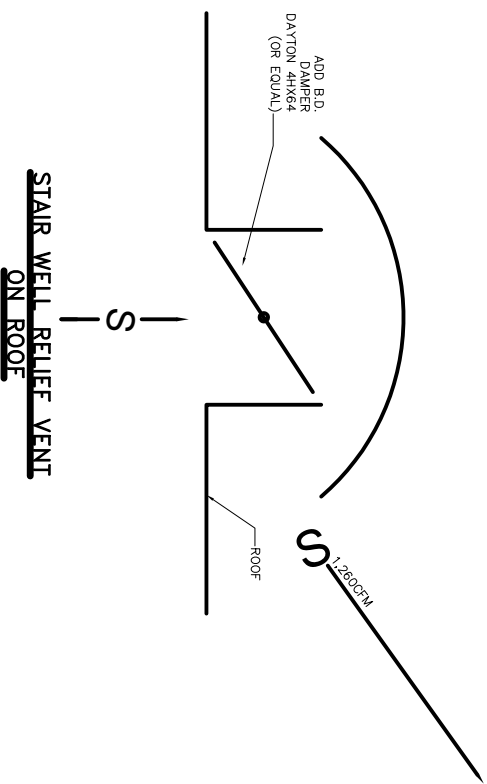


MECHANICAL NOTES

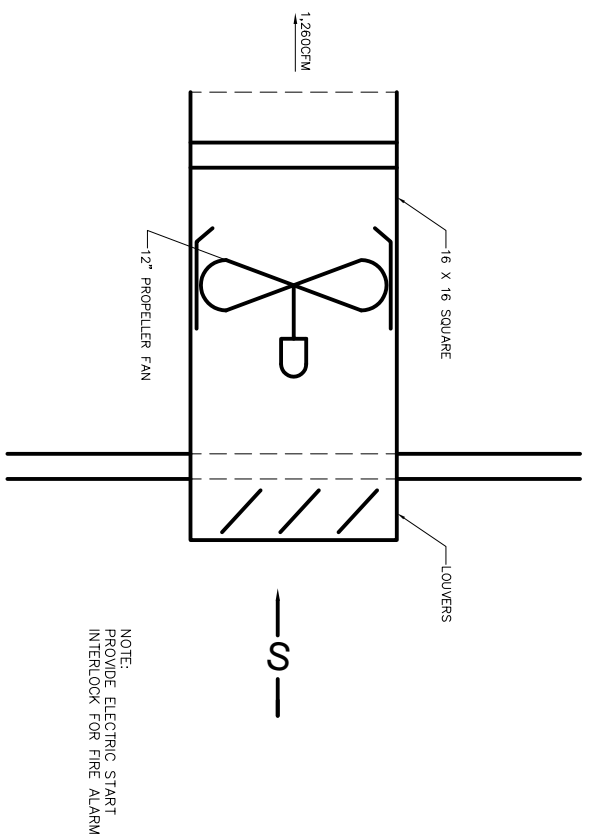
1. PROVIDE RETURN AIR GRILLES FOR REMOVE SPACES AND A CEILING GRILLE BELOW EACH FAN COIL UNIT.
2. OUTSIDE AIR WILL BE CONDITIONED THROUGH SPACE FAN COIL UNITS.
3. PROVIDE INDEPENDENT AIR BALANCE CONTRACTOR TO BALANCE SYSTEM.
4. PROVIDE THROW-AWAY AIR FILTERS FOR FAN COILS. FAN COIL RETURN PLENUM TO HAVE BOTTOM FILTER REMOVAL. INSTALL NEW AIR FILTERS AFTER FINAL CLEAN UP AT JOB COMPLETION. PROVIDE A TOTAL OF TWO SPARE FILTERS FOR EACH FAN COIL UNIT.
5. PROVIDE CONDENSATE DRAIN FROM EACH FAN COIL UNIT TO DRAIN LINES SHOWN ON FLOOR PLAN. DRAIN LINES SHALL BE 1/4" INCH MINIMUM FOR UP TO THREE UNITS, 2" INCH FOR UP TO SIX UNITS, AND 2 1/2" FOR MORE THAN SIX UNITS. CONDENSATE LINES SHALL BE PVC PIPE, INSULATED FOR 40° F ANTISWEAT COVERED, WITH MINIMUM SLOPE OF 0.01 FT./ RUNNING FT. PROVIDE A P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS AND AN AIR VENT AT EACH UNIT.
6. PROVIDE OUTSIDE AIR TO EACH FAN COIL UNIT AS SHOWN.
7. PROVIDE REMOTE PROGRAMMABLE FOUR-WAY SUMMER WINTER THERMOSTAT FOR EACH FAN COIL. FAN SPEEDS SET BY AIR CONDITIONING CONTRACTOR.
8. PROVIDE FLOW-SETTER AND MOTOR CONTROLLED THREE-WAY VALVE FOR EACH FAN COIL. THREE-WAY VALVE TO BE THERMOSTAT CONTROLLED.
9. PROVIDE AIR SEPARATOR AT THE CHILLER WATER PUMPS.
10. PROVIDE SEDIMENT STRAINER BEFORE CHILLER WATER PUMPS.
11. PROVIDE EXPANSION TANK FOR CHILLED WATER RETURN.
12. PROVIDE CHILL WATER SHUT-OFF VALVES FOR EACH FAN COIL.
13. FAN COILS TO HAVE AIR STANDARD RATINGS.
14. SELECT UNITS FOR 40° F ENTERING WATER WITH 10° F RISE. ROOM CONDITIONS TO BE 75° F DB, 63° F WB.
15. PROVIDE ELECTRIC HEAT, AS SHOWN ON FAN COIL SCHEDULES ON DWG. M-10. IN FAN COIL UNITS. UNIT VOLTAGE SHALL BE 277 VAC.
16. SPACE LOADS WERE CALCULATED FOR GLAZING AT 50% SOLAR REFLECTANCE AND 50% HEAT TRANSMISSION.
17. PROVIDE EXHAUST FROM EACH SPACE TO HALL WITH UNDERCUT DOORS OR DOOR GRILLES.
18. PROVIDE 20% GLYCOL SOLUTION FOR 20° F MINIMUM TEMPERATURE.
