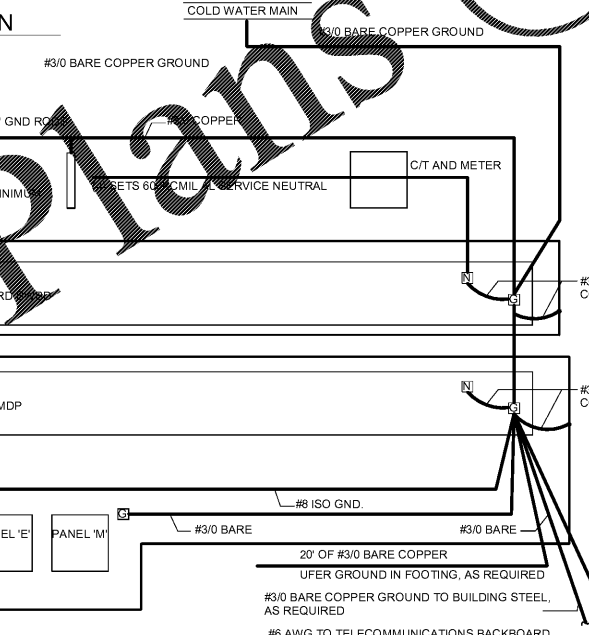
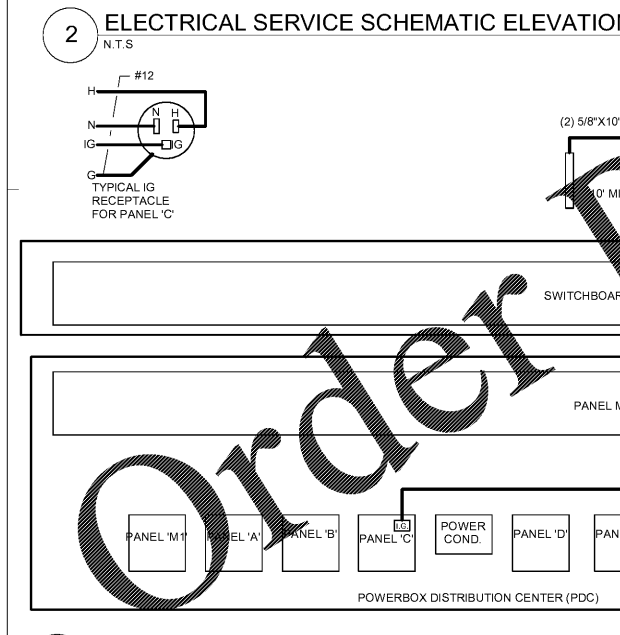
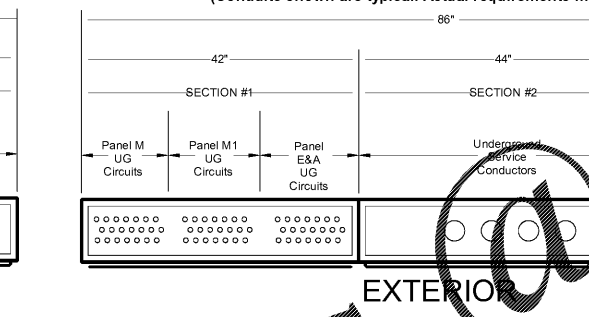
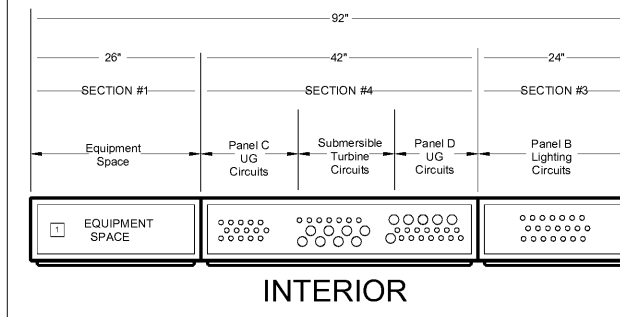
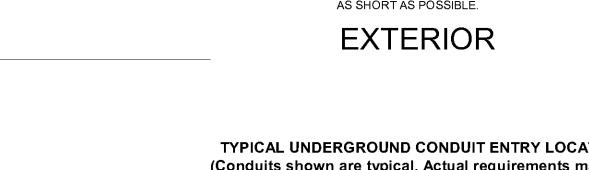
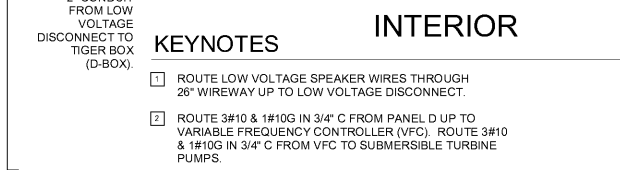


