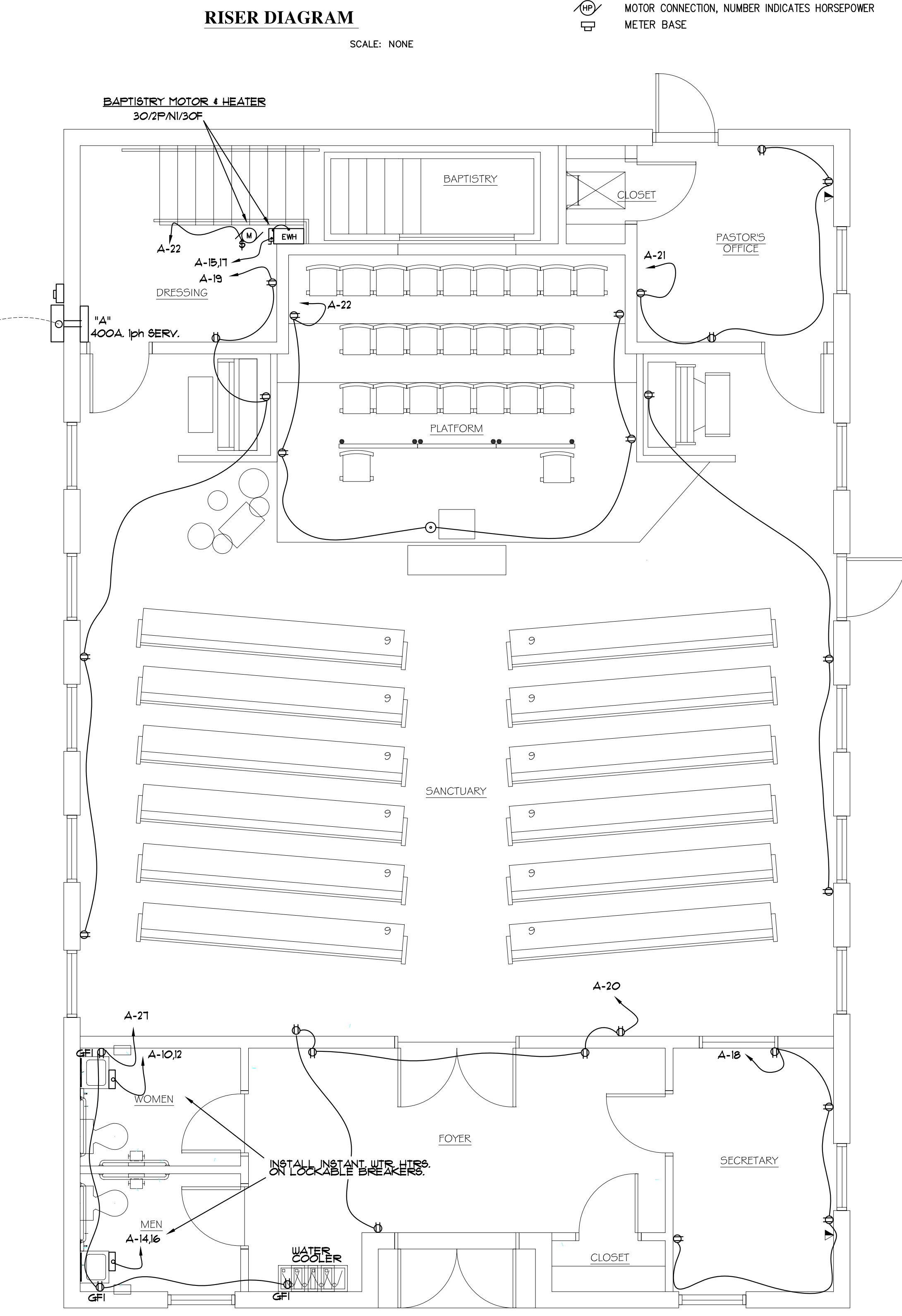
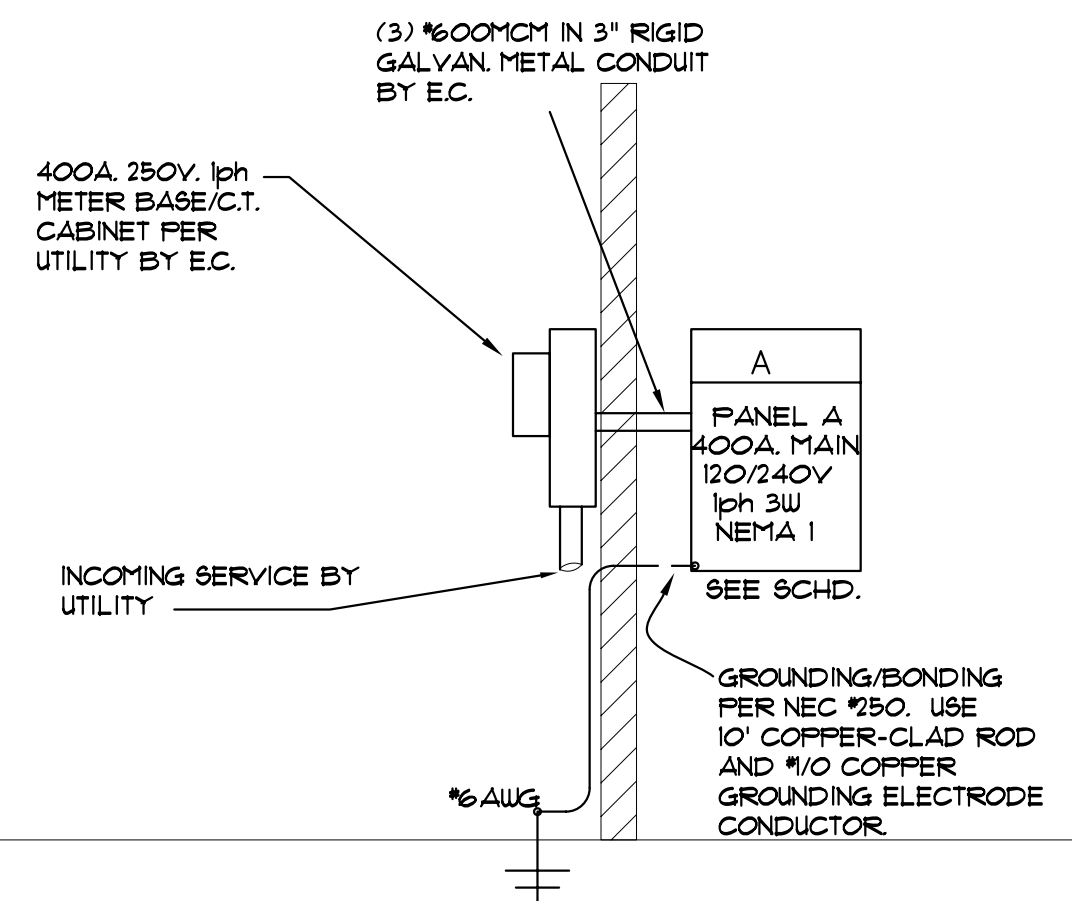


**ELECTRICAL SPECIFICATIONS**

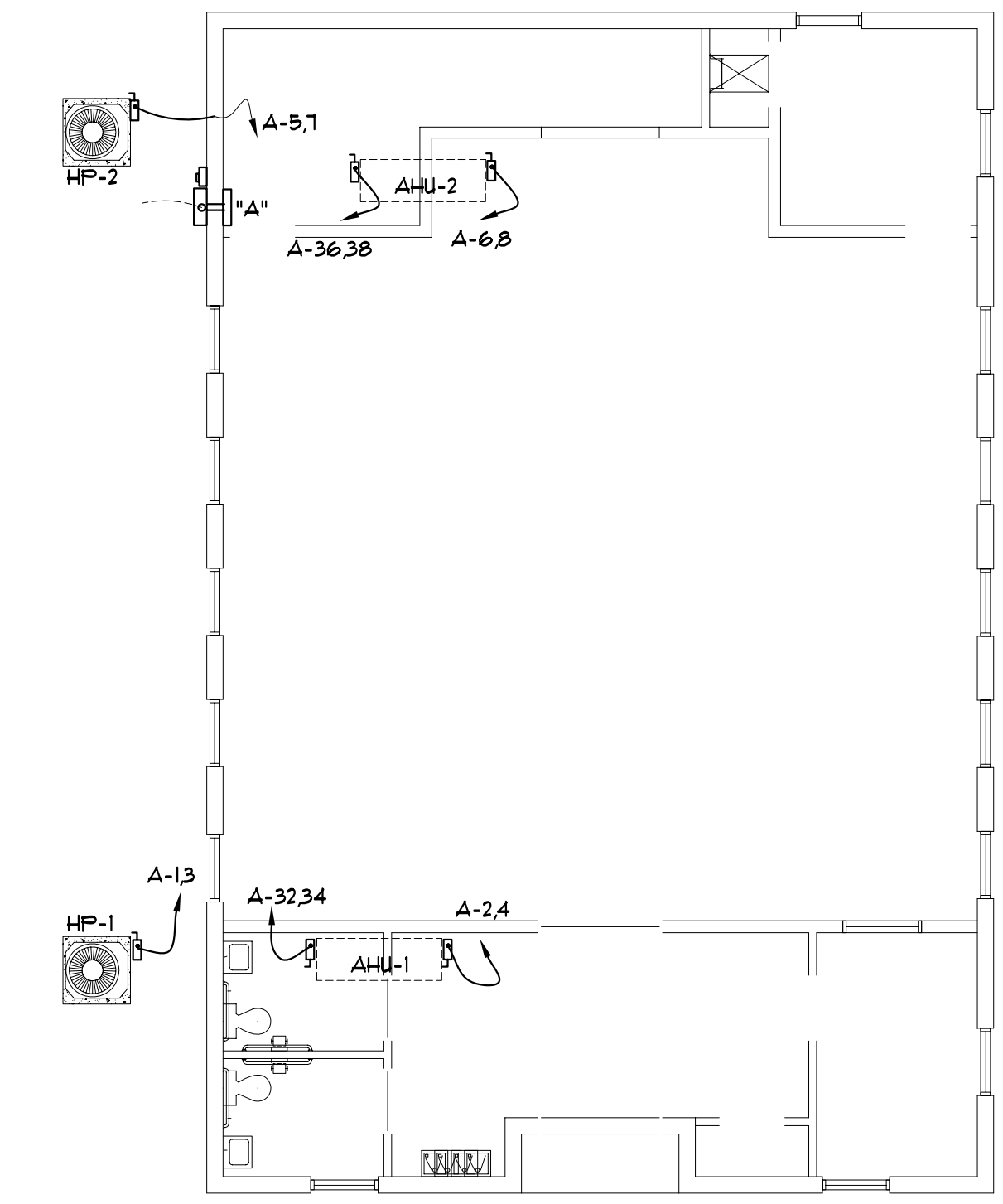
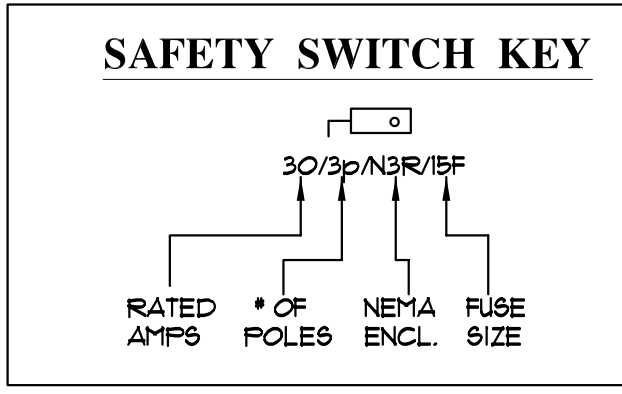
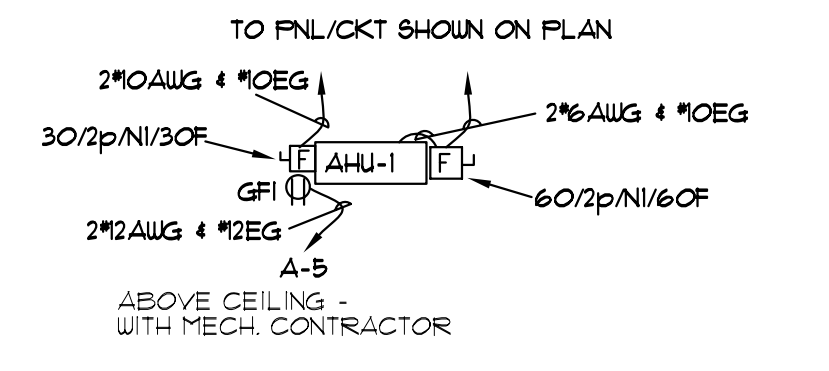
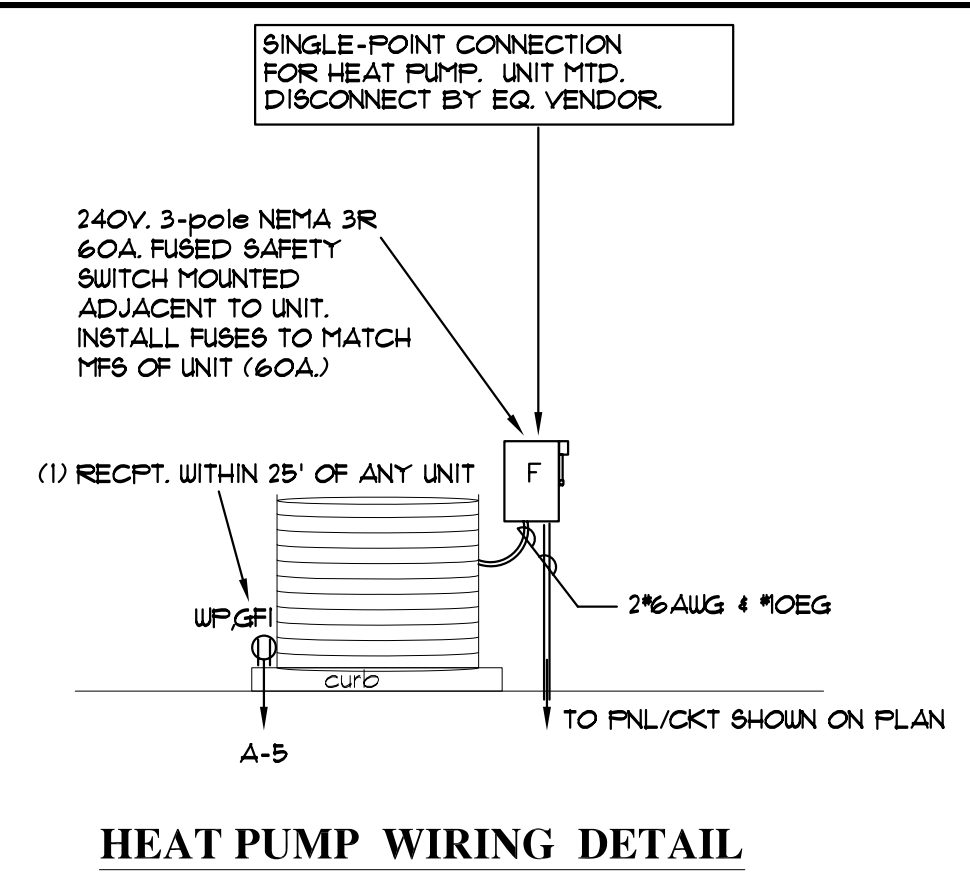
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS ARE TO DESCRIBE THE INSTALLATION OF A COMPLETE, FULLY ADJUSTED, AND OPERATIONAL SYSTEM.
- THE CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIAL, EQUIPMENT, MACHINERY, AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEM.
- ALL WORK UNDER THIS SECTION SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH STATE BUILDING CODES AND THE NATIONAL ELECTRIC CODE.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVAL, OBTAIN ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE INSTALLATION OF THEIR WORK.
- THE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR MAY NEED TO MAKE FIELD ADJUSTMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THE GENERAL CONSTRUCTION OF THE BUILDING, FOR FLOORS AND CEILING HEIGHTS, FOR LOCATIONS OF WALLS, PARTITIONS, BEAMS, ETC.
- MANUFACTURER'S LIST ARE TO ESTABLISH A STANDARD OF QUALITY AND NOT INTENDED TO LIMIT THE SELECTION TO THESE MANUFACTURERS.
- CONTRACTOR SHALL VERIFY ALL LISTED MODEL NUMBERS WITH MANUFACTURERS TO INSURE PROPER APPLICATION OF EQUIPMENT.
- EQUIPMENT AND MATERIALS SHALL BE HANDLED, STORED AND PROTECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL PERFORM ANY AND ALL TRENCHING, EXCAVATION AND BACKFILLING REQUIRED FOR THE INSTALLATION OF HIS WORK.
