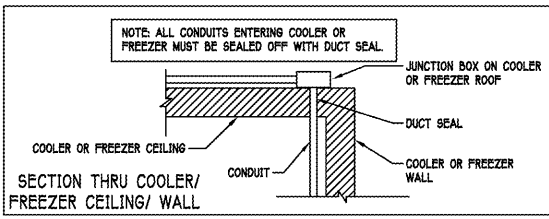


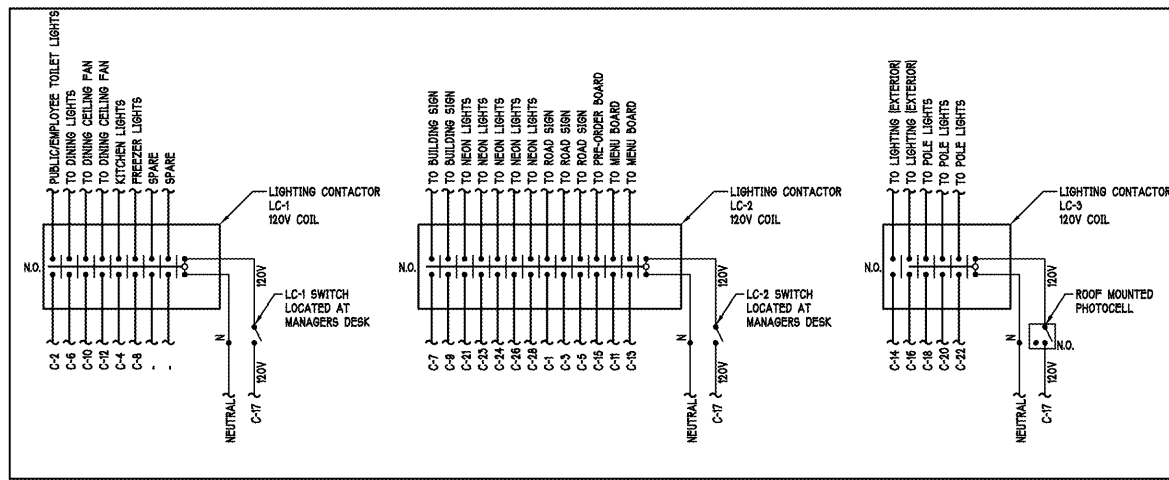
**GROUNDING DETAIL NOTES:**

- GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC 250.52(A).
- GROUNDING ELECTRODES SHALL BE INSTALLED IN ACCORDANCE WITH NEC 250.55.
- WITHOUT EXCEPTION, SUPPLEMENTAL GROUNDING ELECTRODES SHALL ALWAYS BE INSTALLED.

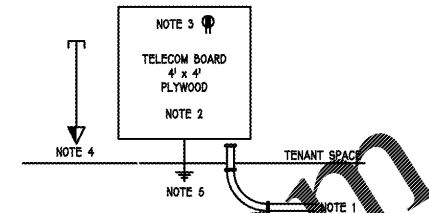
NOTE: ALL ELECTRODES MAY BE PRESENT ON-SITE, THEREFORE NOT ALL ELECTRODES ON THIS SCHEMATIC DIAGRAM MAY APPLY.



4 COOLER/FREEZER PENETRATION DETAIL  
N.T.S. E4



2 LIGHTING CONTACTOR CONTROL DETAIL  
N.T.S. E4



3 TELECOM RISER DIAGRAM  
N.T.S. E4

- TELECOM RISER NOTES:**
- 3/4" CONDUIT PROVIDED UNDER SLAB TO LOCATION INDICATED BY TELECOM COMMUNITY FIELD ENGINEER.
  - 1/2" HIGH GRADE PLYWOOD BACKBOARD PAINTED WITH FLAME RETARDANT PAINT, MOUNTED ABOVE CEILING IN EMPLOYEE BATHROOM.
  - DUPLEX RECEPTACLE ON A DEDICATED CIRCUIT FOR TELEPHONE AND OTHER COMMUNICATION EQUIPMENT.
  - 3/4" CONDUIT ABOVE ACCESSIBLE CEILING.
  - #6 CU GROUND TO SERVICE GROUND BAR WITH ADEQUATE SLACK FOR GROUNDING OF TELECOM EQUIPMENT.

