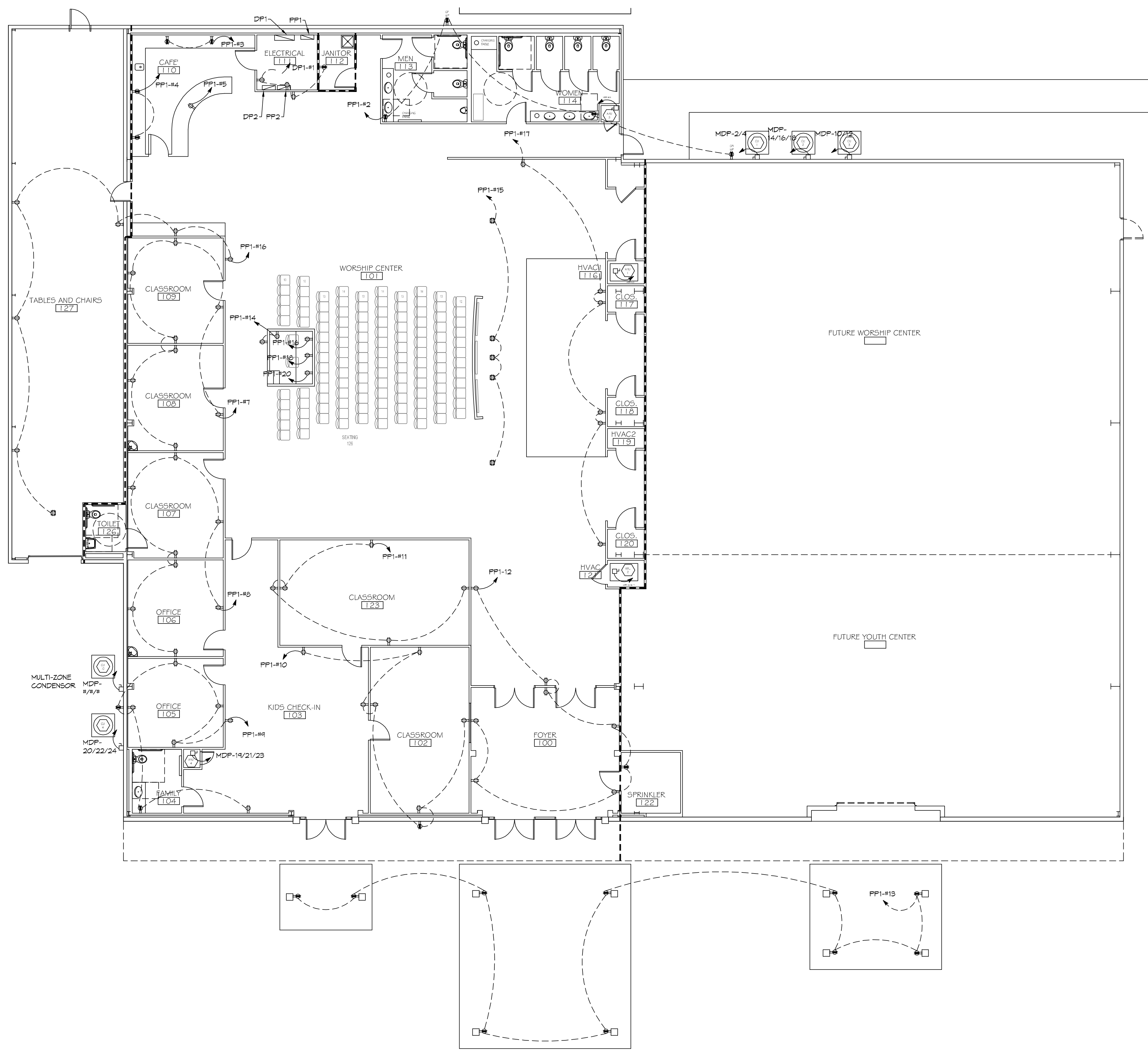


FILE NAME: \\S:\Projects\2016\101 - Grace Fellowship\Drawings\101 - Power Phase A.dwg PLOT DATE: 8/16/2016 10:53:47 AM



