CIRCUIT NO.	GRND WIRE SIZE	# WIRES & SIZE	A&E NO.	LOAD DESCRIPTION	LOAD	WATTS A	WATTS B	WATTS C	TRIP AMPS	POLE	PHASE	POLE	TRIP AMPS	WATTS A	WATTS B	WATTS C	LOAD	LOAD DESCRIPTION	A&E NO.	# WIRES & SIZE	GRND WIRE SIZE	CIRCUIT NO.
D-1	#12	3 #12	W-059	WALK-IN COOLER (6)	M	1236			15	A	-	-	0			-	-	SPACE	-	-	-	D-2
D-3	-	-	-	-	M		1236		-	B	1	20		0		-	-	SPARE	-	-	-	D-4
D-5	-	-	-	-	M			1236	-	3	C	1	20		0	-	-	SPARE	-	-	-	D-6
D-7	#10	3 #10	W-059	WALK-IN FREEZER (6)	M	1674			25	A	1	20	500			-	M	MUSIC SYSTEM (MUZAK)	F-131	2#12	#12	D-8
D-9	-	-	-	-	M		1674		-	B	1	20		264		-	M	ICE MAKERS S/S & D/T (2) (6)	S-513	2 #12	#12	D-10
D-11	-	-	-	-	M			1674	-	3	C	20			1373	-	M	ICE MACHINE CONDENSER (6)	S-513	2 #10	#10	D-12
D-13	-	-	-	SPARE	-	0			20	1	A	2	1373			-	M	-	-	-	-	D-14
D-15	-	-	-	SPARE	-		0		20	1	B	20		1373		-	M	ICE MACHINE CONDENSER (6)	S-513	2 #10	#10	D-16
D-17	-	-	-	SPARE	-			0	20	1	C	2			1373	-	M	-	-	-	-	D-18
D-19	#12	2 #12	N-043	POWER SOAK	K	1186			15	A	1	20	700			-	H	EF-2 (RESTROOM)	-	2 #12	#12	D-20
D-21	-	-	-	-	K		1186		-	2	B	-		0		-	-	SPARE	-	-	-	D-22
D-23	#12	2 #12	E-107	HOOD FIRE SUPPRESSION SYSTEM (1)	M			720	20	1	C	-			0	-	-	SPARE	-	-	-	D-24
D-25	#12	2 #12	-	IRRIGATION TIMER	M	360			20	1	A	1	20	540		-	M	UTILITY RECEPTACLE	-	2 #12	#12	D-26
D-27	#12	2 #12	-	ROOF RECEPTACLES	M		360		20	1	B	1	20		1180	-	H	EF-1 (HOOD)	E-107	2 #12	#12	D-28
D-29	#12	2 #12	B-223	WATER HEATER IGNITION	M			180	20	1	C	-	-			0	-	SPACE	-	-	-	D-30
D-31	#10	3 #8	-	RTU-1	H	5040			50	A	-	-	0			-	-	SPACE	-	-	-	D-32
D-33	-	-	-	-	H		5040		-	B	1	20		360		-	M	UTILITY RECEPTACLES	-	2 #12	#12	D-34
D-35	-	-	-	-	H			5040	-	3	C	-	-		0	-	-	SPACE	-	-	-	D-36
D-37	#8	3 #4	-	RTU-2	H	8520			80	A	1	20	540			-	M	UTILITY RECEPTACLE/VSAT (F-050 & U-061)	-	2 #12	#12	D-38
D-39	-	-	-	-	H		8520		-	B	1	30		2496		-	K	FROZEN BEVERAGE DISPENSER	S-737	2#10	#10	D-40
D-41	-	-	-	-	H			8520	-	3	C	2			2496	-	K	-	-	-	-	D-42
						18016	18016	17370						3653	5673	5242						

WATTS: BUS A 21669
BUS B 23689
BUS C 22612
TOTAL 67970

HVAC EQUIPMENT = 42560 W
KITCHEN EQUIPMENT = 7364 x 0.65 = 4787 W
OTHER LOADS (MISC.) = 18046 W
LIGHTING = 0 x 1.25 = 0 W
TOTAL LOAD= 65393 W
TOTAL CURRENT= 182 A

PANEL D ELECTRICAL DATA 120/208V PANEL TYPE NQOD
MOUNTING FLUSH MAINS 400A M.L.O. PHASE 3Ø, 4W
NEUTRAL BUS AMPACITY 400A GROUND BUS AMPACITY 225A
A.I.C. RATING 65KAIC SERIES RATED UTILIZING 22KAIC CIRCUIT BREAKERS

