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A NEW TRAVEL STOP
STORE NO. 735
CALHOUN, GA



Revisions:	
No.	Date

Project No.: LVS - 18735
Date: 05-22-18
Sheet No.:

E-6.1

OF:

RISER DIAGRAM GENERAL NOTES:

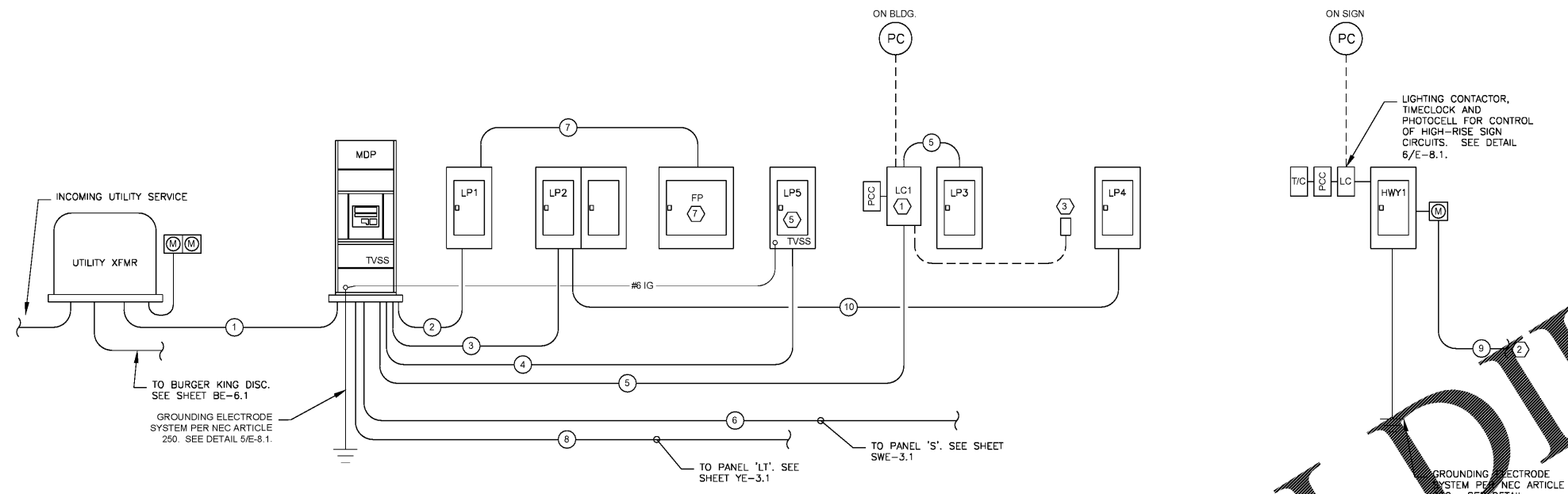
- SWITCHBOARD 'MDP' SHALL BE RATED FOR SERVICE ENTRANCE AND SHALL HAVE BUILT-IN TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS) PROTECTION - EATON SPD250. MODIFY PANEL FACE SUCH THAT NO ADDITIONAL BREAKERS MAY BE ADDED.
- EQUIPMENT BRACING RATINGS ARE BASED ON CALCULATIONS THAT ASSUME INFINITE UTILITY BUS AND A UTILITY TRANSFORMER RATED AT 750KVA AND 3.5% IMPEDANCE. IF A DIFFERENT TRANSFORMER IS SUPPLIED, ENGINEER MUST BE NOTIFIED PRIOR TO EQUIPMENT ORDERING FOR CONSULTATION.
- ALL SWITCHGEAR SHALL BE PROVIDED BY OWNER. ANY REQUIRED FUSES BY OWNER.
- THE ORDER FOR THE ELECTRICAL SWITCHGEAR EQUIPMENT (FURNISHED BY LOVE'S) WILL ONLY BE RELEASED AFTER THE E.C. HAS VERIFIED WITH THE UTILITY COMPANY THAT THE DESIGN PERTAINING TO THE ELECTRICAL SERVICE (METERS, CT ENCLOSURE(S), CONDUIT(S), TRANSFORMER (S), ETC.) MEETS THEIR REQUIREMENTS. THE OWNER (LOVE'S) MUST RECEIVE THIS VERIFICATION TO RELEASE THE ORDER.

