

EXHIBIT "A"

SCOPE OF WORK

HVAC EQUIPMENT PREVENTATIVE MAINTENANCE AND ON-CALL / AS-NEEDED REPAIR SERVICES

I. GENERAL

- A. The Contractor, if doing business under an assumed name, i.e. an individual, association, partnership, corporation, or otherwise, shall be registered with the State of South Carolina Division of Corporations and hold a current and valid Town of Bluffton Business License.
- B. The Contractor shall assume full responsibility for damage to Town property caused by the Contractor's employees or equipment as determined by designated Town personnel.
- C. The Contractor shall be solely responsible for the safety of the Contractor's employees and others relative to the Contractor's work, work procedures, material, equipment, transportation, signage and related activities and equipment.
- D. The Contractor shall possess and keep in force all licenses and permits required to perform the services of this Agreement.
- E. No guarantee of the actual service requirement is implied or expressed by this Agreement. As needed and on-call service requirements shall be determined by actual need. The Town reserves the right to include additional units or remove current units during the tenure of this agreement.
- F. This is a non-exclusive agreement. The Town may now or hereafter enter into agreements with other contractors for maintenance and service of the HVAC equipment. Employees of the Town may elect to place orders with one or more contractors under agreement with selection made on the basis of price, location, hours of operation, and/or availability of needed services.
- G. All chemicals used shall be properly labeled by Contractor and shall be approved for use, in writing, by the Public Utilities designee. A Material Safety Data Sheet (MSDA) for each chemical proposed for use shall be submitted by Contractor for approval at least fifteen (15) days before beginning the work. All chemicals used shall have a Material Safety Data Sheet (MSDA) attached to the container.
- H. Contractor's maintenance and service personnel shall be trained and experienced in servicing the air conditioning and heating system equipment specified. Contractor shall provide certification upon request by the Town representative.
- I. Contractor shall supply a list of employee names and telephone numbers for emergency service and update this list as it changes.

- J. The Contractor shall employ sufficient qualified project managers/account executives, certified/licensed mechanics and certified/licensed technicians who can arrive on the site within the specified time period and perform the services required.
- K. Services to be provided shall be performed by qualified, trained, certified and licensed service personnel, directly employed by the Contractor. Under no conditions shall any work specified be subcontracted without the Town's prior approval. Pre-approved Subcontractor's shall be accompanied by and under the direct supervision of the Contractor at all times.
- L. The Contractor shall ensure and maintain or have access to an adequate inventory of standard replacement parts for common components in the system under contract within 24 hours.
- M. The Contractor shall have the proper tools and test equipment to maintain all the systems and equipment under the contract.
- N. The Contractor shall maintain complete and detailed service and maintenance records for each piece of equipment that will be provided to the Town upon request.
- O. The Contractor shall provide preventative maintenance consisting of prescheduled recurring actions that are to be performed on a regular interval determined by equipment operating hours that may be recommended by each equipment manufacturer. The preventative maintenance tasks are designed to maintain the equipment for prime operating condition so that the equipment will operate effectively, reliably and efficiently.
- P. The Contractor shall furnish all labor, parts, materials, test equipment, tools, programming materials, and services to be performed in compliance with applicable standards, regulations and codes established by local, state and federal agencies.
- Q. The Contractor shall provide licensed/certified service mechanics and technicians that have obtained and hold current certifications with Trane and Aeon systems.
- R. The Contract shall respond to all service requests, including repair calls regardless of the time of day or uncertain weather conditions. Repair calls shall be responded to within four hours. The Town will provide reasonable means of access to all equipment covered by the resulting agreement. The Contractor shall schedule the start and stop of all primary equipment considered incidental to the operation of the systems as arranged with Town representatives.
- S. The Contractor shall ensure that the required services specified in this contract, meet the quality standards outlined therein. All work performed under this contract shall be consistent with best industry practices, to assure adequate protection of Town assets. The Town will conduct inspections on maintenance and repair work performed on equipment and systems to ensure the work is in compliance with the contract.
- T. The Contractor shall furnish and provide a warranty in which all work is to be free from defects of materials or workmanship for a period of one (1) year after acceptance of the work by the Town. Any defects developing within said period due to reasons stated shall be made good without any expense to the Town.

