



**Special Board of Trustees Meeting  
Tuesday April 26, 2022 6:00 pm  
Public comments can be submitted here:**

**<https://www.bethlehempubliclibrary.org/about-us/contact-us/contact-the-director/>**

**Agenda**

- **Call to order**
- **Public Participation**
- **New Business**
  - **HVAC maintenance contract**
- **Executive Session**
- **Adjournment**

**Next board meeting: May 9th, 2022 6:00pm (Budget Presentation and Board Meeting)**



## HVAC SYSTEMS SCHEDULED SERVICE AGREEMENT

**Trane Office**

Trane U.S. Inc.  
301 Old Niskayuna Road, Suite 1  
Latham, NY 12110

**Company Name**

Bethlehem Public Library  
451 Delaware Ave  
Delmar, NY 12054

**Trane Representative**

Scott Miller  
Cell: (518) 365-6080  
Office: (518) 785-1315

**Site Address:**

Bethlehem Public Library  
451 Delaware Ave  
Delmar, NY 12054

**Proposal ID**

3221408

**Service Contract Number**

2592423

**Contact Telephone Number for  
Service**

(518) 785-6486

April 12, 2022



## EXECUTIVE SUMMARY

This **Scheduled Service Agreement** provides an integrated approach to planned maintenance for your HVAC equipment and building automation system (BAS). It is an effective service strategy. After all, both systems must work together to your building comfortable and energy efficient.

Under this combined service agreement, you will hand off the responsibilities for planning, scheduling and managing routine maintenance to Trane. Our local factory trained technicians keep your HVAC and BAS running efficiently and reliability, as two interdependent systems.

As an HVAC service provider, Trane offers many advantages:

- Confidence that your HVAC equipment and BAS are being cared for according to OEM best practices for both frequency and procedures
- Priority service, available 24-hours a day, giving your facility precedence during urgent situations
- Advanced diagnostic technologies, allowing our technicians to analyze system performance more comprehensively, so they can identify and correct a broader set of conditions

**Protect your bottom line.** Proper maintenance can save an estimated 12 to 18 percent of your budget compared to a run-to-fail approach. This service agreement will help you capture those savings. (*FEMP O&M Guide 2010*)

### FOCUSED ON BETTER BUILDINGS

When it comes to service effectiveness, experience matters. No other provider has more experience than Trane.

- 100+ years of system and equipment experience
- 35+ years in building automation systems (BAS)
- 20+ years in energy services

### ADDITIONAL SUPPORT

Trane offers a wide range of maintenance and repair services beyond the scope of this service agreement. Ask your Trane representative for details.

#### ENVIRONMENTAL PRACTICES

Trane procedures for handling refrigerant are compliant with federal and state regulations.

#### CONSISTENT PROCESSES

All Trane technicians follow documented processes ensuring uniform service delivery.

#### SAFETY

Trane incident rates (OSHA) are consistently 50 to 70 percent below industry averages.

#### ASSIGNED TEAM

You will have a consistent group of Trane employees dedicated to your account.



## SCOPE OF SERVICES — STANDARD INCLUSIONS

### ANY HVAC SYSTEM IS ONLY AS STRONG AS ITS INDIVIDUAL MECHANICAL COMPONENTS.

This service agreement with Trane protects and enhances full system functionality by ensuring that components are well maintained and functioning to OEM standards. And it is tailored to your needs. The following are the standard inclusions of your service agreement:

#### TRANE SCHEDULED MAINTENANCE

Factory authorized Trane service technicians perform all periodic maintenance, following OEM standards, to keep HVAC and BAS equipment running optimally and prevent unplanned downtime. Trane assumes all responsibilities for planning, scheduling and managing routine maintenance on Trane HVAC equipment and other brands.

##### Advantages:

- Trust one assigned maintenance team for all HVAC equipment brands
- Receive consistent service outcomes through proprietary Six Sigma maintenance procedures
- Save money compared to ad-hoc service calls

##### Implementation:

- Technician visits are scheduled in advance
- Service is completed during normal business hours
- Basic supplies, such as grease, cleaning solvents and wiping cloths, are included in the annual fee





## REFRIGERANT MANAGEMENT

US Environmental Protection Agency (EPA) has placed in effect more stringent regulations on refrigerant management and reporting in 2017. Section 608 of the Clean Air Act prohibits the knowing release of refrigerant during the maintenance, service, repair, or disposal of air-conditioning and refrigeration equipment. The EPA requires proper refrigerant management practices by owners and operators of refrigeration and air-conditioning systems, all servicing technicians and others. ***The Clean Air Act requires owners to maintain records of refrigerant usage and leak rates for each air-conditioning or refrigeration appliance with refrigerant charge greater than 50 lbs. and for disposal of units between 5 and 50 lbs. of refrigerant. These records must be maintained for 3 years and be directly accessible if audited by the EPA.*** This brief summary of Section 608 of the Clean Air Act is provided for informational purposes only and is not for the purpose of providing legal advice. You should contact your attorney to obtain advice with respect to the application of Section 608 of the Clean Air Act to your business.



Trane Technicians are Universally certified (the highest level possible) to service, manage, and document your refrigerant and are knowledgeable of applicable law and time constraints to repair leaks. Trane Technicians track all refrigerant in all equipment serviced regardless of appliance size.

When a customer has **all** their refrigerant work performed by a Trane technician - Trane Refrigerant Management software maintains complete record of refrigerant transactions and appliance leak rates. Refrigerant reports provided by Trane will contain the information to satisfy EPA record keeping requirements.

### Advantages:

- Real time reporting of refrigerant leak rate informs proactive decisions
- Stay in compliance with state and federal regulations
- Provide acceptable documentation to authorities during audits
- Maintain company environmental standards
- Detect potential refrigerant leaks before equipment damage occurs

### Implementation:

- Technicians collect refrigerant information for covered equipment during onsite visits
- Refrigerant data and technician activity are entered into the Trane Refrigerant Management System
- Refrigerant Usage Reports are generated according to your needs



## TRANE LABORATORY ANALYSIS

Trane Laboratory Analysis tests system fluids for contaminants and other physical characteristics and trends. Conditions indicating sub-optimal HVAC system performance are identified before issues become critical.

