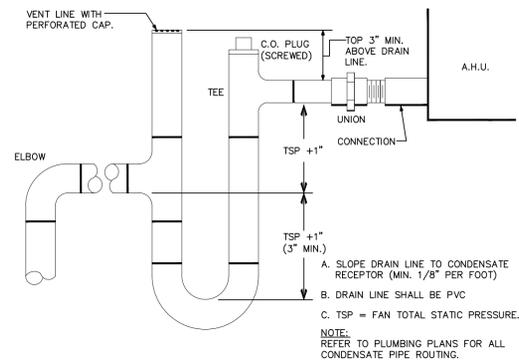


2 BRANCH DUCT DETAIL

NO SCALE



3 CONDENSATE P-TRAP DETAIL

NOT TO SCALE

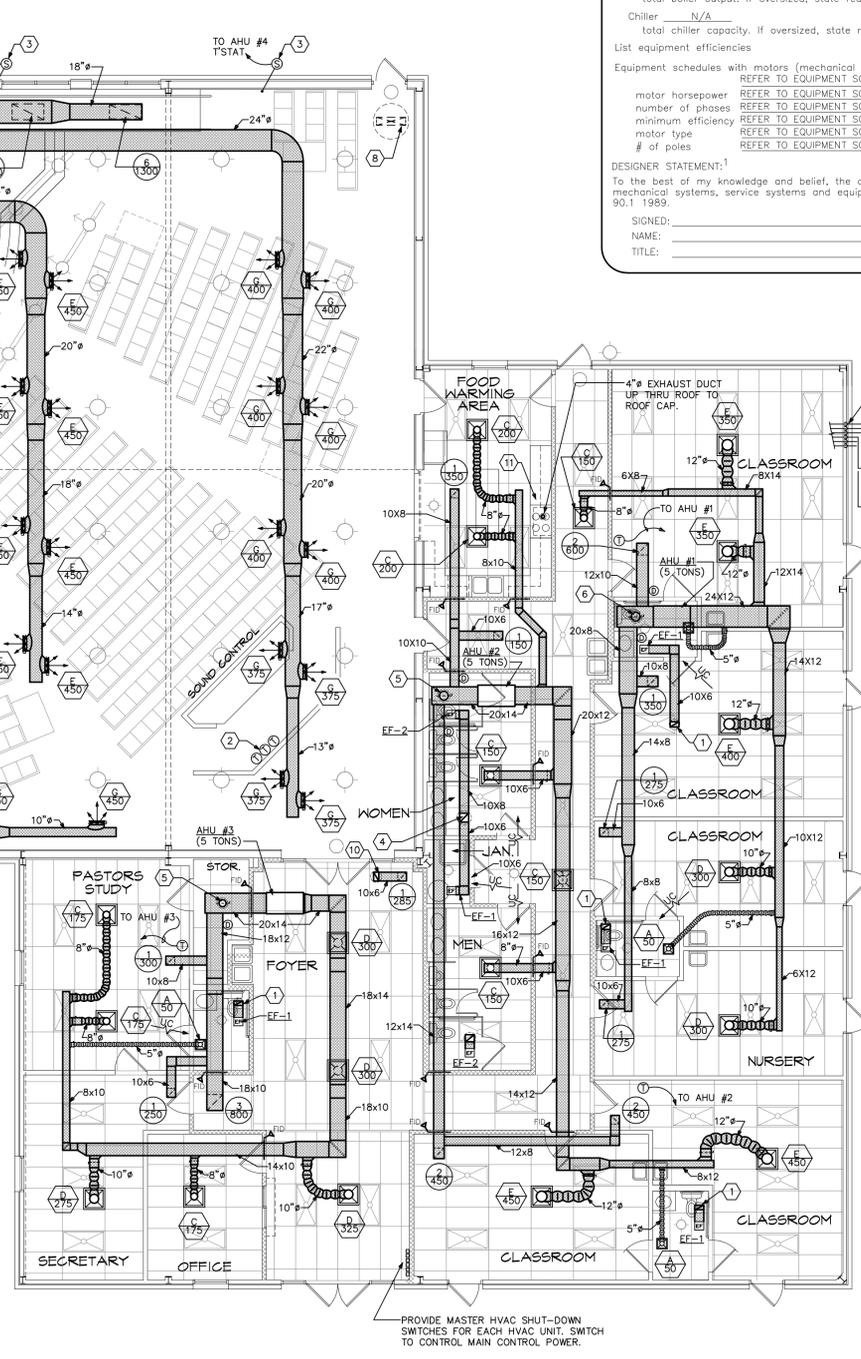
H.V.A.C. ABBREVIATION LEGEND			
A/C	AIR CONDITIONER	REV.	REVISION
DN.	DOWN	N.T.S.	NOT TO SCALE
EXH.	EXHAUST	MFR.	MANUFACTURER
EXT.	EXTERIOR	R/A	RETURN AIR
E.F.	EXHAUST FAN	GR.	GRILLE
A.F.F.	ABOVE FINISH FLOOR	C.D.	CEILING DIFFUSER
F.F.	FINISH FLOOR	REG.	REGISTER
TYP.	TYPICAL	C.U.	CONDENSING UNIT
A.H.U.	AIR HANDLING UNIT	D.G.	DOOR GRILLE
F.I.D.	FIRE DAMPER	DISP.	DISPOSABLE
V.C.D.	VOLUME CONTROL DAMPER	F/A	FRESH AIR
S.P.	SAFE PAN	CD.	CONDENSATE DRAIN

KEY TO RATED WALLS
1 HR. (UL# U-425)

RETURN GRILLE SCHEDULE				
DESIGNATES LABEL FOR GRILLE TYPE		FILTER SHALL BE PROVIDED AT UNIT.		
DESIGNATES CFM QUANTITY FOR GRILLE				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
1	TITUS 355FL	10x10	0 - 400	
2	TITUS 355FL	12x12	400 - 600	
3	TITUS 355FL	18x18	605 - 1200	
4	TITUS 355FL	24x24	1205 - 2000	
5	TITUS 355FL	24x48	2005 - 4000	
6	TITUS 355FL	36x16	0 - 1400	
6	TITUS 355FL	36x18	0 - 1800	