PANEL D

CIRCUIT NO.	GRND WIRE SIZE	# WIRES & SIZE	A&E NO.	LOAD DESCRIPTION	LOAD	WATTS A	WATTS B	WATTS C	TRIP AMPS	POLE	PHASE	POLE	TRIP AMPS	WATTS A	WATTS B	WATTS C	LOAD	LOAD DESCRIPTION	A&E NO.	# WIRES & SIZE	GRND WIRE SIZE	CIRCUIT NO.
A-1	#12	2 #12	S-285	BEVERAGE DISPENSER D/T	K	1116			20	1	A	1	20	1780			K	ICE TEA EQUIPMENT	S-546	2#12	#12	A-2
A-3	#12	2 #12	S-284	BEVERAGE DISPENSER S/S	K		1116		20	1	B	1	20		1200		M	POS/ORDER ENTRY TERMINALS (2) & U-070 (2)	U-100	2 #12	#12	A-4
A-5	#12	2 #12	R-009	FULL HEIGHT FREEZER	K			1080	20	1	C	1	20			360	M	SAFE W/AUDIT LOCK IG / FUTURE	F-174	2 #12	#12	A-6
A-7	-	-	-	SHUNT TRIP FOR BREAKER #A-5	-	-					A	1	20	864			K	CARBONATOR	S-570	2 #12	#12	A-8
A-9	#10	2 #10	P-452	HOT WATER DISPENSER	K		2040		30		B	1	20		1200		M	POS/ORDER ENTRY TERM (1) & U-070 (1)	U-100	2 #12	#12	A-10
A-11	-	-	-	-	K			2040		2	C	-	-			0	-	SPACE	-	-	-	A-12
A-13	#12	2 #12	S-027	HEATED CABINET	K	1920			20	1	A	1	20	600			M	CCTV DVR & MONITOR	U-035	2 #12	#12	A-14
A-15	#12	2 #12	F-040	OFFICE COMPUTER	M		300		20	1	B	1	20		1200		M	POS/ORDER ENTRY TERM (1) & U-070 (1)	U-100	2 #12	#12	A-16
A-17	#12	2 #12	U-052	OFFICE SECURITY SYSTEM (1)	M			300	20	1	C	-	-			0	-	SPACE	-	-	-	A-18
A-19	#12	2 #12		OFFICE RECEPTACLES	M	540			20	1	A	1	20	864			K	CARBONATOR	S-570	2 #12	#12	A-20
A-21	#12	2#12	F-090	LIPS/PTR/COPIER/FAX/SCANNER F-080	M		500		20	1	B	1	20		480		M	DT COMM SYS BASE STATION	U-011	2 #12	#12	A-22
A-23	-	-	-	SPARE	M			0	20	1	C	1	20			240	K	RETHERMALIZER	C-107	2 #12	#12	A-24
A-25	#12	2 #12	S-540	PEPSI BOOSTER TANK/CO2 MONITOR(S-381)	M	540			20	1	A	-	-	-			-	SHUNT TRIP FOR BREAKER #A-24	-	-	-	A-26
A-27	-	-	-	SPACE	-		-		-	-	B	1	20		288		M	TIMER	C-400	2 #12	#12	A-28
A-29	-	-	-	SPACE	-			-	-	-	C	-	-			-	-	SHUNT TRIP FOR BREAKER #A-28	-	-	-	A-30
A-31	-	-	-	SPACE	-	-			-	-	A	1	20	180			M	KITCHEN MONITOR - IG	U-238	2 #12	#12	A-32
A-33	-	-	-	SPACE	-		-		-	-	B	1	20		864		M	D/T TIMING SYSTEM	S-204	2 #12	#12	A-34
A-35	#10	2 #10	P-452	HOT WATER DISPENSER	K			2040	30		C	1	15			1425	K	POD BREWER	S-547	2 #12	#12	A-36
A-37	-	-	-	-	K	2040				2	A	1	20	-			-	SPACE	-	-	-	A-38
A-39	-	-	-	SPARE	-		0		20	1	B	1	20		816		K	DUAL VAT FRYER	C-046	2 #12	#12	A-40
A-41	#12	2 #12	S-026	HEATED CABINET	K			1920	20	1	C	-	-			-	-	SHUNT TRIP FOR BREAKER #A-40	-	-	-	A-42
						6156	3956	7380						4288	6048	2025						

