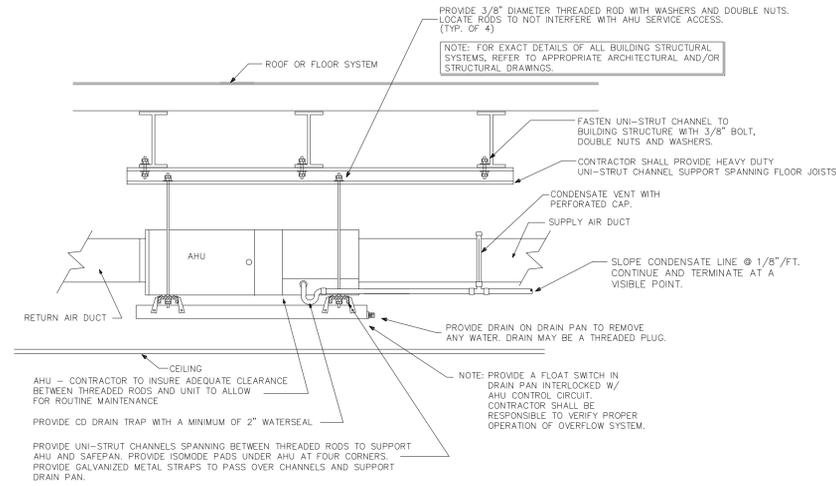


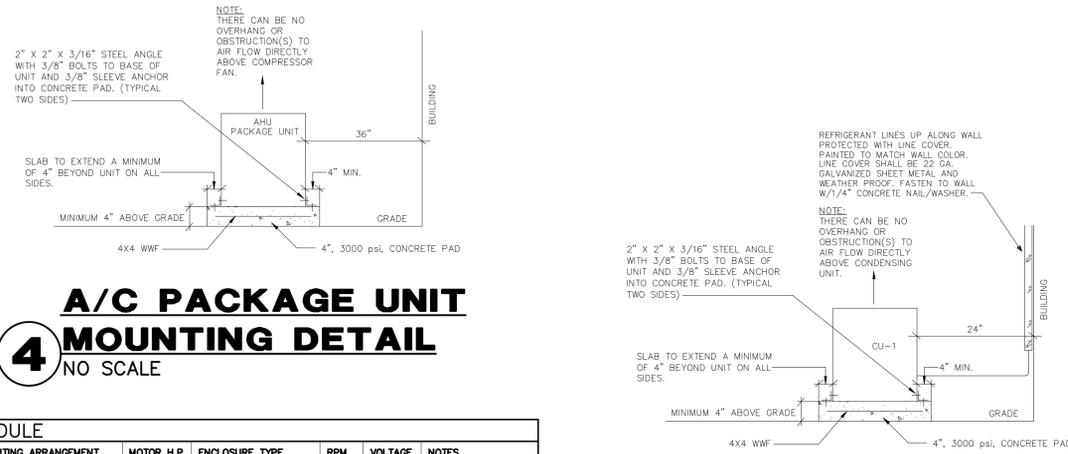
# 1 BRANCH DUCT DETAIL

NO SCALE



# 2 AIR HANDLING UNIT MOUNTING DETAIL

NO SCALE



# A/C PACKAGE UNIT MOUNTING DETAIL

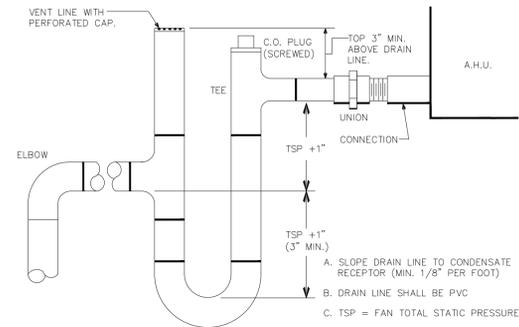
NO SCALE

# 5 COND. UNIT MTG. DETAIL

NO SCALE

# 3 CONDENSATE P-TRAP DETAIL

NOT TO SCALE



- ### GENERAL MECHANICAL NOTES
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE APPLICABLE BUILDING CODE AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS: SMACNA, ASHRAE, NFPA 90A, 90B, 91 & ANSI B-9.1 MECHANICAL REFRIGERATION. ALL DUCTWORK SHALL BE FABRICATED, INSTALLED AND SUPPORTED AS PER SMACNA STANDARDS.
  - THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
  - THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES TO INSURE AN ORDERLY PROGRESS OF THIS WORK.
  - ALL MATERIAL SHALL BE NEW OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY SKILLED WORKMAN.
  - ALL NON-EXPOSED SUPPLY AND RETURN AIR DUCTWORK SHALL BE GALVANIZED SHEET STEEL EXTERNALLY WRAPPED WITH 1" INSULATION WITH A 4.2 R VALUE OR HIGHER.
  - ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS.
  - DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
  - ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE TITUS, METALAIR, AIRGRO. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS.
  - REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER-JOINT TYPE FITTINGS. USE 95/5 SOLDER. REFRIGERANT LINES SHALL SIZED AS PER MANUFACTURER RECOMMENDATIONS.
  - ARMAFLEX 3/4" INSULATION SHALL BE USED FOR SUCTION LINES. PRE-INSULATED REFRIGERANT LINE KITS ARE ACCEPTABLE.
  - PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO FINAL ACCEPTANCE BY OWNER.
  - MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH, PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
  - CONTRACTOR SHALL INSTALL ALL OUTDOOR EQUIPMENT TO WITHSTAND WIND LOADING FORCES AS REQUIRED BY LOCAL CODES. REFER TO STRUCTURAL PLANS BY OTHERS FOR STRUCTURAL DETAILS.
  - PROVIDE ALL NECESSARY CONTACTORS, RELAYS, ETC., FOR A COMPLETE OPERATING A/C UNIT.
  - IF ANY ERRORS, DISCREPANCIES OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH ERROR OR OMISSION IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH NOTICE BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK, HE WILL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS, DISCREPANCIES OR OMISSIONS AND THE COST OF RECTIFYING SAME.

FAN SCHEDULE										
LABEL	TYPE OF UNIT - AREA SERVED	MANUFACTURER & MODEL NO.	CFM	SP	MOUNTING ARRANGEMENT	MOTOR H.P.	ENCLOSURE TYPE	RPM	VOLTAGE	NOTES
EF-1	CABINET FAN - REFER TO PLANS	PENN ZEPHYR Z6	90	.125"	CEILING MOUNTED	50 WATTS	OPEN DRIP PROOF	1055	115V/1Ø	1
EF-3	CABINET FAN - REFER TO PLANS	PENN ZEPHYR Z8H	400	.125"	CEILING MOUNTED	130 WATTS	OPEN DRIP PROOF	1115	115V/1Ø	1

NOTES: 1.) REFER TO ELECTRICAL PLANS FOR CONTROL.

