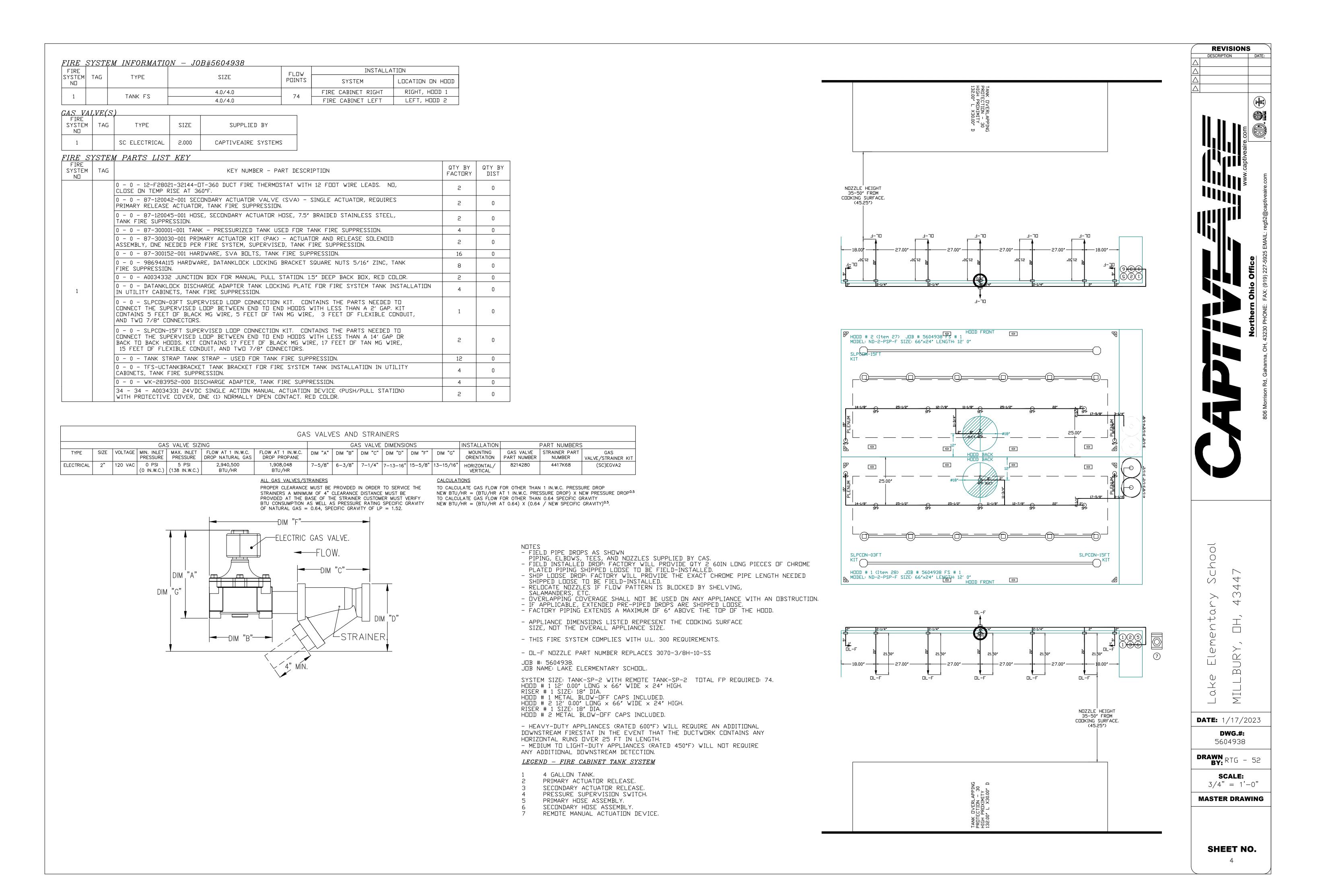
KE LOCAL SCHOOLS
NEM ELEMENTARY SCHOOL

VENTILATION DETAILS

Date: 8/19/2022

Scale: 4

1/4"=1'-( rawn: MJB



No. Revision/Issue Date

1 DESIGN 9/7/2022

2 OWNER REVISIONS 4/26/2023

Breckenridge
Kitchen Equipment & Design

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Mill Parkway, Suite 7 (419) 433–5915

OCAL SCHOOLS EMENTARY SCHOOL

VENTILATION DETAILS

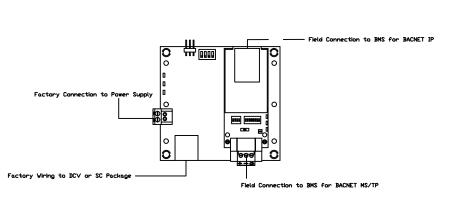
Date: 8/19/2022

Scale: 1/4| 1| 0|

Drawn: MJB

5=53

ALL POWER FEED FROM VARIABLE FREQUENCY DRIVES IN HOOD CONTROL PANEL TO FAN MOTORS MUST BE IN SEPARATE STEEL CONDUIT - OR MOTOR/VFD FAILURE MAY OCCUR



BACNET Interface for DCV and SC Packages

BACNET Interface for Hood Control Panel Specifications:

- Microprocessor-based Hood Controls support communications to an external Building Management System through a BTL listed gateway (BACNET IP and MS/TP).

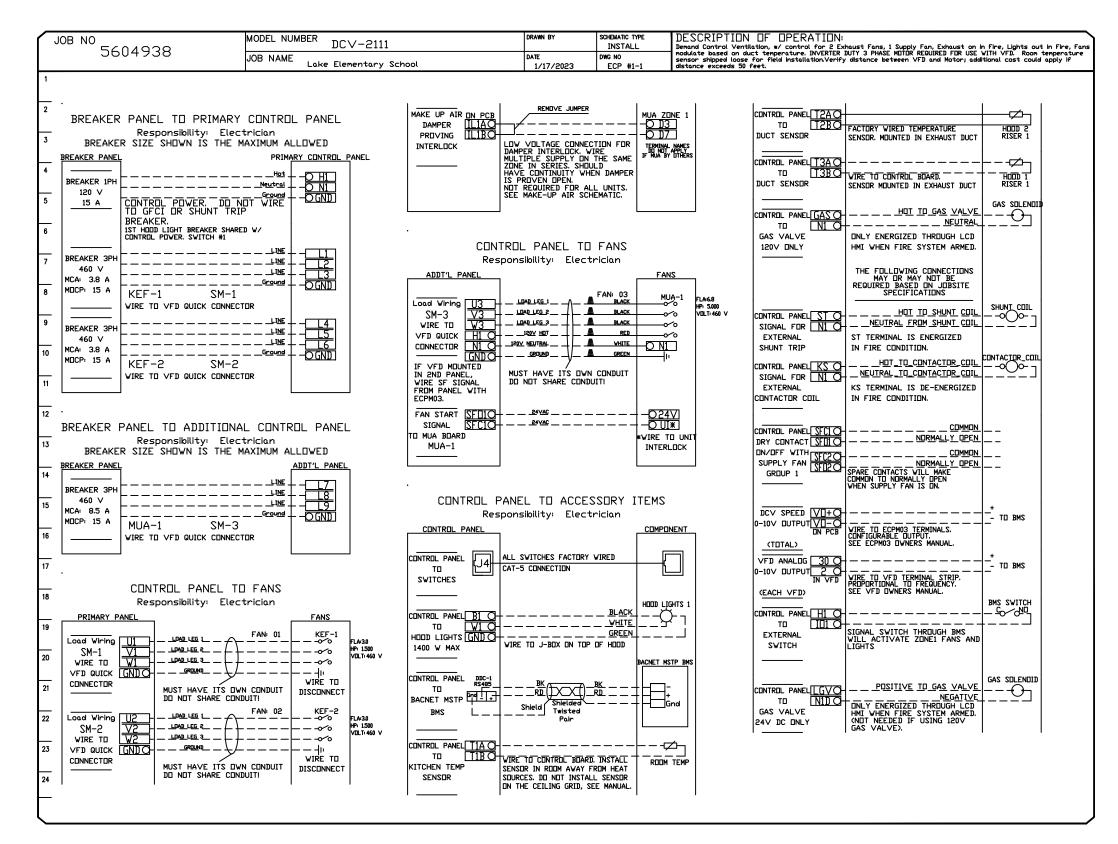
- The Hood Control Panel communicates real time data from sensors and equipment status to the Building Management System. The Hood Control Panel also allows the Building Management System to control fans, lights and wash cycles.

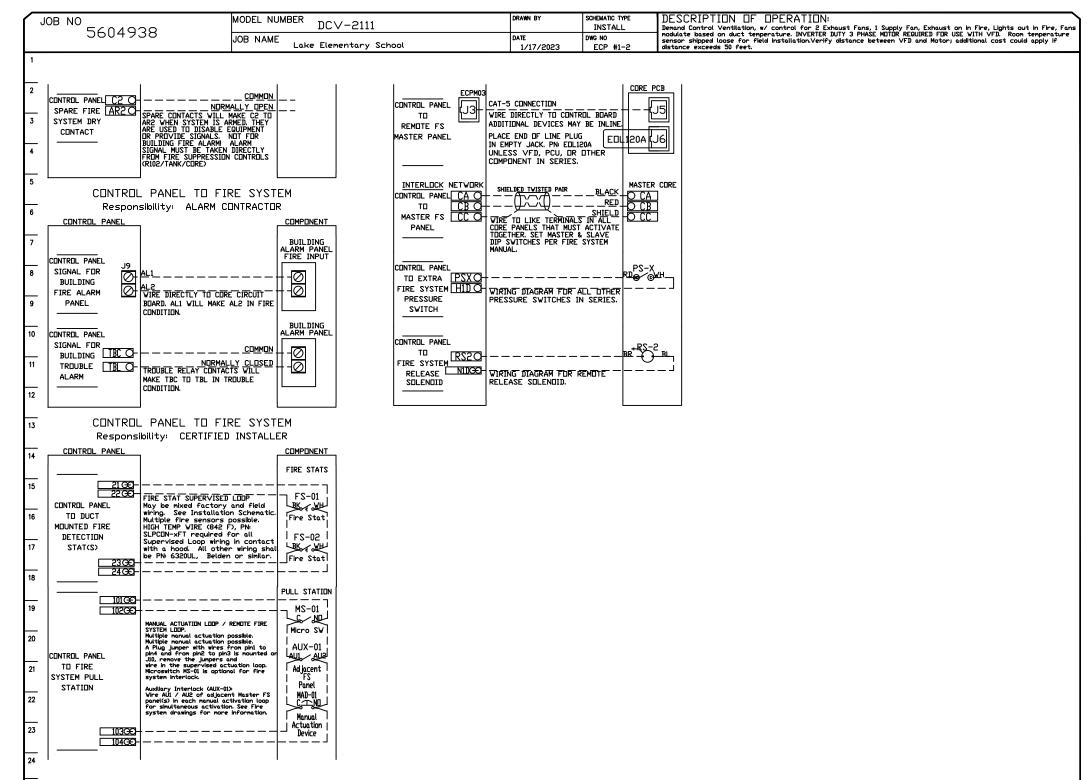
- The monitoring and controlling points for Hood Smart Controls and Demand Control Vertilation Systems are listed below:

#### MONITORING AND CONTROL POINTS LIST

		1	
DCV Packages	Function	SC Packages	Function
Room Temperature	MONITOR	Room Temperature(s)	MONITOR
Duct Temperature(s)	MONITOR	Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR	MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR	Kitchen RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR	Controller Faults	MONITOR
Fan Amperage	MONITOR	Fan Faults	MONITOR
Fan Power	MONITOR	Fan Status	MONITOR
VFD Faults	MONITOR	PCU Faults	MONITOR
Controller Faults	MONITOR	PCU Filter Clog Percentages	MONITOR
Fan Faults	MONITOR	Fire Condition	MONITOR
Fan Status	MONITOR	CORE Fire System	MONITOR
PCU Faults	MONITOR	Building Pressures	MONITOR
PCU Filter Clog Percentages	MONITOR	Fans Button(s)	MONITOR & CONTROL
Fire Condition	MONITOR	Lights Button(s)	MONITOR & CONTROL
CORE Fire System	MONITOR	Wash Button	MONITOR & CONTROL
Building Pressures	MONITOR		
Prep Time Button	MONITOR & CONTROL		
Fans Button	MONITOR & CONTROL		
Lights Button	MONITOR & CONTROL		

Wash Button





DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:

- CONTROLS SHALL BE LISTED BY ETL (UL 508A) AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.2.8 (2015).

- THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.
- TEMPERATURE PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.
- A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES SENSORS, THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.
- A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.

- A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN

- VARIABLE FREQUENCY DRIVES (VFDS) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFDS BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.

- THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.
- AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED
- THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED. OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.

PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.

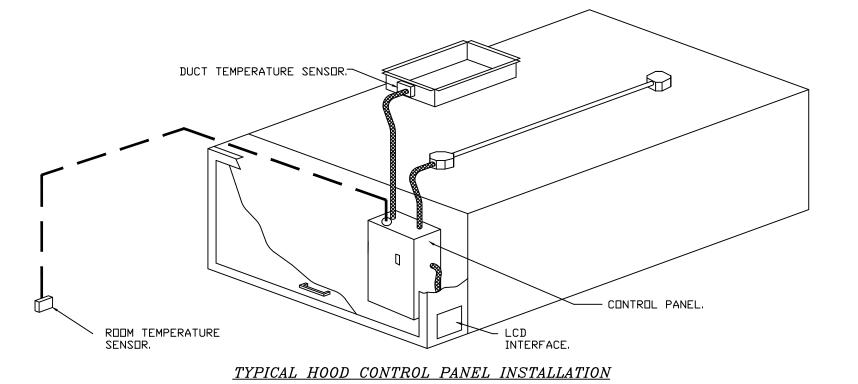
- A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.

- A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL

- AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:

CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).

- A. DN/DFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION. B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).
- C. VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION. D. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
- E. MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
  G. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDS.



SEQUENCE OF OPERATIONS:

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

- AUTOMATIC: THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR FANS ACTIVATE AT A

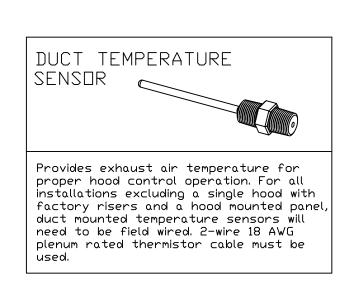
THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR, FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE, IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS DUTLINED IN IECC 403.2.8.

- MANUAL: THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.

SCHEDULE: A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNDCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.

- <u>OTHER:</u> THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).

- <u>FIRE:</u> UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN, FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.



ROOM TEMPERATURE SENSOR

Provides room override based on temperature differential between the room and duct. Installed by electrician on a wall, 5'-6' off the finished floor, in the space but not directly under the hood or close to an appliance (including the electrical control box) so the reading is accurate for space.

HOOD CONTROL Interface

RJ-45 end-of-line terminator.

The LCD interface provides user control and hood status. The faceplate is connected to the hood control panel through CAT-5 cable. A faceplate has 2 RJ-45 connectors. One connects to port J4 or J5 in the hood control panel and the other will typically be occupied by a

DATE: 1/17/2023

DWG.#:
5604938

DRAWN RTG - 52

SCALE:
3/4" = 1'-0"

MASTER DRAWING

SHEET NO.

