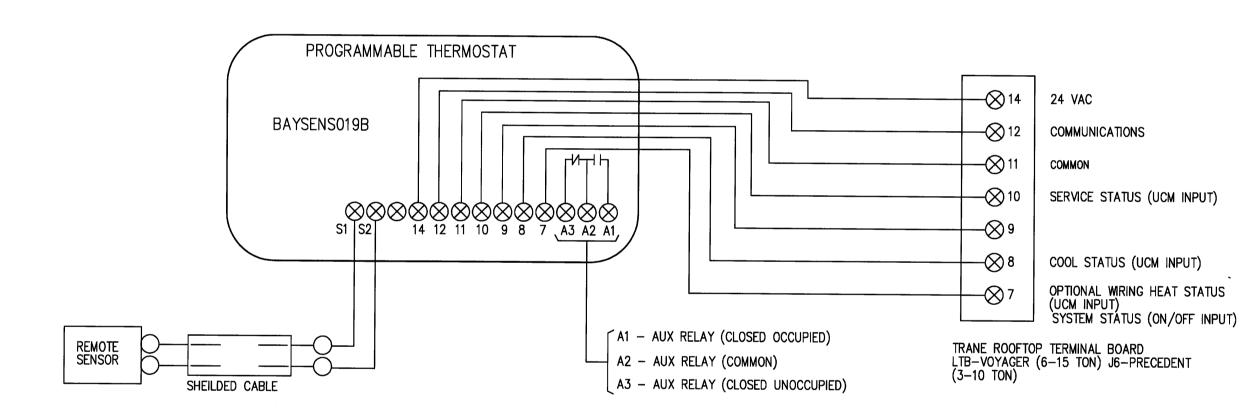
| | WALGREE | NS - H.V.A.C. LOAD SCHE | DULE | | | | |
|-------------------------|----------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------|--|--|--|--|
| ROOF TOP UNIT NUMBER | OCCUPANT LOAD | REQUIRED FRESH-AIR-INTAKE | MISC. LOADS | | | | |
| RTU 1 | ZERO OCCUPANTS | ZERO FRESH AIR | 3 CASH REG. = 2250 BTU/H | | | | |
| RTU 2 | 9 CUSTOMERS 7 EMPLOYEES | 16 PEOPLE (15 CFM / PERSON) = 240 CFM | OFFICE = 7500 BTU/H EMPLOYEE = 5100 BTU/H TOTAL = 12600 BTU/H | | | | |
| RTU 3 | 55 CUSTOMERS | 55 PEOPLE (15 CFM / PERSON) = 825 CFM ADDITIONAL MAKE-UP AIR = 90 CFM | 1 CASH REG. = 750 BTU/H | | | | |
| RTU 4 | 17 EMPLOYEES | 17 PEOPLE (15 CFM / PERSON) = 255 CFM | PHARMACY = 15300 BTU/H TRAINING RM. = 2250 BTU/H TOTAL = 17550 BTU/H | | | | |
| RTU 5 | 3 EMPLOYEES | 3 PEOPLE (15 CFM / PERSON) = 45 CFM | N/A | | | | |
| RTU 6 | 3 EMPLOYEES | 3 PEOPLE (15 CFM / PERSON) = 45 CFM | PHOTO AREA = 21000 BTU/H | | | | |
| RTU 7 | ZERO OCCUPANTS | 45 CFM | CELLAR | | | | |
| TOTAL | 94 OCCUPANTS | 1545 CFM | 54150 BTU/H | | | | |

| | DESIGN CRITERIA SHOWN BASED ON 2001 ASHRAE FUNDAMENTALS | | | | | | | | | | |
|-------------------------|------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|
| ASHRAE LOC | ASHRAE LOCATION PORTLAND, ME | | | | | | | | | | |
| PROJECT EL | EVATION 48 FT | | | | | | | | | | |
| COOLING TABLE 1B | 83 DEGREES F. DRY BULB 70 DEGREES F. WET BULB | | | | | | | | | | |
| HEATING TABLE 1A | | | | | | | | | | | |
| | MECHANICAL INTERNATIONAL BUILDING CODE <u>MECHANICAL CODE</u> | | | | | | | | | | |
| OCCUPANC' CLASSIFICA | Y TION SPECIALTY SHOPS, DRUGS | | | | | | | | | | |
| | | | | | | | | | | | |