### MAIN DISTRIBUTION PANEL: MDP

Location: DRY GOODS RECEIVING 109    Volts: 120/208 Wye  
 Supply From:    Phase: 3  
 Mounting: PRE-FABRICATED    Wires: 4  
 Enclosure: PRE-FABRICATED

A.I.C. Rating: 65,000 SERIES RATED  
 Mains Type: MCB 100% RATED  
 Mains Rating: 1200 A  
 MCB Rating: 1200 A

Notes	CKT	Circuit Description	Circuit Information	Trip	Poles	A	B	C
	1					12129 VA	12129 VA	12129 VA
	2	RTU-1	3#1, & 1#6GND, IN 1-1/2" CONDUIT	110 A	3			
	3							
	4					12129 VA		
	5	RTU-2	3#1, & 1#6GND, IN 1-1/2" CONDUIT	110 A	3			
	6							
	7					6266 VA		
	8	RTU-3	3#6, & 1#8GND, IN 1" CONDUIT	60 A	3			
	9							
	10	SPACE				0 VA	0 VA	0 VA
	11	SPACE				0 VA	0 VA	0 VA
	12	SPACE				0 VA	0 VA	0 VA
	13							
	14	PROVISION FOR LIFT STATION		100 A	3	0 VA	0 VA	0 VA
	15					0 VA	0 VA	0 VA
	16					0 VA	0 VA	0 VA
	17	SPD	3#10, & 1#6GND, IN 3/4" CONDUIT	100 A	3			
	18					19394 VA	19064 VA	20186 VA
	19	PANEL M	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	20					19786 VA	19171 VA	17100 VA
	21	PANEL M1	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	22					6437 VA	8854 VA	6992 VA
	23	PANEL M1	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	24					8400 VA	5649 VA	7490 VA
	25	PANEL M1	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	26					13025 VA	11453 VA	10513 VA
	27	PANEL B	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	28					22206 VA	21000 VA	18169 VA
	29	PANEL B	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	30					0 VA	0 VA	0 VA
	31	PANEL D	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	32					0 VA	0 VA	0 VA
	33	PANEL E	4#3/0, & 1#6GND, INTERNALLY PRE-WIRED FACTORY INSTALLED	200 A	3			
	34					0 VA	0 VA	0 VA
	35	GENERATOR CONNECTION BOX	(2) SETS 4#350KCMIL, & 1#2/0GND, IN 3" CONDUIT (KIRK KEY INTERLOCK)	600 A	3			
	36					0 VA	0 VA	0 VA
	37					0 VA	0 VA	0 VA
	38					0 VA	0 VA	0 VA
	39					0 VA	0 VA	0 VA
	40	SPACE				0 VA	0 VA	0 VA
	41	SPACE				0 VA	0 VA	0 VA
	42					0 VA	0 VA	0 VA
	43	MAIN BREAKER	REFER TO ELECTRICAL SERVICE SCHEMATIC ELEVATION FOR SERVICE CONDUCTORS	1200 A	3	0 VA	0 VA	0 VA
	44					0 VA	0 VA	0 VA
	45	ERMS SMART CELL				0 VA	0 VA	0 VA
	46	ERMS SMART CELL				0 VA	0 VA	0 VA
	47	ERMS SMART CELL				0 VA	0 VA	0 VA
	48	ERMS SMART CELL				0 VA	0 VA	0 VA
	49	SPACE				0 VA	0 VA	0 VA
	50	SPACE				0 VA	0 VA	0 VA
	51	SPACE				0 VA	0 VA	0 VA
	52	SPACE				0 VA	0 VA	0 VA
	53	SPACE				0 VA	0 VA	0 VA
	54	SPACE				0 VA	0 VA	0 VA
						119870 VA	115812 VA	111072 VA
						1005 A	971 A	926 A