SUPPLY DIFFUSER SCHEDULE				
DESIGNATES LABEL FOR DIFFUSER TYPE		ALL DIFFUSERS ARE TO BE PROVIDED WITH OPPOSED BLADE DAMPERS UNLESS OTHERWISE SPECIFIED ON PLANS.		
DESIGNATES CFM QUANTITY FOR DIFFUSER				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
A	TITUS TDC-AA	6"ø	0 - 125	12x12 LOUVERED FACE
B	TITUS TDC-AA	6"ø	0 - 125	24x24 LOUVERED FACE
C	TITUS TDC-AA	8"ø	130 - 200	24x24 LOUVERED FACE
D	TITUS TDC-AA	10"ø	205 - 325	24x24 LOUVERED FACE
E	TITUS TDC-AA	12"ø	330 - 450	24x24 LOUVERED FACE
F	TITUS 300RL	14x6	0 - 300	SIDEWALL REGISTER
G	TITUS 300RL	16x6	305 - 400	SIDEWALL REGISTER
H	TITUS 300RL	18x6	405 - 500	SIDEWALL REGISTER

- ### SPECIFIC MECHANICAL NOTES
- 10x6 TOILET ROOM EXHAUST AIR MAKE-UP TRANSFER DUCT.
 - MAIN BANK OF THERMOSTATS SHALL BE LOCATED IN THIS AREA. CONTRACTOR SHALL PROVIDE WALL MOUNTED LABEL BENEATH EACH THERMOSTAT WHICH INDICATE THE FOLLOWING:
 AHU #1 THERMOSTAT: "CHILDREN ROOMS"
 AHU #2 THERMOSTAT: "KITCHEN, TOILETS, CORRIDOR & TODDLERS"
 AHU #3 THERMOSTAT: "OFFICES & FOYER"
 AHU #4 THERMOSTAT: "SANCTUARY RIGHT"
 AHU #5 THERMOSTAT: "SANCTUARY MIDDLE"
 AHU #6 THERMOSTAT: "SANCTUARY LEFT"
 * CONTRACTOR SHALL FULLY INSTRUCT OWNER ON HOW TO PROPERLY PROGRAM INSTALLED THERMOSTATS. COORDINATE FINAL LOCATION OF ALL THERMOSTATS WITH OWNER PRIOR TO CONSTRUCTION. THERMOSTAT SHALL BE SET TO "FAN ON" DURING OCCUPIED TIMES. THERMOSTAT SHALL BE A "LENNOX" INNOVATOR PROGRAMMABLE THERMOSTAT MODEL T8621D.
 2 HEAT/COOL 7 DAY OR APPROVED EQUAL. REMOTE TEMPERATURE SENSOR SHALL BE AS PER MANUFACTURERS RECOMMENDATIONS.
 - SURFACE WALL MOUNTED REMOTE TEMPERATURE SENSOR WIRED TO CORRESPONDING AHU THERMOSTAT. MOUNT 5'-0" ABOVE FINISHED FLOOR.
 - 10x10 EXHAUST DUCT UP THRU ROOF TO ROOF CAP.
 - 8"ø OUTSIDE AIR DUCT UP THRU ROOF TO ROOF CAP.
 - 10"ø OUTSIDE AIR DUCT UP THRU ROOF TO ROOF CAP.
 - 20"ø OUTSIDE AIR DUCT UP THRU ROOF TO ROOF CAP.
 - 22x10 POSITIVE PRESSURE RELIEF DAMPER SHALL BE A TITUS MODEL 55FL. PROVIDE PRESSURE RELIEF REGISTER WITH A BACK DRAFT DAMPER WITH AIR FLOW TOWARDS CEILING SPACE. 22x10 PRESSURE RELIEF DUCT SHALL ROUT FROM REGISTER THROUGH CEILING SPACE TO ROOF CAP.
 - REFRIGERANT PIPING SHALL ROUT UP IN EXTERIOR WALL TO ATTIC SPACE. OFFSET IN ATTIC TO CORRESPONDING AHU. ALL REFRIGERATION PIPING SHALL BE SIZED AS PER MANUFACTURERS RECOMMENDATIONS BASED ON THE FINAL LENGTH OF REFRIGERANT RUNS. CONTRACTOR SHALL ROUTE ALL REFRIGERANT PIPING SO AS TO MAINTAIN THE SHORTEST POSSIBLE RUN OF PIPE.
 - 10x6 POSITIVE PRESSURE RELIEF DAMPER SHALL BE A TITUS MODEL 55FL. PROVIDE PRESSURE RELIEF REGISTER WITH A BACK DRAFT DAMPER WITH AIR FLOW TOWARDS CEILING SPACE. 10x6 PRESSURE RELIEF DUCT SHALL ROUT FROM REGISTER THROUGH CEILING SPACE TO ROOF CAP.
 - RESIDENTIAL HOOD WITH 4" EXHAUST DUCT UP THRU ROOF TO ROOF CAP. COORDINATE FINAL SPECIFICATION WITH OWNER PRIOR TO BID.



MECHANICAL SYSTEMS, SERVICE SYSTEMS, AND EQUIPMENT
METHOD OF COMPLIANCE
Prescriptive [] Performance [X] Energy Cost Budget []

Exterior Design Conditions
 winter dry bulb 20° F
 summer dry bulb 97° F

Interior Design Conditions
 winter dry bulb 68° F
 summer dry bulb 74° F
 relative humidity 52.9%

Building Heating Load 392,153 BTU
 Building Cooling Load 515,700 BTU

Mechanical Spacing Conditioning System
 Unitary
 Description of unit REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 heating efficiency REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 cooling efficiency REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 heat output of unit REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 cooling output of unit REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.

Boiler N/A
 total boiler output. If oversized, state reason.

Chiller N/A
 total chiller capacity. If oversized, state reason.

List equipment efficiencies
 Equipment schedules with motors (mechanical systems)
 motor horsepower REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 number of phases REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 minimum efficiency REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 motor type REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.
 # of poles REFER TO EQUIPMENT SCHEDULES ON SHEET M-2.