WATTS: BUS A 10444
BUS B 10004
BUS C 9405
TOTAL 29853

KITCHEN EQUIPMENT = 21301 x .65 = 13846 W
OTHER LOADS (MISC.) = 8552 W
TOTAL LOAD= 22398 W
TOTAL CURRENT= 62 A

PANEL A ELECTRICAL DATA 120/208V PANEL TYPE NQOD
MOUNTING FLUSH MAINS 225A M.L.O. PHASE 3Ø, 4W
NEUTRAL BUS AMPACITY 225A GROUND BUS AMPACITY 225A
A.I.C. RATING 65KAIC SERIES RATED UTILIZING 10KAIC CIRCUIT BREAKERS

KITCHEN EQUIPMENT PANEL A

NOT USED H

CIRCUIT NO.	GRND WIRE SIZE	# WIRES & SIZE	A&E NO.	LOAD DESCRIPTION	LOAD	WATTS A	WATTS B	WATTS C	TRIP AMPS	POLE	PHASE	POLE	TRIP AMPS	WATTS A	WATTS B	WATTS C	LOAD	LOAD DESCRIPTION	A&E NO.	# WIRES & SIZE	GRND WIRE SIZE	CIRCUIT NO.
B-1	#12	2 #12	-	KITCHEN/ HOOD LIGHTS (4)	L	885			20	1	A	1	20	0			-	SPACE	-	-	-	B-2
B-3	-	-	-	SPARE	-		0		20	1	B	1	20		536		L	DINING ROOM LIGHTS (5)	-	2#12	#12	B-4
B-5	#12	2 #12	-	COOLER/FREEZER LIGHTS	L			800	20	1	C	1	20			0	-	SPACE	-	-	-	B-6
B-7	-	-	-	SPARE	-	0			20	1	A	1	20	414			L	INTERIOR MENU BOARD & REMOTE ALARM LT	L-016	2 #10	#10	B-8
B-9	#10	2 #10	-	OUTSIDE LIGHTS (2)	L		594		20	1	B	-	-		0		-	SPACE	-	-	-	B-10
B-11	-	-	-	SPARE	-			0	20	1	C	-	-			0	-	SPACE	-	-	-	B-12
B-13	-	-	-	SPARE	-	0			20	1	A	-	-	0			-	SPACE	-	-	-	B-14
B-15	#10	2#10	-	MENU BOARD @ D/T (2) (3)	L		500		20	1	B	1	20		968		L	PARKING LIGHTING (2) (3)	-	2 #8	#8	B-16
B-17	-	-	-	SPARE	-			0	20	1	C	1	20			968	L	PARKING LIGHTING (2) (3)	-	2 #8	#8	B-18
B-19	#12	2 #12	-	SHOW WINDOW	L	1200			20	1	A	1	20	0			L	SPARE	-	-	-	B-20
B-21	#12	2 #12	-	SHOW WINDOW	L		1200		20	1	B	1	20		0		L	SPARE	-	-	-	B-22
B-23	#12	2 #12	-	SHOW WINDOW	L			1200	20	1	C	-	-			0	-	SPARE	-	-	-	B-24
B-25	#12	2#12	-	SHOW WINDOW	L	1200			20	1	A	-	-	0			-	SPARE	-	-	-	B-26
B-27	#10	2 #10	-	BUILDING SIGNS (2)	L		1200		20	1	B	1	20		0		-	SPARE	-	-	-	B-28
B-29	#10	2 #10	-	PYLON SIGN (2) (3)	L			1200	20	1	C	1	20			0	-	SPARE	-	-	-	B-30
B-31	#10	2 #10	-	DIRECTIONAL SIGNS (2) (3)	L	1200			20	1	A	-	-	0			-	SPACE	-	-	-	B-32
B-33	#12	2#12	-	LIGHTING CONTROLS (1)	M		500		20	1	B	-	-		0		-	SPACE	-	-	-	B-34
B-35	#10	2#10	-	BUILDING SIGNS (2)	L			1200	20	1	C	-	-			0	-	SPACE	-	-	-	B-36
B-37	-	-	-	SPARE	L	0			20	1	A	-	-	0			-	SPACE	-	-	-	B-38
B-39	-	-	-	SPARE	L		0		20	1	B	-	-		0		-	SPACE	-	-	-	B-40
B-41	#10	2#10	-	BUILDING SIGNS (2)	L			1200	20	1	C	-	-			0	-	SPACE	-	-	-	B-42
						4485	3994	5600						414	1504	968						

