REQUEST FOR PROPOSAL # 1931

RFP #1931: Preventive HVAC Maintenance for the Ashtabula, East Liverpool, Geauga, Twinsburg, Salem, Stark, Trumbull, and Tuscarawas Campuses of Kent State University

DATE OF ISSUE: Thursday, November 2, 2023

SEALED PROPOSALS DUE: Thursday, January 25, 2024, no later than 4:30 PM Eastern

Proposals must be received electronically through DynamicForms. No other submission method will be accepted, unless otherwise disclosed in the RFP Instructions and Specifications. The confirmation of receipt of your response must be noted as “Signed” no later than the “Proposals Due” date and time specified above. The Forms History of your DynamicForms account will also note the date and time of your proposal submission. Proposals submitted after the “Proposals Due” date and time specified above will be rejected.

Proposals are to be submitted in accordance with the enclosed Proposal Instructions and Specifications. There will not be a formal proposal opening.

The Procurement Department shall at all times reserve the right to reject any or all proposals, award partial proposals, waive any proposal informalities or irregularities, and request new proposals if doing so is deemed to be in the best interests of Kent State University.

Questions pertaining to any specifications contained herein should be directed to:

Alan D. Parker, Strategic Sourcing Manager
Kent State University, Procurement Department
330 Harbort Hall, 615 Loop Road
Kent, Ohio 44242-0001
Phone: 330-672-2276
Fax: 330-672-7904
procurement@kent.edu
www.kent.edu/procurement
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Specifications distributed within RFP and downloadable at [https://kent.edu/procurement/bids](https://kent.edu/procurement/bids)

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1.0 PROJECT TIMELINE

All respondents are expected to adhere to the following timeline in completion of the Request for Proposal process:

- **Thursday, November 2, 2023:** RFP Issued

- **Tuesday, November 14, 2023, at 9:00 AM:** Proposal Meeting. Proposers to attend proposal meeting, Office of the University Architect, Conference Room 104, 615 Loop Road, Kent, Ohio 44242. See the following link for directions [https://www.myatlascms.com/map/?id=568&mrkIid=57891](https://www.myatlascms.com/map/?id=568&mrkIid=57891) Firms planning to attend the proposal meeting must notify Procurement at aparke60@kent.edu no later than November 14, 2023, with the names and titles of the individuals who will attend.

- **Wednesday, November 15, 2023, at 9:00 A.M.:** Campus Tour: KSU Ashtabula Campus and Loge, Bookstore Building, Business Office Conference Room 110A, 3300 Lake Road West, Ashtabula, OH 44004

- **Monday, November 20, 2023, at 9:00 A.M.:** Campus Tour: KSU Trumbull Campus, Classroom Administrative Building Room 233, 4314 Mahoning Avenue NW, Warren, OH 44483

- **Wednesday, November 29, 2023, at 10:30 A.M.:** Campus Tour Geauga - Twinsburg Academic Center, 2745 Creekside Dr., Twinsburg, Ohio 44087

- **Friday, December 1, 2023, at 9:00 A.M.:** Campus Tour: KSU Geauga Campus, Administrative Conference Room 101-G, 4149 Clarion Troy Rd, Burton, OH 44021

- **Tuesday, December 5, 2023 at 9:00 A.M.:** Campus Tour: KSU Stark Campus, Main Hall Maintenance Lounge Room 12, 6000 Frank Avenue NW, North Canton, OH 44720

- **Thursday, December 7, 2023 at 9:00 A.M.:** Campus Tour: KSU Tuscarawas Campus, Founders Hall Business Office Conference Room G101, 330 University Dr. NE, New Philadelphia, OH 44663

- **Wednesday, December 13, 2023 at 9:00 A.M.:** Campus Tour: KSU East Liverpool, Purinton Hall Custodial Office 010A, 400 E. 4th Street, East Liverpool, OH 43920

- **Friday, December 15, 2023 at 9:00 A.M.:** Campus Tour: KSU Salem and City Center Campus, Main Classroom Building Maintenance Office Room 157, 2491 St. Rt. 45 South, Salem, OH 44460

- **January 9, 2024:** Questions Deadline. Questions may only be e-mailed to Alan D. Parker Strategic Sourcing Manager at aparke60@kent.edu. Questions should be submitted in the following format.
  - Section number
  - Paragraph number if applicable
  - Text of passage being questioned
  - Question

- **January 16, 2024:** Question Responses emailed to Bid List.

- **Tuesday, January 25, 2024, 4:00pm (EST):** Proposals Due

- **Tuesday, January 25, 2024, thru February 13, 2024:** Evaluation*

- **March 5, 27, 2024:** Recommendation of Award*

(Project Timeline continues on following page.)
• **Wednesday, May 22, 2024:** Preferred Supplier recommended to Board of Trustees**

• **Monday, July 1, 2024:** Contract Start Date*

* Estimated dates, subject to change. **Internal Dates not necessarily outlined in the RFP.

NOTE: Site Investigation Visits to Each Campus as Listed Above are Mandatory and are a condition for contract award. Failure to attend each site will disqualify further participation.

*Continued on next page.*
2.0 OVERVIEW OF KENT STATE UNIVERSITY

Overview of Kent State University: Kent State University is one of 76 public higher-research universities, as categorized by the Carnegie Foundation for the Advancement of Teaching and is ranked in the top-tier list of Best National Universities by *U.S. News & World Report*. In a class by itself, Kent State is the only public university in Northeast Ohio ranked in the top tier. With eight campuses spanning Northeast Ohio, a College of Podiatric Medicine, a Twinsburg Academic Center, and academic sites in major world capitals such as New York City, Geneva and Florence, Kent State is one of Ohio’s leading public universities and a major educational, economic and cultural resource far beyond the Northeast Ohio region it has served since 1910.

The University’s Kent Campus has a student body of about 33,000 and a thriving residential population of more than 6,600. Its seven regional campuses draw full- and part-time students, totaling about 8,000, from across Northeast Ohio: Kent State at Ashtabula; Kent State at East Liverpool; Kent State at Geauga in Burton and the Regional Academic Center in Twinsburg; Kent State at Salem; Kent State at Stark in Canton; Kent State at Trumbull in Warren; and Kent State at Tuscarawas in New Philadelphia.

Kent State’s College of Podiatric Medicine is located in Independence, near downtown Cleveland. The Cleveland Urban Design Collaborative is the combined home of the urban design graduate program and the public service activities of the College of Architecture and Environmental Design; the center offers architectural and urban design expertise to urban communities, design professionals, and nonprofit and academic partners in Cleveland and Northeast Ohio. Outside of Ohio, located in the heart of the New York City’s Garment District, the Kent State Fashion School’s NYC Studio offers a unique academic experience to further students’ studies in fashion design, fashion merchandising and fashion journalism.

The University offers more than 200 global education opportunities at its campuses in Florence, Italy, and Geneva, Switzerland; centers in China and India; as well as partnerships with 60 institutes and universities across the globe from Columbia to Vietnam and Germany to Kenya. The Kent Campus is a global education destination in its own right, serving as home to 3,000 students hailing from 99 countries.

In 1920 the first Kent State University athletics team played. The sport was football. The “field band” was there and played in the stands. Women’s sports always had a place at Kent State and were recognized as NCAA program in 1984. The Kent State currently supports 19 Division I intercollegiate teams competing within the Mid-American Conference (MAC). Kent State provides a robust club sport and intramurals and recreation and wellness program for its entire campus community.

Kent State is proud of its outstanding faculty and staff, students, collaborative culture, exceptional academic and research orientation, and strong commitment to engagement, academic excellence and diversity. The University offers more than 160 associate and baccalaureate degree programs. Kent State serves the state, the nation and the world through 165 graduate programs. Academic programs are organized into 11 colleges: Aeronautics and Engineering; Architecture and Environmental Design; Arts and Sciences; the Arts; Ambassador Crawford College of Business and Entrepreneurship; Applied and Technical Studies; Communication and Information; Education, Health and Human Services; Nursing; Podiatric Medicine; and Public Health.

For more information about Kent State, visit [www.kent.edu](http://www.kent.edu).

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3.0 REQUEST FOR PROPOSAL INSTRUCTIONS

3.1 Proposal Instruction and Information: In order to receive consideration, companies responding to this RFP are required to submit their proposal electronically through DynamicForms. No other submission method will be accepted, unless otherwise disclosed in the RFP Instructions and Specifications. The confirmation of receipt of your response must be noted as “Signed” no later than the “Proposals Due” date and time specified above. The Forms History of your DynamicForms account will also note the date and time of your proposal submission. Proposals submitted after the “Proposals Due” date and time specified above will be rejected.

Forms 1 through 9 must be completed, dated, and signed by a responsible company official, in addition to the information requested of your company.

It is the responsibility of the respondent to ensure that all required documentation, as enumerated above, is submitted on time. Any submissions received after the stated date and time, or those that do not contain the required information as enumerated above, will be considered incomplete and unresponsive, and will be disqualified.

Instructions, manufacturer’s model or catalog numbers, etc., where shown herein, are for descriptive purposes to guide the proposer in interpretation of the quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of material or service which may be judged as an acceptable alternate. If the description of your offer differs in any way, you must give a complete detailed description of your quotation including pictures and literature where applicable. Unless specific exception is made, assumption will be that you are submitting a proposal exactly as the specifications of this document require. All prices MUST BE FIRM. Proposers will be expected to deliver on order(s) at the price quoted.

This RFP is part of a competitive procurement process which helps to serve the University’s best interests. It also provides Vendors with a formal and unrestrictive opportunity for their services to be considered. The process of competitive negotiation being used in this case should not be confused with the process of competitive sealed bidding. The latter process is usually used where the goods and services being procured can be precisely described and price is generally the determinative factor. With a RFP and competitive negotiation, however, price is not required to be the determinative factor, although it may be, and the University has the flexibility to negotiate with one or more Vendors to arrive at a mutually agreeable relationship. Check your proposal carefully for it may not be corrected after the proposal has been opened.

3.2 New Product Lines: Upon written request by the successful proposer, new related product lines not available at the time of proposal bidding, may be added during the course of any agreement resulting from this RFP at like discounts for the represented manufacturers.

3.3 Specifications: Specifications have been based on products familiar to the University and are used for the purpose of description and establishing quality desired. Acceptable alternates will also be considered.

3.4 Exceptions to Specifications: The proposer shall clearly state in the quote any exceptions to, or deviations from, these specifications, terms or conditions; otherwise, the proposer will be responsible for compliance with all requirements listed herein. Proposers shall provide a separate, itemized list of any and all exceptions. Such list must be cross referenced to the corresponding numbered item in this bid.

3.5 Additional Information: In the event that information submitted by the proposer is unclear to the University, the University may request additional explanation from the proposer for the purpose of evaluation and decisions. The proposer shall answer requests for additional information or clarification in writing, and these responses will become part of the company’s overall submission. Proposers failing to provide adequate information on any issue in a timely manner to allow a comprehensive evaluation by the University shall be considered unresponsive, and their proposal subject to rejection.

3.6 Verbal Information: Respondents shall NOT base the proposal on verbal information from any employee of the University from the date and time the RFP is received by the proposer, unless otherwise noted elsewhere in
the RFP. Any such incident will invalidate the proposal, and bar that particular vendor from receiving a purchase or contract award. In case errors or omissions are found in the proposal document, companies submitting proposals shall at once inform the signee in the Procurement Department who will publish the correction to all companies.

3.7 **Evaluation and Contract Award:** Selection and award of contract will be made to the vendor(s) whose proposal, in the sole opinion of Kent State University, represents the best overall value to the University. Factors which determine the award are more fully detailed in the specifications, and will include, but will not be limited to, the following: The proposer’s responsiveness to all specifications in the RFP, quality of the proposer’s products and/or services, ability to fulfill the contract, and general responsibility as evidence of past performance. Payment terms and cash discounts will be considered as determining factors in the contract award.

Should the total potential spend of the contract resulting from this RFP, inclusive of all possible renewals, exceed or appear to exceed $1.0 million, the final selection will be pending Board of Trustees approval at its next scheduled meeting; and appropriate contract review, approval and execution pursuant to University Policy.

