

Owner

Nanuet Union Free School District
101 Church Street
Nanuet, NY 10954
845.627.9880
www.nanuetusd.org

Structural Engineer

Clapper Structural Engineering
160 Partition Street
Saugerties, NY 12477
845.843.9801
www.clappersstructural.com

MEP Engineer

Sage Engineering Associates, LLP
9 Columbia Circle
Albany, NY 12203
518.453.6091
www.sagegrp.com
MEP ENGINEER LICENSE NUMBER 020868

Environmental Engineer

Quest Environmental Solutions
1376 Route 9
Wappingers Falls, NY 12590
845.298.6251
www.qualityenv.com

Construction Manager

Jacobs
One Penn Plaza
24th Floor, Suite 2400
New York, NY 10119
646.906.6550
www.jacobs.com



NUFSD BOND PROJECT PHASE 5 - MAINTENANCE

- SED#50-01-08-03-0-002-020 (HIGHVIEW ES)
- SED#50-01-08-03-0-003-002 (Maintenance)
- SED#50-01-08-03-0-003-004 (OEC)
- SED#50-01-08-03-0-003-005 (MILLER ES)
- SED#50-01-08-03-0-004-022 (BARR MS)

- Highview Elementary School**
24 Highview Ave
Nanuet, NY 10954
- OEC Building**
135 Convent Rd
Nanuet, NY 10954
- Maintenance Building**
103 Church St.
Nanuet, NY 10954
- Miller Elementary School**
50 Blauvelt Rd Unit 1
Nanuet, NY 10954
- A MacArthur Barr Middle School**
143 Church St
Nanuet, NY 10954

KEY PLAN

REVISIONS		
No.	Description	Date

ISSUED: BID SET
DATE: 06/21/2024
SCALE: NOT TO SCALE
SHEET NAME: HVAC SCHEDULES AND DETAILS

SHEET NUMBER:
MB-M002

ISSUE FOR BID SET

MULTI-ZONE INVERTER HEAT PUMP SCHEDULE

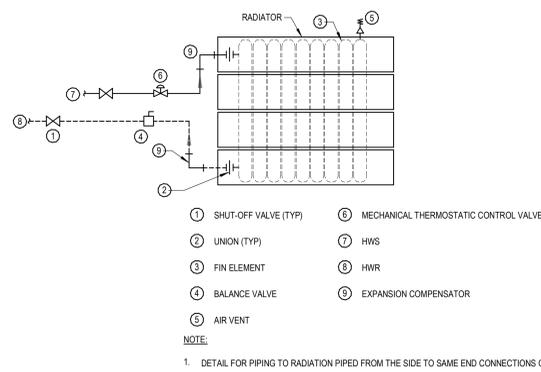
- PROVIDE HEAT PUMP WITH MODEL QSDT3000 18" HIGH STAND AND MOUNT HEAT PUMP STAND ON TOP OF EXISTING EXTERIOR CONCRETE PAD. PROVIDE HEAT PUMP WITH DRAIN PAN HEATER AND INTAKE AND OUTLET SNOW HOODS.
- PROVIDE EACH INDOOR UNIT WITH INLINE CONDENSATE PUMP (MODEL DACA-CP1-1) THAT FITS INSIDE THE FCU AND IS WIRED FROM THE INDOOR UNIT'S POWER SOURCE AND WIRED CONTROLLER (MODEL BRC948Z).
- PROVIDE POWER CONNECTION AND ALL REQUIRED WIRING FOR INDOOR UNIT FROM OUTDOOR UNIT POWER SOURCE. PROVIDE ALL REQUIRED CONTROL WIRING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS BETWEEN OUTDOOR UNIT, INDOOR UNITS AND WIRED CONTROLLERS. PROVIDE WIRING FROM INDOOR FAN COIL UNIT TO INLINE CONDENSATE PUMP.

Mark	SERVICE	DESCRIPTION	COOLING CAPACITY		CFM			ELECTRICAL DATA				WEIGHT	BASIS OF DESIGN MFG. AND MODEL	Mark	COOLING OPERATING RANGE (DEGREE F DB)	HEATING OPERATING RANGE (DEGREE F DB)	CAPACITY HEATING @ 5 DEGREE F DB	CAPACITY COOLING	ELECTRICAL DATA				REFRIGERANT	REFRIGERANT SEER	REFRIGERANT HSPF	WEIGHT	BASIS OF DESIGN MFG. AND MODEL	REMARKS		
			HI	MID	LO	HI	MID	LO	VOLTS	PH	MCA								MFA											
FCU-MB-1	SECY'S 405	WALL MOUNTED	9,000 Btu/h	9,000 Btu/h	381	279	194	208 V	1	60 Hz	0.11 A	21 W	20 lb	DAIKIN FTXS09LJU	HP-MB-1	14-115	-13-60	21,700 Btu/h	24,000 Btu/h	208	1	22.6	25	R-410A	18	12.5	140 lb	DAIKIN 3MXL24RMVJU	1,2,3	
FCU-MB-2	OFFICE 401	WALL MOUNTED	18,000 Btu/h	18,000 Btu/h	583	484	385	208 V	1	60 Hz	0.32 A	38 W	31 lb	DAIKIN FTXS18LVJU																
FCU-MB-3	MAINTENANCE BREAK AREA	WALL MOUNTED	9,000 Btu/h	9,000 Btu/h	381	279	194	208 V	1	60 Hz	0.11 A	21 W	20 lb	DAIKIN FTXS09LJU																

