



MIZKAN AMERICAS, INC.

# ELECTRICAL DRAWING LIST

<u>DWG</u>	<u>SHEET</u>	<u>DESCRIPTION</u>
E-1	1	COVER SHEET/SITE PLAN
E-2	1	PLOT PLAN/EQUIPMENT LOCATION
E-2	2	PLOT PLAN/EQUIPMENT LOCATION
E-3	1	ONELINE DIAGRAM
E-4	1	SCHEDULES AND LOAD CALCS
E-5	1	SITE POWER CONDUIT PLAN
E-5	2	MOTORS CONDUIT PLAN
E-6	1	MCC2 PANEL LAYOUT
E-7	1	PANEL/CONDUIT SUPPORT FRAME

## GENERAL NOTES

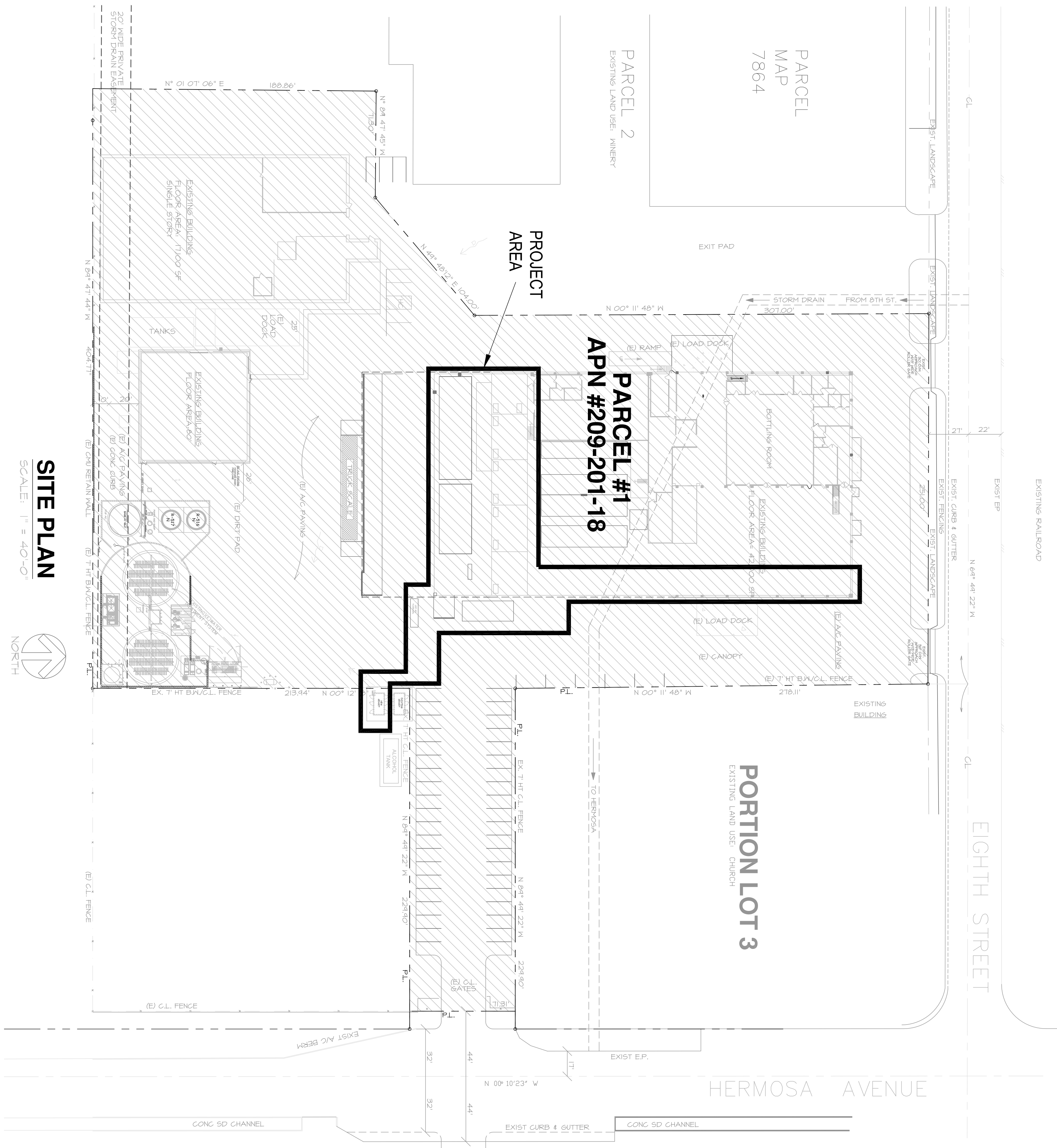
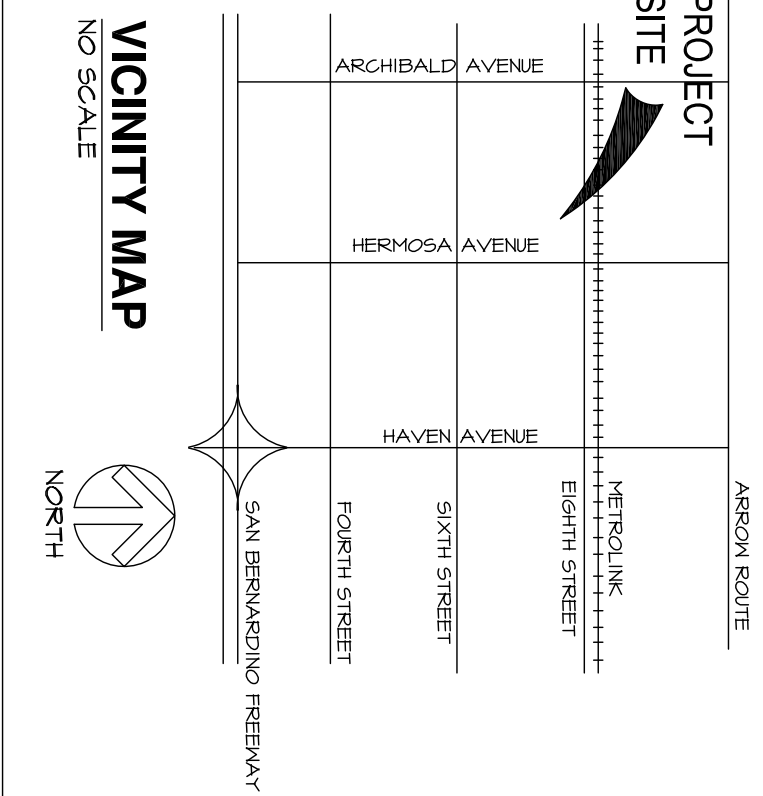
1. ALL DEVICES OWN ON THESE PLANS ARE NEW UNLESS OTHERWISE NOTED.
2. ALL WIRE IS TO BE COPPER. THE TYPE SHALL BE THIN OR THIN-2 UNLESS OTHERWISE NOTED.
3. ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE 2015 EDITION OF THE NATIONAL ELECTRICAL CODE.
4. ALL AIR CONDITIONING UNITS SHALL HAVE A LOCAL DISCONNECT AND ISVAC CONVENIENCE RECEPTACLE LOCATED WITHIN 25 FT OF UNIT.
5. ALL OUTDOOR LIGHTING FIXTURES SHALL BE PHOTOCELL CONTROLLED.
6. ALL OUTDOOR CONVENIENCE RECEPTACLES AND BATHROOM RECEPTACLES SHALL BE GFCI TYPE.
7. INSTALL GROUND CONDUCTORS IN ALL BRANCH CIRCUITS FOR LIGHT FIXTURES AND POWER DEVICES.
8. ALL WIRES SHALL BE CLEARLY MARKED.
9. ALL CONDITIONS SHALL BE LABELED WITH TO/FROM MARKINGS.
10. ALL AREAS HAVE BEEN DERIVED UNCLASSIFIED BY OWNER.
11. ALL COMPONENTS AND EQUIPMENT SHALL BE UL LISTED.