Notwithstanding the above, this RFP does not commit the University to enter into any contracts as described in this document. The University reserves the right to reject any or all offers and to waive formalities and minor irregularities in the proposals it receives.

3.8 **Proposer Presentations:** Proposers submitting proposals which meet the selection criteria and which are deemed to be the most advantageous to the University may be required to give an oral presentation to the University selection team. Scheduling of these oral presentations will be done by the Procurement Department.

3.9 **Samples:** Requested samples necessary for evaluation must be provided without cost or obligation to Kent State University, and shall become the property of the University. Upon request by the supplier, unless destruction, alteration or retention of the sample is required for evaluation purposes, samples may be returned to supplier at supplier’s expense.

3.10 **Rights Reserved:** The University reserves, and in its sole discretion may, but shall not be required to, exercise the following rights and options with respect to the proposal submission, evaluation and selection process under this RFP:

- To reject any proposal if, in the University’s sole discretion, the proposal is incomplete or is not responsive to the requirements of this RFP, the Respondent does not meet the Qualifications set forth in the RFP, or it is otherwise in the University’s best interest to do so;
- To supplement, amend, substitute or otherwise modify this RFP at any time prior to selection of one or more respondents for negotiation or to cancel this RFP with or without issuing another RFP;
- To accept or reject specific items or elements in any proposal and award a contract based only on such items or elements if it is deemed in the University’s best interest to do so;
- To reject the proposal of any respondent that, in the University’s sole judgment, has been delinquent or unfaithful in the performance of any contract with the University, or is financially or technically incapable or is otherwise not a responsible respondent;
- To waive any informality, defect, non-responsiveness and/or deviation from this RFP and its requirements that is not, in the University’s sole judgment, material to the proposal;
- To permit or reject at the University’s sole discretion, corrections (including for information inadvertently omitted), of proposals by some or all of the respondents following proposal submission;
- To request that some or all of the respondents modify proposals based upon the University’s review and evaluation;
- To request additional or clarifying information or more detailed information from any respondent at any time, before or after proposal submission, including information inadvertently omitted by a respondent;
- To inspect and otherwise investigate projects performed by the respondent, whether or not referenced in the proposal, with or without the consent of or notice to the respondent;
- To conduct such investigations with respect to the financial, technical, and other qualifications of respondents as the University, in its sole discretion, deems necessary or appropriate.
3.11 Procedure for Conducting Negotiations:

—Who To Negotiate With First

After completion of the initial evaluation process, the University may begin negotiations with one or more vendors whose proposals are most in keeping with the University’s requirements as enumerated in the RFP. Notification of such negotiations will be offered after a reasonable amount of time has elapsed from the proposal deadline. Negotiations shall continue to the satisfaction of the University or, if the University determines a satisfactory agreement cannot be reached, the University may initiate negotiations with one or more of the remaining vendors.

—Negotiations With Multiple Vendors

The University reserves the right, at all times during the negotiation process, to negotiate with one or more vendors at the same time, but is under no obligation to do so. The vendor(s) with whom the University enters into negotiations must have present a representative with decision-making authority.

—If Negotiations Are Unsuccessful

With respect to any of the services that are a part of this RFP, in the event that the University determines that a contract cannot be negotiated with any of the vendors who respond to the RFP, the University shall have the right to issue a new RFP or other process to seek qualified applicants, to provide the services itself, or to use another process (e.g., sole source contracting) in order to have the product(s) and/or service(s) provided.

3.12 Valid Proposals: Proposals will be considered valid for a period of one hundred-twenty (120) days after the scheduled due date, unless otherwise noted.

3.13 Preferred Invoicing and Payment Methods: The successful proposer must invoice products or services awarded exactly as indicated on a resultant University purchase order, to include cost, unit specified, quantity ordered, item descriptions, etc.

The University prefers to receive invoices for goods and services via electronic means. It is the goal of the University to make payment on invoices via Automated Clearing House (ACH) transfer or Credit Card. To that end, please indicate your company’s capabilities for electronic invoicing and ACH/Credit Card payment where appropriate in Section 8 of this document.

3.14 Dun and Bradstreet Data: Kent State University reserves the right to request data from Dun and Bradstreet concerning history of company’s financial and payment statistics. Proposals from companies failing to provide the requested data to Dun and Bradstreet will not be considered.

3.15 Supplier Diversity: The University strongly encourages women, minority groups, and EDGE vendors to respond to University Requests for Proposals. Kent State University is committed to supplier diversity and encourages full participation of historically disadvantaged, economically and socially underutilized businesses, Minority Business Enterprises (MBE), Women-Owned Business Enterprises (WOBE), and State of Ohio EDGE Enterprises located within the University’s geographic region and beyond.

Further, Kent State University encourages the participation of women, minority groups, and EDGE vendors in all University contracts. Kent State University therefore requires that all prospective suppliers demonstrate good faith efforts to obtain the participation of minority-owned, women-owned, and EDGE business enterprises in the work to be performed under contract(s) resulting from this RFP. The respondent is required to furnish appropriate information about its effort to include women-owned, minority, and EDGE vendors in the contract, including the identities of such enterprises and the dollar amount supplied under the contract.
A listing of Ohio MBE and EDGE certified businesses, as well as the services and commodities they provide, is available from the State of Ohio Minority Business Enterprise Unit on the State of Ohio Department of Administrative Services website for Equal Opportunity Division.

3.16 **Preference to United States and Ohio Products:** State of Ohio Am. H.B. 271 requires that preference be given to products produced or mined in the United States and in Ohio.

3.17 **Buy America:** Proposals will be evaluated to determine that a proposer’s offering is for a “domestic source end product”, as defined in the Federal Buy America Act, 41 U.S.C.A., section 10a-10d. Any proposer’s offering that does not meet this requirement shall be rejected, except in those circumstances where a determination has been made that certain articles, materials and supplies are not mined, produced or manufactured in the U.S. in sufficient and reasonably available commercial quantities and of satisfactory quality.

3.18 **Buy Ohio:** Sections 125.09 and 125.11 of the Ohio Revised Code require that in the evaluation of bids, the University give preference to products which are “mined, excavated, produced, manufactured, raised, or grown in the state by a person where the input of Ohio products, labor, skill, or other services constitutes no less than 25% of the manufactured cost”, or products offered by bidders who have a “significant Ohio presence”, defined to mean that the bidders: (1) pay required taxes to the state of Ohio; (2) are registered and licensed to do business in the state of Ohio with the Office of Secretary of State; and (3) have ten or more employees based in Ohio, or seventy-five percent or more of their employees based in Ohio.

Any bids meeting the above criteria will be given a preference of up to five (5) percent over the lowest price "non-Ohio" bid submitted; except that such preference will not be applied against vendors from bordering states, provided that the border state imposes no greater restrictions than contained in sections 125.09 and 125.11 of the Ohio Revised Code. Where it has been determined that selection of the lowest Ohio proposer, if any, will not result in an excessive price or a disproportionately inferior product or service, the contract shall be awarded to the low Ohio proposer at the proposal price quoted. Where it is advantageous to award the contract to other than an Ohio proposer or Proposers from a border state, then the contract shall be awarded accordingly.

3.19 **H.B. 476, State Contract and Boycotting:** Pursuant to R.C. 9.76(B), by responding to this RFP, respondent warrants that it is not boycotting any jurisdiction with whom the State of Ohio can enjoy open trade, including Israel, and will not do so during the term of any contract that may result from this RFP.

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4.0 REQUEST FOR PROPOSAL CONTRACTING AND AGREEMENT TERMS

4.1 Contract/Purchase Order: The following terms and conditions, shall be incorporated in any final contract or purchase order resulting from this RFP except as such terms and conditions are otherwise expressly specified in any such contract or purchase order.

4.2 Period of Agreement: The term of the agreement shall be five (5) years from the date of contract execution.

4.3 Renewal of Contract: After the initial five (5) year term, Kent State University reserves the right to renew the contract resulting from this RFP for one (1) additional five (5)-year term. Any renewal agreed upon shall occur ninety (90) days prior to the expiration of the contract then in force.

4.4 Termination: Either party may terminate this contract after the expiration of sixty (60) days from the effective date of the contract. Termination may occur by giving the other party ninety (90) days prior written notice of its intent to terminate the contract, except that any breach of this contract shall be just cause for the University to terminate the contract immediately without such prior notice to you. The in case of any termination resulting from breach of contract, the Procurement Department may, at its discretion, prohibit proposer from submitting a proposal on any project at the University for a period of up to three (3) years.

4.5 Choice of Law: This Request for Proposal will be governed, interpreted and construed in accordance with the laws of the State of Ohio.

4.6 Extended Payment Clause: Kent State University may, upon written notice to the proposer receiving the contract, suspend or terminate the unpaid balance of this contract, if the Ohio General Assembly, in a subsequent biennium, fails to appropriate funds making possible the continuation of such payment.

4.7 Vendor Responsibilities: Vendor may not, during the term of the contract, or any renewals or extensions thereof, assign or transfer all or any part of the contract without the prior written consent of the University; and, should Vendor become insolvent, or if proceedings in bankruptcy shall be instituted by or against Vendor the remaining or unexpired portion of the contract shall, at the election of the University, be terminated.

4.8 Value: The contract will not guarantee a specific amount of business, or income and is not an exclusive contract. The University reserves the right to place purchase orders in any manner deemed by the University to be in its own best interest.

4.9 Estimated Requirements: The University in no way obligates itself to purchase the full quantities indicated, but the entire amount of any discount offered must be allowed whether or not the purchases are more or less than the full quantities indicated. The University’s requirements may be greater than or less than the quantities shown, and the Vendor shall be obligated to fulfill all requirements as shown on the purchase orders whose mailing dates fall within the term of the contract.

4.10 Sales Tax: Kent State University is exempt from Ohio sales tax and federal tax and will furnish an exemption certificate upon request.

4.11 Price and Freight: All pricing must be quoted FOB Destination, Kent, Ohio. Include all freight, transportation, and any applicable handling and/or installation charges necessary to complete delivery on an FOB Destination basis. Please specify if your pricing is quoted delivered or pickup.
4.12 **Title and Risk of Loss:** Supplier shall retain title and bear the risk of any loss or damage to the items purchased until they are delivered at the specified FOB point; and upon such delivery, title shall pass and supplier’s responsibility for loss or damage shall cease except as resulting from the supplier’s negligence or failure to comply to all stated terms and conditions. Passing of title upon such delivery shall not constitute acceptance of the terms by Kent State University.

4.13 **Supplier Onboarding System:** Kent State University utilizes a designated third-party provider for onboarding and managing vendors in our system. Vendors awarded contracts with Kent State University must register with our designated third-party provider and provide their business information as required by our provider. Vendors are responsible for maintaining and updating their profile information via the designated third part providers system More information about Kent State University’s vendor onboarding provider and process can be found on Accounts Payables homepage https://www.kent.edu/accountspayable

4.14 **Payment Terms and Cash Discounts:** Kent State University will endeavor to use any cash terms offered, and these could be considered in determining the final net price depending on the discount period.

In the event that Kent State University is entitled to a cash discount, the period of computations will commence on the date of delivery or receipt of a correctly completed invoice, whichever is later. If an adjustment is necessary due to damage, the cash discount period shall commence on the date final approval for payment is authorized. If a discount is part of the contract, but the invoice does not reflect the existence of a cash discount, the University is entitled to a cash discount with the period commencing on the date it is determined that a cash discount applies.

4.15 **Rejection of Goods or Services:** All goods or services purchased herein are subject to approval by Kent State University. Any rejection of goods or services resulting because of nonconformity to the terms and specifications of the contract, whether held by the buyer or returned, will be at the proposer’s risk and expense.

4.16 **Guarantee and Warranty Requirements:** Vendor guarantees all products and installation against any defect in workmanship and/or materials. Full manufacturer’s warranty for labor and materials for all equipment proposed, and a comprehensive list of all authorized service centers must be provided by supplier. List to include the company name, location, and telephone number.

4.17 **Product Substitutions:** There will be no substitutions of ordered product allowed unless the University has first been notified and permission granted.

4.18 **Price Adjustment:** All prices quoted are expected to remain firm during the initial term of the contract; however, in the event of a price change related to an increase or decrease, prices may be changed subject to a negotiated adjustment to reflect such an increase or decrease. Such negotiations and adjustments will be considered only upon written request to the Procurement Department, documented with cost data, filed prior to our request for delivery and submitted after the expiration of ninety (90) days from the date of the proposal closing.

