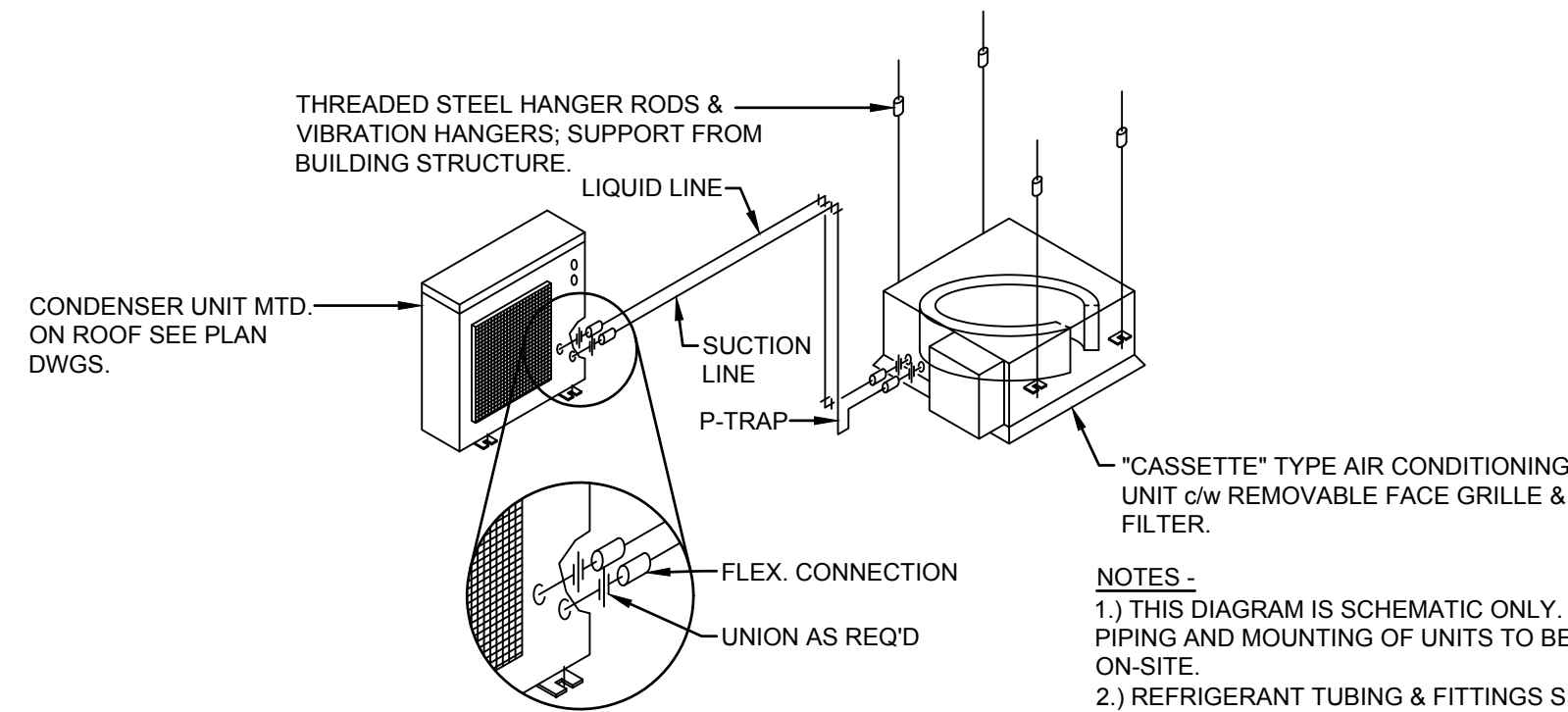


2 ROOFTOP UNIT DETAIL

Scale: NONE



NOTES -

- 1.) THIS DIAGRAM IS SCHEMATIC ONLY. EXACT ROUTING OF PIPING AND MOUNTING OF UNITS TO BE DETERMINED ON SITE.
- 2.) REFRIGERANT TUBING & FITTINGS SHALL BE PROCESSED TUBING SUITABLE FOR THIS APPLICATION; DEOXIDIZED, DEHYDRATED & SEALED, TYPE ACR w BRAZED JOINTS. INSULATED SUCTION LINE w 25mm thk ELASTOMER PIPE INSULATION.