### Advantages:

- Head off equipment failures and unplanned downtime
- Identify long-term equipment performance trends
- Gain definitive insights through Trane experience and expertise

### Implementation:

- Samples collected by Trane technicians during maintenance as stated in this agreement
- Laboratory analysis of oil, absorption solutions and refrigerants
- Consistent testing according to Trane best-practice protocols year after year

## SEQUENCE OF OPERATION VERIFICATION

Sequence of Operation Verification assures the system is operating as intended. It helps manage the multiple system inputs and confirms set-up accuracy.

### Advantages:

- Maintain comfort, reliability and uptime
- Prevent premature failure of the system or components
- Identify anomalies that waste energy

### Implementation:

- Discover unreleased manual overrides
- Correct scheduling discrepancies
- Evaluate appropriate set points





## SOFTWARE UPDATE AND TRAINING

Software Updates and training provide software installation and maintenance, along with information and demonstrations on new features and functionality. This agreement includes annual upgrades for all contract customers. Any unplanned software upgrades above and beyond the annual upgrade will be brought to the customer attention and billable at time and material upon customer approval.

### Advantages:

- Proactively maintain BAS system software to each new version
- Gain new and improved capabilities as technology progresses
- Know how to gain the full advantages of system enhancements
- Keep BAS software compatible with current operating systems and browsers
- Mitigates risk against potential cyber security vulnerabilities within the base software



### Implementation:

- Proactive notification of software releases
- Installation and administration of software and/or firmware upgrades
- Comprehensive system and database backup and archiving
- Operator coaching and/or up-front discussion on new features

## SYSTEM ANALYSIS AND REVIEW

System analysis and review identifies and corrects programming errors, failed points, points in alarm and points that have been overridden. Regularly scheduled on-site visits by Trane technicians also provide the opportunity to ask questions or address systems concerns you may have.

### Advantages:

- Improves system efficiency
- Assures compliance to specified conditions
- Reduces the risk of costly and disruptive system problems

### Implementation:

- Regularly scheduled on-site visits by Trane technicians





## CONTROL LOOP TUNING

Operators sometimes adjust system settings to accommodate immediate comfort requirements. Control Loop Tuning makes sure the correct settings are in place during seasonal transitions.

### Advantages:

- Prepare for hotter or colder weather
- Assure continuous occupant comfort

### Implementation:

- Review for manual changes
- Restore optimal settings for the heating/cooling season
- Verify operation of mechanical loop components

## TRACER SC+ SOFTWARE MAINTENANCE PLAN (As released by Trane)

Includes updates to new Tracer SC+ Software Versions typically released two times per year, including installation by Trane Technicians. These upgrades provide access to exciting new features and functionalities that are being developed at a rapid pace; and are essential to keeping up with the latest technology and demands of high performing, energy efficient buildings.





## HVAC EQUIPMENT COVERAGE

# Bethlehem Public Library

The following "Covered Equipment" will be serviced at Bethlehem Public Library:

Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
Tracer SC	1	Trane	BMCF000AAA	E18C40708	

Description	Quantity Per Year
System Analysis and Review	4
Hot Water System Controls Support	2
RTU Controls Support	4
Full System Backup	1
Operator Training	1
Software Upgrades	1
VAV Front-End Analysis	4
Trend Analysis	4

Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
Split System	1	Johnson Controls	DCX24CSB21	63229965325	CU-1 COOLING UNIT
Split System	1	Johnson Controls	YVAHP036B2	JID60055	HPCU-1 TV STUDIO

Description	Quantity Per Year
Condenser Coil Cleaning	1
Quarterly Maintenance	4

Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
Boiler	1	Weil McLain	678	1	BOILER

Description	Quantity Per Year
Boiler Annual Maintenance	1
Boiler Seasonal Start Up	1

Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
RTU	1	York International	V2S534ABE2	N1E8758248	RTU
RTU	1	York International	V2S534ABE3	N1E8754515	RTU-4
RTU	1	York International	V2S534ABE3	N1E8758224	RTU-
RTU	1	York International	V2S534AE3A	N1E8758233	DT-1 ROOFTOP UNIT

Description	Quantity Per Year
Quarterly Maintenance	4
Clean Condenser Coil	1



Equipment	Qty	Manufacturer	Model Number	Serial Number	Asset Tag
Hot Water Pump VFD	1	Square D	A07X07	SFD212FG3Y	VFD ON PUMP P-01
Hot Water Pump	1	Weil McLain	P-01	C259567- 01C81	P-01

**Description**

Pump Maintenance  
 VFD Maintenance

**Quantity Per Year**

2  
 2



## PRICING AND ACCEPTANCE

Bethlehem Public Library  
 451 Delaware Ave  
 Delmar, NY 12054

Site Address:  
 Bethlehem Public Library  
 451 Delaware Ave  
 Delmar, NY 12054

### Trane Service Agreement

This Service Agreement for Building Automation Systems consists of the pages beginning with the page entitled "HVAC Systems Scheduled Service Agreement," the consecutively numbered pages immediately following such title page, and includes and ends with the Trane Terms and Conditions (Service) (collectively, the "Service Agreement" or "Agreement"). Trane agrees to inspect and maintain the Covered Equipment according to the terms of this Service Agreement, including the "Terms and Conditions," and "Scope of Services" sections. Trane agrees to give preferential service to Service Agreement Customer over non-contract customers.

### Service Fee

As the fee(s) (the "Service Fee(s)") for the inspection and maintenance services described in the Scope of Services section with respect to the Covered Equipment, Customer agrees to pay to Trane the following amounts, plus applicable tax, as and when due.

Contract Year	Annual Amount USD	Payment USD	Payment Term
Year 1	19,606.00	19,606.00	Annual
Year 2	20,390.00	20,390.00	Annual
Year 3	21,206.00	21,206.00	Annual

NYS Contract # PT 65823

Trane US Inc  
 Group # 77201

Service Fee Discount. A one-time 3.00 % discount is offered for full payment of 1 year(s) in advance of the commencement of the Service Agreement. Invoice would be issued at start of the Agreement and is due net 15 days from date of invoice. The discount would be **588.18 USD** if this option is selected. Tax will be calculated based upon the pre-discounted price. This Service Fee discount is for advance payment only under the terms stated in this section and is not applicable to credit card transactions. Please check the box to select this discount option.