POWER PLAN PHASE A
SCALE: 1/8"=1'-0"

**GENERAL ELEC
POWER NOTES**

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, THE GOVERNING ELECTRICAL CODE AND ALL OTHER INSPECTION DEPARTMENTS HAVING JURISDICTION. OBTAIN CERTIFICATES OR APPROVAL WHERE REQUIRED. ELECTRICAL CONTRACTOR SHALL VERIFY ALL WIRE AND CONDUIT SIZES FOR MECHANICAL EQUIPMENT TO BE INSTALLED.
2. ALL MATERIALS FURNISHED SHALL BE NEMA AND SHALL BE U.L. LISTED.
3. THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALE DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION OF ALL LIGHTING FIXTURES, RECEPTACLES AND TELEPHONE OUTLETS, ETC. SHALL BE DETERMINED BY ACTUAL CONDITIONS IN THE FIELD.
4. PRIOR TO BIDDING, CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AND WITH OTHER CONTRACTORS WHOSE WORK MAY AFFECT THIS INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE INCOMING ELECTRICAL SERVICE WITH UTILITY COMPANY AND INCLUDE IN HIS BID ALL CHARGES AND FEES INCURRED IN MODIFICATIONS.
7. ELECTRICAL CONTRACTOR SHALL COORDINATE THE TELEPHONE INSTALLATION WITH THE TELEPHONE COMPANY AND THE GENERAL CONTRACTOR.
8. WHERE MORE THAN ONE SWITCH OCCURS IN THE SAME LOCATION, THEY SHALL BE INSTALLED IN A GANG TYPE BOX UNDER ONE COVER PLATE.
9. ELECTRICAL CONTRACTOR, BEFORE INSTALLING ANY OF THE WORK, SHALL SEE THAT IT DOES NOT INTERFERE WITH CLEARANCES REQUIRED FOR FINISHED FLOORS, HUNG CEILING, PLASTER, PARTITIONS, WALLS, ETC. AS SHOWN IN THE ARCHITECTURAL DRAWINGS AND DETAILS. IF ANY WORK IS INSTALLED AND IT LATER DEVELOPS THAT SUCH DETAILS OR DESIGN CANNOT BE FOLLOWED, THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL MAKE SUCH CHANGES IN THE WORK AS DIRECTED BY THE ARCHITECT, AS WELL AS TO PERMIT THE INSTALLATION OF THE ARCHITECTURAL WORK AS SHOWN ON THE PLANS AND DETAILS.
10. PERFORM TEST REQUIRED BY THE OWNER OR THE ENGINEER IN CONNECTION WITH THE OPERATION OF THE ELECTRICAL SYSTEM IN THE BUILDING. ALL TESTS SHALL BE MADE IN ACCORDANCE WITH THE LATEST STANDARD OF THE IEEE AND THE NATIONAL ELECTRICAL CODE.
11. MINIMUM CONDUCTOR SIZE SHALL BE #12, 600V INSULATION. MINIMUM SIZE CONDUIT SHALL BE 3/4" ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR USE AND 3/4" RIGID ALUMINUM FOR EXTERIOR USE. USE NON-METALLIC CABLE (NMC) CABLE COPPER, FOR LIGHTS AND RECEPTACLE CIRCUITS IN WOOD FRAME CONSTRUCTION AREAS ONLY; IN STEEL FRAMING AREAS THE USE OF EMT (MINIMUM) IS REQUIRED; EXTERIOR FITTINGS SHALL BE CAST BOXES AND COVERS; INTERIOR FITTINGS SHALL BE STAMPED BOXES.
12. CONTRACTOR SHALL INSTALL WIRING AND OTHER CIRCUIT COMPONENTS TO MATCH EQUIPMENT ACTUALLY INSTALLED.
13. INSTALL GROUND FAULT RECEPTACLES AT RECEPTACLE LOCATIONS WITHIN 5' OF SINKS OR LAVATORIES, AND AT EXTERIOR LOCATIONS. EXTERIOR RECEPTACLES SHALL ALSO BE WATERPROOF.
14. BONDING AND GROUNDING SHALL BE IN ACCORDANCE WITH NFPA 70:250-63, NFPA 250-23, 250-71 & 250-72.
15. GROUND NEUTRAL IN ACCORDANCE WITH NFPA 70:250-23B.
16. FUSES SHALL BE ITT CLASS K5, 250 VOLT, 200,000 AMP INTERRUPTING CAP.
17. PROVIDE SERVICES OF A FIRE/SMOKE DETECTION AND ALARM COMPANY TO DESIGN AND INSTALL ALARM SYSTEM TO MEET REQUIREMENTS OF THE STATE FIRE MARSHALL AND THE FIRE DISTRICT.
18. EXTERIOR LIGHTING SHALL BE SHADED OR INWARDLY DIRECTED IN SUCH A MANNER SO THAT NO DIRECT LIGHTING OR GLARE IS CAST BEYOND THE PROPERTY LINE. THE INTENSITY OF SUCH LIGHTING SHALL NOT EXCEED ONE FOOT CANDLE AS MEASURED AT THE ADJUTING PROPERTY LINE.
19. ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATING FIRE PARTITIONS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E814.)
20. VERIFY ELECTRICAL CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS.