**REVISIONS** 

No. Revision/Issue Date

1 DESIGN 9/7/2022

2 OWNER REVISIONS 4/26/2023

**example 26** Secretary Sec

Kitchen Equipolaria | Kitchen Equipolaria |

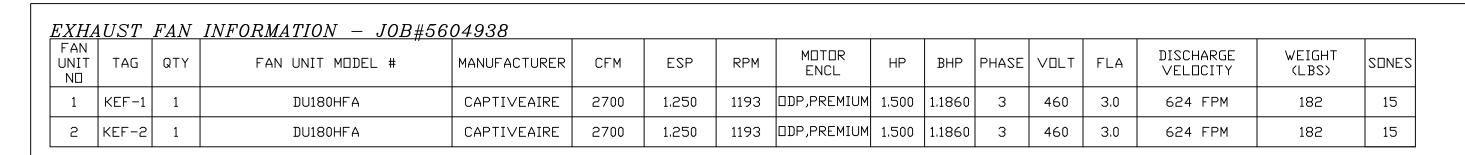
AKE LOCAL SCHOOL NEM ELEMENTARY SCHOOL

VENTILATION DETAILS

Date: 8/19/2022Scale:  $1/4^{\parallel} = 1^{\parallel} - 0^{\parallel}$ 

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MUA FAN INFORMATION - JOB#5604938

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HDUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SONES
3	MUA-1	1	A2-D.500-20D	20MF-2-MOD	A2-D.500	2500	4320	0.630	1649	ODP,PREMIUM	5.000	2.5570	3	460	6.8	8.5A	15A	680	17.1

GAS .	FIRED	MAKE-i	UP AIR	UNIT(S)			
FAN UNIT NO	TAG	INPUT BTUs	DUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%
3	MUA-1	343437	315962	70°F	7 IN. W.C. – 14 IN. W.C.	NATURAL	92

FAN	OPTION	VS				
FAN UNIT NO	TAG	QTY	DESCRIPTION			
		1	GREASE BOX			
1	KEF-1	1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS			
	KEL-I	1	LOAD REACTOR MOUNTED IN FAN			
		1	2 YEAR PARTS WARRANTY			
	KEF-2	1	GREASE BOX			
2		NEE-3	VEE_2	VEE_2	1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	LOAD REACTOR MOUNTED IN FAN			
		1	2 YEAR PARTS WARRANTY			
		1	SIZE 2 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS			
		1	INLET PRESSURE GAUGE, 0-35"			
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC			
		1	SHIP LOOSE GAS STRAINER 1"			
			1	MOTORIZED BACKDRAFT DAMPER FOR A2-D HOUSING - MEETS AMCA CLASS 1A RATING		
3	MUA-1	1	LOAD REACTOR MOUNTED IN FAN			
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY			
		1	DDC MSTP BACNET REMOTE UNIT MONITORING - ALLOWS FOR REMOTE DDC OCCUPIED OVERRIDE AND SETPOINT CHANGES			
		1	2 YEAR PARTS WARRANTY			

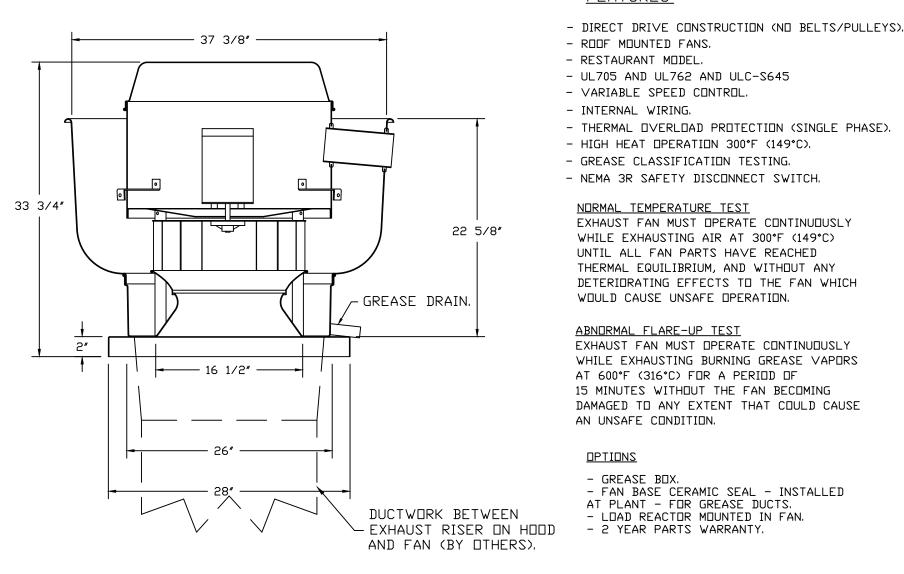
<u>FAN ACCESSORIES</u>

FAN UNIT	TAG		EXHAUST	SUPPLY					
ND	TAG	GREASE CUP	GRAVITY DAMPER	SIDE DISCHARGE		MOTORIZED DAMPER	WALL MOUNT		
1	KEF-1	YES							
2	KEF-2	YES							
3	MUA-1					YES			

CURB ASSEMBLIES

NE	]   DN FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	38 LBS	CURB	26.500"W X 26.500"L X 24.000"H ALONG LENGTH, RIGHT VENTED HINGED.
2	# 2	KEF-2	38 FB2	CURB	26.500"W X 26.500"L X 24.000"H ALONG LENGTH, RIGHT VENTED HINGED.
3	# 3	MUA-1	80 LBS	CURB	31.000"W X 79.000"L X 20.000"H ALONG WIDTH, RIGHT INSULATED.

#### FANS #1 (KEF-1), #2 (KEF-2) - DU180HFA EXHAUST FAN



#### 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 DPERATION 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. <u>ABNORMAL FLARE-UP TEST</u> 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.



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**DATE:** 1/17/2023

DRAWN BY: RTG - 52

SCALE: 3/4" = 1'-0"

**MASTER DRAWING** 

SHEET NO.

DWG.#: 5604938

- 20 GAUGE STEEL CONSTRUCTION.

- ROOF OPENING

DIMENSIONS.

─ 3″ FLANGE.





**REVISIONS** 

DESCRIPTION DATE:

\_\_\_\_\_

No. Revision/Issue Date

DEVELOPMENT

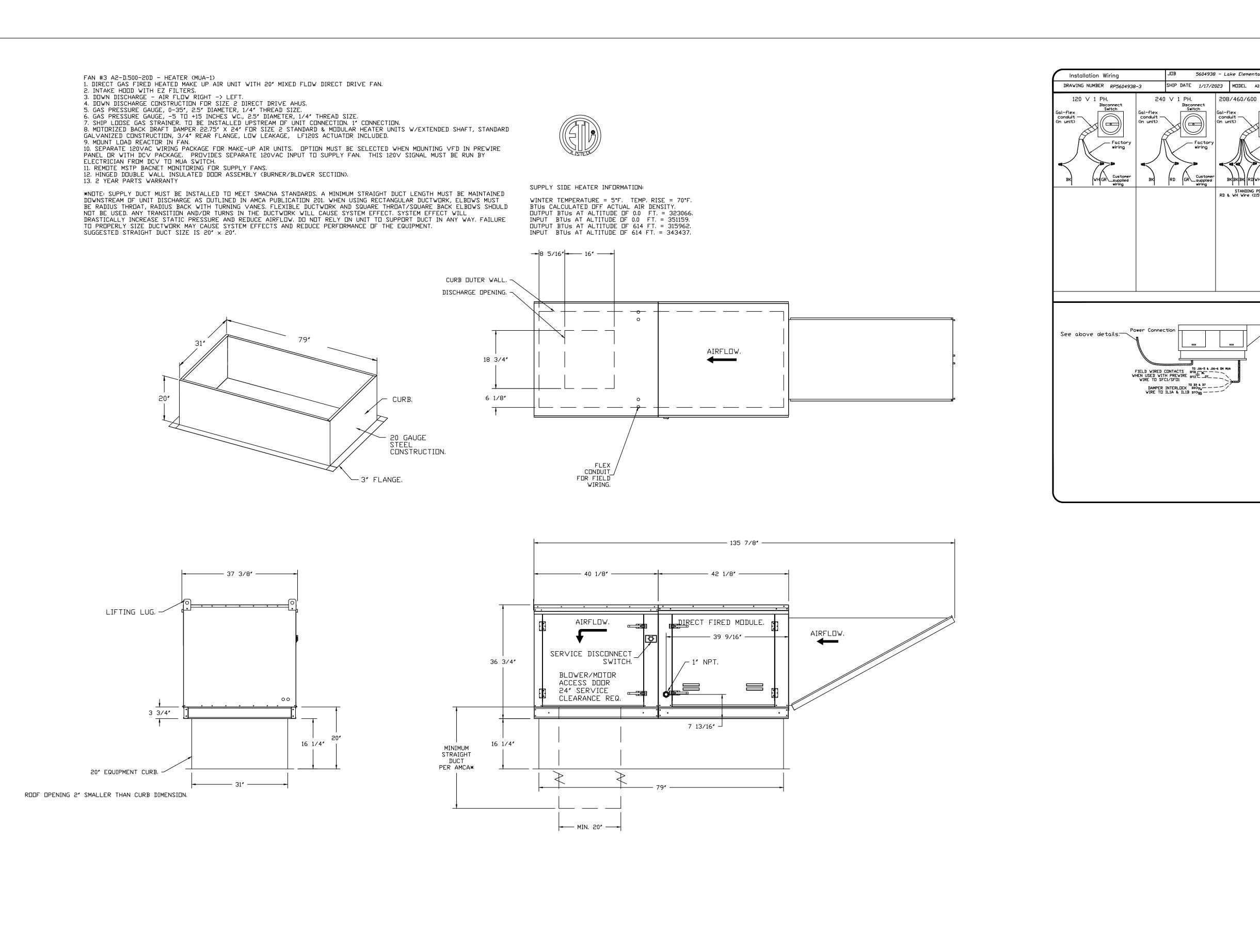
OWNER REVISIONS

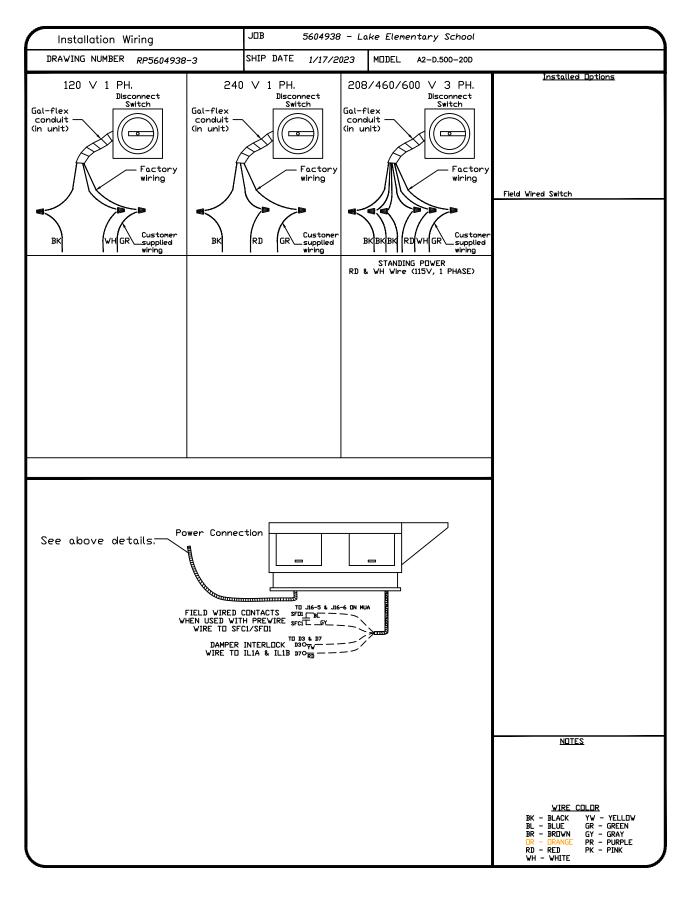
Breckenridge Kitchen Equipment & Design

VENTILATION DETAILS

Date: 8/19/2022

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**DATE:** 1/17/2023

**DWG.#:** 5604938

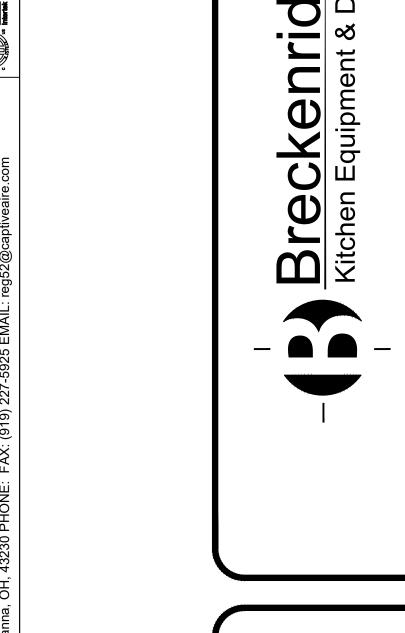
DRAWN BY: RTG - 52

**SCALE:** 3/4" = 1'-0"

**MASTER DRAWING** 

SHEET NO.

**REVISIONS** 



No. Revision/Issue Date

DEVELOPMENT

OWNER REVISIONS

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VENTILATION DETAILS

Date: 8/19/2022



Combo - Frz/Clr OVERALL SIZE: 16'-4 1/2" X 21'-2" X 9'-11 1/4" (INDOOR)

**PANELS** 

FOAMED IN PLACE URETHANE FOAM 4"

**EXTERIOR FINISH** WALL: GALVALUME - EMBOSSED 26 GA EXCEPT AS NOTED

TOP: GALVALUME - EMBOSSED 26 GA FLOOR: GALVALUME - EMBOSSED 26 GA

**INTERIOR FINISH** WALL: ALUMINUM - SMOOTH WHITE .040 TOP: ALUMINUM - SMOOTH WHITE .040

**FLOOR TYPE** F01 FREEZER:

STANDARD 1000# ERA GALVANIZED - SMOOTH -16GA.

