



DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

PERMIT ISSUED

This is to certify that HVAC Services Inc.,

Located At 127 MARGINAL WAY

has permission to Install an HVAC system

FEB 24 2011

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

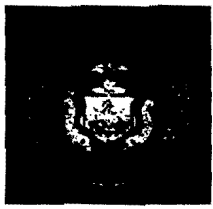
Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be procured prior to occupancy.

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY.
PENALTY FOR REMOVING THIS CARD.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development

Penny St. Louis Littell

Job ID: 2010-12-119-HVAC

Located At: 127 MARGINAL

CBL025 - - B - 014 - 001 - - - - -

Conditions of Approval:

Zoning

1. This property shall remain a retail use (Walgreens) with no drive-thru. Any change of use shall require a separate permit application for review and approval.
2. All previous conditions of approval are still in force.

Building

1. The installation must comply with UL, Manufacturer's Listing, and the State of Maine gas regulations.
2. Maintain proper setback(s) from property lines/buildings and proper clearances from vertical openings when direct venting

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

1. Close-In: (Electrical, Framing, Plumbing)
2. Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUOPIED.

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101
 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2010-12-119-HVAC	Applicatin Date: 12/17/2010	CBL: 025 - - B - 014 - 001 - - - - -
		CBL: 025 - - A - 014 - 001 - - - - -

Location of Construction: 127 MARGINAL 127 MARGINAL	Owner Name: COVE COMPANY BACK	Owner Address: 5 MILK ST PORTLAND, ME - MAINE 04112	Phone:
			PERMIT ISSUED FEB 24 2011 City of Portland
Business Name:	Contractor Name: HVAC Services Inc., HVAC Services Inc.	Contractor Address: 73 Bradley DR WESTBROOK ME 04092 WESTBROOKMAINE04092	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type:	Zone: B-7
Past Use: Walgreens	Proposed Use: Walgreens	Permit Fee:	Cost of Work:
CEO District:			
Proposed Project Description: new Heating			
Permit Taken By:	Date Applied For: 12/17/10		

12/21/10 - 12/23/10



FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT



To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL R7 Marginal Way & Chestnut St. Use of Building Commercial Retail Date 12/16/2010
 Name and address of owner of appliance Walgreens / Fork River Development (Back Cove Company)
5 Milk St. Portland, Me.
 Installer's name and address HVAC SERVICES INC.
73 Bradley Drive Westbrook, Me 04092 Telephone 207-854-4822

Location of appliance:

- Basement
- Floor
- Attic
- Roof

Type of Fuel:

- Gas
- Oil
- Solid

Appliance Name: TRANE RTU'S

U.L. Approved Yes No

Will appliance be installed in accordance with the manufacture's installation instructions? Yes No

IF NO Explain: _____

The Type of License of Installer:

- Master Plumber # _____
- Solid Fuel # _____
- Oil # _____
- Gas # PNT 1042
- Other _____

Type of Chimney:

- Masonry Lined
- Factory built _____

Metal TRASH RE HOSTER
Factory Built U.L. Listing # RW5.ES3291

Direct Vent RTU'S
Type TRANE UL# L2FC.5A 7928

Type of Fuel Tank

- Oil
- Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ feet.

Cost of Work: \$ 83,500

Permit Fee: \$ 860

Approved

Fire: _____
 Ele.: _____
 Bldg.: _____

Approved with Conditions

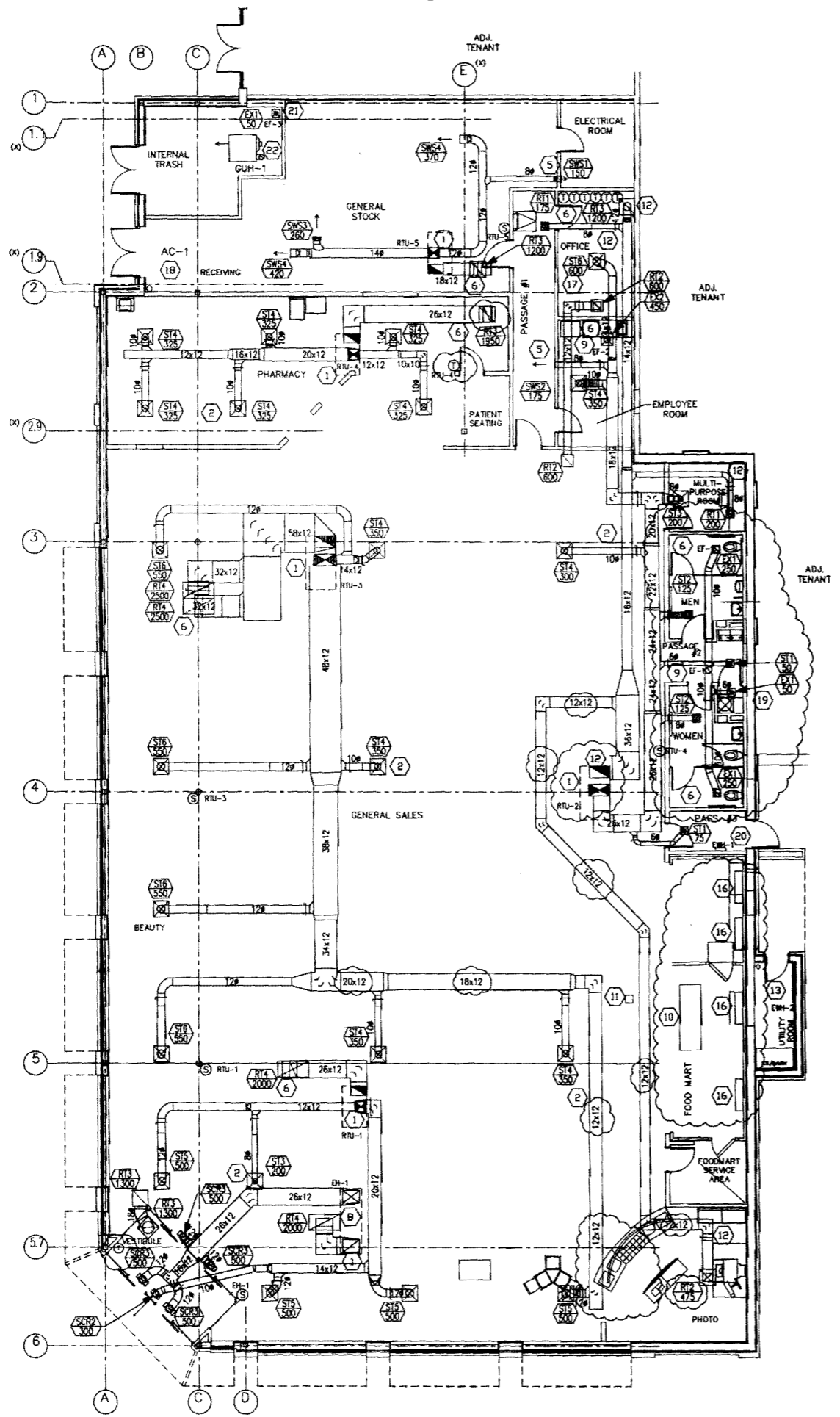
- See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy



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

- MECHANICAL KEYED NOTES**
- 1 HVAC ROOF-TOP UNIT. SEE GENERAL NOTES AND SCHEDULE ON DRAWING M2.2 FOR ADDITIONAL INFORMATION.
 - 2 SAD - CFM AND SIZE AS NOTED. FOUR WAY UNLESS OTHERWISE NOTED.
 - 3 LOCATE RAG OVER COMMUNICATION CABINET.
 - 4 NOT USED
 - 5 SAG - CFM AND SIZE AS NOTED.
 - 6 EAG, RAG & TAG - CFM AND/OR SIZE AS NOTED.
 - 7 NOT USED
 - 8 ROOF-TOP ENCLOSED BLOWER/ENTRANCE HEATER. INCLUDE FLEXIBLE CONNECTIONS, 100% RETURN AIR (NO OUTSIDE AIR) WITH SENSOR AT ENTRANCE AND THERMOSTAT IN OFFICE.
 - 9 10" ROUND EXHAUST DUCT UP THROUGH ROOF. TERMINATE WITH APPROVED ROOF CAP.
 - 10 ROOF-TOP CONDENSING UNIT FOR COOLER/FREEZER. REFER TO ARCHITECTURAL DRAWINGS A1.3 & A4.5 FOR LOCATIONS.
 - 11 PIPE PORTAL FOR WALK-IN/COOLER/FREEZER CONDENSING UNIT REFRIGERANT AND ELECTRICAL LINES. REFER TO ARCHITECTURAL DRAWINGS A1.3 & A4.5.
 - 12 AFTER AIR BALANCE OF RTU-2, SECURE RETURN DAMPER POSITION WITH SCREWS.
 - 13 ELECTRIC WALL HEATER (EWH) FURNISHED BY MECHANICAL CONTRACTOR (AT BUILDING OWNER'S EXPENSE) WIRED TO HOUSE PANEL. SEE DRAWING E1.2 FOR MORE INFORMATION.
 - 14 NOT USED
 - 15 NOT USED.
 - 16 EVAPORATIVE UNIT. (FAN COIL) PROVIDE DX PIPING CONNECTION WITH ROOFTOP CONDENSING UNIT. FIELD LOCATE.
 - 17 ON INITIAL SETUP, THE SENSOR WITHIN THE THERMOSTAT FOR RTU-2 SHALL BE CONTROLLER. RETAIN THE REMOTE SENSOR FOR A FUTURE OPTION. SEE DETAIL 1 DRAWING M2.2.
 - 18 OVERHEAD DOOR AIR CURTAIN, WALL MOUNTED AND SUPPORTED FROM BAR-JOIST, POSITION TO CLEAR THE DOOR AND INSTALL PER MANUFACTURER'S DIRECTION. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
 - 19 NOT USED.
 - 20 ELECTRIC WALL HEATER (EWH) FURNISHED BY ELECTRICAL CONTRACTOR (AT WALGREEN'S EXPENSE) WIRED TO WALGREEN'S PANEL. SEE DRAWING E1.2 FOR MORE INFORMATION.
 - 21 6" EXHAUST DUCT UP THROUGH ROOF. TERMINATE WITH APPROVED ROOF CAP.
 - 22 CONCENTRIC COMBUSTION AIR AND FLUE UP THROUGH ROOF. TERMINATE WITH APPROVED ROOF CAP.

