ROOFTOP AIR HANDLER SCHEDULE - PUMP ROOM

UNIT ID	MODEL	AREA SERVED	SUPPLY FAN				HEATING COIL						FILTERS			ELECTRICAL			SOUND	WEIGHT	NOTES
			SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	ESP (IN WG)	TSP (IN WG)	MOTOR (HP)	CAPACITY (MBH)	EAT (DB °F)	LAT (DB °F)	APD (IN WG)	HW FLOW (GPM)	WPD (FT WG)	TYPE	QTY / SIZE (IN)	APD (IN WG)	VOLTAGE (V)	MCA (A)	MOCP (A)	(dBA)	(LB)	
AHU-1	CSAA035	Pump Room	20,400	2,040	1	2.8	(4) at 6HP	500.0	63	85.6	0.2	50.0	0.1	MERV 8	(16) 20x25	0.62	460	26.1	30	90	4,000	ALL
AHU-2	CSAA035	Pump Room	20,400	2,040	1	2.8	(4) at 6HP	500.0	63	85.6	0.2	50.0	0.1	MERV 8	(16) 20x25	0.62	460	26.1	30	90	4,000	ALL

NOTES:
1. Selection Is Based On Package Rooftop Air Handling Unit With Hot Water Heating By Trane.
2. Unit Controls With Graphic Touchscreen To Be Provided By Equipment Manufacturer. Include Labor To Field Modify Controls.
3. Provide Variable Frequency Drive On Supply Fans.
4. Static Pressure Indicated Above Is The External Static Pressure Which Excludes Any P.D. Within The Unit.
5. Units Shall Be Of Double Wall Construction. Units Shall Be Complete With Side Outlet Drain, Access Doors And Lights, And Economizer With Power Exhaust.
6. Maximum Air Velocity Thru Heating Coil Shall Not Exceed 500 Feet Per Min.
7. Provide 4 Sided Factory Equipment Rail Suitable For Seismic Conditions And Installation On Existing Steel Dunnage.
8. Electrical Connection To Be Single Point And To Be Through The Bottom Of The Unit. Provide Fused Disconnect Switch And 115 Volt GFI Convenience Receptacle.
9. Unit Shall Have Hinged Access Doors.
10. Coil Shall Be Coated With A Phenolic Coating.
11. Units Shall Have Full UL Listing.
12. Motor Efficiency Shall Match Premium Efficiency Table.
13. Provide Duct Smoke Detectors In Supply And Return.
14. Provide Phase And Brownout Protection.

HOT WATER UNIT HEATER SCHEDULE

UNIT ID	MODEL NO.	TYPE	LOCATION	CAPACITY (MBH)	EWT (°F)	LWT (°F)	WATER FLOW (GPM)	AIR FLOW (CFM)	EAT DB (°F)	LAT DB (°F)	MOTOR POWER (HP)	MOTOR VOLTAGE (V)	MOTOR PHASE (Ø)	MOTOR FREQ (HZ)	WEIGHT (LBS)	ACCESSORIES	NOTES
UH-1	VS-367	VERTICAL	CHLORINE ROOM	240	180	160	20.8	3,520	60	96	3/4	480	3	60	150	ALL	ALL
UH-2	VS-237	VERTICAL	CHLORINE ROOM	149	180	160	15.4	4,160	60	94	1/4	115	1	60	135	ALL	ALL
UH-3	VS-367	VERTICAL	CHLORINE ROOM	240	180	160	20.8	3,520	60	96	3/4	480	3	60	150	ALL	ALL
UH-4	HS-18	HORIZONTAL	FILE ROOM	27	180	160	2.7	630	60	99	1/20	115	1	60	50	ALL	ALL
UH-5	HS-360	HORIZONTAL	GENERATOR ROOM	12	180	160	1	400	60	85	16W	115	1	60	25	ALL	ALL
UH-6	HS-48	HORIZONTAL	SHOP	27	180	160	2.7	630	60	99	1/20	115	1	60	50	ALL	ALL
UH-7	HS-204	HORIZONTAL	SCREEN ROOM	124	180	160	12.7	2,900	60	100	1/3	115	1	60	100	ALL	ALL
UH-8	HS-204	HORIZONTAL	SCREEN ROOM	124	180	160	12.7	2,900	60	100	1/3	115	1	60	100	ALL	ALL
UH-9	HS-204	HORIZONTAL	SCREEN ROOM	124	180	160	12.7	2,900	60	100	1/3	115	1	60	100	ALL	ALL