### ELECTRICAL SERVICE SCHEMATIC NOTES

(ALL CIRCUITS SHOWN COORDINATED WITH SQUARE D PRE-FABRICATED ASSEMBLY)

- THE SQUARE D IPaCS ELECTRICAL DISTRIBUTION AND CONTROL PANEL IS INSTALLED BY THE ELECTRICAL CONTRACTOR AND FURNISHED BY THE OWNER OR AS SPECIFIED. THIS CONTROL PANEL INCLUDES ALL SQUARE D PANELBOARDS, BREAKERS, LIGHTING CONTROLS, DISPENSER AND SUBMERSIBLE PUMP CONTROLS, PILOT LIGHTS, SWITCHES, TERMINAL STRIPS AND POWER CONDITIONING DEVICES WHICH ARE PRE-INSTALLED AND INTERNALLY PREWIRED.
- THE ENCLOSURE MATERIAL IS 1/8" ALUMINUM.
- THE ENTIRE BOTTOM OF CABINET IS OPEN EXCEPT FOR A 1" FLANGE ON EACH SECTION. THE ENTIRE TOP OF CABINET IS SOLID. HOLES CAN BE KNOCKED OUT FOR CONDUIT ENTRY EVERYWHERE EXCEPT WHERE CABINETS JOIN TOGETHER.
- THE METER CABINET, AND PULL SECTION EQUIPMENT LOCATED OUTSIDE THE BUILDING IS NOT PART OF THE SQUARE D IPaCS SYSTEM IF APPLICABLE.

