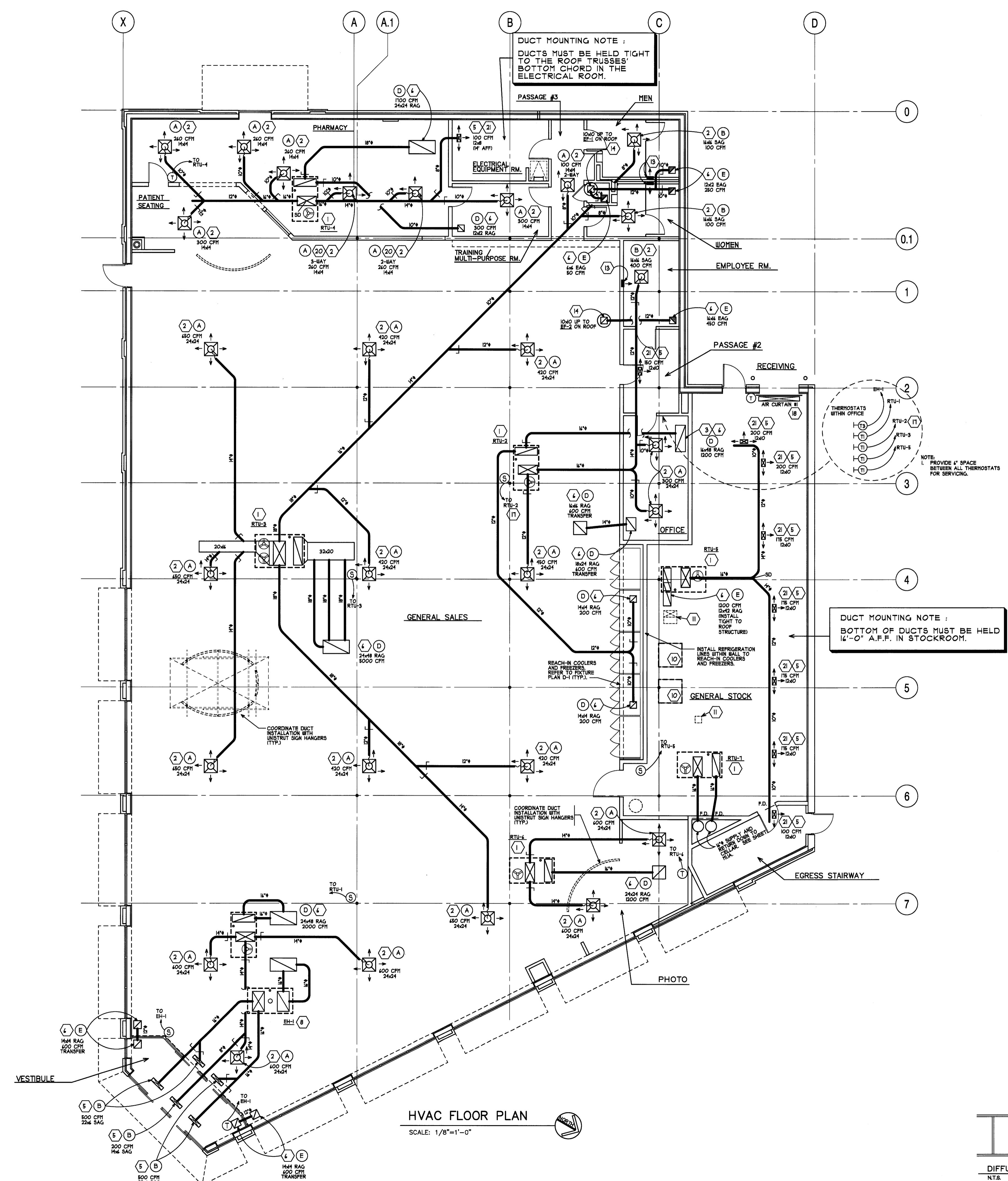


DRAWINGS/SPECIFICATIONS BY:

- WALGREENS'
  - LANDLORD'S CONSULTANT
- ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
- WALGREENS' CONTRACTOR
  - LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

STORE	BUILDING
NEW <input type="checkbox"/>	NEW <input checked="" type="checkbox"/>
REMODELING <input type="checkbox"/>	EXISTING <input type="checkbox"/>
RELOCATION <input type="checkbox"/>	NEW SHELL ONLY <input type="checkbox"/>
OTHERS <input type="checkbox"/>	



**DUCT MOUNTING NOTE :**  
DUCTS MUST BE HELD TIGHT TO THE ROOF TRUSSES BOTTOM CHORD IN THE ELECTRICAL ROOM.

**DUCT MOUNTING NOTE :**  
BOTTOM OF DUCTS MUST BE HELD 14"-0" A.F.F. IN STOCKROOM.

**NOTES**

- GENERAL:**
- REFER TO ALL OTHER PROJECT AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATIONS.
  - IN AREAS WITHOUT A FINISHED CEILING, MECHANICAL PIPING AND DUCT WORK SHALL BE NOT LOWER THAN 15 FT. COORDINATE LOCATION WITH STOCK ROOM SHELVING AND LIGHTING.
  - NON HVAC COMPRESSORS AND CONDENSERS SHALL BE FURNISHED BY WALGREENS.
- EQUIPMENT:**
- SEE ARCHITECTURAL DRAWINGS FOR HVAC ROOF CURB, ROOF COMPRESSOR CURB AND SUPPORT DETAILS.
  - INSTALL HVAC UNITS LEVEL ON ROOF CURBS.
  - OUTSIDE AIR INTAKE ON ROOF SHALL BE LOCATED A MINIMUM OF 15'-0" AWAY FROM ANY EXHAUST DUCT, BLOWER DISCHARGE, PLUMBING VENTS, ETC.
  - HVAC UNITS TO INCLUDE FLEXIBLE CONNECTIONS.
  - OUTSIDE AIR INTAKE TO BE SIZED FOR 100% OF OUTSIDE AIR WHEN AN ECONOMIZER SYSTEM IS PROVIDED.
  - ALL OUTSIDE AND RETURN AIR DAMPERS FOR ECONOMIZER AND NON-ECONOMIZER UNITS SHALL BE MOTORIZED AND HAVE A LEAK GASKET.
  - PROVIDE LAMINATED BANGETTE NAME PLATES ON EACH HVAC UNIT AND LOCATE NEXT TO UNIT NAME TAG (RTU-1, CB-1, EF-1, ETC).
- CONDENSATE DRAIN SYSTEM:**
- FOR ALL GEOGRAPHICAL LOCATIONS, PROVIDE COSTGARD DEVICE ON EACH RTU. MANUFACTURED BY TRENT TECHNOLOGIES, INC. TYLER TEXAS, TELEPHONE # (903) 509-4843.
  - FOR LOCATIONS WEST OF 99 DEG. LONGITUDE OR NORTH OF 33 DEG. LATITUDE, RUN CONDENSATE PIPING 8 INCHES BEYOND THE ROOF CURB AND DISCHARGE IN THE DIRECTION OF THE ROOF PITCH. LOCATE DISCHARGE SO THAT CONDENSATE RUNS AWAY FROM TOWER. REFER TO ARCHITECTURAL DRAWING (A1.5) FOR THE REQUIRED "SPLASH BLOCK ON WALKWAY PAD BELOW WATER DISCHARGE."
  - N/A
  - N/A
  - N/A
  - PROVIDE CONDENSATE PIPING, DRAINAGE FITTINGS AND CLEANOUTS WITH A MINIMUM SIZE OF 1/2" INCH. PROVIDE SCHEDULE 40 MIN. P.W.P. OR ABS UNLESS COORDINATES OTHERWISE. PIPING LOCATED OUTSIDE THE BUILDING SHALL BE WEATHER, SUNLIGHT AND UV RESISTANT.