- NOTES**
- GENERAL:**
1.1 REFER TO ALL OTHER PROJECTS, DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATIONS.
1.2 IN AREAS WITHOUT A FINISHED CEILING, MECHANICAL PIPING AND DUCT WORK SHALL NOT BE LOWER THAN 15 FT. COORDINATE LOCATION WITH STOCK ROOM SHELVING AND LIGHTING.
1.3 NON-HVAC COMPRESSORS AND CONDENSERS SHALL BE FURNISHED BY WALGREENS.
EQUIPMENT:
2.1 SEE ARCHITECTURAL DRAWINGS FOR HVAC ROOF CURB, ROOF COMPRESSOR CURB, PIPE PORTALS AND SUPPORT DETAILS.
2.2 INSTALL HVAC UNITS LEVEL ON ROOF CURBS.
2.3 OUTSIDE AIR INTAKE ON ROOF SHALL BE LOCATED A MINIMUM OF 15'-0" AWAY FROM ANY EXHAUST DUCT, BLOWER DISCHARGE, PLUMBING VENTS, ETC.
2.4 HVAC UNITS TO INCLUDE FLEXIBLE CONNECTIONS.
2.5 OUTSIDE AIR INTAKE TO BE SIZED FOR 100% OF OUTSIDE AIR WHEN AN ECONOMIZER SYSTEM IS PROVIDED.
2.6 ALL OUTSIDE AND RETURN AIR DAMPERS FOR ECONOMIZER AND NON-ECONOMIZER UNITS SHALL BE MOTORIZED AND HAVE A LOW LEAK GASKET.
2.7 PROVIDE LAMINATED BAKELITE NAME PLATES ON EACH HVAC UNIT AND LOCATE NEXT TO UNIT NAME TAG (RTU-1, ER-1, EF-1, ETC.).
2.8 IMMEDIATELY AFTER AN HVAC UNIT IS INSTALLED, PROVIDE A MERV 8 OR BETTER TEMPORARY AIR FILTER OVER THE RETURN AIR INLET OF EACH HVAC UNIT AND/OR EACH RETURN AIR GRILLE AS APPLICABLE. REMOVE ONLY AFTER CONSTRUCTION IS COMPLETE.
- CONDENSATE DRAIN SYSTEM:**
3.1 FOR ALL GEOGRAPHICAL LOCATIONS, PROVIDE COSTGARD DEVICE SYSTEM KIT ON EACH RTU, MANUFACTURED BY TRENT TECHNOLOGIES, INC. TYLER TEXAS, TELEPHONE # (903) 508-4843. PIPE AND FITTINGS SHALL BE UV STABILIZED RECOGNIZED BY UL AS SUITABLE FOR OUTDOOR USE.
3.2 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 RTU. REFER TO ARCHITECTURAL DRAWING (A1.3) FOR THE REQUIRED "SPASH BLOCK ON WALKWAY PAD BELOW WATER DISCHARGE".
3.3 FOR LOCATIONS BOTH EAST OF 99 DEG. LONGITUDE AND SOUTH OF 33 DEG. LATITUDE, RUN CONDENSATE PIPING FROM RTUs TO AN APPROVED RECEPTOR. THE PREFERRED METHOD IS TO RUN THE CONDENSATE DRAIN PIPING ABOVE THE ROOF SUPPORTED ON 6"x6" BLACK POLYCARBONATE PIPE SUPPORTS, MODEL NO. 1.5 BY MIRO INDUSTRIES, TELEPHONE (800) 788-8978. PROVIDE STAINLESS STEEL SCREWS AND STRAP TO PERMIT PIPE MOVEMENT. POSITION THE SUPPORT PIPING NOT MORE THAN 6 FT. APART. SECURE THE PIPE SUPPORT TO ROOF MEMBRANE IN A MANNER APPROVED BY THE MEMBRANE MANUFACTURER.
3.4 RUN CONDENSATE PIPING BELOW THE ROOF IF C/
- (ABOVE) ARE NOT DELIVERED WITH DRAIN CONNECTIONS IN THE BOTTOM OF THE DRAIN PAN. DRAIN CONNECTIONS FOR THESE UNITS MUST BE MADE IN THE FIELD. DETAILED INSTALLATION INSTRUCTIONS ARE PROVIDED WITH EACH SHIPMENT OF COSTGARD DRAIN SEAL.
- 3.6 PROVIDE CONDENSATE PIPING DRAINAGE FITTINGS AND CLEANOUTS WITH A MINIMUM SIZE OF 1.25 INCH. PROVIDE SCHEDULE 40 MIN. PVC OR ABS UNLESS CODE REQUIRES OTHERWISE. CONDENSATE PIPING AND COMPONENTS LOCATED OUTSIDE THE BUILDING SHALL BE WEATHER, SUNLIGHT, AND UV RESISTANT.
3.7 LOCATE CONDENSATE DRAIN PIPING SO IT WILL NOT INTERFERE WITH THE REQUIRED ACCESS TO THE RTUs.
3.8 INSULATE ALL CONDENSATE DRAIN PIPING INSIDE THE BUILDING TO INCLUDE MAINS, BRANCHES, VENTS AND COSTGARD.
- AIR DISTRIBUTION:**
4.1 DUCTWORK TO BE GALVANIZED SHEET METAL RECTANGULAR (OR SPIRAL CEILING SPACE PERMITTING) PER SMACNA. REFER TO SPECIFICATION 15880. LINED DUCTWORK IS NOT PERMITTED.
4.2 PROVIDE FIRE DAMPERS WITH ACCESS PANELS PER LOCAL CODE AND AS NOTED.
4.3 FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 3'-0". USE ONLY ON FINAL SUPPLY AIR DIFFUSER, AND 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 DETAIL 5/M2.1.
4.4 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.
4.5 PAINT THE INTERIOR SURFACE OF DUCTS (WHERE VISIBLE) THROUGH GRILLES, DIFFUSERS ETC. USE FLAT "DM" (DIRECT TO METAL), NON-SPECULAR BLACK PAINT.
4.6 SUPPLY AND/OR RETURN AIR CEILING PLENUMS ARE NOT PERMITTED.
4.7 ALL VOLUME DAMPERS SHALL BE FLAGGED WITH STREAMERS FOR EASY IDENTIFICATION ESPECIALLY WHEN COVERED WITH INSULATION.
4.8 AIR BALANCING - BALANCE AIR TO INDICATED QUANTITIES WITHIN A TOLERANCE OF PLUS OR MINUS 10%.
- MISCELLANEOUS:**
5.1 ELECTRIC WALL HEATERS (EWH-1) ARE PROVIDED UNDER THE ELECTRICAL CONTRACT. THEY ARE SHOWN HERE FOR INFORMATION ONLY.
5.2 DO NOT INSTALL EQUIPMENT, DUCTWORK, PIPE, CONDUIT IN PROXIMITY TO THE ROOF HATCH LADDER AREA.
HVAC CONTROLS:
6.1 REFER TO DRAWING M3.1.

CONSULTANT PROJECT NO. 0739
PROJECT TYPE

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

CONSTRUCTION NOTE:
TENANTS MUST REMAIN OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.