## PROJECT DATA

**OWNER/APPLICANT**  
MIZKAN AMERICAS, INC.,  
1003 EIGHTH STREET  
RANCHO CUCAMONGA, CALIFORNIA, 91370

**ELECTRICAL ENGINEER**  
SOUTH VALLEY ENGINEERING, INC.,  
18325 FLIGHTPATH WAY  
BAKERSFIELD, CALIFORNIA, 93308

**ASSESSORS' PARCEL NO.** 204-201-16

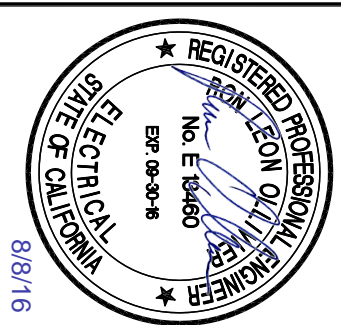


REV	DESCRIPTION	BY	DATE



**MIZKAN AMERICAS, INC.**  
**ACETATOR 9 & 10 INSTALLATION**  
**RANCHO CUCAMONGA FACILITY**  
**RANCHO CUCAMONGA, CA**

ENGR: RLO
DRT: RLO
SCALE: NTS
PROJ #:-
DATE: 8/1/16
D
REV: 1.0

COVER SHEET  
SITE PLAN

## SITE PLAN

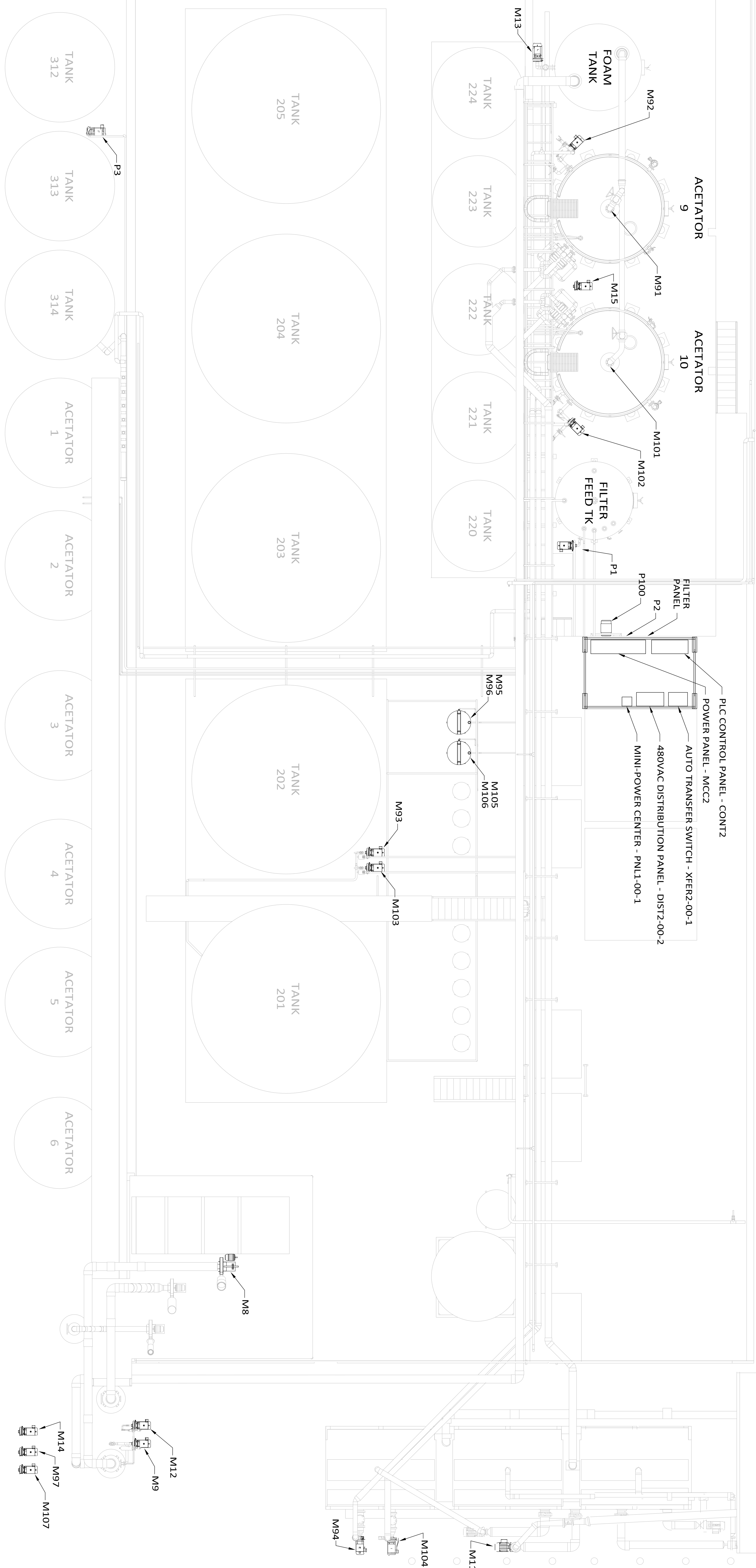
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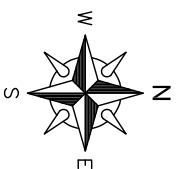
1 OF 1