(MAY NEED TILE OR THINSET OVERLAY FOR NSF APPROVAL) C01 COOLER: STANDARD 1000# ERA

GALVANIZED - SMOOTH -16GA. (MAY NEED TILE OR THINSET OVERLAY FOR NSF APPROVAL)

**WALK-IN ACCESSORIES** 

(1) LOT, CLOSURE PANEL ALUMINUM EMBOSSED .040

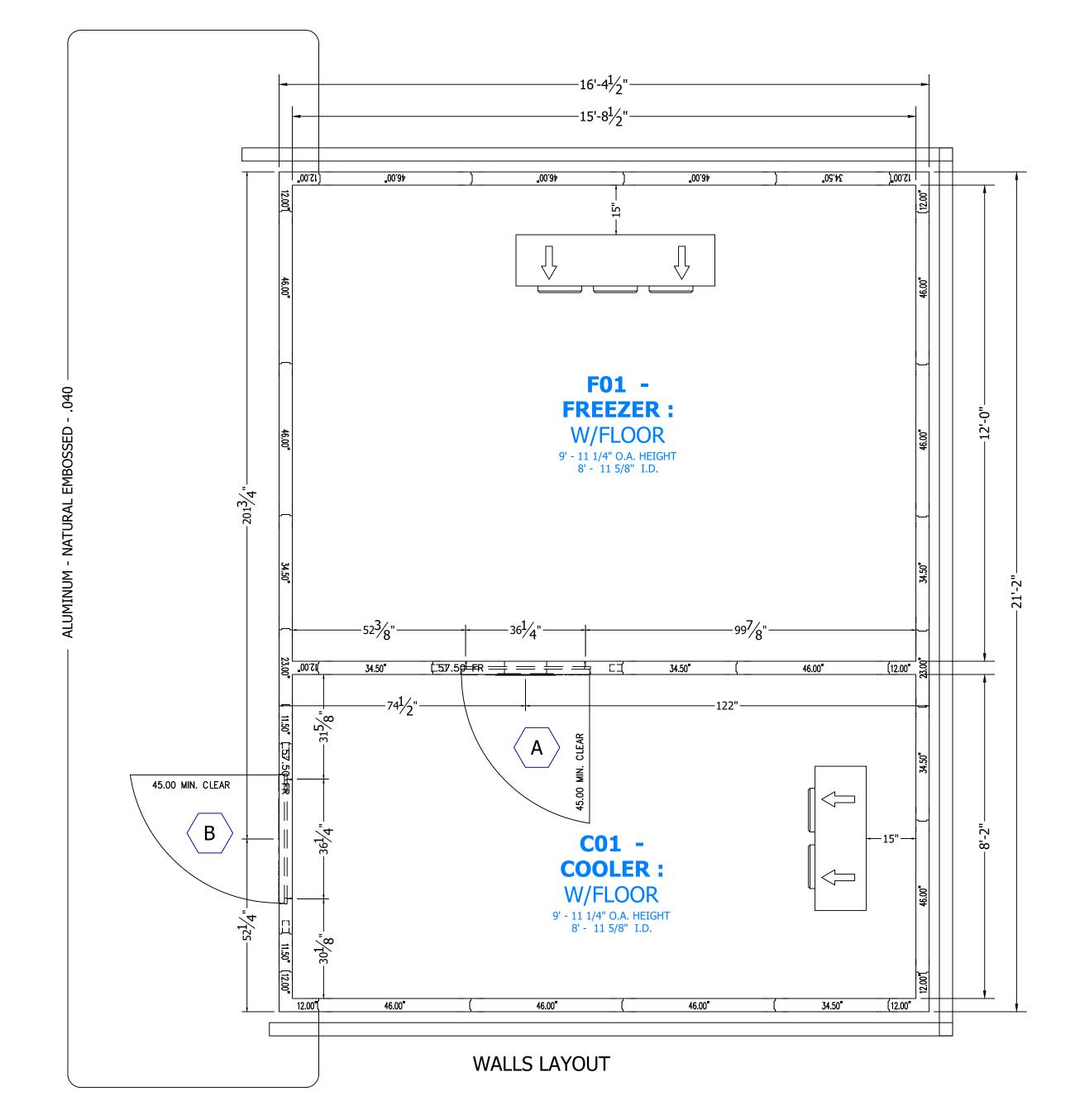
OVER EXPOSED EXTERIOR CLR DR WALL - VERIFY HEIGHT REQUIRED (5) LIGHT FIXTURE - KASON 1809 LED 115V/220V (1) LOT, BUMPER RAIL HAT SHAPE 16GA STAINLESS 2 ROWS ACROSS EXPOSED FRONT CLR DR WALL (4) TRIM ANGLED 3" X 3" X 8FT ALUMINUM EMBOSSED .040

REFRIGERATION F01 FREEZER:

KPC349LZOP-3E VOLTS: 208-230-60-3.BTU:11700 KEL36-121-2ECAFOEM-PR-4 VOLTS: 208-230-60-1,BTU:12603 TRU-DMND BY ARCTIC FOX TEMP: WALK-IN -10,AMBIENT TEMP: 100 (1) SWITCH DISCONNECT 240V 30A 3P GF321N (SHIP LOOSE)

KPC69MZOP-3E VOLTS: 208-230-60-3,BTU:8710 KAM26-094-1ECAFOEM-PR-4 VOLTS: 115-60-1,BTU:9547

TRU-DMND BY ARCTIC FOX TEMP: WALK-IN 35,AMBIENT TEMP: 100 (1) SWITCH DISCONNECT 240V 30A 3P GF321N (SHIP LOOSE)



### **!**ATTENTION

SUBMITTAL DRAWING NOT INTENDED FOR INSTALLATION.

2. ALL WALK-INS ARE DESIGNED FOR INDOOR APPLICATION UNLESS NOTED OTHERWISE 3. PENETRATIONS AND SEALING OF ARE THE RESPONSIBILITY OF OTHERS

4. ALLOW 2" MINIMUM CLEARANCE WITH AIRFLOW OF 5 CFM PER 100 SQ FT AROUND ENTIRE PANEL SURFACES. INDOOR WALK-INS REQUIRE A

5. GENERAL CONTRACTOR TO REFER TO DESIGN AND SPECIFICATION MANUAL FOR FLOOR DETAIL INFORMATION 6. QUARRY TILE OR CONCRETE FLOOR APPLICATIONS: METAL PANEL FACING MAY BE SUSCEPTIBLE TO STAINING DUE TO EXCESSIVE MOISTURE ČREATED BY THE HYDRATION OF CONCRETE TYPE MATERIALS. IT IS ABSOLUTELY NECESSARY THAT EACH ROOM BE PROPERLY VENTILATED. SPECIAL PRECAUTIONS MUST ALSO BE TAKEN WHEN USING MURIATIC ACID DUE TO EFFECTS HYDROCHLORIC FUMES HAVE ON METAL MATERIALS

10. FLOOR, CURB, AND PIT DETAILS ARE FOR GENERAL REFERENCE ONLY. THESE DRAWINGS SHOULD NOT BE USED OR INCORPORATED IN THE

R-44 FOR 6" THICK PANELS. FREEZER R-VALUES ARE R-32 FOR 4" THICK, R-40 FOR 5" THICK, R-48 FOR 6" THICK PANELS, AND R-29 FOR 4" FLOORS. 13. FLOORS NOT DESIGNED FOR WET MOPPING, PALLET JACKS, OR FORKLIFT TRAFFIC.

YOU MUST REVIEW ALL NOTES, DETAILS, DIMENSIONS, FINISHES, DOORS SIZES, LOCATIONS AND SWINGS

APPROVAL- NO CHANGE REQUIRED, MANUFACTURE AS

Panels with non-textured and/or no-profile panel finishes (smooth finishes) on the exterior and interior faces may exhibit "oil canning" and flatness imperfections on the surface. Our standard panels have a stucco embossed texture on both faces that helps to reduce oil canning and any other irregularities in the exposed surface. Please be aware REVISION AND RESUBMISSION. of this potential situation in your specification process. Such "oil canning" and flatness issues are typical and are not covered under standard warranties.

Kolpak and Harford walk-ins are compliant with UL standards.

Door panels are UL471, UL file listing E46140.

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No. Revision/Issue Date

DEVELOPMENT

OWNER REVISIONS

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SHEET #

AD-1 of 3

VENTILATION DETAILS

> 8/19/2022 1/4"=1'-0"

**AS-BUILT DRAWING FOR INSTALLATION WILL BE AVAILABLE AFTER ORDER IS PLACED**. HARD COPY OF AS-BUILT DRAWING WILL BE IN HARDWARE BOX WITH WALK-IN SHIPMENT TO JOBSITE. ALL AS-BUILT DRAWINGS SHOW PART NUMBERS AND ID LABELS ON PLAN VIEWS.

75°F AMBIENT AND 55% RELATIVE HUMIDITY OR LESS AROUND THE EXTERIOR OF THE WALK-IN.

7. PANEL LAYOUT MAY CHANGE BASED ON OPTIMAL MANUFACTURING STANDARDS 8. WALK-IN TOP IS NOT DESIGNED FOR FOOT TRAFFIC OR STORAGE UNLESS NOTED OTHERWISE 9. IF CONDENSING UNIT IS LOCATED IN THE INTERIOR OF BUILDING A MINIMUM OF 24" OF CLEARANCE IS REQUIRED AROUND TOP AND SIDES DESIGN OR PREPARATION OF THE INSULATED FLOOR, SUB-SLAB OR CURBS, WITHOUT HAVING THE DESIGN REVIEWED BY A QUALIFIED ENGINEER. ALL FOOTINGS, FOUNDATION WALLS AND CONCRETE WEAR SLABS ARE THE RESPONSIBILITY OF THE BUILDING ENGINEER OR ARCHITECT.

11. THE FOAM PLASTIC USED IN THIS PRODUCT COMPLIES TO THE IBC SECTION 2603 AS FOLLOWS: FLAME SPREAD RATING: 20; SMOKE DEVELOPED RATING: 450; FLASH IGNITION TEMPERATURE RATING: 915°F; SPONTANEOUS IGNITION TEMPERATURE RATING: 950°F.

12. R-VALUES MEET DOE REQUIREMENTS AND ARE ASTM C518 TESTED. COOLER R-VALUES ARE R-29 FOR 4" THICK, R-36 FOR 5" THICK, AND RATE OF THICK PANELS. THE PROPERTY AND REPORT AND RESPONDENT AND RESPONDENT AND RESPONDENT AND RESPONDENT.

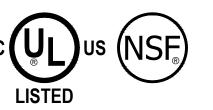
SMOOTH FINISH DISCLAIMER

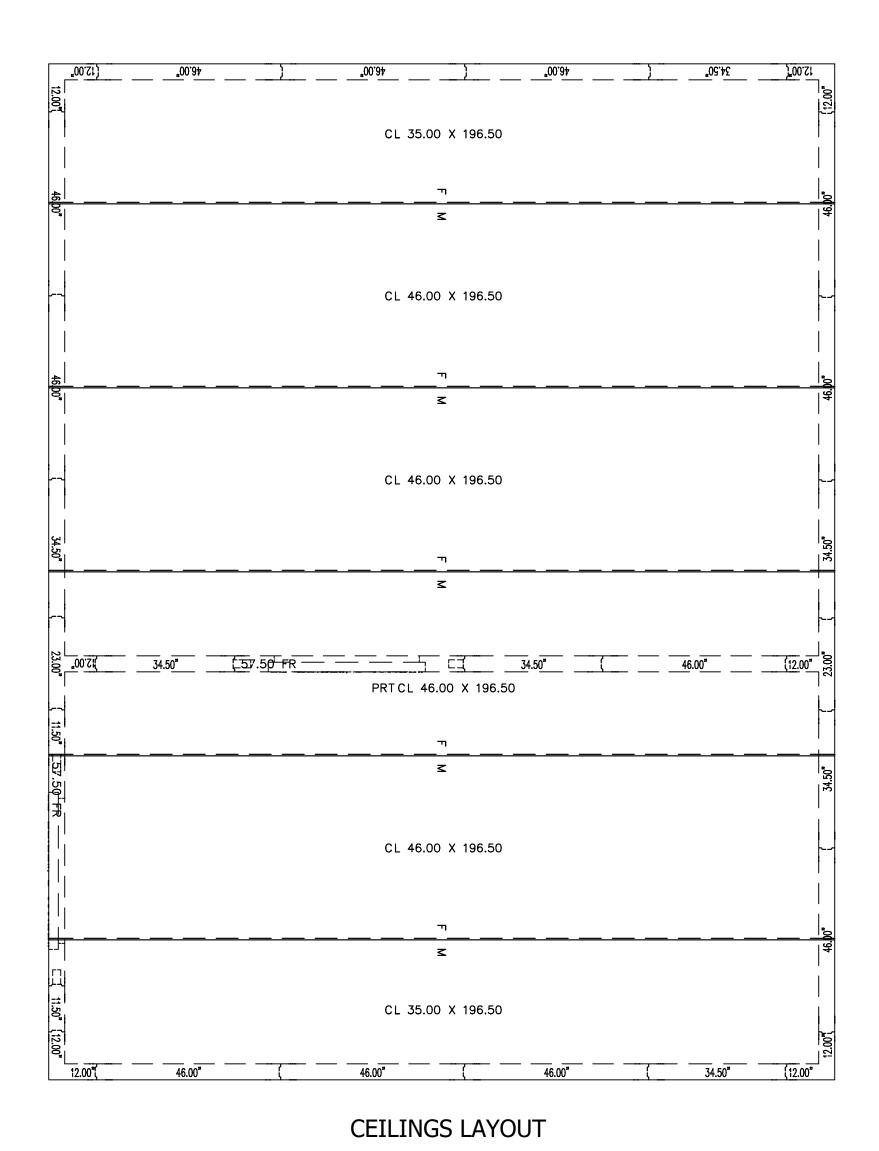
**NOTICE:** 

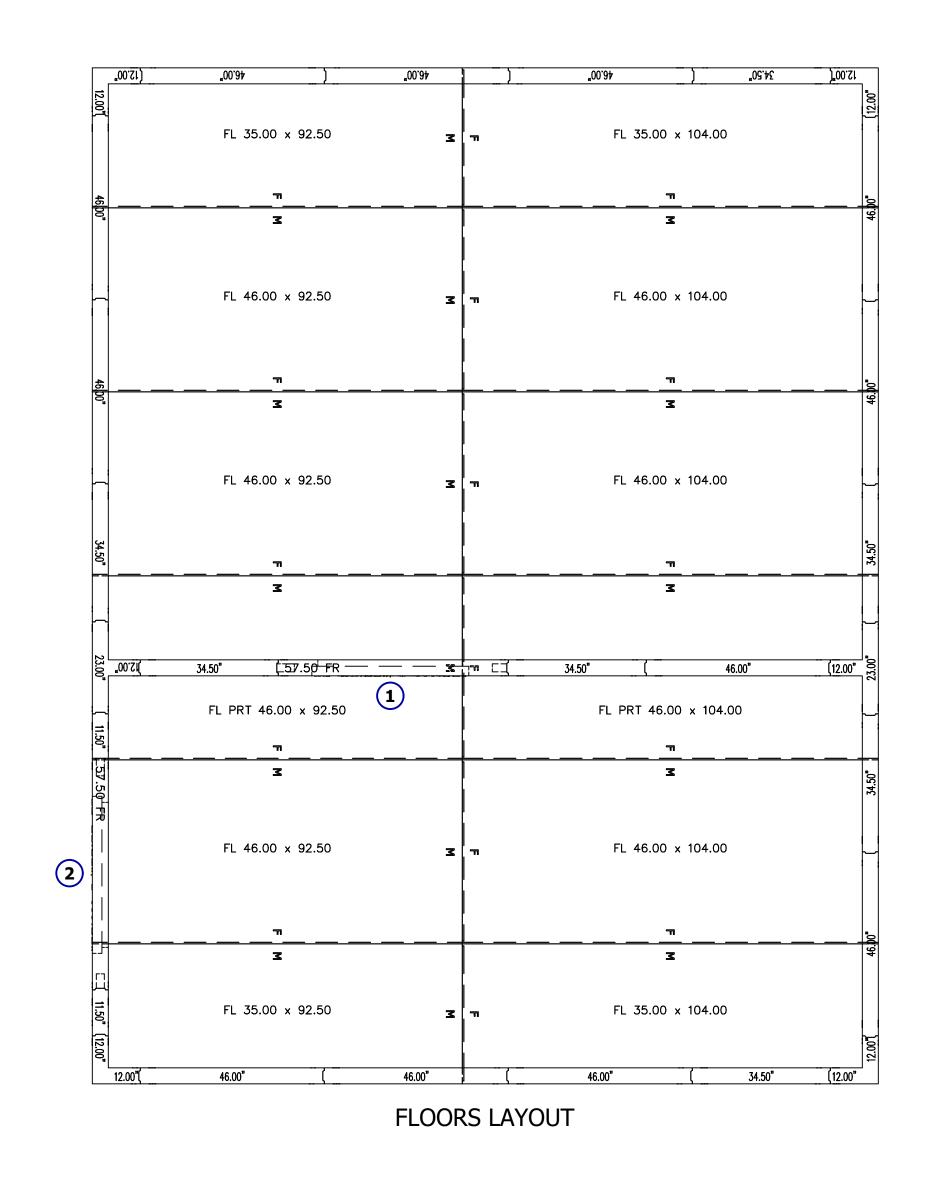
• Standard Evaporator coils are UL412.

