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ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

NEW FACILITY

STANDARD MATERIALS
1601 NORTH LANE
MANDEVILLE, LA

SCHEDULES &
RISER DIAGRAM

REV:04-15-09

SCALE: AS NOTED

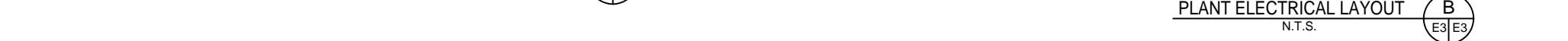
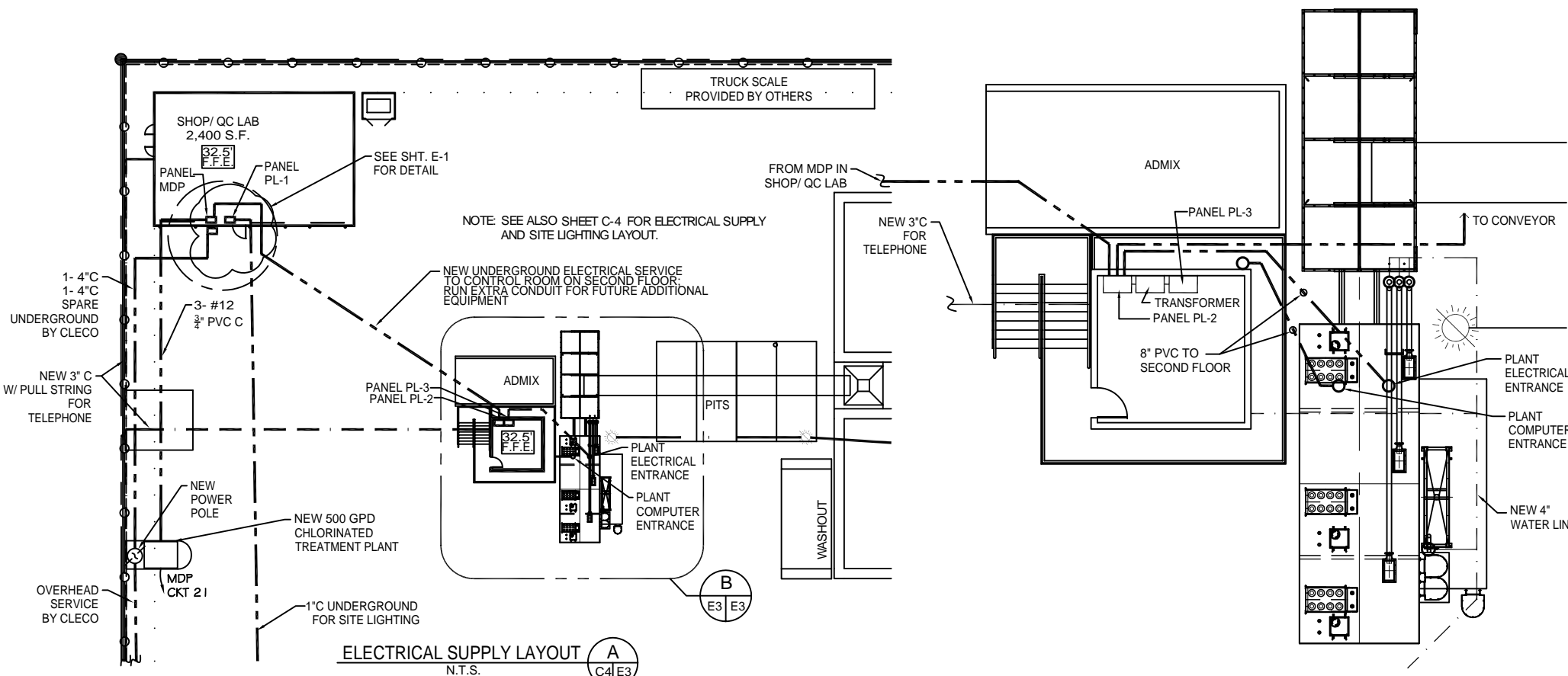
JOB#: 1906

