Qty.	Equipment	Location	Manufacturer	Times Per Year
4	Air Cooled Chiller	Mech. Yard	JCI/Trane	4
31	Pumps	Mech. Yard	Taco	4
26	AHU	Building	JCI/York	4
2	Makeup Air Unit	Building	Captive Aire	4
10	Ventilation Fans	Building	Loren Cook	1
l	Unit Heater	Building	Raywall	1
12	Boilers	Mech. Yard	Ray Pak, LAARS	4
24	Variable frequency drive	Building/Yard	Schneider	4
3	ISO Unit	Building	Cont Tech Corp	4

Building Automation Preventative Maintenance

The Schneider Electric SmartStruxure Building Automation System will have a semi-annual maintenance checkup and calibration of systems. This will include diagnostics of all field controllers as well as all automation servers. This service will include verification of all programming sequences and ensure proper operation of the building control system. This service specifically includes a full checkout of each VAV box and controller to ensure proper operation and control.

Includes the following:

(11) Automation Servers
(252) VAV controllers
(20) AHU controllers
(4) MAU control1ers
(3) Central Plant controllers
(1) T.A.C. I/Net Seven
(3) SmartStruxure Workstations

Peak Performance
Maintenance Schedule
Chiller Maintenance
Inspection

- Check for proper refrigerant charge.
- Repair minor refrigerant leaks.
- Check control calibration and operation.
- Inspect main electrical components.
- Inspect compressor operation oil level.
- Check for evidence of moisture in refrigerant circuit.
- Check and record refrigerant sub cooling.
- Check and record superheat.
- Check and record all water temperatures and pressures.
- Check and record compressor voltage and amperages.
- Check for proper closed system water make up.
- Check expansion tank for proper air cushion.
- Operationally test energy management system at least twice per year.
- Inspect central system pumps, motors and bearings and lubricate per manufacturer's recommendations.
- Check electrical wiring for evidence of overheating and tighten connections as required.
- Check crankcase heater operation.
- Visually inspect and clean air cooled condenser coils.
- Check proper operation all condenser fan motors.
- Clean the starter and cabinet.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Check condition of the contacts for wear and pitting.
- Check contactors for free and smooth operation.
- Check the mechanical linkages for wear, security, and clearances.
- Check tightness of the motor terminal connections.
- Meg the motor and record reading.
- Verify the operation of the electrical interlocks
- Furnish inspection report and inform of any abnormal conditions or necessary repairs.

General System Check

- Inspect the unit for cleanliness.
- Inspect the fan wheel and shaft for wear and clearance.
- Check the sheaves and pulleys for wear and alignment.
- Install new belts. Belts will be provided by BBMC.
- Verify tight bolts, set screws, and locking collars.
- Check dampers for wear, security and linkage adjustment.
- Clean condensate pan.
- Clean and verify proper operation of the condensate drain.
- Clean Evaporator and heating coils.
- Verify smooth fan operation.
- Log operating conditions after system has stabilized.

Lubrication

- Lubricate the fan shaft bearings.
- Lubricate the motor bearings.

Motor and Starter

- Clean the starter and cabinet.
- Inspect the wiring and connections for tightness and signs of overheating and discoloration.
- Check the condition of the contacts for wear and pitting.
- Check the contactors for free and smooth operation.
- Meg the motor and record readings.
- Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Peak Performance Maintenance Schedule Pump Preventative Maintenance

General Assembly

- Check motor shaft and pump shaft for alignment.
- Inspect the coupling for wear.
- Verify that the shaft guard is in place and tight.
- Verify water flow through the pump.
- Check for leaks on the mechanical pump seals, if applicable.
- Verify proper drip rate on the pump seal packing, if applicable.
- Verify smooth operation of the pump.

Lubrication

- Lubricate the motor bearings.
- Lubricate the pump bearings.

