

VENTILATION REQUIREMENTS:
 1052 SF - RETAIL SALES FLOOR AT 0.30 CFM/SF = 316 CFM

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RETAIL FACILITY
 FIRST LADY'S CENTRE RETAIL II
 KING GEORGE COUNTY, VIRGINIA

SHEET TITLE:
 MECHANICAL PLAN,
 SCHEDULE AND
 EQUIPMENT LIST

REVISIONS:
 11 DEC 06

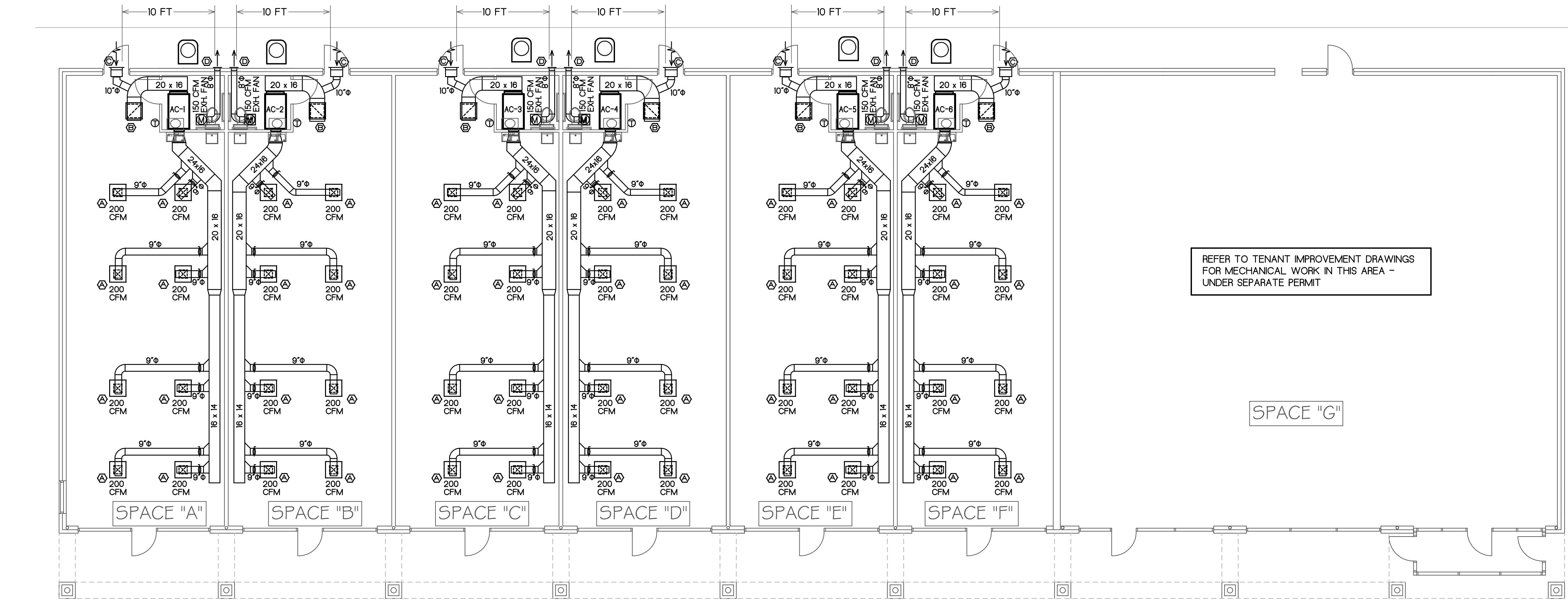
DATE: 24 MAY 06

JOB NO.: 0607

SHEET NO.:

M-1

11 OF 14 SHEETS



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

| GRILLES - REGISTERS - DIFFUSERS & VENTS | | | | | | | |
|---|-------------------------|---------|----------------|--------|--------|----------------------|---------|
| TYPE | DESCRIPTION | NECK | FRAME | FINISH | O.B.D. | MFR - MODEL | REMARKS |
| ⊙ | CEILING DIFFUSER | 9 x 9 | 24 x 24 LAY-IN | WHITE | YES | AIR GUIDE AVP-OB-PLT | |
| ⊙ | RETURN AIR GRILLE | 22 x 22 | 24 x 24 LAY-IN | WHITE | NO | AIR GUIDE RA-T | |
| ⊙ | OUTSIDE AIR INTAKE VENT | 16 x 8 | FLANGE | WHITE | NO | SYLRO SUNVENT FL-168 | |
| ⊙ | EXHAUST VENT | 8 x 8 | FLANGE | WHITE | NO | SYLRO SUNVENT FL-808 | |
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| | | | | | | | |