3 DUCTLESS SPLIT SYSTEM DETAIL

Scale: NONE

DUCTLESS SPLIT SYSTEM SCHEDULE

INDOOR UNIT													OUTDOOR UNIT						NOTES	
PLAN MARK	MANUFACTURER / MODEL #	TEDB (° F)	TEWB (° F)	SUPPLY AIR (CFM)	VOLTS/MCA/MOCP	HEATING CAPACITY INPUT (MBH)	HEATING CAPACITY OUTPUT (MBH)	OUTSIDE AIR (CFM)	FILTER TYPE	AMBIENT AIR (° F)	HEATING STAGE(S)	WEIGHT (LBS.)	PLAN MARK	MODEL # (SAME MANUFACTURER AS INDOOR UNIT)	TOTAL CLG CAPACITY (MBH/TON/SEER)	VOLTS/MCA/MOCP	COOLING STAGE(S)	T-STAT TYPE		WEIGHT (LBS.)
AHU-1	LG / LCN127HV4	80	67	335	208/230-1-60/11/-	-	14	-	MERV 10	90.4	ONE	31	CU-1	LUU127HV	12.4/1/19.4	208/230-1-60/12.3/15	ONE	PROGRAMM.	82	1,2,3,4,5

NOTES:

1. PROVIDE W/ CONDENSER MOUNTING BRACKETS.
2. RUN CONDENSATE LINE TO NEAREST SANITARY.
3. SUCTION AND LIQUID LINE SIZES AS REQUIRED PER MANUFACTURER RECOMMENDATION.
4. SINGLE POINT ELECTRICAL CONNECTION
5. PROVIDE WITH PROGRAMMABLE THERMOSTAT, LOW AMBIENT WIND BAFFLE AND CASSETTE GRILLE.

OUTSIDE AIR CALCULATION

BASED ON 2007 ASHRAE

Zone Name / Space Name	Mult.	Floor Area (ft²)	Maximum Occupants	Required Outdoor Air (CFM/person)	Required Outdoor Air (CFM/ft²)	Uncorrected Outdoor Air (CFM)
Zone 1						
Backbar	1	390.0	3.0	7.50	0.18	92.7
RR	1	102.0	0.0	0.00	0.00	0.0
Cafe	1	805.0	26.0	7.50	0.18	339.9
Work Room	1	398.0	2.0	0.00	0.12	47.8
Totals (incl. Space Multipliers)						480.4