| COOLING S | SET POINTS | | | HEATING S | ET POINTS | | | | |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|--------------------------------|------------------------------|--|--|--|--|
| 8AM-IOPM OCCUPIED DEG.F. | IOPM-BAM NOT- OCCUPIED | HVAC UNIT NO. | AREA | 8AM-IOPM OCCUPIED DEG.F. | IOPM-8AM NOT- OCCUPIED | | | | |
| NA. | NA | EH-I | ENTRANCE HEATER | 48 | 55 | | | | |
| 74 | 80 | RTU-I | ENTRANCE RTU | 70 | 60 | | | | |
| 74 | 80 | RTU-2 | OFFICE/SALES | 10 | 40 | | | | |
| 74 | 80 | RTU-3 | INTERIOR SALES | 70 | 40 | | | | |
| 72 | 76 | RTU-4 | PHARMACY, ETC. | ОГ | 40 | | | | |
| 78 | 80 | RTU-5 | GENERAL STOCK | 70 | 40 | | | | |
| 74 | 80 | RTU-6 | PHOTO | OF | 60 | | | | |
| 80 | 80 | RTU-1 | CELLAR | 60 | 40 | | | | |
| . 54DF - DEW | POINT FOR ENTIRE | BUILDING - | EQUALS 53% RH AT 14DB. | | | | | | |
| 20 | IN HUMID CLIMATES (74 DF WB OR GREATER), DO NOT RAISE THE COOLING SET POINTS FOR RTU-1,2,3 OR 4, WHEN THE BUILDING IS NOT OCCUPIED. | | | | | | | | |
| INT | TERLOCK THE C | ODE OUT | SIDE AIR ON RTU-3 TO | TOILET EXHA | ust. | | | | |
| " Al | UTO CYCLE" RT | 'U's AND | 4 IF THEY DO NOT HA | VE CODE OUT | SIDE AIR. | | | | |



TRANE BRAND HVAC CONTROL DIAGRAM (EACH UNIT) NOTE: ABOVE WIRING DIAGRAM ARRANGEMENT ARE APPLICABLE FOR PROJECTS WITH OR WITHOUT ECONOMIZER

| | HVAC CONTROLS | | | | | | | | | | | |
|-----|---------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| | | BILL OF MATE | RIAL | | | | | | | | | |
| | THE FOLLOW | ING CONTROLS TO BE FURNISHED BY | TEMPERATURE CONTROL CONTRACTOR | | | | | | | | | |
| NO. | QUANTITY | MAKE | REMARKS | | | | | | | | | |
| T1 | 1 (PER UNIT) | TRANE BAYENS019B | -20%%D F TO 80%%D F SCALE 1 DEGREE DIFFERENCE (USE AS COMPRESSOR LOCKOUT SET AT 50%%D F). | | | | | | | | | |
| T2 | 1 (PER UNIT) | TRANE BAYENS019B | NOTE: FOR PHARMACY AND 1 HOUR PHOTO UNIT USE T7300F2010/Q7300A2016 (SWITCHING BASE) | | | | | | | | | |
| | 1 (PER UNIT) | TRANE BAYENS017B | REMOTE SENSOR (NOTE: EXCEPT PHARMACY AND 1 HR PHOTO UNIT) | | | | | | | | | |
| | 1 | TRANE BAYSENS016A | DUCT MOUNTED TEMPERATURE SENSOR | | | | | | | | | |
| Т3 | 1 (PER UNIT) | HONEYWELL TH830U1006 AND HONEYWELL C7189U1005 REMOTE SENSOR | NOTE: FOR ENTRANCE HEATER WITH Q7100A1010 SUBBASE | | | | | | | | | |

REMOTE SENSOR IS TO BE MOUNTED ON COLUMN (OR WALL), 6'-0" UP, WITH THE SUBBASE LOCATED IN OFFICE. CONNECT REMOTE SENSOR TO T-T TERMINALS OF SUBBASE VIA TWO (2) #18 AWG SHIELDED, TWISTED PAIR WIRES, BELDEN 8719, SEE CONTROL WIRING DIAGRAM. (DO NOT USE THEREMOTE SENSOR OPTION ON THE PHARMACY UNIT).