WATTS: BUS A 4899
BUS B 5498
BUS C 6568
TOTAL 16965

LIGHTING = 16465 x 1.25 = 20581 W
OTHER LOADS (MISC.) = 500 W
TOTAL LOAD= 21081 W
TOTAL CURRENT= 59 A

PANEL B ELECTRICAL DATA 120/208V PANEL TYPE NQOD
MOUNTING FLUSH MAINS 225A M.L.O. PHASE 3Ø, 4W
NEUTRAL BUS AMPACITY 225A GROUND BUS AMPACITY 225A
A.I.C. RATING 65KAIC SERIES RATED UTILIZING 10KAIC CIRCUIT BREAKERS

LIGHTING PANEL B

NOT USED

PANEL	LIGHTING (W) **	KITCHEN EQUIP. (W) ***	HVAC (W)	MISCELLANEOUS (W)	CONNECTED LOAD	DEMAND LOAD (W)
A	-	13846	-	8552	29853	22398
B	20581	-		500	16965	21081
EQUIP. CABINET	-	47664	-	2400	50064	33382
D	-	* 4787	42560	18046	67970	65393
TOTAL	20581	66297	42560	29498	164852	142254

* 7364 x 0.65 = 4787

142254W @ 120/208V, 3Ø-4W = 395 A
LARGEST MOTOR LOAD = 2379 W

LOAD KEY LEGEND		
	LOAD DESCRIPTION	APPLICABLE FACTOR
L	LIGHTING	125% **
K	KITCHEN EQUIPMENT	65% ***
H	HVAC	100%
M	MISC. EQUIPMENT	100%

***KITCHEN EQUIPMENT DEMAND FACTORS PER NEC 2011 SECTION 220.56 ALLOWS FOR PERCENTAGES WITHIN EACH PANEL ACCORDING TO THE FOLLOWING EQUIPMENT QUANTITIES:
1 - 100%; 2 - 100%; 3 - 90%; 4 - 80%; 5 - 70%; 6 AND OVER - 65%.
THESE PERCENTAGES DO NOT CARRY OVER INTO THE LOAD SUMMARY, WHICH IS CALCULATED AT 65% REGARDLESS.

LOAD SUMMARY & LEGEND

NOT USED C

GENERAL NOTE:

LIGHTING CIRCUITS INSIDE THE BUILDING SHALL BE WIRED THRU LIGHTING CONTACTOR. REFER TO DETAIL 2/E6.0.

KEY NOTES:

1. PROVIDE LOCK-ON BREAKER.
2. CIRCUITS TO BE WIRED THRU EXTERIOR LIGHTING CONTROL RELAY. SEE DETAIL 4/E6.0.
3. FOR PARKING LOT LIGHTS AND OUTSIDE SIGNS: PROVIDE (5) 3/4"C FROM PANEL 'B' AND STUB OUT 10'-0" AWAY FROM THE BUILDING. VERIFY EXACT LOCATION OF STUB PRIOR TO ROUGH-IN. LOADS MAY VARY WITH LOCATION -- VERIFY. VERIFY OUTDOOR VOLTAGE DROP FOR ALL PARKING LIGHTING CIRCUITS.
4. CIRCUITS TO BE WIRED THRU THE LIGHTING CONTROL RELAY AND SWITCH a. SEE DETAIL 2/E6.0.
5. CIRCUITS TO BE WIRED THRU THE LIGHTING CONTROL RELAY AND SWITCH b. SEE DETAIL 2/E6.0.
6. PROVIDE HACR TYPE CIRCUIT BREAKER.

GENERAL NOTES & KEY NOTES

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ARCHITECT
THOMAS E. MORGAN, JR.
ARCHITECT

423 FISCHER TRAIL
ELLIJAY, GEORGIA 30540

JOB: 16049

CONTRACT DATE:	4.3.17
BUILDING TYPE:	EXPLORER LG-54
PLAN VERSION:	NOVEMBER 2015
SITE NUMBER:	XXXXXX
STORE NUMBER:	XXXXX

TACO BELL
LAKEPOINT
EMERSON, GA 30137

EXPLORER

PANEL SCHEDULES AND LOAD SUMMARY

E2.1

PLOT DATE: 08/17/17E