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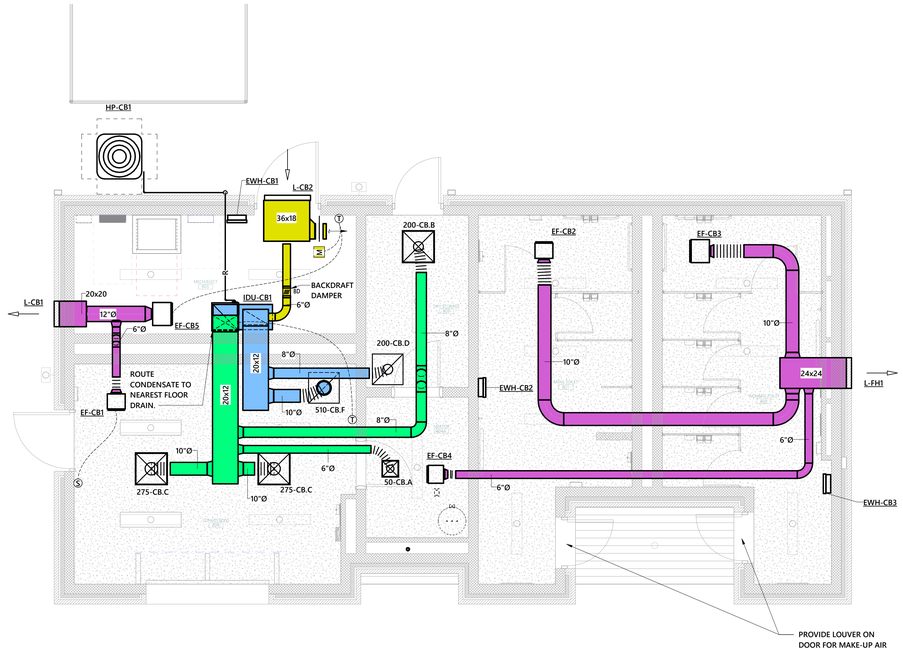
RATED WALL LEGEND

SYMBOL	DESCRIPTION
	1 HR FIRE RATED
	2 HR FIRE RATED

GENERAL NOTE: PROVIDE ACCESS DOOR OR CABLE-OPERATED DAMPER FOR VOLUME DAMPERS LOCATED ABOVE HARD CEILINGS. SEE DETAIL 3/M-502 FOR ADDITIONAL DETAILS.



1 MECHANICAL PLAN - CONCESSIONS BUILDING
1/4" = 1'-0"

ELECTRIC WALL HEATER SCHEDULE

SYMBOL	LOCATION	CFM	BTUH	KW	MOTOR RPM	MOTOR H.P.	MOTOR AMPS	MOTOR VOLT	MOTOR PH	MANUFACTURER (MARKEL)	ACCESSORIES
EWH-CB1	FIELD HOUSE	175	2560	0.75	600	0.00	6.3 A	120	1	E3313T2SRP	A,B,F,G,H
EWH-CB2	FIELD HOUSE	175	2560	0.75	600	0.00	6.3 A	120	1	E3313T2SRP	A,B,F,G,H
EWH-CB3	FIELD HOUSE	175	2560	0.75	600	0.00	6.3 A	120	1	E3313T2SRP	A,B,F,G,H

NOTES:
1. HEATING CAPACITY BASED ON 65° F E.A.T.
2. SEE PLANS FOR TYPE OF THERMOSTAT REQUIRED (WALL MOUNTED OR UNIT MOUNTED). UNIT HEATERS SHOWN WITHOUT THERMOSTAT INDICATED SHALL BE PROVIDED WITH A UNIT MOUNTED THERMOSTAT.
3. SET TO MAINTAIN 45°F.