TRANE EQUIPMENT WILL UTILIZE TRANE TEMPERATURE CONTROL. CHECK WITH LOCAL EQUIPMENT DEALER TO VERIFY MODEL NUMBERS. TRANE TEMPERATURE CONTROL UNIT MUST BE REPROGRAMMED TO OPERATE ACCURATELY WITH REMOTE SENSOR.

ALL CONTROLS SUCH AS THERMOSTATS, ETC SHALL HAVE A LABEL (USING P-TOUCH LABELING MACHINE) TO IDENTIFY WHICH UNIT IS BEING CONTROLLED,— SUCH AS RTU-1, ETC.

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, FLORIDA, HAWAII, IDAHO, IOWA, KANSAS, LOUISIANA, MASSACHUSETTS, MAINE, MINNESOTA, MISSOURI, NEW HAMPSHIRE, NEW MEXICO, NORTH CAROLINA, NORTH DAKOTA, OHIO, OKLAHOMA, OREGON, RHODE ISLAND, SOUTH DAKOTA, TEXAS, 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.

PACKAGE ROOFTOP AIR CONDITIONING UNIT (RTU) SCHEDULE

| | | EV | APORA | TOR FA | N DAT | Α | COOLING DATA | | | | | | | HEATING DATA | | | 4 | ELECT. | | NOTES | MAN | UFACTURER | |
|------------|-----------------------|---------------|------------------|-------------|--------------|--------------------|--------------|-----------------|----------------|---------------------|-----------------|-----------------|------|--------------|------------|-----------|----------------|--------------------------------|-------------|----------------------|-------|-----------|--|
| ID Mark | AREAS SERVED | DESIGN | EVAP. AIRFLOW | UNIT ESP | EVAP. FAN | FAN MOTOR HP | NO. | CAI | PACITY LEAVING | | DISCHAF FROM | RGE AIR UNIT | EER | RE- HEAT | RE- HEAT F | | GAS FURNACE | GAS FIRED FURNACE (2—STAGE) | | 3–60 | | | |
| - | | O.A.I. CFM | CFM | IN.WC. | BHP | HP | OF COMP. | NOMINAL TONS | TOTAL NET | SENSIBLE NET MBH | D.B. DEG. F. | W.B. DEG. F. | | OUT MBH | MBH | IN MBH | OUT MBH | UNIT MCA | UNIT MOP | | MAKE | MODEL | |
| RTU-1 | SALES-ENTRANCE | 0 | 2000 | 0.50 | 1.05 | 1.0 | 1 | 5 | 53.58 | 43.86 | 56.4 | 54.4 | 13.0 | | | 80.0 | 66.7 | 28.8 | 45 | 1,3,4,6,7,9,12,13 | TRANE | YHC063 | |
| | | | | | | | | | | | | | | | | | | | | 1,0,1,0,7,0,12,10 | | 741 lbs | |
| RTU-2 | SALES-OFFICE-EMPLOYEE | 240 | 1600 | 0.50 | 0.55 | 1.0 | 1 | 4 | 42.92 | 36.02 | 55.8 | 54.4 | 13.0 | | | 60.0 | 49.8 | 22.6 | 35 | 1,3,4,6,7,9,12,13 | TRANE | YHC043 | |
| | | | | | | | | | | | | | | | | | | | | 1,0,1,0,7,0,12,10 | | 706 lbs | |
| RTU-3 | SALES CENTER | 915 | 5000 | 0.75 | 2.47 | 3.0 | 2 | 12.5 | 132.12 | 102.99 | 57.5 | 54.6 | 11.3 | | | 250.0 | 209.4 | 64.0 | 80 | 1,3,4,6,7,9,12,13 | TRANE | YCD151 | |
| | | | | | | | | | | | | | | | | 200.0 | 200.1 | 0 1.0 | 00 | 1,0,7,0,7,0,12,10 | | 1926 lbs | |
| RTU-4 | PHARMACY | 255 | 2000 | 0.50 | 1.05 | 1.0 | 1 | 5 | 53.58 | 43.86 | 56.4 | 54.4 | 13.0 | | | 60.0 | 50.7 | 28.8 | 45 | 1 7 4 6 7 0 10 17 | TRANE | YHC063 | |
| | | | | | | ļ | | | | | | | | | | 00.0 | 00.7 | 20.0 | | 1,3,4,6,7,9,12,13 | | 741 lbs | |
| RTU-5 | STOCK ROOM | 45 | 1200 | 0.50 | 0.41 | 0.5 | 1 | 3 | 34.10 | 27.82 | 56.2 | 54.2 | 13.0 | | | 60.0 | 49.0 | 19.9 | 30 | 1746701017 | TRANE | YHC033 | |
| | | | | | | | | | | | | | 10.0 | | | | 10.0 | 10.0 | | 1,3,4,6,7,9,12,13 | | 664 lbs | |
| RTU-6 | РНОТО | 45 | 1200 | 0.50 | 0.41 | 0.5 | 1 | 3 | 34.10 | 27.82 | 56.2 | 54.2 | 13.0 | | | 60.0 | 49.0 | 19.9 | 30 | 1746704047 | TRANE | YHC033 | |
| | | | | | | | | | | 27.02 | 00.2 | <u> </u> | 10.0 | | | 00.0 | T3.0 | 13.3 | 50 | 1,3,4,6,7,9,12,13 | | 664 lbs | |
| RTU-7 | CELLAR | 45 | 1200 | 0.50 | 0.41 | 0.5 | 1 | 3 | 34.10 | 27.82 | 56.2 | 54.2 | 13.0 | | | 60.0 | 49.0 | 19.9 | 30 | 174670444647 | TRANE | YHC033 | |
| | | | | | | | | | | 27.02 | JJ.2 | 0 7.2 | 10.0 | | | 00.0 | T3.0 | 13.3 | 50 | 1,3,4,6,7,9,11,12,13 | | 664 lbs | |
| | TOTALS | 1545 | | | | | | 35.5 | 384.50 | 310.19 | | | | | | | | | | | | | |