4.19 **Audits:** With advance notice to Vendor, from time to time during the contract term and for five (5) years after termination of the contract, Kent State University reserves the right to audit Vendor’s performance under, and compliance with the requirements of, the contract. The University will utilize all invoicing and documentation, which relates to Kent State University’s final cost, and internal controls documentation required under the contract including, but not limited to any applicable audit or security assessment reports or certifications such as: SAS 70 or its replacement SSAE 16, SOC 2, or ISO 27001, and copies of any applicable corporate information security policies or other supporting documentation. University personnel from the Office of the University
Architect, the Controller’s Office, Procurement Department, and/or the Auditing Department may perform these audits. Audit discrepancies must be resolved to the reasonable satisfaction of Kent State University, and the University reserves the right to terminate the any contract resulting from this RFP if at any time the audit results are not resolved to its reasonable satisfaction.

Vendor must provide access to files and information reasonably necessary, including, but not limited to all cancelled checks, work papers, books, records and accounts upon which invoices are based, and any and all documentation and justification in support of expenditures or fees incurred pursuant to the contract, to validate cost data and internal controls, and assist in the performance of each audit. Audit discrepancies must be resolved to the satisfaction of Kent State University. Kent State University reserves the right to terminate the contract at any time if the audit results are not resolved to meet the requirements of Kent State University.

4.20 **Sales Representative:** Vendor will provide the name and telephone number of the company sales representative who may be contacted Monday through Friday 8am to 4pm (EST), exclusive of holidays. Vendor representative shall have primary responsibility for processing and correcting all breaches of this contract and shall be authorized to accept emergency and special orders. Vendor must notify the University when the regular sales representative is on vacation and identify the individual acting in his/her absence.

4.21 **Extending Resulting Contracts:** Please advise if your company has an interest in extending your offer to the Inter-University Council of Ohio Purchasing Group (IUC-PG) membership. This is a courtesy request and there is no obligation to agree to it. It is not part of the University’s selection criteria. Should you choose to extend usage, participation in the contract by other IUC-PG members is strictly voluntary on their part, and the University’s sole role and responsibility would be to share the contents of the contract with them.

In no way must any decision by your company to extend the contract to the IUC-PG members negatively affect the delivery capability, general service level, prices, discounts, product availability or other contractual obligations to the University.

Please indicate in your response package if your company agrees to extend any resulting contracts to include other IUC-PG members who may have an interest in utilizing it and describe any regional or geographic limitations.

4.22 **Time is of the Essence:** Time is of the essence in completing this project. Any breach of the terms of this contract, including, but in no way limited to the time period of performance, will be just cause to terminate the contract without prior notice to the Vendor. Termination resulting from breach will be cause, at the sole discretion of the University, to suspend the proposer from proposing on any project at the University for a period of up to three (3) years.

4.23 **Parking:** Kent State University operates under a paid parking system. All Vendor-owned vehicles and privately-owned vehicles of Vendor personnel that are to be parked on campus must comply with existing parking regulations. If parking permits are required, the successful proposer will purchase appropriate numbers of permits from Kent State University Parking Services. All regulations concerning parking can be obtained from Parking Services. Vendor is to take care that sidewalks are not blocked and all handicap areas are fully accessible.
4.24 **Federal, State and Local Laws:** Vendor shall, in the performance of work or services, fully comply with all applicable federal, state or local laws, rules, regulations and ordinances, and shall hold Kent State University harmless from any liability from failure of such compliance.

4.25 **Governmental Approvals:** Vendor shall obtain all permits, certificates of inspection and any and all governmental approvals relating to his/her work, and shall pay all charges connected therewith.

4.26 **Indemnification/Hold Harmless:** Vendor shall indemnify and hold Kent State University harmless from and against all claims, losses, expenses, damages, causes of actions and liabilities of every kind and nature (including without limitation reasonable attorney’s fees), arising out of any alleged breach of any proposer’s obligations or warranties or from any other acts or omissions of Vendor, its officers, agents, employees and subcontractors.

4.27 **Force Majeure:** If University or Vendor is unable to perform any part of its obligations under this contract by reason of force majeure, the party will be excused from its obligations, to the extent that its performance is prevented by force majeure, for the duration of the event. The party must remedy with all reasonable dispatch the cause preventing it from carrying out its obligations under this contract. The term “force majeure” means without limitation: acts of God; such as epidemics; lightning; earthquakes; fires; storms; hurricanes; tornadoes; floods; washouts; droughts; any other severe weather; explosions; restraint of government and people; war; strikes; and other like events; or any other cause that could not be reasonably foreseen in the exercised of ordinary care, and that is beyond the reasonable control of the party.

4.28 **Insurance for Vendor Services:** If this contract involves services, and unless otherwise approved by the University in writing, Vendor shall, at its sole cost and expense, procure and maintain, in full force and effect, the types and minimum limits of insurance specified below, covering its performance of the services provided hereunder by Vendor, its agents, representatives, employees or subcontractors. Vendor shall procure such insurance from duly licensed or approved non-admitted insurers in the State of Ohio with an “A.M. Best” rating of not less than A-VII or otherwise acceptable to the University:

**Workers’ Compensation/Employers’ Liability.**
- Coverage: Worker’s Compensation for losses arising from work performed by or on behalf of the Vendor
  - State Fund or Self-Insurance: Statutory Limits
  - Proof of Employers' Liability: $500,000

**General Liability Insurance.**
- Coverage: Policy shall include bodily injury, property damage, personal injury, contractual liability, fire legal liability, medical payments coverage, and sexual molestation/abuse if Vendor is interacting with minors
  - Each Occurrence: $1,000,000
  - General Aggregate Accrual: $2,000,000
  - Products-Completed Operations Aggregate Accrual: $2,000,000

**Business Automobile Liability.**
- Coverage: Bodily injury and property damage for any owned, leased, hired and non-owned vehicles used in the performance of the Vendor services
  - Combined Single Limit: $1,000,000

**Insurance Required as Applicable:**
1. **Professional Liability Insurance**—if applicable.
Coverage: Policy required for licensed or certified professionals, including, without limitation, accountants, architects, consultants, and engineers.

- Each Occurrence: $1,000,000
- General Aggregate: $2,000,000

Professional Liability Insurance may be written on a claims-made basis provided that coverage for occurrences happening during the performance of the Services required under this Contract shall be maintained in full force and effect under the policy or “tail” coverage for a period of at least three (3) years after completion of the Services.

(2) **Liquor Liability**—if applicable.
Coverage: Policy for service provider distributing, selling or serving alcoholic beverages.

- Each Occurrence: $1,000,000
- General Aggregate: $1,000,000

(3) **Crime Coverage**—if applicable.
Coverage: Policy for service provider with access to cash or payments, networks or outsources services such as custodial, building management, dining, etc.

- Single Loss: $500,000

(4) **Cyber Liability**—if applicable.
Coverage: Policy for service provider who has access to credit card information, student or employee records, health records, or any other Personally Identifiable Heath Information.

- Each event for Breach Response/Event Services: $1,000,000

(5) **Pollution Liability**—if applicable.
Coverage: Policy for service provider working with pollutants, coverage shall include coverage for 3rd party claims and clean-up.

- Each incident: $1,000,000

All required policies shall meet the following requirements:

- shall be endorsed on a primary basis, non-contributory with any other insurance coverages and/or self-insurance carried by the University.
- all insurance herein, except Professional Liability and Pollution Liability, shall be written on an “occurrence” basis and not a “claims-made” basis.
- Shall be endorsed to include University and its governing board, officers, agents and employees as additional insureds with respect to liability arising out of the services performed by or in behalf of Vendor. Such endorsement shall be evidenced on the Certificate of Insurance as well as a copy of the endorsement to the Vendor’s insurance.
- Shall contain a waiver of subrogation in favor of University and its board, officers, agents and employees for losses arising from work performed by or on behalf of Vendor.
- Limits may be met with a combination of primary and/or excess/umbrella coverage or equivalent.
- Coverage provided by Vendor shall not be limited to the liability assumed under the indemnification provision set for in Section 4.26 above.

Service Provider shall furnish the University’s Procurement Department, at the address provided herein, with Certificates of insurance (ACORD form or equivalent) as required by the services being provided under this
Contract. In no event shall Vendor perform any services or other work until Vendor has delivered or caused to be delivered to the University’s Procurement Department the required evidence of insurance coverages.

All insurance coverages shall provide for at least thirty (30) days prior written notice to be given to the University in the event coverage is reduced, suspended, voided, cancelled, or non-renewed.

4.29 Proprietary Information Disclosure: All responses and accompanying documentation will become the property of the University at the time proposals are opened. All submitted proposal materials may be subject to disclosure under the Ohio Public Records Law (ORC 149.43). Personal Social Security numbers, if provided in Section 7, will be redacted prior to release. If you choose to submit documentation containing information your company considers trade secret, please be aware that the University may have a duty to release the documentation in response to a public record request. If you wish to claim that certain information contained in the materials is trade secret, your company bears the burden of identifying that information, as well as taking steps to demonstrate that it is subject to protection under the law.

4.30 Marketing and Advertising: Vendor shall not willfully use the name, identifying marks or property of Kent State University for its own promotional purposes.

4.31 Use of Designs: Vendor agrees that it will keep confidential the features of any equipment, tools, gauges, patterns, designs, drawings, engineering data or other technical or proprietary information furnished by the University and use such items only in the production of item(s) awarded pursuant to the contract. Upon demand or completion of resultant purchase order, the proposer shall return all such item(s) to the university at the expense of the Vendor, or make other disposition thereof as may be directed or approved by the University.

4.32 Performance Bond: If required, Vendor shall, within ten (10) days of the contract award, furnish a performance bond in the amount of 100% of the contract price.

4.33 Equal Employment Opportunity: Kent State University is an Equal Opportunity Employer and as such makes the following request: The proposer, in submitting a proposal and/or filling a purchase order, agrees not to discriminate against any employee or applicant for employment with respect to hiring and tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, gender, age, sexual orientation, national origin, disability, or identity as a disabled veteran or veteran of the Vietnam era to the extent required by law. The proposer must further agree that every subcontract or order given for the supplying of this order will contain a provision requiring nondiscrimination in employment, as herein specified. This covenant is required pursuant to Federal executive orders 11246 and 11375 and any breach thereof may be regarded as a material breach of the contract or purchase order. Additionally, Proposer must comply with the following:

The Equal Employment Opportunity Act of 1972, as amended, 42 U.S.C. 2000e et seq., which prohibits discrimination in employment because of race, color, religion, sex or national origin. The Rehabilitation Act of 1973, as amended, 29 U.S.C. 701 et seq. and 45 C.F.R. 84.3(J) and (K) implementing Sec. 504 of the Act which prohibits discrimination against qualified individuals with disabilities in the access to or participation in federally-funded services or employment. The Age Discrimination in Employment Act of 1967, as amended, which generally prohibits discrimination based upon age. The Equal Pay Act of 1963, as amended, 29 U.S.C. 206, which provides that an employer may not discriminate on the basis of sex by paying employees of different sexes differently for the same work.
4.34 **Prevailing Wage Rate:** If applicable under Ohio law, Vendor must agree to pay all employees involved with the installation on this project, the prevailing wage rate as ascertained by the Department of Industrial Relations of the State of Ohio.

4.35 **Drug Free Workplace:** Vendor agrees to comply with all applicable state and federal laws regarding drug – free workplace and shall make a good faith effort to ensure that all its employees, while working at Kent State University, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.

4.36 **Smoke-Free, Tobacco-Free University:** Smoking and the use of nicotine, tobacco-derived or plant based products, and oral tobacco are not permitted on any property owned, operated or leased by Kent State University inclusive of personal vehicles parked on University property. All smoking is prohibited, including the use of electronic smoking devices, mod boxes or electronic nicotine delivery systems that create an aerosol or vapor. Vendors, contractors and other respondents to this RFP may not use cigarettes, cigars, cigarillos, cloves, hookahs, e-cigarettes, herbal and oil vaporizers, pipes, water pipes, any smokeless tobacco (chew, snuff, dip, etc.), and any other non-FDA approved nicotine products while conducting business on University property.