## PLOT PLAN



2 OF 2

REV	DESCRIPTION	BY	DATE



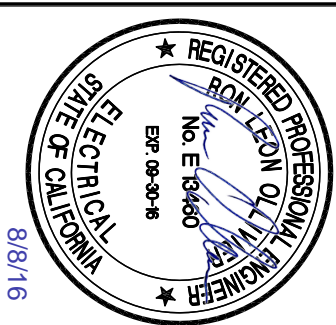
**South Valley Engineering**

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PLOT PLAN  
EQUIPMENT  
LOCATION

EQUIPMENT  
LOCATION

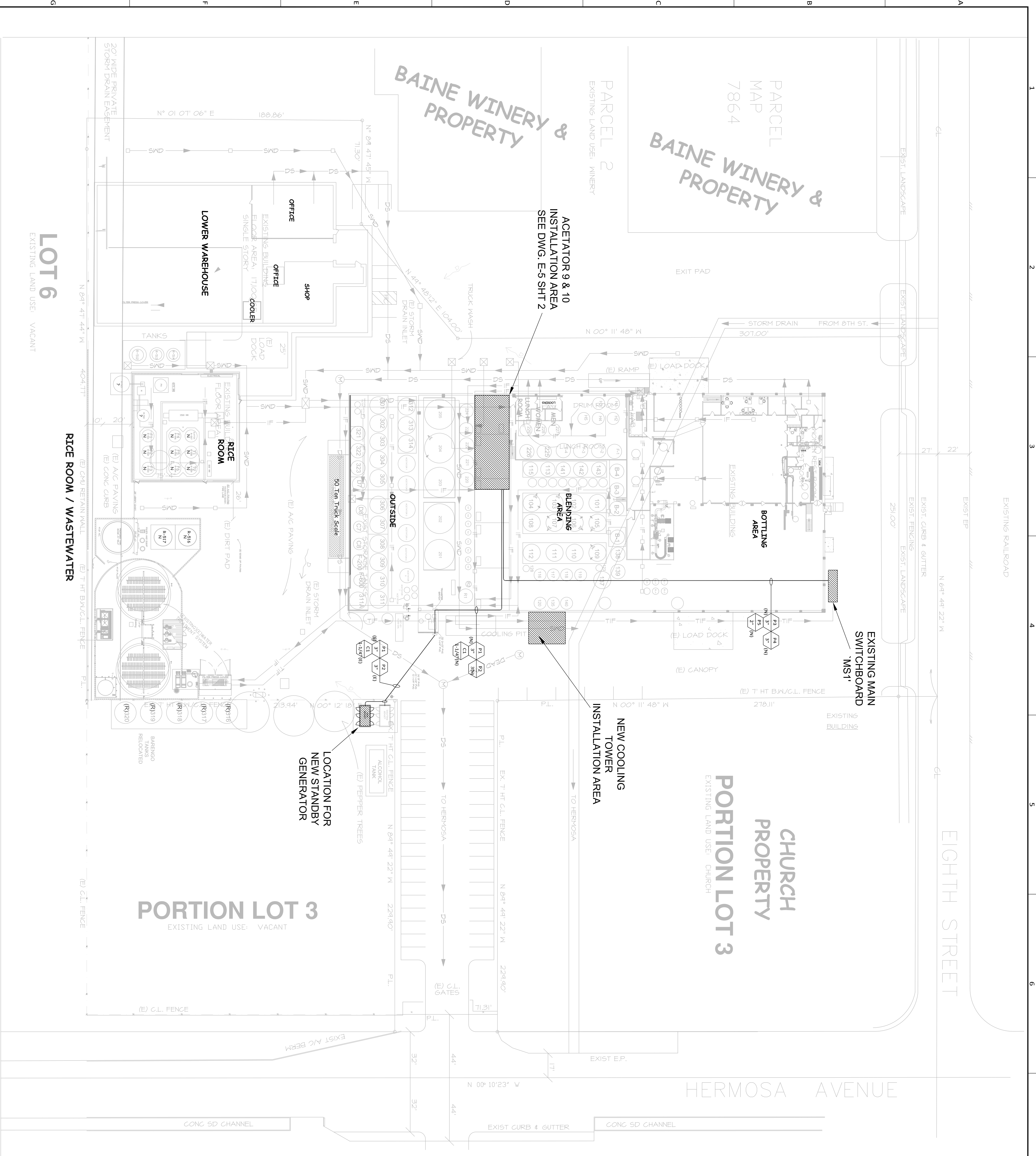
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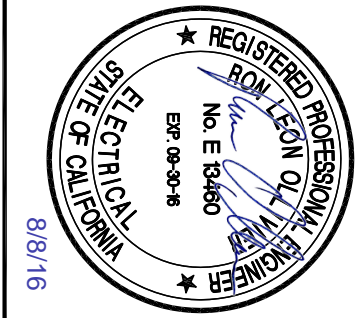
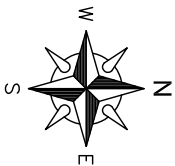
CONDUIT AND WIRE SCHEDULE					
CONDUIT	SIZE	FROM	TO	WIRES	COMMENTS
P1	3"	GENERATOR 2	TRANSFER SWITCH 2	3-500MCM, 1-1/0 GND	-
P2	3"	GENERATOR 2	TRANSFER SWITCH 2	3-500MCM, 1-1/0 GND	-
P3	3"	MS1	TRANSFER SWITCH 2	3-500MCM, 1-1/0 GND	-
P4	3"	MS1	TRANSFER SWITCH 2	3-500MCM, 1-1/0 GND	-
P5	2"	MS1	KOCH PANEL	3-42, 1-46 GND	-
C1	1-1/4"	GENERATOR 2	TRANSFER SWITCH 2	6-#12, 1-#10 GND	VERIFY W/ SUPPLIER