DESIGNER STATEMENT:
 To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of ASHREA Standard 90.1 (1989).
 SIGNED: _____
 NAME: _____
 TITLE: _____

HVAC SYMBOLS LEGEND

⊙	REMOTE TEMPERATURE SENSOR
⊕	THERMOSTAT
⊖	EXHAUST FAN
⊕ ⊖	SECTION "A"- "A"
⊙	REMOTE BULB SENSOR
⊕	DUCT SMOKE DETECTOR
⊕ ⊖	TRANSITION
⊕ ⊖	TURNING VANE
⊕ ⊖	45° BRANCH DUCT TAKE-OFF
⊕ ⊖	FIRE DAMPER
⊕ ⊖	VOLUME CONTROL DAMPER
⊕ ⊖	RETURN REGISTER
⊕ ⊖	SUPPLY DIFFUSER
⊕ ⊖	RETURN AIR GRILLE
⊕ ⊖	SUPPLY REGISTER
→	AIR FLOW DIRECTION
⊕ ⊖	ROOF MTD. EXH. FAN
⊕ ⊖	DUCT TURN DOWN
⊕ ⊖	DUCT TURN UP
⊕ ⊖	FLEXIBLE DUCT

1 FLOOR PLAN - MECHANICAL

SCALE: 1/8"=1'-0"

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "CLASSROOM" CATEGORY = PEOPLE AS PER ARCHITECTURAL PLANS & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #1	1,489	- / 1000 X - = -	71 X 15 = 1,065/2=532

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "CLASSROOM" CATEGORY = 50 PEOPLE PER 1,000 SQ. FT. & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	490	490 / 1000 X 50 = 25	25 X 15 = 375

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "TOILET ROOM" CATEGORY = 50 CFM PER TOILET/URNAL.			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	-	- / 1000 X - = -	6 X 50 = 300

OUTSIDE AIR CALCULATIONS			
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	541	- / 1000 X - = -	541 X .05 = 28

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "KITCHEN" CATEGORY = 18 PEOPLE AS PER ARCHITECTURAL PLANS & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	261	- / 1000 X - = -	18 X 15 = 270
TOTAL OUTSIDE AIR REQUIRED FOR AHU #2 = 598 CFM/2=299 CFM			

OUTSIDE AIR CALCULATIONS			
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 #3	715	715 / 1000 X 7 = 6	6 X 20 = 120

OUTSIDE AIR CALCULATIONS			
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	633	633 / 1000 X 30 = 19	19 X 15 = 286
TOTAL OUTSIDE AIR REQUIRED FOR AHU #2 = 406 CFM/2=203 CFM			

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "ASSEMBLY" CATEGORY = 359 PEOPLE AS PER ARCHITECTURAL PLANS & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4,5,6	3,971	- / 1000 X - = -	359 X 15 = 5,385

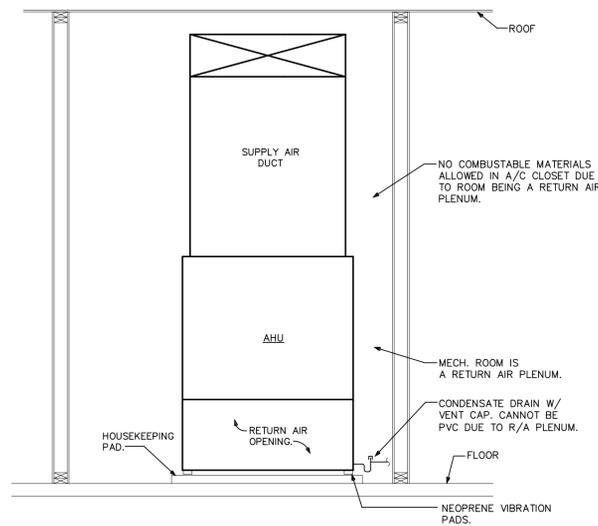
OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "STAGE" CATEGORY = 34 PEOPLE AS PER ARCHITECTURAL PLANS & 15 CFM PER PERSON			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4,5,6	837	- / 1000 X - = -	34 X 15 = 510

OUTSIDE AIR CALCULATIONS			
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS: OUTDOOR AIR REQUIREMENTS ARE BASED ON "STORAGE" CATEGORY = .15 CFM PER SQ. FT.			
UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4,5,6	212	- / 1000 X - = -	212 X .15 = 32
TOTAL OUTSIDE AIR REQUIRED FOR AHU #4,5,6 = 5,927 CFM / 2 = 2,964 TOTAL OF REQUIREMENT. TOTAL OUTSIDE AIR FEEDING RETURN AIR PLENUM MECHANICAL ROOM CONTAINING AHU'S #3,4,5 SHALL BE 2,964 CFM.			

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.