  - LOCATE CONDENSATE DRAIN PIPING SO IT WILL NOT INTERFERE WITH THE REQUIRED ACCESS TO THE RTUs.
  - INSULATE ALL CONDENSATE DRAIN PIPING INSIDE THE BUILDING TO INCLUDE MAINS, BRANCHES, VENTS AND COSTGARD.
- AIR DISTRIBUTION:**
- DUCTWORK TO BE GALVANIZED SHEET METAL, SPIRAL PER SMACNA. REFER TO SPECIFICATION 1588E. LINED DUCTWORK IS NOT PERMITTED.
  - PROVIDE FIRE DAMPERS WITH ACCESS PANELS PER LOCAL CODE AND AS NOTED.
  - FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 3'-0". USE ONLY ON FINAL SUPPLY AIR DIFFUSERS, AND 3'-0" FROM THE RETURN AIR GRILLE TO THE METAL DUCTWORK. FOR BOTH CASES, 90° TURNS ARE NOT ALLOWED - OFFSET ANGLES SHALL BE KEPT TO A MINIMUM. SEE DETAILS 6/M2.1 & 8/M2.1.
  - DO NOT INSTALL SUPPLY AIR DIFFUSERS IN CEILING PANEL ADJACENT TO A ROW OF LIGHT FIXTURES. LOCATE DIFFUSERS IN ACCORDANCE WITH THE REFLECTED CEILING PLAN SHOWN ON THE ARCHITECTURAL DRAWING.
  - PAINT THE INTERIOR SURFACE OF DUCTS (WHERE VISIBLE) THROUGH GRILLES, DIFFUSERS ETC. USE FLAT "TM" (DIRECT TO METAL), NON-SPECULAR BLACK PAINT.
  - SUPPLY AND/OR RETURN AIR CEILING FLEXIBLES ARE NOT PERMITTED.
  - AIR BALANCING: BALANCE AIR TO INDICATED QUANTITIES WITH A TOLERANCE OF PLUS OR MINUS 10%.
- MISCELLANEOUS:**
- ELECTRIC WALL HEATERS (EWH) ARE PROVIDED UNDER THE ELECTRICAL CONTRACT. THEY ARE HERE FOR INFORMATION ONLY.
  - DO NOT INSTALL EQUIPMENT, DUCTWORK, PIPE, CONDUIT IN PROXIMITY OF THE ROOF HATCH LADDER AREA.
- HVAC CONTROLS:**
- EACH HVAC UNIT SHALL HAVE ITS OWN STAND-ALONE CONTROLS.
  - PROVIDE THERMOSTATS, HUMIDISTAT AND SENSORS. LABEL WITH RESPECT TO THE HVAC UNIT THEY SERVE.
  - THERMOSTAT, HUMIDISTAT AND SENSOR WIRING SHALL BE RUN INSIDE CONDUIT.
  - TEMPERATURE CONTROL DEVICES IN THE OFFICE:  
TEMPERATURE SET POINT ADJUSTMENT SENSORS IN THE OFFICE SHALL BE MOUNTED VERTICALLY IN A 4 X 4 PATTERN WITH 6 INCHES BETWEEN SENSORS, APPROXIMATELY, 5.0 FT ABOVE FLOOR.
  - LOCATE THERMOSTATS, HUMIDISTATS AND SENSORS AS SHOWN ON THE MECHANICAL PLAN FOR THE PROJECT, AND MOUNTED AS FOLLOWS:  
a. RTU-1, RTU-2 AND RTU-3 DEVICES SHALL BE COLUMN MOUNTED. THE WIRING FOR COLUMN MOUNTED DEVICES SHALL BE RUN CONCEALED INSIDE THE PIPE COLUMN.  
b. THERMOSTAT SHALL BE VERTICAL. TEMPERATURE SENSOR SHALL BE HORIZONTAL, BOTH 6.0 FT ABOVE FLOOR, WITH HOLE SEALED AND AN INSULATION BLOCK BETWEEN DEVICE AND STEEL COLUMN.  