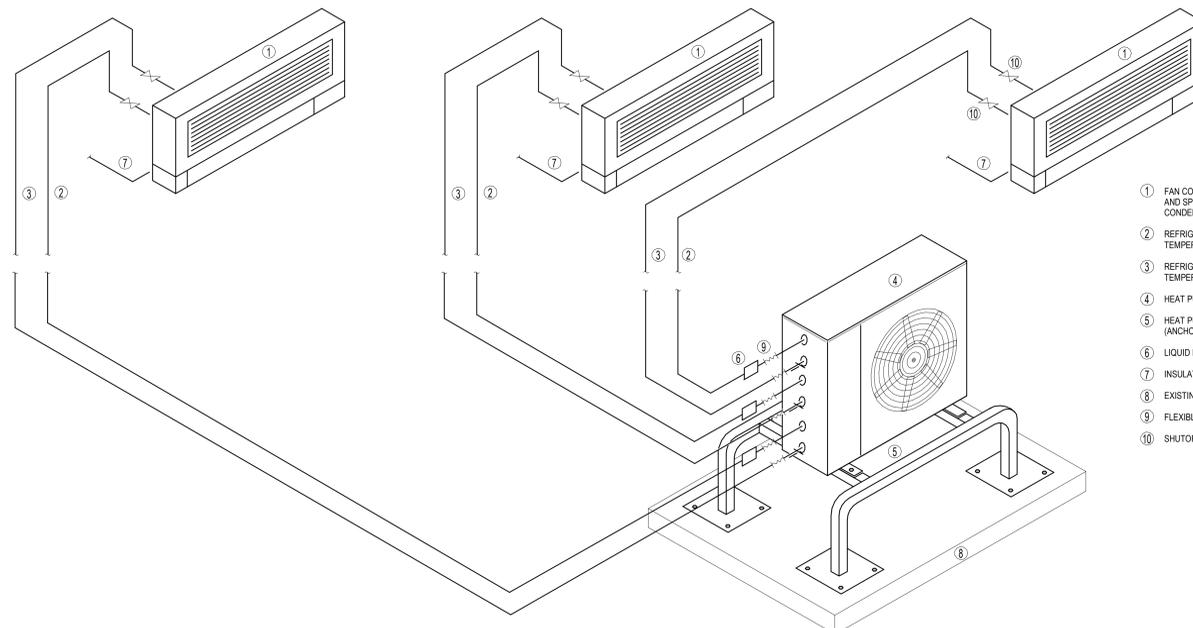
VERTICAL RADIATOR SCHEDULE

- PROVIDE WITH SAME END SERIES PIPING CONNECTIONS (SUPPLY AND RETURN CONNECTIONS ON SAME SIDE OF RADIATOR).
- PROVIDE WITH OPPOSITE END SERIES PIPING CONNECTIONS (SUPPLY AND RETURN CONNECTIONS ON OPPOSITE SIDES OF RADIATOR).
- PROVIDE WITH TYPE C LEFTHAND SUPPLY CONNECTIONS AND STANDARD, STRAIGHT MECHANICAL THERMOSTATIC CONTROL VALVE.

Mark	CAPACITY (BTUHR PER LINEAL FOOT)	AVERAGE WATER TEMP.	HEIGHT	SIZE DEPTH	FLOW RATE (GPM)	SIZE LENGTH	WATER PRESSURE DROP	BASIS OF DESIGN MFG. AND MODEL	REMARKS
RMB-1	996	170.0 °F	4.0 ft	2.0 in	0.5	1'-11 1/8"	0.03 Feet	RUNTAL RV-8	3
RMB-2	748	170.0 °F	3.0 ft	2.0 in	0.5	1'-5 1/4"	0.04 Feet	RUNTAL RV-6	3
RMB-3	748	170.0 °F	3.0 ft	2.0 in	0.5	1'-5 1/4"	0.04 Feet	RUNTAL RV-6	3



A18 HOT WATER RADIATION PANEL DETAIL
NOT TO SCALE



- ① FAN COIL UNIT (TYP), WALL MOUNT SHOWN, SUPPORT AND SPACE AS NECESSARY FOR REFRIGERANT AND CONDENSATE PIPING CONNECTIONS.
- ② REFRIGERANT LIQUID LINE (TYPE L DRAWN TEMPER COPPER WITH ELASTOMERIC INSULATION)
- ③ REFRIGERANT SUCTION LINE (TYPE L DRAWN TEMPER COPPER WITH ELASTOMERIC INSULATION)
- ④ HEAT PUMP
- ⑤ HEAT PUMP ANCHOR POINT (ANCHOR TO EQUIPMENT PAD, TYP OF 4)
- ⑥ LIQUID LINE FILTER DRYER (TYP)
- ⑦ INSULATED CONDENSATE DRAIN LINE
- ⑧ EXISTING EQUIPMENT CONCRETE PAD
- ⑨ FLEXIBLE CONNECTOR (TYP)
- ⑩ SHUTOFF SERVICE VALVE (TYP)

A12 DUCTLESS MULTI-SPLIT DETAIL WITH WALL MOUNTED FAN COIL UNIT
NOT TO SCALE

DATE PLOTTED: 06/18/2024 2:52:34 PM