Condensing Units are UL1995.









## **!**ATTENTION

AS-BUILT DRAWING FOR INSTALLATION WILL BE AVAILABLE AFTER ORDER IS PLACED. HARD COPY OF AS-BUILT DRAWING WILL BE IN HARDWARE 2. ALL WALK-INS ARE DESIGNED FOR INDOOR APPLICATION UNLESS NOTED OTHERWISE

8. WALK-IN TOP IS NOT DESIGNED FOR FOOT TRAFFIC OR STORAGE UNLESS NOTED OTHERWISE 9. IF CONDENSING UNIT IS LOCATED IN THE INTERIOR OF BUILDING A MINIMUM OF 24" OF CLEARANCE IS REQUIRED AROUND TOP AND SIDES 10. FLOOR, CURB, AND PIT DETAILS ARE FOR GENERAL REFERENCE ONLY. THESE DRAWINGS SHOULD NOT BE USED OR INCORPORATED IN THE DESIGN OR PREPARATION OF THE INSULATED FLOOR, SUB-SLAB OR CURBS, WITHOUT HAVING THE DESIGN REVIEWED BY A QUALIFIED ENGINEER. ALL FOOTINGS, FOUNDATION WALLS AND CONCRETE WEAR SLABS ARE THE RESPONSIBILITY OF THE BUILDING ENGINEER OR ARCHITECT. 11. THE FOAM PLASTIC USED IN THIS PRODUCT COMPLIES TO THE IBC SECTION 2603 AS FOLLOWS: FLAME SPREAD RATING: 20; SMOKE DEVELOPED RATING: 450; FLASH IGNITION TEMPERATURE RATING: 915°f; SPONTANEOUS IGNITION TEMPERATURE RATING: 950°f.

12. R-VALUES MEET DOE REQUIREMENTS AND ARE ASTM C518 TESTED. COOLER R-VALUES ARE R-29 FOR 4" THICK, R-36 FOR 5" THICK, AND R-44 FOR 6" THICK PANELS. FREEZER R-VALUES ARE R-32 FOR 4" THICK, R-40 FOR 5" THICK, R-48 FOR 6" THICK PANELS, AND R-29 FOR 4" FLOORS.

13. FLOORS NOT DESIGNED FOR WET MOPPING, PALLET JACKS, OR FORKLIFT TRAFFIC.

SPECIAL PRECAUTIONS MUST ALSO BE TAKEN WHEN USING MURIATIC ACID DUE TO EFFECTS HYDROCHLORIC FUMES HAVE ON METAL MATERIALS

YOU MUST REVIEW ALL NOTES, DETAILS, DIMENSIONS, FINISHES, DOORS SIZES, LOCATIONS AND SWINGS

**APPROVAL**- NO CHANGE REQUIRED, MANUFACTURE AS

MANUFACTURE AS DRAWN. MOT APPROVED - DESIGN CHANGES REQUIRE DRAWING REVISION AND RESUBMISSION.

# SMOOTH FINISH DISCLAIMER

Panels with non-textured and/or no-profile panel finishes (smooth finishes) on the APPROVED AS NOTED- MAKE REQUIRED CHANGES AND exterior and interior faces may exhibit "oil canning" and flatness imperfections on the surface. Our standard panels have a stucco embossed texture on both faces that helps to reduce oil canning and any other irregularities in the exposed surface. Please be aware of this potential situation in your specification process. Such "oil canning" and flatness issues are typical and are not covered under standard warranties.

# **NOTICE:**

Kolpak and Harford walk-ins are compliant with UL standards.

No. Revision/Issue Da DEVELOPMENT

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SHEET #

**AD-1** of 3

VENTILATION DETAILS

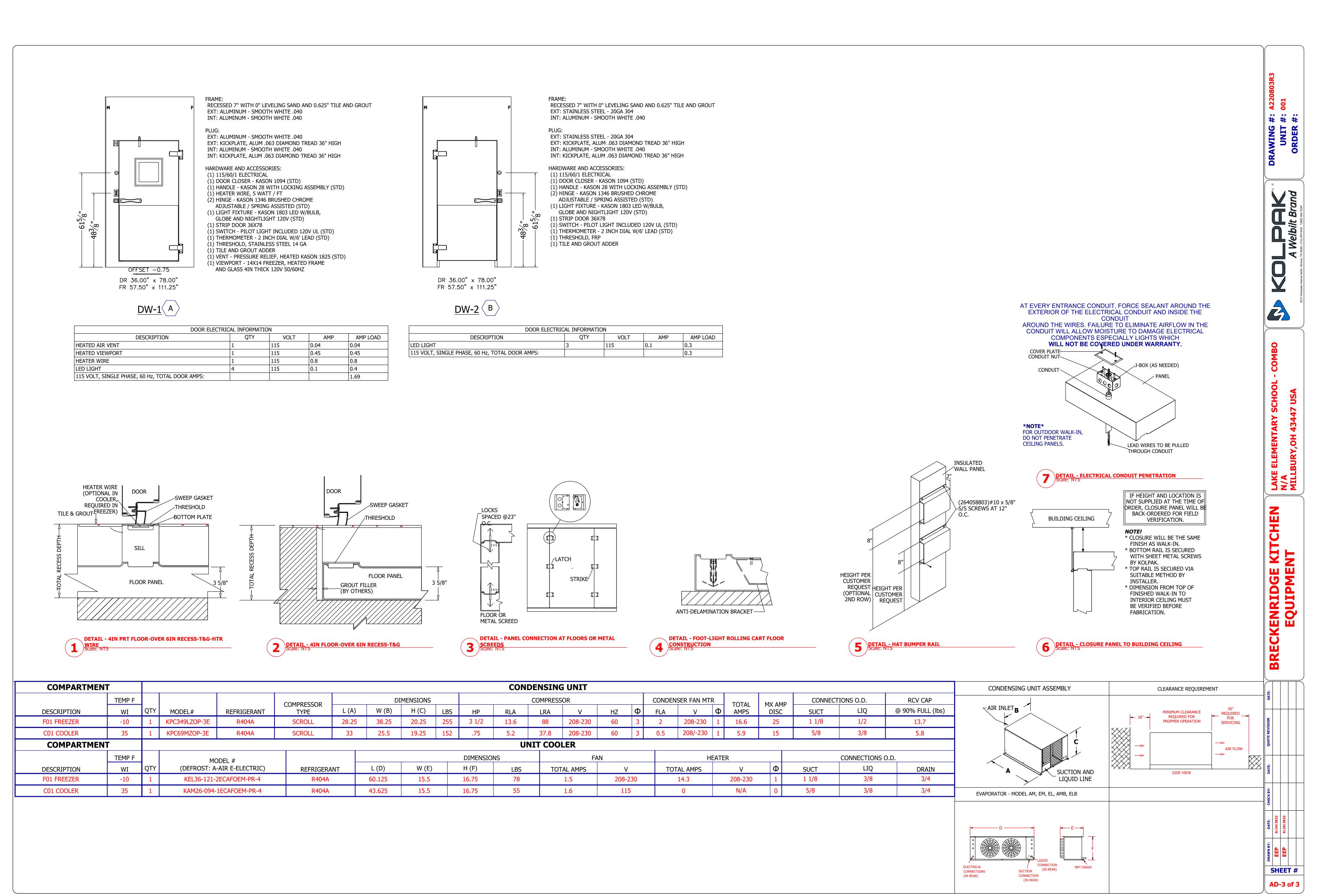
Date: 8/19/2022

1/4"=1'-0"

• Door panels are UL471, UL file listing E46140.

Standard Evaporator coils are UL412.

Condensing Units are UL1995.

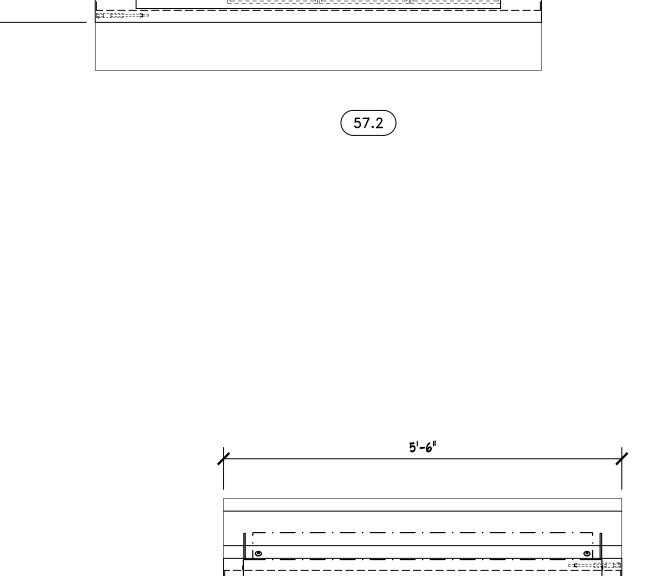


No. Revision/Issue Date DEVELOPMENT OWNER REVISIONS

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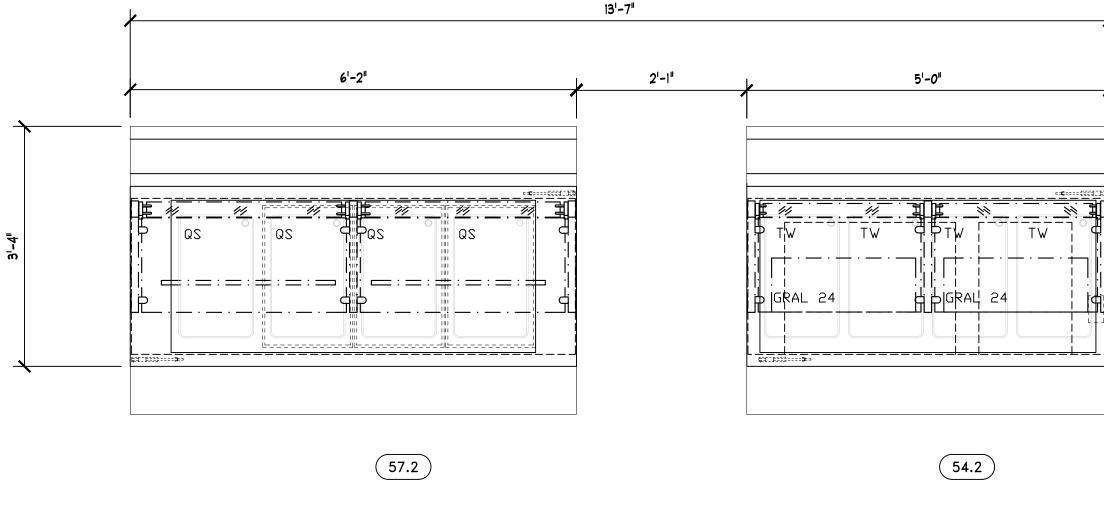
DETAILS

Date: 8/19/2022



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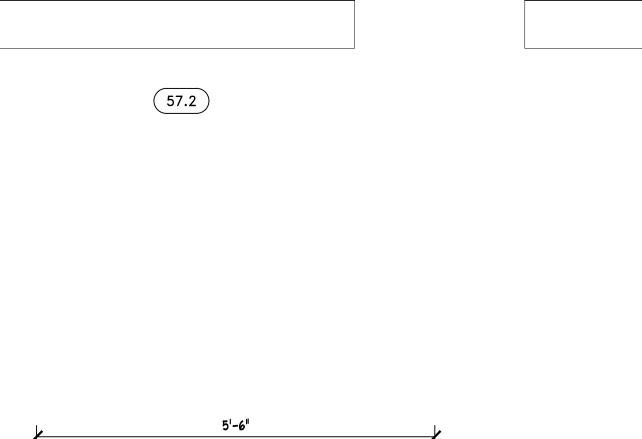
13'-7"

6'-2"

57.1

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58

SPECLINE CONSTRUCTION

TOP - 14 GA. S/S WITH SQ. TURNDOWN ON ALL SIDES W/ CORNERS WELDED & POLISHED TO A #4 SATIN FINISH - ALL EDGES TO HAVE #7 HI-LITE FINISH.

BODY - SEAMLESS MOLDED FIBERGLASS (F.R.P.) W/ SMOOTH SURFACE & ROUNDED CORNERS.

STANDOFF PANEL - 16 GA. S/S PANEL W/ LASER CUT DESIGN (VERIFY DESIGN). 16 GA. S/S W/ LP DR VINYL GRAPHICS (VERIFY DESIGN), 1" STAND DFF BUSHING.

BODY SHELVING - 18 GA. S/S INSERT W/ COVED CORNERS & REMOVABLE TOP FOR ACCESS. FURN INTERMEDIATE ADJUSTABLE SHELF MOUNTED ON PILASTER STRIPS WHERE REQUIRED.

THERMALWELL HOT FOOD UNITS - 12" x 20" DIE-STAMPED OPN'GS FOR DRY-MOIST ELECTRIC HEAT - U.L. RECOGNIZED WELLS W/ (563 WATT @208)(751 WATTS @120/240V) HEAT SOURCE & INDIVIDUAL SOLID STATE DIGITAL CONTROLS, PRE-WIRED TO CIRCUIT BREAKER - EACH HOT FOOD WELL TO BE PRE-PLUMBED THRU A COMMON MANIFOLD TO A ¼ TURN DRAIN VALVE BELOW THE BODY.

CASTERS - 5" DIA. NON-MARKING, BALL BEARING SWIVEL TYPE - FURN ALL W/ BRAKES.

TEMPESTAIR COLD PAN - 9" DEEP 18 GA. S/S PAN W/ REFRIGERATION COILS BONDED TO UNDERSIDE IN MASTIC - FULLY INSULATED W/ URETHANE FOAM - FIT W/ AXIAL FANS AS SHOWN - FURN W/ 1" OPEN DRAIN EXTENDED TO SHUT-OFF VALVE BELOW.

CONDENSING UNIT - AIR-COOLED, HERMETICALLY SEALED - FACTORY TESTED & FULLY CONNECTED AS REQ'D - MADE READY TO PLUG IN - MOUNTED ON 18 GA. GALV. CHANNEL BASE - 18 GA. S/S REMOVABLE LOUVERED ACCESS PANELS - UNITS SIZED AS REQ'D. WITH ALL NECESSARY VALVES AND CONTROLS FOR OPERATION.

QUICKSWITCH - 18 GA. S/S DIE-STAMPED PAN W/ ¾" DIA. OPEN DRAIN & FULLY INSULATED. REFRIGERATION COILS BONDED TO UNDERSIDE IN MASTIC - REFRIGERATION SYSTEM TO BE A HERMETICALLY SEALED COMPRESSOR OPERATING ON R449A (HFC) REFRIGERANT DRY-MOIST ELECTRIC HEAT W/ (500 WATT @208)(661 WATTS @120/240V) HEAT SOURCE & INDIVIDUAL SOLID STATE DIGITAL CONTROLS - ALL SWITCHES AND CONTROLS ARE FULLY ACCESSIBLE.

SPECLINE OPTIONS

A SOLID TRAY SLIDE - 16 GA. S/S BEADED, MOUNT ON S/S FOLD-DOWN BRACKETS.

D CUTTING BOARD - 16 GA. S/S W/ EDGES TURNED DOWN, WELDED & POLISHED.

ON S/S FOLD-DOWN BRACKETS.