NO.	DATE	BY	DESCRIPTION	CONST
4	07/08/10	DMM	BULLETH #3	
3	04/08/10	DMM	FINAL REVIEW BY WALGREEN'S	
2	11/23/09	DMM	BULLETH #2	
1	10/06/09	DMM	BULLETH #1	

REVISIONS

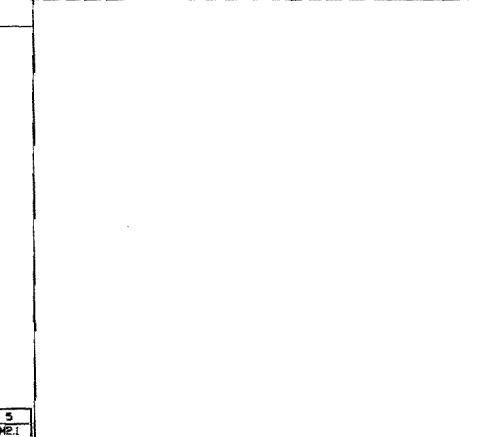
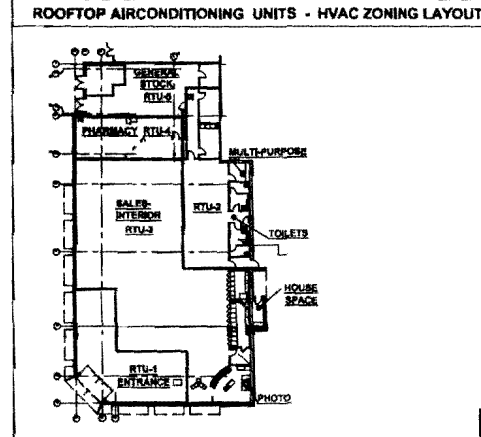
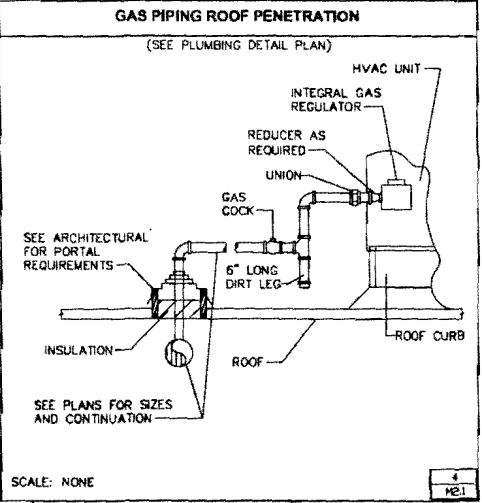
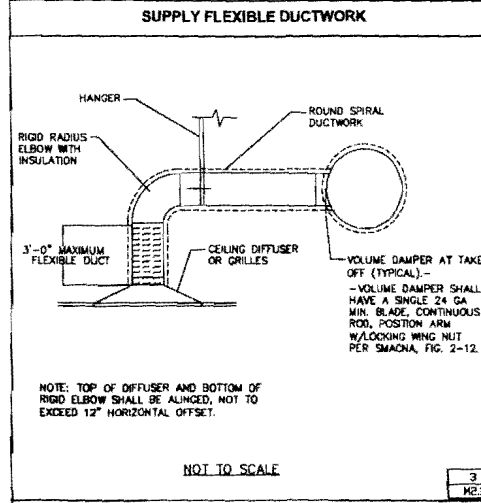
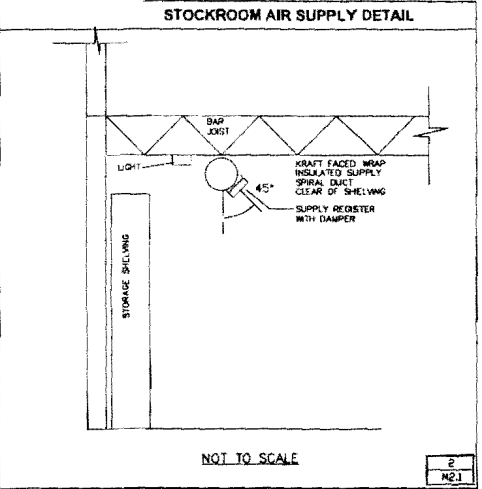
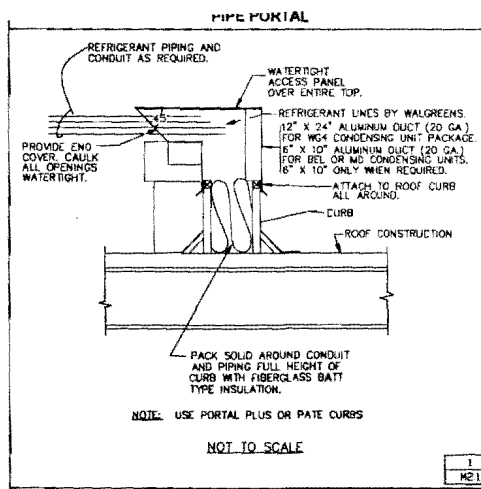
CERTIFICATION AND SEAL

ARCHITECT	ENGINEER
-----------	----------

STORE NUMBER 11886
PROJECT NAME
Walgreens Store (SWC) Marginal & Chestnut Portland, ME

DRAWING TITLE
FLOOR PLAN MECHANICAL

CADD PLOT:	SCALE: AS NOTED	DRAWING NO.
VOID PLOT:	DRAWN BY: M.A.H.	M1.1
SUPERSEDES PLAN DATED:	DATE ISSUED: 04/29/09 BMS	
	REVIEWED BY: J.K.C.	OF 3 DWGS.