- THE CONTRACTOR SHALL FURNISH ALL NECESSARY SCAFFOLDING, STAGING, RIGGING AND HOISTING REQUIRED FOR THE COMPLETION OF HIS WORK.
- ALL WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OTHER TRADES INVOLVED IN THE CONSTRUCTION PROJECT. ALL WORK SHALL BE CAREFULLY LAID OUT IN ADVANCE TO COORDINATE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL FEATURES OF CONSTRUCTION.
- THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING HIS BID SO AS TO BE THOROUGHLY FAMILIAR WITH THE JOB CONDITIONS AND/OR PECULIARITIES. NO EXTRA PAYMENT WILL BE ALLOWED FOR ANYTHING WHICH COULD HAVE BEEN ANTICIPATED FROM A VISIT TO THE SITE.
- EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- PROVIDE GROUNDING FOR SERVICE. ALL CONDUITS, MOTOR FRAMES, METAL CASINGS, RECEPTACLES, SYSTEM NEUTRAL, ETC. AND AS REQUIRED BY NEC AS MINIMUM RESISTANCE TO GROUND SHALL NOT EXCEED 25 OHMS. CONTRACTOR SHALL SUBMIT GROUNDING TEST REPORT.
- A GREEN INSULATED COPPER GROUND WIRE, SIZED PER NEC, SHALL BE INSTALLED IN ALL NON-METALLIC CONDUIT, ELECTRIC METALLIC TUBING USED FOR FEEDERS, FLEXIBLE CONDUIT, AND AS OTHERWISE NOTED ON THE DRAWINGS.
- ALL FIXTURES SHOWN ON THE FIXTURE SCHEDULE SHALL BE FURNISHED AND INSTALLED, COMPLETE WITH ALL MOUNTING ACCESSORIES, LAMPS AND TUBES. FIXTURES SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE. ACRYLIC LENSES SHALL BE A MINIMUM THICKNESS OF 0.125 INCHES.
- ALL WIRING SHALL BE RUN IN CONDUIT (OR BX). FOR UNDER FLOOR INSTALLATIONS, CONDUIT SHALL BE RUN BELOW, NOT IN, THE SLAB. THE MINIMUM INDOOR CONDUIT SIZE SHALL BE 1/2". THE MINIMUM OUTDOOR UNDERGROUND CONDUIT SIZE SHALL BE 1". FEEDER CONDUITS EXTERIOR TO THE BUILDING FOUNDATION WALL BELOW GRADE SHALL BE SIZED AS SHOWN ON THE DRAWING. OUTDOOR EXPOSED CONDUIT SHALL BE RIGID CONDUIT. UNDERGROUND CONDUIT SHALL BE RIGID METALLIC CONDUIT OR NONMETALLIC RIGID CONDUIT WHERE NOTED. CONNECTION TO EQUIPMENT SHALL BE LIQUDTIGHT FLEXIBLE METAL CONDUIT. OUTDOOR BOXES AND ENCLOSURES SHALL BE NEMA TYPE 3R OR TYPE 4. INDOOR CONDUIT SHALL BE ELECTRICAL METALLIC TUBING OR TYPE AC, MC, OR NONMETALLIC SHEATHED CABLE MAY BE USED FOR BRANCH CIRCUITS WHERE ALLOWED BY NEC AND NOT SUBJECT TO PHYSICAL DAMAGE, MOISTURE OR DAMPNESS. CONNECTION TO EQUIPMENT SHALL BE FLEXIBLE METAL CONDUIT EXCEPT IN WET OR DAMP LOCATIONS USE LIQUDTIGHT FLEXIBLE METAL CONDUIT. INDOOR BOXES AND ENCLOSURES SHALL BE NEMA TYPE 1, EXCEPT IN DAMP OR WET LOCATIONS USE NEMA TYPE 4, STAINLESS STEEL. WHERE NONMETALLIC CONDUIT IS USED