4.37 **Americans with Disabilities Act:** Without limiting the requirements of Subsection 4.49, Electronic Information Technology Accessibility, Seller agrees to comply with the Title II of the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. §§ 12131-12134, and it implementing regulation 28 C.F.R. pt. 35, which prohibits public universities from excluding individuals with disabilities from participating in and/or receiving the benefits of University services, programs, and activities, Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, and its implementing regulation at 34 C.F.R. Part 104, which prohibits a qualified individual with a disability, solely by reason of disability, from being excluded from participation in, being denied benefits of, or being subjected to discrimination under any University activity, and other applicable State of Ohio laws and regulations regarding accessibility and disability. Accordingly, Seller represents and warrants that the products and/or services provided hereunder are functionally accessible to individuals with disabilities. Compliance means that a person with a disability can acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability, in an equally effective and integrated manner, with substantially equivalent ease of use.

4.38 **Conflicts of Interest and Ethics Compliance:** Vendor represents, warrants, and certifies that it and its employees engaged in the administration or performance of the Agreement are knowledgeable of and understand the Ohio Ethics and Conflicts of Interest laws. Vendor further represents, warrants, and certifies that neither Vendor nor any of its employees will do any act that is inconsistent with such laws.

4.39 **Executive Order Banning the Expenditure of Public Funds on Offshore Services:** Vendor affirms that it has read and understands Executive Order 2019-12D issued by Ohio Governor Mike DeWine and shall abide by those requirements in the performance of any Contract arising from this RFP, and shall perform no services required under this Contract outside of the United States.

The Vendor also affirms, understands, and agrees to immediately notify the State of any change or shift in the location(s) of services performed by the Vendor or its subcontractors under this Contract, and no services shall be changed or shifted to a location(s) that are outside of the United States.

If Vendor or any of its subcontractors perform services under this Contract outside of the United States, the performance of such services shall be treated as a material breach of the Contract. The State is not obligated to pay and shall not pay for such services. If Vendor or any of its subcontractors perform any such services, Vendor shall immediately return to the State all funds paid for those services. The State may also recover from the Vendor
all costs associated with any corrective action the State may undertake, including but not limited to an audit or a risk analysis, as a result of the Vendor performing services outside the United States.

The State may, at any time after the breach, terminate the Contract, upon written notice to the Vendor. The State may recover all accounting, administrative, legal and other expenses reasonably necessary for the preparation of the termination of the Contract and costs associated with the acquisition of substitute services from a third party.

If the State determines that actual and direct damages are uncertain or difficult to ascertain, the State in its sole discretion may recover a payment of liquidated damages amounting to a percentage of the value of the Contract, such a percentage to be determined.

The State, in its sole discretion, may provide written notice to Vendor of a breach and permit the Vendor to cure the breach. Such cure period shall be no longer than 21 calendar days. During the cure period, the State may buy substitute services from a third party and recover from the Vendor any costs associated with acquiring those substitute services.

Notwithstanding the State permitting a period of time to cure the breach or the Vendor’s cure of the breach, the State does not waive any of its rights and remedies provided the State in this Contract, including but not limited to recovery of funds paid for services the Vendor performed outside of the United States, costs associated with corrective action, or liquidated damages.

—Assignment/Delegation
The Vendor will not assign any of its rights, nor delegate any of its duties and responsibilities under this Contract, without prior written consent of the State. Any assignment or delegation not consented to may be deemed void by the State.

4.40 Executive Order 2022-02D: The Vendor confirms that they are not a Russian institution or company and will comply with this order at: https://content.govdelivery.com/attachments/OHIOGOVERNOR/2022/03/03/file_attachments/2093123/Signed%20EO%202022-02D.pdf.

“Company” means a sole proprietorship, partnership, corporation, national association, société anonyme, limited liability company, limited partnership, limited liability partnership, joint venture, or other business organization, including their subsidiaries and affiliates, that operates to earn a profit. Pursuant to Executive Order 2022-02D and to the extent practicable, the University is prohibited from purchasing services from or investments in Russian institutions or companies.

4.41 Finding for Recovery; Debarment: Ohio Revised Code Section 9.242 prohibits any vendor who has been debarred by any state agency to participate in any contract during the debarment period. Further, Vendor represents and warrants that it is not now, and will not become during the term of any contract resulting from this RFP, subject to an unresolved finding for recovery under ORC Section 9.24 and is not under any suspension or debarment by any office of the state of Ohio or the federal government. If this representation and warranty is found to be false, any contract resulting from this RFP shall be void, and the Vendor shall immediately repay to the university any funds paid under the contract. If Vendor becomes subject to an unresolved finding for recovery under ORC Section 9.24 and/or is suspended or debarred by any office of the state of Ohio or the federal government during the term of the contract, such finding for recovery, suspension or debarment shall be considered a material breach of such contract, and the University may, at its sole discretion, terminate the contract.
4.42 **Campaign Contributions:** Vendor hereby certifies that all applicable parties listed in Division (l)(3) or (J)(3) of O.R.C. Section 3517.13 are in full compliance with Divisions (l)(1) and (J)(1) of O.R.C. Section 3517.13.

4.43 **Biobased Products Bid Reference Policy:** The Department of Administrative Services, other state agencies and state institutions of higher education must procure biobased products that fall within the designated item categories list compiled by the United States Department of Agriculture, as maintained by the Department of Administrative Services. State agencies must procure equipment, materials, and supplies in accordance with procedures set forth in Ohio Revised Code section 123:5-1-14. Biobased products may be considered and a preference may be applied for those biobased products meeting the specifications set forth in bidding documents when applicable. For those proposals in which biobased products are offered, Vendor must list or otherwise identify and certify those products.

The minimum content for the anticipated biobased purchase shall be derived from the United States Department of Agriculture’s determination of minimum content for the designated item.

4.44 **Data Security Requirements/PCI Compliance:**

1) Will this product or service have involvement in creating, storing, processing, transmitting, or accessing University data or handling financial transactions?

   a) If yes, will any data be removed by, accessed from, copied to, or created within systems that do not reside within the geographical boundaries of Kent State University?

   i. If yes, complete the “Higher Education Cloud Vendor Assessment Tool Lite”, [https://www.kent.edu/it/higher-education-cloud-vendor-assessment-tool-lite](https://www.kent.edu/it/higher-education-cloud-vendor-assessment-tool-lite). Include a copy of any applicable audit or security assessment reports or certifications such as: SSAE 16, SOC 2, or ISO 27001 and include copies of any applicable corporate information security policies or other supporting documentation that will substantiate the questionnaire responses.

   (1) If an NDA is required for the disbursement of any of these documents or information, provide a copy of the NDA in your response.

2) Will this product or service have involvement in the processing of credit card transactions (Card-Present, Card-Not-Present, Online, Phone-based, or otherwise)?

   a) If yes, submit a QSA-signed Attestation of Compliance to the Payment Card Industry Data Security Standards (“PCI-DSS”).

   b) If yes, Vendor acknowledges and agrees to the following statements:

      i. Kent State University requires that Vendor at all times maintain compliance with current PCI DSS as applicable. Accordingly, the Vendor will be required to provide confirmation of compliance upon request by Kent State University throughout the contract term. Respondent hereby acknowledges that cardholder data may only be used for execution of the contracted systems or services as described herein, or as required by the PCI DSS, or as required by applicable law.

      ii. If, during the contract term, Vendor becomes aware that systems or services provided under the contract falls out of compliance with PCI DSS requirements, the Vendor shall immediately notify the Kent State University Office of Security and Access Management.

      iii. In the event of a breach, intrusion, or unauthorized access to cardholder data, Vendor shall immediately notify the Kent State University Office of Security and Access Management to allow for the PCI DSS breach notification process to commence. Vendor shall provide appropriate payment card companies and their respective designee’s access to Vendor’s facilities and all pertinent records to conduct a review of Vendor’s compliance with the PCI DSS requirements. Vendor acknowledges liability for any and all costs resulting from such breach, intrusion, or unauthorized access to cardholder data deemed to be the fault of Vendor.
Vendor agrees to assume responsibility for informing all such individuals in accordance with applicable law and to indemnify and hold harmless Kent State University and its officers and employees from and against any claims, damages, or other harm related to such breach.

4.45 **European General Data Protection Regulation**: If Kent State University’s Cyber Security and Privacy Department in the Division of Information Technology, determines that the services provided within this RFP involve the transfer of personal data subject to the European General Data Protection Regulation, the supplier will be required to execute the University’s the European General Data Protection Regulation addendum. [https://www.kent.edu/sites/default/files/file/GDPR%20Vendor%20Addendum%20KSU%20FINAL%200619%20PDF.pdf](https://www.kent.edu/sites/default/files/file/GDPR%20Vendor%20Addendum%20KSU%20FINAL%200619%20PDF.pdf)

4.45 **H.B. 476, State Contract and Boycotting**: Pursuant to R.C. 9.76(B) Vendor represents and warrants that Vendor is not boycotting any jurisdiction with whom the State of Ohio can enjoy open trade, including Israel, and will not do so during the contract period.

4.46 **Health Insurance Portability and Accountability Act of 1996 (HIPAA) Compliance**: Vendor agrees to comply with the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), and the regulations promulgated thereunder, including without limitation the federal privacy regulations (the “Federal Privacy Regulations”) and the federal security standards (the “Federal Security Standards”), as such provisions are applicable to delivery of the goods or services being provided pursuant to and contract resulting from this RFP. Vendor acknowledges that an entity’s status as a business associate is determined under law, regardless of such entity’s opinion as to its status as a business associate; and if an entity is, under applicable law, a business associate, such entity has a direct legal obligation in its own right to comply with all legal requirements applicable to a business associate. Accordingly, Vendor agrees not to use or further disclose any protected health information, as defined in 45 CFT 164.504, or individually identifiable health information, as defined in 42 USC § 1320d (collectively the “Protected Health Information” or “PHI”), or individually identifiable health information, as defined in 42 USC § 1320d (collectively the “Protected Health Information” or “PHI”), other than as permitted by the requirements of HIPAA or regulations promulgated under HIPAA including without limitation the Federal Privacy Regulations and the Federal Security Regulations. Vendor agrees to implement appropriate safeguards to prevent the use or disclosure of Protected Health Information as applicable to the performance of any agreement arising from this RFP. The successful Vendor agrees to promptly report to University any improper or unlawful use or disclosure of any PHI arising out of or relating to the products and or services arising from this RFP.

4.47 **Electronic Information Technology (EIT) Accessibility Compliance**: If any component of the proposed product or service is an Electronic Information Technology (EIT) product or service as such products or services are defined below in this Section, then your proposal must include a response to this section so the proposed product or service can be evaluated by university personnel for compliance with the University Policy 4-16.

EIT product(s) and/or service(s) include, but are not limited to, systems and application software (including mobile), online services such as learning management systems, content management systems, access portals, online marketing solutions, websites, web content and multimedia, digital materials (video, audio, etext, ebooks, lab simulations, virtual reality systems, augmented reality systems), telecommunications, and self-contained products such as displays, kiosks, touchscreens, operable controls (key carded door openers), and personal response systems.

To clarify, this form must be completed if **ANY COMPONENT of your product/service contains a DIGITAL (EIT) element**, something a user or administrator must interact with on a screen to use your product/service.
The following examples DO require the completion of this form.

**Example 1**
Physical Product: Payment kiosks on parking lots
Accompanying EIT Element: Screen that users must navigate to complete transaction

**Example 2**
Physical Product: Package lockers
Accompanying EIT Element: Software used by employees and users to track packages and locker use

**Example 3**
Physical Product: Electric battery charging stations for vehicles
Accompanying EIT Element: Accompanying mobile app to reserve locations and pay for charging

Pursuant to University Policy 4-16, Kent State University is committed to ensuring that its electronic and information technologies, including but not limited to, all information provided through university and third-party websites, online learning and course management systems, and curriculum, institutional and administrative data systems: (a) provide equal opportunity to the educational benefits and opportunities afforded by the technology; (b) provide equal treatment in the use of such technology; and (c) be accessible to individuals with disabilities in compliance with Section 504 of the Rehabilitation act of 1973, as amended and the Americans with Disabilities Act of 1990, as amended (ADA-AA) and other applicable laws of the State of Ohio.