DATE: 01-09-09

SHEET

E-3

OF



PANEL: MDP
LOCATION: WEST SIDE WAREHOUSE WALL
FEEDER SOURCE: CLECO

VOLTAGE: 480V, 600A 3Ø, 3W W/ MAIN LUG
ENCLOSURE: SURFACE MOUNTED EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER OR EQUAL

LOAD NO.	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER	LOAD (VA)	ADJ. LOAD (VA)	LOAD (VA)	BREAKER	LOAD DESCRIPTION	THHN WIRE SIZE	LOAD NO.	
1	20	SPACE	1	-	-	1600	1	20	FUEL DISCONNECT SWITCH	2	
3	20	SPACE	1	-	-	-	1	20	SPACE	4	
5	20	SPACE	1	-	-	75000	3	100	75 KVA XFMR TO PL-1	6	
7	20	CONTROL BOX / TRUCK SCALE	1	1000	-	-	-	-	-	8	
9	30	SITE LIGHTING	3	1200	-	-	-	-	-	10	
11	20	SPACE	1	-	-	-	-	-	-	12	
13	20	SPACE	1	-	-	-	-	-	-	14	
15	20	SPACE	1	-	-	-	-	-	-	16	
17	20	SPACE	1	-	-	-	-	-	-	18	
19	20	SPACE	1	-	-	-	-	-	-	20	
21	20	SPACE	1	-	-	-	-	-	-	22	
23	20	SPACE	1	-	-	-	-	-	-	24	
25	20	SPACE	1	-	-	-	-	-	-	26	
27	20	SPACE	1	-	-	-	-	-	-	28	
29	20	SPACE	1	-	-	-	-	-	-	30	
31	20	SPACE	1	-	-	-	-	-	-	32	
33	20	SPACE	1	-	-	-	-	-	-	34	
35	20	SPACE	1	-	-	-	-	-	-	36	
37	20	SPACE	1	-	-	-	-	-	-	38	
39	20	SPACE	1	-	-	-	-	-	-	40	
41	20	SPACE	1	-	-	-	-	-	-	42	
TOTAL CONNECTED LOAD (VA)											
AD= 130700										BD= 137000	CD= 130900

PANEL: PL-1
LOCATION: NORTH SIDE WAREHOUSE WALL
FEEDER SOURCE: CLECO

VOLTAGE: 208/120V, 225A 3Ø, 4W W/ MAIN BRKR
ENCLOSURE: SURFACE MOUNTED EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER OR EQUAL

LOAD NO.	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER	LOAD (VA)	ADJ. LOAD (VA)	LOAD (VA)	BREAKER	LOAD DESCRIPTION	THHN WIRE SIZE	LOAD NO.	
1	20	ALL EMERGENCY LIGHTS	1	400	-	300	1	20	EXTERIOR WALL SCENES	2	
3	20	LAB AREA, W/H OFFICE & MATERIAL STORAGE LIGHTS	1	2000	-	200	1	20	RESTROOM LIGHT/VENT	4	
5	20	WATER HEATER	1	1200	-	1200	1	20	WH/MATERIAL STOR./OFF. RECEPT	6	
7	20	RESTROOM GFI RECEPTACLE	1	200	-	1000	1	20	LAB W/H OFF. RECEPT	8	
9	30	STOVE IN LAB	2	5000	-	1200	1	20	WALL FAN	10	
11	20	BAT. STOR. / LOFT RECEPT	1	1400	-	1200	1	20	WALL FAN	12	
13	20	AHU RECEPT	1	200	-	200	1	20	W. HEATER REC. ABOVE DECK	14	
15	20	WATER HEATER 5 GAL	1	2000	-	1600	3	30	HIGH/BAY/LOW/BAY LIGHTS	16	
19	30	HIGH/BAY LIGHTS	3	1600	-	-	-	-	-	22	
23	30	SHOP COMPRESSOR	2	1200	-	1800	3	30	WELDING MACHINE	24	
25	20	SPACE	1	-	-	-	-	-	-	26	
27	20	SPACE	1	-	-	-	-	-	-	28	
29	20	SPACE	1	-	-	-	-	-	-	30	
31	20	SPACE	1	-	-	-	-	-	-	32	
33	20	SPACE	1	-	-	-	-	-	-	34	
35	20	SPACE	1	-	-	-	-	-	-	36	
37	20	SPACE	1	-	-	-	-	-	-	38	
39	20	SPACE	1	-	-	-	-	-	-	40	
41	20	SPACE	1	-	-	-	-	-	-	42	
TOTAL CONNECTED LOAD (VA)											
AD= 10433										BD= 11033	CD= 14783