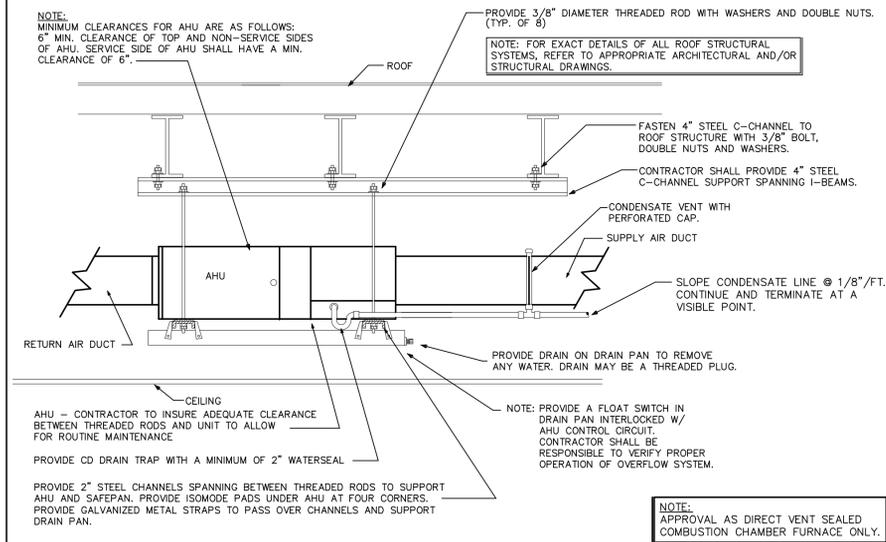
GENERAL MECHANICAL NOTES

- 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.
- THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS UPON COMPLETION OF THIS PROJECT.
- CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE (5) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
- 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 EXPOSED ROUND SUPPLY AND RETURN DUCTWORK SHALL BE "SPIROSAFE" SINGLE WALL SPIRAL DUCTWORK AS MANUFACTURED BY LINDB, INC. (800)797-7476 OR APPROVED EQUAL. THE ROUND DUCT SYSTEM SHALL CONSIST OF FITTINGS THAT ARE FITTED WITH A SEALING GASKET AND SPIRAL DUCT WHICH, WHEN INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS, WILL SEAL THE DUCT JOINTS WITHOUT THE USE OF DUCT SEALER.
- 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 OF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE TITUS, METALARE, AIRGUIDE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS.
- THERMOSTAT SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE THERMOSTAT. THERMOSTAT SHALL BE EQUIPPED WITH A DIRT/FILTER INDICATOR.
- CONTRACTOR SHALL FULLY INSTRUCT OWNER ON HOW TO PROPERLY PROGRAM INSTALLED THERMOSTATS. COORDINATE FINAL LOCATION OF ALL THERMOSTATS WITH OWNER PRIOR TO CONSTRUCTION. PROGRAMMABLE THERMOSTAT SHALL BE BY MANUFACTURER OF INSTALLED AIR HANDLING UNIT/ROOF TOP UNIT.
- REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER-JOINT TYPE FITTINGS, USE 95/5 SOLDER. REFRIGERANT LINES SHALL BE SIZED AS PER MANUFACTURER RECOMMENDATIONS.
- ARMAFLEX 3/4" INSULATION SHALL BE USED FOR SUCTION LINES, FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
- ALL BRANCH TAKE-OFFS TO BE PROVIDED W/MANUAL VOLUME DAMPERS. ALL ELBOWS AND TEES MUST BE FURNISHED W/TURNING VANES. PROVIDE 45° BRANCH TAKE-OFF AS PER BRANCH DUCT TAKE-OFF DETAIL.
- PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO FINAL ACCEPTANCE BY OWNER.
- PROVIDE SMOKE DETECTORS WITH ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
- SHAC CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE T & B SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS, AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES, AND EXHAUST GRILLES, AND THE LEAVING AND ENTERING AIR TEMPERATURE (T) FROM SUPPLY GRILLES AND EVAPORATORS. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEERS BEFORE INSTALLATION.
- ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
- 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 AND INSTALL 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.
- THROUGHOUT THE COURSE OF THE WORK, MINOR CHANGES AND ADJUSTMENTS TO THE PLANS AND SPECIFICATIONS MAY BE REQUESTED BY THE TENANT. THE CONTRACTOR SHALL MAKE SUCH ADJUSTMENTS WITHOUT ADDITIONAL COST TO THE TENANT WHERE SUCH ADJUSTMENTS ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE SYSTEMS, AND WITHIN THE INTENT OF THE CONTRACT DOCUMENTS.
- NOTWITHSTANDING ANY OTHER PROVISIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR BEARS ULTIMATE RESPONSIBILITY FOR COMPLIANCE WITH THE INSTALLATION WITH THE REQUIREMENTS OF THE LANDLORD AND OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- 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.



1 AHU FLOOR MOUNTING DETAIL

NO SCALE



2 AIR HANDLING UNIT MOUNTING DETAIL

NO SCALE

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-2	CABINET FAN - REFER TO PLANS	PENN ZEPHYR Z81	300	.125"	CEILING MOUNTED	124 WATTS	OPEN DRIP PROOF	1115	115V/1Ø	1

NOTES: 1) REFER TO ELECTRICAL PLANS FOR CONTROL.

AIR COOLED HEAT PUMP SCHEDULE																						
HEAT PUMP					AIR HANDLING UNIT				INTEGRATED ELECTRIC HEATING													
CU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CAPACITY COOLING	SENSIBLE CAPACITY COOLING	TOTAL CAPACITY HEATING	COMP. RLA	FAN FLA	VOLTAGE	MOCP	EER/SEER	WEIGHT	AHU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CFM	O/A CFM	E.S.P.	BLOWER SPEED	FAN HP	VOLTAGE	WEIGHT	HEATER KW	VOLTAGE	NOTES
CU #1	CARRIER 38AYC-060-301	58,900	44,000	39,500	32.1	1.4	208V/1Ø	60A	12.0	268 lbs.	AHU #1	CARRIER FB4ANB060005	2,000	SEE SCH. .25"	HIGH	3/4 HP	208V/1Ø	168 lbs.	13.5 KW	208V/1Ø	1 THRU 6	
CU #2	CARRIER 38AYC-060-301	58,900	44,000	39,500	32.1	1.4	208V/1Ø	60A	12.0	268 lbs.	AHU #2	CARRIER FB4ANB060005	2,000	SEE SCH. .25"	HIGH	3/4 HP	208V/1Ø	168 lbs.	13.5 KW	208V/1Ø	1 THRU 6	
CU #3	CARRIER 38AYC-060-301	58,900	44,000	39,500	32.1	1.4	208V/1Ø	60A	12.0	268 lbs.	AHU #3	CARRIER FB4ANB060005	2,000	SEE SCH. .25"	HIGH	3/4 HP	208V/1Ø	168 lbs.	13.5 KW	208V/1Ø	1 THRU 6	
CU #4	CARRIER 38AQS-012--501	113,000	87,000	111,000	43.6	(2) @ 4.3	208V/3Ø	100A	8.9	750 lbs.	AHU #4	CARRIER 40RMQ-012-B501	4,000	SEE SCH. 0.4"	766	2 HP	208V/3Ø	427 lbs.	24.8 KW	208V/3Ø	1 THRU 6	
CU #5	CARRIER 38AQS-012--501	113,000	87,000	111,000	43.6	(2) @ 4.3	208V/3Ø	100A	8.9	750 lbs.	AHU #5	CARRIER 40RMQ-012-B501	4,000	SEE SCH. 0.4"	766	2 HP	208V/3Ø	427 lbs.	24.8 KW	208V/3Ø	1 THRU 6	
CU #6	CARRIER 38AQS-012--501	113,000	87,000	111,000	43.6	(2) @ 4.3	208V/3Ø	100A	8.9	750 lbs.	AHU #6	CARRIER 40RMQ-012-B501	4,000	SEE SCH. 0.4"	766	2 HP	208V/3Ø	427 lbs.	24.8 KW	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:
 1) SIZE AND RUN REFRIGERANT PIPING AS PER MANUFACTURERS PUBLISHED RECOMMENDATIONS.
 2) INSULATE REFRIGERANT SUCTION LINE WITH 3/4" ARMAFLEX OR APPROVED EQUAL.
 3) INSTALL FILTER DRYER AND STRAINER IN REFRIGERANT LIQUID LINE.
 4) PROVIDE FIELD INSTALLED ACCESSORIES, AND 5 MINUTE TIME DELAY SWITCH.
 5) PROVIDE 5 YEAR WARRANTY ON COMPRESSOR AND 1 YEAR WARRANTY ON ALL PARTS AND LABOR.
 6) PROVIDE SINGLE POINT POWER CONNECTION WITH INTEGRAL OVERCURRENT PROTECTION DEVICE.