SPLIT SYSTEM AIR CONDITIONING SCHEDULE																		
CONDENSING UNIT									AIR HANDLING UNIT									
CU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CAPACITY	SENSIBLE CAPACITY	COMP. RLA	FAN FLA	VOLTAGE	MOCP	EER/SEER	AHU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CFM	O/A CFM	E.S.P.	BLOWER SPEED	FAN HP	HEATER KW	VOLTAGE	NOTES
CU #1	CARRIER 38CKQ-036-501	34,000	25,700	10.0	1.4	208V/3Ø	20A	10.0	AHU-1	CARRRIER FB4N036	1,200	150	.30"	HIGH	1/3 HP	5.0	208V/1Ø	1 THRU 6
CU #2	CARRIER 38CKQ-042-501	40,000	29,100	13.6	1.4	208V/3Ø	25A	10.0	AHU-2	CARRRIER FB4N042	1,400	150	.30"	HIGH	1/2 HP	5.0	208V/1Ø	1 THRU 6
CU #3	CARRIER 38CKQ-060-501	57,000	41,000	18.3	1.4	208V/3Ø	35A	10.0	AHU-3	CARRRIER FB4N060	2,000	255	.30"	HIGH	3/4 HP	8.0	208V/1Ø	1 THRU 6
CU #4	CARRIER 38ARZ007-501	66,500	65,200	19.2	(2)Ø9.9	208V/3Ø	35A	9.0	AHU-4	CARRRIER 40RM-007-B501	2,400	475	.40"	663 RPM	1 HP	10.0	208V/3Ø	1 THRU 6
CU #5	CARRIER 38ARZ007-501	66,500	65,200	19.2	(2)Ø9.9	208V/3Ø	35A	9.0	AHU-5	CARRRIER 40RM-007-B501	2,350	475	.40"	663 RPM	1 HP	10.0	208V/3Ø	1 THRU 6

GENERAL NOTES:

- ALL RATINGS ARE AT ARI ENTERING CONDITIONS UNLESS OTHERWISE NOTED.
- PROVIDE VIBRATION ISOLATION FOR UNITS.
- EXTERNAL STATIC PRESSURE DOES NOT INCLUDE COIL OR FILTER PRESSURE DROP.
- CONTRACTOR MAY SUBSTITUTE MANUFACTURER FOR APPROVED EQUAL. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ANY CLEARANCE REQUIREMENTS ARE MET FOR ANY SUBSTITUTIONS.

ABBREVIATION LEGEND:

- O/A - OUTSIDE AIR
- HP - HORSE POWER
- RLA - RUNNING LOAD AMPS
- FLA - FULL LOAD AMPS
- MOCP - MAX. OVERCURRENT PROTECTION (DUAL ELEMENT TYPE FUSE)
- E.S.P. - EXTERNAL STATIC PRESSURE
- EER - ENERGY EFFICIENCY RATIO
- SEER - SEASONAL ENERGY EFF. RATIO

SPECIFIC NOTES:

- SIZE AND RUN REFRIGERANT PIPING AS PER MANUFACTURERS PUBLISHED RECOMMENDATIONS.
- INSTALL REFRIGERANT SUCTION LINE WITH 3/4" ARMAFLEX OR APPROVED EQUAL.
- INSTALL CHEMICAL DRYER AND STRAINER IN REFRIGERANT LIQUID LINE.
- PROVIDE 5 YEAR WARRANTY ON COMPRESSOR AND 1 YEAR WARRANTY ON ALL PARTS AND LABOR.
- HEATER SHALL BE PROVIDED WITH 24 VOLT CONTROL.
- PROVIDE BUILT-IN DISCONNECT/CIRCUIT BREAKER IN AIR HANDLING UNIT.

PACKAGE AIR CONDITIONING SCHEDULE																
SYS. LABEL	MANUFACTURER	MODEL NO.	TOTAL CAPACITY	SENSIBLE CAPACITY	TOTAL CFM	O/A CFM	E.S.P.	FAN SPEED	COMP. RLA	OUTDOOR FAN FLA	INDOOR FAN HP	HEATER KW	VOLTAGE	MOCP	EER/SEER	NOTES
A/C #5	CARRIER	50HG016--5	200,000	149,000	6,000	2,036	.4"	732	(3)Ø22.4	(4)Ø1.5	3.7 H.P.	19	208V/3Ø	110	11.5	1 THRU 5
A/C #6	CARRIER	50HG016--5	200,000	149,000	6,000	2,036	.4"	732	(3)Ø22.4	(4)Ø1.5	3.7 H.P.	19	208V/3Ø	110	11.5	1 THRU 5

GENERAL NOTES:

- ALL RATINGS ARE AT ARI ENTERING CONDITIONS UNLESS OTHERWISE NOTED.
- PROVIDE VIBRATION ISOLATION FOR UNIT.
- EXTERNAL STATIC PRESSURE DOES NOT INCLUDE COIL OR FILTER PRESSURE DROP.
- CONTRACTOR MAY SUBSTITUTE MANUFACTURER FOR APPROVED EQUAL. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ANY CLEARANCE REQUIREMENTS ARE MET FOR ANY SUBSTITUTIONS.

ABBREVIATION LEGEND:

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- RLA - RUNNING LOAD AMPS
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- MOCP - MAX. OVERCURRENT PROTECTION (DUAL ELEMENT TYPE FUSE)
- E.S.P. - EXTERNAL STATIC PRESSURE
- EER - ENERGY EFFICIENCY RATIO
- SEER - SEASONAL ENERGY EFF. RATIO

SPECIFIC NOTES:

- OUTDOOR AIR MANUAL Ø% TO 30% DAMPER.
- PROVIDE (1) YEAR WARRANTY ON ALL PARTS AND LABOR AND 5 YEAR WARRANTY ON COMPRESSOR.
- PROVIDE 1" FARR 30/30 THOWAWAY. (1) SET DURING CONSTRUCTION AND (1) SET AFTER FINAL INSPECTION.
- PROVIDE ALL NECESSARY CONTACTORS, RELAYS, MOTOR STARTER, ETC. FOR A COMPLETE OPERATING UNIT.
- CONTRACTOR SHALL INSTALL ROOFTOP AIR CONDITIONING EQUIPMENT IN ACCORDANCE WITH ALL APPLICABLE CODES, AND TO WITHSTAND HURRICANE FORCE WINDS OF UP TO 120 M.P.H.