II. RESPONSIBILITIES OF THE CONTRACTOR

The responsibilities of the Contractor include, but shall not be limited to, the following.

- A. Provide all required equipment, materials, tools, labor, and supervision to service and maintain the HVAC equipment for the Town of Bluffton with **quarterly Preventative Maintenance** and **As-needed/On-call services** for the following locations:

<u>Location</u>	<u>Address</u>
1. <i>Rotary Community Center</i>	<i>2 Recreation Court</i>
2. <i>Public Works Depot</i>	<i>2 Recreation Court</i>
3. <i>Stormwater Offices</i>	<i>1261 May River Road</i>
4. <i>Bluffton Police Substation</i>	<i>1264 May River Road</i>
5. <i>Law Enforcement Center</i>	<i>101 Progressive Street</i>

- B. Provide all required equipment, materials, tools, labor, and supervision to service and maintain the HVAC equipment for the Town of Bluffton with only **As-needed/On-call services** for the following locations:

<u>Location</u>	<u>Address</u>
1. <i>Town Hall</i>	<i>20 Bridge Street</i>

- C. Provide repair services to problems that are either discovered at the time of providing preventative maintenance or as requested by the Town. Respond to service calls as follows:

- 1. Basic service shall be performed Monday through Thursday, 8:00 a.m. through 5:30 p.m. and Fridays from 8:00 a.m. to 1:00 p.m. Emergency service shall be provided after regular working hours, weekends, and holidays.
- 2. Response time to the site shall not exceed two (2) hours.
- 3. Provide two (2) contact phone numbers. The phones shall be answered by actual persons and not recorded messages.

- D. Perform all services listed on Exhibit "C", Preventative Maintenance for HVAC Equipment.

- 1. Preventative maintenance services shall be performed on a quarterly basis.
- 2. During quarterly visits contractor shall ensure that all appropriate tasks (for the season) detailed in Exhibit "C" are performed for each piece of equipment.
- 3. Contractor shall schedule quarterly visits in conjunction with seasonal maintenance needs of the various temperature control system equipment.

4. Contractor shall dedicate a minimum of eight (8) labor hours per quarter to the completion of the preventative maintenance tasks. Contractors may accomplish this service in one visit or several shorter visits to the site. Eight labor hours and any time spent in excess of these hours shall be included in the annual maintenance fee.
5. All preventive maintenance work shall be provided no less than four (4) times per year, unless otherwise specified, including start-up and shut down if applicable. Preventative maintenance includes, but is not limited to:
 - Examining each piece of equipment and device to see that it is functioning properly and is in good operating condition.
 - Cleaning all components of dust, old lubricants, etc. to allow the equipment to function as designed.
 - Lubricating all equipment where needed to permit bearings, gears and all contact wearing points to operate freely and without undue wear.
 - Adjusting all linkages, motors, drives, etc. that may have drifted from the original design settings and positions.
 - Calibrating sensing, monitoring, output, safety and readout devices for proper ranges, settings and optimum efficiencies.
 - Testing and cycling all equipment as a system after it has been cleaned, lubricated, adjusted, and calibrated, to see that it is in good operational condition and at optimum efficiency.
 - Cleaning coils to remove any airborne particles and dirt build-up using either brush cleaning, high-pressure air or chemicals with low pressure wash (per manufacturer's schedule recommendation).
 - Inspecting and brushing heat exchanger tubes. Internal tube brushing and inspection includes the heat exchanger head removal and replacement (per manufacturer's schedule recommendation).
 - Replacing or providing all necessary insulation as needed.
 - Inspect all freeze protection for piping (heat tape or insulation) annually prior to heating season.
 - Painting all equipment to prevent and protect against corrosion and deterioration (as needed).
 - Lubricating all equipment where needed to permit bearings, gears, and all contact wearing points to operate freely and without undue wear (per manufacturer's recommendation).