PANEL: PL-2
LOCATION: CONTROL ROOM NORTH WALL 2ND FLOOR
FEEDER SOURCE: CLECO

VOLTAGE: 480V, 400A 3Ø, 4W MLD
ENCLOSURE: SURFACE MOUNTED EQUIPMENT GND BAR
FEEDER SOURCE: CLECO

LOAD NO.	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER	LOAD (VA)	ADJ. LOAD (VA)	LOAD (VA)	BREAKER	LOAD DESCRIPTION	THHN WIRE SIZE	LOAD NO.	
1	100	CONVEYOR	3	80500	-	101250	3	250	BATCH PLANT	2	
3	20	FIRST FLOOR LIGHTS	1	300	-	-	-	-	-	4	
5	20	2ND FLOOR LIGHTS	1	400	-	30000	3	45	20 KVA XFMR #2 180-200V/208-120V	6	
7	20	RESTROOM VENT LIGHT	1	200	-	-	-	-	-	8	
9	20	EMERGENCY EXT LIGHTS	1	200	-	200	1	20	EXTERIOR WALL SCENES	10	
11	20	EXTERIOR HALIDE WALLPACKS	1	1200	-	-	-	-	-	12	
13	20	SPACE	1	-	-	-	-	-	-	14	
15	20	SPACE	1	-	-	-	-	-	-	16	
17	20	SPACE	1	-	-	-	-	-	-	18	
19	20	SPACE	1	-	-	-	-	-	-	20	
21	20	SPACE	1	-	-	-	-	-	-	22	
23	20	SPACE	1	-	-	-	-	-	-	24	
TOTAL CONNECTED LOAD (VA)											
AD= 104616										BD= 105516	CD= 104116

PANEL: PL-3
LOCATION: CONTROL ROOM NORTH WALL 2ND FLOOR
FEEDER SOURCE: CLECO

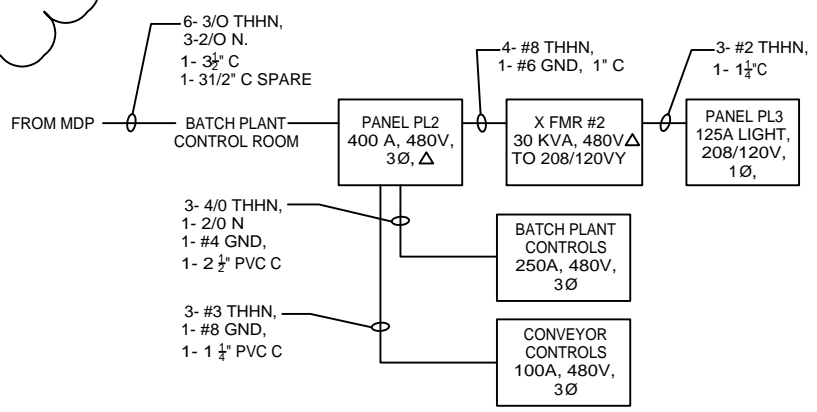
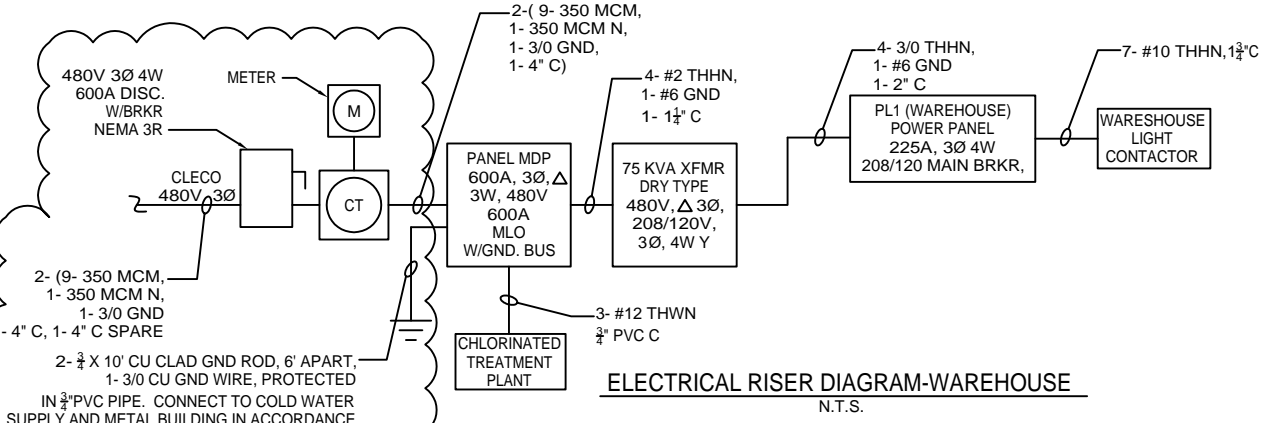
VOLTAGE: 208/120V, 125A 1Ø, 3W W/ MAIN BRKR
ENCLOSURE: SURFACE MOUNTED EQUIPMENT GND BAR
SQUARE D TYPE QO LOAD CENTER OR EQUAL