In addition to any other amounts then due hereunder, if this Agreement is terminated or cancelled prior to its scheduled expiration, Customer shall pay to Company the balance of any amounts billed to but unpaid by Customer and, if a "Service Project" is included in the Agreement, the Cancellation Fee set forth in "Exhibit A" Cancellation Schedule attached hereto and incorporated herein, which Cancellation Fee represents unbilled labor, non-labor expenses and parts materials and components. Subject only to a prior written agreement signed by Trane, payment is due upon receipt of invoice in accordance with Section 4 of the attached Terms and Conditions.



### **Term**

The Initial Term of this Service Agreement is 3 years, beginning **May 1, 2022** and expiring **April 30, 2025**. However, Trane's obligation under this Agreement will not begin until authorized representatives of Trane and Customer have both signed this Agreement in the spaces provided below.

If any questions arise regarding this Service Agreement or how to cancel this Agreement, Trane can be reached either by telephone at (518) 785-6486 or by direct mail addressed to: 301 Old Niskayuna Road, Suite 1 Latham, NY 12110.

### **Renewal Pricing Adjustment**

The Service Fees for an impending Renewal Term shall be the current Service Fees (defined as the Service Fees for the initial Term or Renewal Term immediately preceding the impending Renewal Term) annually adjusted based on changes to the cost of service. The Service Fees for an impending Renewal Term shall be set forth in the service renewal letter furnished to Customer.

### **Cancellation by Customer Prior to Services; Refund**

If Customer cancels this Agreement within (a) thirty (30) days of the date this Agreement was mailed to Customer or (b) twenty (20) days of the date this Agreement was delivered to Customer, if it was delivered at the time of sale, and if no Services have been provided by Company under this Agreement, the Agreement will be void and Company will refund to Customer, or credit Customer's account, the full Service Fee of this Agreement that Customer paid to Company, if any. A ten percent (10%) penalty per month will be added to a refund that is due but is not paid or credited within forty-five (45) days after return of this Agreement to Company. Customer's right to cancel this Agreement only applies to the original owner of this Agreement and only if no Services have been provided by Company under this Agreement prior to its return to Company.

### **Cancellation by Company**

This Agreement may be cancelled during the Initial Term or, if applicable, a Renewal Term for any reason or no reason, upon written notice from Company to Customer no later than 30 days prior to the scheduled expiration date and Company will refund to Customer, or credit Customer's account, that part of the Service Fee attributable to Services not performed by Company. Customer shall remain liable for and shall pay to Company all amounts due for Services provided by Company and not yet paid.

### **COVID-19 National Emergency Clause**

The parties agree that they are entering into this Agreement while the nation is in the midst of a national emergency due to the Covid-19 pandemic ("Covid-19 Pandemic"). With the continued existence of Covid-19 Pandemic and the evolving guidelines and executive orders, it is difficult to determine the impact of the Covid-19 Pandemic on Trane's performance under this Agreement. Consequently, the parties agree as follows:

1. Each party shall use commercially reasonable efforts to perform its obligations under the Agreement and to meet the schedule and completion dates, subject to provisions below;
2. Each party will abide by any federal, state (US), provincial (Canada) or local orders, directives, or advisories regarding the Covid-19 Pandemic with respect to its performance of its obligations under this Agreement and each shall have the sole discretion in determining the appropriate and responsible actions such party shall undertake to so abide or to safeguard its employees, subcontractors, agents and suppliers;
3. Each party shall use commercially reasonable efforts to keep the other party informed of pertinent updates or developments regarding its obligations as the Covid-19 Pandemic situation evolves; and
4. If Trane's performance is delayed or suspended as a result of the Covid-19 Pandemic, Trane shall be entitled to an equitable adjustment to the project schedule and/or the contract price.



This Agreement is subject to Customer's acceptance of the attached Trane Terms and Conditions (Service).

CUSTOMER ACCEPTANCE	TRANE ACCEPTANCE
_____ Authorized Representative	_____ Submitted By: Scott Miller
_____ Printed Name	_____ Proposal Date: April 12, 2022
_____ Title	_____ Cell: (518) 365-6080
_____ Purchase Order	_____ Office: (518) 785-1315
_____ Acceptance Date	_____ License Number:
	_____ Authorized Representative
	_____ Title
	_____ Signature Date

The Initial Term of this Service Agreement is 3 years, beginning May 1, 2022.  
Total Contract Amount: \$61,202.00 USD.



## TERMS AND CONDITIONS

“Company” shall mean Trane U.S. Inc..

**1. Agreement.** These terms and conditions (“Terms”) are an integral part of Company’s offer and form the basis of any agreement (the “Agreement”) resulting from Company’s proposal (the “Proposal”) for the following commercial services as stated in the Proposal (collectively, the “Services”): inspection, maintenance and repair (the “Maintenance Services”) on equipment (the “Covered Equipment”), specified Additional Work (if any), and, if included in the Proposal, Intelligent Services, Energy Assessment, Energy Performance Solutions, and any other services using remote connectivity (collectively and individually referred to in these Terms as “Energy and Building Performance Services”). **COMPANY’S TERMS ARE SUBJECT TO PERIODIC CHANGE OR AMENDMENT.**

**2. Connected Services.** In addition to these terms and conditions, the Connected Services Terms of Service (“Connected Services Terms”), available at <https://www.trane.com/TraneConnectedServicesTerms>, as updated from time to time, are incorporated herein by reference and shall apply to the extent that Company provides Customer with Connected Services, as defined in the Connected Services Terms.

**3. Acceptance.** The Proposal is subject to acceptance in writing by the party to whom this offer is made or an authorized agent (“Customer”) delivered to Company within 30 days from the date of the Proposal. If Customer accepts the Proposal by placing an order, without the addition of any other terms and conditions of sale or any other modification, Customer’s order shall be deemed acceptance of the Proposal subject to these Terms and Conditions. If Customer’s order is expressly conditioned upon Company’s acceptance or assent to terms and/or conditions other than those expressed herein, return of such order by Company with Company’s Terms and Conditions attached or referenced serves as Company’s notice of objection to Customer’s terms and as Company’s counteroffer to perform in accordance with the Proposal and Company Terms and Conditions. If Customer does not reject or object in writing to Company within 10 days, Company’s counteroffer will be deemed accepted. Customer’s acceptance of performance by Company will in any event constitute an acceptance by Customer of Company’s Terms and Conditions. This Agreement is subject to credit approval by Company. Upon disapproval of credit, Company may delay or suspend performance or, at its option, renegotiate prices and/or Terms and Conditions with Customer. If Company and Customer are unable to agree on such revisions, this Agreement shall be cancelled without any liability, other than Customer’s obligation to pay for Services provided by Company to the date of cancellation.