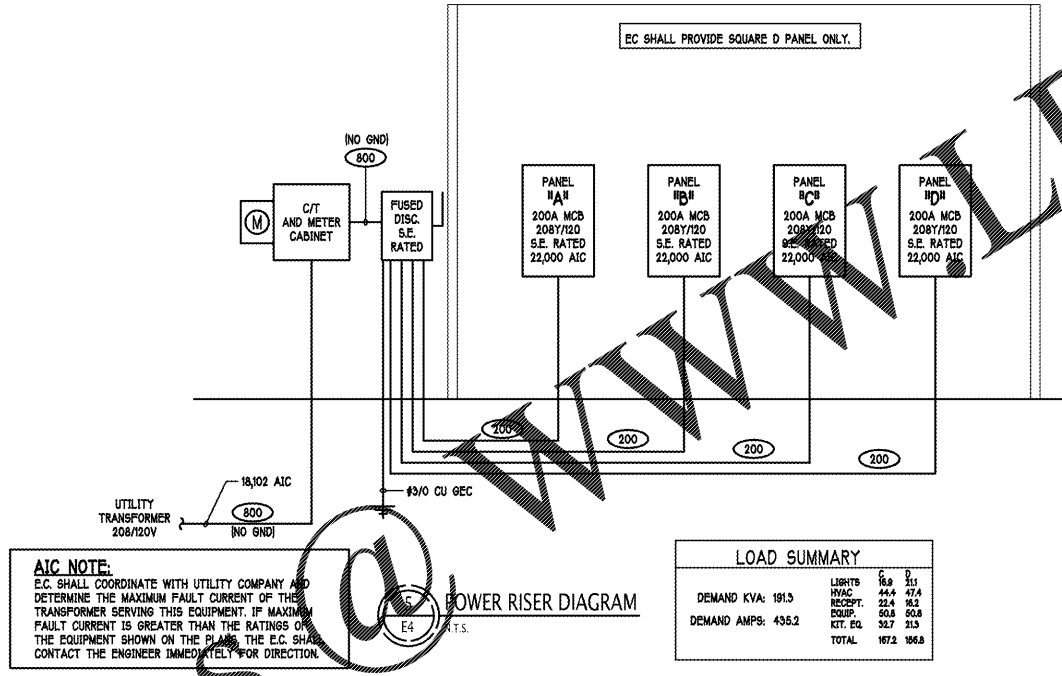
FEEDER SCHEDULE - 3 PHASE

STANDARD FUSE OR C/B SIZE	FEEDER WIRE - #SETS (COND. SIZE, EQU. GND, COND. SIZE) CONDUCTOR TYPE: THHN - DRY; THWN - WET	SEG	ALUMINUM WIRE*	SEG
30	1 [4 #10, #10G 3/4"PC]		1 [4 #8, #8G 3/4"PC]	
35	1 [4 #8, #10G 3/4"PC]		1 [4 #6, #6G 1"PC]	
40	1 [4 #8, #10G 3/4"PC]		1 [4 #6, #6G 1"PC]	
45	1 [4 #6, #10G 1"PC]		1 [4 #4, #8G 1-1/4"PC]	
50	1 [4 #6, #10G 1"PC]		1 [4 #4, #8G 1-1/4"PC]	
60	1 [4 #4, #10G 1-1/4"PC]		1 [4 #3, #8G 1-1/4"PC]	
70	1 [4 #4, #8G 1-1/4"PC]		1 [4 #2, #6G 1-1/4"PC]	
80	1 [4 #3, #8G 1-1/4"PC]		1 [4 #1, #6G 1-1/2"PC]	
90	1 [4 #2, #8G 1-1/4"PC]		1 [4 #1/0, #6G 2"PC]	
100	1 [4 #1, #8G 1-1/2"PC]	#8	1 [4 #1/0, #6G 2"PC]	#6
110	1 [4 #1, #6G 1-1/2"PC]	#8	1 [4 #1/0, #4G 2"PC]	#6
125	1 [4 #1, #6G 1-1/2"PC]	#8	1 [4 #2/0, #4G 2"PC]	#4
150	1 [4 #1/0, #6G 2"PC]	#6	1 [4 #3/0, #4G 2"PC]	#4
175	1 [4 #2/0, #6G 2"PC]	#4	1 [4 #4/0, #4G 2-1/2"PC]	#2
200	1 [4 #3/0, #6G 2"PC]	#4	1 [4 #250MCM, #4G 2-1/2"PC]	#2
225	1 [4 #4/0, #4G 2-1/2"PC]	#2	1 [4 #300MCM, #2G 3"PC]	#1/0
250	1 [4 #250MCM, #4G 2-1/2"PC]	#2	1 [4 #350MCM, #2G 3"PC]	#1/0
300	1 [4 #350MCM, #4G 3"PC]	#2	1 [4 #500MCM, #2G 3"PC]	#1/0
350	2 [4 #2/0, #5G 2"PC]	#2	2 [4 #4/0, #1G 2-1/2"PC]	#1/0
400	2 [4 #3/0, #5G 2"PC]	#2	2 [4 #250MCM, #1G 2-1/2"PC]	#1/0