### NOTES FOR THIS DRAWING

- THE POWERWALL DISTRIBUTION CENTER (PDC) IS INSTALLED BY THE ELECTRICAL CONTRACTOR AND FURNISHED BY THE OWNER. THIS CONTROL PANEL INCLUDES ALL SQUARE 'D' PANELBOARDS, BREAKERS, LIGHTING CONTRACTORS, CONTROLS, DISPENSER, AND SUBMERSIBLE PUMP CONTROLS. PILOT LIGHTS, SWITCHES, TERMINAL STRIPS, AND PANEL 'C' POWER CONDITIONER ARE PRE-INSTALLED AND INTERNALLY PREWIRED ALL CIRCUIT BREAKERS, LIGHTING CONTROLS WITH BYPASS SWITCHES, DISPENSER AND SUBMERSIBLE PUMP CONTROLS, AND REMOTE EMERGENCY STOP CONTROLS ARE PREWIRED TO TERMINAL STRIPS AT THE TOP OR BOTTOM OF THE PDC. ALL NEUTRAL BARS AND GROUND BARS ARE FURNISHED WITH THE SYSTEM. A SPECIAL ISOLATED GROUND BAR IS FURNISHED WITH PANEL 'C'. REFER TO PDC SHOP DRAWINGS FOR TERMINATION POINTS.
- CASHIER CONTROL CENTER (CONTAINS EMERGENCY STOPS, RESET SWITCH, ALARMS AND LIGHTING OVERRIDE SWITCH), AUXILIARY EMERGENCY STOPS, AND LIGHT SENSOR ARE FURNISHED WITH PDC, INSTALLED BY THE ELECTRICAL CONTRACTOR.
- ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE SHOP DRAWINGS MUST IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD.
- ELECTRICAL CONTRACTOR SHALL BALANCE THE LOAD ON EACH PHASE LEG USING THE UNUSED 'AREA LIGHTS', 'CANOPY LIGHTS', AND BUILDING SIGNAGE CIRCUITS (STAYING WITHIN SIMILAR BUILDING FUNCTIONS).
- DISCONNECT SWITCHES ARE NOTED AS SIZE/FUSES (EXAMPLE: 60/40 IS 60 AMP FUSED DISCONNECT SWITCH WITH 40 AMP FUSES).
- WIRE SIZE OF BRANCH CIRCUITS SHALL BE MINIMUM #12 AWG, BUT NO LESS THAN PERMITTED BY THE NEC FOR SPECIFIED OVERCURRENT PROTECTION.
- ALL FEEDER CONDUCTORS NOT INTERNAL TO THE INTEGRATED PACKAGE SHOULD BE SHOWN AS DASHED, AND WIRING SHOWN DASHED IS NOT INSTALLED BY POWERWALL, AND SIZED PER NEC, BASE ON ORIGINATING BREAKER SEE APPROPRIATE PANELBOARD SCHEDULES.
- THE PDC IS UL LISTED. STANDARD ASSEMBLY IS 65,000 AC SERIES RATED WITH FEEDER BREAKER. EC SHALL VERIFY AVAILABLE FAULT CURRENT AND SERVICE CHARACTERISTICS WITH LOCAL ELECTRIC UTILITY COMPANY PRIOR TO ORDERING PDC.
- THE PDC WILL BE SHIPPED IN SECTIONS ON A PALLET & BOLTED TOGETHER AT THE JOBSITE. COORDINATE WITH THE GENERAL CONTRACTOR.
- ELECTRICAL CONTRACTOR MUST TERMINATE ALL CONTROLLED BRANCH CIRCUITS FOR LIGHTING AND FUEL CABINET. BRANCH CIRCUITS FOR UNCONTROLLED LOADS CONNECT DIRECTLY TO RESPECTIVE CIRCUIT EQUIPMENT & CONTROL WIRING AT THE TERMINAL STRIPS AT THE TOP OR BOTTOM OF THE POWERWALL BREAKERS IN THE PANELS.
- LOCATE OUTDOOR LIGHT SENSOR ON ROOF FACING NORTH. LIGHT SENSOR CONTROL WIRING IS FURNISHED AS PART OF THE POWERWALL PACKAGE. AIM SENSOR EYE AWAY FROM ARTIFICIAL LIGHT SOURCES. INSTALL IN ACCORDANCE WITH SHOP DRAWINGS.
- SUBMERSIBLE PUMP POWER WIRING MUST BE #10AWG. A SEPARATE #10 AWG GROUNDING CONDUCTOR MUST BE RUN FROM EACH PUMP TO PANEL 'D' GROUND BAR.
- CIRCUIT BREAKERS FOR FLOOR RECEPTACLES SHALL BE GF.
- ALL BRANCH CIRCUITS FOR PANEL 'C' LOADS SHALL INCLUDE A GROUNDING CONDUCTOR AND AN ISOLATED GROUNDING CONDUCTOR, WHICH SHALL BE CONNECTED TO THE PANEL 'C' ISOLATED GROUND BAR.
- A VARIETY OF MAIN GROUNDING METHODS ARE INDICATED. METHOD(S) SHALL BE IN ACCORDANCE WITH LOCAL REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL PERFORM A FALL OF POTENTIAL TEST, IN ACCORDANCE WITH IEEE STD. 81, TO ENSURE A MAXIMUM EARTH GROUND RESISTANCE OF 25 OHMS AS REQUIRED BY THE NEC.
- PROVIDE 3/4" RIGID CONDUIT FROM PDC TO EACH SUBMERSIBLE TURBINE PUMP. PROVIDE WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- PROVIDE ALL WIRING FOR TANK MONITORING SYSTEM. WIRING SHALL BE CONTINUOUS WITH NO SPLICES. DO NOT SHARE CONDUITS WITH OTHER WIRING SYSTEMS.
- (1) 3/4" RIGID CONDUIT TO EACH TANK GAUGE MANHOLE
- (1) 3/4" RIGID CONDUIT TO ALL INTERSTITIAL MONITORS
- (1) 1" RIGID CONDUIT TO EACH STP MANHOLE IN TANK SLAB
- PROVIDE ALL WIRING FOR DISTRIBUTION BOX AND GAS CONSOLE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- E.C. SHALL PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER NEC 110.16 AND LOCAL JURISDICTION REQUIREMENTS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AN OUTDOOR EMERGENCY BUTTONE TO KILL ALL BUILDING POWER. EC SHALL PROVIDE SHUNT TRIP KIT MA1-1021 FOR 1200SP MAIN BREAKER. PROVIDE WEATHERPROOF EMERGENCY REMOTE CUTOFF SWITCH KNOX #KS-2P SPST KEYPAD PER LOCAL FIRE DEPARTMENT REQUIREMENTS. POWER FROM CKT B-40. PROVIDE PERMANENT SIGN "EMERGENCY POWER DISCONNECT 1 OF 1". LOCATE ON OUTSIDE OF BUILDING PER AUTHORITIES' DIRECTION.
- PROVIDE KIRK-KEY INTERLOCK BETWEEN MAIN BREAKER AND 600A SPARE (GENERATOR) BREAKER. ONLY ONE BREAKER SHALL BE CAPABLE OF BEING ENERGIZED AT ANY GIVEN TIME.
- WIRING OF HVAC UNITS POWER, SMOKE DETECTION, AND CONTROL WIRING BY ELECTRICAL CONTRACTOR.