- Adjusting all linkages, motors, drives, etc. that have drifted from the initial design settings and positions (as needed).
 - Tearing down major pieces of equipment such as refrigeration compressors, water chillers, boilers etc. and overhauling periodically based on accumulated operating hours, building requirements, and/or as required to prevent breakdowns and to improve operational conditions per manufacturer's recommendations or industry standards.
 - Maintain the standardization and integrity of the existing temperature and environmental control systems. This includes thermostats, pressure controls, relays, limits, valves, valve operators, damper motors, step switches, time clocks, contactors, controllers, safety controls, recorders, control panels, gauges, and air compressors.
 - All controls must be replaced with current major control manufacturer replacement parts only.
 - The Contractor shall provide install and regularly change all filters at a frequency dictated by dirt conditions generally accepted to be at least four (4) times per year. The Contractor shall date all filter changes on the actual filter or post information on site at each filter location.
 - The Contractor shall provide physical inspections, air diagnostics and assessments for the listed buildings at a minimum of four (4) times per year, quarterly.
- E. Provide written reports to the Town representative following each inspection or preventative maintenance service call. The reports shall state each system checked, actual services performed, and shall note any unusual problems detected during the inspection.
- F. Perform repair services if directed to do so by the Town. Payment for repair services shall be based on actual labor hours to perform the repair plus cost of parts as outlined on Exhibit "B" (Schedule of Fees).
- G. **EQUIPMENT IDENTIFIER** to be serviced under this Agreement:
1. Rotary Community Center – 2 Recreation Court
 - a. Unit # 1 – Air Handler – Unknown - S#1603282671
Heat Pump – Carrier - S#0909E11324
 - b. Unit # 2 – Air Handler – Carrier - S#4302A68359
Heat Pump – Carrier - S#0216E03623
 - c. Unit # 3 – Air Handler – Carrier - S#4302A68377
Heat Pump – Carrier -S#1309X65988

2. Public Works Depot – 2 Recreation Court
 - a. Unit # 1 – Air Handler – Carrier – S#2110A75287
Heat Pump – Carrier - S#2710E20692

3. Stormwater Offices – 1261 May River Road
 - a. Unit # 1 – Air Handler – Goodman - S#1306155832
Heat Pump – Goodman - S#06062595

4. Bluffton Police Substation – 1264 May River Road
 - a. Unit # 1 – Air Handler – Carrier - S#1309E05896
Heat Pump – Carrier - S#2409A88172

5. Law Enforcement Center – 101 Progressive Street
 - a. Main Building – Air handler/compressor – Trane - S#C10G03485
Make up air – Aaon - S#201009-Anel
 - b. Lab Building – Evidence Air handler/compressor – Trane - S#103312298L
Laboratory Air handler/compressor – Aaon - S#201009-ANEF03791

6. Town Hall – 20 Bridge Street
 - a. Unit # 1 – Business License Office
 - Air Handler – Information not available
 - Heat Pump – Lennox - HP5805J51627
 - b. Unit # 2 – Finance Office
 - Air Handler – Lennox – S#5805E47227
 - Heat Pump – Lennox – S#5805C50218
 - c. Unit # 3 – Planning Meeting Room
 - Air Handler – Lennox – S#5805E47225
 - Heat Pump – Payne – S#2213X75720
 - d. Unit # 4 – Planning Offices
 - Air Handler – Lennox – S#5805E47229
 - Heat Pump – Lennox – S#2213X70223
 - e. Unit # 5 – Large Meeting Room
 - Air Handler – Lennox – S#5805E43348
 - Heat Pump – Lennox – S#5805E40224
 - f. Unit # 6 – Building Inspections