ELECTRIC UNIT HEATER ACCESSORIES:
A. DISCONNECT SWITCH
B. BUILT IN THERMOSTAT
C. WALL MOUNTED THERMOSTAT
D. WALL MOUNTING BRACKETS
E. CEILING MOUNTED BRACKETS
F. ADJUSTABLE DISCHARGE LOUVERS
G. PENCIL PROOF LOUVERS
H. CABINET FOR SURFACE MOUNTING

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE

SYMBOL	DESCRIPTION	MANUF.	MODEL	MATERIAL	FACE SIZE	NECK SIZE	NECK WIDTH	NECK HEIGHT	INSTALLATION BORDER TYPE	OPTIONS DAMPER DESCRIPTION	NOTES
CB.A	PLAQUE FACE DIFFUSER	TITUS	OMNI-AA	ALUMINUM	12x12	6			TYPE 1 (SURFACE)	---	
CB.B	PLAQUE FACE DIFFUSER	TITUS	OMNI-AA	ALUMINUM	24x24	8			TYPE 1 (SURFACE)	---	
CB.C	PLAQUE FACE DIFFUSER	TITUS	OMNI-AA	ALUMINUM	24x24	10			TYPE 1 (SURFACE)	---	
CB.D	PERFORATED DIFFUSER	TITUS	PAR-AA	ALUMINUM	24x24	8			TYPE 1 (SURFACE)	---	
CB.F	PERFORATED DIFFUSER	TITUS	PAR-AA	ALUMINUM	24x24	12			TYPE 1 (SURFACE)	---	

AIR DISTRIBUTION SCHEDULE NOTES:
1. ALL CEILING AND WALL MOUNTED DEVICES SHALL BE FURNISHED WITH AN ENAMEL BRIGHT WHITE FINISH UNLESS NOTED OTHERWISE.
2. ALL DEVICES SHALL BE FURNISHED WITH FRAMES SUITABLE FOR THE TYPE OF INSTALLATION REQUIRED.
3. ALL DEVICES LOCATED IN ROOMS WITH HIGH HUMIDITY (BATHROOMS, JANITORS CLOSETS) SHALL BE ALUMINUM.

VARIABLE SPEED INDOOR UNIT SCHEDULE

SYMBOL	CFM	NOMINAL TONNAGE	O.A. CFM	E.S.P.	COOLING CAPACITY TC (BTUH)	COOLING CAPACITY SHC (BTUH)	HEATING CAPACITY (BTUH)	ELECTRIC AUXILIARY HEAT KW	STAGES	AMPS	VOLTAGE	PH	FAN MOTOR FLA	ELECRICAL DATA FLA	MOCP	MCA	VOLTAGE	PH	MANUFACTURER	MODEL	WEIGHT	REFRIGERANT TYPE	MATCHING OUTDOOR UNIT
IDU-CB1	800	2	90	0.40	23700	17800	22600	7	1	20.0	208	3	2.5	20.0	30.0	28.0	208 V	3	TRANE	TEM6A0B24H21+TDR	117.00 lbf	R-454B	HP-CB1

NOTES:
1. COOLING CAPACITY BASED ON 80°/67° ENTERING AIR.
2. PROVIDE UNITS WITH: ELECTRONIC 7-DAY PROGRAMMABLE THERMOSTAT, 1" THICK DISPOSABLE FILTER (MERV 8 MINIMUM), FIELD INSTALLED HEATER, U.L. LABEL, SINGLE POINT ELECTRICAL CONNECTION, 1-INCH INSULATION.
3. SEQUENCE OF OPERATION: UNIT SHALL BE CONTROLLED BY ITS ELECTRONIC 7-DAY PROGRAMMABLE THERMOSTAT. UNIT SUPPLY FAN SHALL RUN CONTINUOUSLY IN THE OCCUPIED MODE, CYCLE WITH HEATING AND COOLING WHILE UNOCCUPIED. UPON A RISE IN SPACE TEMPERATURE, UNIT COMPRESSOR AND CONDENSER FAN SHALL ACTIVATE TO SATISFY SPACE. UPON A DROP IN SPACE TEMPERATURE, UNIT COMPRESSOR SHALL ACTIVATE IN REVERSE CYCLE FOR HEATING. UPON A FURTHER DROP IN SPACE TEMPERATURE, ELECTRIC HEAT SHALL BE ENERGIZED TO SATISFY SPACE TEMPERATURE. THERMOSTATS SHALL PROVIDE A DEADBAND OF 5°, WITHIN WHICH THE SUPPLY OF HEATING OR COOLING ENERGY TO THE ZONE CAN BE REDUCED TO THE MINIMUM. OCCUPANCY SCHEDULES SHALL BE SET TO OCCUPIED MONDAY THRU FRIDAY, 7 AM TO 7 PM, UNOCCUPIED NIGHTS AND WEEKENDS. THERMOSTATS SHALL BE SET FOR OCCUPIED COOLING 75°, OCCUPIED HEATING 70°, UNOCCUPIED COOLING 85°, UNOCCUPIED HEATING 55°. ALL TIME AND TEMPERATURE SETPOINTS SHALL BE VERIFIED BY THE OWNER PRIOR TO PROGRAMMING. THERMOSTATS SHALL BE PROGRAMMED BY MECHANICAL CONTRACTOR IN THE PRESENCE OF OWNER'S REPRESENTATIVE PRIOR TO PROJECT COMPLETION.