RISER DIAGRAM KEYED NOTES:

- 3-POLE, 100A ELECTRICAL HELD LIGHTING CONTACTOR IN A NEMA 1 ENCLOSURE INCLUDE PHOTOCELL CONTROLLER (PCC) IN AN ENCLOSURE NEXT TO LOCAL CONTROLLER FOR SIGN CONTROL PANEL 'LP3'. SEE DETAIL 2 THIS SHEET.
- CONNECTION TO SEPARATE SERVICE. E.G. SHALL RUN SECONDARY CONDUIT FROM UTILITY TRANSFORMER TO PANEL. COORDINATE LOCATION AND REQUIREMENTS WITH UTILITY COMPANY.
- SEE LIGHTING MANUAL OVERRIDE SWITCH IN OFFICE. REFER TO SHEET E-4.1
- NOTE NOT USED
- PANEL 'LP5' SHALL HAVE BUILT-IN TVSS PROTECTION, EATON PPSD160.
- NOTE NOT USED
- ISO-FUEL PANEL 'FP' PROVIDED BY PATCO ELECTRICAL SERVICES. SEE FUEL ELECTRICAL DRAWINGS FOR WIRING DIAGRAMS AND ALL CONNECTION REQUIREMENTS.

FEEDER SCHEDULE

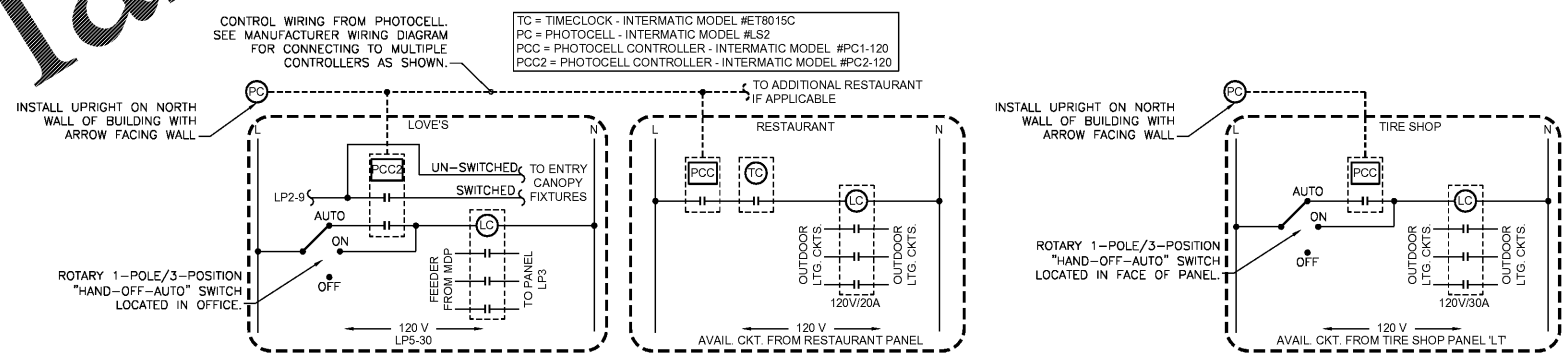
- 7 SETS EACH OF 4 - 500KCMIL IN 7 - 3/2" CONDUITS.
- 2 SETS EACH OF 4 - 350KCMIL, #1 GROUND IN 2 - 3" CONDUITS.
- 4 - 500KCMIL, #3 GROUND IN 3/2" CONDUIT.
- 4 - #1, #6 GROUND IN 2" CONDUIT.
- 4 - #1, #6 GROUND IN 2" CONDUIT.
- 4 - 500KCMIL, #3 GROUND IN 3/2" CONDUIT.
- 4 - #1, #6 GROUND IN 2" CONDUIT.
- 3 SETS EACH OF 4 - 400KCMIL, #3/0 GROUND IN 3 - 3/2" CONDUITS.
- 3 - #1 IN 1 1/2" CONDUIT.
- 4 - #3/0, #6 GROUND IN 2 1/2" CONDUIT.