NOTES

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3. ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES INCLUDING, BUT NOT LIMITED TO, THE 2013 EDITION OF THE NATIONAL ELECTRICAL CODE.
4. ALL WIRES SHALL BE CLEARLY MARKED.
5. ALL ABOVE GROUND CONDUIT AND FITTINGS SHALL RIGID ALUMINUM.
6. ALL UNDERGROUND CONDUIT SHALL BE SCHED 40 PVC AND BURIED MINIMUM 24" BELOW GRADE.
7. ALL UNDERGROUND CONDUIT RUNS SHALL HAVE DETECTABLE MARKING TAPE INSTALLED 12" BELOW GRADE.
8. UNDERGROUND CONDUIT EXISTS FROM GENERATOR 2 TO AN ABOVE GROUND JUNCTION BOX.

CONDUIT PLAN

1/32" = 1'-0"



SITE  
CONDUIT  
PLAN

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ACETATOR 9 & 10 INSTALLATION  
RANCHO CUCAMONGA FACILITY  
RANCHO CUCAMONGA, CA



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P1 Z					CONDUIT AND WIRE SCHEDULE				
CONDUIT	SIZE	FROM	TO	WIRES	CONDUIT AREA	WIRE AREA	% FILL	COMMENTS	
P7	1-1/4"	MCC2	M10	3-#4, 1-#8 GND, 1-BELDEN #9341	0.5983	0.17	28%	BELDENS GO TO PLC PANEL	
P8	1"	MCC2	M11	3-#10, 1-#10 GND, 1-BELDEN #9341	0.3457	0.092	27%	BELDENS GO TO PLC PANEL	
P9	1"	MCC2	M104	3-#6, 1-#10 GND, 1-BELDEN #9341	0.3457	0.106	31%	BELDENS GO TO PLC PANEL	
P10	1"	MCC2	M84	3-#6, 1-#10 GND, 1-BELDEN #9341	0.3457	0.106	31%	BELDENS GO TO PLC PANEL	
P11	1-1/4"	MCC2	M8, M9, M12	5-#12, 3-#12 GND, 3-BELDEN #9341	0.5983	0.238	40%	BELDENS GO TO PLC PANEL	
P12	1-1/4"	MCC2	M14, M87, M107	5-#12, 3-#12 GND, 3-BELDEN #9341	0.5983	0.238	40%	BELDENS GO TO PLC PANEL	
P13	1-1/4"	MCC2	M83, M103	6-#12, 2-#12 GND, 2-BELDEN #9341	0.5983	0.159	27%	BELDENS GO TO PLC PANEL	
P14	1-1/2"	MCC2	M85, M86, M105, M106	12-#12, 4-#12 GND, 4-BELDEN #9341	0.8243	0.318	39%	BELDENS GO TO PLC PANEL	
P15	3/4"	KOCH	P3	3-#12, 1-#12 GND	0.3457	0.0204	6%	-	
P16	3/4"	MCC2	M92	3-#12, 1-#12 GND, 1-BELDEN #9341	0.3457	0.0794	23%	BELDENS GO TO PLC PANEL	
P17	1-1/4"	MCC2	M81	3-#4, 1-#8 GND, 1-BELDEN #9341	0.5983	0.17	28%	BELDENS GO TO PLC PANEL	
P18	1-1/4"	MCC2	M13, M15	6-#12, 2-#12 GND, 2-BELDEN #9341	0.5983	0.159	27%	BELDENS GO TO PLC PANEL	
P19	1-1/4"	MCC2	M101	3-#4, 1-#8 GND, 1-BELDEN #9341	0.5983	0.17	28%	BELDENS GO TO PLC PANEL	
P20	3/4"	MCC2	M102	3-#12, 1-#12 GND, 1-BELDEN #9341	0.3457	0.0794	23%	BELDENS GO TO PLC PANEL	
P21	3/4"	KOCH	P1	3-#12, 1-#12 GND	0.3457	0.0204	6%	-	
P22	3/4"	KOCH	P100	3-#4, 1-#8 GND	0.3457	0.075	22%	-	
P23								-	