OUTSIDE AIR CALCULATIONS (AHU #1)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "OFFICE" CATEGORY = 7 PEOPLE PER 1,000 SQ. FT. & 20 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #1	195	195 / 1000 X 7 = 2	2 X 20 = 40
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "CORRIDOR" CATEGORY = .05 CFM PER SQ. FT.			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #1	820	- / 1000 X - = -	820 X .05 = 41
TOTAL OUTSIDE AIR REQUIRED FOR AHU #1 = 81 CFM			

OUTSIDE AIR CALCULATIONS (AHU #2)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "OFFICE" CATEGORY = 7 PEOPLE PER 1,000 SQ. FT. & 20 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	453	453 / 1000 X 7 = 3	3 X 20 = 60
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "CORRIDOR" CATEGORY = .05 CFM PER SQ. FT.			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	762	- / 1000 X - = -	762 X .05 = 38
TOTAL OUTSIDE AIR REQUIRED FOR AHU #1 = 98 CFM			

OUTSIDE AIR CALCULATIONS (AHU #3)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "LOBBY" CATEGORY = 30 PEOPLE PER 1,000 SQ. FT. & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #3	1,140	1,140 / 1000 X 30 = 34	34 X 15 = 510/2=255
AHU #5 PROVIDED WITH 300 CFM OF OUTSIDE AIR.			
THE OCCUPANCY OF THIS FACILITY DOES NOT EXCEED THREE HOURS AT ANY TIME, THEREFORE THE FACILITY QUALIFIES FOR REDUCTION OF OUTSIDE AIR IN ACCORDANCE WITH THE ASHRAE STANDARD 62 SECTION 6.1.3.4. THE AVERAGE OCCUPANCY IS LESS THAN 1/2 THE MAXIMUM CALCULATED OCCUPANCY, SO THE FRESH AIR PROVIDED WILL BE 1/2 THE CALCULATED IN ACCORDANCE WITH SECTION 6.1.3.4.			

OUTSIDE AIR CALCULATIONS (AHU #4)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: 63 PEOPLE AS PER ARCHITECTURAL PLANS			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4	1,425	- / 1000 X - = -	63 X 15 = 945/2=472
THE OCCUPANCY OF THIS FACILITY DOES NOT EXCEED THREE HOURS AT ANY TIME, THEREFORE THE FACILITY QUALIFIES FOR REDUCTION OF OUTSIDE AIR IN ACCORDANCE WITH THE ASHRAE STANDARD 62 SECTION 6.1.3.4. THE AVERAGE OCCUPANCY IS LESS THAN 1/2 THE MAXIMUM CALCULATED OCCUPANCY, SO THE FRESH AIR PROVIDED WILL BE 1/2 THE CALCULATED IN ACCORDANCE WITH SECTION 6.1.3.4.			

OUTSIDE AIR CALCULATIONS (AHU #5)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: 63 PEOPLE AS PER ARCHITECTURAL PLANS			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #5	1,375	- / 1000 X - = -	65 X 15 = 975/2=487
THE OCCUPANCY OF THIS FACILITY DOES NOT EXCEED THREE HOURS AT ANY TIME, THEREFORE THE FACILITY QUALIFIES FOR REDUCTION OF OUTSIDE AIR IN ACCORDANCE WITH THE ASHRAE STANDARD 62 SECTION 6.1.3.4. THE AVERAGE OCCUPANCY IS LESS THAN 1/2 THE MAXIMUM CALCULATED OCCUPANCY, SO THE FRESH AIR PROVIDED WILL BE 1/2 THE CALCULATED IN ACCORDANCE WITH SECTION 6.1.3.4.			

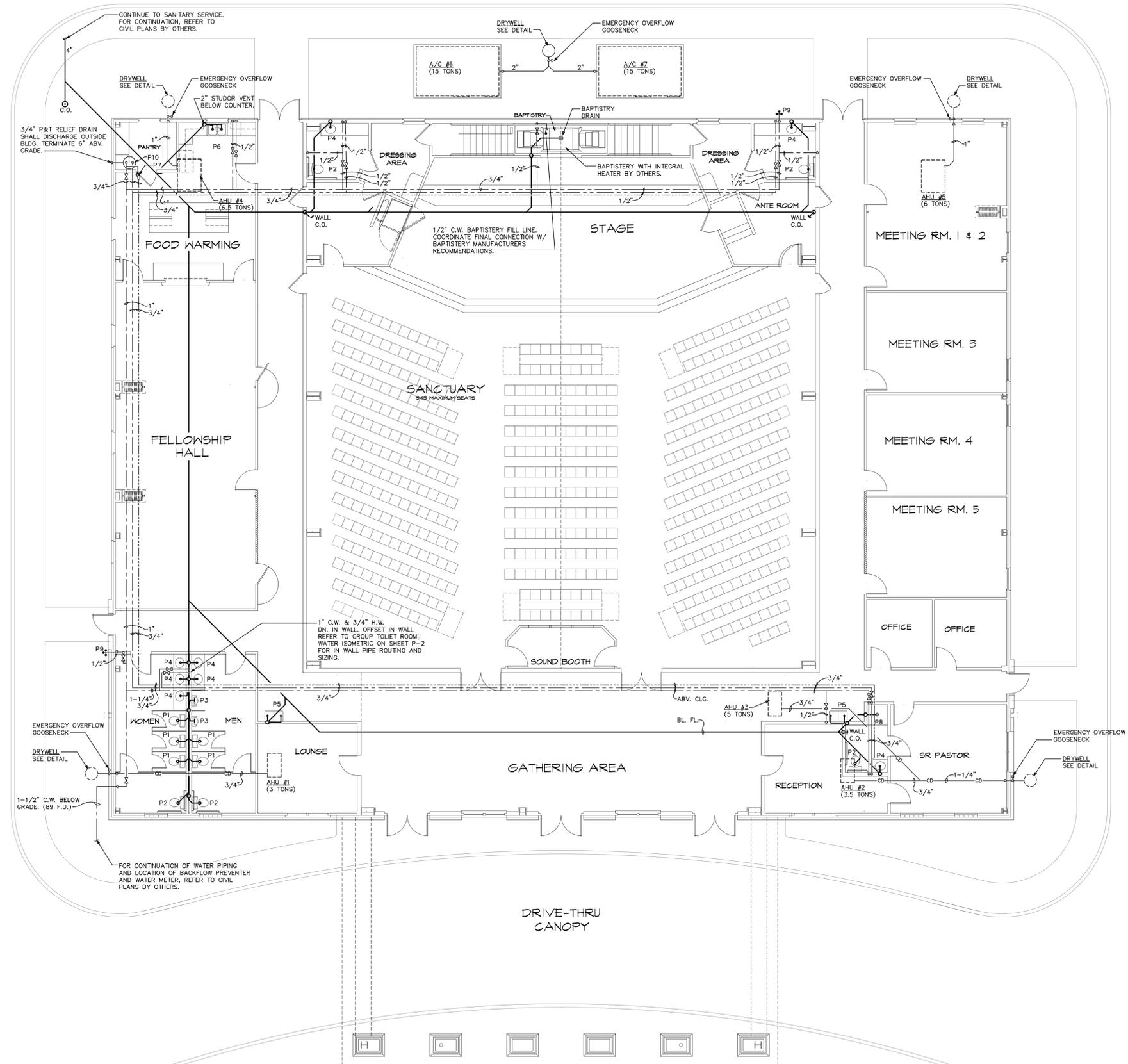
OUTSIDE AIR CALCULATIONS (AHU #6 & 7)			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: 63 PEOPLE AS PER ARCHITECTURAL PLANS			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #6&7	5,800	- / 1000 X - = -	543 X 15 = 8,145/2=4,072
THE OCCUPANCY OF THIS FACILITY DOES NOT EXCEED THREE HOURS AT ANY TIME, THEREFORE THE FACILITY QUALIFIES FOR REDUCTION OF OUTSIDE AIR IN ACCORDANCE WITH THE ASHRAE STANDARD 62 SECTION 6.1.3.4. THE AVERAGE OCCUPANCY IS LESS THAN 1/2 THE MAXIMUM CALCULATED OCCUPANCY, SO THE FRESH AIR PROVIDED WILL BE 1/2 THE CALCULATED IN ACCORDANCE WITH SECTION 6.1.3.4.			