HEAT LAMPS W/ LIGHTS - INFRARED FOOD WARMER W/ INCANDESCENT LIGHTS.
SECURED TO
UNDERSIDE OF PROTECTOR / DISPLAY STAND SHELVES. PREWIRED, SWITCHED &

DRAENS - EACH HOT FOOD WELL SHALL BE PLUMBED TO COMMON MANIFOLD AND
EXTENDED TO A SHUT OFF VALVE BELOW THE BODY.

AA LINE-UP LOCKS - BARREL BOLT & SLOT DESIGN W/ CAM LOCKING ACTION, LOCKS TO BE MOUNTED ON OPPOSING CORNERS FOR MAXIMUM VERSATILITY.

RR LED LIGHT STRIPS - 3.3 WATTS PER FOOT - FURN WITH 120-240/12VDC POWER SUPPLY . WIRED TO POWER SWITCH.

CDB SELF SERVICE DUEL SIDED BUFFET TO HAVE 36" TEMPERED GLASS & TUBULAR SUPPORTS POST, WITH GLASS TOP SHELF,

 $\overline{\mathsf{GAG}}$  ADJUSTABLE FOOD PROTECTORS TO HAVE PIVOT FRONT TEMPERED GLASS &  $1\frac{1}{4}''$  SQUARE TUBING REAR POST. WITH GLASS TOP SHELF.

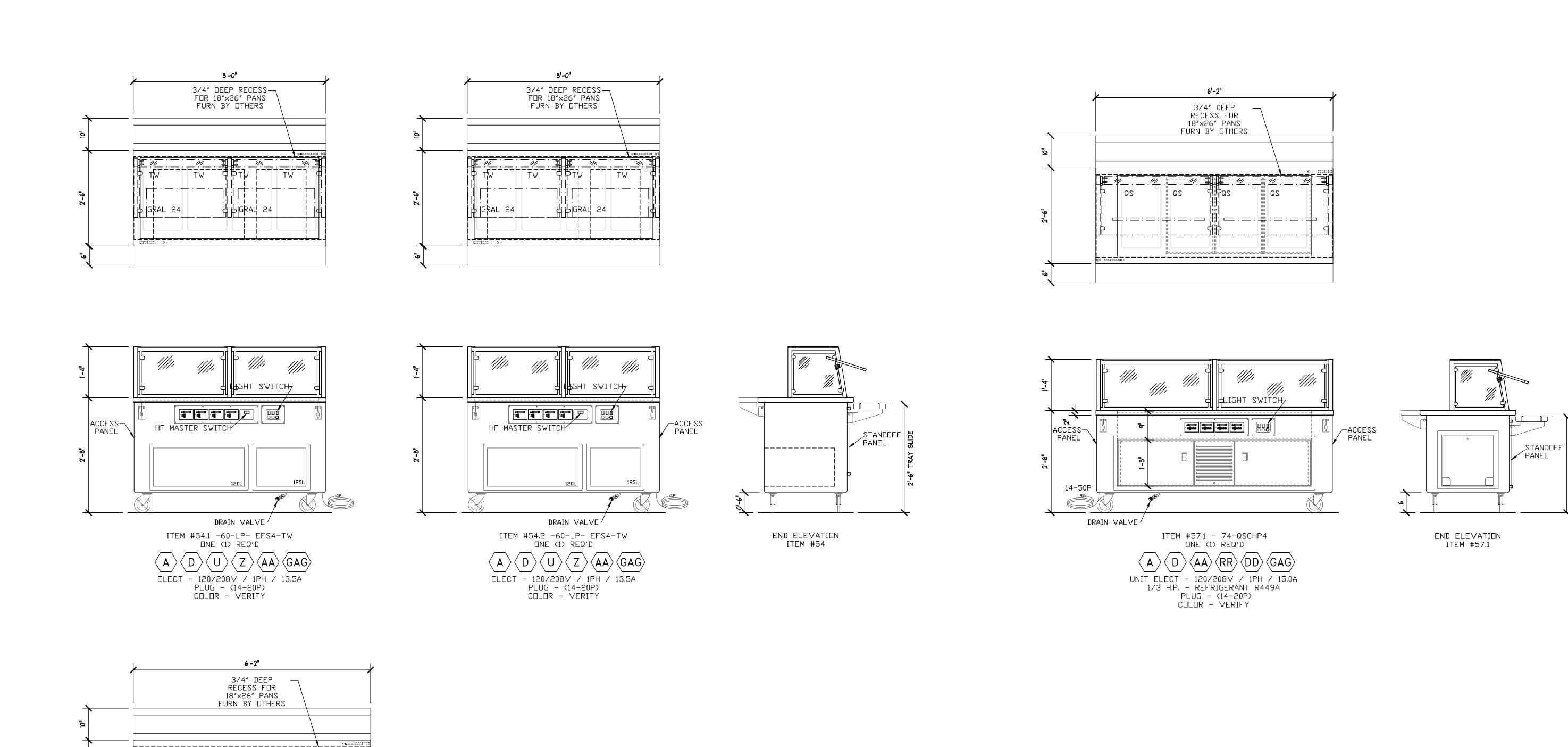
No. Revision/Issue Date DEVELOPMENT OWNER REVISION

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SERVING DETAILS

Date: 8/19/2022

3/4<sup>||</sup>=1<sup>|</sup>-0<sup>||</sup>



-ACCESS PANEL

STANDOFF PANEL

END ELE∨ATION ITEM #57.2

ITEM #57.2 - 74-QSCHP4

DNE (1) REQ'D

A

D

AA

RR

DD

GAG

UNIT ELECT - 120/208V / 1PH / 15.0A

1/3 H.P. - REFRIGERANT R449A

PLUG - (14-20P)

COLOR - VERIFY

ACCESS— PANEL

DRAIN VALVE

No. Revision/Issue Date

1 DESIGN 9/7/2022

2 OWNER REVISION 4/26/2023

Breckenridge

Kitchen Equipment & Design

Way, Suite 7 (419) 433–5915
(419) 433–6616 Fax

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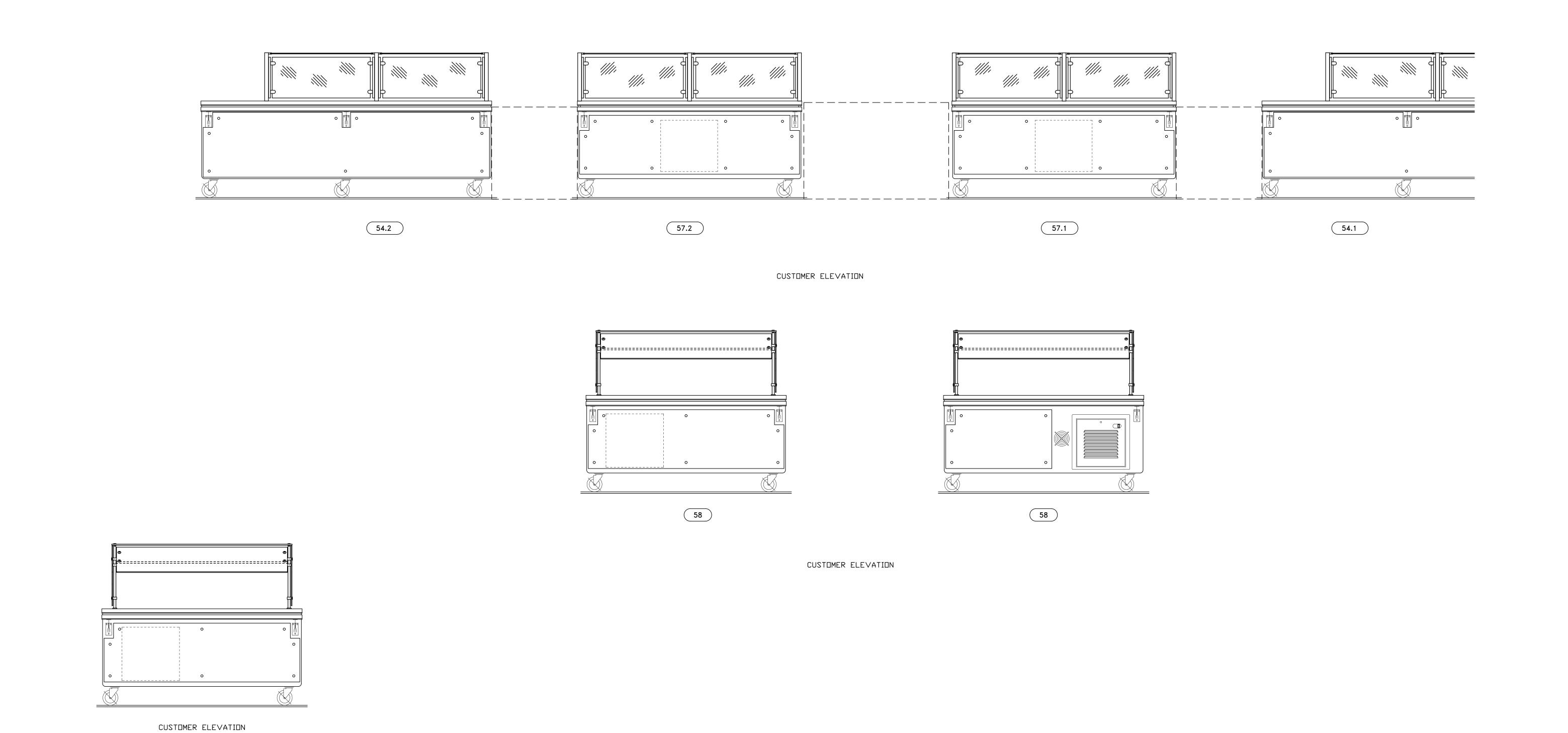
SERVING COUNTER DETAILS

Date: 8/19/2022

Scale: 41 4 4 4

Scale:  $3/4^{\parallel} = 1^{1} - 0^{\parallel}$ Drawn: MJB

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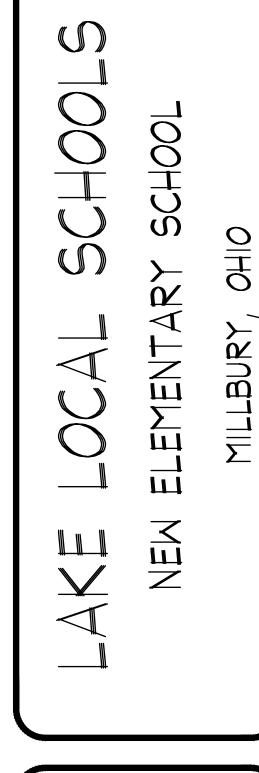


5'-6"