CONDUIT AND WIRE SCHEDULE

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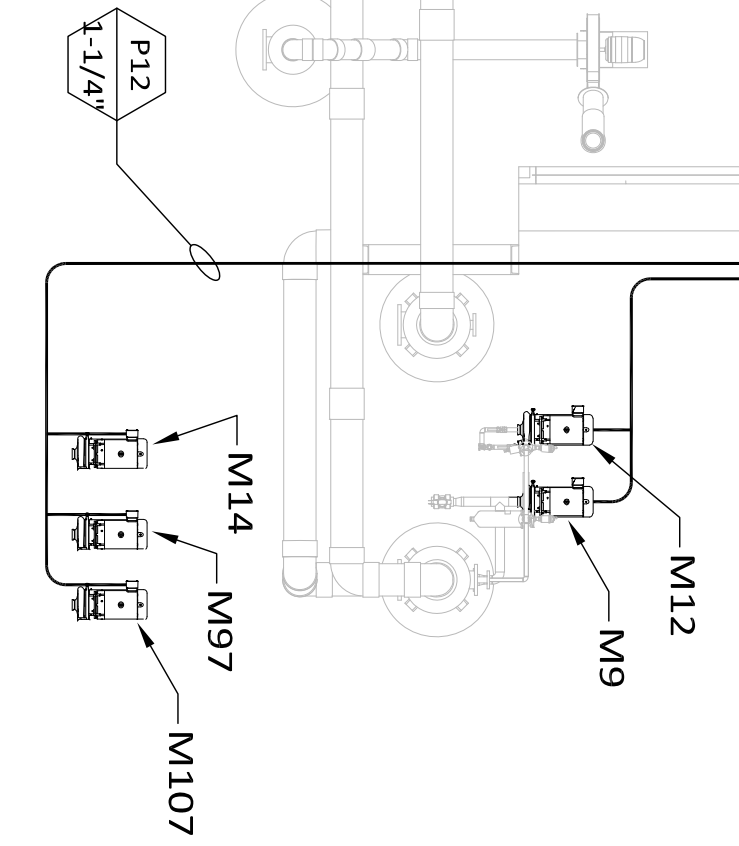
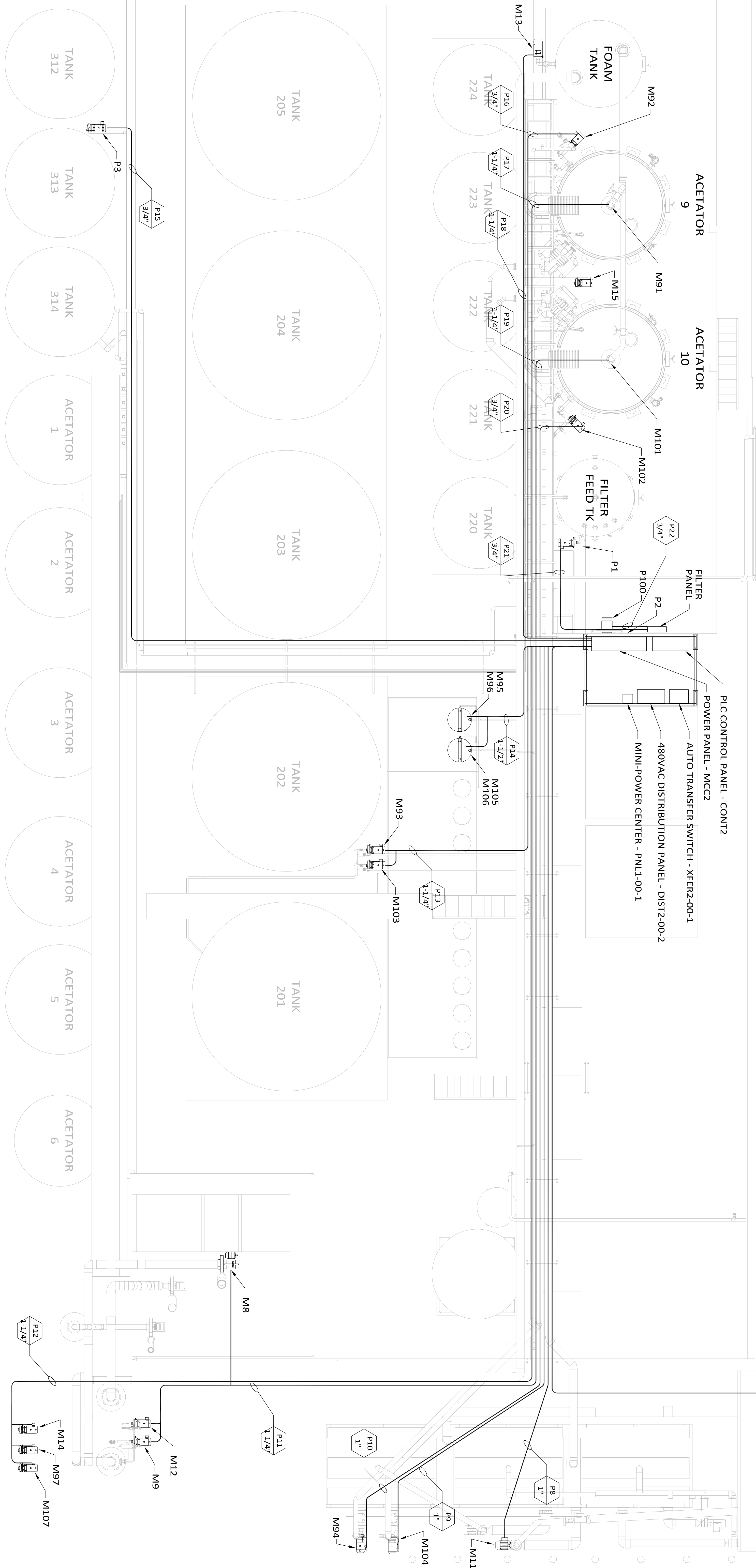
8. UNDERGROUND CONDUIT EXISTS FROM GENERATOR 2 TO AN ABOVE GROUND JUNCTION BOX.

