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**GERALD R. GROSS ARCHITECT**  
 205T North Isis Drive  
 Bristle Breezes, Florida 33453  
 386-574-9088  
 FL REG. ARCHITECT NO. AR00005998

**GERALD R. GROSS ARCHITECT**  
 755 RINEHART ROAD, STE. 200  
 LAKE MARY, FLORIDA 32746

**ELECTRICAL PLAN**  
**BACH TO ROCK**  
 Lake Mary Florida

PROJECT NO.:  
 edcBACHCROCK5E1  
 DATE:  
 2 FEB 2018  
 DRAWN BY:  
 TML  
 SHEET NO.:  
**E-1**

- ### ELECTRICAL SYMBOLS
- DUPLEX OUTLET
  - 1/2 HOT, 1/2 SWITCHED 120 V. DUPLEX OUTLET
  - GROUND FAULT CIRCUIT 120 V. DUPLEX OUTLET
  - WATERPROOF GROUND FAULT CIRCUIT 120 V. DUPLEX OUTLET
  - 110 V. QUAD-PLEX OUTLET
  - 220 V. DUPLEX OUTLET
  - 220 V. DISCONNECT
  - PRE-WIRE FOR CLG. FAN
  - GFI PRE-WIRE FOR GARAGE DOOR OPENER IN CLG.
  - OUTLET IN CEILING
  - SINGLE POLE SWITCH
  - 3-WAY SWITCH
  - SWITCH w/ MOTION SENSOR
  - DIMMER SWITCH
  - GFI SWITCH
  - CEILING MOUNTED LIGHT FIXTURE
  - CEILING MOUNTED PENDANT LIGHT FIXTURE
  - WALL MOUNTED LIGHT FIXTURE
  - RECESSED LIGHT FIXTURE
  - RECESSED EYE LIGHT FIXTURE
  - MINI RECESSED LIGHT FIXTURE
  - WALL SCONCE
  - CHANDELIER
  - FLOOD LIGHT FIXTURE
  - 2x2 FLUORESCENT DROP-IN LIGHT FIXTURE G05G2TUNVH1 2-TRU-8 120V/34W (OPTION: DIMMABLE FOR SOME ROOMS - VERIFY WITH ELECTRICAL PLAN)
  - TRACK LIGHTING (DIMMABLE) LIGHT FIXTURE 26-028BLK 4 26-038BLK - STUDIO 4 CONTROL RM 26-038BLK - STAGE 120V/35W
  - EXHAUST FAN
  - EXHAUST FAN/LIGHT COMBO
  - EMERGENCY LIGHT WALL MOUNT (2-HR BATTERY BACKUP)
  - EMERGENCY LIGHT CEILING MOUNT (2-HR BATTERY BACKUP)
  - LIGHTED EXIT SIGN (2-HR BATTERY BACKUP)
  - EMERGENCY LIGHT LIGHTED EXIT SIGN COMBO (2-HR BATTERY BACKUP)
  - MOTOR
  - ELECTRICAL PANEL
  - TELEVISION JACK
  - TELEPHONE
  - DATA/NETWORK
  - CLG. T.V. OUTLET
  - CLG. DATA OUTLET
  - JUNCTION BOX (AUDIO)
  - SPEAKER (AUDIO)
  - THERMOSTAT
  - PUSH BUTTON

### ELECTRICAL NOTES

- E1. ALL OUTLETS TO BE 18" UNLESS OTHERWISE NOTED
- E2. ADD PUTTY PADS ON ALL PENETRATIONS TO WALLS WITH INCREASED SOUND PROOFING.
- RECORDING WIRING CHASE TO STUDIO OR STAGE (SEE B2B SPECS.)

### PANEL 3609

EXISTING SERVICE: 200 AMP 208 VOLTS THREE PHASE/3 WIRE

BKR.	WIRE	IDENTIFICATION	CRT.	CRT.	IDENTIFICATION	WIRE	BKR.
3P40	8	R.T.U. #1	1	2	RECEPT/LIGHTS - 112	12	1P20
			3	4	RECEPT/LIGHTS - 111	12	1P20
			5	6	RECEPT/LIGHTS - 110 QUADS	12	1P20
			7	8	RECEPT/LIGHTS - 101	12	1P20
3P40	8	R.T.U. #1	9	10	RECEPT/LIGHTS - 104	12	1P20
			11	12	RECEPT/LIGHTS - 100,102	12	1P20
			13	14	RECEPT/LIGHTS - 113,114,115, D/F	12	1P20
			15	16	RECEPT/LIGHTS - 108,109	12	1P20
			17	18	RECEPT/LIGHTS - 106,107	12	1P20
			19	20	RECEPT/LIGHTS - 105	12	1P20
			21	22	RECEPT/LIGHTS - 103, HALL	12	1P20
			23	24			
			25	26			
			27	28			
			29	30			
			31	32			
			33	34			
			35	36			
			37	38			
			39	40			
			41	42			
TOTAL PANEL LOAD					129.9 KVA (54,930 VA)		
TOTAL PANEL AMP LOAD [VA/(208x1.732)]					88 AMPS		