NOTES:
1. Selection Based On Equipment Manufactured By Sterling.
2. Coils Shall Be Constructed Of 0.008" Thick Aluminum Fins Mechanically Bonded To 5/8" OD Expanded Copper Tubes.
3. Cabinets Shall Be Constructed Of Minimum 18 Gauge Steel. Finish And Color Shall Be As Selected By Owner.
4. Motors Shall Be Permanent Split Capacitor Type. Provide Fused Disconnect.
5. Units Shall Have Built-In Thermal Overload Protection.

ACCESSORIES:
1. Remote Thermostat
2. Ceiling Mounting Bracket

AIR HANDLING UNIT SCHEDULE - OFFICES

UNIT ID	MODEL NO.	AREA SERVED	SUPPLY FAN				HOT WATER HEAT SECTION							DX COOLING COIL				ELECTRICAL			WEIGHT	NOTES
			SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	ESP (IN WG)	MOTOR (HP)	CAPACITY (MBH)	FLOW (GPM)	EWT (°F)	LWT (°F)	APD (IN. WG)	WPD (FT. H2O)	ROWS	TOTAL (MBH)	SENS (MBH)	EAT (DB / WB °F)	LAT (DB / WB °F)	VOLTAGE (V)	MCA (A)	MOCP (A)	(LB)	
AHU-3	UCCAD10	Offices	4,000	400	1.0	5.0	108.0	10.8	180.0	160.0	0.1	0.4	1.0	125.0	97.8	80 / 67	57.4 / 57.2	460V / 3ϕ	7.0	15.0	1,100	ALL

NOTES:
1. Selection Is Based On Package Indoor Air Handling Unit With Hot Water Heating And DX Cooling By Trane.
2. Supply Fan Shall Be Variable Volume. Motor Shall Be Premium Efficiency Type. Controls Shall Adjust Fan Speed Based On Static Pressure In Ductwork Main.
3. Static Pressure Indicated Above Is The External Static Pressure Which Excludes Any P.D. Within The Unit.
4. Unit Shall Be Supported On 4" Tall Base Rail.
5. Unit Controls With Graphic Touchscreen To Be Provided By Equipment Manufacturer. Include Labor To Field Modify Controls.
6. Provide Unit With 2" Pleated MERV 13 Filters.
7. Provide 100% Comparative Enthalpy Low Leakage Economizer With Barometric Relief And Comparative Enthalpy Sensors.
8. Provide Duct Smoke Detector In Return.

EXHAUST FAN SCHEDULE

UNIT ID	MODEL NO.	TYPE	LOCATION	SERVICE	AIRFLOW (CFM)	S.P. (IN WG)	SPEED (RPM)	MOTOR HORSEPOWER (HP)	MOTOR VOLTAGE / PHASE (V)	MOTOR DRIVE	INTERLOCK	WEIGHT (LB)	NOTES	ACCESSORIES
EF-4, 5	G-240-VG	Centrifugal	Roof	VFD Room Exhaust	9,000	0.25	750	5	480 / 3ϕ	Direct	Thermostat	175	ALL	ALL
EF-6,7,8	G-240-VG	Centrifugal	Roof	Pump Room Exhaust	6,600	0.25	750	2	480 / 3ϕ	Direct	Thermostat	150	ALL	ALL
EF-9	G-160-VG	Centrifugal	Roof	PV Electric Area Exhaust	3,000	0.25	1,000	1	120 / 1ϕ	Direct	Thermostat	75	ALL	ALL
EF-10	G-240-VG	Centrifugal	Roof	Screen Room Exhaust	9,500	0.25	1,000	5	480 / 3ϕ	Direct	Thermostat	175	ALL	ALL
EF-11	G-070-VG	Centrifugal	Roof	Repair Shop Exhaust	250	0.25	1,300	1/15	120 / 1ϕ	Direct	Thermostat	20	ALL	ALL
EF-12	G-080-VG	Centrifugal	Roof	Toilet Exhaust	350	0.25	1,500	1/10	120 / 1ϕ	Direct	Light Switch	20	ALL	ALL
EF-13	G-095-VG	Centrifugal	Roof	Boiler Room Exhaust	900	0.25	1,500	1/6	120 / 1ϕ	Direct	Thermostat	40	ALL	ALL

NOTES:
1. Selection Based On Equipment Manufactured By Greenheck.
2. Motors Shall Be Of Premium Efficiency.
3. Fans Shall Be Fully Modulating EC Type With 0-10 VDC Input.