9. UNLESS OTHERWISE NOTED, ALL WIRE IS #12AWG THHN. WHEN MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE RUN IN A CONDUIT THE CONDUCTOR AMPACITY MUST BE DERATED ACCORDING TO THE FOLLOWING TABLE:

# OF CONDUCTORS (INCLUDING SPARES)		% OF VALUES IN (INCLUDING SPARES)	
1-46	70	80	
46-79	50	50	
79-100	30	30	
100-21-30	25	25	
21-30	20	20	
31-40	15	15	
41 AND ABOVE	10	10	

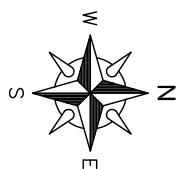
10. IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE THE PROPER DERATING VALUES HAVE BEEN APPLIED TO THE CONDUCTORS INSTALLED.

COOLING TOWER	
M10	
P7 1-1/4"	
DATE	BY
DESCRIPTION	REV



CONDUIT PLAN

3/16" = 1'-0"

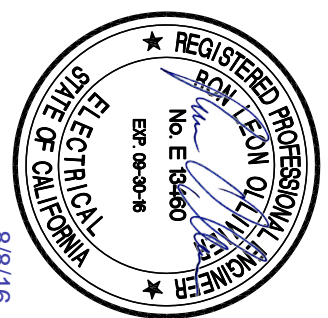