- Air Handler – Lennox – S#5805E47223
- Heat Pump – Lennox – S#5805C50224

g. Unit # 7 – Town Managers Office

- Air Handler – Lennox – S#5805C44599
- Heat Pump – Lennox – S#5806A26310

h. Unit # 8 – Customer Service Office

- Air Handler – Lennox – S#3308E05255
- Heat Pump – Lennox – S#5805C52442

i. Unit # 9 – Children’s Care Center

- Air Handler – Lennox – S#3308E05255
- Heat Pump – N/A

j. Unit # 10 – Lunch Room

- Air Handler – Carrier – S#3706A71598
- Heat Pump – Lennox – S#191404059

k. Unit # 11 – Theater

- Air Handler – Carrier – S#.....3210
- Heat Pump – Carrier – S#.....3260

L. Unit # 12- Foyer

- Air Handler – Mitsubishi – M#MUZ-GE24NA
- Heat Pump – Mitsubishi – S#1000842

m. Unit # 13 – Server Room

- Air Handler – Mitsubishi – S#3315G501077
- Heat Pump – Mitsubishi – S#NE02

H. **INSURANCE:** The Contractor shall at all times maintain the following minimum amounts and coverages of insurance during the contract:

Workers Compensation – The Selected Contractor shall agree to maintain Worker’s Compensation Insurance & Employers Liability in accordance with the State of South Carolina Code.

Business Auto Policy – The Selected Contractor shall agree to maintain Business Automobile Liability at a limit of liability not less than \$500,000 each occurrence for all owned, non-owned and hired automobiles.

Commercial General Liability – Commercial General Liability for public liability during the lifetime of a contract shall have minimum limits of \$1,000,000 per claim, \$2,000,000 per occurrence for Personal Injury, Bodily Injury, and Property Damage Liability. Coverage shall include Premises and/or Operations, Independent Contractors, Products and/or Complete Operations, Contractual Liability and Broad Form Property Damage Endorsements. Coverage shall not contain an exclusion or limitation endorsement for Contractual Liability or Cross Liability. Coverage for the hazards of explosion, collapse and underground property damage (XCU) must also be included when applicable to the work to be performed.

EXHIBIT "B"

HVAC EQUIPMENT PREVENTATIVE MAINTENANCE

C O N T E N T S

- I. General Overview of Service
- II. Detailed Preventative Maintenance Requirement
 - A. Semi-Annual Inspection, Heating & Air Conditioning
 - B. Annual Inspection, Heating & Air Conditioning
 - C. Hot Water Boilers
 - D. Pumps
 - E. Condensing Units
 - F. General Roof-Top Heating & Cooling Units
 - G. Fans & Central Fan System
 - H. Terminal Units
 - I. Cooling Tower Evaporative Condensers
 - J. Water Treatment

I. General Overview of Service

The required preventative maintenance program and service shall be performed on the identified equipment with the Town of Bluffton Facilities Department as follows:

- A. Total maintenance services for the automatic temperature control system.
- B. Water chiller start-up and maintenance, including water treatment, one (1) filter drier, and oil change.
- B. Annual price paid by Town for the preventative maintenance program as described herein includes all labor hours, transportation, supplies, materials and consumables such as belts, lubricants, filters, pads, etc., including but not limited to the supplies and materials listed in this exhibit. Price also includes all water treatment chemicals.

II. Detailed Preventative Maintenance Requirements

A. SEMI-ANNUAL INSPECTION: HEATING AND AIR CONDITIONING

- 1. Air Compressor
 - a. Drain tank and check traps.
 - b. Change oil and check oil pressure.
 - c. Check belt and sheaves, and change as required.
 - d. Change suction filter as required.
 - e. Check unloader and check valve.
 - f. Check high pressure safety valve.
 - g. Check motor operating conditions and lubricate.
 - h. Check PE switch, starter, and alternator.
 - i. Clean as required.
 - j. Record compressor run-time.
- 2. Refrigerated Air Dryer
 - a. Check refrigerant pressure.
 - b. Check refrigerant temperature.
 - c. Clean condenser and cover grills.
 - d. Check drain top and bypass valve.
 - e. Clean as required.
- 3. Filter and Pressure Reducing Station
 - a. Check particle filters (change as required).
 - b. Check oil filter (change as required).
 - c. Check pressure valve settings.
 - d. Check low-pressure safety valve.
- 4. Time Clocks
 - a. Check operation and settings.
 - b. Check solenoid air valve and clock bypass switch.

