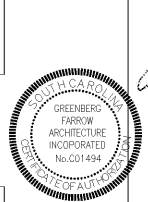


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ISSUE RECORD
DATE REV. DESCRIPTION
03/29/18 PERMIT SUBMISSION SET

PROFESSIONAL SEAL



Eric Wolf
Professional Engineer
No. 31307
South Carolina
Professional Seal

03/29/2018

PROFESSIONAL IN CHARGE
ERIC WOLF

PROJECT MANAGER
ONDRE MAYUGA

QUALITY CONTROL
ONDRE MAYUGA

DRAWN BY
GERRARD DUPLAN

PROJECT NAME
MURPHY OIL USA

MURPHY OIL CONVENIENCE STORE
508 SC - 72

GREENWOOD, SC 29646

FREY MOSS STRUCTURE

1801 Rockdale Industrial Blvd.
Conyers, Georgia 30012
Voice: (800) 366-6385
Fax: (770) 483-6037
FMS JOB NUMBER: G18MU00025
FMS MODEL NUMBER: XXXXXX

PROJECT NUMBER
20170844.0

SHEET TITLE

ELECTRICAL PANEL SCHEDULE

SHEET NUMBER

EL4

PROTO V3.0 01/03/2017

Panel: A
VOLTAGE: 120/240V
PHASE: 1
WIRE: 3
LOCATION: UTILITY/OFFICE 8
SIZE/RATING: 600 A
MOUNTING: PREFAB GEAR
STORE: MURPHY OIL CONVENIENCE STORE
AIC RATING: 35,000
GROUND BUS: SN

CKT	Wire Size	Description	Trip	Poles	A	B	Poles	Trip	Description	Wire Size	CKT
1	1-#12, 1-#12, 1-#12	SOFT DRINK CARBONATOR	20 A	1	540	720		1	20 A	1-#12, 1-#12, 1-#12	2
3	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	2080	2050	0	--	--	4
5	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	2080	2050	0	3 FLAVOR FROZEN DISPENSOR	2-#10, 1-#10, 1-#10	6
7	1-#12, 1-#12, 1-#12	CONVENIENCE RECP.T.	20 A	1	360	2080		2	20 A	1-#12, 1-#12, 1-#12	8
9	2-#4, 1-#4, 1-#8	RTU-1	70 A	2	7752	537	7752	226	1	20 A	10
11	2-#4, 1-#4, 1-#8	RTU-1	70 A	2	7752	537	7752	226	1	20 A	12
13	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	1000	2050	7752	1	20 A	14
15	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	1000	2050	7752	1	20 A	16
17	--	--	--	--	0	7752			2	70 A	18
19	2-#10, 1-#10, 1-#10	PANEL B	150 A	2	6500	2850	16020	2880	2	35 A	20
21	2-#10, 1-#10, 1-#10	PANEL B	150 A	2	6500	2850	16020	2880	2	35 A	22
23	--	--	0 A	1	0	0	0	0	--	--	24
25	2-#8, 1-#8, 1-#10	CCU#1	35 A	2	2880	11870	2880	10124	2	150 A	26
27	2-#8, 1-#8, 1-#10	CCU#1	35 A	2	2880	11870	2880	10124	2	150 A	28
29	--	--	--	--	0	0			--	--	30
31	1-#12, 1-#12, 1-#12	CREAMER	20 A	1	360	0	360	0	--	--	32
33	1-#12, 1-#12, 1-#12	RESTROOM RECEPTACLE	20 A	1	900	13568			--	--	34
35	1-#12, 1-#12, 1-#12	SALES RECEPTACLE	20 A	1	360	10457	540	10457	2	200 A	36
37	1-#12, 1-#12, 1-#12	CAPPUCCINO MACHINE	20 A	1	1800	0			--	--	38
39	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	360	2050	0	--	--	40
41	2-#10, 1-#10, 1-#10	COFFEE BREWER	30 A	2	2050	360	2050	0	1	20 A	42
Total Load:					67289 VA	67582 VA					
Total Amps:					561 A	563 A					