SEQUENCE OF OPERATION FOR HEATING
 FIRST STAGE
 WHEN THE THERMOSTAT CALLS FOR HEATING, THE INDOOR FAN MOTOR, OUTDOOR FAN MOTORS AND THE COMPRESSOR (FULLY LOADED) ARE ENERGIZED. THE REVERSING VALVE SOLENOID IS ENERGIZED IN THE HEATING MODE.
 SECOND STAGE
 IF ADDITIONAL HEAT IS REQUIRED, THE ELECTRIC HEAT SHALL BE ENERGIZED.

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

UL System
WL2082

1 or 2 Hour Fire Rated Through Penetration Firestop for Plastic Pipe through Gypsum Walls using FYRE-CAN SLEEVE

3735 Green Rd.
Beachwood, OH, 44122

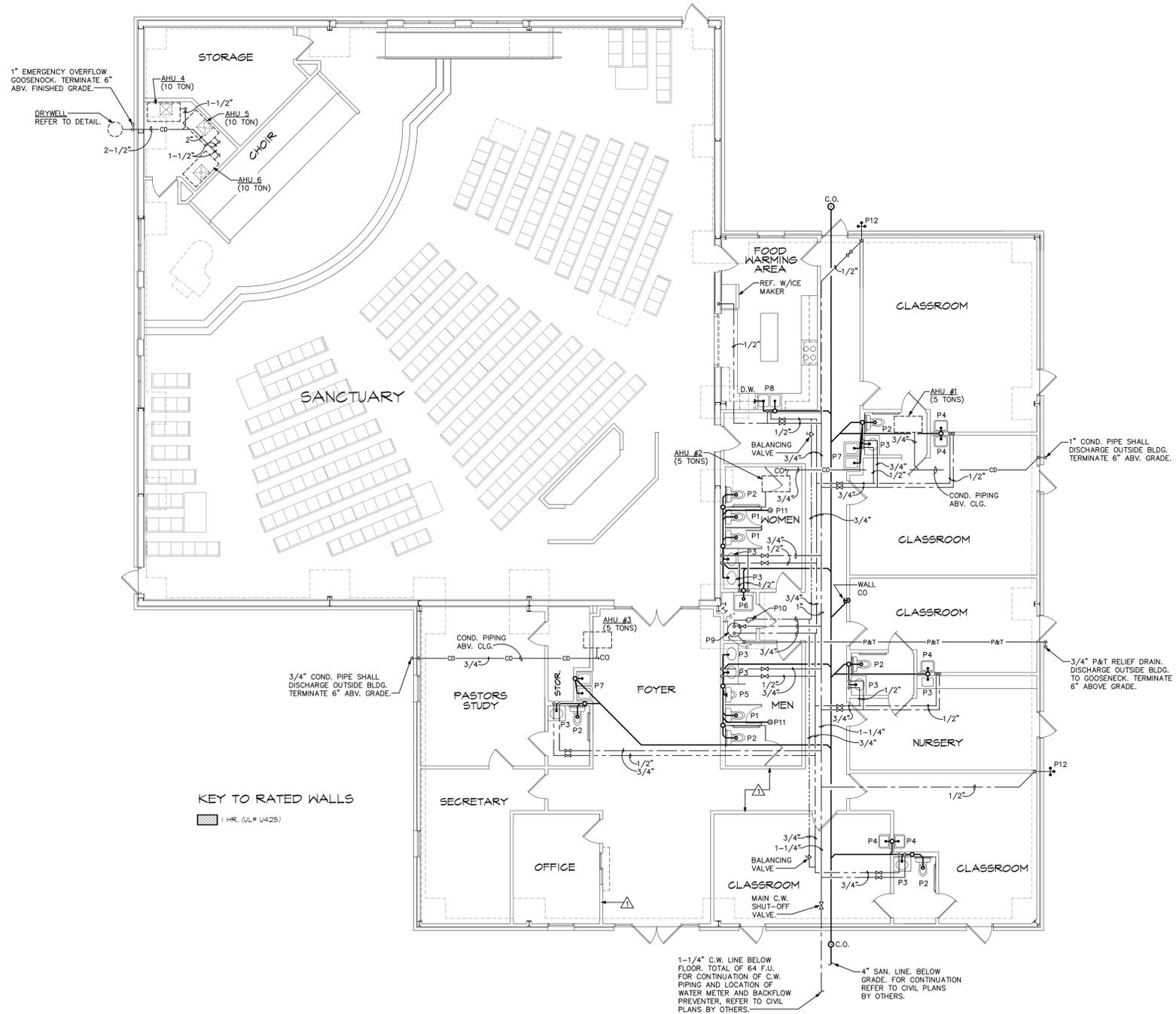
Drawing not to scale

F-rating = 2 Hr.
T-rating = 1 Hr.