**4. Fees and Taxes.** Fees for the Services (the “Service Fees”) are as set forth in the Proposal. Except as otherwise stated in the Proposal, Service Fees are based on performance during regular business hours. Charges for performance outside Company’s normal business hours shall be billed separately according to the then prevailing overtime or emergency labor/labour rates. In addition to the stated Service Fees, Customer shall pay all taxes not legally required to be paid by Company or, alternatively, shall provide Company with an acceptable tax exemption certificate.

**5. Payment.** Payment is due upon receipt of Company’s invoice. Service Fees shall be paid no less frequently than quarterly and in advance of performance of the Services. Company reserves the right to add to any account outstanding for more than 30 days a service charge equal to the lesser of the maximum allowable legal interest rate or 1.5% of the principal amount due at the end of each month. Without liability to Customer, Company may discontinue performance whenever payment is overdue. Customer shall pay all costs (including attorneys’ fees) incurred by Company in attempting to collect amounts due or otherwise enforcing this Agreement.

**6. Customer Breach.** Each of the following constitutes a breach by Customer and shall give Company the right, without an election of remedies, to suspend performance or terminate this Agreement by delivery of written notice declaring termination. Upon termination, Customer shall be liable to the Company for all Services furnished to date and all damages sustained by Company (including lost profit and overhead): (a) Any failure by Customer to pay amounts when due; (b) any general assignment by Customer for the benefit of its creditors, Customer’s bankruptcy, insolvency, or receivership; (c) Any representation or warranty furnished by Customer in connection with this Agreement is false or misleading in any material respect when made; or (d) Any failure by Customer to perform or comply with any material provision of this Agreement.

**7. Performance.** Company shall perform the Services in accordance with industry standards generally applicable in the state or province where the Services are performed under similar circumstances when Company performs the Services. Company may refuse to perform where working conditions could endanger property or put people at risk. Unless otherwise agreed by Customer and Company, at Customer’s expense and before the Services begin, Customer will provide any necessary access platforms, catwalks to safely perform the Services in compliance with OSHA, state, or provincial industrial safety regulations or any other applicable industrial safety standards or guidelines. This Agreement presupposes that all major pieces of Covered Equipment are in proper operating condition as of the date hereof. Services furnished are premised on the Covered Equipment being in a maintainable condition. In no event shall Company have any obligation to replace Covered Equipment that is no longer maintainable. During the first 30 days of this Agreement, or upon initial inspection, and/or upon seasonal start-up (if included in the Services), if an inspection by Company of Covered Equipment indicates repairs or replacement is required, Company will provide a written quotation for such repairs or replacement. If Customer does not authorize such repairs or replacement, Company may remove the unacceptable equipment from the Covered Equipment and adjust the Service Fees accordingly. Customer authorizes Company to utilize Customer’s telephone line or network infrastructure to connect to controls, systems and/or equipment provided or serviced by Company and to provide Services contracted for or otherwise requested by Customer, including remote diagnostic and repair service. Customer acknowledges that Company is not responsible for any adverse impact to Customer’s communications and network infrastructure. Company may elect to install/attach to Customer equipment or provide portable devices (hardware and/or software) for execution of control or diagnostic procedures. Such devices shall remain the personal proprietary property of Company and in no event shall become a fixture of Customer locations. Customer shall not acquire any interest, title or equity in any hardware, software, processes, and other intellectual or proprietary rights to devices used in connection with the Services on Customer equipment. Company may remove such devices at its discretion. Parts used for any repairs made will be those selected by Company as suitable for the repair and may be parts not manufactured by Company.

**8. Customer Obligations.** Customer shall: (a) Provide Company reasonable and safe access to the Covered Equipment and areas where Company is to work; (b) Follow manufacturer recommendations concerning teardown and internal inspection, major overhaul, restoration or refurbishing of the Covered Equipment; unless expressly stated in the Scope of Services statement, Company is not performing any manufacturer recommended teardown and internal inspection, major overhaul, restoration or refurbishing of the Covered Equipment; and (c) Where applicable, unless water treatment is expressly included in the Services, provide professional cooling tower water treatment in accordance with any reasonable recommendations provided by Company.

**9. Exclusions.** Unless expressly included in the Covered Equipment or the Services, the Services do not include, and Company shall not be responsible for or liable to the Customer for any claims, losses, damages or expenses suffered by the Customer in any way connected with, relating to or arising from, any of the following: (a) Any guarantee of room conditions or system performance; (b) Inspection, maintenance, repair, replacement of or services for: chilled water and condenser water pumps and piping; electrical disconnect switches or circuit breakers; motor starting equipment that is not factory mounted and interconnecting power wiring; recording or portable instruments, gauges or thermometers; non-moving parts or non-maintainable parts of the system, including, but not limited to, storage tanks; pressure vessels, shells, coils, tubes, housings, castings, casings, drain pans, panels, duct work; piping: hydraulic, hydronic, pneumatic, gas, or refrigerant; insulation; pipe covering; refractory material; fuses, unit cabinets; electrical wiring; ductwork or conduit; electrical distribution system; hydronic structural supports and similar items; the appearance of decorative casing or cabinets; damage sustained by other equipment or systems; and/or any failure, misadjustment or design deficiencies in other equipment or systems; (c) Damage, repairs or replacement of parts made necessary as a result of electrical power failure, low voltage, burned out main or branch fuses, low water pressure, vandalism, misuse or abuse, wear and tear, end of life failure, water damage, improper operation, unauthorized alteration of equipment, accident, acts or omissions of Customer or others, damage due to freezing weather, calamity, malicious act, or any Event of Force Majeure; (d) Any damage or malfunction resulting from vibration, electrolytic action, freezing, contamination, corrosion, erosion, or caused by scale or sludge on internal tubes except where water treatment protection services are provided by Company as part of this Agreement; (e) Furnishing any items of equipment, material, or labor/labour, or performing special tests recommended or required by insurance companies or federal, state, or local governments; (f) Failure or inadequacy of any structure or foundation supporting or surrounding the equipment to be worked on or any portion thereof; (g) Building access or alterations that might be necessary to repair or replace Customer’s existing equipment; (h) The normal function of starting and stopping equipment or the opening and closing of valves, dampers or regulators normally installed to protect equipment against damage; (i) Valves that are not factory mounted: balance, stop, control, and other valves external to the device unless specifically