NOTES:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	26920 VA	100.00%	26920 VA	
HVAC	31008 VA	100.00%	31008 VA	
Lighting	2317 VA	100.00%	2317 VA	
Lighting - Exterior	6390 VA	125.00%	7988 VA	
Motor	27748 VA	100.00%	27748 VA	
Other	126 VA	100.00%	126 VA	
Receptacle	37956 VA	63.17%	23978 VA	
LARGEST MOTOR	2520 VA	125.00%	3150 VA	
Total Conn. Load:			134985 VA	
Total Est. Demand:			123234 VA	
Total Conn.:			562 A	
Total Est. Demand:			513 A	

Notes:

Panel: B
VOLTAGE: 120/240V
PHASE: 1
WIRE: 3
LOCATION: UTILITY/OFFICE 8
SIZE/RATING: 150 A
MOUNTING: PREFAB GEAR
STORE: MURPHY OIL CONVENIENCE STORE
AIC RATING: 22,000
GROUND BUS: SN

CKT	Wire Size	Description	Trip	Poles	A	B	Poles	Trip	Description	Wire Size	CKT
1	2-#12, 1-#12, 1-#12	PUMP CONTROLS (SWITCHED NEUTRAL)	20 A	2	180	1260		2	20 A	2-#12, 1-#12, 1-#12	2
3	2-#12, 1-#12, 1-#12	PUMP CONTROLS (SWITCHED NEUTRAL)	20 A	2	180	1260		2	20 A	2-#12, 1-#12, 1-#12	4
5	2-#12, 1-#12, 1-#12	DISPENSERS #1 & #2 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	1-#12, 1-#12, 1-#12	6
7	2-#12, 1-#12, 1-#12	DISPENSERS #1 & #2 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	1-#12, 1-#12, 1-#12	8
9	2-#12, 1-#12, 1-#12	DISPENSERS #3 & #4 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	1-#12, 1-#12, 1-#12	10
11	2-#12, 1-#12, 1-#12	DISPENSERS #3 & #4 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	1-#12, 1-#12, 1-#12	12
13	2-#12, 1-#12, 1-#12	DISPENSERS #5 & #6 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	2-#12, 1-#12, 1-#12	14
15	2-#12, 1-#12, 1-#12	DISPENSERS #5 & #6 (SWITCHED NEUTRAL)	20 A	2	900	1260		2	20 A	2-#12, 1-#12, 1-#12	16
17	2-#12, 1-#12, 1-#12	DISPENSERS #7 & #8 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	18
19	2-#12, 1-#12, 1-#12	DISPENSERS #7 & #8 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	20
21	2-#12, 1-#12, 1-#12	DISPENSERS #9 & #10 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	22
23	2-#12, 1-#12, 1-#12	DISPENSERS #9 & #10 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	24
25	2-#12, 1-#12, 1-#12	DISPENSERS #11 & #12 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	26
27	2-#12, 1-#12, 1-#12	DISPENSERS #11 & #12 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	28
29	2-#12, 1-#12, 1-#12	DISPENSERS #13 & #14 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	30
31	2-#12, 1-#12, 1-#12	DISPENSERS #13 & #14 (SWITCHED NEUTRAL)	20 A	2	900	900		2	20 A	2-#12, 1-#12, 1-#12	32
33	1-#12, 1-#12, 1-#12	VEEDER ROOT	20 A	1	180	1260		2	20 A	1-#12, 1-#12, 1-#12	34
35	--	--	--	--	0	1260		2	20 A	2-#12, 1-#12, 1-#12	36
37	--	--	--	--	0	360		1	20 A	1-#12, 1-#12, 1-#12	38
39	--	--	--	--	0	0		--	--	--	40
41	--	--	--	--	0	0		--	--	--	42
Total Load:					16020 VA	6500 VA					
Total Amps:					134 A	54 A					