1 ELECTRICAL RISER DIAGRAM

PANEL HWY1											
VOLTAGE (L-N):		120	ENCLOSURE TYPE:		NEMA 3R						
VOLTAGE (L-L):		240	MOUNTING:		SURFACE						
PHASES, WIRES:		1 ϕ , 3 W	AIC RATING (A):		10000						
MINIMUM BUS CAPACITY:		100 A	NOTES:		SERVICE ENTRANCE RATED						
MAIN O.C. DEVICE:		100 A MCB									
CKT NO	TRIP AMPS	POLE	DESCRIPTION	LOAD (VA)		DESCRIPTION	POLE	TRIP AMPS	CKT NO	PHASE	
				A	B					A	B
1	20	1	BURGER KING SIGN *1	1000	1080	LOVE'S HEART	1	20	2		
3	20	1	SPARE	0	1080	LOVE'S HEART	1	20	4		
5	20	1	SPARE	0	1440	LOVE'S LOGO *1	1	20	6		
7	30	1	PRICER SIGN - LED	1800	100	LIGHTING CONTROL PILOT	1	20	8		
9	30	1	PRICER SIGN - LED	1800	960	SUBWAY SIGN *1	1	20	10		
11	30	1	PRICER SIGN - LED	1800	0	SPARE	1	20	12		
13	30	1	PRICER SIGN - LED	1800	0	SPARE	1	20	14		
15	20	1	SPARE	0	0	SPARE	1	20	16		
17	20	1	SPARE	0	0	SPARE	1	20	18		
CONNECTED LOAD PHASE TOTALS (VA)				8080		4780					
CONN. LOAD (KVA)				12.9		53.6		AMPS			
EQUIPMENT				0.1		1.00		0.1			
LIGHTING - EXTERIOR				12.8		1.25		15.9			
DEMAND LOAD				7.9		33.1		AMPS			
SPARE CAPACITY				7.9		33.1		AMPS			

SWITCHBOARD MDP				SERVICE ENTRANCE RATED LOCKABLE NEMA 3R ENC.	
120/208 VOLTS		3 ϕ 4 W	250 AMP CB	65000 A.I.C. RATING	
			2500 VOLT BUS	FLOOR MOUNTED	
CKT NO.	TRIP/ POLES	DESCRIPTION	DEMAND LOAD VA	CIRCUIT NOTES	
1	600/3	PANEL LP1	193241		
2	400/3	PANEL LP2	126293		
3	100/3	PANEL LP3	27920		
4	100/3	PANEL LP5	19390		
5	400/3	PANEL LP4	92138		
6	600/3	PANEL LP6	151411		
7	200/3	DWH-1	54000		
8	200/3	DWH-2	54000		
Load Category			Connected Load (kVA) x Demand Factor =	Demand Load (kVA)	
Cooling and Heating			121.4	0.80	97.1
Electric Clothes Dryers			47.2	0.85	40.1
Equipment			153.7	1.00	153.7
Heating			168.3	1.25	210.4
Kitchen Equipment - Non-Dwelling Unit			60.9	0.65	39.6
Lighting			17.9	1.25	22.4
Lighting - Exterior			35.9	1.25	44.9
Motors			75.9	1.00	75.9
Motors (Largest)			16.6	1.25	20.8
Receptacles (0 - 10 KVA)			10.0	1.00	10.0
Receptacles (Over 10 KVA)			30.4	0.50	15.2
TOTAL CONN. LOAD:			738.2 KVA		
TOTAL DEMAND LOAD:			730.0 KVA		
TOTAL DEMAND LOAD:			2026.4 AMPS		
SPARE CAPACITY:			473.6 AMPS		



NOTE
WHEN THE RESTAURANT IS OPEN FOR 24 HOURS - SET THE TIMECLOCK TO TURN OFF DURING DAYLIGHT TIMES SO THAT LIGHTING TURNS OFF AT DAWN.
WHEN THE RESTAURANT IS NOT OPEN FOR 24 HOURS - SET THE TIMECLOCK TO TURN OFF AT CLOSING TIME. VERIFY TIME WITH OWNER.

2 OUTDOOR LIGHTING CONTROL WIRING DETAIL

Order Plans @