included in the Agreement; (j) Any responsibility for design or redesign of the system or the Covered Equipment, obsolescence, safety tests, or removal or reinstallation of valve bodies and dampers; (k) Any services, claims, or damages arising out of Customer's failure to comply with its obligations under this Agreement; (l) Failure of Customer to follow manufacturer recommendations concerning teardown and internal inspection, overhaul and refurbishing of equipment; (m) Any claims, damages, losses, or expenses, arising from or related to conditions that existed in, on, or upon the premises before the effective date of this Agreement ("Pre-Existing Conditions"), including, without limitation, damages, losses, or expenses involving pre-existing building envelope issues, mechanical issues, plumbing issues, and/or indoor air quality issues involving mold/mould and/or fungi; (n) Replacement of refrigerant is excluded, unless replacement of refrigerant is expressly stated as included within the Services, in which case replacement shall in no event exceed the stated percentage of rated system charge per year expressly stated in the Services; (o) crane or rigging costs; (p) Any Services, claims, or damages arising out of refrigerant not supplied by Company. Customer shall be responsible for: (i) The cost of any additional replacement refrigerant; (ii) Operation of any equipment; and (iii) Any claims, damages, losses, or expenses, arising from or related to work done by or services provided by individuals or entities that are not employed by or hired by Company.

**10. Limited Warranty.** Company warrants that: (a) the material manufactured by Company and provided to Customer in performance of the Services is free from defects in material and manufacture for a period of 12 months from the earlier of the date of equipment start-up or replacement; and (b) the labor/labour portion of the Maintenance Services and Additional Work has been properly performed for a period of 90 days from date of completion (the "Limited Warranty"). Company obligations of equipment start-up, if any are stated in the Proposal, are coterminous with the Limited Warranty period. Defects must be reported to Company within the Limited Warranty period. Company's obligation under the Limited Warranty is limited to repairing or replacing the defective part at its option and to correcting any labor/labour improperly performed by Company. No liability whatsoever shall attach to Company until the Maintenance Services and Additional Work have been paid for in full. Exclusions from this Warranty include claims, losses, damages and expenses in any way connected with, related to or arising from failure or malfunction of equipment due to the following: wear and tear; end of life failure; corrosion; erosion; deterioration; Customer's failure to follow the Company-provided maintenance plan; unauthorized or improper maintenance; unauthorized or improper parts or material; refrigerant not supplied by Company; and modifications made by others to equipment. Company shall not be obligated to pay for the cost of lost refrigerant or lost product. Some components of equipment manufactured by Company may be warranted directly from the component supplier, in which case this Limited Warranty shall not apply to those components and any warranty of such components shall be the warranty given by such component supplier. Notwithstanding the foregoing, all warranties provided herein terminate upon termination or cancellation of this Agreement. Equipment, material and/or parts that are not manufactured by Company ("Third-Party Products(s)") are not warranted by Company and have such warranties as may be extended by the respective manufacturer. **CUSTOMER UNDERSTANDS THAT COMPANY IS NOT THE MANUFACTURER OF ANY THIRD-PARTY PRODUCT(S) AND ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS ARE THOSE OF THE THIRD-PARTY MANUFACTURER, NOT COMPANY AND CUSTOMER IS NOT RELYING ON ANY WARRANTIES, CLAIMS, STATEMENTS, REPRESENTATIONS, OR SPECIFICATIONS REGARDING THE THIRD-PARTY PRODUCT THAT MAY BE PROVIDED BY COMPANY OR ITS AFFILIATES, WHETHER ORAL OR WRITTEN. THE REMEDIES SET FORTH IN THIS LIMITED WARRANTY ARE THE SOLE AND EXCLUSIVE REMEDIES FOR WARRANTY CLAIMS PROVIDED BY COMPANY TO CUSTOMER UNDER THIS AGREEMENT AND ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, LIABILITIES, CONDITIONS AND REMEDIES, WHETHER IN CONTRACT, WARRANTY, STATUTE OR TORT (INCLUDING NEGLIGENCE), EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND/OR OTHERS ARISING FROM COURSE OF DEALING OR TRADE. COMPANY EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES, ENDORSEMENTS OR CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF QUALITY, FITNESS, MERCHANTABILITY, DURABILITY AND/OR OTHERS ARISING FROM COURSE OF DEALING OR TRADE OR REGARDING PREVENTION BY THE SCOPE OF SERVICES, OR ANY COMPONENT THEREOF. NO REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, REGARDING PREVENTING, ELIMINATING, REDUCING OR INHIBITING ANY MOLD, FUNGUS, BACTERIA, VIRUS, MICROBIAL GROWTH, OR ANY OTHER CONTAMINANTS (INCLUDING COVID-19 OR ANY SIMILAR VIRUS) (COLLECTIVELY, "CONTAMINANTS"), WHETHER INVOLVING OR IN CONNECTION WITH EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE. IN NO EVENT SHALL COMPANY HAVE ANY LIABILITY FOR THE PREVENTION, ELIMINATION, REDUCTION OR INHIBITION OF THE GROWTH OR SPREAD OF SUCH CONTAMINANTS INVOLVING OR IN CONNECTION WITH ANY EQUIPMENT, THIRD-PARTY PRODUCT, OR ANY COMPONENT THEREOF, SERVICES OR OTHERWISE AND CUSTOMER HEREBY SPECIFICALLY ACKNOWLEDGES AND AGREES THERETO.**

**11. Indemnity.** To the maximum extent permitted by law, Company and Customer shall indemnify and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or personal property, to the extent caused by the negligence or misconduct of the indemnifying party, and/or its respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses, or liabilities to the extent attributable to the acts or omissions of the other party or third parties. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify and hold harmless will continue in full force and effect, notwithstanding the expiration or early termination of this Agreement, with respect to any claims based on facts or conditions that occurred prior to expiration or termination of this Agreement.