ACCESSORIES:
1. Fused Disconnect Switch
2. Integral Speed Controller
3. Motorized Damper
4. Remote Thermostat
5. 12" Roof Curb Adaptor With Damper Tray. Provide Unit With 24V Motorized Damper Interlocked With Fan Operation. Base Shall Be Hinged.

AIR SEPARATOR SCHEDULE

UNIT ID	MODEL NO.	SERVICE	TYPE	CAPACITY (GPM)	FITTING TYPE	WEIGHT (LBS)	NOTES
AS-1	R-4F	HOT WATER	TANGENTIAL	300	FLANGE	278	ALL

NOTES:
1. Selection Based On Rolairtrol Model Line Equipment Manufactured By Bell &Gossett.
2. Provide Unit With Integral Strainer.
3. Provide Unit With Optional Factory Welded Support Bracket.

DCA REVIEW

HOT WATER BOILER SCHEDULE

UNIT ID	MODEL NO.	RATING (BHP)	HEATING CAPACITY INPUT (MBH)	HEATING CAPACITY OUTPUT (MBH)	EWT (°F)	LWT (°F)	FLOW (GPM)	P.D. (IN W.G.)	FLUE DIAM (IN)	COMB. AIR DIAMETER (IN)	ELECTRICAL VOLTAGE (V)	ELECTRICAL PHASE (Ø)	ELECTRICAL MCA (A)	ELECTRICAL MOCP (A)	WEIGHT (LBS)	NOTES
B-1	PK Sonic SC-1500	42.2	1,500	1,456	180	160	145	8.3	10	12	208	1	10	20	1,500	ALL
B-2	PK Sonic SC-1500	42.2	1,500	1,456	180	160	145	8.3	10	12	208	1	10	20	1,500	ALL

NOTES:
1. Selection Based On Equipment Manufactured By Patterson Kelley, Which Shall Be Provided And Installed By Contractor.
2. Boilers Shall Fire Modules To Maintain The Constant Discharge Water Temperature Specified Above With Outdoor Air Reset Capability. Provide New Outdoor Air Temperature Sensor.
3. Provide Condensate Neutralizing Kit At Boiler.
4. Boiler Shall Be Sealed Combustion.
5. Provide Boiler Mounted Control Panel For Operation And Staging Of Boilers And Pumps.
6. Provide Natural Gas Regulator At Boiler. Regulator Shall Be Sized To Reduce Site Pressure (2PSI, Confirm In Field) To A Minimum Of 3.5" WC And Maximum 14" WC At Boiler.

AIR COOLED CONDENSING UNIT SCHEDULE - OFFICES

UNIT ID	MODEL NO.	ASSOCIATED AHU	AREA SERVED	SIZE (TONS)	ELECTRICAL VOLTAGE (V)	ELECTRICAL MCA (A)	ELECTRICAL MOCP (A)	IEER	WEIGHT (LB)	NOTES
CU-3	TTA12044CAA	AHU-3	Offices	10	460V / 3 ϕ	19	25.0	13	525	ALL

NOTES:
1. Selection Based On Equipment Manufactured By Trane.
2. Unit Performance Based On 95°F Ambient Air Temperature.
3. Unit Shall Have Two Scroll Compressors With Two Stage Capability (4 Total Stages).
4. Unit Shall Be Factory Assembled With Weatherproof Cabinets And Shall Be Complete With Fused Disconnect Switch.
5. Unit Shall Be UL Listed.
6. Refrigerant Shall Be R-410a.
7. Provide Support Rails Mounted To Grade.
8. Filter / Dryer Shipped Loose For Field Installation.