LOAD NO.	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER	LOAD (VA)	ADJ. LOAD (VA)	LOAD (VA)	BREAKER	LOAD DESCRIPTION	THHN WIRE SIZE	LOAD NO.	
1	30	1ST. FLOOR PTAC	2	6240	-	6240	2	30	2ND FLOOR PTAC	2	
3	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	4	
5	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	6	
7	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	8	
9	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	10	
11	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	12	
13	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	14	
15	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	16	
17	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	18	
19	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	20	
21	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	22	
23	20	2ND FLOOR RECEPTACLES (ISOLATED GROUNDS)	1	200	-	200	1	20	2ND FLOOR RECEPTACLE (ISOLATED GROUNDS)	24	
TOTAL CONNECTED LOAD (VA)											
AD= 2640										BD= 6640	CD= 6640

- LEGEND**
- ⊕ - 120V, 20A DUPLEX RECEPTACLE
 - ⊕GFI - 120V, 20A GFI DUPLEX RECEPTACLE
 - ⊕ - PULL DOWN RECEPTACLE
 - ⊕ - FUSED DISCONNECT
 - ⊕ - POWER PANEL
 - ⊕ - THERMOSTAT
 - ⊕ - JBOX FOR SIGNAGE, STYLE BY OWNER
 - ⊕ - 2' x 4' RECESSED FLUORESCENT LAMP, STEEL HOUSING; NUMBER INDICATES # OF BULBS
 - ⊕ - VENT / LIGHT
 - ⊕ - EMERGENCY LIGHT WITH 90 MIN. BATTERY BACKUP
 - ⊕ - EXIT LIGHT, 90 MINUTE BATTERY BACK-UP
 - ⊕ - EXTERIOR WALL MOUNTED LIGHT, SELECTED BY OWNER
 - ⊕ - SWITCH
 - ⊕ - WALL PACK, SELECTED BY OWNER
 - ⊕ - EMERGENCY SHUNT TRIP

ELECTRICAL LOAD SUMMARY - ---A SERVICE

LOAD SOURCE	3Ø-KVA	1Ø-KVA OR	1Ø-KW	3Ø-KW
BUILDING LIGHTING	4300			
ELECTRIC WATER HEATING	4000			
HEAT PUMP				
SUPPLEMENTAL HEAT SYSTEM				
AIR CONDITIONING	19680			
ELECTRIC HEATING (CIRCLE - PRIMARY/SECONDARY)			10	5
COOKING (INDIRECT)	5000			
REFRIGERATION				
RECEPTACLES (STANDARD)	4400			
RECEPTACLES (COMPUTER)	1400			
TOTAL MOTORS (EXCLUDE HVAC)				
PARKING LOT / EXTERIOR LIGHTING	2100			
MISCELLANEOUS	3000			
MIXING PLANT/ CONVEYOR	281150			
TOTAL	325030		10	5



ELECTRICAL RISER DIAGRAM-BATCH PLANT CONTROL
N.T.S.