**PLUMBING SYMBOLS LEGEND**

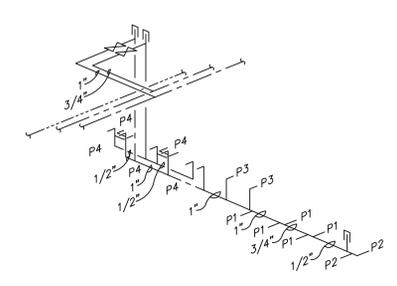
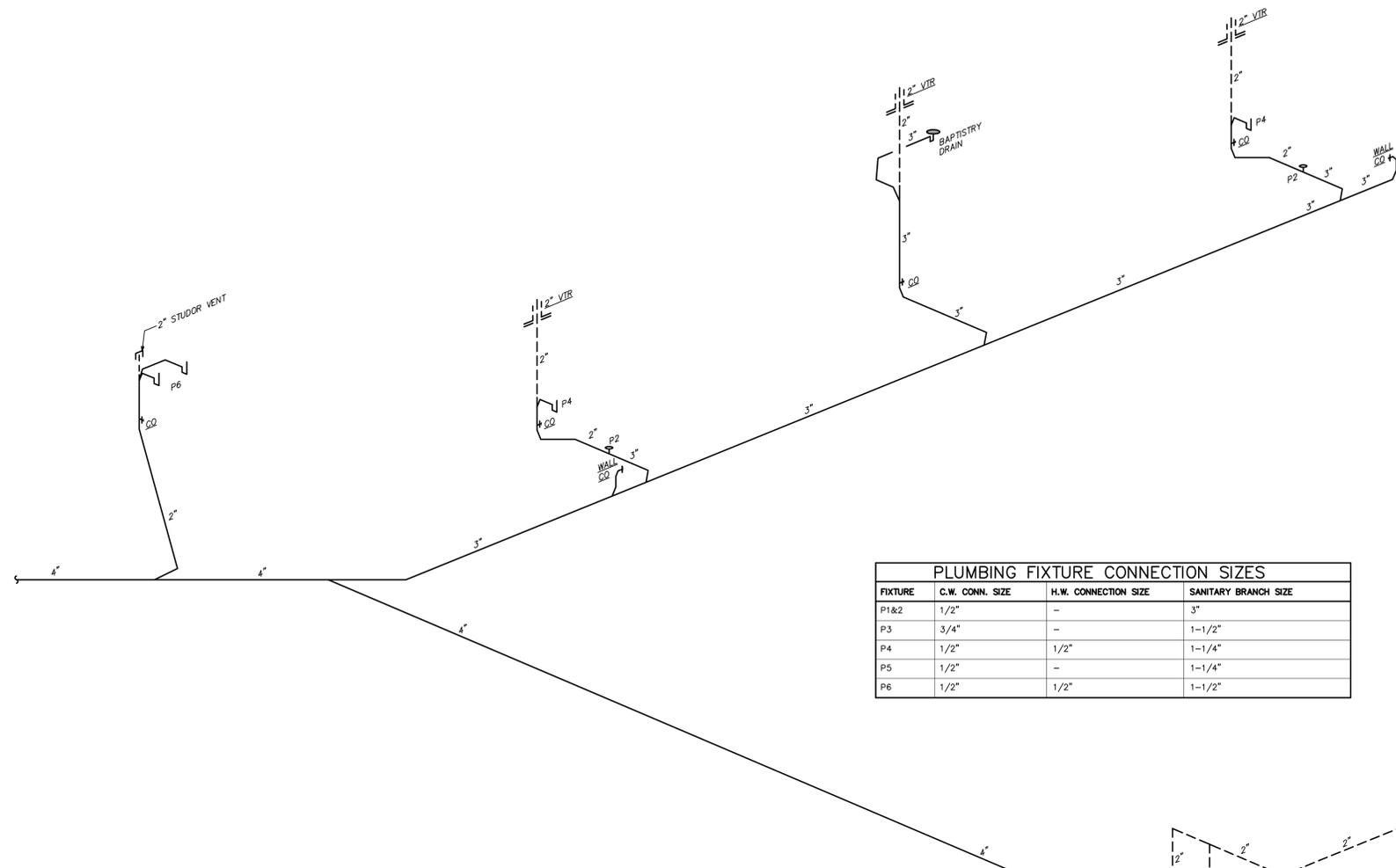
	FLOOR DRAIN
	HOSE BIBB
	CLEANOUT
	RELIEF VALVE
	AIR CHAMBER
	UNION
	SOIL OR WASTE LINE
	SANITARY VENT LINE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC WATER RECIRCULATION
	PRESSURE & TEMP. RELIEF LINE
	CONDENSATE DRAIN LINE
	RAIN WATER LEADER
	GAS LINE
	SAFEWASTE LINE
	FIRE PROTECTION
	SHUT OFF VALVE
	SAFEPAN LINE
	FIRE SPRINKLER HEAD
	PIPE TURN UP
	PIPE TURN DOWN
	P-TRAP

**PLUMBING ABBREVIATION LEGEND**

DN.	DOWN	C.C.	CENTER TO CENTER	F.U.	FIXTURE UNITS
EXT.	EXTERIOR	N.T.S.	NOT TO SCALE	H.B.	HOSE BIBBS
F.D.	FLOOR DRAIN	MFR.	MANUFACTURER	C.O.	CLEANOUT
F.F.	FINISH FLOOR	S.O.V.	SHUT OFF VALVE	E.W.H.	ELECTRIC WATER HEATER
A.F.F.	ABOVE FINISH FLOOR	W.C.	WATER CLOSET	JAN.SK.	JANITOR SINK
V.T.R.	VENT THRU ROOF	LAV.	LAVATORY	P & T	PRESSURE & TEMPERATURE
TYP.	TYPICAL	SK.	SINK	RWL.	RAIN WATER LEADER
R.D.	ROOF DRAIN	D.W.	DISH WASHER		
REV.	REVISION	E.D.F.	ELECTRIC DRINKING FOUNTAIN		
O.C.	ON CENTER	UR.	URINAL		



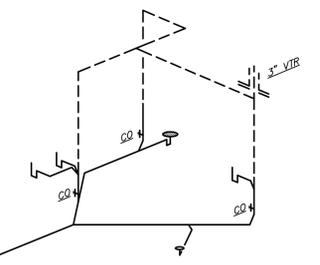
**1 FLOOR PLAN - PLUMBING**  
SCALE: 1/8"=1'-0"



(GROUP TOILET ROOMS)

**2 WATER PIPING ISOMETRIC**  
NO SCALE

PLUMBING FIXTURE CONNECTION SIZES			
FIXTURE	C.W. CONN. SIZE	H.W. CONNECTION SIZE	SANITARY BRANCH SIZE
P1&2	1/2"	-	3"
P3	3/4"	-	1-1/2"
P4	1/2"	1/2"	1-1/4"
P5	1/2"	-	1-1/4"
P6	1/2"	1/2"	1-1/2"



**PLUMBING FIXTURE SCHEDULE**

P-1 (WATER CLOSET)  
SHALL BE AN AMERICAN STANDARD MODEL CADET 2898.014 ELONGATED 1.6 GPF, VITREOUS CHINA, SIPHON ACTION BOWL, CLOSE-COUPLED TANK, SPEED CONNECT TANK/BOWL COUPLING SYSTEM TOILET AND AN OLSONITE # 95 OPEN FRONT SEAT LESS COVER.