LEGEND

SYMB	DESCRIPTION
⊕	STANDARD 120V DUPLEX RECEPTACLE, NEMA 5-2 OR 15' AFF (UNLESS OTHERWISE NOTED)
⊕	STANDARD 120V DUPLEX RECEPTACLE, ABOVE COUNTER HT.
⊕	SINGLE-POLE DEDICATED RECEPTACLE - REFER TO PANEL SCHEDULE FOR CIRCUIT SIZE
⊕	GFCI DUPLEX RECEPTACLE
⊕	GFCI QUAD RECEPTACLE
⊕	220V ELECTRIC DRYER RECEPTACLE - MOUNTED AT 30" AFF
⊕	220V DEDICATED GFCI RECEPTACLE
⊕	WEATHER-PROOF GFCI DUPLEX RECEPTACLE MOUNTED AT 30" AFF (UNLESS OTHERWISE NOTED)
⊕	STANDARD 120V DUPLEX RECEPTACLE - FLOOR OR CLG. MOUNTED
⊕	STANDARD QUAD RECEPTACLE - WALL-MOUNTED
⊕	STANDARD QUAD RECEPTACLE - FLOOR MOUNTED
⊕	125V 15 AMP DUPLEX-USB 5VDC 3 AMP HUBBELL USB CHARGER RECEPTACLE
⊕	125V 15 AMP QUADPLEX-USB 5VDC 3 AMP HUBBELL USB CHARGER RECEPTACLE
⊕	JUNCTION BOX
⊕	GENERATOR BATTERY CHARGER
⊕	2-BUTTON PUSH BUTTON STATION
⊕	COAX-CABLE CONNECTION FOR TELEVISION
⊕	WALL MOUNTED DATA OUTLET
⊕	FLOOR DATA OUTLET
⊕	POWER DISCONNECT
⊕	WATER HEATER ON DECK OR MEZZANINE ABOVE - SIZE AS NOTED ON PLAN
⊕	EXHAUST FAN - SEE MECH.

NOTES:
1. CONNECT ALL EMERGENCY/EXIT LIGHT FIXTURES TO NEAREST CONSTANT POWER SOURCE.

DAMMON ENGINEERING, INC.
LOUISIANA & MISSISSIPPI
Chief Engineer: Brian Mitchell, PE
www.dammonengineering.com
info@dammonengineering.com
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Bossier, LA 70608
PH: 985.949.2532, FX: 985.949.1920