c. RELATIVE HUMIDITY SENSOR OR HUMIDISTAT SHALL BE 6.5 FEET ABOVE FLOOR AT THE SAME LOCATION AS THE RESPECTIVE TEMPERATURE SENSOR.  
d. CO2 SENSOR SHALL BE HORIZONTAL 7.0 FEET ABOVE FLOOR AT THE SAME LOCATION AS THE RESPECTIVE TEMPERATURE SENSOR.  
e. THE RTU-4 THERMOSTAT OR TEMPERATURE SENSOR SHALL BE VERTICALLY WALL MOUNTED 8.0 FEET ABOVE FLOOR, NOT IN THE DISCHARGE AIR PATH OF SUPPLY AIR DIFFUSERS.  
f. THE RTU-6 THERMOSTAT OR TEMPERATURE SENSOR SHALL BE VERTICALLY WALL MOUNTED 8.0 FEET ABOVE FLOOR, NOT IN THE DISCHARGE AIR PATH OF SUPPLY AIR DIFFUSERS, GENERALLY CENTERED HORIZONTALLY ON THE REAR WALL IN PROXIMITY TO THE RETURN AIR GRILLE.  
g. THE RTU-5 THERMOSTAT OR TEMPERATURE SENSOR SHALL BE VERTICALLY WALL MOUNTED 6.0 FEET ABOVE FLOOR.  
h. THERMOSTAT AND SENSOR WIRING SHALL BE RUN INSIDE THE CONDUIT, VERTICALLY UP TO CEILING, WHERE SUBJECT TO VIEW IN UNFINISHED SPACES.  
i. CONTROL OF ENTRANCE HEATER (EH-1):  
THE TWO STAGE GAS BURNER SHALL BE CONTROLLED BY A TWO STAGE TEMPERATURE SENSOR, WALL MOUNTED, OUTSIDE THE VESTIBULE, INSIDE THE SALES AREA. THE SET POINT FOR THIS SENSOR SHALL HAVE AN OPERATIONAL H-O-A SUBBASE. WHEN A VESTIBULE IS PRESENT, A FREEZE PROTECTION THERMOSTAT SHALL BE PROVIDED TO SENSE AIR TEMPERATURE INSIDE THE RETURN AIR DUCT RIGHT ABOVE THE CEILING GRILLE. THIS THERMOSTAT (SET AT 55 DEGREES F) SHALL CALL FOR FAN ON AND/OR HEAT EVEN IF THE TEMPERATURE SENSOR INSIDE THE STORE IS SATISFIED.
  - ALL SENSORS AND THERMOSTATS SHALL BE LABELED.
  - REMOTE DUCT SMOKE DETECTOR TEST STATIONS SHALL BE INSTALLED ADJACENT TO FIRE ALARM PANEL AND LABELED WITH CORRESPONDING RTU NUMBER.
  - MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES, AND PROVIDE A FULLY OPERATIONAL AND FUNCTIONAL SYSTEM.
  - MECHANICAL CONTRACTOR SHALL BE PRESENT AT START UP.
- CONTROL OF HVAC ENTRANCE HEATER (EH-1):**
- THE TWO STAGE GAS BURNER SHALL BE CONTROLLED BY A TWO STAGE TEMPERATURE SENSOR, WALL MOUNTED, OUTSIDE THE VESTIBULE, INSIDE THE SALES AREA. THE SET POINT FOR THIS SENSOR SHALL HAVE AN OPERATIONAL H-O-A SUBBASE.
  - A FREEZE PROTECTION THERMOSTAT SHALL BE PROVIDED TO SENSE AIR TEMPERATURE INSIDE THE RETURN AIR DUCT RIGHT ABOVE THE CEILING GRILLE. THIS THERMOSTAT (SET AT 50 DEG. F) SHALL CALL FOR HEAT EVEN IF THE TEMPERATURE SENSOR INSIDE THE STORE IS SATISFIED.