P-2 (HANDICAPPED WATER CLOSET)  
SHALL BE AN AMERICAN STANDARD MODEL CADET 2998.012 ELONGATED 18" HIGH, 1.6 GPF, VITREOUS CHINA, SIPHON ACTION BOWL, CLOSE-COUPLED TANK, SPEED CONNECT TANK/BOWL COUPLING SYSTEM TOILET AND AN OLSONITE # 95 OPEN FRONT SEAT LESS COVER. CONTRACTOR TO ORDER LEFT OR RIGHT HAND ACTUATOR LEVER PLACEMENT TO ALLOW LEVER PLACEMENT TO BE ON THE OPEN SIDE OF THE TOILET TO MEET HANDICAP CODE REQUIREMENTS.

P-3 (HANDICAPPED URINAL)  
SHALL BE AN AMERICAN STANDARD ALLBROOK MODEL 6541.132. FLUSH VALVE SHALL BE SLOAN ROYAL MODEL 180-YB.

P-4 (HANDICAPPED COUNTER TOP LAVATORY)  
SHALL BE AN AMERICAN STANDARD MODEL RONALYN MODEL 0490.011 VITREOUS CHINA SELF-RIMMING FAUCET SHALL BE A MONTERRY 5502.170 W/4" WRIST BLADE HANDLES. PROVIDE 0.5 GPM FLOW RESTRICTOR. PROVIDE PROTECTIVE INSULATION ON DRAIN AND HOT WATER LINE TO MEET HANDICAP CODE REQ. ON ALL INSTALLATIONS WHERE THE PIPING IS EXPOSED TO THE USER.

P-5 (HANDICAPPED ELECTRIC WATER COOLER COMBINATION H/L/O)  
SHAL BE AN OASS SPLIT LEVEL MODEL P8AMSLS. 7.8 GPM, 5.0 FLA AT 120 VOLT WITH A 1/5 HP COMPRESSOR.

P-6 (DOUBLE BOWL STAINLESS STEEL SINK)  
SHALL BE AN ELKAY LUSTERTONE MODEL LR-3322-C SELF RIMMING DOUBLE COMPARTMENT STAINLESS STEEL SINK WITH LK2433 HI-ARC FAUCET TO INCLUDE AN OMNI PRESSURE COMPENSATING 2.0 GPM FLOW RESTRICTOR.

P-7 (HOT WATER RECIRCULATING PUMP)  
SHALL BE A TEEL MODEL 1P903 HOT WATER RECIRCULATING PUMP, 1/6 HP MOTOR RUNNING AT 1725 RPM AND 115 VOLTS SINGLE PHASE INCOMING POWER.

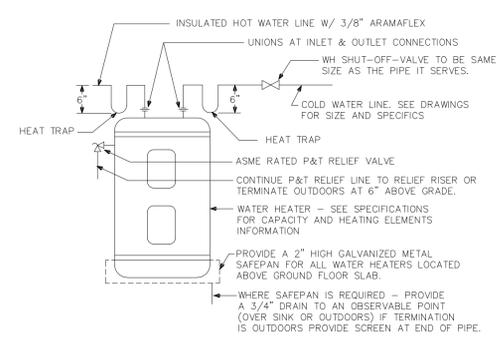
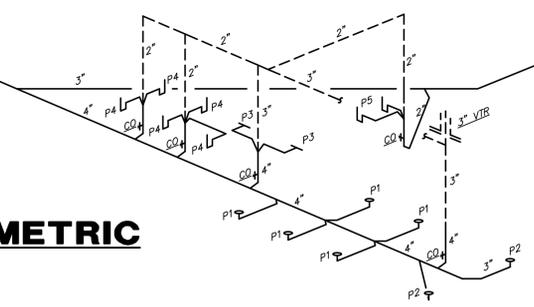
P-8 (HANDICAPPED SHOWER MIXING VALVE)  
SHOWER SHALL INCLUDE AN SPEAKMAN MODEL VS-1970-SS-3 SENTINEL MARK II REGENCY CONCEALED ANTI-SCALD BALANCED PRESSURE SHOWER VALVE AND HAND HELD SPRAY COMBINATION WITH 60" WHITE VINYL REINFORCED HOSE. ALSO INCLUDED IN THIS PACKAGE IS A COSMOPOLITAN SHOWER HEAD MODEL #S-2270-AF WITH WATER CONSERVING COMPENSATING AUTOFLOW DEVICE SET TO 2.5 CFM. \* COORDINATE FINAL SHOWER STALL SPECIFIC CATIONS WITH OWNER PRIOR TO CONSTRUCTION.

P-9 (EXTERIOR HOSE BIBB W/HANDWHEEL)  
SHALL BE A "NIBCO" SERIES 63LS, GRAINGER STOCK NO. 5E407, 3/4" SOLID BRONZE HOSE BIBB WITH ALUMINUM HANDWHEEL.

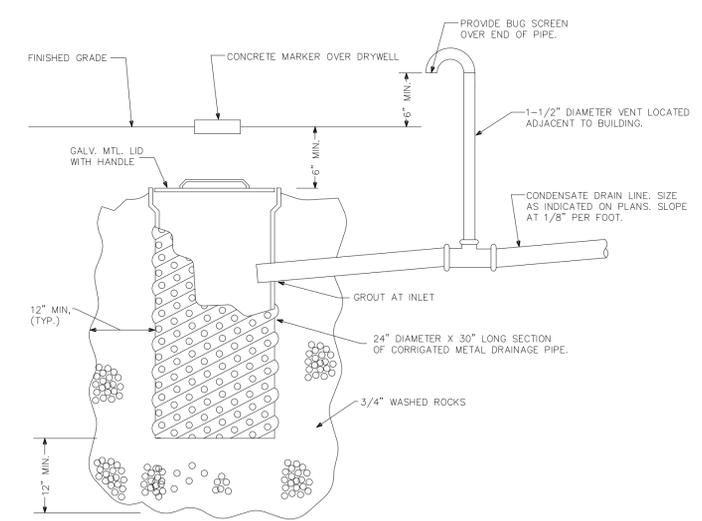
P-10 (WATER HEATER)  
SHALL BE A LOCHINVAR MODEL ETA120KK, 119 GALLON GLASSLINED STORAGE TANK, TALL TYPE WATER HEATER WITH (2) - 4.5 KW ELECTRIC ELEMENTS W/RED FOR NON-CONCURRENT INDEPENDENT OPERATION AT 208 VOLTS, SINGLE PHASE INCOMING POWER. 5 YEAR LIMITED WARRANTY ON STORAGE TANK AGAINST TANK FAILURE. WATER HEATER SHALL MEET OR EXCEED ALL APPLICABLE SECTIONS OF ASHRAE STANDARD 90-BXA AND NAECA REQUIREMENTS FOR ENERGY CONSERVATION.