19. CHILLERS TO OPERATE IN PARALLEL OR ON STAND BY.
20. MAXIMUM FLEX DUCT LENGTH TO BE 5 FEET.
21. CEILING DIFFUSERS TO OPERATE AT 0.045 WATER COLUMN MAXIMUM WITH NECK VELOCITY AT 500 FPM.
22. SQUARE CEILING DIFFUSERS TO BE TTUS TMSA-AA 24X24 INCH, OR EQUAL, INSTALLED IN CEILING GRID.
23. MOTORIZED VALVE PACKAGE FOR REVERSE RETURN IS 3-WAY, 2 POSITION IN C, ELECTRIC OPEN, SPRING RETURN.
24. EQUIPMENT SCHEDULE ON DRAWING M-10 SHOWS OUTSIDE AIR, EXHAUST, AND SUPPLY FAN DATA.
25. CHILLED WATER LINES AND CHILLED WATER RETURN SHALL BE INSULATED FOR 40° F ANTISWEAT COVERED.
26. TOILET ROOM DOORS SHALL BE UNDER CUT OR PROVIDED WITH DOOR GRILLES FOR EXHAUST AIR FLOW.
27. DUCTS TO BE DESIGNED FOR A MAXIMUM PRESSURE DROP OF 0.1 INCHES OF WATER.



CONDENSATE DRAINS SHALL BE DIVERTED TO EITHER:
 1. NEAREST DRAIN AT MINIMUM SLOPE OF .01 FOOT PER FOOT.
 2. NEAREST WALL AND DOWN THRU FLOOR SLAB, THERE TO NEAREST DRAIN AT MINIMUM SLOPE OF .01 FOOT PER FOOT.

HVAC GENERAL NOTES

1. CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 CFM & SECONDARY DUCTS TO 800 CFM. TO BE INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. PROVIDE UL LISTED 125° F FIRE-RAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
6. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES.
7. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
8. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
9. EXHAUST FANS EQUAL TO BROWN MODEL NO. LX4L OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
10. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
11. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
12. CHILLED WATER LINES SHALL COMPLY WITH CHAPTER 12 OF THE INTERNATIONAL MECHANICAL CODE.
13. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CALKED. (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-E8-14).
14. FAN COIL UNITS TO SHUT DOWN ON FIRE ALARM ACTIVATION.
15. RESTROOM EXHAUST FANS TURN ON WHEN LIGHTS TURN ON.
16. STAIRWELL PRESSURIZATION FAN STARTS ON FIRE ALARM ACTIVATION.