TAG	AREA	RANGE	CFM	NECK IN.	OVERALL SIZE 1 IN.	BORDER	TYPE	BLDW	D.B.D. DAMPER	PRICE MODEL OR LISTED EQUAL
S.T. SALES	50 - 120	8 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE	ASPD		
S.T. SALES	121 - 235	8 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE			
S.T. SALES	236 - 400	10 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE			
S.T. SALES	401 - 680	12 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE			
S.T. SALES	681 - 1000	14 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE			
S.T. SALES	1001 - 1450	16 DIA.	24 x 24	LAY-IN	PLAQUE	360 DEG.	NONE			
S.T. SALES	50 - 150	6 x 6		NOTE 1	FLUSH FACE LOUVERED	4 WAY	NONE	AMD-A-36		
S.T. SALES	50 - 150	6 x 6	24 x 24	LAY-IN	FLUSH FACE LOUVERED	4 WAY	NONE			
S.T. SALES	151 - 400	9 x 9	24 x 24	LAY-IN	FLUSH FACE LOUVERED	4 WAY	NONE			
S.T. SALES	401 - 680	12 x 12	24 x 24	LAY-IN	FLUSH FACE LOUVERED	4 WAY	NONE			
S.C.R. STOCK	50 - 300	12 x 8	14 x 8	NOTE 1	NOTE 4.	1 WAY	YES	620 DL		
S.C.R. ENTRANCE	300 - 400	14 x 8	16 x 8	NOTE 1	NOTE 4.	1 WAY	NONE			
S.C.R. ENTRANCE	401 - 700	22 x 8	24 x 8	NOTE 1	NOTE 4.	1 WAY	NONE			
S.C.R. ENTRANCE	701 - 1000	20 x 10	22 x 12	NOTE 1	NOTE 4.	1 WAY	NONE			
S.C.R. ENTRANCE	1001 - 1200	24 x 10	26 x 12	NOTE 1	NOTE 4.	1 WAY	NONE			
R.T. SALES	2501 - 5000	47 x 23	48 x 24	LAY-IN	1"x1"x1" EGG GRATE	NA	NONE	62 TB		
R.T. SALES	801 - 2500	23 x 23	24 x 24	LAY-IN	1"x1"x1" EGG GRATE	NA	NONE			
R.T. OFFICE	401 - 600	12 x 12	14 x 14	NOTE 1	1"x1"x1" EGG GRATE	NA	NONE			
E.X. EMP. ROOM	401 - 600	12 x 12	14 x 14	NOTE 1	1"x1"x1" EGG GRATE	NA	YES			
E.X. TOILETS	201 - 400	10 x 10	12 x 12	NOTE 1	1"x1"x1" EGG GRATE	NA	YES			
R.T. OTHER	101 - 200	8 x 8	10 x 10	NOTE 1	1"x1"x1" EGG GRATE	NA	NONE			
E.X. PORTER	50 - 100	6 x 6	8 x 8	NOTE 1	1"x1"x1" EGG GRATE	NA	YES			

- NOTES:
1. PROVIDE PROPER BORDER AND MOUNTING OPTION THAT IS COMPATIBLE WITH THE ADJACENT SURFACE.
 2. PROVIDE "ADJUSTABLE PATTERN" TYPE IN SUPPLY FOR PHARMACY, OFFICE AND EMPLOYEE ROOM.
 3. IN PHARMACY, PROVIDE 2 AND 3 WAY BLOW DIFFUSERS AS SHOWN ON PLAN.
 4. DOUBLE DEFLECTION WITH HORIZONTAL BLADES
 5. AIR TERMINAL DEVICES SHALL BE ALL ALUMINUM WITH A WHITE FACTORY FINISH TO MATCH ADJACENT CEILING GRID.
 6. TOTAL STATIC PRESSURE DROP ACROSS AN AIR TERMINAL SHALL NOT EXCEED 0.20 IN. WC.
 7. ACCEPTABLE MANUFACTURERS: CARNES, KRUEGER, METALAIR, HAILOR, PRICE, TITUS, TUTTLE AND BAILEY.
 8. DUCT INSULATION SHALL EXTEND DOWN OVER TOP AND SIDES OF ALL SUPPLY DIFFUSERS AND GRILLES.

LEGEND	
<input checked="" type="checkbox"/>	SUPPLY OR TRANSFER AIR
<input checked="" type="checkbox"/>	RETURN, EXHAUST OR TRANSFER AIR
<input type="checkbox"/>	MANUAL DAMPER
<input type="checkbox"/>	GAS WITH VALVE
<input type="checkbox"/>	HUMIDISTAT OR RELATIVITY HUMIDITY SENSOR
<input type="checkbox"/>	THERMOSTAT
<input type="checkbox"/>	SENSOR FOR THERMOSTAT
<input type="checkbox"/>	GAS METER
XXXX	CFM SUPPLY AIR
XXXX	CFM RETURN AIR
XXE	CFM EXHAUST AIR
AC	AIR CURTAIN
CFM	CUBIC FEET PER MINUTE
CU	CONDENSING UNIT
EF	EXHAUST FAN
EH	ENTRANCE HEATER
EWH	ELECTRIC WALL HEATER
FD	FIRE DAMPER WITH ACCESS DOOR
SAD	SUPPLY AIR DIFFUSER
SAG	SUPPLY AIR GRILLE
SAR	SUPPLY AIR REGISTER
RAG	RETURN AIR GRILLE
TAG	TRANSFER AIR GRILLE
EAG	EXHAUST AIR GRILLE
RTU	ROOF TOP UNIT
UH	UNIT HEATER
UC	UNDERCUT

1. 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 ON THE BACK SIDE. 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 8.0 FT ABOVE FLOOR, WITH HOLE SEALED AND AN INSULATION BLOCK BETWEEN DEVICE AND STEEL COLUMN.
 - c. RELATIVE HUMIDITY SENSOR OR HUMIDISTAT SHALL BE 8.5 FEET ABOVE FLOOR AT THE SAME LOCATION AS THE RESPECTIVE TEMPERATURE SENSOR. CARRIER HUMIDITY SENSOR IS INTEGRAL WITH THERMOSTAT.
 - 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 FAN SERVING THE ELECTRICAL EQUIPMENT ROOM/AREA (IF APPLICABLE) SHALL RUN WHEN THE ROOM TEMPERATURE EXCEEDS 85 DEG. F.
 - g. THE RTU-5 THERMOSTAT OR TEMPERATURE SENSOR SHALL BE VERTICALLY WALL MOUNTED 8.0 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.
2. 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.
3. ADDITIONAL CONTROL FOR RTU-1:

WHEN A VESTIBULE IS PRESENT AND THERE IS NO ENTRANCE HEATER, A THERMOSTAT SHALL BE PROVIDED TO SENSE THE VESTIBULE TEMPERATURE NEAR THE CEILING TRANSFER GRILLE OR RETURN GRILLE. THIS THERMOSTAT (SET AT 55 DEG. F.) SHALL PREVENT A FREEZING CONDITION IN THE VESTIBULE BY MAKING THE EVAPORATOR FAN RUN EVEN IF THE TEMPERATURE SENSOR INSIDE THE STORE IS SATISFIED.
4. THE TOILET EXHAUST FAN(S) SHALL RUN CONTINUOUSLY DURING "OCCUPIED" PERIODS AS DETERMINED BY THE LARGEST RTU-3.
5. THE EMPLOYEE ROOM EXHAUST FAN SHALL RUN ONLY WHEN THE ROOM LIGHTS ARE ON.
6. TEMPERATURE CONTROL DEVICES IN THE OFFICE SHALL BE MOUNTED VERTICALLY IN A 4 X 4 PATTERN WITH 6 INCHES BETWEEN DEVICES, APPROXIMATELY 5.0 FT ABOVE FLOOR.
7. OUTDOOR AIR TEMPERATURE SENSOR SHALL BE INSTALLED ON NORTH WALL OF THE BUILDING, 5'-0" ABOVE THE GROUND (MINIMUM). SENSOR PROBE SHALL BE FACING DOWNWARD.
8. ALL SENSORS AND THERMOSTATS SHALL BE LABELED.
9. REMOTE DUCT SMOKE DETECTOR TEST STATIONS SHALL BE INSTALLED ADJACENT TO FIRE ALARM PANEL AND LABELED WITH CORRESPONDING RTU NUMBER.
10. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES, AND PROVIDE A FULLY OPERATIONAL AND FUNCTIONAL CONTROL SYSTEM.
11. MECHANICAL CONTRACTOR SHALL BE PRESENT AT START UP.

COOLING SET POINTS				HEATING SET POINTS			
BAM-10PM OCCUPIED DEGT.	10PM-BAM NOT-OCCUPIED	HVAC UNIT NO.	AREA	BAM-10PM OCCUPIED DEGT.	10PM-BAM NOT-OCCUPIED	UNIT	AREA
NA	NA	EH-1		68	55		
74	80	RTU-1		70	60		
74	80	RTU-2		70	60		
74	80	RTU-3		70	60		
72	76	RTU-4		70	60		
78	80	RTU-5		70	60		
N/A	N/A	GUH-1		80	60		
56 - DEW POINT FOR ENTIRE BUILDING - EQUALS 53% RH @ 74DB							
IN HUMID CLIMATES (74°F WB OR GREATER), DO NOT RAISE THE COOLING SET POINTS FOR RTU-1,2,3 OR 6, WHEN THE BUILDING IS NOT OCCUPIED.							
INTERLOCK THE CODE OUTSIDE AIR ON RTU-3 TO TOILET EXHAUST							
"AUTO CYCLE" RTUS 1&6 IF THEY DO NOT HAVE CODE OUTSIDE AIR							

DESIGN CRITERIA SHOWN
 BASED ON 2009 ASHRAE FUNDAMENTALS

ASHRAE LOCATION - PORTLAND, ME

PROJECT ELEVATION - 62'

COOLING 83 DEGREES F. DRY BULB
 1% COLUMN
 70 DEGREES F. WET BULB

HEATING 2 DEGREES F. DRY BULB
 99% COLUMN

MECHANICAL BUILDING CODE/YEAR - BOCA 1993

VENTILATION CLASSIFICATION - RETAIL

Walgreens
 FACILITIES PLANNING, DESIGN, & ENGINEERING
 108 WILMOT ROAD
 DEERFIELD, IL 60015-5105

PROJECT ARCHITECT
Landry ARCHITECTS
 P.A. INC. FARMINGTON, CT

PROJECT ENGINEER

CONSULTANT PROJECT NO. 0739

PROJECT TYPE

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

CONSTRUCTION NOTE:
 TENANTS MUST REMAIN OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.

NO.	DATE	BY	DESCRIPTION	CONST
3	07/08/10	DWM	BULLETH #3	
2	11/23/09	DWM	BULLETH #2	
1	10/06/09	DWM	BULLETH #1	

REVISIONS

CERTIFICATION AND SEAL

ARCHITECT	ENGINEER
-----------	----------

STORE NUMBER 11886

PROJECT NAME
Walgreens Store (SWC) Marginal & Chestnut Portland, ME

DRAWING TITLE
MECHANICAL DETAILS

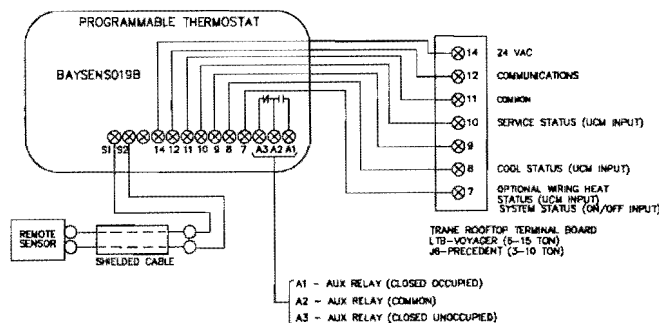
CADD PLOT:	SCALE: AS SHOWN	DRAWING NO.
VOID PLOT:	DRAWN BY: J.E.L.	M2.1
SUPERSEDES PLAN DATED:	DATE ISSUED: 04/29/09 BWS	
	REVIEWED BY: J.M.C.	OF 3 DWGS.