5. Boiler, Chiller, Converter, Pumps & Zone Control
 - a. Calibrate all controllers.
 - b. Calibrate all transmitter and receiver gauges.
 - c. Check all PE switches.
 - d. Check all control valves.
 - e. Check all pilot positioners.
 - f. Check all auxiliary devices.

6. Fan Systems and HVAC Unit Controls
 - a. Review sequence of operation.
 - b. Check all dampers and lubricate.
 - c. Check pilot positioners.
 - d. Check all control valves.
 - e. Calibrate all controllers.
 - f. Calibrate all transmitters and receiver gauges.
 - g. Check all solenoid air valves, PE switches, and air valves.
 - h. Check all auxiliary control devices.
 - i. Clean and wipe down panel face.

B. ANNUAL INSPECTION: HEATING AND AIR CONDITIONING

1. Room-Terminal Unit Controls
 - a. Check all room stats.
 - b. Check all control valves.
 - c. Check operation of unit coil steam traps.
 - d. Check operation of all dampers and lubricate.
 - e. Check all PE switches, solenoid air valves, and limit controls.

2. For Items A1 through A6, and B1 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
 - a. Belts
 - b. Suction Filter
 - c. Oil Filter
 - d. Particle Filter
 - e. Oil
 - f. Lubricant - oil and grease
 - g. Drain Trap Gaskets
 - h. Clean up materials.

C. HOT WATER BOILERS

1. Pre-Season Inspection
 - a. Inspect fireside of boiler and record condition.
 - b. Brush and vacuum soot and dirt from flues and combustion chamber.
 - c. Inspect firebrick and refractory for defects. Patch and coat as required.
 - d. Visually inspect boiler pressure vessel for possible leak and record condition.
 - e. Disassemble, inspect, and clean low-water cutoff.
 - f. Check hand valves and automatic feed equipment. Repack and adjust as required.

- g. Inspect, clean, and lubricate the burner and combustion control equipment.
 - h. Reassemble boiler.
 - i. Check burner sequence of operation and combustion air equipment.
 - j. Check fuel piping for leaks and proper supports.
 - k. Clean external surfaces as required.
 - l. Clean boiler room.
2. Seasonal Start-Up
- a. Review manufacturer's recommendations for boiler and burner start-up.
 - b. Check fuel supply.
 - c. Check auxiliary equipment operation.
 - d. Inspect burner, boiler, and controls prior to start-up.
 - e. Start burner and check operating controls. Test safety controls and pressure relief valve.
 - f. Perform combustion tests and adjust burner for maximum efficiency.
 - g. Log all operating conditions.
 - h. Review operating procedures and Town's log with boiler operator.
3. Quarterly Preventative Maintenance
- a. Review Town's log. Log all operating conditions.
 - b. Inspect boiler and burner, and make adjustments as required.
 - c. Test low-water cutoff and pressure relief valve.
 - d. Check operating and safety controls.
 - e. Review boiler operation with boiler operator.
4. Seasonal Shut Down
- a. Review Town's log. Log all operating conditions.
 - b. Shut off burner and open electrical disconnect.
 - c. Close fuel supply valves.
 - d. Review boiler operation with boiler operator.
5. For Items C1 through C4 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
- a. Refractory Patch and Coat Material
 - b. Gasket - low-water cutoff
 - c. Automatic Feed
 - d. Hand Hole
 - e. Man Hole
 - f. Asbestos Rope
 - g. Hand Valve Packing
 - h. Lubricant - oil and grease
 - i. Oil Burner Nozzles
 - j. Electrodes
 - k. Filters - oil and air
 - l. Belts
 - m. Clean up material
 - n. Contact Cleaner