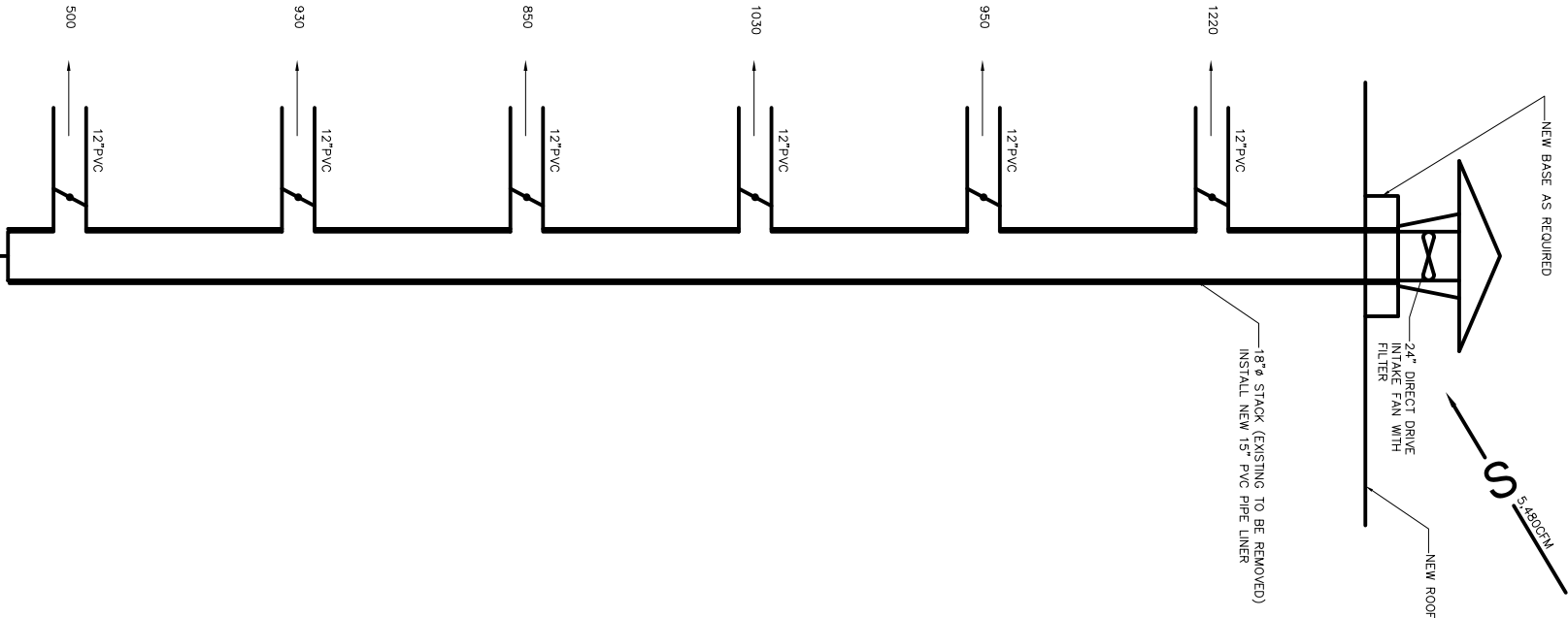


**STAIRWELL PRESSURIZATION FAN
1ST FLOOR**

ALTERNATE BID #2

HVAC FAN COIL UNITS IN LIEU OF VAV SYSTEM
 NOTES:

1. ONLY WORK PERTAINING TO HVAC SYSTEM IS PART OF ALTERNATE #2. ALL OTHER WORK IS PART OF BASE BID.



REVISED: 09/17/06b
 REVISED: 09/07/06b
 REVISED: 1/11/07

SHEET M.10 OF	JOB NO. 1729 DATE: 1-8-07	SCALE: AS NOTED FILE:	RENOVATE OFFICE BUILDING		HVAC DETAILS AND NOTES
			DAMMON ENGINEERING, INC. 1095 FLORIDA AVENUE 985-649-5832 SLIDELL, LA. 70458 DAMMONENGINEERING.COM		