**Requirements for Vendors submitting a proposal for an EIT product and/or service:** Provide information about the digital accessibility of proposed product(s) and/or service(s). This process is handled via an online form. Please carefully read the instructions below:

a. The form should be completed by Vendor’s **lead technical staff member** best suited to share information about the digital accessibility of the product and/or service.

b. Form is located at: **Digital Accessibility RFP Vendor Questionnaire**

c. If available, please make sure to attach a completed VPAT when completing the form. A blank template of the VPAT is available at **VPAT Info and Template**

**NOTE:** KSU may, in its sole discretion, deem as non-responsive, any form submission that is deemed by the university as incomplete.

If the proposed product or service is not an EIT product or service AND HAS NO ACCOMPANYING DIGITAL ELEMENTS, consider this section complete.

**4.48 Supplier Onboarding/PaymentWorks:** Kent State University utilizes a designated third-party provider for onboarding and managing vendors in our system. Vendors awarded contracts with Kent State University must register with our designated third-party provider and provide their business information as required by our provider. Vendors are responsible for maintaining and updating their profile information via the designated third part providers system More information about Kent State University’s vendor onboarding provider and process can be found on Accounts Payables homepage **https://www.kent.edu/accountspayable**.
5.0 REQUEST FOR PROPOSAL FORMAT AND EVALUATION CRITERIA

5.1 Format and Content of Proposals: To respond to this RFP, vendors are to submit their proposal electronically through DynamicForms. No other submission method will be accepted, unless otherwise disclosed in the RFP Instructions and Specifications. The confirmation of receipt of your response must be noted as “Signed” no later than the “Proposals Due” date and time specified above. The Forms History of your DynamicForms account will also note the date and time of your proposal submission. Proposals submitted after the “Proposals Due” date and time specified above will be rejected.

The proposal must be signed by a person authorized to bind the proposing form to the representations, commitments and statements contained in this response. Proposals should be prepared as simply as possible and provide a straightforward description of the Proposer’s capabilities to satisfy the requirements and goals of the RFP. Proposer should concentrate on accuracy, completeness, and clarity of content. All parts, pages, figures, and tables should be numbered and labeled clearly.

Kent State University considers it to be of utmost importance that the successful Vendor(s) present evidence of their ability to perform prior to the awarding of this contract partnership. The contract partnership shall be awarded to company that will best serve the interest of Kent State University, and, in determining the responsible proposer, the University shall consider the responses to the following requested information.

All proposals submitted shall conform to the following format requirements. Deviation from these requirements may disqualify a supplier from consideration. The response must contain the following information and documents:

a. **Forms 1 through 9:** Signed and dated, completed through DynamicForms.

b. **The submission requirements enumerated in Section 6, “Specifications”:** Please format all requirements as noted and submit via DynamicForms.

c. **Vendor Response Form:** Please complete and submit through Dynamic Forms as in (a) above and send another copy of the Vendor Response Form via email to Alan D. Parker at aparke60@kent.edu. Do not alter the RFP Specifications and Vendor Response Form, and do not submit pricing in any other format but the RFP Specifications and Vendor Response Form. The copy that is submitted via DynamicForms may be scanned in .pdf format, but the copy that is returned via email to Alan Parker in Procurement MUST BE MAINTAINED IN EXCEL. Vendors not submitting their pricing on the RFP Specifications and Vendor Response Form and/or fail to maintain the Excel formatting of the email return copy will be disqualified and their bids will be rejected.

d. If applicable, **completion of the Higher Education Cloud Vendor Assessment Tool Lite,** submitted as a separate attachment to the DynamicForms submission.

e. **Assumptions, Certifications, and Exclusions:** Describe any and all of the assumptions, clarifications, or exclusions to the proposal.

f. Provide cost proposal and/or price quotation as indicated in Section 6, and include any additional specification documentation you deem necessary to support your proposal.

g. Include any additional documentation you deem necessary to support your proposal.

5.2 Evaluation Criteria and Process: All proposals received from Vendors will be reviewed and evaluated by a committee of qualified University personnel. Selection and award of contracts will be made to the supplier(s) whose proposal, in the sole opinion of Kent State University, represents the best overall value to the University. Factors which determine the award include, but will not be limited to, the following: The proposer’s responsiveness to all specifications in the RFP, quality of the proposer’s products and/or services, ability to
fulfill the contract, and general responsibility as evidence of past performance. Payment terms and cash discounts will be considered as determining factors in the contract award.

Continued on next page.
6.0 REQUEST FOR PROPOSAL SPECIFICATIONS

Division 23800 – PREVENTATIVE MAINTENANCE PROGRAM-GENERAL REQUIREMENTS

General Conditions – Refer to instruction to bidders and general conditions, which form a part of this specification.

Addendum(a): Written instruments, issued solely by the Kent State University Procurement Department, that detail amendments, changes, modifications, or clarifications to the specifications, terms and conditions of this Request for Proposal (RFP). Such written instruments shall be the sole method employed by the Procurement Department to amend, change, modify or clarify this RFP, and any claims (from whatever source) that verbal amendments, changes, modifications or clarifications have been made shall be summarily rejected by the Procurement Department.

Definitions:
- **CA**: Contract Administrator
- **FM**: Facilities Manager
- **PM or PMC**: Preventative Maintenance Contractor
- **KSU**: Kent State University
- **BMP**: Best Management Practice
- **VAV**: Variable Air Volume
- **JCI**: Johnson Controls Inc
- **BAS**: Building Automation System (Metasys)
- **FMS**: Facilities Management System
- **A/C**: Air Conditioning
- **CV**: Constant Volume
- **VFD**: Variable Frequency Drive
- **VRF**: Variable Refrigerant Flow
- **MERV**: Minimum Efficiency Reporting Value (Efficiency rating for Filters)
- **ECU**: Environmental Control Unit
- **AHU**: Air Handling Unit
- **RTU**: Roof Top Unit
- **MAU**: Make-up Air Unit
- **ERU**: Energy Recovery Unit
- **OUA**: Office of the University Architects Engineers
- **NAE**: Network Application Engine

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1. Introduction
1. These contract documents cover a Service Agreement between the Contractor and Kent State University. The Documents cover planned preventive maintenance, repair or replacement services for Heating Ventilation and Air Conditioning (HVAC) systems, Temperature Controls, Limited Plumbing equipment and systems, Laboratory systems, Kitchen Equipment, Chemical Treatment, Emergency Generators, Refrigeration Systems, Inspections and Certification of Boilers (through State Boiler inspections), and certification of Fume Hoods and certifications for Backflow Devices. Electrical systems related to the systems indicated within these specifications and specially identified services. Testing is required and monitoring of all equipment and systems within the buildings or on the grounds serving the facilities at Kent State University Regional campuses.

2. General Program Requirements:
1. The maintenance service program shall maintain all systems and replace equipment to their original condition and Mfg. Operation & Maintenance requirements. All replacement parts, lubricants, refrigerants, chemicals, (labor, and material) including special maintenance tests, certifications as outlined and required to keep KSU systems running in an optimal and safe condition.
2. This Contractor, through the written submission process giving their performance and outlining their maintenance program shall submit the maintenance service program, review of the building analytics operating system and the chemical treatment program to KSU at the time of bid. The Contractor’s overall maintenance program shall be equal to or superior to the manufacturer’s Operation and maintenance recommendations and/or Kent State University standards as outlined hereinafter.
3. **Scope of work:**

   1. The scope of work for this contract shall be a full preventive maintenance service contract and full equipment and parts replacement for systems and/or equipment described in specification sections 23800, 23801, and Appendixes “A” and “B”. This contract covers all labor and materials from any failure to operate or malfunction of any system or component. (This is an all-inclusive contract on all costs for replacement of components, re-programming of equipment, electrical needs and equipment associated with each campus and the associated labor to facilitate repair or replacement.)

   a. Special conditions outlined in the RFP and its specification section 23800, 23801 and Appendixes “A” and “B”.

   b. This contract also includes future equipment, system expansion, building expansion or modifications and upgrades to any building or campus, added during this contract due to KSU general remodeling, construction or additions to buildings, or new building construction.

   c. The cost of adding fees to the base contract shall be by change order to the base bid. An evaluation between the PM contractor and KSU (owner) will need to be reviewed and approved by both parties for the dollar amount of service including (all labor and materials) and the additional PM review time which will be added to the contract PM inspection hours for each campus this would accrue.

   2. The maintenance service contract shall include:

   a. **Regular systematic preventive maintenance inspections:** Hours allotted for inspections are in Appendix “A” listed by campus. Inspections periods are in hours for identification of Preventive Maintenance needs for systems and equipment by campus. The PM Contractor shall assign a person to coordinate with each facility manager/director as to when the inspections are to take place. This should be set for the same time and day of the week if possible. The inspections shall be scheduled with each of the Campus maintenance departments outlined in appendix “A”. These inspections are not to be included in the time for actual repair, replacement, or routine maintenance.

   b. **PM inspections and Repair Time Reporting:** for adjustments to maintain systems or equipment in proper operating condition as needed and identified on field reports in addition to the PM hours called out for inspections. All labor and materials beyond the outlined PM inspections are covered in full under this contract with NO additional cost to the owner. The risk for labor and material shall be included in your base bid proposal for each campus. KSU will adjust your base line contract as equipment is added or removed from service. These adjustments will need to be vetted and approved by PM contractor and the OUA and mutually agreed upon prior to making any change to the contract. Submit all substitutions or replacements to the OUA-engineers. The Contract administrator (CA) shall review and approve prior to installation whenever possible. Exceptions will need to be reviewed with CA if deviation is required. Failure to get approval can cause rejection of products or equipment. PM contractor shall pay for equipment or equipment costs associated with rejection.

   c. **Emergency Service:** response time from call by KSU to PM contractor dispatch center shall require PM contractor personnel to be on site within 4 hours from time called into contractor’s dispatch or operator. (24 hours per day, 7 days of week, and 365 days of the year) contact person or service shall be required to be on duty. Answering machine, voice mail or other data stream options are not acceptable. (The PM contract requires a real person to answer the phone call.)

   d. **Replacement and substitutions:** components, equipment, controls, electrical, plumbing, chemicals, chemical treatment equipment or system components, which fail to operate. If catastrophic failure contractor is to notify KSU OUA engineers and CA and local facilities director or head of maintenance as soon as possible. All replacement components, equipment, controls, electrical devices, plumbing, chemicals including glycol, chemical treatment equipment, refrigerants shall be (in kind or better) with the same performance and operating conditions. If PM contractor is recommending a substitute this product shall require a full submittal with full performance, weight, size, electrical info, warranty and MSDS sheets if applicable. Substitutions can only be
installed if approved by KSU-OUA engineers, Local Facilities Director or CA. In case of emergency, the CA can waive this requirement, but must be done in writing, via email, text, delivered letter etc. If equipment or component is coordinated with both the Facility Director, CA and OUA engineer as an upgrade to the system or component then the PM contractor can ask KSU to cover the cost for the upgrade and submit a separate proposal and invoice for said upgrade but only after approval and funding has been approved by the OUA and Facility Director and CA.

e. **Catastrophic Failure:** On central equipment, affecting the whole or portions of any complex will require contractor to review and provide temporary measures to mitigate possible damage to complex and reasonable comfort to occupants. The cost for this service shall be included as a risk under this PM contract. No Additional cost to owner unless agreed upon by both parties.

f. **Field Reporting and performance logging:** Provide a comprehensive equipment log (make, model, performance information, power, identification tag no, building or area served by campus). The equipment log is to be prepared during the first year’s contract and updated on an annual basis thereafter. Provide monthly summery reports on work and repairs made, hours utilized and incorporate into an annual comprehensive life cycle report on major equipment. Examples: (chillers, boilers, cooling towers, fluid coolers, sewage ejectors, sumps, hot water heaters, solar thermal systems, pumps, VFD’s, AHU, ECU, RTU, VRF systems including outdoor units, DX split systems, fume hoods, fans, building automation system, Etc.). These reports are to give KSU perspective on the remaining life span of systems, equipment and components. This report will enable KSU to plan for replacement, construction and budget necessary for capital replacement on end of life. Our hope is to replace it prior to catastrophic failure. This annual report will be due First Monday in December.

g. Furnish two monthly PM Service reports. One to CA and one to local Facility Managers (FM) by the technician performing said work in detail following each inspection and/or emergency call and any work performed during normal maintenance or site observations. Written or PDF format acceptable.

h. Verify with manufacturers on maintenance requirements and warranty requirements on existing or new equipment and controls to ensure proper calibration, lubrication, safety devices, operation, control sequences, gauges, thermostats, and sensors requirements are being maintained. PM Contractors shall perform maintenance to meet the above requirements as a minimum. PM Contractor shall develop a maintenance plan for each piece of equipment and associated components and share the program with the CA with a copy of the maintenance plan. A means to monitor maintenance repair or replacement of all equipment, components and system devices to maintain system integrity and operations to original or modified design shall be a requirement of all PM contractors. If available this system shall be shared with KSU-OUA CA if possible.

i. Adjust air distribution of all systems as required for maximum performance. The PM contractor shall provide under alternate no. one (1) a line-item cost proposal to perform a snapshot balance report of all field devices (diffusers, terminal units, unitary equipment during the first year’s contract period for all campuses. This option can also be performed through the Building Analytics program if the PID loop tracks airflow on the system. The report will need to be generated in a hard copy to be accepted.