NOTES:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	16020 VA	100.00%	11880 VA	
Motor	360 VA	100.00%	7760 VA	
Receptacle	360 VA	100.00%	360 VA	
LARGEST MOTOR	2520 VA	125.00%	3150 VA	
Total Conn. Load:			22520 VA	
Total Est. Demand:			23150 VA	
Total Conn.:			94 A	
Total Est. Demand:			96 A	

Notes:

Panel: C
VOLTAGE: 120/240V
PHASE: 1
WIRE: 3
LOCATION: UTILITY/OFFICE 8
SIZE/RATING: 200 A
MOUNTING: PREFAB GEAR
STORE: MURPHY OIL CONVENIENCE STORE
AIC RATING: 22,000
GROUND BUS: SN

CKT	Wire Size	Description	Trip	Poles	A	B	Poles	Trip	Description	Wire Size	CKT
1	1-#12, 1-#12, 1-#12	SECURITY SHUTTERS	20 A	1	250	120		1	20 A	1-#12, 1-#12, 1-#12	2
3	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	4
5	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	6
7	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	8
9	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	10
11	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	12
13	2-#12, 1-#12, 1-#12	CANOPY LED LIGHTS	20 A	2	600	1020	600	1000	1	20 A	14
15	--	--	--	--	0	1440			2	30 A	16
17	1-#12, 1-#12, 1-#12	SALES COUNTER REC.	20 A	1	720	1440			1	20 A	18
19	1-#12, 1-#12, 1-#12	UPS	20 A	1	1440	0			1	20 A	20
21	1-#12, 1-#12, 1-#12	**HAND DRYER	20 A	1	1905	398			1	20 A	22
23	1-#12, 1-#12, 1-#12	**HAND DRYER	20 A	1	1905	398			1	20 A	24
25	1-#12, 1-#12, 1-#12	OPTIONAL REFRIG.	20 A	1	360	600			2	20 A	26
27	1-#12, 1-#12, 1-#12	OPTIONAL REFRIG.	20 A	1	360	600			2	20 A	28
29	1-#12, 1-#12, 1-#12	ISLAND RECEPTACLE	20 A	1	360	750			1	20 A	30
31	1-#12, 1-#12, 1-#12	FLOOR BOX RECEPTACLE	20 A	1	360	1116			1	20 A	32
33	1-#12, 1-#12, 1-#12	SALES COUNTER RECEPT	20 A	1	180	2050			30 A	1-#12, 1-#12, 1-#12	34
35	1-#12, 1-#12, 1-#12	SECURITY SHUTTERS	20 A	1	600	2060			30 A	2-#10, 1-#10, 1-#10	36
37	--	--	--	--	0	230			2	20 A	38
39	2-#12, 1-#12, 1-#12	POLE LIGHTS	20 A	2	600	1020			1	20 A	40
41	2-#12, 1-#12, 1-#12	POLE LIGHTS	20 A	2	600	1020			1	20 A	42
Total Load:					3578 VA	10467 VA					
Total Amps:					113 A	87 A					

NOTES: ** PROVIDED BREAKER LOCK

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	120 VA	100.00%	120 VA	
Lighting	782 VA	100.00%	782 VA	
Lighting - Exterior	7988 VA	100.00%	7988 VA	
Motor	7375 VA	100.00%	7375 VA	
Receptacle	9386 VA	100.00%	9386 VA	
Total Conn. Load:			24053 VA	
Total Est. Demand:			25651 VA	
Total Conn.:			100 A	
Total Est. Demand:			107 A	

Notes:

Panel: D
VOLTAGE: 120/240V
PHASE: 1
WIRE: 3
LOCATION: UTILITY/OFFICE 8
SIZE/RATING: 150 A
MOUNTING: PREFAB GEAR
STORE: MURPHY OIL CONVENIENCE STORE
AIC RATING: 22,000
GROUND BUS: SN

CKT	Wire Size	Description	Trip	Poles	A	B</
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