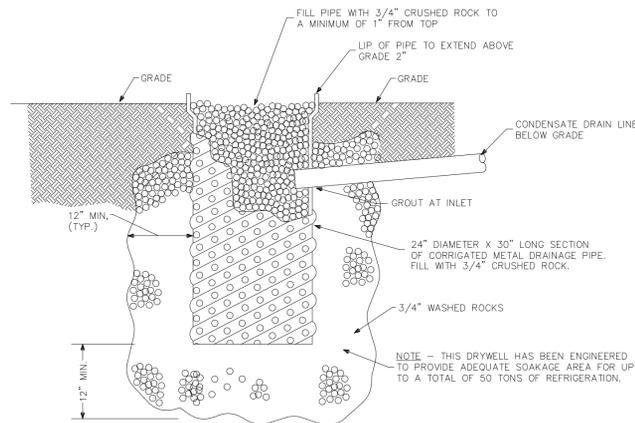
① Pre-rated gypsum wallboard/stud assembly.
② Plastic Pipe - 3" dia. or 2" dia. Sch.40 PVC for use in closed or vented piping systems.
③ FYRE-CAN SLEEVE/intumescent device:

Nom. Pipe Dim. (in.)	Device Size	Dim. of Opening (in.)	Annular Space (in.)
2	TS2	3-1/2	1/4 to 7/8
3	TS3	4-3/4	1/2 to 3/4

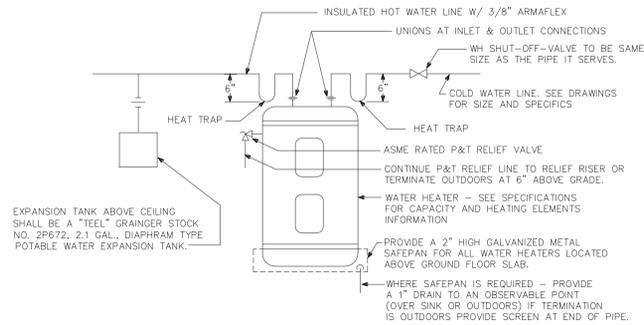
④ TREMstop WEM - Min. 1/4" thick sealant applied at sleeve/pipe and sleeve/wall interfaces.



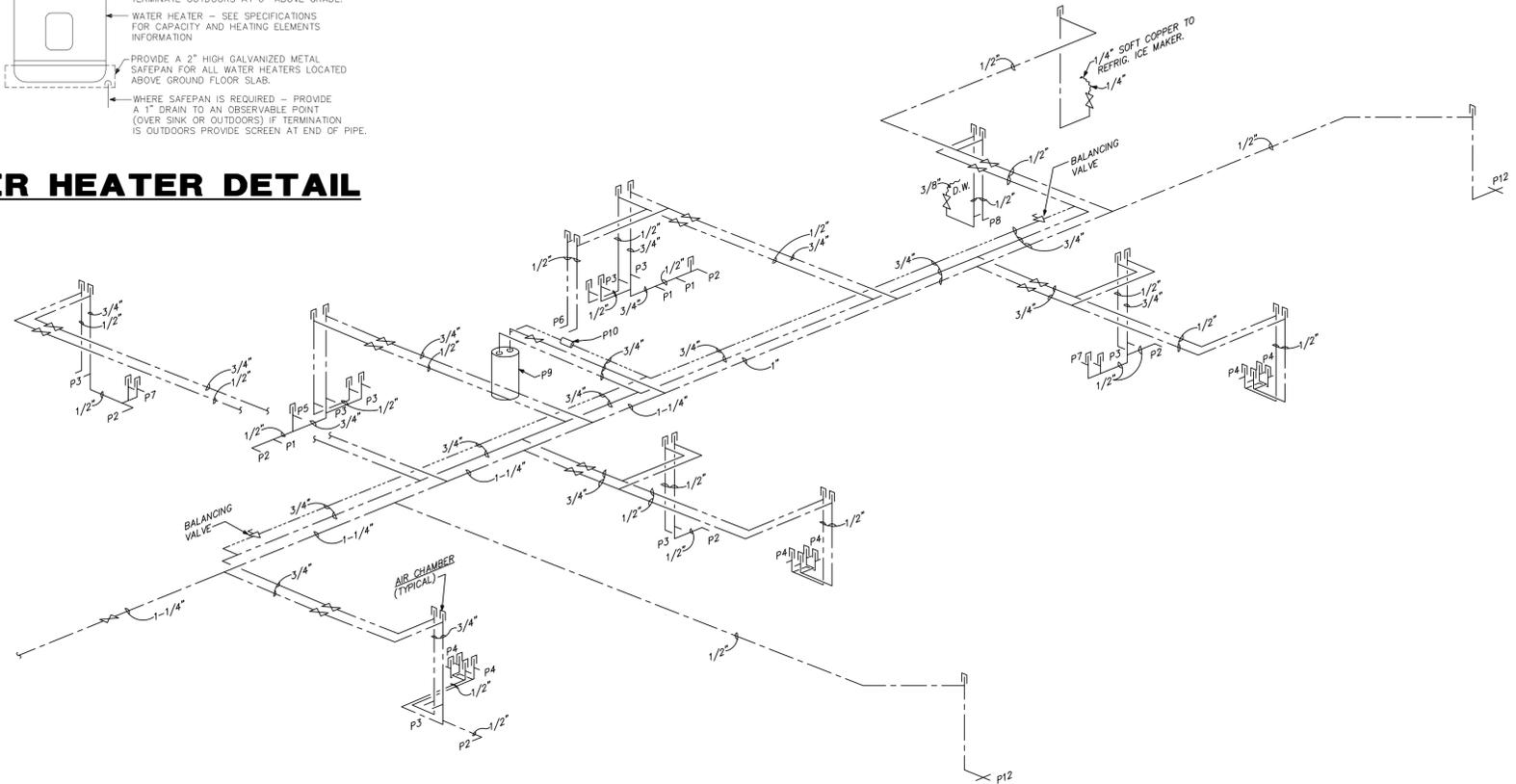
1 FLOOR PLAN - PLUMBING
SCALE: 1/8"=1'-0"