NATIONAL ACCOUNT FOR TRANE ROOF TOP UNIT

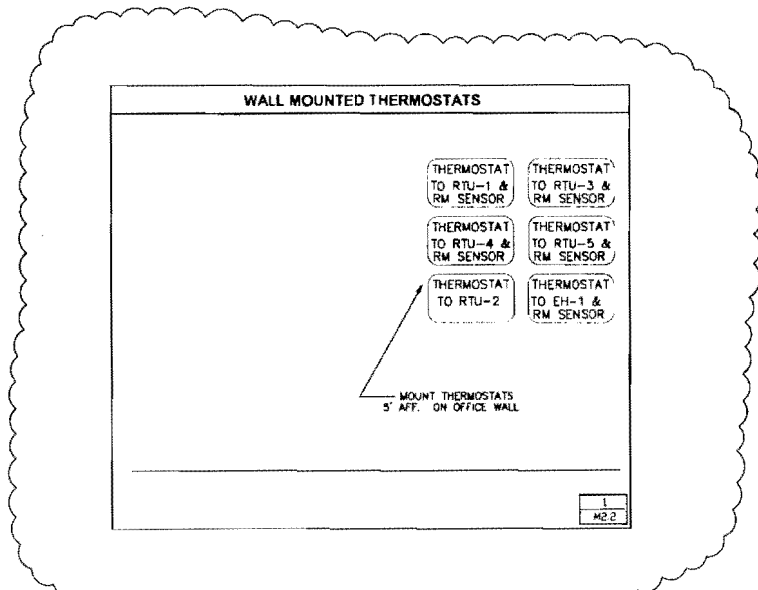
I. HVAC UNITS

WALGREEN CO. SHALL HAVE TRANE EQUIPMENT INSTALLED FOR STORES LOCATED IN ARIZONA, ARKANSAS, CALIFORNIA, CONNECTICUT, COLORADO, DELAWARE, FLORIDA, HAWAII, IDAHO, IOWA, KANSAS, LOUISIANA, MASSACHUSETTS, MAINE, MINNESOTA, MISSOURI, MONTANA, NEBRASKA, NEVADA, NEW HAMPSHIRE, NEW MEXICO, NORTH CAROLINA, NORTH DAKOTA, OHIO, OKLAHOMA, OREGON, RHODE ISLAND, SOUTH DAKOTA, UTAH, VERMONT, VIRGINIA, WASHINGTON, WISCONSIN AND WYOMING.

FOR TRANE EQUIPMENT, CALL TRANE NATIONAL ACCOUNT TEAM @ (800)453-6954 TO COORDINATE THE PURCHASE ORDER AGREEMENT AND EQUIPMENT DELIVERY.



BILL OF MATERIAL		
THE FOLLOWING CONTROLS TO BE FURNISHED BY TEMPERATURE CONTROL CONTRACTOR		
TAG	TRANE	REMARKS
(T)	BAYSENS019B OR BAYSENS119A	FOR ALL RTUS FURNISH A SWITCHING BASE FOR HEAT, COOL AND FAN-OFF-AUTO
(S)	BAYSENS077A	REMOTE SENSOR FOR ALL RTUS EXCEPT PHARMACY AND 1 HR PHOTO
(T)	N/A	FOR RTU'S THAT HAVE THE HUMIDIFIER OPTION
(H)	BAYSENS036A	HUMIDITY SENSOR, COLUMN OR WALL MOUNTED
(T)	HONEYWELL MODEL TH8320U1006	FOR ENTRANCE HEATER WITH Q7100A1010 SUBBASE
(S)	HONEYWELL MODEL C718BU1005	REMOTE SENSOR FOR ENTRANCE HEATER
(CO2)	BAYD02K001B	CO2 SENSOR, COLUMN OR WALL MOUNTED



PACKAGE ROOFTOP AIR CONDITIONING UNIT (RTU) SCHEDULE

ID MARK	AREAS SERVED	SUPPLY FAN DATA				COOLING DATA				HEATING DATA		ELECT.		NOTES	MANUFACTURER			
		DESIGN G.A.I. CFM	EVAP. AIRFLOW CFM	UNIT ESP. IN. WC	EVAP. FAN BHP	COOL. CAP. TONS	REFRIG. TONS	TOTAL NET TONS	SEER/EER	FUEL	HEAT INPUT MBH	HEAT SET POINT	UNIT		UNIT	MAKE	MODEL	
RTU-1	SALES-ENTRANCE	0	2000	.5"	0.87	4.4	5.0	63.87	47.55	-/15.0	NG	130	104	32.1	45	1,4,5,8,10,12,13,14	TRANE	YHC-080
RTU-2	SALES-OFFICE	360	2000	.5"	0.87	4.3	5.0	63.21	45.32	-/15.0	NG	130	104	32.1	45	1,4,5,8,10,12,13,14	TRANE	YHC-080
RTU-3	SALES-INTERIOR	935	5000	.8"	1.91	11.5	12.5	157.7	115.7	-/12.0	NG	250	203	71.0	80	ALL	TRANE	YCD-1510
RTU-4	PHARMACY	185	1950	.5"	0.85	4.2	5.0	63.77	46.20	-/15.0	NG	130	104	32.1	45	1,4,8,10,12,13,14	TRANE	YHC-080
RTU-5	STOCK ROOM	180	1200	.5"	0.32	2.6	3.0	39.93	31.33	-/13.0	NG	120	96	21.9	30	1,4,8,10,12,13,14	TRANE	YHC-036
-	NOT USED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS		1680				27.0	30.5	388.48	286.10									

NOTE 1 *DESIGN CONDITIONS CONDENSER AND OUTSIDE AIR FOR COOLING: 83-DB 70-WB OUTSIDE AIR FOR HEATING: 2-DB.

NOTE 2 NOT USED

NOTE 3 NOT USED

NOTE 4 ECONOMIZER WITH ENTHALPY CONTROL

NOTE 5 DUCT SMOKE DETECTOR, FACTORY INSTALLED, WIRED TO SHUTDOWN RTU, MOUNT ON THE RETURN UNLESS DICTATED OTHERWISE BY THE LOCAL AUTHORITY.

NOTE 6 NOT USED

NOTE 7 NOT USED

NOTE 8 PROGRAMMABLE THERMOSTATS - ELECTRONIC TYPE-2 STAGE.

NOTE 9 NOT USED

NOTE 10 ANTI-CORROSION COATING FOR THE CONDENSER COIL.

NOTE 11 POWER EXHAUST OPTION.

NOTE 12 14" ROOF CURBS.

NOTE 13 FACTORY INSTALLED & WIRED ELECTRICAL DISCONNECT SWITCH.

NOTE 14 FOR ADDITIONAL REQUIREMENTS APPLICABLE TO ALL RTUS, REFER TO THE HVAC SPECIFICATION 15500.

FAN SCHEDULE

UNIT	AREA SERVED	CFM	SP. IN. WC	MOTOR		RPM	MAKE AND MODEL	REMARKS
				HP	VOLTS PHASE			
EF-1	TOILETS PORTER'S CLOSET	550	.375	1/15	120 1	1550	GREENHECK G-90-DGEX-QD-D	PROVIDE BACKDRAFT DAMPER, INT. DISC. SWITCH, SPEED CONTROL & ROOF CURB.
EF-2	EMPLOYEE ROOM	450	.375	1/15	120 1	1550	GREENHECK G-90-DGEX-QD-D	CONTROLLED BY LIGHTING CIRCUIT. PROVIDE BACKDRAFT DAMPER, INT. DISC. SWITCH, SPEED CONTROL & ROOF CURB.
EF-3	TRASH RM EXH	50	.375	54 W	120 1	807	GREENHECK SP-BB0	OPERATES CONTINUOUSLY. PROVIDE BACKDRAFT DAMPER, INT. DISC. SWITCH, SPEED CONTROL.