Load Classification	Connected Load	Demand Factor	Estimated...	Panel Totals
HVAC	104537 VA	100.00%	104537 VA	
Lighting	25400 VA	125.00%	31750 VA	Total Conn. Load: 346754 VA
Power	38185 VA	100.00%	38185 VA	Total Est. Demand: 293063 VA
Receptacle	16796 VA	79.77%	13398 VA	Total Conn. Current: 962 A
Kitchen Equipment	161836 VA	65.00%	105193 VA	Total Est. Demand Current: 813 A

**Racetrac**  
 THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM, INC. IS PROHIBITED. 2016 RACETRAC PETROLEUM INC.

**DESIGN PROFESSIONALS**  
**WILLIAM S. GADSDY, JR.**  
 ARCHITECTURE  
 ENGINEERING  
 3686 Pleasant Hill Road  
 Suite 200  
 Duluth, Georgia 30096  
 p 770.622.9858  
 f 770.622.9535  
 www.billfoleyross.com

**ISSUE/REVISION RECORD**

DATE	DESCRIPTION
2018.08.22	PERMIT ISSUE

**Racetrac**  
 RACETRAC PETROLEUM, INC.  
 200 GALLERIA PKWY SE  
 SUITE 900  
 ATLANTA, GEORGIA 30339  
 (770) 431-7600

**PROJECT NAME**  
**GRIFFIN**

**GRIFFIN**  
 GEORGIA  
 1638 US HWY 41  
 GRIFFIN, GA 30223

**RACETRAC PROJECT NUMBER**  
**#1242**

**PROTOTYPE SERIES 5.5K 2.0**  
**2018 LH MO**

**PLAN MODIFICATION NOTICE**

**SPB NO. DATE**

**STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED IN THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.**

**PROFESSIONAL SEAL**  
 GEORGIA REGISTERED PROFESSIONAL ENGINEER  
 WILLIAM S. GADSDY, JR.  
 No. 15270  
 08/22/18

**PROJECT NUMBER**  
 17.721.00

**SHEET TITLE**  
**ELECTRICAL RISER DIAGRAM**

**SHEET NUMBER**  
**E410**  
 ISSUED FOR PERMIT