TOTAL O.A. REQUIRED = 480 CFM
TOTAL O.A. PROVIDED = 480 CFM

ROOFTOP PACKAGED UNIT SCHEDULE

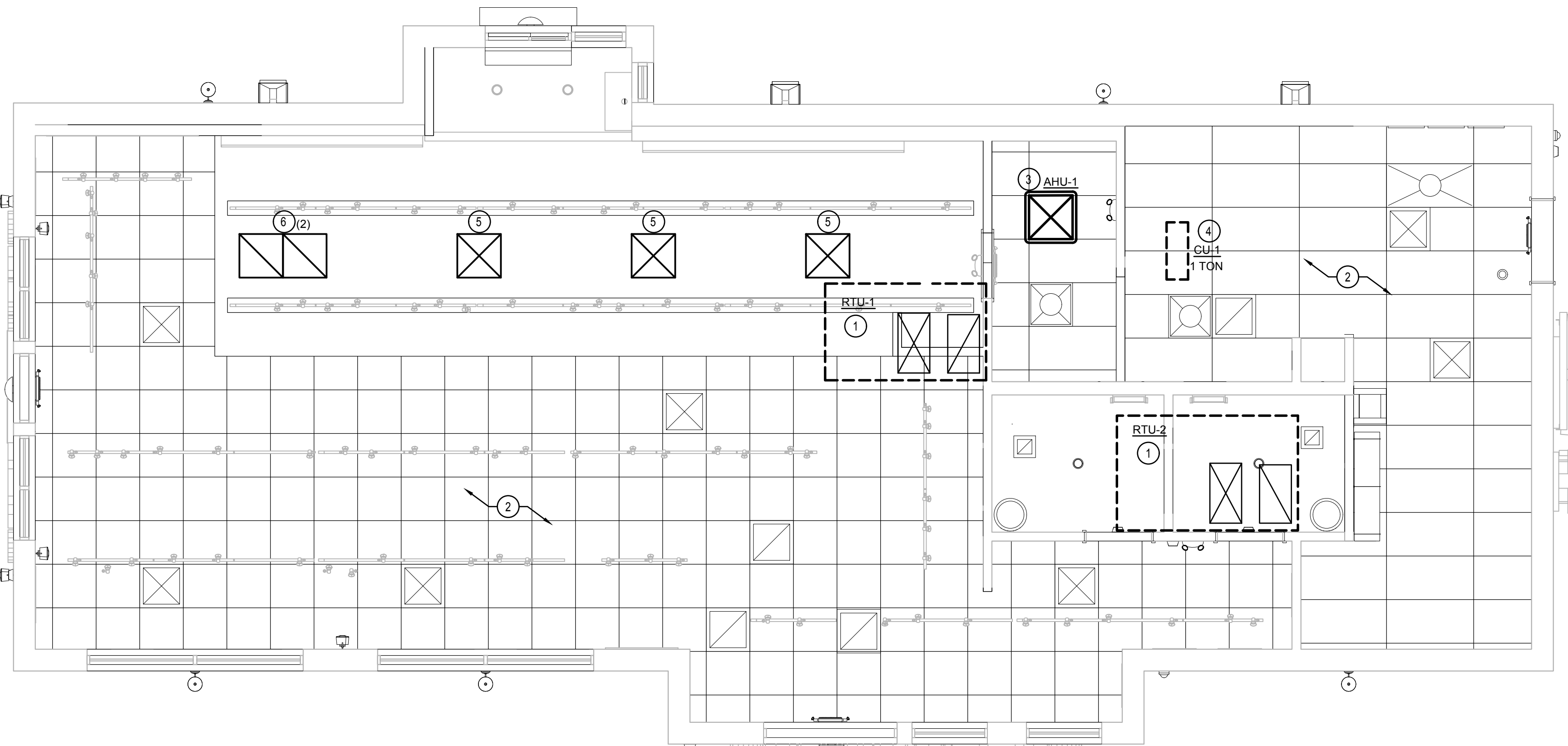
MARK	MANUFACTURER & MODEL	SUPPLY FAN			E.A.T. DB/WB	CLG CAP. (TOTAL/SENS)	HTG. CAP.		AUX. HEAT (KW)	ELECTRICAL					EER	SEER	NOTES	WEIGHT (LB)
		CFM	O.A.	E.S.P.			IN (MBH)	OUT (MBH)		V	PH	Hz	MCA	MOCP				
RTU-1	TRANE YSC060G4RMA	2000	340	0.68	80/67	60.08/53.91	80	68.59	-	208	3	60	12.9	20	-	14.0	1,2,3,4,5,6	798
RTU-2	TRANE YSC090F4RLA	3000	140	0.64	80/67	94.59/45.47	120	100.42	-	208	3	60	19.5	30	11.2	-	1,2,3,4,5,6,7	1021

NOTES:

1. NEW ELECTRIC COOLING/GAS HEATING ROOFTOP PACKAGED UNIT TO REPLACE EXISTING. VERIFY FINAL LOCATION AT JOBSITE.
2. HIGH EFFICIENCY, DOWN DISCHARGE CONFIGURATION.
3. PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH.
4. PROVIDE WITH NON-POWERED CONVENIENCE SERVICE OUTLET (115V GFCI).
5. PROVIDE WITH FACTORY INSTALLED ENTHALPY TYPE ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.
6. PROVIDE FACTORY INSTALLED SMOKE DETECTOR IN RETURN AIR DUCT TO SHUT DOWN UNIT UPON DETECTION.
7. PROVIDE WITH POWER EXHAUST.

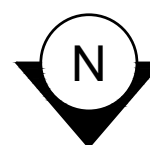
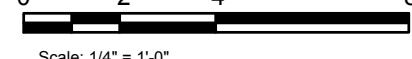
(X) SHEET NOTES