#	DESCRIPTION	DATE

SYMB	DESCRIPTION
⊕	STANDARD 120V DUPLEX RECEPTACLE, NEMA 5-2 OR 15' AFF (UNLESS OTHERWISE NOTED)
⊕	STANDARD 120V DUPLEX RECEPTACLE, ABOVE COUNTER HT.
⊕	SINGLE-POLE DEDICATED RECEPTACLE - REFER TO PANEL SCHEDULE FOR CIRCUIT SIZE
⊕	GFCI DUPLEX RECEPTACLE
⊕	GFCI QUAD RECEPTACLE
⊕	220V ELECTRIC DRYER RECEPTACLE - MOUNTED AT 30" AFF
⊕	220V DEDICATED GFCI RECEPTACLE
⊕	WEATHER-PROOF GFCI DUPLEX RECEPTACLE MOUNTED AT 30" AFF (UNLESS OTHERWISE NOTED)
⊕	STANDARD 120V DUPLEX RECEPTACLE - FLOOR OR CLG. MOUNTED
⊕	STANDARD QUAD RECEPTACLE - WALL-MOUNTED
⊕	STANDARD QUAD RECEPTACLE - FLOOR MOUNTED
⊕	125V 15 AMP DUPLEX-USB 5VDC 3 AMP HUBBELL USB CHARGER RECEPTACLE
⊕	125V 15 AMP QUADPLEX-USB 5VDC 3 AMP HUBBELL USB CHARGER RECEPTACLE
⊕	JUNCTION BOX
⊕	GENERATOR BATTERY CHARGER
⊕	2-BUTTON PUSH BUTTON STATION
⊕	COAX-CABLE CONNECTION FOR TELEVISION
⊕	WALL MOUNTED DATA OUTLET
⊕	FLOOR DATA OUTLET
⊕	POWER DISCONNECT
⊕	WATER HEATER ON DECK OR MEZZANINE ABOVE - SIZE AS NOTED ON PLAN
⊕	EXHAUST FAN - SEE MECH.

GRACE FELLOWSHIP
3442 WILLIS ALLEY
PEARL RIVER LA
JOB NO: 2540 DATE: 02/07/2016
DRAWN BY: JTL CHECKED BY: BAW

SHEET TITLE:
**POWER PLAN
PHASE A**

DRAWING NUMBER:
E101
SHEET No: 13 of 2

FILE NAME: J:_CAD\03\3100 - Grace Fellowship\0300 - Panel Schedules.dwg PLOT DATE: 02/07/2019 10:41:00

PANEL SCHEDULE														
PANEL: MDP			VOLTAGE: 208/120V, 200A, 3Ø, 4W, W/MGB											
LOCATION: EQUIPMENT ROOM			ENCLOSURE:			SURFACE MOUNTED IV EQUIPMENT GND			FEEDER SOURCE: UTILITY COMPANY					
CKT NO	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER		LOAD (VA)	AS	BS	CS	LOAD (VA)	BREAKER		LOAD DESCRIPTION	THHN WIRE SIZE	CKT NO
			AMP	POLE						FOLE	AMP			
1	#4	AHU-1	80	2	7500				3200	2	40	CU-1	#8	2
3					7500				3200					4
5	#10	PANELBOARD 'FP1'	200	2	0				0	2	200	PANELBOARD 'FP2'	#10	6
7					0				0					8
9	#8	AHU-3	40	2	2500				2300	2	30	CU-1	#10	10
11					2500				2300					12
13					8400				8900					14
15	#4	AHU-2	80	3	8400				3300	3	40	CU-2	#8	16
17					8400				3300					18
19					8400				3300					20
21	#4	AHU-4	80	3	8400				3300	3	40	CU-4	#8	22
23					8400				3300					24
25	#10	AHU-10 MINI SPLIT	30	2	2600				0					26
27					2600				0	1	400	PANEL DP-2	#12	28
29	#8	WATER HEATER	40	2	2600				0					30
31					2600				0					32
33														34
35														36
37														38
39														40
41														42
SOLID NEUTRAL NEUTRAL WIRE (N)					TOTAL CONNECTED LOAD (VA) = 0				GROUND BUS GROUND WIRE (G)					
					AG = 91800 BS = 36930 CS = 28730									