DRAIN VALVE

STANDOFF | F

END ELE∨ATION ITEM #58



No. Revision/Issue Date

DESIGN DEVELOPMENT

OWNER REVISION

Breckenridge
Kitchen Equipment & Design

SERVING COUNTER DETAILS

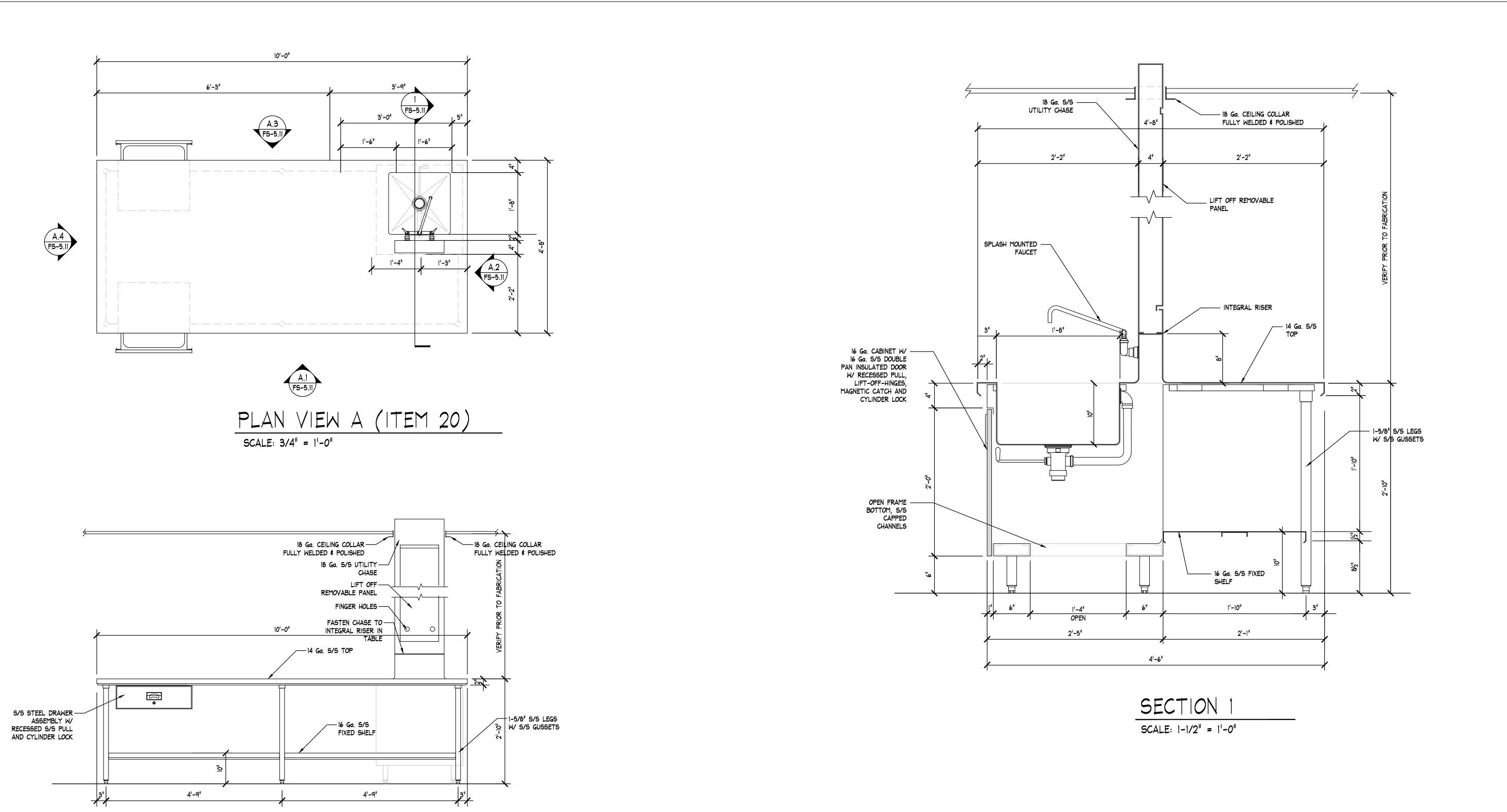
Scale: 8/19/2022

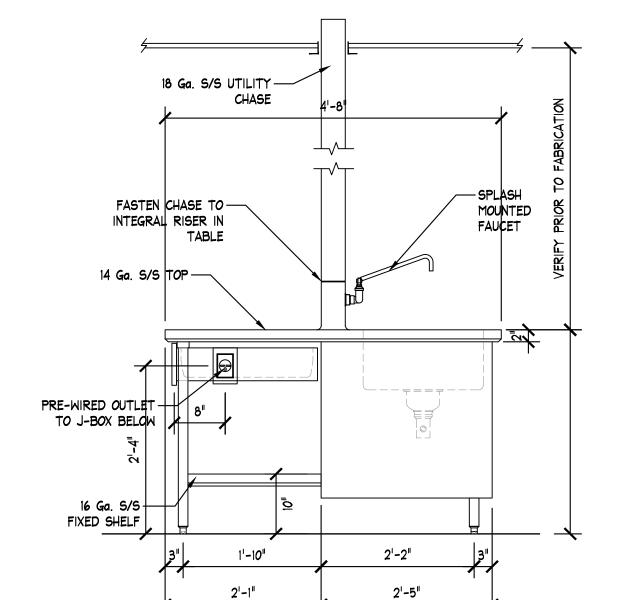
5/4' = 1

Drawn: MJB

Sheet

**55**.12

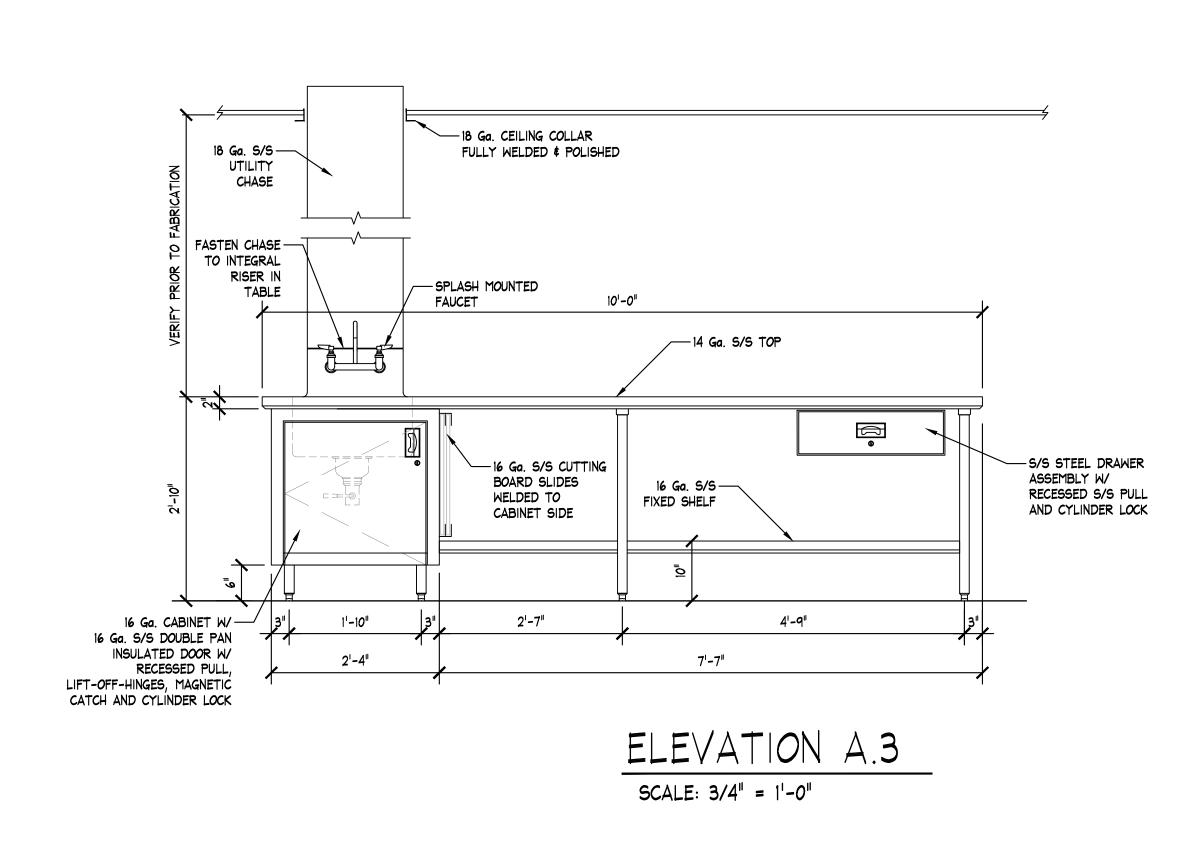




4'-6"

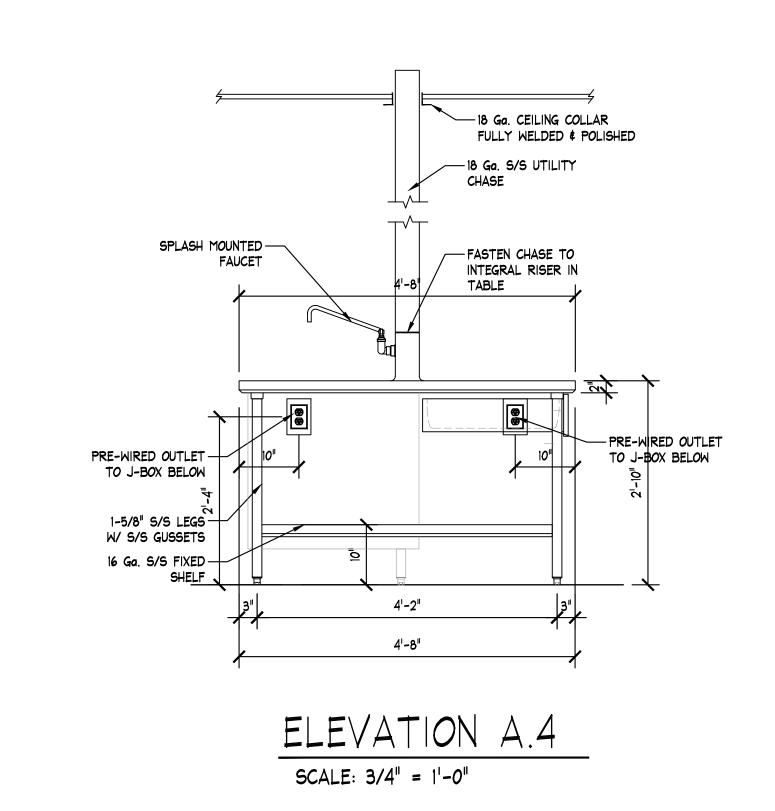
SCALE: 3/4" =  $1^1-0$ "

ELEVATION A.2



ELEVATION A.1

SCALE: 3/4" = 1'-0"



LAKE LOCAL SCHOOL
NEM ELEMENTARY SCHOOL

No. Revision/Issue Date

DESIGN DEVELOPMENT

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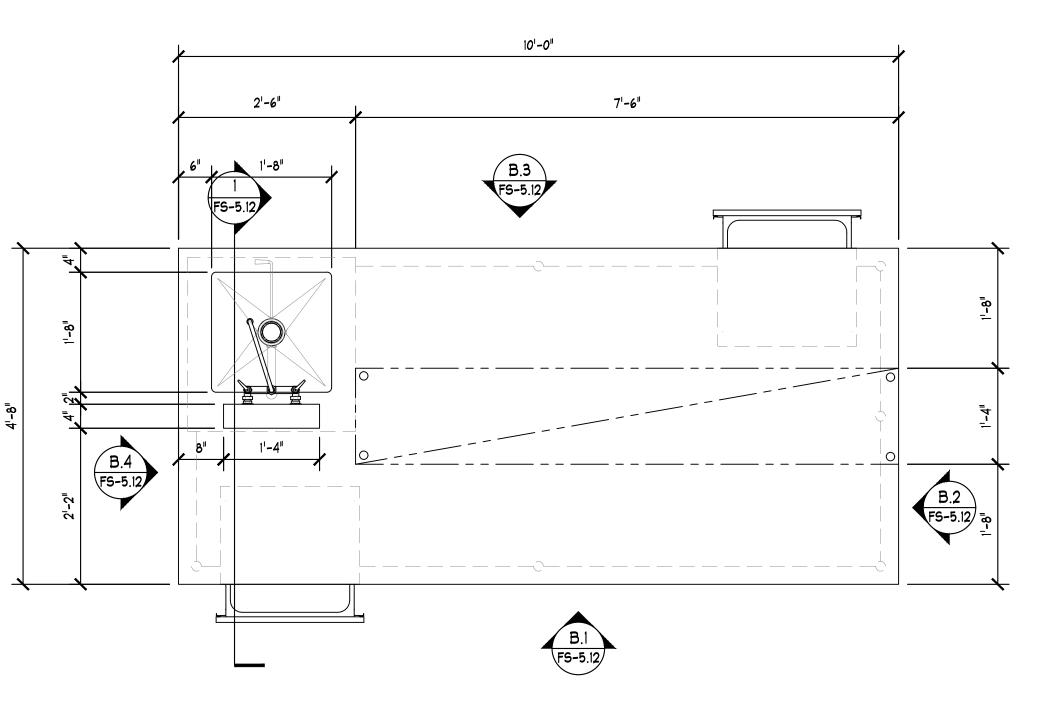
FABRICATION DETAILS

Date: 8/19/2022

Scale: 3/4"=1"-0"

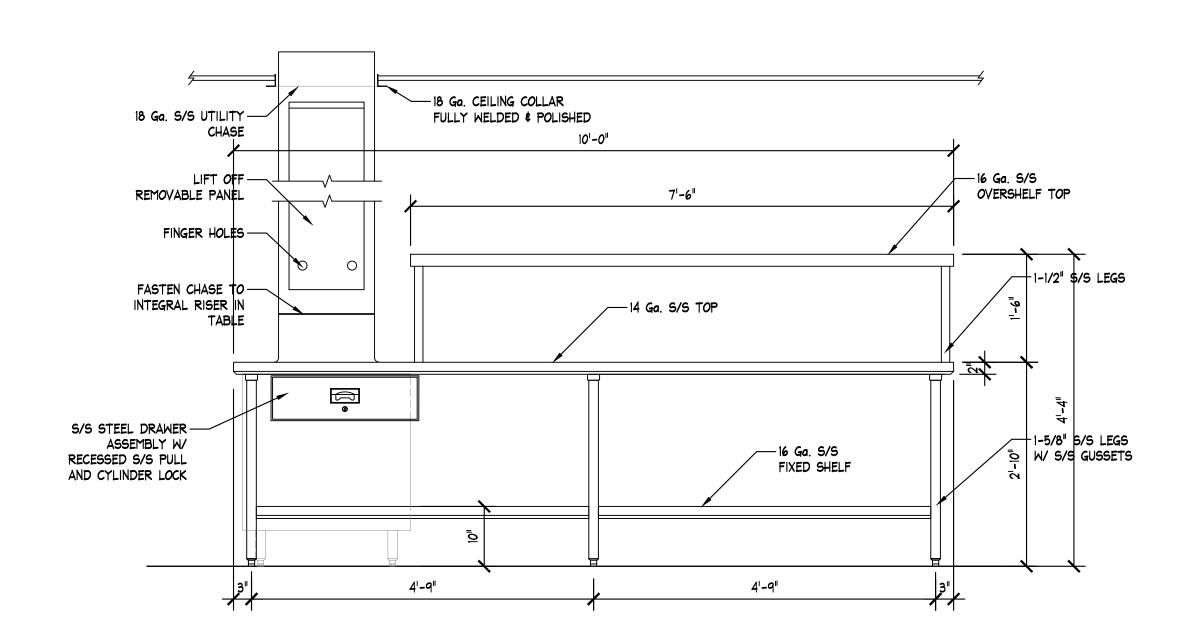
Drawn: MJB

5-5.1



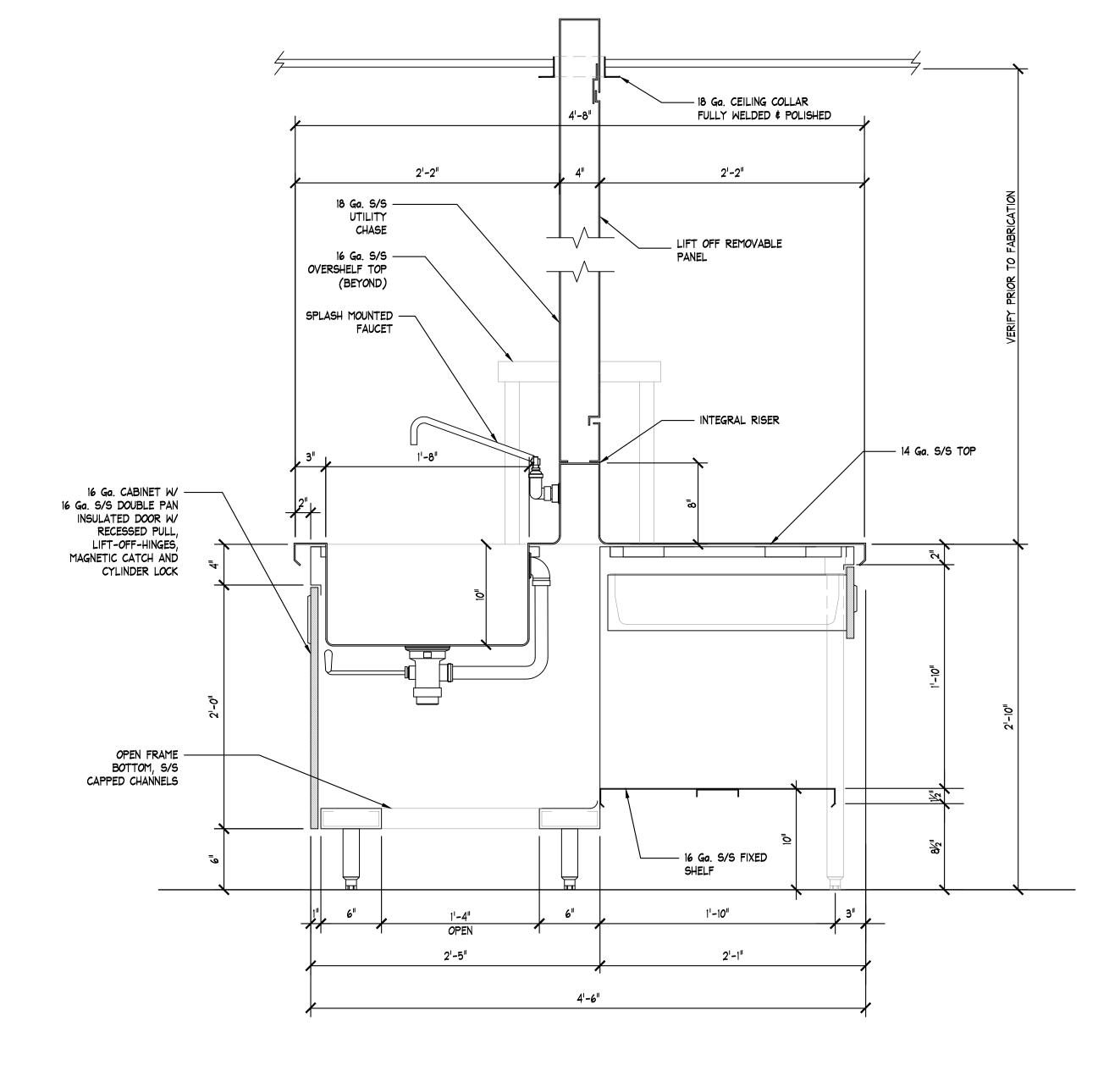
PLAN VIEW B (ITEMS 32 \$ 33)

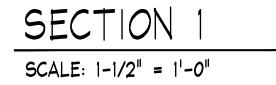
SCALE: 3/4" = 1'-0"