HEAT PUMP SCHEDULE (AIR COOLED)

SYMBOL	NOMINAL TONNAGE	COOLING COIL TC (BTUH)	COOLING COIL SHC (BTUH)	EFFICIENCY EER	EFFICIENCY SEER	HEATNG CAPACITY (BTUH)	EFFICIENCY COP	COMPRESSOR LRA	COMPRESSOR RLA	FAN FLA	ELECTRICAL DATA MCA	ELECTRICAL DATA FUSE	ELECTRICAL DATA VOLTAGE	ELECTRICAL DATA PH	REFRIG. TYPE	MANUFACTURER (TRANE) MODEL	WEIGHT	MATCHING INDOOR UNIT
HP-CB1	3.0	35200	25900	12	15	32600	4	70.0	9.9	0.8	15.0	25.0	208 V	1	R-454B	4TWR6024	236.00 lbf	IDU-CB1

NOTES:
1. COOLING CAPACITY @ 95 AMBIENT.
2. HEAT PUMP SUPPLEMENTARY ELECTRIC RESISTANCE HEAT SHALL BE PROVIDED WITH CONTROLS TO PREVENT OPERATION WHEN THE REVERSE CYCLE HEAT CAN MEET HEATING LOAD. SUPPLEMENTAL ELECTRIC HEAT SHALL BE ALLOWED TO OPERATE DURING HEAT PUMP DEFROST CYCLE. SUPPLEMENTAL ELECTRIC HEAT SHALL BE LOCKED OUT WHEN THE OUTDOOR TEMPERATURE IS BETWEEN 35°F AND 40°F AND THE INDOOR TEMPERATURE SETPOINT IS INCREASED.
3. MOUNT UNITS ON A 4 " THICK CONCRETE PAD AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNITS.
4. PROVIDE UNITS WITH CONDENSER COIL HAIL GUARDS AND LOW AMBIENT CONTROLS.

EXHAUST FAN SCHEDULE

SYMBOL	LOCATION	MANUFACTURER	MODEL NO.	TYPE	CFM	APPROX. ESP	DRIVE TYPE	FAN RPM	SONES	ELECTRICAL DATA WATTS	ELECTRICAL DATA H.P.	ELECTRICAL DATA VOLTAGE	ELECTRICAL DATA PHASE	ACCESSORIES	CONTROL TYPE
EF-CB1	FIELD HOUSE	GREENHECK	SP-A250	CEILING	75	0.500	DIRECT	818	3	28	0.00	115 V	1	A,B,F,G,O	2
EF-CB2	FIELD HOUSE	GREENHECK	SP-A390	CEILING	300	0.500	DIRECT	1280	4.5	114	0.00	115 V	1	A,B,F,G,O	2
EF-CB3	FIELD HOUSE	GREENHECK	SP-S10-VG	CEILING	375	0.500	DIRECT	1188	5	86	0.00	115 V	1	A,B,F,G,O	2
EF-CB4	FIELD HOUSE	GREENHECK	SP-A250	CEILING	75	0.500	DIRECT	818	3	28	0.00	115 V	1	A,B,F,G,O	2
EF-CB5	FIELD HOUSE	GREENHECK	CSP-A510-VG	CEILING	420	0.500	DIRECT	1070	2.8	203	0.00	115 V	1	A,B,F,G,O	1