**Under the base contract** all air delivery units greater than 5000 cfm of supply or return air shall be air tested via a duct transverse method running at 100%. The report shall provide Max/Min CFM on RTU, AHU, MAU or HRU, measure percentage of OA, Pressure Drop across coil face on both pre-heat coils, reheat coils if present and cooling coils in all units. All Filter banks must have clean filters prior to testing; coordinate with known filter replacement schedule and the pressure drop across filters from dirty to clean to maintain best management energy practices. Provide CA and FM with the results of the TAB report. This document will provide KSU with a base line of performance for the HVAC equipment starting in the first contract year. TAB or PM contractors shall also check the hydronic flow for coils and record in GPM. Include in report pressure drop in PSIG. Record all discharge air temperatures, Outside Air temperature, Return air temperatures at time of test. Record voltage draw on units and if furnished or operated with VFD record data from VFD. All the information shall be included with first year annual report at the completion of the test by campus.
This PM contact will verify the correct operation of cabinet heaters, fan coil units, fin-tube, unit ventilators, heat pumps, VRF system cassettes etc. Verifying that all units operate in both heating and cooling if applicable and that the controls are operational for each piece of equipment. On the basis of this contract proposal it is understood that all equipment is operational as of July 1, 2024. Unless your field observation dictates otherwise and identified in your proposal. At the end of each contract year the building analytics system and JCI Metasys shall record and verify that units are operating in an energy efficient operation and communicating to the Building Automation System (BAS) and running the sequence of operation as designed. Verify all components are maintaining set point and performance. If found otherwise the PM contractor will have one week from discovery to file report with CA via email, inform local Facility Manager/Director upon discovery and provide cause and method to correct. All items are to be placed in monthly reporting to CA. If the delay in repairs are due to parts this information needs to be identified and time line presented to Building Management, Business Manager and CA. The report shall indicate campus, building, room number or area affected, device tag, indicate status (operational, offline, complete failure, partially operational etc.) and if temporary measures are to be incorporated with environmental expectations until final repair or replacement is made. The PM contractor shall comply with item “E” above. Indicate if temporary conditions will be controlled by (BAS or Local)controller and how the system is to be monitored during this time. Coordination with FD and CA and OUA engineering.

AHU’s, Energy Recovery Units, ECU’s, Split Systems, pumps, flow meters etc. associated with equipment and systems should be reviewed in more detail if AHU, ERU, DX units are underperformance or have continuous maintenance call backs or trips. If poor conditions and underperforming are found, the CA may request additional testing. Cost to perfume additional testing to be reviewed by both PM and CA on a case-by-case basis. If found to be lack of maintenance the cost will be passed to PM contractor for payment. If found to be end of operational life, no available parts do to age or no longer available this information must be, identified final determination of said equipment and cost impact shall be agreed upon by OUA – Engineer, Owner, PM contractor and CA. The CA will make the final decision and cost impact.

j. Perform and certify one electronic copy and one written copy of certified report on all backflow preventers to authority having jurisdiction and submit test reports certifying the proper operation and/or repairs/replacement to the PM contract administrator (CA), local authority (AHJ) and business manager (BM) on each campus tests performed. The PM Contractor once contract is in force shall coordinate with each local AHJ and coordinate when test have to be submitted to both AHJ and to the local FM and a copy of this report is to be submitted to the CA. Close coordination with each campus will be required so testing and certification will NOT influence the normal operations of the building or campus. PM contractor is to coordinate with water purveyor all testing requirements and dates in which test have to submit to (AHJ) and copied to BM and CA. All backflow reports and certification reports submitted are to be copied into the annual contract reporting process.

4. Bidding Instructions

1. The bidder/contractor is required to read carefully the Procurement front-end documents, specification sections 23800, 23801 and 23801 appendix “A” and “B”. The PM Contractor is to review each campus and become familiar with the facilities and scope of work covered by this contract. The Bidder shall visit the site and familiarize himself with the existing conditions of all systems and equipment before submitting the bid. KSU will tour the PM contractors through each campus and building. KSU will provide access to building design documents. All exiting equipment considered in good working order at time of Bid. No additional compensation will be awarded due to unfamiliarity. The bidding contractor’s responsibility, knowledge and experience to service, repair, or replace any of the types of equipment they encounter is a requirement of this contract. They must have in-house certified technicians or submit certified subcontractors at time of bid or up
to ten days once bid is accepted who would perform the services outlined in the contract document if not self-
performed. PM contractor to supervise all sub-contractor work. KSU reserves the right to reject subcontractors
if not approved at bid opening. PM contractor to review the current operations, understand all existing
conditions of all equipment and systems. All equipment and systems shall be maintained to optimum operating
conditions within (225) days after award of contract to create a PM baseline. The contractor at the end of the
(365) days will submit by campus and building a written report identifying all major equipment and systems
Make, Model, Serial Number, Performance Information, Power requirements, Identification Number/Tag and
a PM assessment and maintenance plan for that system or piece of equipment. Submit a report in electronic
PDF format or in a single hard copy submitted in a three (3) ring binders by campus to the CA.

2. The existing equipment has been under Preventive Maintenance (PM) contracts. KSU considers the equipment
to be in working order. The bidder/contractor shall include in their proposal a list of equipment or
components they want excluded from the PM contract for consideration of non-replacement due to failure. The PM contractor to provide associated cost to include for each itemized exclusion. KSU will
evaluate Bid Exclusions of equipment, system or components to determine overall best value of bid prior
to awarding. (Do not add or modify original bid form), any additional costs for exceptions indicated by
the bidder if deemed necessary shall be included in their bid document and clearly outlined and listed
at an attachment to the bid form. Each item must indicate an added cost for (excluded item) from the
original bid form. PM Contractor to provide a detailed list of components, equipment or systems by
campus, description, and building. Failure to provide will be evaluated on the best value consideration
of awarding bid. No additional compensation will be awarded due to claims of inadequate past
performance, neglect, age, shall be considered after award of bid.

3. If the excluded equipment is accepted, the bidder/contractor will be responsible for maintaining the equipment
or system in the best operating condition possible, but not less than the condition at the start of this contract.
Should a bidder/contractor find discrepancies or omissions in the contract documents, or should he be in doubt
as to their meaning, the bidder/contractor shall immediately notify the owner. The owner may send written
instructions or clarifications to each bidder prior to bid date submission. The owner will not be responsible
for any oral instructions.

4. The successful Bidder within thirty (30) days after the award of Contract shall submit his detailed proposed
maintenance program and within (365) days provide the remaining documentation indicated in number 1 of
bidding instructions. Both sets of documents will be subject to approval by Kent State University. Failure to
submit shall be considered the cause for contract termination through the written process associated with the
state contract term 4.1 thru 4.4 indicated in the procurement front end page 9 of 65.

5. Owners Right to Reject Bids
1. Kent State University reserves the right to reject any or all bids and the right to waive any minor defects or
information in the bids. Any bid which is incomplete, conditional, obscure, or has irregularities of any kind,
may be cause for rejection of bid. Failure to provide the necessary support documentation as outlined in the
general conditions or front end of the contract documents may be cause for rejection of bid.

6. Contractors Experience and Personnel
1. The Maintenance Contractor shall submit, with his proposal, firm evidence of the ability to properly
administrate and execute full mechanical maintenance contracts (covering labor, material, environmental
compliance, license requirements and equipment replacement) for contracts similar to that for which bids are
being submitted. Personnel responsible for the administration and technical skilled tradesmen shall submit
formal resume on each of the personnel who will be associated with this PM Contract. This also complies to
any Sub-contractors who will be associated with this contract.
2. The Maintenance Contractor shall use qualified Skilled (Tradesmen, Journeymen, Electricians, Plumbers,
Mechanics, and Temperature Control personnel). PM contractor shall provide documentation of formal
training programs and your continued training programs of your maintenance staff who will be caring for the equipment covered by the specifications and general requirements. Firms must have a **Minimum** of five (5) or more continuous years of performing this type of PM contracting. All firms are to submit their continuous training program for their employees to show that they are keeping up with latest technology. All work performed or directly supervised by PM contractors is to be maintained. This goes for any subcontractors, prior approval required. No work performed by sub-contractor without the oversight of a PM contractor. The successful PM contractor will provide PM Contractors tradesmen credentials prior to performing any work on KSU facilities. Skilled and certified personnel must perform major equipment replacement or modifications, repair of components, equipment or may use factory-trained mechanics. Use of Apprentices **PROVIDED THEY WORK AT ALL TIMES UNDER THE DIRECT SUPERVISION OF A JOURNEYMAN** or approved personnel submitted to the CA or Office of the University Architect engineers for **approval**.

a. The terms “Skilled Tradesmen”, "Journeyman" “Plumber”, “Electrician”, “Control technician”, and "Apprentice' are used to denote a level of skill, Formal training (Provide Facility/Professional Organization or accredited college or institution and date of graduation or certification), and overall experience shall be submitted for each person who will be utilized under this contract. No reference intended to affiliate with any one organization.

b. All skilled tradesmen: “Journeyman”, “Apprentice”, “electrician” etc. will be required to submit their formal training documentation, certifications held, continued education certificates, OSHA certifications, EPA Training for refrigerants, Ohio License if applicable or other specialties. Years of working in Trade alone does not qualify as qualified! The contractor’s workforce is to be local to relevant campuses served. This requirement is to ensure your firm is able to meet the emergency response time outlined in the specification. If your firm is Union, please provide your Apprentice Agreements for each person in this category.

3. The Maintenance Contractor shall assign to a single campus one specified Skilled Tradesmen the responsibility to either perform or supervise the job site not less than 60% of the total maintenance work performed under the contract. The maintenance contractor shall submit the Tradesmen Resume or approved specialist to Kent State University’s Contract Administrator (CA) and OUA-Engineers. This requirement is to provide unity and coordination with each campus Facility Director and its administration.

4. Maintenance personnel assigned to perform maintenance and/or repair to special equipment like (Centrifugal chillers, absorption chillers, chemical treatment, and temperature control panels, emergency generators, transfer switch, VFD, boilers, cooling towers and similar equipment) shall be thoroughly experienced with this type of equipment. They shall have attended factory training and considered an authorized specialist for each type of system or equipment listed within the specifications and appendix.

**7. Adherence to Regulations:**

1. Give notices and comply with laws, ordinances, rules, regulations and orders of any authority having jurisdiction bearing on the work associated with this contract. The Contractor is responsible for work associated with changes in laws, ordinances, rules, codes, regulations or notices from state inspectors or AHJ. All work associated with any notice or a result of an inspection shall be reviewed with the CA and OUA. Prior to performing this work. If requests fall beyond the scope of work associated with this contract. The PM contractor shall submit a proposal for labor and material.

**8. Contract-Start-up:**

During the first sixty-(60) days of the contract, the contractor shall perform the following specific tasks:

1. Review major equipment locations; obtain Metasys login and submit for guest approval process. Submit list of authorized users. Any information viewed is to remain the technical property of KSU. Use of data or any information is held as intellectual property of KSU.