BELOW THE SLAB PROVIDE RIGID CONDUIT TO TURN UP INTO THE BUILDING SPACE OR AT ALL EXTERIOR WALLS, POLES OR EQUIPMENT USE RACEWAY FITTINGS COMPATIBLE WITH RACEWAY AND SUITABLE FOR USE AND LOCATION. RUN CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE CONSIDERING THE TYPE OF BUILDING CONSTRUCTION AND OBSTRUCTIONS. RACEWAYS SHALL RUN PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS, AND FOLLOW THE SURFACE CONTOURS AS MUCH AS PRACTICAL. PROVIDE GROUNDING CONNECTIONS FOR RACEWAY, BOXES, AND COMPONENTS AS INDICATED AND INSTRUCTED BY MANUFACTURER. TIGHTEN CONNECTIONS AND TERMINALS, INCLUDING SCREWS AND BOLTS, ACCORDING TO EQUIPMENT MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES FOR EQUIPMENT CONNECTORS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS ACCORDING TO TIGHTENING TORQUES SPECIFIED IN UL STANDARD 486A. ALL UNDERGROUND RACEWAYS SHALL BE IDENTIFIED BY "UNDERGROUND LINE MARKING TAPE" LOCATED DIRECTLY ABOVE THE RACEWAY AT 6" BELOW FINISHED GRADE. TAPE SHALL BE PERMANENT, BRIGHT-COLORED, CONTINUOUS, MAGNETIC STRIP, PRINTED, PLASTIC TAPE COMPOUNDED FOR DIRECT BURIAL, NOT LESS THAN 6" WIDE AND 4 MILS THICK. PRINTED LEGEND SHALL BE INDICATIVE OF THE SERVICE IT IS MARKING. CONDUITS EXPOSED TO DIFFERENT TEMPERATURES SHALL BE SEALED AS REQUIRED BY NEC ARTICLE 300.7A.
- COLOR FOR DEVICES SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR.
- RECEPTACLES SHALL COMPLY WITH UL STANDARD 498, "ELECTRICAL ATTACHMENT PLUGS AND RECEPTACLES," HEAVY-DUTY GRADE 20 AMP RATED EXCEPT AS OTHERWISE INDICATED.
- GROUND-FAULT CIRCUIT INTERRUPTER (GFI) RECEPTACLES SHALL COMPLY WITH UL STANDARD 943, "GROUND FAULT CIRCUIT INTERRUPTERS," WITH INTEGRAL NEMA 5-20R DUPLEX RECEPTACLE.
- SINGLE POLE AND THREE/FOUR-WAY TOGGLE TYPE SNAP SWITCHES SHALL BE 20 AMP 120/277 V. AC, RATED, QUITE-TYPE A.C. SWITCHES. NRIL LISTED AND LABELED AS COMPLYING WITH UL STANDARD 20 "GENERAL USE SNAP SWITCHES," AND WITH FEDERAL SPECIFICATION W-5-896.
- WALL PLATES: SINGLE AND COMBINATION TYPES SHALL BE 302 STAINLESS STEEL THAT MATE AND MATCH WITH CORRESPONDING WIRING DEVICES.
- CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC AS FOLLOWS:
 

PHASE	208/120 VOLTS	480/277 VOLTS
A	BLACK	BROWN
B	RED	ORANGE
C	BLUE	YELLOW
NEUTRAL	GRAY	WHITE
GROUND	GREEN	GREEN
- ELECTRICAL EQUIPMENT SHALL BE IDENTIFIED WITH LABELS OF ENGRAVED PLASTIC-LAMINATE ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT IN THE BUILDING, INCLUDING CENTRAL OR MASTER UNIT OF EACH ELECTRICAL SYSTEM.