450	2 [4 #4/0, #2G 2-1/2"PC]	#1/0	2 [4 #300MCM, #1/0G 3"PC]	#1/0
500	2 [4 #250MCM, #2G 2-1/2"PC]	#1/0	2 [4 #350MCM, #1/0G 3"PC]	#1/0
600	2 [4 #350MCM, #1G 3"PC]	#2/0	2 [4 #500MCM, #2/0G 3"PC]	#4/0
700	2 [4 #500MCM, #1/0G 3"PC]	#2/0	3 [4 #350MCM, #3/0G 3"PC]	#4/0
800	3 [4 #300MCM, #1/0G 3"PC]	#3/0	3 [4 #400MCM, #3/0G 3"PC]	#4/0
1000	3 [4 #400MCM, #2/0G 3"PC]	#3/0	4 [4 #500MCM, #3/0G 3"PC]	#4/0
1200	4 [4 #500MCM, #3/0G 3"PC]	#3/0	4 [4 #500MCM, #3/0G 3"PC]	#250
1600	5 [4 #400MCM, #4/0G 3"PC]	#3/0	4 [4 #400MCM, #3/0G 3"PC]	#250
2000	6 [4 #400MCM, #250G 3"PC]	#3/0	7 [4 #500MCM, #4/0G 3"PC]	#250
2500	7 [4 #500MCM, #350G 3"PC]	#3/0	8 [4 #500MCM, #600G 3"PC]	#250
3000	8 [4 #500MCM, #400G 3"PC]	#3/0	10 [4 #500MCM, #600G 3"PC]	#250
4000	11 [4 #500MCM, #500G 3"PC]	#3/0	13 [4 #500MCM, #750G 3"PC]	#250

**FEEDER SCHEDULE NOTES:**

- ALL FEEDER SIZES LISTED MAY NOT BE USED IN PROJECT RISER DIAGRAM.
- ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED. REFER TO APPLICABLE VERSION OF THE N.E.C.
- IF CONDUIT OTHER THAN "EMT" IS REQUIRED BASE BID ON NEXT TRADE SIZE ABOVE THAT INDICATED.
- \*#6G# DENOTES SERVICE ENTRANCE GROUND.

\* E.C. SHALL VERIFY WITH THE AUTHORITY HAVING JURISDICTION AND THE UTILITY COMPANY THAT ALUMINUM CONDUCTORS ARE ACCEPTABLE FOR USE AS TRANSFORMER SECONDARIES AND FEEDER CIRCUITS.