PANEL SCHEDULE														
PANEL: FP1			VOLTAGE: 208/120V, 200A, 1Ø, 3W, W/MGB											
LOCATION: EQUIPMENT ROOM			ENCLOSURE:			SURFACE MOUNTED IV EQUIPMENT GND			FEEDER SOURCE: UTILITY COMPANY					
CKT NO	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER		LOAD (VA)	AS	BS	CS	LOAD (VA)	BREAKER		LOAD DESCRIPTION	THHN WIRE SIZE	CKT NO
			AMP	POLE						FOLE	AMP			
1	#12	RECEPTACLES, ELECTRICAL ROOM AND JANITOR'S ROOM	20	1	360				720	1	20	RECEPTACLES, MEN'S ROOM WOMEN'S ROOM EXTERIOR	#12	2
3	#12	RECEPTACLES, KITCHEN COUNTER	20	1	1200				1200	1	20	RECEPTACLES, KITCHEN COUNTER	#12	4
5	#12	RECEPTACLES, KITCHEN ISLAND	20	1	1000				1260	1	20	RECEPTACLES, ROOM 121 AND KITCHEN	#12	6
7	#12	RECEPTACLES, CLASSROOMS 108 AND 109	20	1	1440				1440	1	20	CLASSROOMS 108 AND 109	#12	8
9	#12	RECEPTACLES, CLASSROOM 102 AND RESTROOM 104	20	1	1440				1260	1	20	RECEPTACLES, CLASSROOM 102 AND KIDS CHECK IN ROOM 103	#12	10
11	#12	RECEPTACLES, CLASSROOM 123	20	1	900				1440	1	20	RECEPTACLES, FOYER	#12	12
13	#12	RECEPTACLES, FRONT CANOPY	20	1	120				800	1	20	RECEPTACLES, SOUND EQUIPMENT	#12	14
15	#12	RECEPTACLES, WORSHIP AREA	20	1	900				800	1	20	RECEPTACLES, SOUND EQUIPMENT	#12	16
17	#12	RECEPTACLES, WORSHIP AREA	20	1	1080				800	1	20	RECEPTACLES, SOUND EQUIPMENT	#12	18
19	#12	LIGHTS, MEN, WOMEN, AND CORRIDOR	20	1	780				800	1	20	RECEPTACLES, SOUND EQUIPMENT	#12	20
21	#12	KITCHEN, ROOM 121, JANITOR AND ELECTRICAL ROOM	20	1	800				1200	1	20	LIGHTS, CHECK IN, CLASS ROOMS 102 AND 103	#12	22
23	#12	LIGHTS, WORSHIP CENTER ROOM 101	20	1	1200				1200	1	20	LIGHTS, FOYER AND CANOPY	#12	24
25	#12	LIGHTS, PULPIT ROOM 101	20	1	1200				800	1	20	LIGHTS, YOUTH CENTER	#12	26
27	#12	LIGHTS, CLASSROOMS 101, 105, 109	20	1	660				800	1	20	LIGHTS, YOUTH CENTER, SNACK AREA AND BATHROOMS	#12	28
29	#12	LIGHTS, OFFICES, ROOMS 109, 106 AND RESTROOMS	20	1	1200									30
31														32
33														34
35														36
37														38
39														40
41														42
SOLID NEUTRAL NEUTRAL WIRE (N)					TOTAL CONNECTED LOAD (VA) = 0				GROUND BUS GROUND WIRE (G)					
					AG = 14640 BS = 14740									

PANEL SCHEDULE														
PANEL: DP2			VOLTAGE: 208/120V, 400A, 3Ø, 4W, W/MGB											
LOCATION: EQUIPMENT ROOM			ENCLOSURE:			SURFACE MOUNTED IV EQUIPMENT GND			FEEDER SOURCE: UTILITY COMPANY					
CKT NO	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER		LOAD (VA)	AS	BS	CS	LOAD (VA)	BREAKER		LOAD DESCRIPTION	THHN WIRE SIZE	CKT NO
			AMP	POLE						FOLE	AMP			
1					11700				4300					2
3	#2	AHU-5	110	3	11700				4300	3	50	CU-5	#8	4
5					11700				4300					6
7					8400				3300					8
9	#4	AHU-6	80	3	8400				3300	3	40	CU-6	#8	10
11					8400				3300					12
13	#4	AHU-6	80	2	7500				3200	2	40	CU-6	#8	14
15					7500				3200					16
17	#4	AHU-7	80	2	7500				3200	2	40	CU-7	#8	18
19					7500				3200					20
21	#8	AHU-8	40	2	2500				2300	2	30	CU-8	#10	22
23					2500				2300					24
25	#8	RANGE	50	2	2500				0					26
27					2500				0					28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
SOLID NEUTRAL NEUTRAL WIRE (N)					TOTAL CONNECTED LOAD (VA) = 0				GROUND BUS GROUND WIRE (G)					
					AG = 51600 BS = 42820 CS = 40180									