NOTES:  
1.) ALL PLUMBING FIXTURES SHALL BE AS SPECIFIED OR APPROVED EQUAL.  
2.) PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.

**1 SANITARY PIPING ISOMETRIC**  
NO SCALE



**3 WATER HEATER**  
NO SCALE



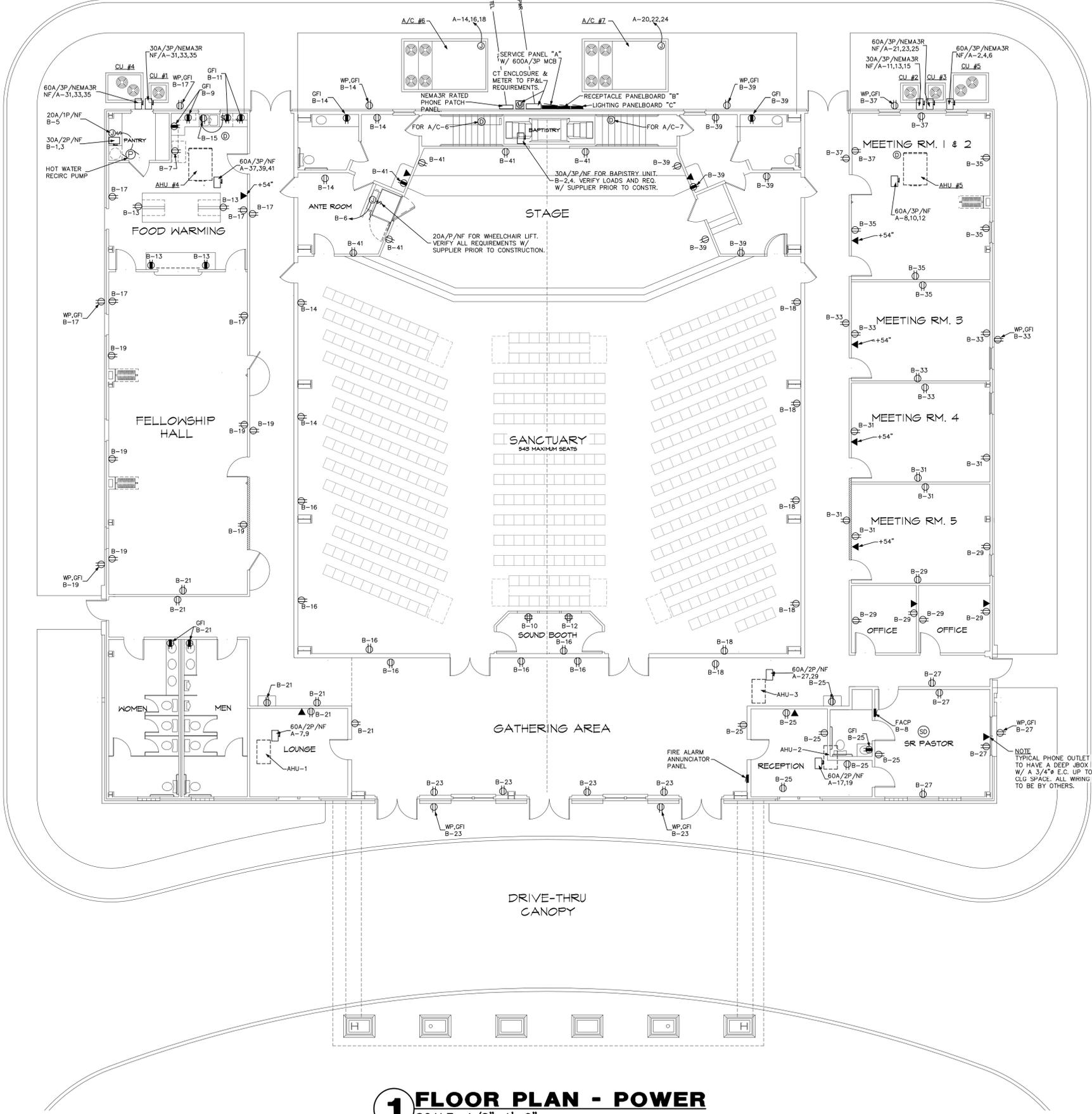
**4 DRYWELL DETAIL**  
NO SCALE

NOTE PRIOR TO THE ORDERING OF ANY SWITCHGEAR, OR ANY ROUGH IN WORK, CONTRACTOR IS TO CAREFULLY COORDINATE ALL ELEC. REQUIREMENTS WITH SHOP DRAWINGS FOR ALL SUPPLIED EQUIPMENT.

2" PVC E.C. FOR PHONE SERVICE. TERMINATE AT LOCAL PHONE SERVICE. FIELD VERIFY EXACT REQUIREMENTS. ALL PHONE WIRING BY OTHERS.

UNDERGROUND ELECTRICAL SERVICE FEEDER. SEE RISER DIAGRAM. COORDINATE ALL ASPECTS OF ELECTRICAL SERVICE ENTRANCE WITH FP&L.