EXHAUST FAN SCHEDULE ACCESSORIES:
A. DISCONNECT SWITCH
B. GRAVITY BACKDRAFT DAMPER
C. MOTORIZED BACKDRAFT DAMPER
D. PREFAB. ROOF CURB
E. BIRDSCREEN
F. ACOUSTICAL LINING
G. HANGING BRACKETS WITH VIBRATION ISOLATION
H. WL, WALL LOUVER DISCHARGE
I. RCC OR GRS ROOF CAP (FLAT ROOF) OR RJ ROOF CAP (PITCHED ROOF)
J. WALL MOUNTING COLLAR
K. INLET GAURD
M. 2" WASHABLE ALUMINUM FILTERS
N. MOTORSIDE FAN GUARD
O. EXHAUST GRILLE
P. U.L. 762
Q. VENTED ROOF CURB EXTENSION
R. COMBINATION KITCHEN HOOD FAN CURB
S. INTERLOCK WITH DISHWASHER
T. PROVIDE DRAIN PLUG ACCESSORY
U. ROOF SUPPORT RAILS
V. VFD

EXHAUST FAN SCHEDULE CONTROLS:
1. WALL MOUNTED THERMOSTAT (REVERSE ACTING, SET FOR 80°)
2. INTERLOCK WITH ROOM LIGHT SWITCH (FAN SHALL OPERATE WHEN LIGHT IS ON IF ANY ROOM IS SERVED BY FAN)
3. WALL MOUNTED ON/OFF 60 MINUTE TIMER SWITCH WITH IDENTIFICATION LABEL
4. WALL MOUNTED MUSHROOM PUSH BUTTON SWITCH/STARTER WITH IDENTIFICATION LABEL
5. CONTROLLED BY BUILDING AUTOMATION SYSTEM
6. CONTINUOUS OPERATION
7. CONTROLLED BY THE FACP AND FIREMAN'S MANUAL OVER-RIDE CONTROL PANEL IN FIRE COMMAND ROOM. NO MECHANICAL CONTROL POINTS REQUIRED BY M.C. FOR SMOKE CONTROL FANS
8. INTERLOCK WITH DISHWASHER OPERATION
9. INTERLOCK WITH MECHANICAL ROOM 'CO' DETECTOR
10. INTERLOCK WITH FUME HOOD OPERATION

EXHAUST FAN SCHEDULE NOTES:
1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW. ALL FANS INSTALLED INSIDE, ABOVE, OR ADJACENT TO OCCUPIED SPACES SHALL HAVE A MAXIMUM 9.0 INLET SONE LEVEL.
2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AS REQUIRED.
4. PROVIDE ALL DIRECT DRIVE FANS WITH SPEED CONTROLLERS.
5. BACKDRAFT DAMPER ON ROOF SUPPLY FANS SHALL BE MOTORIZED.

LOUVER SCHEDULE - MECHANICAL EQUIPMENT

SYMBOL	MANUFACTURER	MODEL NO.	DESIGN AIRFLOW	FREE AREA	FREE AREA VELOCITY	PD	DAMPER TYPE	DIMENSIONS WIDTH	DIMENSIONS HEIGHT	REMARKS
L-CB1	GREENHECK	ESD-435	420 CFM	1.1 SF	380 FPM	0.02 in-wg	BAROMETRIC	20"	20"	EXHAUST
L-CB2	GREENHECK	ESD-435	600 CFM	1.7 SF	350 FPM	0.02 in-wg	BAROMETRIC	36"	18"	INTAKE

LOUVER SCHEDULE NOTES:
1. PROVIDE BAKED ENAMEL FINISH, COLOR BY ARCHITECT.
2. PROVIDE WITH ALUMINUM BIRDSCREEN.
3. INSTALL WITH MINIMUM 18" DEEP INSULATED PLENUM.
4. PROVIDE FRAME TYPE REQUIRED FOR MOUNTING LOCATION.

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ENERGY STAR PARTNER

No.	Date	Description
	3/27/26	Issue for Bidding

ISSUE DATE: 02/25/2026
PROJECT #: 2308.001

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MECHANICAL PLAN - CONCESSIONS BUILDING

CC-M-101

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