PUMP SCHEDULE

UNIT ID	MODEL NO.	SIZE	TYPE	SERVICE	FLOW (GPM)	TDH (FT. W.G.)	SPEED (RPM)	MOTOR POWER (HP)	MOTOR VOLTAGE (V)	MOTOR PHASE (Ø)	MOTOR FREQ (HZ)	WEIGHT (LBS)	NOTES
HWP-1,2	e-90	2AAC	INLINE	HOT WATER HEATING - ZONE 1 (AHU1-3, UH-5-9)	150	50	1,800	3	115	1	60	100	ALL
HWP-3,4	e-90	1.5AB	INLINE	HOT WATER HEATING - ZONE 2 (UH-1-4)	60	30	1,800	1	115	1	60	75	ALL
FZP-1,2	PL-100	2"	INLINE	HOT WATER CIRCULATOR - FREEZE PROTECTION	50	10	3,600	1/2	115	1	60	15	1-3
FZP-3	PL-36	1-1/4"	INLINE	HOT WATER CIRCULATOR - FREEZE PROTECTION	10.8	10	3,600	1/6	115	1	60	15	1-3

NOTES:
1. Selection Based On Equipment Manufactured By Bell&Gossett.
2. Pump Shall Be Furnished With A Premium Efficiency, Inverter Duty Motor.
3. Pumps Shall Be Bronze Fitted All Iron Construction.
4. Furnish And Install Variable Frequency Drives For Each Pump. Basis Of Design Is ABB Model ACH580.

ELECTRIC UNIT HEATER SCHEDULE

UNIT ID	MODEL NO.	TYPE	AIRFLOW (CFM)	ESP (IN WG)	CAPACITY (kW)	ELECTRICAL VOLTAGE (V)	ELECTRICAL MCA (A)	ELECTRICAL MOCP (A)	WEIGHT (LB)	ACCESSORIES	NOTES
EUH-1	HER30	Horizontal	380	0.25	3	480 / 3ϕ	4.8	15	30	1-3	1-5

NOTES:
1. Selection Based On Equipment Manufactured By Modine.
2. Cabinets Shall Be Constructed Of Minimum 14 Gauge Steel. Standard Factory Finish And Color.
3. Motors Shall Be Permanent Split Capacitor Type. Provide Fused Disconnect.
4. Configuration Shall Be Ceiling Mounted.
5. Units Shall Have Built-In Thermal Overload Protection.

ACCESSORIES:
1. Remote Thermostat
2. Factory Mounting Support Bracket.

EXPANSION TANK SCHEDULE

UNIT ID	MODEL NO.	SERVICE	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	TANK DIMENSIONS DIAMETER (IN)	TANK DIMENSIONS HEIGHT (IN)	WEIGHT (LBS)	NOTES
ET-1	B-500	HOT WATER SYSTEM	132.0	132	24	78	1450	ALL

NOTES:
1. Selection Based On Equipment Manufactured By Bell & Gossett.
2. Unit Shall Be Pre-Charged To 14 PSI.
3. Provide Seismic Restraints Option.
4. Expansion Tank Shall Be Bladder Type.

This Drawing Is The Property Of DLB Associates Consulting Engineers, PC. It Was Prepared Exclusively For This Particular Project And Is Limited To This Project Only. Unauthorized Reproduction Or Other Use Of These Drawings Or Ideas Is Prohibited.

REV.	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
B	7/13/23	CORRECTED FAN MODEL NUMBERS			
A	6/23/23	ISSUE FOR BID AND DCA REVIEW			

24x36

dlbassociates consulting engineers
3600 Route 66, Suite 150 - #5981
Neptune NJ 07753
Questions For DLB Call: Dan Rehberg
DLB Project ID: 12636 Phone: 732-318-0314

project: NJDWSC WANAQUE SOUTH HVAC & LIGHTING REPLACEMENT 310 FAIRFIELD ROAD WAYNE, NJ 07470

title: SCHEDULES

scale	drawn by	checked by	date	filename
AS SHOWN	CAD	DR	06/09/2023	12636M203

dwg. no. M203

Confidential and Proprietary / ©DLB Associates 2023