- PANELBOARDS/LOADCENTERS SHALL BE TYPE, RATING, AND FEATURES AS INDICATED ON THE SCHEDULES. ENCLOSURES SHALL BE NEMA TYPE 1, FLUSH OR SURFACE MOUNTED AS INDICATED. CABINET SHALL BE CODE GAUGE, GALVANIZED STEEL. FRONTS SHALL BE SHEET STEEL WITH GRAY LACQUER FINISH WITH HINGED LOCKING DOOR. GROUND AND NEUTRAL BUS SHALL BE 100% RATED. BUS SHALL BE COPPER OR ALUMINUM. MAIN AND NEUTRAL BUSES SHALL BE FLUSH ON TYPE. EQUIPMENT GROUND BUS SHALL BE ADEQUATE FOR FEEDER AND BRANCH-CIRCUIT EQUIPMENT GROUND CONDUCTORS, BONDED TO BOX. DIRECTORY FRAME SHALL BE METAL, MOUNTED INSIDE EACH PANEL DOOR. AT THE COMPLETION OF THIS INSTALLATION, TYPE CIRCUIT DESIGNATIONS ON THE DIRECTORY CARD AND LEAVE IN THE CARD HOLDER PROVIDED INSIDE CABINET DOORS. TANDEM CIRCUIT BREAKERS SHALL NOT BE USED. MULTIPOLE BREAKERS SHALL HAVE COMMON TRIP. THE MINIMUM INTERRUPTING RATING FOR CIRCUIT BREAKERS RATED AT 120/240 VOLTS SHALL BE 10,000 AMPS RMS SYMMETRICAL. FOR FLUSH MOUNTED PANELS PROVIDE A MINIMUM OF (4) - 1" CONDUITS STUBBED TO THE CEILING SPACE FOR FUTURE USE.
- ENCLOSED NONFUSIBLE DISCONNECT SWITCH SHALL BE NEMA KS 1, TYPE HD, HANDLE LOCKABLE WITH 2 PADLOCKS. ENCLOSED FUSIBLE DISCONNECT SWITCH, NEMA KS 3, TYPE HD, CLIPS TO ACCOMMODATE SPECIFIED FUSES, ENCLOSURE CONSISTENT WITH ENVIRONMENT WHERE LOCATED, HANDLE LOCKABLE WITH 2 PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION. ALL SWITCHES SHALL BE "STANDARD DUTY" RATED FOR THE VOLTAGE REQUIRED.
- MAKE ALL NECESSARY TESTS TO INSURE THAT THE ENTIRE INSTALLATION IS FREE FROM IMPROPER GROUNDS AND FROM SHORTED AND/OR OPEN CIRCUITS. VOLTAGE, CURRENT, AND ROTATION TESTS SHALL BE MADE BEFORE ANY MOTORS ARE PLACED IN OPERATION. ALL LOADS MUST BE BALANCED ACROSS PHASES. CHECK TO SEE THAT ALL LIGHTS WORK AND ARE CONTROLLED BY SWITCHES INDICATED ON DRAWINGS OR BREAKERS SO INDICATED ON PANEL SCHEDULE.
- MARK ALL DEVICES AS TO WHICH PANEL AND CIRCUIT THEY ARE CONNECTED.
- ELECTRICAL SERVICE IS 120/240V SINGLE-PHASE, 3W. E.C. SHALL PAY FOR ALL REQUIRED LICENSED PERMITS, FEES, ETC. NECESSARY TO OBTAIN ELECTRIC SERVICE. PROVIDE ALL TRENCHING AND BACKFILLING REQUIRED FOR INSTALLATION OF SERVICE. VERIFY SIZE AND ROUTING OF ALL TRENCHES WITH PLANT AND OTHER TRADES PRIOR TO START OF CONSTRUCTION. PROVIDE CONDUITS UNDER PAVED AREAS FOR USE BY PLANT WHERE REQUIRED. VERIFY SIZE AND LOCATION OF EXISTING CONDUITS WITH PLANT AND UTILITY COMPANY PRIOR TO START OF CONSTRUCTION.
- PROVIDE SERVICE EQUIPMENT GROUNDING PER NEC ARTICLE 250. GROUNDING ELECTRODE CONDUCTOR SHALL BE BONDED TO METAL WATER PIPE, GAS PIPING, SPRINKLER PIPING AND TO BUILDING STRUCTURAL METAL.
- THE TELEPHONE SERVICE SHALL BE INSTALLED AS REQUIRED. THE CONTRACTOR SHALL COORDINATE WITH THE TELEPHONE COMPANY SO THAT THE ENTIRE SYSTEM IS INSTALLED IN ACCORDANCE WITH THE TELEPHONE COMPANY'S STANDARDS AND POLICIES.
- ALL WIRING FOR EQUIPMENT SHALL BE ONE OF THE FOLLOWING TYPES THW, THHW, THWN WITH A RATING OF AT LEAST 75 DEG. C.
- BACK TO BACK DEVICES LOCATED IN RATED WALLS SHALL BE SEPARATED BY A DISTANCE OF AT LEAST 24" HORIZONTALLY.