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POWER  
CONDUIT  
PLAN

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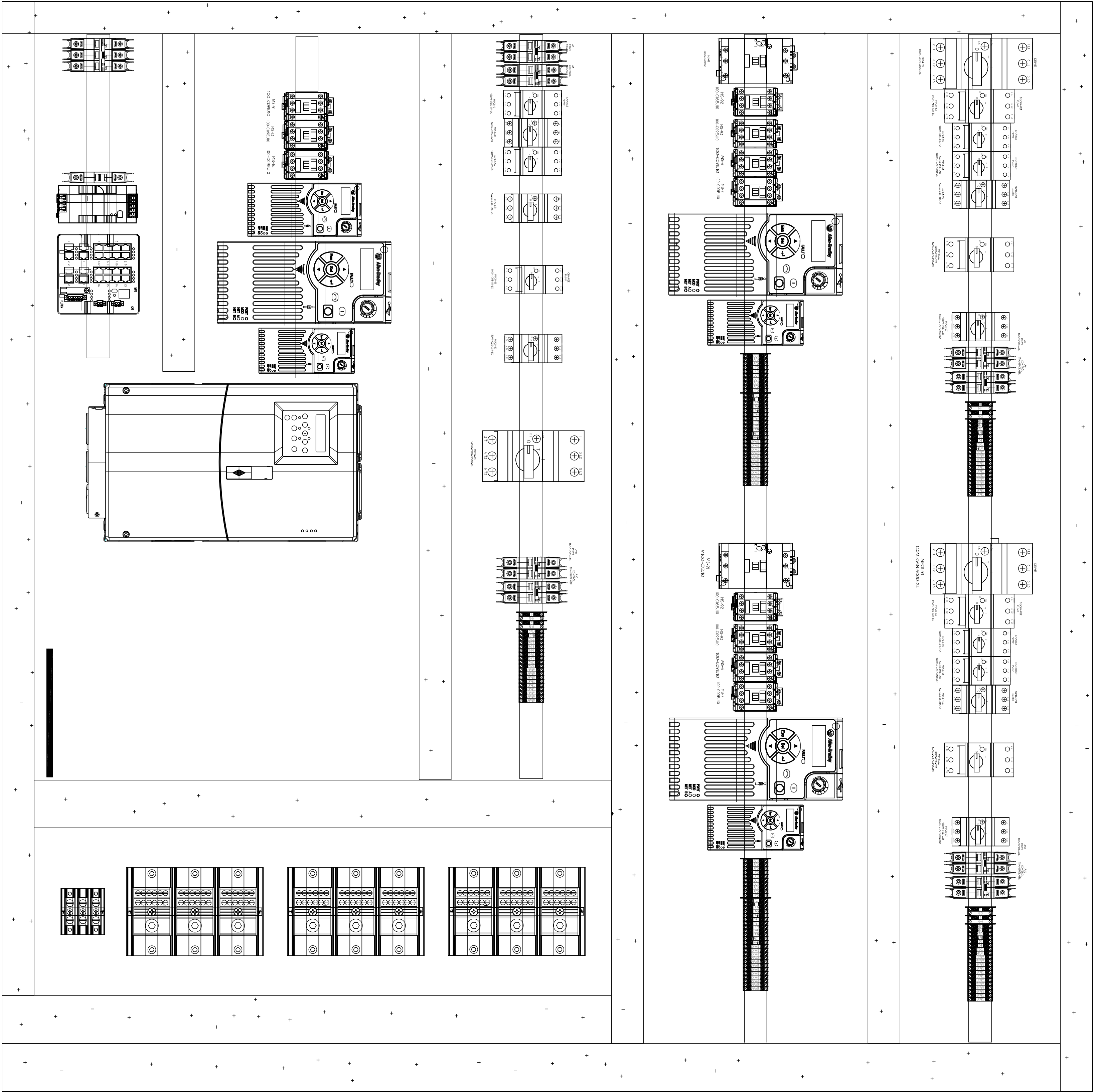


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5. ALL COMPONENTS AND EQUIPMENT SHALL BE UL LISTED.
6. PANEL SHALL BE CONSTRUCTED TO UL508A STANDARDS BY A LICENSED UL PANEL SHOP.
7. MAJOR PANEL COMPONENTS ARE CALLED OUT ON ONELINE DIAGRAM.

MCC Panel  
Hoffman #A74H7218SSLP3PT  
Panel Weight: 650 lbs  
74" x 72" x 18"

Back Panel  
Hoffman #A72P72  
68" X 68"  
Back Panel Weight (est) 180 lbs





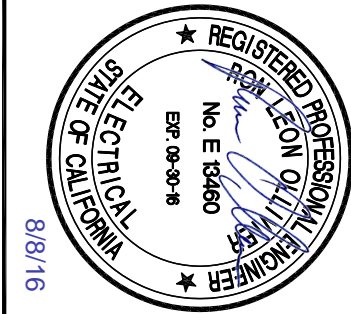
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MCC2 POWER  
PANEL LAYOUT