**AIC NOTE:**  
E.C. SHALL COORDINATE WITH UTILITY COMPANY AND DETERMINE THE MAXIMUM FAULT CURRENT OF THE TRANSFORMER SERVING THIS EQUIPMENT. IF MAXIMUM FAULT CURRENT IS GREATER THAN THE RATINGS OF THE EQUIPMENT SHOWN ON THE PLANS, THE E.C. SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION.

**LOAD SUMMARY**

DEMAND KVA:	1913	LIGHTS:	6.9	21.1
DEMAND AMPS:	435.2	HVAC RECEPT.:	44.4	47.4
		EQUIP.:	50.8	50.8
		WTR. HTR.:	32.7	31.5
		TOTAL:	152.2	156.8

**NEW PANEL A** - 3-PHASE/4-WIRE SURFACE

DESCRIPTION	POLE	LOAD PER PHASE			C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	DESCRIPTION				
		A	B	C																									1	2	3	4	5
COOLER EVAP. FAN	2	12	15	1	3																												RECEP. AT ORDERING
COOLER EVAP. FAN	2	12	15	3	0.8	0.8																										RECEP.	
COOLER CONDENSER	2	10	25	8	1.4	1.4																										ROOF RECEPT.	
COOLER CONDENSER	2	10	25	13	1.8	1.8																										RECEP. MANAGER'S DESK	
FREEZER EVAP. FAN	2	12	15	17	0.8	0.8																										RECEP.	
FREEZER EVAP. FAN	2	12	15	21	0.8	0.8																										SANDWICH/SALAD PREP	
FREEZER EVAP. FAN	2	12	15	23	0.8	0.8																										STEAM TABLE	
FREEZER CONDENSER	2	12	20	34	1.3	1.3																										QUESADILLA GRILL	
FREEZER CONDENSER	2	12	20	38	1.3	1.3																										AIR CURTAIN FLY PAN(LO)	
FREEZER CONDENSER	2	12	20	38	1.3	1.3																										GAS WATER HEATER	
SPARE	1	-	20	35	0.8	0.8																										RECIRC. PUMP	
SPARE	1	-	20	38	0.8	0.8																										HAND DRYER	
KITCHEN HOOD SHUT DOWN	1	12	20	37	0.8	0.8																										HAND DRYER	
#7 - SANDWICH/SALAD PREP	1	12	20	38	0.8	0.8																										HOOD CONTROLS	
#7 - SANDWICH/SALAD PREP	1	12	20	41	0.8	0.8																										SPARE	
TOTAL CONNECTED KVA					11.1	11.3	8.6																										

DEMAND KVA: 27.9  
DEMAND AMPS: 77.4

PC/PC - PHOTOCELL 'ON', PHOTOCELL 'OFF'  
P/C/T/C - PHOTOCELL 'ON', TIMECLOCK 'OFF'  
LO - LOCK ON ATTACHMENT  
ST - SHUNT TRIP

**NEW PANEL B** - 3-PHASE/4-WIRE SURFACE

DESCRIPTION	POLE	LOAD PER PHASE			C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	DESCRIPTION					
		A	B	C																									1	2	3	4	5	6
WALK SHAKE MACHINE	3	12	20	3	1.7	0.7																												POS
WALK SHAKE MACHINE	3	12	20	3	1.7	0.7																											POS	
MILK SHAKE MACHINE	3	12	20	8	1.7	0.7																											POS	
MILK SHAKE MACHINE	3	12	20	11	1.7	0.7																											POS	
MILK SHAKE MACHINE	3	12	20	14	1.7	0.7																											MONITOR	
MILK SHAKE MACHINE	3	12	20	18	1.7	0.7																											SHAKE MONITOR	
MILK SHAKE MACHINE	3	12	20	18	1.7	0.7																											KITCHEN RECEPT.	
MILK SHAKE MACHINE	3	12	20	18	1.7	0.7																											KITCHEN RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											#7 SANDWICH/SALAD PREP.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																											ENCLOSURE RECEPT.	
MILK SHAKE MACHINE	3	12	20	23	1.7	0.7																												