INSTALL THE SPEED CONTROL INSIDE THE EXHAUST FAN DOME NEAR THE MOTOR.

ACCEPTABLE MANUFACTURERS FOR EXHAUST FANS: (SEE FAN SCHEDULE REMARKS) - ACME, CARNES, COOK, I.L.G. JENN AND PENN.

HEATER SCHEDULE

UNIT	AREA SERVED	OUTPUT	CFM	MOTOR		TYPE	MAKE AND MODEL
				HP	VOLT PHASE		
EH-1	ENTRANCE	120,000 BTUH	2000	3/4	208/3 PH	OUTDOOR, POWER VENTED, GAS FIRED, PACKED DUCT FURNACE/ BLOWER UNIT W/FILTER SECTION.	** TRANE-GRAA15
EW-1	PASSAGE #3 W/EXTERIOR DOOR	4 KW				ELECTRIC WALL HEATER	* SEE ELECTRICAL DRAWINGS
EW-2	SUPPORT ROOM W/EXTERIOR DOOR	1.25 KW				ELECTRIC BASEBOARD HEATER	* SEE ELECTRICAL DRAWINGS
GUH-1	INTERNAL TRASH	24,600 BTUH	456	0.02	120/1 PH	INDOOR, SEPARATED COMBUSTION, GAS FIRED UNIT HEATER.	*** REZNOR UDAS-30
AC-1	DOUBLE SWING RECEIVING DOOR	(2) 20 KW 208/3 PH	2072	1/5	208/1 PH	AIR CURTAIN WITH ELECTRIC HEAT AND THERMOSTAT.	**** BERNER MODEL MAX1072EX-150-WAG

* EWH-1 FURNISHED BY ELECTRICAL CONTRACTOR AT WALGREEN'S EXPENSE. EWH-2 FURNISHED BY MECHANICAL CONTRACTOR AT BUILDING OWNER'S EXPENSE.

** PROVIDE HEAT EXCHANGER WITH A 10 YEAR WARRANTY, 0.5 IN. WC E.S.P., TWO STAGE BURNER, TWO STAGE THERMOSTAT, WITH REMOTE SENSOR (LOCATED IN SALES). ALSO, WHEN A VESTIBULE IS PRESENT, PROVIDE A THERMOSTAT IN THE VESTIBULE (SET @ 55 DEG. F.) TO PREVENT A FREEZING CONDITION (HONEYWELL MODEL T67BA OR EQUAL). ALTERNATE MANUFACTURERS FOR ENTRANCE HEATER: REZNOR HRPB-150, MODINE-HDP150, GREENHECK - 10X-HV-110.

*** PROVIDE UNIT HEATER WITH VERTICAL CAVENT KIT WITH CONCENTRIC ADAPTER WITH ROOF CAP AND THERMOSTAT WITH LOCKING GUARD.

**** PROVIDE AIR CURTAIN WITH DOUBLE SWING DOOR CONTROL, FAN AND HEAT CONTROL, SUMMER FAN CONTROL, TIME DELAY, WALL PREWIRED THERMOSTAT, ADJUSTABLE, PRESET TO 80 DEG. F. (PACKAGE CONTROL SYSTEM), MOUNTING BRACKET, FED FROM A SINGLE 60A MAX. CIRCUIT, 120V, 1Ø FOR AIR CURTAIN W/O ELECTRIC HEAT. (CONTACT WILLIAMSON & COMPANY @ 847-674-0000 FOR BERNER UNIT).

MECHANICAL CONTRACTOR SHALL FURNISH AIR CURTAIN. ELECTRICAL CONTRACTOR SHALL INSTALL AIR CURTAIN.

Walgreens

FACILITIES PLANNING, DESIGN, & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-5105

PROJECT ARCHITECT

Landry
ARCHITECTS
PLANNING & ENGINEERING

PROJECT ENGINEER



CONSULTANT PROJECT NO. 0739

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:

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

STORE BUILDING

- NEW
REMODELING
RELOCATION
OTHERS
- NEW
EXISTING
NEW SHELL ONLY

CONSTRUCTION NOTE:

TENANTS MUST REMAIN OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.

NO.	DATE	BY	DESCRIPTION	CONST
3	07/08/10	DMM	BULLETH #3	
2	11/23/08	DMM	BULLETH #2	
1	10/05/08	DMM	BULLETH #1	

REVISIONS

CERTIFICATION AND SEAL

ARCHITECT	ENGINEER

STORE NUMBER 11886

PROJECT NAME
Walgreens Store
(SWC) Marginal & Chestnut
Portland, ME

DRAWING TITLE
EQUIPMENT SCHEDULE AND CONTROL

CADD PLOT:	SCALE: AS NOTED	DRAWING NO.
VOID PLOT:	DRAWN BY: J.A.H.	M2.2
SUPERSEDES PLAN DATED:	DATE ISSUED: 04/29/08 BMS	
	REVIEWED BY: J.H.C.	

OF 3 DWGS.



CITY OF PORTLAND, MAINE
 Department of Building Inspections

Original Receipt

12-17 2010

Received from 116 AC Services

Location of Work 127 Marginal Way

Cost of Construction \$ _____ Building Fee: _____

Permit Fee \$ _____ Site Fee: _____

Certificate of Occupancy Fee: _____

Total: 800

Building (1L) _____ Plumbing (15) _____ Electrical (12) _____ Site Plan (U2) _____

Other ITAC

CBL: _____

Check #: _____ Total Collected \$ 800

**No work is to be started until permit issued.
 Please keep original receipt for your records.**

Taken by: S. P.

WHITE - Applicant's Copy
 YELLOW - Office Copy
 PINK - Permit Copy