D. PUMPS

1. Annual Inspection
 - a. Lubricate pump bearings per manufacturer's recommendations.
 - b. Lubricate motor bearings per manufacturer's recommendations.
 - c. Tighten all nuts and bolts. Check motor mounts and vibration pads (adjust as required).
 - d. Visually check pump alignment and coupling.
 - e. Check motor operating conditions.
 - f. Inspect electrical connections and contactors.
 - g. Check and clean strainers, and check hand valves.
 - h. Inspect mechanical seals. Replace as required or inspect pump packing and adjust as needed.
 - i. Verify gauges for accuracy.
 - j. Clean external surfaces as required.
2. Semi-Annual Inspection
 - a. Lubricate pump bearings per manufacturer's recommendations.
 - b. Lubricate motor bearings per manufacturer's recommendations.
 - c. Check suction and discharge pressures.
 - d. Check packing or mechanical seal.
3. For Items D1 and D2 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
 - a. Belts
 - b. Motor Mounts
 - c. Vibration Pads
 - d. Seals
 - e. Packing
 - f. Lubricant - oil and grease
 - g. Contact Cleaner
 - h. Clean up materials

E. CONDENSING UNITS

1. Air Cooled, Start-Up Inspection
 - a. Review manufacturer's recommendations for start-up.
 - b. Energize crankcase heater per manufacturer's recommendation for warm-up.
 - c. Remove all debris from within and around unit.
 - d. Visually inspect for leaks.
 - e. Check belts, pulleys and mounts. Adjust and replace belts as required.
 - f. Lubricate fan and motor bearings per manufacturer's recommendation.
 - g. Inspect electrical connections, contactors, relays, and operating/safety controls.
 - h. Check motor operating conditions.
 - i. Check and clean fan blades as required.
 - j. Check and clean coil. Straighten fins as required.
 - k. Check vibration eliminators. Replace or adjust as required.
 - l. Check compressor oil level, acid test oil, and meg hermetic motor.

- m. Change oil and refrigerant filter drier as required.
 - n. Check and test all operating and safety controls.
 - o. Check operating conditions. Adjust as required.
 - p. Clean external surfaces as required.
2. Mid-Season Inspection
 - a. Visually inspect for leaks.
 - b. Lubricate fan bearings per manufacturer's recommendations.
 - c. Lubricate motor bearings per manufacturer's recommendations.
 - d. Check belts and sheaves. Adjust and replace belts as required.
 - e. Clean and straighten fins as required.
 - f. Check operating conditions. Adjust as required.
 3. Water Cooled, Start-Up Inspection
 - a. Review manufacturer's recommendations for start-up.
 - b. Energize crankcase heater per manufacturer's recommendation for warm-up.
 - c. Visually inspect for leaks.
 - d. Vent system of trapped air.
 - e. Inspect electrical connections, contactors, relays, and operating/safety conditions.
 - f. Check vibration eliminators. Replace or adjust as required.
 - g. Check compressor oil level, acid test oil, and meg hermetic motor.
 - h. Change oil and refrigerant filter drier as required.
 - i. Check operating conditions. Adjust as required.
 - j. Clean external surfaces as required.
 4. Mid-Season Inspection
 - a. Visually inspect for leaks.
 - b. Check operating conditions. Adjust as required.
 5. For Items E1 through E4 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
 - a. Belts
 - b. Lubricants - oil and grease
 - c. Contact Cleaner
 - d. Cleanup materials
 - e. Caulking
 - f. Panel Gasketing
 - g. Refrigerant filter drier
 - h. Vibration eliminators