2. All personnel/Firm who have been given the right to log into Metasys and make changes to the system shall
be held liable for any damage to the system if changes are made that are detrimental to the facility or its operation. Only authorized persons are permitted to make programming changes. Written notice and approval by KSU energy technicians, CA, FM and OUA. Pre-approval required prior to making permanent adjustment to the system’s programming. Programming changes must be coordinated with Johnson Controls Inc. account manager, KSU assigned JCI programmer, OUA-Engineering and the CA. Under no circumstances is the base programming to be altered without written approval from OUA – engineers and CA.

3. Review all temperature settings and operating controls, locate and inspect all BAS control panels and associated hardware.

4. Thoroughly inspect all systems equipment, obtain spare parts, and components for proper operations.

5. Inspect and clean all heating, cooling, and condensing coils to remove dirt buildup. Provide documentation on coil cleaning process and proposed schedule. Provide MSDS sheets on materials used and provide method of cleaning.

6. Submit a complete list of all parts and materials placed on order for emergency replacement, as determined by your service technicians as being required to be on hand to limit down time of the systems/equipment. (Examples belts, relays, panels, controllers, filters etc.) Your technicians shall review with the facility director’s locations for storage of your materials on site. At the end of the total contract period spare parts or materials which are located on the campuses will need to be inventoried and a cost proposal shall be submitted to each of the Facility Directors 30 days prior to termination date and a copy to the CA to see if KSU wants to purchase spare parts materials prior to the termination date. If parts are not to be purchased all spare parts and materials shall be removed from premises on or prior to the contract termination date. Failure to remove and leave at facility shall become the property of KSU with no additional cost to the University.

7. Prepare and submit a written report of all work performed during the start-up period. This report shall also include the present operating condition of the equipment and systems under the contract. In the report, each item of equipment, by building, will be listed showing location and indicating all mechanical and electrical nameplate data. Thereafter reports will be required once a month defining all the work performed and inspections/work scheduled in the next month or weeks ahead. Submit detailed logs and equipment updates quarterly if system or equipment replaced or modified.

8. The start-up reports shall identify any replacement component. The PM contractor shall submit reports to the Regional Campus Facility Director with a copy to the Office of the University Architect Contract Administrator (CA), 615 Loop Road, Suite 101 Harbouht Hall, Kent State University, and Kent, Ohio 44242 within 60 days of the start-up. Email with document in PDF or Microsoft Word/Excel format will be acceptable.

9. Submit air balance and hydronic balance reports per system and complex if accepted under bid. A qualified firm approved by Kent State University shall make any air and water balancing performed. Submit qualifications thirty-(30) days from award of contract and balance report scheduled within (180) days after approved firm. Complete Hydronic and Air balance reporting once per five-year contact term or provide on-line performance monitoring of system throughout the year. (Monitoring program and associated costs to connect to KSU system will be at the expense of the PM contractor. KSU accepts “No” pass through fee for performing this function.

10. Building Terminal units with reheat or no reheat, Cabinet Heaters, Fin-tube, Radiant Panel, Unit Ventilators, Fan Coil units, DX systems, VRF systems or any other standalone system will need to be incorporated into performance report. Reports throughout the year can be requested by CA. Provide system report on an annual basis if requested by CA. This will require verification of thermostatic controls and calibration if pneumatic room thermostats are present.

9. Conflicts:
1. The State Front End and general conditions issued takes precedence over the specifications in any conflict or
discrepancy between the general condition and the specifications. The procurement general conditions always prevail.

10. System Operations:
1. All Systems covered under this contract are operated by Kent State University, unless specifically stated otherwise. Wherever practical, the systems being operated essentially in accordance with the latest revisions of all specifications prepared for these systems and according to the design guides of the Office of the University Architect.
2. The owner may make changes to the specifications, which affect a specific system or its operation. This contractor to be notified in writing of any such change or revision. These changes or revisions may affect equipment or systems operations under this contract. Such changes shall become a part of the contract unless an exception in writing is made by the PM contractor within (15) days after the date of notification. This notice can be submitted to the contractor by email, fax or other electronic means.
3. The responsibility of this contractor shall be to maintain and service all systems included in this contract in an effective and efficient operating condition for continued operation by the owner personnel.
4. Start-up and Shutdown of seasonal equipment or systems such as refrigeration and heating systems will be the responsibility of the Preventative Maintenance contractor and shall be coordinated and scheduled with the university maintenance personnel and university’s business manager. Notice given in monthly reports.
5. Refrigeration equipment, including liquid chiller, air-cooled chillers and condensing units, cooling towers, shall be placed on “stand-by” status by no later than March 15 and deactivated for the season by November 15, subject to change by university written authorization. Only the business manager and university maintenance personnel can make changes to these dates. Shutdown shall be in accordance with acceptable practices, approved by the Office of the University Architect, and the manufacturer’s recommendations.
6. The heating systems for reheat and hot deck air conditioning systems shall be “active” the whole year round.
7. The heating system shall be placed on “stand-by” status no later than September 15 and deactivated for the season June 15, subject to change by university written authorization by business manager and university maintenance personnel.
8. All shutdowns and start-ups of seasonal systems scheduled and approved by the university maintenance personnel and Business manager.
9. The contractor shall provide all necessary chemical treatment to provide the necessary protection of piping or equipment during shutdowns. Contractor shall perform lockout and tag out procedures and coordinate with university maintenance and health safety personnel. Contractor shall report procedures and obtain approval from the Office of the University Architect if procedure or operations are deviated from current operations.

11. Replacement parts, Components and Equipment:
1. The contractor shall carry a stock of commonly used replacement parts, such as compressor parts, belts, pulleys, packing, seals and seal kits, relays, switches, filters, and the like, to minimized delays in the repair or replacement of common component failures. Contractor shall also stock critical components, which have extremely long lead items and provide pricing to stock such components prior to order. High priced items will be reviewed and evaluated if not cost effective as determined by the Office of the University Architect and local administrator.
2. This contractor shall also carry a minimal inventory of long delivery items so that equipment or system breakdowns are minimized. Provide a minimal inventory list to KSU for review and coordinate with local FM where these spare parts are to be stored.
3. The contractor shall provide alternate methods for maintaining comfort in buildings because of an extended outage or failure of central systems. The cost of rental equipment shall be by this contractor. If the issues are part of a major component (Chiller, AHU, Cooling Tower, and Emergency Generator) failure, the cost for
maintenance over a long period shall be reviewed with the owner. Possible shared cost if not due to failure from lack of maintenance but by unknown natural disaster, caused by act of weather or utility related, Vandalism, Terrorist or act of God. Otherwise, the cost of said equipment shall be incurred by this contractor. A written report on accidents or possible causes outside of the norm shall be submitted at time of failure to OUA, FM and CA, failure to provide within 24 hours will result in total cost or rental equipment to contractor.

4. The contractor will repair or replace worn parts of complete components with new parts of equal or better grade and in accordance to the Office of the University Architects design guide. Reconditioned components may be used only with the specific consent of the FM, OUA-Engineers/Architects and CA.

5. All equipment and components replaced by the contractor shall be with equipment of the same manufacturer. When conditions require replacement of equipment with a different manufacturer, the contractor shall notify the FM, OUA-Engineer and CA prior to replacement and furnish a complete description and submittal of the replacement component and drawings showing all alterations to the existing installation within 48 hours of the installation. The Owner, OUA engineer, CA shall approve all substitute replacement equipment along with receipt of approved submittal prior to installation.

6. Installation of alternate equipment shall be installed in the same location, manner, and with similar materials and accessories as the original equipment. No abandoned equipment or components will be permitted on the job. The contractor shall be responsible for all costs associated with removal and installation of alternate equipment.

7. Damage obviously due to vandalism will be cause for the Owner to reimburse the contractor for replacement parts used plus the labor necessary to install the parts. The Owner must be informed of the vandalism prior to the replacement. Provide photo documentation of damage and field report on incident once found.

8. KSU shall review damage to equipment and systems by an act of God, Terrorism, Weather induced (lightning strike, tornado etc.), utility power outages or War and the cost of damage to equipment and systems will be reimbursed after receipt of report within 24 hours of what was damaged and by what action. Date and time will be required for assessment to KSU-OUA, FM, and CA prior to any repairs or replacements are made. PM contractor shall provide an not to exceed estimated cost to repair and cost of materials prior to work of replacement.

12. Routine Inspections, Repairs and Emergency Service Calls:

1. The contractor shall report to the Owner's designate at the start and end of each job visit. The contractor shall indicate whether the visit is for a scheduled maintenance inspection or result of an emergency call for service or general repair/maintenance work.

2. The contractor will make a follow-up report of the status of each visit. Record routine maintenance calls in the Preventive Maintenance Log (PM log) as described later. Emergency calls or routine calls, which result in the discovery of emergency or potential critical situation, are reported immediately to the Owner's designate, CA and OUA. Record the satisfactory conclusion of each emergency call in PM log.

3. P.M. Contractor shall coordinate Preventive Maintenance schedule with each campus maintenance staff and adjust as required. Conduct normal maintenance on the same day each week and coordinated with owners designate. Operating equipment shut-down required for the performance of routine inspection and maintenance shall be held to minimal periods. Shutdown of critical items such as fume and kitchen hood exhaust, domestic water system, etc., shall be scheduled with the advance knowledge and approval of the Owner's operating personnel scheduled during a time so as not to interrupt the day-to-day operations of the facility if possible.

4. Regular maintenance and/or inspections of systems serving educational areas, lecture rooms, meeting rooms, and similar areas, shall be scheduled during "non-occupied" periods but at least once a year. Time for non-occupied periods shall be coordinated with each campus.

5. The Maintenance Contractor shall make regular preventive maintenance inspections of each system. The number of inspections shall not be less than the minimum number specified in the Appendix. PM Inspection
hours are not part of normal maintenance work.
6. Routine service calls, such as an uncomfortable temperature, shall be responded to within twenty-four (24) hours, unless temperature could result in damage to building system, experiments, research, or structures.
7. This contractor will also provide emergency service as required to assure uninterrupted service of all systems under this contract. Emergency service shall be required for non-operating equipment, malfunctioning equipment, broken service pipes, and any condition which would have a detrimental effect on personnel, equipment and/or property.
8. The Owner shall require emergency service within four (4) hours after notification. This service, included under this contract, will continue on a twenty-four (24) hour day, seven (7) day-a-week 365 days of the year basis at no cost to the Owner until the repair is complete. The Owner and CA will make any exception to this requirement of continuing service only if required repair parts are not available for immediate delivery.
9. A listing of the telephone contact numbers of not less than three (3) qualified service technicians or 24 hour/365 day operation dispatch center. Post contact numbers at a predetermined location at the Owner's facility. Keep list maintained and updated, as required by the PM contractor. A submit a copy to the Office of the University Architect. If the "emergency contact" is a telephone answering service, the contractor or their qualified technician shall answer the Owner’s call within thirty-(30) minutes from the time of the Owner's call. The University will not tolerate any deviation in the response to an emergency call if the University's requirements are not met. This will be grounds for revoking the contract and all sub-sequential damages as a failure to respond shall be borne by the PM Contractor.
10. A service call made at the request of the Owner and approved by the Office of the University Architect that has no relationship with the equipment or the contractor at his prevailing rates may invoice systems under contract. This is very important that coordination during construction projects is tracked so the cost included for work or services relating to construction is tracked and billed to the construction project. Work order tickets must be submitted for any work force or materials used under this condition. Outside contractors are not to shut down the system unless the PM Contractor is involved. Coordination with CA, outside contractors working within the building to perform PM work and tracking cost will be up to the PM contractor. KSU will not reimburse if failure to track work force and materials expended.