**12. Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY, NEITHER PARTY SHALL BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSSES OR DAMAGES OF ANY KIND (INCLUDING WITHOUT LIMITATION REFRIGERANT LOSS, PRODUCT LOSS, LOST REVENUE OR PROFITS, OR LIABILITY TO THIRD PARTIES), OR CONTAMINANTS LIABILITIES, OR PUNITIVE DAMAGES WHETHER BASED IN CONTRACT, WARRANTY, STATUTE, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL THEORY OR FACTS. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE TOTAL AND AGGREGATE LIABILITY OF THE COMPANY TO THE CUSTOMER WITH RESPECT TO ANY AND ALL CLAIMS CONNECTED WITH, RELATED TO OR ARISING FROM THE PERFORMANCE OR NON-PERFORMANCE OF THIS AGREEMENT, WHETHER BASED IN CONTRACT, WARRANTY, STATUTE, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL THEORY OR FACTS, SHALL NOT EXCEED THE COMPENSATION RECEIVED BY COMPANY OVER THE 12 MONTH PERIOD PRECEDING THE DATE OF OCCURRENCE FOR THE SERVICES AND ADDITIONAL WORK FOR THE LOCATION WHERE THE LOSS OCCURRED. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY DAMAGES (WHETHER DIRECT OR INDIRECT) RESULTING FROM MOLD/MOULD, FUNGUS, BACTERIA, MICROBIAL GROWTH, OR OTHER CONTAMINANTS OR AIRBORNE BIOLOGICAL AGENTS. TO THE MAXIMUM EXTENT ALLOWED BY LAW, COMPANY SHALL NOT BE LIABLE FOR ANY OF THE FOLLOWING IN CONNECTION WITH PROVIDING THE ENERGY AND BUILDING PERFORMANCE SERVICES: INTERRUPTION, DELETION, DEFECT, DELAY IN OPERATION OR TRANSMISSION; CUSTOMER'S NETWORK SECURITY; COMPUTER VIRUS; COMMUNICATION FAILURE; THEFT OR DESTRUCTION OF DATA; GAPS IN DATA COLLECTED; AND UNAUTHORIZED ACCESS TO CUSTOMER'S DATA OR COMMUNICATIONS NETWORK.**

**13. CONTAMINANTS LIABILITY.** The transmission of COVID-19 may occur in a variety of ways and circumstances, many of the aspects of which are currently not known. HVAC systems, products, services and other offerings have not been tested for their effectiveness in reducing the spread of COVID-19, including through the air in closed environments. **IN NO EVENT WILL COMPANY BE LIABLE UNDER THIS AGREEMENT OR OTHERWISE FOR ANY INDEMNIFICATION, ACTION OR CLAIM, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR OTHERWISE, FOR ANY BODILY INJURY (INCLUDING DEATH) DAMAGE TO PROPERTY, OR ANY OTHER LIABILITIES, DAMAGES OR COSTS RELATED TO CONTAMINANTS (INCLUDING THE SPREAD, TRANSMISSION OR CONTAMINATION THEREOF) (COLLECTIVELY, "CONTAMINANTS LIABILITIES") AND CUSTOMER HEREBY EXPRESSLY RELEASES COMPANY FROM ANY SUCH CONTAMINANTS LIABILITIES.**

**14. Asbestos and Hazardous Materials.** The Services expressly exclude any identification, abatement, cleanup, control, disposal, removal or other work connected with asbestos polychlorinated biphenyl ("PCB"), or other hazardous materials (collectively, "Hazardous Materials"). Customer warrants and represents that there are no Hazardous Materials on the premises that will in any way affect Company's performance, except as set forth in a writing signed by Company disclosing the existence and location of any Hazardous Materials in all areas within which Company will be performing. Should Company become aware of or suspect the presence of Hazardous Materials, Company may immediately stop work in the affected area and notify Customer. Customer will be responsible for correcting the condition in accordance with all applicable laws and regulations. Customer shall be exclusively responsible for and shall indemnify and hold harmless Company (including its employees, agents and subcontractors) from and against any loss, claim, liability, fees, penalties, injury (including death) or liability of any nature, and the payment thereof, arising out of or relating to any Hazardous Materials on or about the premises, not brought onto the premises by Company. Company shall be required to



resume performance only in the absence of Hazardous Materials or when the affected area has been rendered harmless. In no event shall Company be obligated to transport or handle Hazardous Materials, provide any notices to any governmental agency, or examine the premises site for the presence of Hazardous Materials.

**15. Insurance.** Company agrees to maintain the following insurance during the term of this Agreement with limits not less than shown below and will, upon request from Customer, provide a Certificate of evidencing the following coverage:

Commercial General Liability	\$2,000,000 per occurrence
Automobile Liability	\$2,000,000 CSL
Workers Compensation	Statutory Limits

If Customer has requested to be named as an additional insured under Company's insurance policy, Company will do so but only subject to Company's manuscript additional insured endorsement under its primary Commercial General Liability policies. In no event does Company or its insurer waive rights of subrogation.

**16. Force Majeure.** Company's duty to perform under this Agreement is contingent upon the non-occurrence of an Event of Force Majeure. If Company is unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Company's election (i) remain in effect but Company's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days' notice to Customer, in which event Customer shall pay Company for all parts of the Services furnished to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Company. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism, war or the public enemy; flood; earthquake; lightning; tornado; storm; fire; civil disobedience; pandemic; insurrections; riots; labor/labour disputes; labor/labour or material shortages from the usual sources of supply; sabotage; restraint by court order or public authority (whether valid or invalid), and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Company; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.

**17. Maintenance Services Other Than Solely Scheduled Service.** If Company's Maintenance Services hereunder are not limited solely to Scheduled Service, the following provisions shall also apply: (a) Required restoration shall be performed by Customer at its cost prior to Company being obligated to perform hereunder; (b) any changes, adjustments, service or repairs made to the Equipment by any party other than Company, unless approved by Company in writing, may, at Company's option, terminate Company's obligation to render further service to the Equipment so affected; in such case no refund of any portion of the Service Fees shall be made; and (c) Customer shall (i) promptly notify Company of any unusual performance of Equipment; (ii) permit only Company personnel to repair or adjust Equipment and/or controls during the Term or a Renewal Term; and (iii) utilize qualified personnel to properly operate the Equipment in accordance with the applicable operating manuals and recommended procedures.