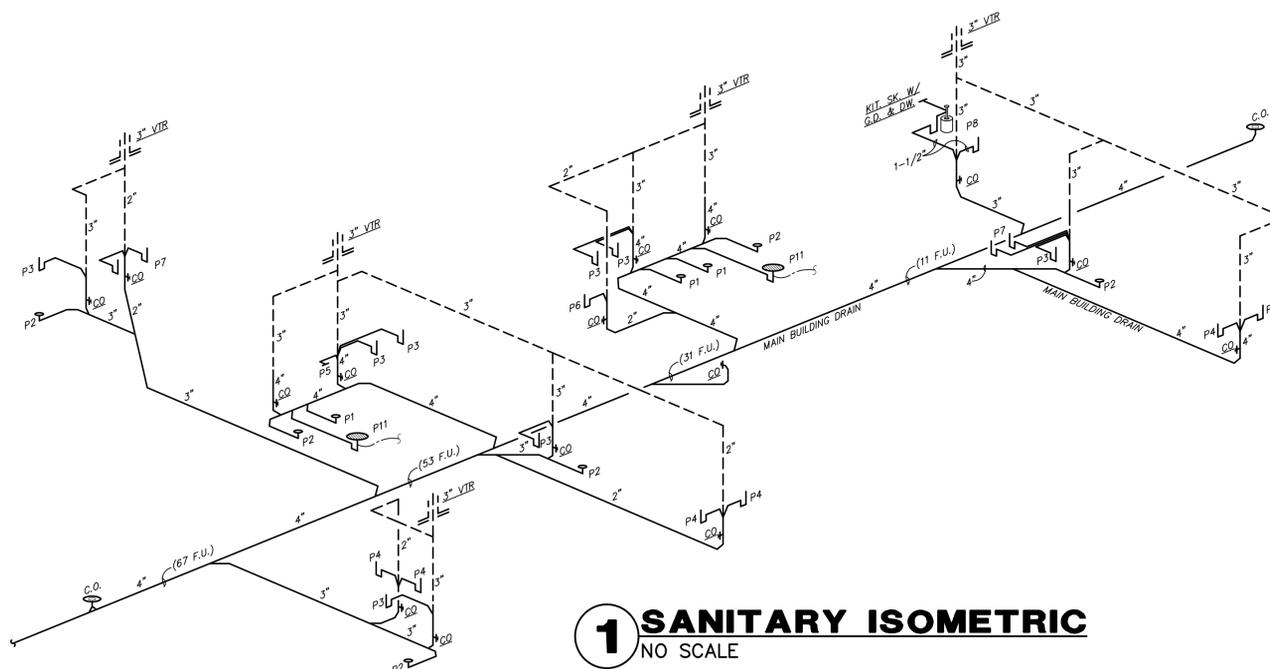
3 CONDENSATE DRYWELL DETAIL NO SCALE



4 WATER HEATER DETAIL NO SCALE



2 WATER ISOMETRIC NO SCALE



1 SANITARY ISOMETRIC NO SCALE

PLUMBING FIXTURE SCHEDULE

- P-1 (WATER CLOSET)
SHALL BE AN AMERICAN STANDARD MODEL NEW CADET MODEL 2798.012 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 ADA MODEL 2998.012 16-1/2\"/>

- 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.
 - 3.) ALL HANDICAP PLUMBING FIXTURES SHALL BE INSTALLED AS PER LATEST A.D.A. REQUIREMENTS.

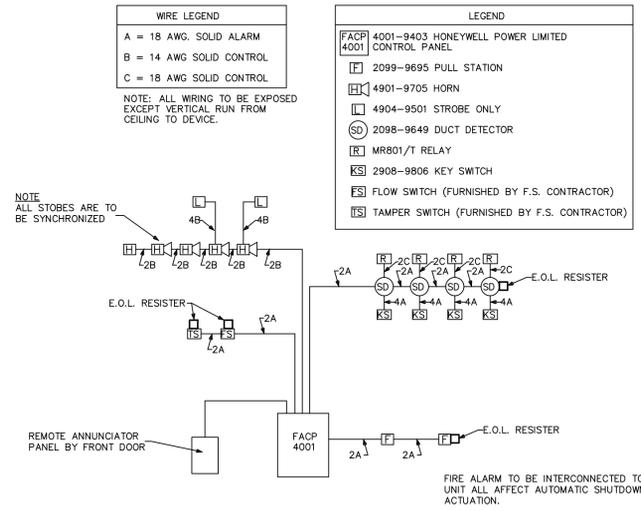
GENERAL PLUMBING NOTES

1. Drawings are diagrammatic and shall not be scaled. Refer to architectural plans and elevations for exact location of all plumbing fixtures, equipment, etc.. Plumbing contractor shall furnish and install all items required for a complete and acceptable working installation.
2. All work and materials shall comply with the latest edition of the National, State, and all local codes and Ordinances having jurisdiction.
3. The plumbing contractor shall visit the site and thoroughly familiarize himself with all existing conditions. All execution and backfill as required for this phase of construction shall be a part of this contract.
4. All material shall be new.
5. All work shall be performed by a licensed plumbing contractor in a first class workmanlike manner. The completed system shall be fully operative and accepted by engineer/architect.
6. All required insurance shall be provided for protection against public liability or property damage for the duration of the work.
7. The plumbing contractor shall secure and pay all permit fees, inspections, and tests.
8. All work shall be coordinated with other trades to avoid interference with the progress of construction.
9. The plumbing contractor shall guarantee all materials and workmanship free from defects for a period of not less than (1) one year from date of acceptance. Correction of any defects shall be completed without additional charge and shall include replacement or repair of any other phase of the installation which may have been damaged thereby.
10. Verify location, size and inverts of all existing utilities prior to start of construction. Advise architect/engineer of any discrepancies.
11. All fixtures shall be provided with readily accessible stops.
12. Water piping shall be type "L" copper for up to and including 2" and shall be type "K" for 2 1/2" and larger.
13. Soil, wastes and vent piping shall be PVC #40 DMV. Waste and vent piping above slab shall be PVC, if approved by local authorities having jurisdiction, otherwise cast iron. PVC shall not be installed in A/C return air plenum or penetrate fire rated walls or floors.
14. Air conditioning condensate drain piping shall be PVC #40 or copper drain waste and bent pipe and fittings. Insulate all condensate piping except exterior piping. Install all condensate piping for air conditioning units as required per local codes.
15. Furnish and install approved air chambers at each plumbing fixture and PDI approved shock arresters on main lines and risers.
16. Provide chrome plated combination covered plate and cleanout plug for all wall cleanouts, Josam 5889D.
17. Insulate lines as follows:
a) Hot and Cold water supply and return: 1" thick fiberglass.
b) Condensate piping: 1/2" thick armaflex preformed.