F. GENERAL ROOF-TOP HEATING AND COOLING UNITS

The maintenance for heating and cooling units shall include filter changes as needed and T-stat calibration. Maintenance shall be as follows:

1. Spring start-up of cooling system.
2. Summer inspection.

3. Fall start-up of heat.
4. Winter inspection.
5. Air Cooled
 - a. Review manufacturer's recommendation for start-up.
 - b. Energize crankcase heater per manufacturer's recommendation for warm-up.
 - c. Remove all debris from within and around unit.
 - d. Visually inspect for leaks.
 - e. Check belts, pulleys, and mounts. Adjust and replace belts as required.
 - f. Lubricate fan and motor bearings per manufacturer's recommendation.
 - g. Inspect electrical connections, contactors, relays, and operating/safety controls.
 - h. Check motor operating conditions.
 - i. Check and clean fan blades as required.
 - j. Check and clean coil. Straighten fins as required.
 - k. Check vibration eliminators. Replace or adjust as required.
 - l. Check compressor oil level, acid test oil, and meg hermetic motor.
 - m. Change oil and refrigerant filter drier as required.
 - n. Check and test all operating and safety controls.
 - o. Check operating conditions. Adjust as required.
 - p. Clean external surfaces as required.

G. FANS AND CENTRAL FAN SYSTEMS

1. Fans, Annual Inspection
 - a. Check and clean fan assembly.
 - b. Lubricate fan bearings per manufacturer's recommendation.
 - c. Lubricate motor bearings per manufacturer's recommendation.
 - d. Check belts and sheaves. Adjust and replace belts as required.
 - e. Tighten all nuts and bolts.
 - f. Check motor mounts and vibration pads. Adjust as required.
 - g. Check motor operating conditions.
 - h. Inspect electrical connections and contactors.
 - i. Lubricate and adjust associated dampers and linkage.
 - j. Check fan operation.
 - k. Clean external surfaces as required.
2. Fans, Semi-Annual
 - a. Lubricate fan bearings per manufacturer's recommendation.
 - b. Lubricate motor bearings per manufacturer's recommendation.
 - c. Check belts and sheaves. Adjust and replace belts as required.
 - d. Check for operation.
3. Central Fan Systems, Annual Inspection
 - a. Check and clean fan assembly.
 - b. Lubricate fan bearings per manufacturer's recommendation.
 - c. Lubricate motor bearings per manufacturer's recommendation.
 - d. Check belts and sheaves. Adjust and replace belts as required.
 - e. Tighten all nuts and bolts.

- f. Check motor mounts and vibration pads. Adjust as required.
 - g. Check motor operating conditions.
 - h. Lubricate and adjust associated dampers and linkage.
 - i. Check fan operation.
 - j. Clean outside air intake screen.
 - k. Check and clean drains and drain pans.
 - l. Check and clean strainers. Check hand valves and steam traps.
 - m. Check filter advancing mechanism. Lubricate and adjust as required.
 - n. Inspect filters.
 - o. Check heating and cooling coils.
 - p. Inspect humidifier.
 - q. Clean external surfaces as required.
4. Semi-Annual Inspection
- a. Lubricate fan bearings per manufacturer's recommendation.
 - b. Lubricate motor bearings per manufacturer's recommendation.
 - c. Check belts and sheaves. Adjust and replace belts as required.
 - d. Clean outside air intake screen.
 - e. Check filter advancing mechanism. Lubricate and adjust as required.
 - f. Inspect filters.
 - g. Check heating and cooling coils.
 - h. Inspect humidifier.
5. For Items G1 through G4 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
- a. Belts
 - b. Lubricants - oil and grease
 - c. Contact Cleaner
 - d. Cleanup material

H. TERMINAL UNITS

1. Unit Ventilation, Annual
- a. Brush and vacuum grills, coil, fan, and unit interior.
 - b. Lubricate fan and motor bearings per manufacturer's recommendation.
 - c. Check belts and sheaves. Adjust as required. Replace belts as required.
 - d. Check and clean drains and drain pan.
 - e. Check and clean strainers. Check steam traps and hand valves.
 - f. Inspect filters.
 - g. Check unit operating conditions.
 - h. Lubricate and adjust dampers and linkage.
 - i. Clean exterior surfaces as required.
2. Radiation, Annual
- a. Visually inspect fins/cast iron. Clean as required.
 - b. Check and clean strainers. Check steam traps and hand valves.
3. Induction Units, Annual
- a. Visually inspect coil. Clean as required.
 - b. Check and clean drains and drain pans.