NOTES:

NOTE NO.1 COOLING DESIGN CONDITIONS: CONDENSER AIR & OUTSIDE AIR 83 DB & 70 WB. HEATING DESIGN CONDITIONS:

NOTE NO.2 DEHUMIDIFICATION OPTION BY TRANE USING COMPRESSOR REHEAT CONTROLLED BY A HUMIDISTAT (SPECIFY WHEN THE DESIGN WET BULB IS 74 DEG. F. OR

NOTE NO.3 ECONOMIZER WITH DRY BULB CONTROL (WHEN REQUIRED BY CODE ORWHEN THE DESIGN OUTSIDE SUMMER WET BULB IS LESS THAN 74 DEG. F.) SPECIFY ON ALL RTUS. ALSO, SPECIFY AN ECONOMIZER ON THE PHARMACY AND PHOTO RTUS WHEN THE OUTSIDE WINTER DESIGN TEMPERATURE IS 15 DEG. F. OR LESS).

NOTE NO.4 LOW AMBIENT KIT DOWN TO ZERO DEG. F. (SPECIFY ONLY WHEN REQUIRED.)(DOWN TO 25 DEG. F. IS STANDARD).

NOTE NO.5 NOT USED.

NOTE NO.6 ELECTRONIC PROGRAMMABLE THERMOSTAT

NOTE NO.7 DUCT SMOKE DETECTOR FACTORY INSTALLED, WIRED BUT NOT POWERED FROM THE RTU - (REFER TO SPECIFICATIONS))(MOUNT ON SUPPLY)

NOTE NO.8 DEMAND CONTROLLED VENTILATION "DCV" WITH CO2 SENSOR. (SPECIFY ON RTU-1 AND RTU-2 WHEN THE CODE OUTSIDE AIR REQUIREMENT IS HICH)

NOTE NO.9 ANTI-CORROSION COATING FOR THE CONDENSER COIL - SEE SPECIFICATIONS (SPECIFY 5 MILES OR LESS FROM THE SALT WATER)

NOTE NO.10 CONVENIENCE ELECTRICAL OUTLET, 110 VOLT, UNIT MOUNTED , POWERED FROM RTU. NORMALLY NOT SPECIFIED)

NOTE NO.11 POWER EXHAUST OPTION (SPECIFY ONLY WHEN REQUIRED)

NOTE NO.12 FOR HEATING OPTIONS AND FOR ADDITIONAL REQUIREMENTS COMMON TO ALL UNITS, REFER TO THE HVAC SPECIFICATION (SECTION 15500).