**18. General.** Except as provided below, to the maximum extent provided by law, this Agreement is made and shall be interpreted and enforced in accordance with the laws of the state or province in which Company performs the Services. Any dispute arising under or relating to this Agreement shall be decided by litigation in a court of competent jurisdiction located in the state or province in which the Services are performed. To the extent the premises are owned and/or operated by any agency of the United States Federal Government, determination of any substantive issue of law shall be according to the United States Federal common law of Government contracts as enunciated and applied by United States Federal judicial bodies and boards of contract appeals of the United States Federal Government. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes all previous understandings, commitments or agreements, oral or written, related to the Services. If any term or condition of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, all other Terms of this Agreement will nevertheless remain in full force and effect as long as the economic or legal substance of the transaction contemplated hereby is not affected in a manner adverse to any party hereto. Customer may not assign, transfer, or convey this Agreement, or any part hereof, without the written consent of Company. Subject to the foregoing, this Agreement shall bind and inure to the benefit of the parties hereto and their permitted successors and assigns. This Agreement may be executed in several counterparts, each of which when executed shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original. Customer may not assign, transfer, or convey this Agreement, or any part hereof, or its right, title or interest herein, without the written consent of Company. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the parties' respective successors and assigns. No failure or delay by the Company in enforcing any right or exercising any remedy under this Agreement shall be deemed to be a waiver by the Company of any right or remedy.

**19. Equal Employment Opportunity/Affirmative Action Clause.** Company is a federal contractor that complies fully with Executive Order 11246, as amended, and the applicable regulations contained in 41 C.F.R. Parts 60-1 through 60-60, 29 U.S.C. Section 793 and the applicable regulations contained in 41 C.F.R. Part 60-741; and 38 U.S.C. Section 4212 and the applicable regulations contained in 41 C.F.R. Part 60-250 Executive Order 13496 and Section 29 CFR 471, appendix A to subpart A, regarding the notice of employee rights in the United States and with Canadian Charter of Rights and Freedoms Schedule B to the Canada Act 1982 (U.K.) 1982, c. 11 and applicable Provincial Human Rights Codes and employment law in Canada.

**20. U.S. Government Services.** The following provision applies only to direct sales by Company to the US Government. The Parties acknowledge that all items or services ordered and delivered under this Agreement are Commercial Items as defined under Part 12 of the Federal Acquisition Regulation (FAR). In particular, Company agrees to be bound only by those Federal contracting clauses that apply to "commercial" suppliers and that are contained in FAR 52.212-5(e)(1). Company complies with 52.219-8 or 52.219-9 in its service and installation contracting business. The following provision applies only to indirect sales by

**Company to the US Government.** As a Commercial Item Subcontractor, Company accepts only the following mandatory flow down provisions: 52.219-8; 52.222-26; 52.222-35; 52.222-36; 52.222-39; 52.247-64. If the Services are in connection with a U.S. Government contract, Customer certifies that it has provided and will provide current, accurate, and complete information, representations and certifications to all government officials, including but not limited to the contracting officer and officials of the Small Business Administration, on all matters related to the prime contract, including but not limited to all aspects of its ownership, eligibility, and performance. Any thing herein notwithstanding, Company will have no obligations to Customer unless and until Customer provides Company with a true, correct and complete executed copy of the prime contract. Upon request, Customer will provide copies to Company of all requested written communications with any government official related to the prime contract prior to or concurrent with the execution thereof, including but not limited to any communications related to Customer's ownership, eligibility or performance of the prime contract. Customer will obtain written authorization and approval from Company prior to providing any government official any information about Company's performance of the Services that are the subject of the Proposal or this Agreement, other than the Proposal or this Agreement.

**21. Limited Waiver of Sovereign Immunity.** If Customer is an Indian tribe (in the U.S.) or a First Nation or Band Council (in Canada), Customer, whether acting in its capacity as a government, governmental entity, a duly organized corporate entity or otherwise, for itself and for its agents, successors, and assigns: (1) hereby provides this limited waiver of its sovereign immunity as to any damages, claims, lawsuit, or cause of action (herein "Action") brought against Customer by Company and arising or alleged to arise out of the furnishing by Company of any product or service under this Agreement, whether such Action is based in contract, tort, strict liability, civil liability or any other legal theory; (2) agrees that jurisdiction and venue for any such Action shall be proper and valid (a) if Customer is in the U.S., in any state or United States court located in the state in which Company is performing this Agreement or (b) if Customer is in Canada, in the superior court of the province or territory in which the work was performed; (3) expressly consents to such Action, and waives any objection to jurisdiction or venue; (4) waives any requirement of exhaustion of tribal court or administrative remedies for any Action arising out of or related to this Agreement; and (5) expressly acknowledges and agrees that Company is not subject to the jurisdiction of Customer's tribal court or any similar tribal forum, that Customer will not bring any action against Company in tribal court, and that Customer will not avail itself of any ruling or direction of the tribal court permitting or directing it to suspend its payment or other obligations under this Agreement. The individual signing on behalf of Customer warrants and represents that such individual is duly authorized to provide this waiver and enter into this Agreement and that this Agreement constitutes the valid and legally binding obligation of Customer, enforceable in accordance with its terms.

1-26.130-7 (0821)

Supersedes 1-26.130-7 (0720)





## APPENDIX

### SERVICE BEST PRACTICES

Trane is completely dedicated to making buildings better. The ongoing pursuit of better buildings, using our long-term domain expertise to push new technologies into everyday use, keeps us at the forefront of the industry.

In addition to the services details in the agreement above, we take practical steps every day to ensure our approach is safe and efficient.

#### SAFETY

Since 2003, U.S. Bureau of Labor Statistics records have consistently shown the Total Recordable Incident Rate (TRIR) and Days Away From Work (DAFW) for Trane have been significantly lower than those for HVAC repair and maintenance contractors and specialty trade contractors (construction). The company's safety culture in America is unparalleled in the building service industry, with proven results in the continuous reduction of injury rates. Trane incident rates (OSHA) are consistently 50 to 70 percent below the industry average.