Motor and Starter

- Clean the starter and cabinet.
- Inspect wiring and connections for tightness and signs of overheating and discoloration.
- Meg the motor.
- Verify tight connections on the motor terminals.
- Check the condition of the contacts for wear and pitting, if applicable.
- Check the contactors for free and smooth operation.
- Verify proper volts and amps.

Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Peak Performance
Maintenance Schedule Split
System Preventive
Maintenance Evaporator
Check

- Inspect the unit for cleanliness.
- Inspect the fan wheel and shaft for wear and clearance.
- Check the sheaves and pulleys for wear and alignment.
- Install new belt if needed. Belts will be provided by BBMC.
- Verify tight bolts, set screws, and locking collars. Clean condensate pan.
- Clean and verify proper operation of the condensate drain.
- Clean Evaporator and heating coils.
- Verify smooth fan operation.
- Log operating conditions after system has stabilized.

Condenser Check

- Inspect the unit for cleanliness.
- Inspect the fan blade and shaft for wear and clearance.
- Verify tight bolts, set screws, and locking collars.
- Clean air-cooled condenser, using building supplied water source.
- Verify smooth fan operation.
- Log operating conditions after system has stabilized.

System Lubrication

- Lubricate the fan shaft bearings.
- Lubricate the motor bearings.

System Electrical Check

- Inspect the wiring and connections for tightness and signs of overheating and discoloration.
- Check the condition of the contacts for wear and pitting.
- Check the contactors for free and smooth operation.

Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Peak Performance
Maintenance Schedule
Ventilation Fan Inspection

- Visually inspect general conditions of fan, motor blade and housing.
- Inspect fan belt and sheaves for wear.
- Replace fan belt as required and adjust tension.
- Check fan motor and fan bearings for wear.
- Lubricate fan and fan motor bearings.
- Inspect electrical wiring and tighten terminals.
- Check electrical current draw.
- Check fire stat and terminals for tightness.

Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

Peak Performance
Maintenance Schedule Unit
Heater (Electric/Hot Water)
Inspection

- Check all high limit controls.
- Check all safety controls.
- Check all operating controls.
- Visually inspect pilot safety control.
- Check burner operation.
- Check and record entering and leaving water temperature.
- Check and record all associated pressures.
- Test for proper draft.
- Check operation of circulation pumps in mechanical room.

- Visually inspect all valves and piping in mechanical room for corrosion and/or deterioration.
- Check low water cut off.
- Check expansion tank for proper air cushion.
- Check for proper water make up.

Provide a written report of completed work, operating Jog, and indicate any uncorrected deficiencies detected.

Peak Performance
Maintenance Schedule Unit
Heater (Electric/Hot Water)
Inspection

- Check all high limit controls.
- Check all safety controls.
- Check all operating controls.
- Visually inspect pilot safety control.
- Check burner operation.
- Check and record entering and leaving water temperature.
- Check and record all associated pressures.
- Test for proper draft.
- Check operation of circulation pumps in mechanical room.
- Visually inspect all valves and piping in mechanical room for corrosion and/or deterioration.
- Check low water cut off.
- Check expansion tank for proper air cushion.
- Check for proper water make up.

Provide a written report of completed work, operating Jog, and indicate any uncorrected deficiencies detected.

Peak Performance
Maintenance Schedule
BOILER INSPECTION

- Check boiler water level.
- Check all high limit controls.
- Check all safety controls.
- Check all operating controls.
- Check relief valve operation.
- Inspect pilot light flame appearance and position.
- Visually inspect pilot light safety control.
- Check gas valve operation.
- Check burner operation.

- Check and record entering and leaving water temperature.
- Check and record all associated pressures.
- Test for proper draft.
- Check operation of circulation pumps in mechanical room.
- Visual1y inspect all valves and piping in mechanical room for corrosion and deterioration.
- Check low water cut-off.
- Check expansion tank for proper air cushion.
- Inspect all fresh air vents to assure proper combustion air to boiler.
- Lubricate pumps and motors in mechanical room per manufacturer's recommendations.
- Check for proper water make up.

Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.