1. REPLACE EXISTING ROOFTOP UNIT WITH NEW UNIT (SEE SCHEDULE ON THIS SHEET) PER MANUFACTURER'S RECOMMENDATIONS. MOUNT ON EXISTING CURB. FACTORY INSTALLED SMOKE DETECTOR SHALL DE-ENERGIZE UNIT SUPPLY FAN IF ACTIVATED. PROVIDE PERMANENT ACCESS TO SMOKE DETECTOR. EXISTING THERMOSTATS/CONTROLS TO REMAIN. IF EXISTING CONTROLS NOT ADEQUATE, REPLACE WITH NEW 2-PIECE 7-DAY PROGRAMMABLE THERMOSTAT MOUNTED AT 44" A.F.F. AT MANAGER'S DESK AND SENSOR MOUNTED AT 60" A.F.F. IN ZONE SERVED BY RTU. FIELD VERIFY ALL CONDITIONS PRIOR TO INSTALLATION.
2. ALL EXISTING SUPPLY, RETURN, & EXHAUST DUCTWORK AND AIR DEVICES TO REMAIN. FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
3. PROVIDE & INSTALL NEW AHU-1 CEILING CASSETTE AS PART OF DUCTLESS SPLIT SYSTEM. REFER TO SCHEDULE ON THIS SHEET FOR SPECIFICATIONS. UNIT INSTALLATION SHALL BE PER LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. ROUTE TRAPPED CONDENSATE PIPING TO NEAREST SANITARY. SEE PLUMBING PLANS FOR MORE INFORMATION.
4. PROVIDE & INSTALL NEW CONDENSING UNIT CU-1 AS PART OF DUCTLESS SPLIT SYSTEM. SEE SCHEDULE ON THIS SHEET. UNIT TO BE MOUNTED ON ROOF PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE VIBRATION ISOLATORS AS REQUIRED. ROUTE REFRIGERATION LINES DOWN THRU ROOF TO AHU-1 PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH OTHER ROOFTOP EQUIPMENT.
5. PROVIDE & INSTALL NEW SUPPLY DIFFUSER WITH SURFACE MOUNT BORDER TO REPLACE EXISTING LAY-IN TYPE DIFFUSER. RECONNECT TO EXISTING BRANCH DUCT AS REQUIRED. MATCH EXISTING DIFFUSER MANUFACTURER, MODEL, AND NECK SIZE.
6. PROVIDE & INSTALL NEW RETURN GRILLE WITH SURFACE MOUNT BORDER TO REPLACE EXISTING LAY-IN TYPE GRILLE. EXTEND EXISTING BRANCH DUCT TO NEW GRILLE LOCATION AS REQUIRED. MATCH EXISTING GRILLE MANUFACTURER, MODEL, AND NECK SIZE.



1 MECHANICAL DESIGN PLAN

Scale: 1/4" = 1'-0"



STARBUCKS COFFEE COMPANY
2401 UTAH AVENUE SOUTH
SEATTLE, WASHINGTON 98134
(206) 318-1575

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NORR
ARCHITECTS PLANNERS
225 N. LESLIE ST., SUITE 500 | CHICAGO, IL 60654
1.312.424.2400 | www.norr.com

ENGINEER OF RECORD

William J. Alkemyer, P.E.
333 Marshall Avenue
St. Louis, Missouri 63119
Phone (314) 772-1782
Fax (314) 772-0708

Engineering Consultant

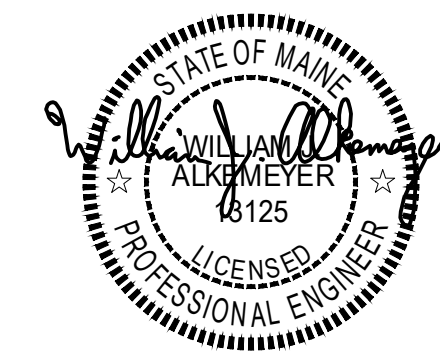
PROJECT NAME:
RENOVATION OF STARBUCKS COFFEE PORTLAND, 1080 FOREST AVE.
PROJECT ADDRESS:
1080 FOREST AVENUE
PORTLAND, ME 04103
CUMBERLAND COUNTY

STORE #: 11917
PROJECT #: 37548-037
ISSUE DATE: 08/04/2017
PROGRAM MANAGER: J. BOND
DESIGNER: A. LEE
LEED AP: R. TURNER-LAUCK
PRODUCTION DESIGNER: E. VEGA
CHECKED BY: DMC / SWE

Revision Schedule			
Rev	Date	By	Description

SHEET TITLE:
MECHANICAL DESIGN PLAN
SCALE: AS SHOWN

SHEET NUMBER:
M-1101



ISSUED FOR CONSTRUCTION - 08/23/2017