A wide range of safety training and resources are available to Trane technicians, including:

- Safety training—20 hours per year
- Electrical safety—NFPA 70E compliant, electrical PPE
- Fall protection
- Ergonomics
- Smith System Safe Driving Program
- USDOT compliance
- Refrigerant management training



### ENVIRONMENTAL PRACTICES

Trane policies and procedures are compliant with all federal and state regulations. Refrigerant (and substitutes) handling, storage and leak repair processes are compliant with Environmental Protection Agency regulation 40 CFR Part 82. Service technicians are Universal-certified and use only certified recovery equipment.

Refrigerant Management Software (RMS) captures, manages and reports all refrigerant activity at your site. Annually, Trane will send you a report documenting all refrigerant activity that we performed for each piece of equipment during the past 12 months.

Trane adheres to all environmental regulations when removing used oil from refrigeration units. We have a national contract with a qualified supplier to recycle or dispose of used oil appropriately.



## CONSISTENCY

Nationwide, Trane technicians follow documented, formal processes that ensure uniform service delivery. As an OEM, Trane has developed exclusive service procedures which provide the most reliable outcomes, and extended equipment longevity, at the most cost-effective price.

- Exclusive service workflow processes provide detailed steps and information encompassing parts, materials, tools and sequence of execution
- Additional steps addressing safety, quality control, work validation and environmental compliance
- Technicians must consistently reference documented processes to ensure no critical steps are skipped or omitted
- Applicable service processes meet or exceed ASHRAE 180-2008 Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems



## CUSTOMER SERVICE FLOWS

The following Customer Service Flows provide additional service description detail for Covered Equipment. Note: There may be differences per the agreement in the work being performed between sites and the equipment on those sites. This section clarifies differences in the work being performed between sites and the equipment on those sites:

### **Boiler Annual Maintenance (Sept)**

#### Description

- Water Boiler Maintenance Safety Check
- Shut Down Boiler
- Drain Boiler
- Boiler Internal Cleaning Natural Gas, Propane, Oil  
Boiler Internal Natural Gas/Propane/Oil Inspection  
External Cleaning for Natural/Propane Water Boiler
- Burner Safety Inspection for Natural Gas/Propane Water Boilers
- Thermo Shock
- Boiler External Inspection for Water Boilers (Natural Gas/Propane)

### **Boiler Seasonal Start Up (Sept)**

#### Description

- Water Boiler Maintenance Safety Check
- External Cleaning for Natural/Propane Water Boiler
- Burner Safety Inspection for Natural Gas/Propane Water Boilers
- Thermo Shock
- Boiler External Inspection for Water Boilers (Natural Gas)

### **Commercial Package Rooftop Quarterly Maintenance (Jan, April, July, Nov)**

#### Description

- Customer Notification
- Unitary Visual Equipment Inspection
- Supply Fan and Motor Inspection
- Power Exhaust Fan and Motor Inspection
- Return Air Fan and Motor Inspection
- Change Belt (Annual)
- Filter Inspection and Change
- Condensate Drip Pan Inspection and Treatment
- Check Damper
- Electrical Inspection
- Log Unit (Gas Heating)
- Log Unit (Cooling)
- Generic Check Delta T

### **Condenser Coil Cleaning**

#### Description

- Condenser Coil Cleaning



### Hot Water Pump Inspection (Oct,Jan)

- Check motor shaft and pump shaft for alignment, if applicable.
- Inspect the coupling for wear.
- Verify that the shaft guard is in place and tight, if applicable.
- 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.
- Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.
- Lubricate the motor bearings as necessary.
- Lubricate the pump bearings as necessary.
- 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.

### Hot Water Pump VFD Inspection (Oct,Jan)

- Visual Inspection
- Open VFD and clean internal components
- Check all electrical connections
- Check cooling fan operation



### **SYSTEM ANALYSIS AND REVIEW - Quarterly**

Trane will review the building automation system to minimize software problems identify and correct programming errors, failed points, points in alarm and points that have been overridden. Software optimization improves system efficiency, assures compliance to specified conditions, and reduces the risk of costly and disruptive system problems. Regularly scheduled on-site visits by Trane technicians also provide the opportunity to meet with on-site operators, review the system and address any questions or concerns they may have.

### **CONTROL LOOP TUNING - Quarterly**

Loop Tuning assures the system is operating at peak performance for the upcoming season. Operators may make manual changes during the heating or cooling season to accommodate current comfort requirements. During Control Loop Tuning, any changes that were made in previous months are reviewed and adjusted to accommodate changing seasonal conditions. The operation of mechanical loop components is verified, as well.

### **SEQUENCE OF OPERATION VERIFICATION - Quarterly**

Sequence of Operation Verification assures the system is operating as intended. During this assessment, unreleased manual overrides are discovered, scheduling discrepancies are corrected, and appropriate set point values are evaluated.

### **TRACER DATABASE BACKUP - Yearly**

Throughout the year, changes are continuously being made to the database in response to energy efficiency, occupant comfort or operator interface issues. Trane maintains current and archived backups of all vital Tracer databases to expedite system recovery and restoration to the last known set-up following a catastrophic event.

### **SOFTWARE SERVICE PACK UPDATES – As released by Trane**

The latest service pack updates will be downloaded and installed to the existing software version when available. This assures the software is always up to date with the current versions that enhance usability and functionality.

### **OPERATOR COACHING - Yearly**

During regularly scheduled visits, Trane technicians will work with on-site operators to develop their skills and proficiencies to help ensure they fully understand how to effectively use the system.

## **REMOTE BAS SERVICES SUPPORT: YEARLY**

Trane will provide customer support assistance during the normal business hours, Monday through Friday (except holidays). This service includes the purchase of a cellular router and a yearly cellular plan for remote access.

#### **Advantages:**

- Support assistance from an experienced technician with faster response time.
- Pre-evaluation of a trouble call allows for a technician to be better prepared (parts, etc.) prior to dispatch
- Shorter recovery time from problems
- Possible continuous training of personnel on Trane software
- Better tracking for software updates, may be able to be accomplished remotely