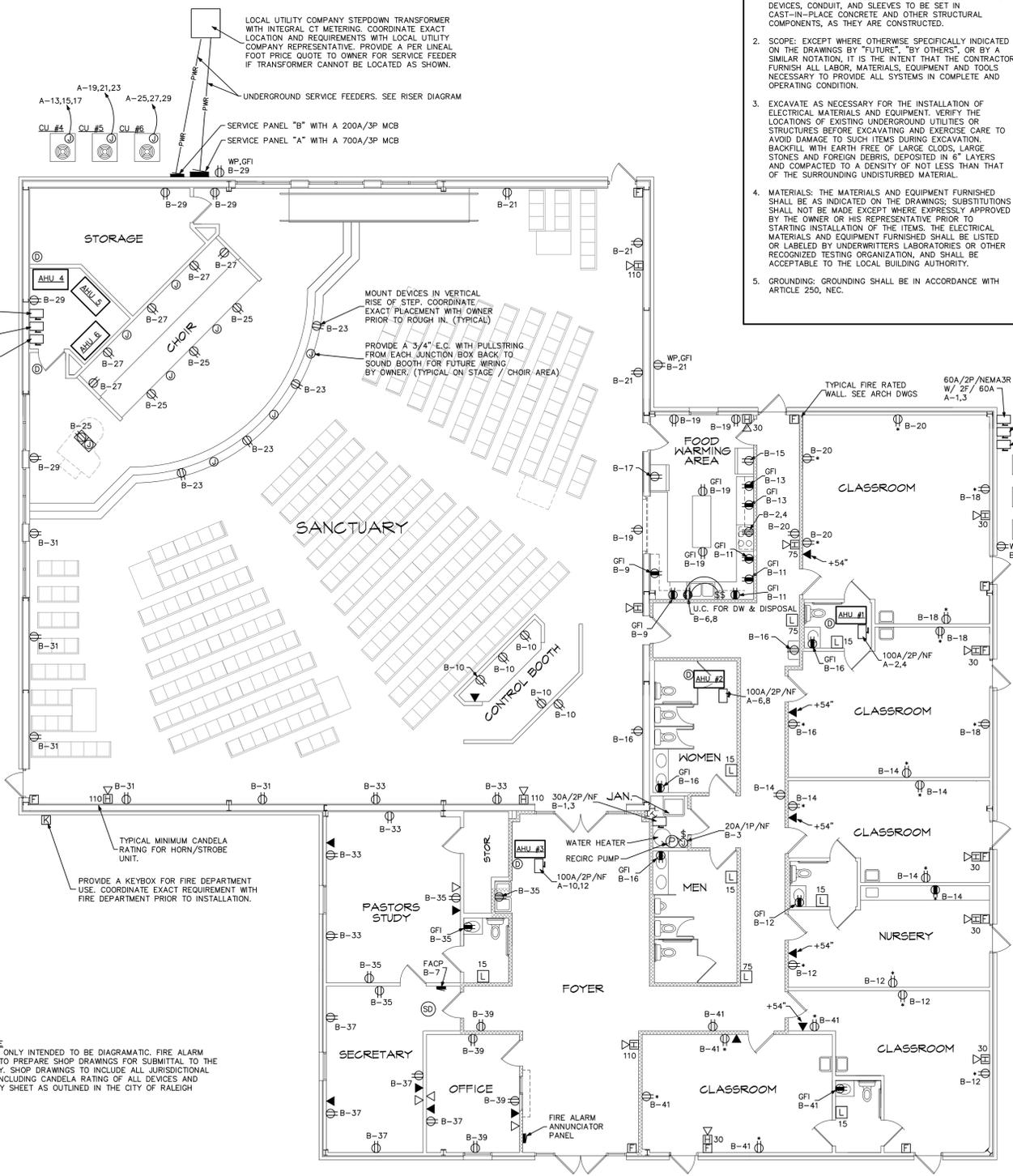
ELECTRICAL SYMBOLS LEGEND			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
	DUPLEX RECEPTACLE, MTD, +18" AFF		TRANSFORMER - SIZE AS NOTED
	240 VOLT RECEPTACLE (HT. AS REQ.)		PANEL - SIZE AS NOTED
	QUADRUPLEX RECEPTACLE, MTD, +18" AFF		MOMENTARY CONTACT PUSH BUTTON
	COUNTERTOP HT. RECEPTACLE +42" AFF		F-FAN;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

Raleigh Code Data Summary Sheet for Fire Alarm

General Requirements	General Alarm Only <input type="checkbox"/>	Sprinkler System Supervision Only <input type="checkbox"/>	Sprinkler and General Alarm <input checked="" type="checkbox"/>
Secondary Power Requirements	Voice Alarm <input type="checkbox"/>	Remote <input type="checkbox"/>	Central <input type="checkbox"/>
Primary Supply	Light & Power <input checked="" type="checkbox"/>	Generator <input type="checkbox"/>	Wiring <input type="checkbox"/>
Life Safety Controls	Smoke Door <input type="checkbox"/>	Shaft Pressurization <input type="checkbox"/>	Duct Detector <input type="checkbox"/>
Voice Alarm System	Pre-recorded <input type="checkbox"/>	Live <input type="checkbox"/>	Entire Building <input type="checkbox"/>
Smoke Detector System	Cross Zones <input type="checkbox"/>	Alarm Verification <input type="checkbox"/>	Class B System <input type="checkbox"/>
Wiring Class	Class A System <input type="checkbox"/>	Class B System <input type="checkbox"/>	Other <input type="checkbox"/>
Special Systems	FM 200 <input type="checkbox"/>	Hood Systems <input type="checkbox"/>	Pre-Action <input type="checkbox"/>



2 FIRE ALARM RISER DIAGRAM
NO SCALE



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

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.
- 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).
 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 WET 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.

KEY TO RATED WALLS
 1 HR. (UL# U425)