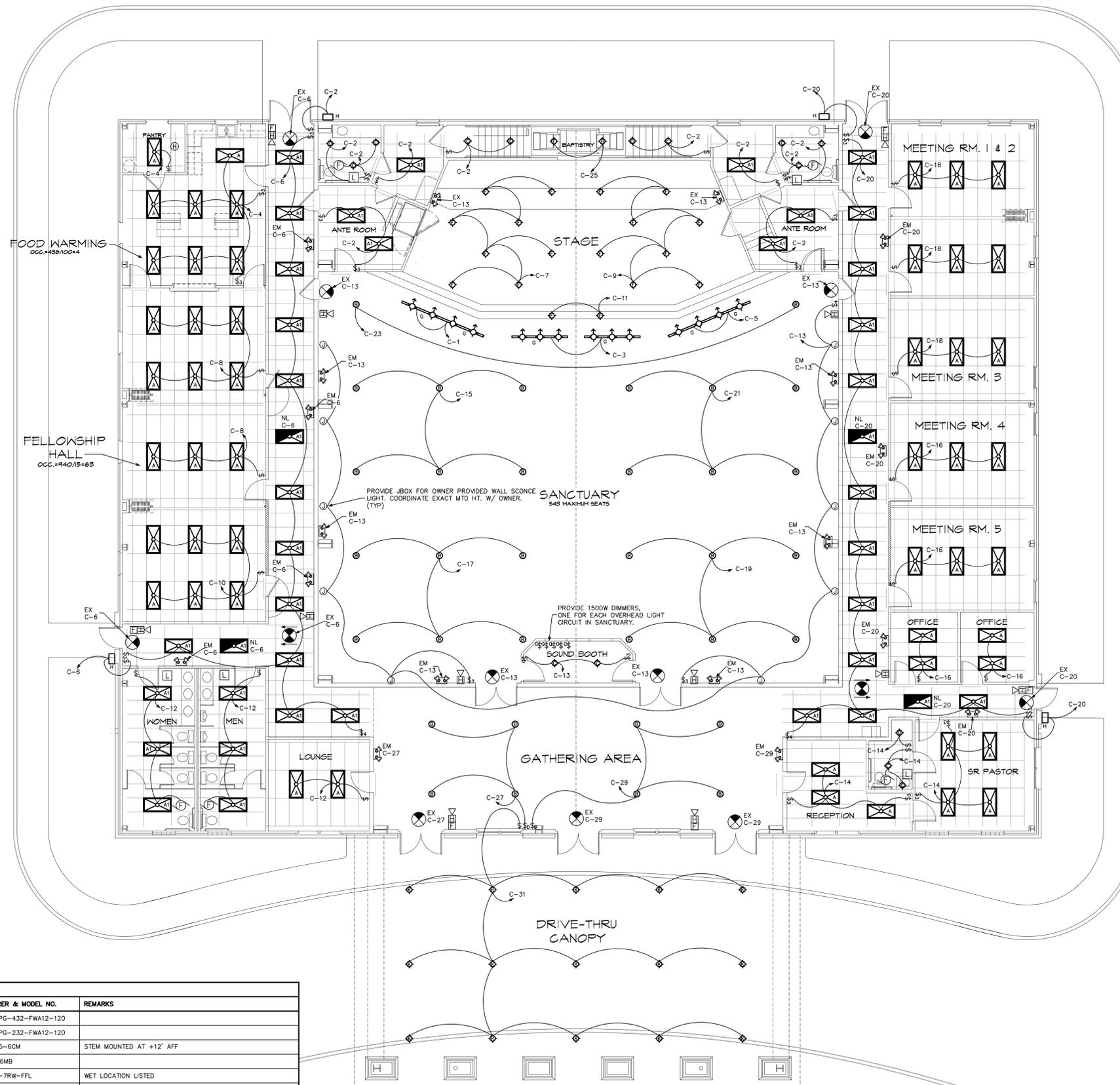
ELECTRICAL SYMBOLS LEGEND			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	DUPLEX RECEPTACLE, MTD. +18" AFF		TRANSFORMER - SIZE AS NOTED
	240 VOLT RECEPTACLE (HT. AS REQ.)		PANEL - SIZE AS NOTED
	QUADRUPLEX RECEPTACLE, MTD. +18"		MOMENTARY CONTACT PUSH BUTTON
	COUNTERTOP HT. RECEPTACLE +42"		F-FAN; M-MOTOR; P-PUMP
	SINGLE POLE SWITCH, MTD. +47"		SPECIAL OUTLET - AS REQUIRED
	THREE-WAY SWITCH, MTD. +47"		CKT. HOMERUN (B INDICATES PANEL) "2" DESIGNATES CIRCUIT NUMBER
	MANUAL STARTER SWITCH		EXIT SIGN; ONE SIDED, OR TWO SIDED
	DIMMER SWITCH, MTD. +47"		EMERGENCY LIGHTING
	SWITCH W/ ILLUM. WHEN ON +47"		RECESSED MOUNTED LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	JUNCTION BOX, FLUSH IF POSSIBLE		HIGH BAY HID LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	TELEPHONE / DATA OUTLET +18"		FLUORESCENT LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	DED. COMPUTER TERM. OUTLET +18"		FLUORESCENT STRIP LIGHTING FIXTURE B DESIGNATES FIXTURE TYPE
	DISCONNECT SWITCH W/ STARTER		ISOLATED GROUND
	DISCONNECT SWITCH		WEATHER-PROOF
	FLR. MTD. FLUSH DUPLEX RECEPTACLE		BELOW COUNTER
	FLR. MTD. FLUSH QUAD. RECEPTACLE		BELOW FINISH GRADE
	FLR. MTD. FLUSH PHONE/DATA OUTLET		GROUND FAULT INTERRUPTER
	FLR. MTD. FLUSH COMPUTER OUTLET		ABOVE FINISHED FLOOR
	AREA SMOKE DETECTOR		ELECTRIC WATER COOLER
	HEAT DETECTOR		ABOVE SHOW WINDOW
	DUCT SMOKE DETECTOR		BELOW SHOW WINDOW
	FIRE ALARM MAN. PULL STATION +47"		FIRE ALARM CONTROL PANEL
	HORN WITH STROBE LIGHT, MTD. +80"		FIRE ALARM ANNUNCIATOR PANEL
	STROBE LIGHT ONLY, MTD. +80"		