**MECHANICAL KEYED NOTES**

- HVAC ROOF-TOP UNIT. SEE GENERAL NOTES (THIS SHEET) AND SCHEDULE ON DRAWING M2.2 FOR ADDITIONAL INFORMATION.
- S.A.D., CFM AND SIZE AS NOTED. S.A.D. FOUR-WAY UNLESS OTHERWISE NOTED.
- LOCATE RAG OVER COMMUNICATION CABINET.
- INSTALL FIRE DAMPER AND ACCESS DOOR PER LOCAL CODE.
- S.A.G., CFM AND SIZE AS NOTED.
- E.A.G. & R.A.G., CFM AND SIZE AS NOTED.
- GAS SERVICE, METER, REGULATOR, AND VALVES. PHYSICAL PROTECTION OF EQUIPMENT BY GENERAL CONTRACTOR.
- ROOF-TOP ENCLOSED BLOWER/ENTRANCE HEATER. INCLUDE FLEXIBLE CONNECTIONS, 100% RETURN AIR (W/ OUTSIDE AIR) WITH SENSOR AT ENTRANCE AND THERMOSTAT IN OFFICE.
- RETURN GRILLES ARE SIZED FOR 100% RETURN AIR QUANTITY.
- ROOF-TOP CONDENSING UNIT FOR REACH-IN COOLER/FREEZER.
- PIPE PORTAL FOR REACH-IN COOLER/FREEZER CONDENSING UNIT REFRIGERANT AND ELECTRICAL LINES.
- AFTER AIR BALANCE OF RTU-2, SECURE RETURN DAMPER POSITION WITH SCREWS.
- ELECTRIC WALL HEATER (EWH) FURNISHED BY ELECTRICAL CONTRACTOR. SEE DRAWING E1.2 FOR MORE INFORMATION.
- ROOF MOUNTED EXHAUST FAN. SEE DETAIL 4/M2.1.
- N/A
- EVAPORATIVE UNIT (FAN COIL) PROVIDE DX PIPING CONNECTION WITH ROOFTOP CONDENSING UNIT.
- ON INITIAL SETUP, THE SENSOR WITHIN THE THERMOSTAT FOR RTU-2 SHALL BE CONTROLLER. RETAIN THE REMOTE SENSOR FOR A FUTURE OPTION.
- OVERHEAD DOOR AIR CURTAIN, WALL MOUNTED AND SUPPORTED FROM BAR-JOIST POSITION TO CLEAR THE DOOR AND INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE ELECTRIC HEAT. SEE DETAIL 12/A4.5.
- IF ELECTRICAL ROOM CONTAINS UPS, INCREASE THE SUPPLY AIR AND RETURN AIR PER HVAC LOAD CALCULATION.
- DIRECT SUPPLY AIR AWAY FROM WEIGHT SCALE.
- MOUNT REGISTERS ON SPIRAL DUCTWORK. REGISTERS SHALL HAVE DAMPER AND SHALL BE INSTALLED SO THAT THE AIR SUPPLY IS DIRECTED DOWNWARD AT AN ANGLE, SHOWN ON DETAIL 11/M2.1.
- PROVIDE AIR EXHAUST THRU THE ROOF FOR GAS FIRED WATER HEATER. SEE SHEET P1.1, DETAILS 2/P2.1 & 6A/P2.1. FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR.

NO.	DATE	BY	DESCRIPTION	CONST
REVISIONS				

**CERTIFICATION AND SEAL**

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AS SIGNIFIED BY MY HAND AND SEAL.

**FISCAL 2007 CRITERIA - STORE #12325**

WALGREENS  
616 FOREST AVENUE  
PORTLAND, MAINE

**DRAWING TITLE**  
FLOOR PLAN - MECHANICAL

CADD PLOT:	SCALE: AS NOTED	DRAWING NO.
VOID PLOT:	DRAWN BY: WAL	<b>M1.1</b>
RELEASED TO CONSTRUCTION	DATE: 12-10-08	
	REVIEWED BY: SAM	