PANEL SCHEDULE														
PANEL: FP2			VOLTAGE: 208/120V, 200A, 1Ø, 3W, W/MGB											
LOCATION: EQUIPMENT ROOM			ENCLOSURE:			SURFACE MOUNTED IV EQUIPMENT GND			FEEDER SOURCE: UTILITY COMPANY					
CKT NO	THHN WIRE SIZE	LOAD DESCRIPTION	BREAKER		LOAD (VA)	AS	BS	CS	LOAD (VA)	BREAKER		LOAD DESCRIPTION	THHN WIRE SIZE	CKT NO
			AMP	POLE						FOLE	AMP			
1	#12	RECEPTACLE, KITCHEN REFRIGERATOR	20	1	1800				1080	1	20	RECEPTACLES, WORSHIP ROOM	#12	2
3	#12	RECEPTACLE, KITCHEN FREEZER	20	1	1800				900	1	20	RECEPTACLES, WORSHIP ROOM	#12	4
5	#12	RECEPTACLE, KITCHEN COUNTER	20	1	1800				1260	1	20	RECEPTACLES, WORSHIP ROOM PULPIT	#12	6
7	#12	RECEPTACLE, KITCHEN COUNTER	20	1	1800				900	1	20	RECEPTACLES, YOUTH CENTER	#12	8
9	#12	RECEPTACLES, KITCHEN WALLS	20	1	360				1260	1	20	RECEPTACLES, YOUTH CENTER	#12	10
11	#12	LIGHTS, WORSHIP ROOM, CHANGING AREA, EXT LIGHTS	20	1	800				900	1	20	RECEPTACLES, YOUTH CENTER	#12	12
13	#12	LIGHTS, WORSHIP ROOM, CHANGING AREA, EXT LIGHTS	20	1	1200									14
15	#12	LIGHTS, WORSHIP ROOM, PULPIT FLOODLIGHTS	20	1	1800									16
17	#12	LIGHTS, WORSHIP ROOM, PULPIT FLOODLIGHTS	20	1	1800									18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
SOLID NEUTRAL NEUTRAL WIRE (N)					TOTAL CONNECTED LOAD (VA) = 0				GROUND BUS GROUND WIRE (G)					
					AG = 9660 BS = 8000									

ELECTRICAL LOAD SUMMARY											
CLECO POWER COMPANY											
PROJECT NAME:	GRACE FELLOWSHIP										
PROJECT ADDRESS:	34492 WILLIS ALLEY										
CITY/TOWN:	PEARL RIVER, LA.										
INTENDED USER:	CHURCH										
REQ SERV:	240	V	1	PHASE	3	WIRES					
SERV ENTR. SIZE:	200 AMPS										
HVAC TONNAGE:	15 TONS										
LARGEST MOTOR:	HP										
(NOTE: MOTORS ABOVE 20HP MAY REQUIRE REDUCED VOLTAGE STARTING AND ARE NEVER RECOMMENDED FOR USE IV 120/240V, 1Ø, 3W SERVICE)											
TOTAL BUILDING SQ FT:	1400	SF									
INDIVIDUAL UNIT SQUARE FOOTAGE:										SF (MULT OCCUPANCY)	
INDIVIDUAL UNIT DESIGNATION:										(MULT OCCUPANCY)	
LOAD SOURCE	1Ø-KVA	3Ø-KVA	OR	1Ø-KW	3Ø-KW						
BUILDING LIGHTING	1.0										
ELECTRIC WATER HEATING	GAS										
HEAT PUMPS	N/A										
SUPPLEMENTAL HEAT SYSTEMS	N/A										
AIR COND CONDENSING UNITS	25.0										
ELEC HEATING (PRIMARY) - AHU's	20.0										
COOKING	GAS										
REFRIGERATION	3.1										
RECEPTACLES (STANDARD)	2.8										