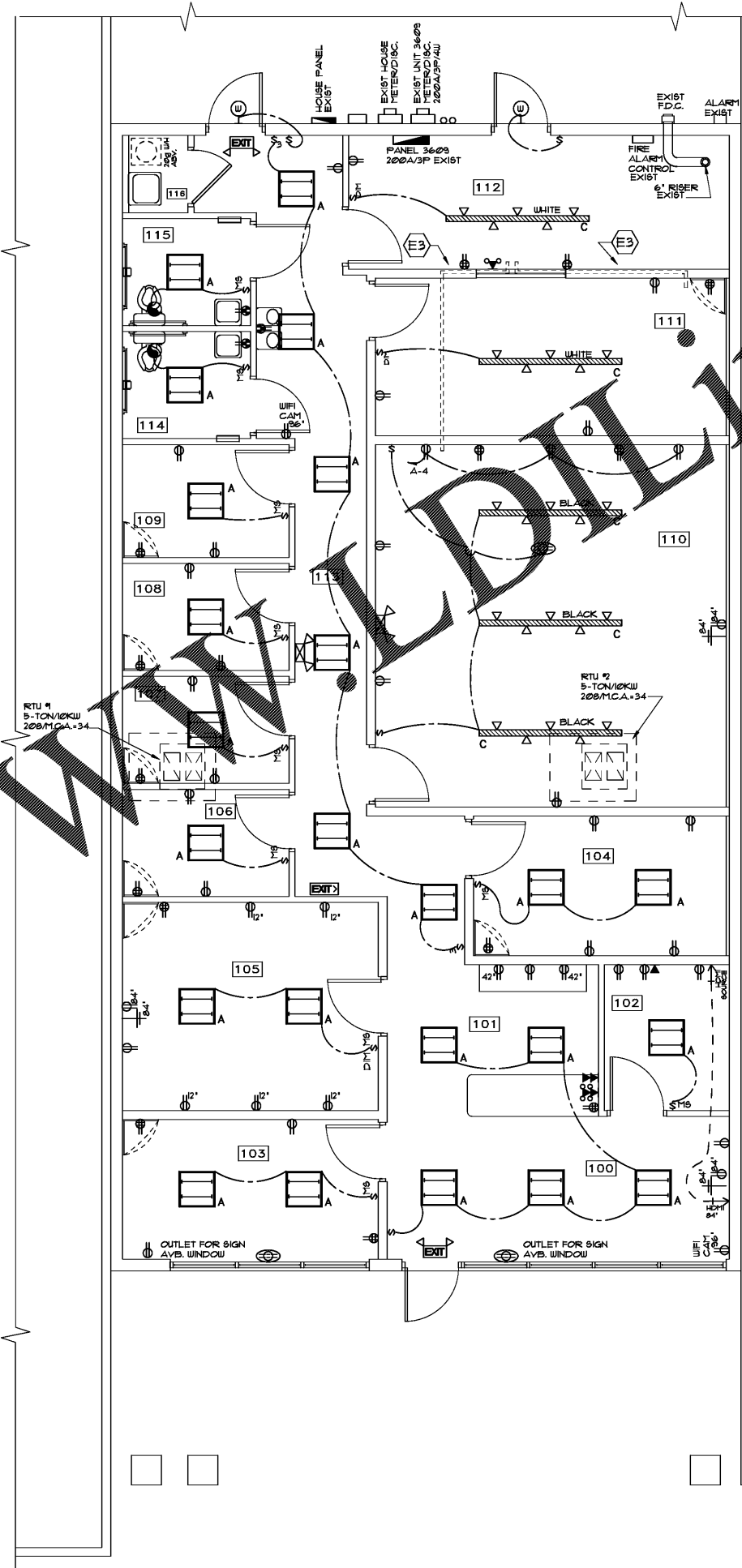
### LOAD CALCULATIONS - PANEL 3609

NON-CONTINUOUS LOAD			
RECEPTACLE LOAD: 70 OUTLETS @ 180 VA =	12,600	VA	
FIRST 10,000 VA @ 100%	10,000	VA	
REMAINING VA @ 50%	1,300	VA	
<b>SUBTOTAL</b>	<b>13,300</b>	<b>VA</b>	
CONTINUOUS LOAD - DEDICATED			
WATER FOUNTAIN	1,200	VA	
COPIER @ 1000 VA	1,000	VA	
WATER HEATER	3,800	VA	
<b>SUBTOTAL</b>	<b>6,000</b>	<b>VA</b>	
CONTINUOUS LOAD - LIGHTING			
24- 2x2 FLOUR (2 BULB) @ 34W EA.	816	VA	
4- 8' TRACK-5 LED(S5W) @ 175W EA.	700	VA	
5- EXIT/EMERGENCY FIXTURES @ 2 VA EA. =	10	VA	
<b>SUBTOTAL</b>	<b>1,526</b>	<b>VA</b>	
<b>SUBTOTAL @ 125%</b>	<b>1,908</b>	<b>VA</b>	
HEAT - LOAD			
2-10 KW	20,000	VA	
<b>SUBTOTAL (LARGEST LOAD)</b>	<b>20,000</b>	<b>VA</b>	
<b>TOTAL LOAD</b>	<b>41,208</b>	<b>VA</b>	