- c. Clean discharge grill.
 - d. Check and clean strainers. Check steam traps and hand valves.
 - e. Clean exterior surfaces as required.
4. Reheat Coils, Annual
- a. Visually inspect coil. Clean as required.
 - b. Check and clean strainers. Check steam traps and hand valves.
 - c. Inspect electrical connections, contactors, relays, and operating/safety controls.
5. Boxes, Dual Duct and Variable Air Volume, Annual
- a. Inspect box for duct work connection.
 - b. Lubricate and adjust dampers and linkage.
6. For Items H1 through H5 above, Contractor shall provide the following listed materials when necessary and indicated under type of inspection above:
- a. Belts
 - b. Lubricant - oil and grease
 - c. Contact Cleaner
 - d. Cleanup materials.

I. COOLING TOWER EVAPORATIVE CONDENSERS

1. Pre-Season Inspection
- a. Remove all debris from within and around unit, and flush as required.
 - b. Check and clean strainers, bleed overflow and drain.
 - c. Lubricate fan and motor bearings per manufacturer's recommendation.
 - d. Change oil in gear reducer assembly as per manufacturer's recommendation.
 - e. Check belts, motor pulley, and motor mounts. Replace belts and adjust as required.
 - f. Inspect electrical connections, contactors, relays, and operating/safety controls.
 - g. Check motor operating conditions.
 - h. Clean float valve assembly and check for proper operation.
 - i. Clean and paint external surfaces as required.
2. Quarterly Inspection
- a. Inspect fan, motor, and belts.
 - b. Check oil level in gear reducer. Add oil as required.
 - c. Check intake strainer, bleed, and overflow.
 - d. Check operating conditions. Adjust as required.
3. For Items I1 and I2 above, Contractor shall provide the following listed materials when indicated under type of coverage above.
- a. Belts
 - b. Lubricant - oil and grease
 - c. Contact Cleaner
 - d. Cleanup Materials
 - e. Paint Material
 - f. Caulking

J. WATER TREATMENT

1. Quarterly Inspection, Cooling Tower
 - a. Operate all chemical bleed and feed equipment to assure proper operation.
 - b. Chemically test the system water for proper bleed rate and treatment levels.
 - c. Adjust the controls to obtain proper operation.
 - d. Visually inspect the open portions of the system for evidence of corrosion, scale or slime, and algae growth.
 - e. Slug feed biocide and antifoam to control slime and algae growth.
 - f. Furnish to Town a written report of the test and inspection results, including recommendations.
 - g. Inventory the remaining water treatment chemicals and reorder as required.

2. Quarterly Inspection, Open Steam Boilers
 - a. Operate all chemical bleed and feed equipment to assure proper operation.
 - b. Chemically test the system water for proper bleed rate and treatment levels.
 - c. Adjust the controls to obtain proper operation.
 - d. Furnish to Town a written report of the test and inspection results including recommendations.
 - e. Inventory the remaining water treatment chemicals and reorder as required.

3. Semi-Annual Inspection, Closed Systems
 - a. Chemically test the system water for proper bleed rate and treatment levels.
 - b. Adjust the controls to obtain proper operation.
 - c. Furnish to Town a written report of the test and inspection results including recommendations.
 - d. Inventory the remaining water treatment chemicals and reorder as required. Contractor shall provide all necessary chemical materials at no additional cost to the Town.