NOTE NO.13 INSTALL GAS PIPE UP THRU ROOF. REFER TO DETAIL 9/P2.1.

| | FAN SCHEDULE | | | | | | | | | | | | | |
|------|---------------|-------------|----------------|----------|-----------------------|------|-----------------------------|---------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| UNIT | AREA SERVED | CFM. | SP. IN. WG. | MO HP | TOR VOLTS PHASE | RPM | MAKE AND MODEL | REMARKS | | | | | | |
| EF-1 | TOILETS | 550 | .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-2 | EMPLOYEE ROOM | 4 50 | .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. | | | | | | |
| | | | | | | | | | | | | | | |

INSTALL THE SPEED CONTROL INSIDE THE EXHAUST FAN DOME NEAR THE MOTOR. ACCEPTABLE MANUFACTURERS FOR EXHAUST FANS: (SEE FAN SCHEDULE REMARKS) EF-1,2 - ACME - PRN100U; CARNES - VEDK 08; COOK - ACE-D-90C15DH: ILG - CRDA08: JENN - RED810-ST AND PENN - DX11R.

| AIR CURTAIN & ENTRANCE HEATER SCHEDULE | | | | | | | | | | |
|----------------------------------------|---------------------------------------|-------------------|------|-----------------------|--------------|--------------------------------------------------------------------------------------|----------------------------------------|--|--|--|
| UNIT | AREA SERVED BTU/HR OUTPUT OR KILOWATT | | CFM | MOTOR HP. VOLT PHASE | | TYPE | MAKE AND MODEL | | | |
| AC-1 | OVERHEAD RECEIVING DOOR | 20 KW 208/3 PH | 2072 | 1/5 | 208/ 1 PH | AIR CURTAIN WITH 20 KW ELECTRIC HEAT AND THERMOSTAT. | BERNER MODEL MAXAIR *** MAX1072ED-WAG | | | |
| EH-1 | ENTRANCE | 120,000 | 2000 | 3/4 | 208/ 3PH | OUTDOOR, POWER VENTED, GAS FIRED, PACKED DUCT FURNACE/ BLOWER UNIT W/FILTER SECTION. | ** TRANE-GRAA15 | | | |

- ** PROVIDE WITH HEAT EXCHANGER, TWO STAGE BURNER, WALL THERMOSTAT, WALL SENSOR, AND 10 YEAR HEAT EXCHANGER WARRANTY. ALTERNATE MANUFACTURERS FOR ENTRANCE HEATER: REZNOR HRPB-150 AND MODINE-HDP150, GREENHECK 1GX-HV-110, ESP= 0.5 IN.
- PROVIDE AIR CURTAIN WITH DOOR CONTROL, FAN AND HEAT CONTROL, SUMMER FAN CONTROL, TIME DELAY, 8'-0" CAPILLARY TEMP. SENSOR (PACKAGE CONTROL SYSTEM), MOUNTING BRACKET, 120V, 1PH FOR AIR CURTAIN W/O ELECTRIC HEAT. (CONTACT WILLIAMSON & COMPANY @ 847-674-0000 FOR BERNER UNIT) ALTERNATE TMI INC.

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

MOESER & ASSOCIATES ARCHITECT

DRAWINGS/SPECIFICATIONS BY:

LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY: ☐ WALGREENS' CONTRACTOR

■ LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

REMODELING. EXISTING RELOCATION. NEW SHELL ONLY . . . OTHERS

DATE BY DESCRIPTION CONS **REVISIONS** CERTIFICATION AND SEAL HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME

OR UNDER MY DIRECT SUPERVISION AND THAT AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AS SIGNIFIED BY MY HAND

FISCAL 2007 CRITERIA - STORE #12325

WALGREENS 616 FOREST AVENUE PORTLAND, MAINE

HVAC CONTROL WIRING DIAGRAMS AND SCHEDULES

DRAWING TITLE

CADD PLOT: SCALE: AS NOTED DRAWING NO. DRAWN BY **VOID PLOT:** DATE: 12-10-08 RELEASED TO CONSTRUCTION | REVIEWED BY:

MOESER & ASSOC. 2007 BASE w/ CONST. BULLETINS 020701 - 020759 MOESER & ASSOC. JOB #08074