41,218 VA/208 VOLTS/1.73 = 115 AMPS

### GENERAL ELECTRICAL NOTES

1. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM. THE CONTRACTOR SHALL INCLUDE THE COST OF ALL FEES AND PERMITS FOR THE ELECTRICAL WORK AND CALL FOR ALL INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
2. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE N.E.C. & LOCAL AMENDMENTS AND OTHER CODES APPLICABLE TO THE PROJECT.
3. KEEP ONE SET OF ELECTRICAL PRINTS AT THE JOB SITE AND MARK DESIGN DRAWINGS WITH COLORED PENCIL AS ELECTRICAL ITEMS ARE INSTALLED. SHOW ACTUAL LOCATION OF CONDUIT RUNS AND BRANCH CIRCUIT NUMBERS. THESE MARKED PRINTS SHALL SHOW PROGRESS TO DATE AND SHALL BE FOR AN "AS-BUILT" RECORD. THE MARKED DRAWINGS SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT. AT THE COMPLETION OF INSTALLATION, THE CONTRACTOR SHALL OPERATE EACH ITEM OF ELECTRICAL EQUIPMENT AND GIVE OWNER INSTRUCTION ON THE OPERATION OF THE ITEM. THE CONTRACTOR SHALL ALSO SUBMIT PERFORMANCE VERIFICATION INFORMATION ON EACH ITEM OF ELECTRICAL EQUIPMENT. THE CONTRACTOR SHALL SUBMIT A MEMO FROM THE MANUFACTURER'S REP. ADVISING THAT THE EQUIPMENT FURNISHED BY THE REPRESENTATIVE HAS BEEN CHECKED AND IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IS OPERATING PROPERLY.
4. MOUNT A TYPEWRITTEN DIRECTORY IN PANEL BOARDS SHOWING CIRCUIT NUMBERS, TYPE OF LOAD AND ARE SERVED.
5. ALL WORK AND MATERIALS SHALL BE GUARANTEED FREE FROM DEFECTS FOR ONE YEAR AFTER DATE OF ACCEPTANCE. REPAIRS, REPLACEMENTS (EXCEPT LAMPS), AND ADJUSTMENTS SHALL BE MADE DURING THIS PERIOD AT NO COST TO THE OWNER.
6. ALL WIRING SHALL BE IN CONDUIT. CONDUIT BELOW GRADE OR BELOW SLAB SHALL BE RIGID METAL CONDUIT OR P.V.C. ABOVE GRADE SHALL BE EMT OR AS OTHERWISE SHOWN ON PLANS.
7. MINIMUM WIRE SIZE SHALL BE #12. ALL WIRES SHALL BE COPPER UNLESS OTHERWISE INDICATED. HOME RUNS 100' OR MORE ON 20 AMP CIRCUITS SHALL BE #10.
8. INSTALL A SEPARATE EQUIPMENT AND GROUNDING CONDUCTOR IN EACH RACEWAY SIZED IN ACCORDANCE WITH TABLE 250-93.
9. PROVIDE OUTLET BOXES SIZED AS REQUIRED BY NEC FOR LIGHTING FIXTURES AND OTHER ELECTRICAL ITEMS.
10. REUSE EXISTING WIRING & PANELS WHERE SUITABLE FOR NEW LAYOUT. PROVIDE NEW COMPONENTS WHERE REQUIRED.
11. THERE WILL BE NO ELECTRICAL PENETRATIONS THROUGH EXISTING PERIMETER WALLS.
12. ALL EXIT AND EMERGENCY LIGHTS TO BE WIRING TO UNFINISHED POWER.
13. NO MORE THAN SIX GENERAL PURPOSE OUTLETS PER 20 AMP CIRCUIT.
14. NO MORE THAN TEN FLUORESCENT FIXTURES PER 20 AMP CIRCUIT.
15. USING ALL EXISTING FLUORESCENT LIGHTS & LOCATIONS.
16. USING EXISTING ELECTRICAL PANEL & EXISTING SYSTEM CALCULATION.
17. ALL LIGHTING, OUTLETS, & SWITCHES ARE EXISTING UNLESS NOTED OTHERWISE.
18. ALL DSL AND PHONE BOXES TO BE FED FROM CONDUIT IN THE WALL TO ATTIC SPACE.



## ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"