**ELECTRICAL NOTES:**

- GENERAL: ALL WORK SHALL CONFORM TO THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL JURISDICTIONAL CODES.  
THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND ANY APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, THE CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM, AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL THE OWNER HAS DIRECTED THE CORRECTIVE ACTION TO BE TAKEN.  
THE CONTRACTOR SHALL COORDINATE THE PROPOSED LOCATIONS OF ALL ELECTRICAL MATERIALS AND EQUIPMENT WITH THE REPRESENTATIVES OF THE OTHER TRADES INVOLVED BEFORE STARTING INSTALLATION OF THOSE ITEMS.  
COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES, CONDUIT, AND SLEEVES TO BE SET IN CAST-IN-PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.  
UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL SPECS ARE NOT INTENDED TO BE PROPRIETARY. SUBSTITUTIONS WILL BE ACCEPTABLE FOR EQUAL RATED AND LISTED UNITS.
- SCOPE: EXCEPT WHERE OTHERWISE SPECIFICALLY INDICATED ON THE DRAWINGS BY "FUTURE," "BY OTHERS," OR BY A SIMILAR NOTATION, IT IS THE INTENT THAT THE CONTRACTOR FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS NECESSARY TO PROVIDE ALL SYSTEMS IN COMPLETE AND OPERATING CONDITION.
- EXCAVATE AS NECESSARY FOR THE INSTALLATION OF ELECTRICAL MATERIALS AND EQUIPMENT. VERIFY THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES OR STRUCTURES BEFORE EXCAVATING AND EXERCISE CARE TO AVOID DAMAGE TO SUCH ITEMS DURING EXCAVATION. BACKFILL WITH EARTH FREE OF LARGE CLODS, LARGE STONES AND FOREIGN DEBRIS, DEPOSITED IN 6" LAYERS AND COMPACTED TO A DENSITY OF NOT LESS THAN THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- MATERIALS: THE MATERIALS AND EQUIPMENT FURNISHED SHALL BE AS INDICATED ON THE DRAWINGS; SUBSTITUTIONS SHALL NOT BE MADE EXCEPT WHERE EXPRESSLY APPROVED BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO STARTING INSTALLATION OF THE ITEMS. THE ELECTRICAL MATERIALS AND EQUIPMENT FURNISHED SHALL BE LISTED OR LABELED BY UNDERWRITERS LABORATORIES OR OTHER RECOGNIZED TESTING ORGANIZATION, AND SHALL BE ACCEPTABLE TO THE LOCAL BUILDING AUTHORITY.
- GROUNDING: GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250, NEC.
- CONDUITS: PROVIDE CONDUITS WHERE CALLED FOR ON PANEL SCHEDULES. ELECTRICAL METALLIC TUBING (EMT) SHALL BE INSTALLED ONLY IN DRY LOCATIONS, IN CONCRETE ABOVE GRADE, AND WHERE NOT SUBJECT TO PHYSICAL DAMAGE.  
CONDUITS INSTALLED UNDERGROUND SHALL BE POLYVINYLCHLORIDE (PVC) AND SHALL NOT BE SMALLER THAN 3/4" TRADE SIZE. WHERE PVC CONDUIT IS INSTALLED UNDERGROUND, ELBOWS TURNING UP AND CONDUIT EMERGING ABOVE GRADE SHALL BE RSC. THE TOPS OF CONDUITS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE. PVC CONDUIT INSTALLED ABOVE GRADE OR DIRECT-BURIED IN EARTH SHALL BE NEMA TC2 TYPE EPC-40-PVC (SCHEDULE 40) EXCEPT THAT WHERE UNDER AREAS SUBJECT TO HEAVY VEHICULAR TRAFFIC, IT SHALL BE NEMA TC2 TYPE EPC-80-PVC (SCHEDULE 80).  
ALL ARMOR CLAD CABLE (AC CABLE) WIRING SHALL MEET OR EXCEED ALL NEC, OSHA AND HUD STANDARDS.
- CONDUCTORS: CONDUCTORS SHALL BE AS SCHEDULED ON PANEL SCHEDULES. ALL POWER CONDUCTORS SHALL NOT BE SMALLER THAN #14 AWG (CU), OR #12 AWG (AL), CONTROL CIRCUIT CONDUCTORS SHALL NOT BE SMALLER THAN #18 AWG CU. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET WITHOUT SPLICES EXCEPT WITHIN WIREWAY OR JUNCTION BOXES. MARK CONDUCTORS IN PANELS, PULL BOXES OR WIREWAYS AND TERMINAL STRIP TERMINALS FOR IDENTIFICATION OF CIRCUITS.  
CONDUCTORS SHALL BE JOINED USING COMPRESSION SPLICES, EXCEPT THAT CONDUCTORS #10 AND SMALLER MAY BE JOINED USING WIRE NUT TYPE CONNECTORS. CONDUCTORS SHALL BE TERMINATED USING COMPRESSION OR PRESSURE TYPE TERMINAL LUGS, OR IN PRESSURE TERMINALS. COMPRESSION SPLICES USED ON CONDUCTORS #10 AWG AND SMALLER SHALL BE THE SELF-INSULATED TYPE; OTHER SPLICES SHALL BE INSULATED USING 3M #33+ OR #88 PLASTIC TAPE. SPLICES IN WEI LOCATIONS SHALL BE INSULATED WITH ELECTRICAL TAPE AND ENCAPSULATED WITH SCOTCHCAST OR EQUAL POTTING COMPOUND.
- PROVIDE AND INSTALL JUNCTION AND PULL BOXES WHERE INDICATED AND WHERE NECESSARY TO TERMINATE, TAP OFF, OR REDIRECT MULTIPLE CONDUIT RUNS, OF SIZE INDICATED OR AS REQUIRED BY NEC. WHERE FEEDER SPLICES ARE TO BE MADE, INSTALL BOXES LARGE ENOUGH TO PROVIDE AMPLE WORK SPACE.
- LIGHTING FIXTURES: LIGHTING FIXTURES SHALL BE AS INDICATED ON THE DRAWINGS, AND SHALL BE INSTALLED COMPLETE WITH LAMPS. FIXTURES WITH ADJUSTMENTS AFFECTING LIGHT DISTRIBUTION SHALL BE SET TO PROVIDE THE REQUIRED LIGHT PATTERNS PRIOR TO THE FINAL DEMONSTRATION TEST.
- TESTS: AFTER EACH SYSTEM HAS BEEN COMPLETED, A FUNCTIONAL TEST SHALL BE PERFORMED TO DEMONSTRATE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS. THE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE.
- TERMINALS: ALL ELECTRICAL EQUIPMENT FURNISHED ON THIS PROJECT IS TO HAVE TERMINALS RATED FOR 75° C. OPERATION.

**1 FLOOR PLAN - POWER**  
SCALE: 1/8"=1'-0"



LIGHTING FIXTURE SCHEDULE

LABEL	TYPE OF FIXTURE	FINISH	LENS TYPE	VOLTAGE	LAMP	MANUFACTURER & MODEL NO.	REMARKS
A	RECESSED 2'x4' TROFFER	WHITE	PRISMATIC	120	(4) 32W T8	LITHONIA 2SPG-432-FWA12-120	
A1	RECESSED 2'x4' TROFFER	WHITE	PRISMATIC	120	(2) 32W T8	LITHONIA 2SPG-232-FWA12-120	
B	PENDENT MTD DOWNLIGHT	BRONZE		120	(1) 250W HALOGEN	HUBBEL C145-6CM	STEM MOUNTED AT +12' AFF
C	RECESSED INCANDESCENT	WHITE		120	(1) 75W HALOGEN	LITHONIA R-6MB	
D	RECESSED INCANDESCENT	WHITE	FLAT FRESNEL	120	(1) 75W HALOGEN	LITHONIA LG-7RW-FFL	WET LOCATION LISTED
EM	EMERGENCY EGRESS	WHITE		120	INCLUDED	LITHONIA ELM2	W/ BATTERY BACKUP
EX	EXIT SIGN	WHITE	RED	120	INCLUDED	LITHONIA LE-SW2R-120/277-ELN	W/ BATTERY BACKUP
F	RECESSED INCANDESCENT	WHITE		120	(1) 150W HALOGEN	LITHONIA R-6MB	
G	SINGLE CIRCUIT 8' TRACK LT	WHITE		120	(5) 150W HALOGEN	LITHONIA LT8-WH	W/ (5) LITHONIA PRSP HEADS
H	HID WALL PACK	BRONZE	POLYCARBONATE	120	(1) 100W MH	LITHONIA TWP-100M-120	
K	RECESSED HID	WHITE	FLAT FRESNEL	120	(1) 100W MH	LITHONIA LGH-100M-7RW-FFL-120	

**1 FLOOR PLAN - LIGHTING**  
SCALE: 1/8"=1'-0"