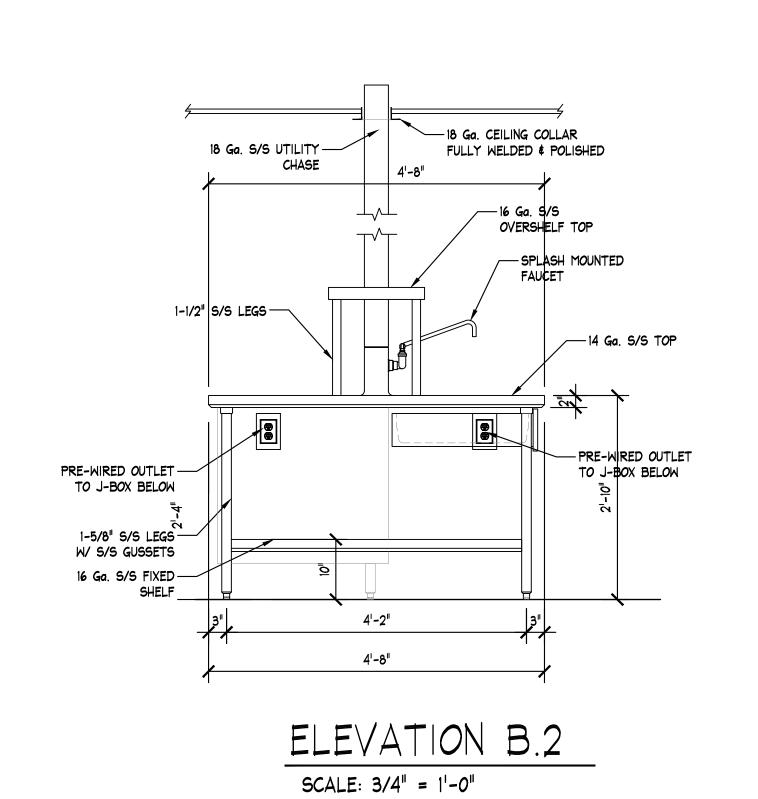


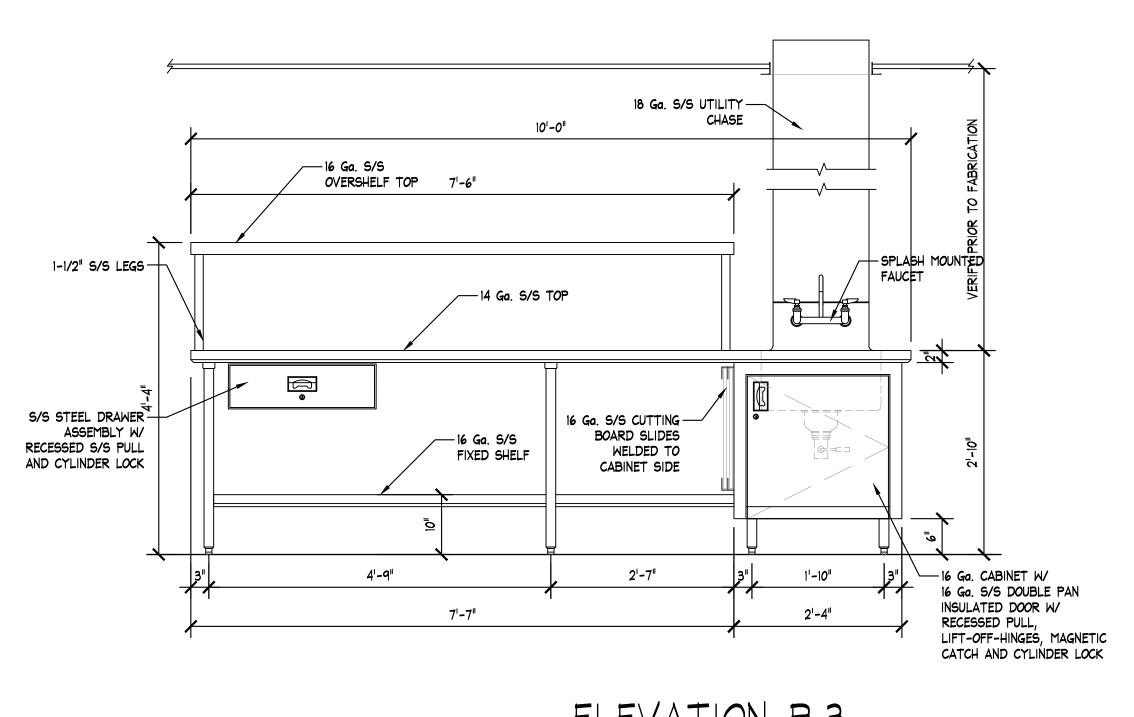
ELEVATION B.1

SCALE: 3/4" = 1'-0"



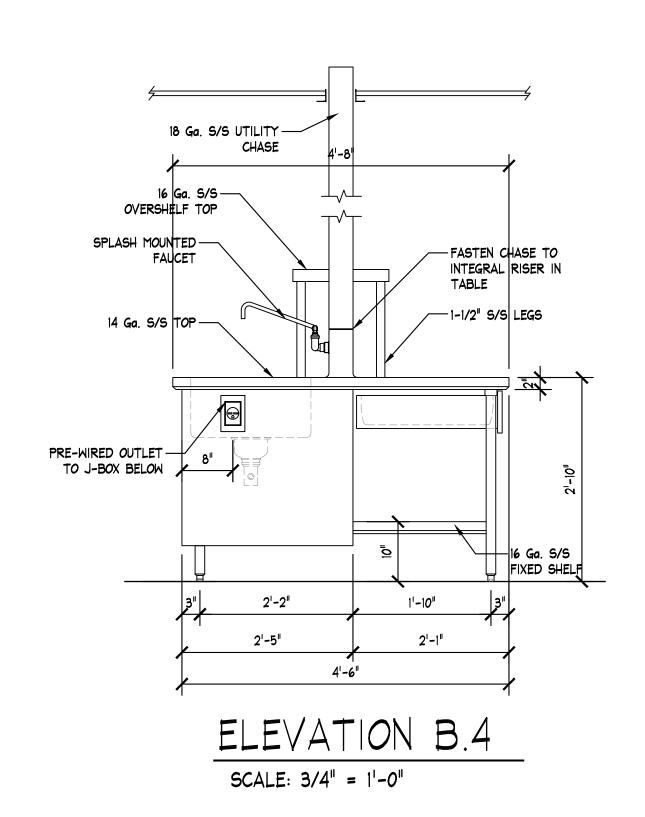






ELEVATION B.3

SCALE: 3/4" = 1'-0"



LAKE LOCAL SCHOOLS
NEW ELEMENTARY SCHOOL

No. Revision/Issue Date

DESIGN DEVELOPMENT

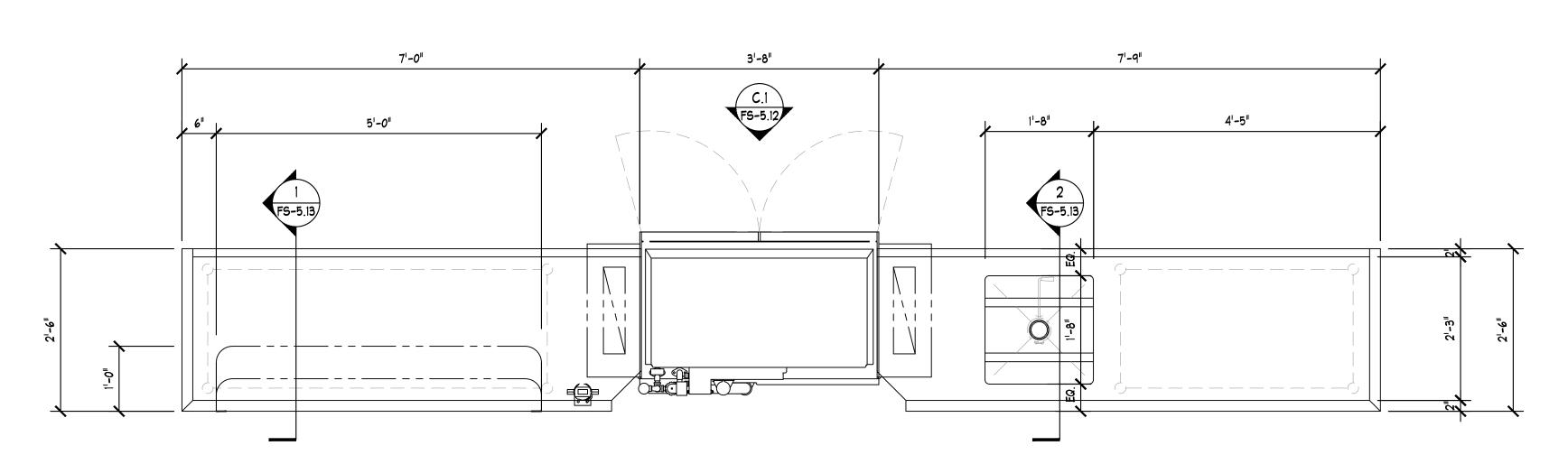
OWNER REVISION

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FABRICATION DETAILS	
Date: 0 //0 /0000	

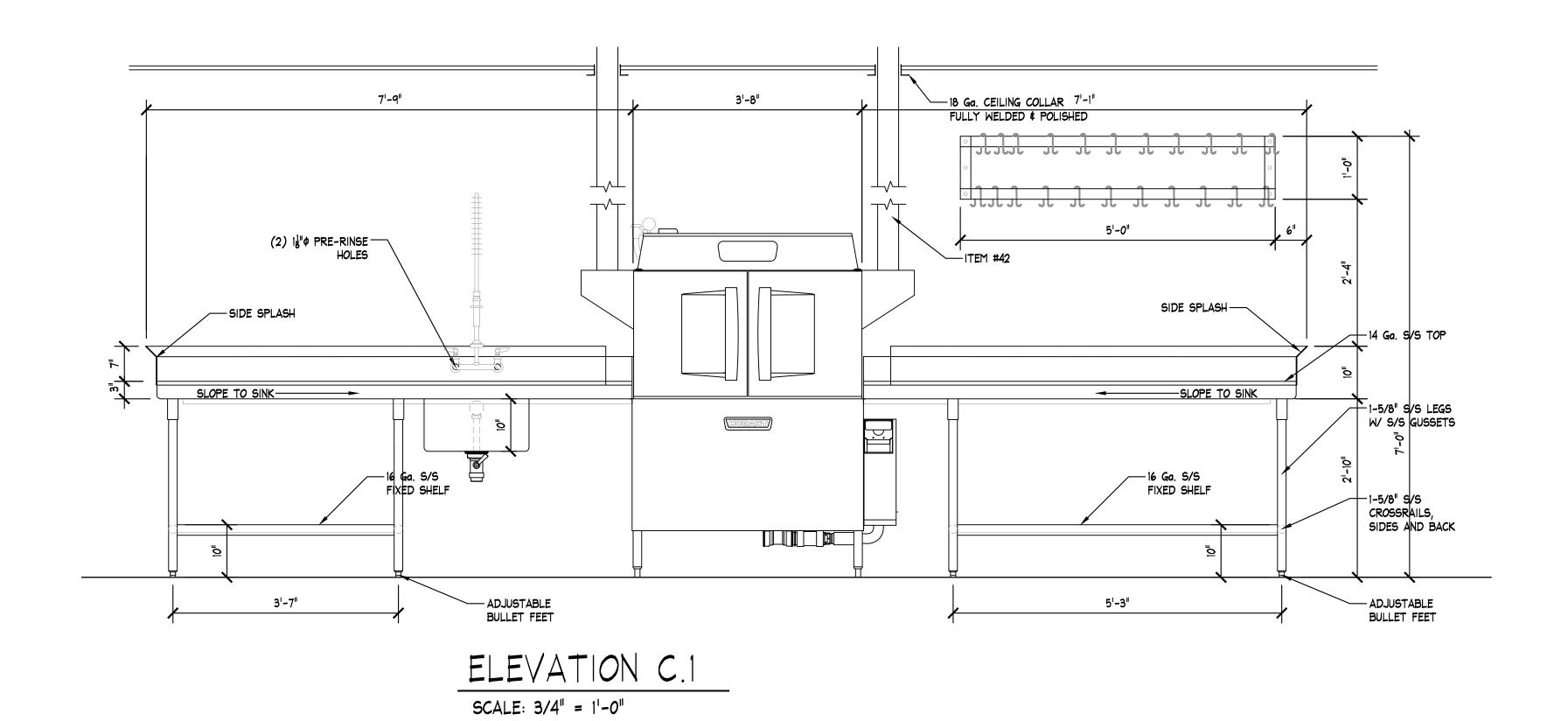
Date:	8/19/2022
Scale:	3/4"=1'-0"
Drawn:	MJB