AC-1 THROUGH AC-6

EXH. FANS

EQUIPMENT LIST:

SPLIT-SYSTEM HEAT PUMP w/20 kW AUX. ELECTRIC HEAT AND SEER > 10 208 VOLT, 3 PHASE, 60 Hz. DESIGN BASED UPON CARRIER FC4C-048 w/ THERMAL EXPANSION VALVE AND 38-YCC-048-501

THERMOSTAT SHALL BE PROGRAMMABLE, 7 DAY, AUTO-CHANGE-OVER ELECTRONIC TYPE w/ AUX. CONTACTS TO OPEN OUTSIDE AIR VENT DAMPER DURING "OCCUPIED" MODE.

ACCEPTABLE MFRS: CARRIER, TRANE OR YORK

CENTRIFUGAL CEILING EXHAUSTER, 150 CFM AT 0.25 INCHES S.P. BROAN LO-SONE L-150 OR EQUAL BY ACME, GREENHECK OR PENN

NOTES:

- WORK SHALL COMPLY WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
- RUN DUCTS IN SPACE ABOVE LAY-IN CEILING. HOLD DUCT TIGHT TO GYP. BOARD APPLIED TO UNDERSIDE OF ROOF TRUSSES. RUN OUTSIDE AIR INTAKE AND EXHAUST DUCTS IN ATTIC. DUCT SIZES SHOWN ARE SHEET-METAL DIMENSIONS, w/ ALLOWANCE FOR LINER INCLUDED.
- SOUND LINE TRUNK DUCTS WITH 1/2 INCH THICKNESS OF FIBERGLASS DUCT LINER WITH ANTI-MICROBIAL INNER LINER. COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- ADHERE DUCT LINER TO DUCT WITH ADHESIVE APPLIED AT 75% COVERAGE.
- SECURE LINER WITH WELDED MECHANICAL PIN FASTENERS AT 8 INCHES O. C., BOTH WAYS.
- SEAL EDGES OF LINER WHERE IT HAS BEEN CUT WITH MASTIC OR DUCT BUTTER, TO ELIMINATE FRAYING OF LINER AND TO KEEP CONTAMINATES OUT OF THE LINER.
- BRANCH DUCTS SHALL HAVE 1-1/2" FIBERGLASS INSULATION APPLIED TO OUTSIDE OF METAL DUCTS.
- BRANCH DUCT TAPS SHALL BE HIGH EFFICIENCY "BOOT" TYPE, w/ 45 DEGREE LEADING EDGE FOR BOTH SUPPLY & RETURN DUCTS. REFER TO TAP DETAIL ON DRAWING M-2.
- AIR GUIDE DIFFUSERS & GRILLES ARE THE BASIS OF DESIGN. DO NOT SUBSTITUTE "HIGH" CAPACITY DIFFUSERS WHERE THE ENTIRE LAY-IN PANEL IS OCCUPIED BY THE LOUVER FACE OF THE DIFFUSER. TITUS, METAL-AIR, KRUEGER, E. C. PRICE, TUTTLE & BAILEY, HART & COOLEY AND LIMA MAKE THE STYLE THAT HAS BEEN SPECIFIED. ALTERNATE MANUFACTURERS ARE ACCEPTABLE, PROVIDED THAT THE SAME STYLE OF DIFFUSER IS USED.
- BALANCE AIR DISTRIBUTION SYSTEM TO -10% TO +20% OF AIRFLOW INDICATED ON DRAWINGS, USING ALNOR BALOMETER (HOOD) OR EQUAL BY SHORTTRIDGE. SET BLOWER TO LOWEST SPEED THAT SATISFIES AIRFLOW REQUIREMENTS. SUBMIT REPORT TO OWNER.
- RUN CONDENSATE DRAIN DOWN IN EXTERIOR WALL TO DISCHARGE AT +6" AFG.