- FINAL LOCATIONS OF ALL EXIT AND EMERGENCY LIGHTS SHALL BE VERIFIED WITH THE BUILDING INSPECTOR PRIOR TO INSTALLATION.
- BRANCH CIRCUITS SHALL NOT EXCEED 80% OF OVERCURRENT PROTECTION. DEVICES SHALL BE RELOCATED TO ANOTHER CIRCUIT IF FOUND TO BE IN EXCESS OF 80%.



**SYMBOL SCHEDULE**

- SWITCHED CIRCUITS (LIGHTING, ETC.)
- (HOME RUNS) CONDUIT CONCEALED ABOVE CEILING AND/OR IN WALLS OR EXPOSED, WHERE ALLOWED. #12 & #12EG, UNLESS NOTED.
- CONNECTIONS BETWEEN JUNCTION BOXES AND SWITCHES TO DISTRIBUTE HOME RUNS - #12 & #12EG, UNLESS NOTED.
- DEDICATED 20A DUPLEX RECEPTACLE MOUNTED 12" AFF UNLESS OTHERWISE NOTED
- 20A DUPLEX RECEPTACLE MOUNTED 18" AFF UNLESS OTHERWISE NOTED
- 240V RECEPTACLE (DRYER, ETC.)
- FLOOR-MOUNTED RECEPTACLE
- 20A SINGLE POLE SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED
- 20A THREE WAY SWITCH MOUNTED 46" AFF UNLESS OTHERWISE NOTED
- TELEPHONE/DATA OUTLET MOUNTED 12" AFF (5-PHASE)
- JUNCTION OR PULL BOX, SIZE AS INDICATED OR REQUIRED
- 120/208V 3ph PANELBOARD - FLUSH OR SURFACE MOUNTED, PER DWG'S.
- TELEPHONE CABINET
- SAFETY SWITCH, SEE NOTE ON PLAN
- MOLDED CASE CIRCUIT BREAKER
- MOTOR CONNECTION, NUMBER INDICATES HORSEPOWER
- METER BASE



A	MAKE: SQ. D.		RATING: 120/240V 1PH		MAIN BRK. OR M.L.O. 400A. MAIN BRK.						
	TYPE: QO		MOUNTING: SURFACE		EQUIP. GROUND BUS?		X YES NO				
	AMPS	PER	WIRE	CKT.	NO.	BRK.	SIZE	A	B	LOAD SERVED	
HEAT PUMP HP-1	31		#6	60	1		2	30	#10	18	AHU-1 CKT #2
HEAT PUMP HP-2	31		#6	60	5		6	30	#10	18	AHU-2 CKT #2
MAINT. REPTS.	5		#12	20	9		10	30	#10	23	RRW WATER HEATER
SANCTUARY LTS	5		#12	20	11		12		#10		
SANCTUARY LTS	5		#12	20	13		14	30	#10	23	RRW WATER HEATER
SANCTUARY LTS	5		#12	20	15		16		#10		
PLATFORM LTS	5		#12	20	17		18	20	#12	4.5	SECRETARY RECPTS.
FOYER/RRM LTS	5		#12	20	19		20	20	#12	6	FOYER RECPT.
PASTOR'S OFFICE LTS	2		#12	20	21		22	20	#12	7.5	SANCTUARY RECPTS
BAPTISTRY LTS	4		#12	20	23		24	20	#12	7	PLATFORM RECPTS
PLATFORM LTS	6		#12	20	25		26	20	#12	9	BAPTISTRY MOTOR
RESTROOM RECPTS	5		#12	20	27		28	30	#10	23	BAPTISTRY HTR.
CHOIR LTS.	5		#12	20	29		30		#10	23	
					31		32	60	#6	46	AHU-1 CKT #1
					33		34		#6	46	
					35		36	60	#6	46	AHU-2 CKT #1
					37		38		#6	46	
					39		40	20			
					41		42	20			
REMARKS	90	86	SUB-TOTAL "B"		400A AL		BUS SUB "A"		218	210	PANEL SHALL HAVE A RATING OF 22,000 AIC
					#600MCM		LUGS SUB "B"		90	86	
					YES		TOTAL		308	296	
					SIN		FEED				
					TOP						

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NEW ORLEANS, LA

**POWER DISTRIBUTION PLAN**

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**E-1**