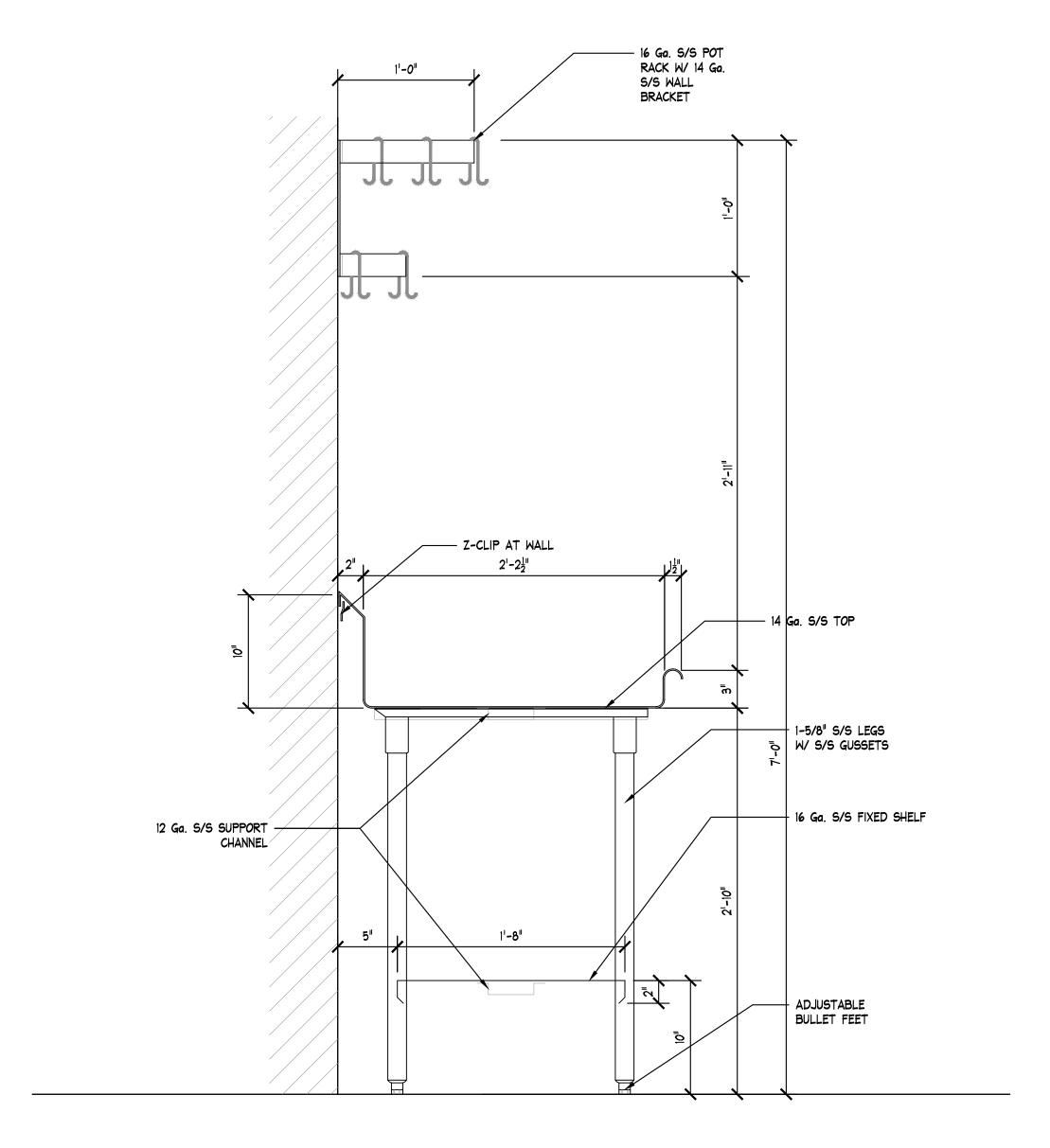
5-5.1



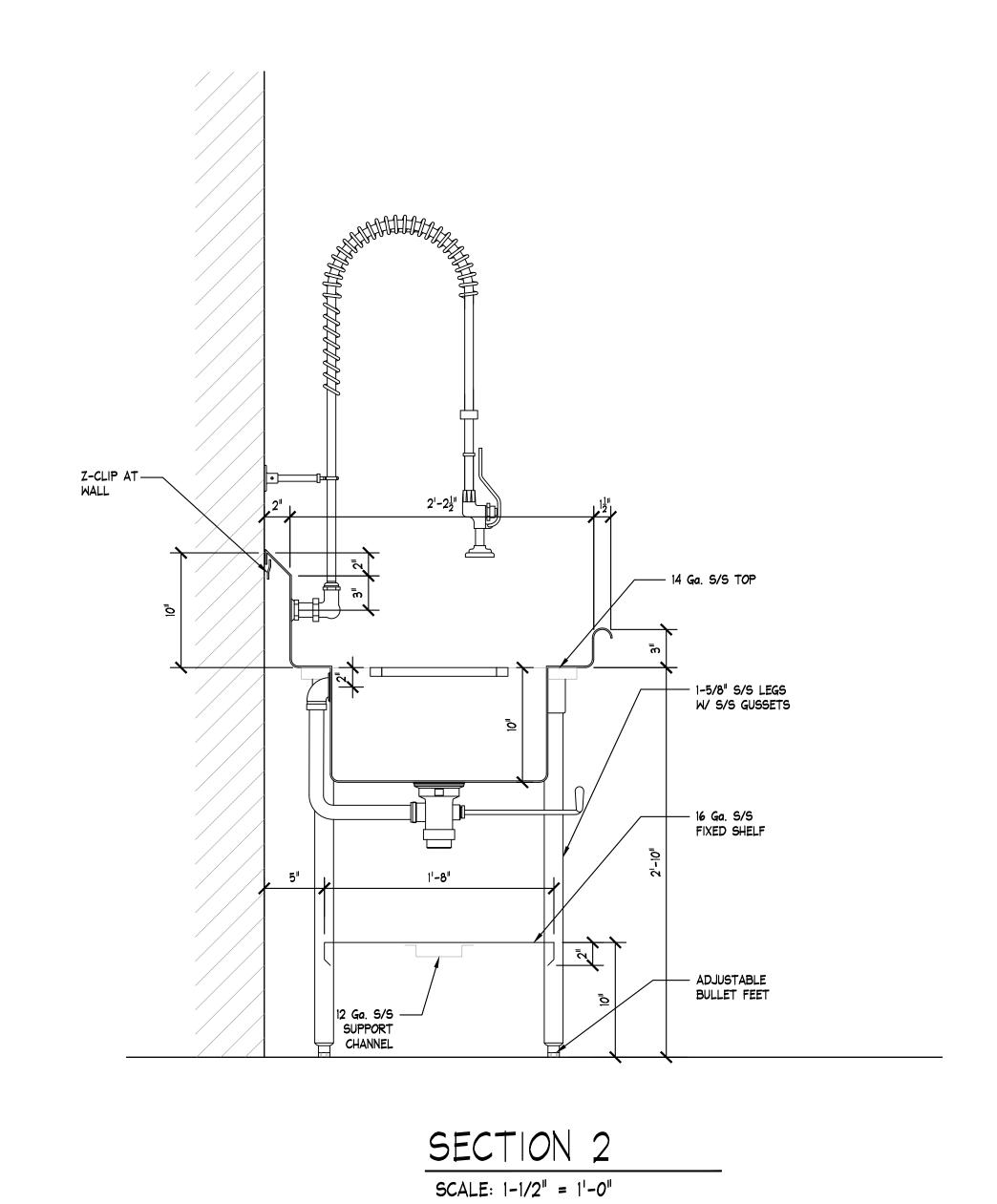
PLAN VIEW C (ITEMS 40-45)

SCALE: 3/4" = 1'-0"





SECTION 1 SCALE: 1-1/2" = 1'-0"





No. Revision/Issue Date

DESIGN DEVELOPMENT

OWNER REVISION

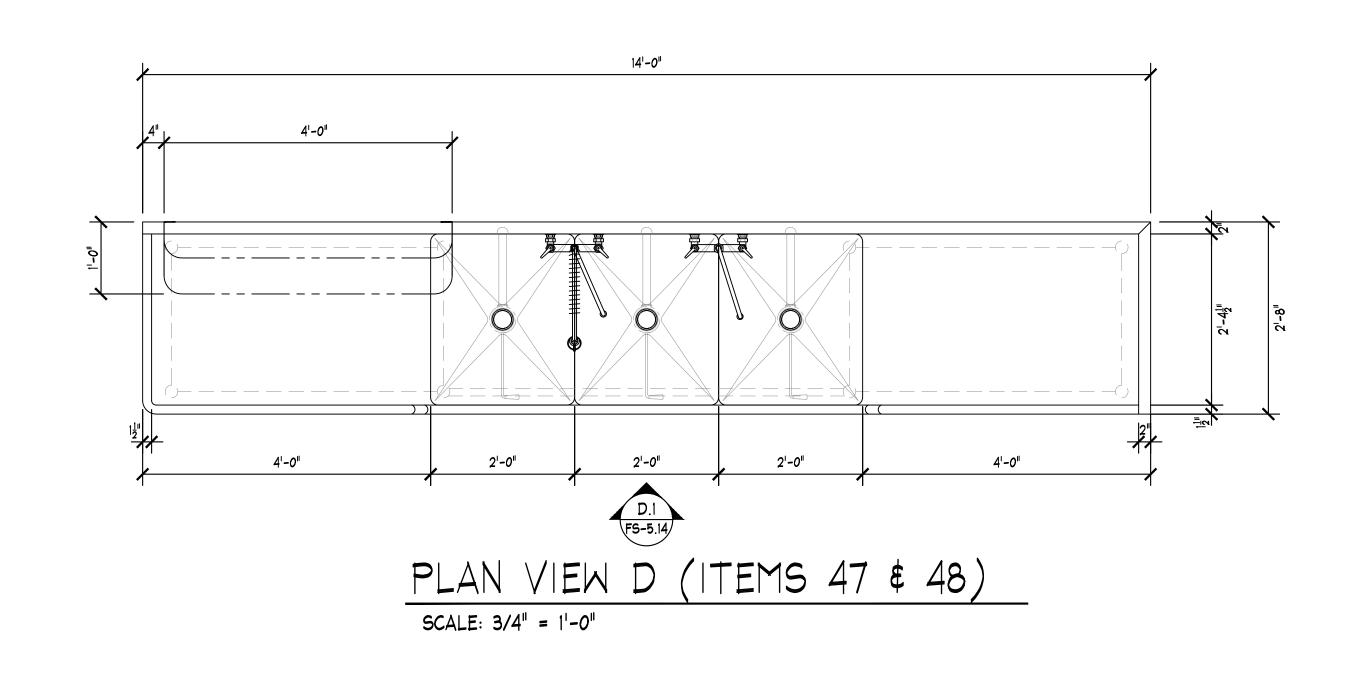
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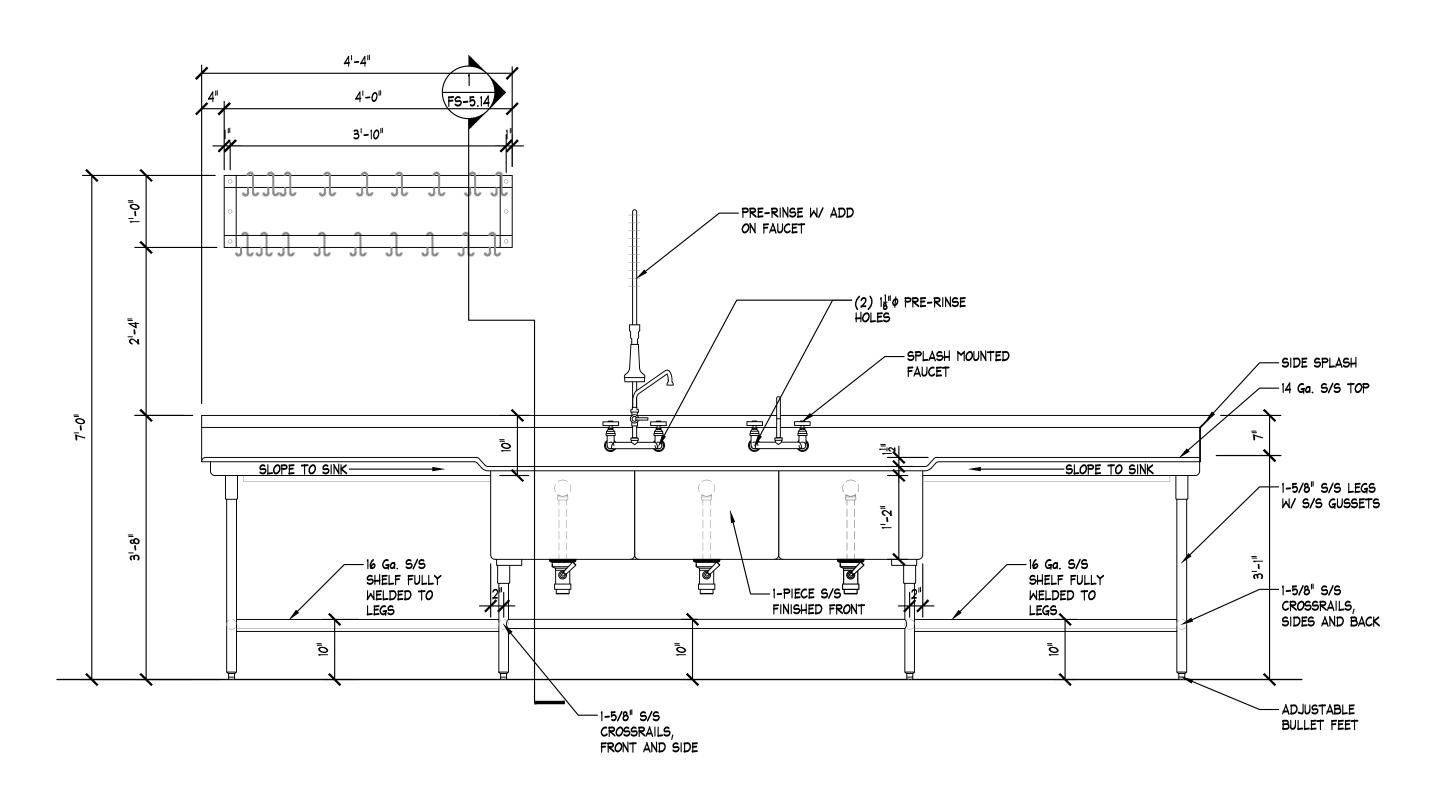
FABRICATION
DETAILS

Scale: 3/4<sup>||</sup>=1<sup>|</sup>-0<sup>||</sup>

Sheet

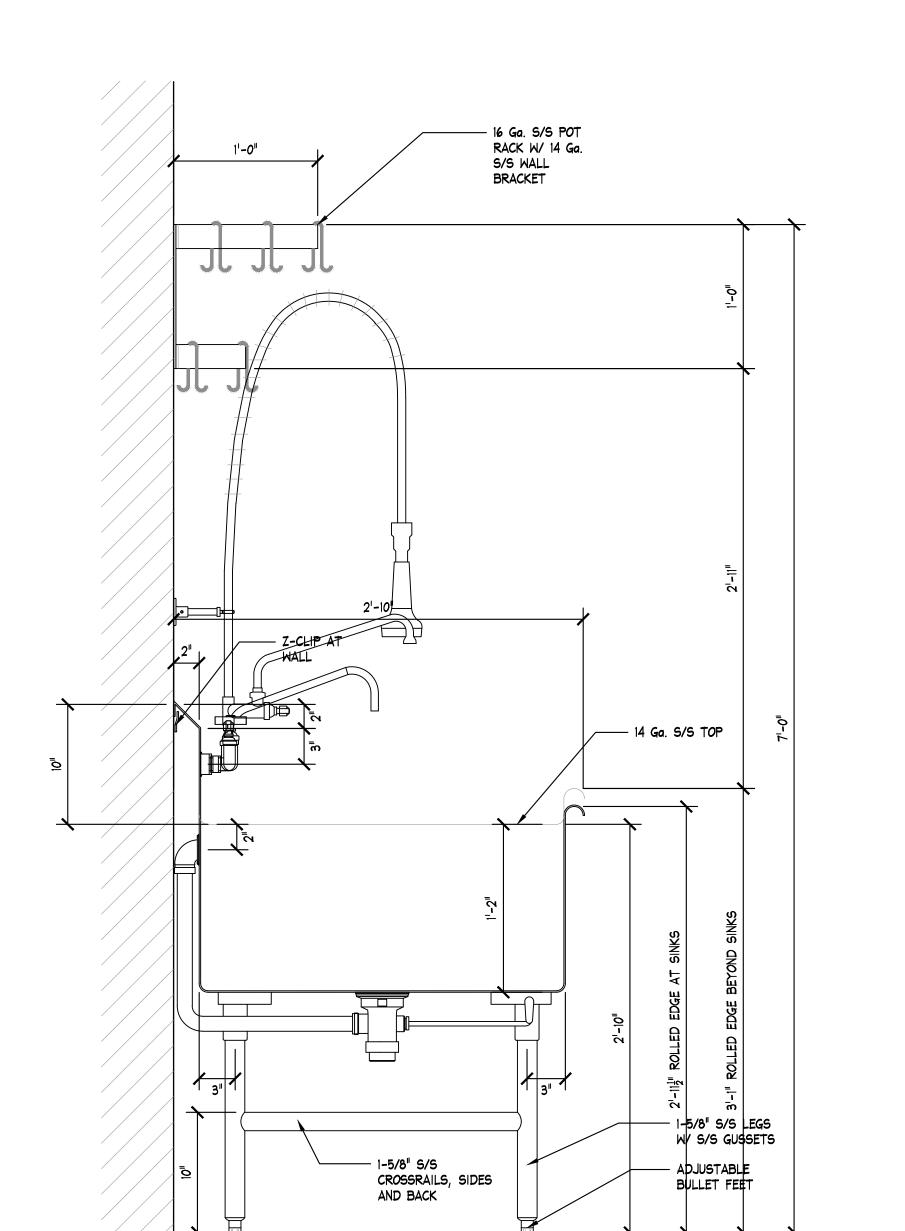
5=5.15





ELEVATION D.1

SCALE: 3/4" = 1'-0"



2'-0"

SECTION 1

SCALE:  $1-1/2^{\parallel} = 1^{\parallel}-0^{\parallel}$ 

No. Revision/Issue Date

1 DESIGN 9/7/2022

2 OWNER REVISION 4/26/2023

Breckenridge

Kitchen Equipment & Design

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Auron, OH 44839

(419) 433–5915

(419) 433–6616 Fax

LAKE LOCAL SCHOONEM ELEMENTARY SCHOO

FABRICATION DETAILS

Date: 8/19/2022

Scale:  $3/4^{\parallel} = 1^{\parallel} - 0^{\parallel}$ Drawn: M | D

Sheet

**5 5 6**