13. Owner and Contractor responsibilities:
1. The PM Contractor is not required to make safety tests unless outlined in specifications or considered best management practices. Code Official or government official, having jurisdiction to perform safety test on safety devices to ensure proper operation, may request PM contractor. If any device fails or requires device to be installed or replaced, this requirement provided at no additional cost to owner. If a new device is requested by AHJ, KSU-CA shall review the request. The PM contractor to submit the cost proposal for labor and material. The CA will request that a Proposal Request (PR) or Change Order (CO) be issued to modify the contract. Safety attachments, controls or equipment as recommended or directed by any authority having jurisdiction. This action needs to be documented by PM contractor and reviewed with CA, OUA-Engineering and FM prior to making corrective actions. Replacements mentioned herein with parts or devices of a different design for any reasons whatsoever shall be coordinated with OUA-Engineers and CA and FM prior to installation or replacement. Exception: The Maintenance Contractor shall be required to make safety tests, at no additional charge. Tests required by a governmental authority due to failure of the Maintenance Contractor to maintain the equipment in safe operating condition or if tests are required as a normal procedure for operating permits associated with equipment or systems. (Boiler inspections, Backflow Devices, Water Heaters, Emergency Generators, Fume Hoods, Emergency Showers and eyewash stations) are to be tested and certified on an annual basis by the PM contractor. These are expected tests and inspections and the cost to perform and correct are part of the labor and materials requirements covered under this PM contract.
2. The Owner will provide reasonable access to all equipment, which are serviced. If PM Contractor requires
additional access, the contractor shall review this request with the OUA and owners FM. If the owner FM agrees, the changes will be made when funding is available or if the Mechanical Contractor wants to perform at his own cost with the methods approved by the OUA. The Owner will take responsibility for equipment malfunction where such access is denied.

3. The Maintenance Contractor shall be free to start and stop all primary equipment incidentals to the operation of the mechanical systems as arranged with and directed by the FM, Owner's maintenance representative or his duly authorized representative.

4. The Owner, under this contract, shall not require the PM contractor to add, extend or cause revisions to existing equipment and systems from the present design intention. Such work, if performed by the PM contractor at the request of the Owner and approved by OUA and CA, shall be reimbursed at the current prevailing wage rates and materials used. All invoices for such work must be broken down into labor and materials.

5. The owner agrees to cooperate in providing ready and unencumbered access for the PM contractor's service personnel to enter and leave the premises. All applicable rules and regulations of the University personnel policies for parking, identification, tobacco use, vaping and the like are a requirement of this contract. At no time shall the PM contractor enter unoccupied buildings during unoccupied hours or during University closed days unless authorized by the FM and a KSU personnel within the complex. Security and FM shall be notified if PM contractors are working outside of normal business hours, Holidays or closed due to weather conditions.

6. The contractor agrees to accept all equipment in its existing condition at the inception date of the agreement, except if excluded by the Owner or by the PM Contractor upon written notice at time of BID or by written notice 90 days prior to Annual Contract Renewal if any piece is exempted from the contract. The PM contractor shall provide details as to the justification for placing the equipment or system on an exemption list. The PM contractor further agrees to perform all repairs necessary to restore the equipment to a working and maintainable condition if not excluded under this contract. The CA and owner shall review PM contractor timeline to get equipment or systems operational for creating a base line of operations.

7. The contractor shall not be liable for any loss, delay, injury, or damage, whether direct or consequential damages caused by conditions beyond the contractor's direct control. (Review section These may include lockouts, fire, explosions, theft, riot, civil commotion, war, mischief, floods, power outages by utility company and other acts of God.

8. The Maintenance Contractor shall advise the Owner of work outside the scope of this agreement that requires maintenance (i.e. replacement or repair of damaged utility services, defective or damaged power wiring, renovations and alterations to improve system by other contractors). This report shall be in writing but will not be excluded from his contract if not reported immediately to the owner and OUA.

14. Damage:
1. The Contractor is responsible for damage caused by neglect of workers, improper repairs, damage caused by freezing weather conditions, and non-compliance with manufacturer’s recommendations on operation or maintenance of equipment. Damage to equipment, catastrophic failure of equipment will be paid at 100% up to the cost or repair or replacement. Up to a limit of $1,000,000 dollars for structure and finishes, $500,000 for contents, $50,000 for indirect costs. The damage limits are per campus per contact year.

15. Subcontractors:
1. Within ten- (10) days after notice of the award of the contract, the contractor shall prepare and submit a list of proposed subcontractors to the Office of the University Architect for approval. Sub-contractors shall not be working within the KSU complexes without direct supervision or approval from FM.

16. Suppliers:
1. The Maintenance Contractor must have the ability to obtain basic materials and supplies such as pipe and
fittings, valves, special tools, etc. twenty-four (24) hours per day, seven (7) days a week, and 365 days of the year.

**17. Tools and Test Equipment:**
1. All tools and test equipment, including required special instruments such as volt-ohm-meters, oscilloscopes, monometers, recorders, combustion products test devices, flowmeters, and the like, shall be owned and operated by the contractor. A list of test equipment to be used shall be submitted with the contractor’s evidence of experience to the CA.

**18. Use of Kent State University Equipment:**
9. The Maintenance Contractor may not use Kent State equipment such as ladders, movable platforms, hydraulic platforms, etc. under normal conditions.
10. Under special conditions or emergency conditions regarding the use of any KSU owned equipment, the contractor shall sign a waiver releasing Kent State University from any damage resulting from the use of said equipment.

**19. Preventative Maintenance Log:**
1. Throughout the term of this agreement, the contractor shall record in a neat and legible manner all pertinent data relevant to each item of equipment included in this program and provide a comprehensive history for the specific equipment or system.
2. The historical information is to be maintained on Preventive Maintenance Log Sheets approved by the Owner and CA. These Log Sheets are to be kept in 8-1/2” x 11” three-ring binders. A separate binder will be kept for the equipment in each building in the building equipment room or in the Maintenance Office if requested by the Owner. There shall be a separate, titled log sheet for each piece of equipment. Multiple items such as reheat coils, piping systems, etc. may be on one titled log sheet.
3. The type of data and information recorded shall include, but not necessarily be limited to, the following:
   a. Type of maintenance (preventive or repair)
   b. Date of service
   c. Description of work done
   d. Resultant effect in operating condition if any
   e. Proposed follow-up if any.
   f. Name of repair person
   g. Chemical treatment performed and recorded on Trend Report. (Trend Report submitted quarterly.)
   h. Time involved for emergency and normal repair work.
   i. Parts replaced if any will indicate in report all performance information associated with part.
   j. Warranty if implied by manufacturer on replacement parts or equipment shall be submitted. Provide a copy of warranty information provided by the manufacturer to the owner.

**20. Contractor Service Reports:**
1. Designated personnel at the job site shall sign the Maintenance Contractor service reports.
2. A copy of the service report shall be kept at the local maintenance department and a copy is to be forwarded to the Office of the University Architect with the Preventive Maintenance monthly reports.
3. Contractor to provide KSU with a work order process so you are able to get feedback from KSU staff through our facility manager on each campus. The process should be very straightforward and provide you with a location (building and room) and a field for inputting issues. This process should be logged in your field report and copied to the CA.
1. The Preventive Maintenance Contractor shall submit two (2) copies of type drafted reports; one report to maintenance personnel at campus being serviced and one to the CA. The reports shall be broken down summarizing the work done on each piece of equipment or system for each building or area. The monthly report shall include an executive report outlining the highlights of the past repairs or maintenance that were done during the month.

22. Performance Reports:
1. The Preventive Maintenance Contractor shall check the performance and operations of all Supply Air, Return Air and Exhaust Air systems and/or zones for proper operation. These systems or equipment include the following checks:
   a. Check all terminal unit’s temperature control systems, including coordination and communications with the Building Automation System (BAS), and the Facility Management System (FMS).
   b. Check performance of the heating and/or cooling coils by system or by unit and include their controls.
   c. Check performance coming from each Air handling Unit, Terminal Unit, Duct Heater/Coil, Exhaust Fan, Return Fan, Kitchen Fan, Chemical Exhaust Fans, Chemical Hoods, along with the proper operation of all control valves, etc.
   d. Check the performance of all temperature-controlled systems serving all Air Handling Units, Chillers, Boilers, Terminal Units, Cabinet heaters, Unit Heaters, Heat exchangers, Exhaust Fans, Dampers and Damper Operators, Pumps for each of the cooling and heating seasons and ensure that all equipment and systems are responding correctly with their programs and controls.
   e. Check Performance of all VRF, DX systems components and operations of all Split and VRF Systems.
2. Contractor shall provide air and hydronic balance report (if accepted at time of Bid) by the 5th contract period (Does not apply if electronic monitoring is performed or if contract period terminated less than 5 years) (Air balance report is to provide a snap shot of the air flow when all system or units are over ridden to their full open position)(Hydronic Balance report is to show the current flow rate of pumps for the system when system is over ridden to the full open position) covering the following:
   a. Air Handling Units
   b. Chilled water, Tower Water, Heating Water, Reheat Pumps, Condensate Pumps (A/C and Steam), Pressure Assist Pumps (Steam), Domestic Hot Water Circulating Pumps and Circulators, Sump pumps, Sewage Ejector Pumps, etc.
   c. Fan Coil Units, Cabinet Heaters, Unit Ventilators, Unit heaters, Fin-Tube, Radiant Ceiling Panels.
3. Both Air and Hydronic Balance Report shall include the following:
   a. Record the date, outside air temperature, supply air discharge(SA),return air (RA) temperature, mixed air (MA), discharge set point (s) and actual (a) temperature, hot deck set point (s) and actual (a) temperature, and cold deck set point (s) and actual (a) temperature when applicable. Measure air systems for proper flow and record all air distribution system's airflow quantities.
   b. Record airflows at each diffuser, register, and exhaust grille. Contractor to verify each zone’s maximum and minimum CFM serving each room. (Log room, building and min/max air flows at each diffuser, register and grille.
   c. Report shall indicate GPM flow at each terminal unit, convector, cabinet heater, fin-tube, fan coil, unit heater and air-handling unit, temperature, RPM of motor and projected BHP. Static pressure readings for each air distribution system shall be recorded at full flow conditions.
   d. The zone supply temperature shall also be recorded in the following manner:
      3.d.1. Set the room thermostat to full "heat" and record the temperature after the supply air temperature stabilizes.
      3.d.2. Set the room thermostat to full "cool" and record the temperature after the room stabilizes.
      3.d.3. Set room thermostat to original setting.
3.4. On multi-zone and dual duct systems, not more than 25% of all zone thermostats shall be set at full heat or cool simultaneously.

4. The Balance Report and Zone Supply Temperature Log will be in the custody of the Owner's Maintenance Supervisor, with a copy to the Office of the University Architect.

23. Bi-Annual Meeting:
   1. The Maintenance Contractor is required to attend a bi-annual meeting to review the overall contract performance and submit the state of the contract report. This Bi-Annual report shall include the trending reports of the chemical treatment, special tests (Backflow preventer certification reports), (Fume Hood certification) problem equipment, and other specified reports indicated within the specifications. The meetings location is at the Office of the University Architect, 615 Loop Road, Suite 230a, Habourt Hall, Kent, Ohio, 44242-0001 or at the PM contractor office if CA authorizes during the months of June and December.

24. Duration of Preventative Maintenance Contract:
   1. The preventative maintenance contract shall be in effect between the dates specified in the Form of Proposal starting with the "First Contract Period". This contract and all succeeding contracts shall become effective at 12:01 a.m. and terminate at 12:00 midnight, local standard time, on the dates specified.
   2. The University reserves the right to request additional years of service based on performance contract general conditions on a year-to-year basis until contract is re-issued for public bid renewal.

25. Termination:
   1. This maintenance contract may be canceled by either party on January 1 or June 30 (every six [6] months) of each year of the contract term by notifying the other party in writing ninety-(90) days prior to these dates.
   2. In the event of University termination, resulting from breach of contract by the contractor, the University may suspend the Contractor from bidding on any project at the University (Kent Campus or Regional Campuses) for a period up to five (5) years.

26. Annual Contract Price Adjustments:
   1. The annual contract price adjusted each contract period for the next year by the increase or decrease in material and labor costs for the past year and based on local prevailing wages and cost of material issued by the Department of Labor. Present adjustments to Kent State University ninety-(90) days prior to the start of a new contract period.
   2. Base your material cost increase or decrease on the percentage increase or decrease shown in the latest published index of the Department of Labor "Wholesale Commodity Price for Metal and Metal Product" as compared with the index at the bid date.
   3. Base labor cost increase or decrease on the percentage increase or decrease in the total prevailing wage rate on (straight time hourly labor cost), including all fringe benefits, currently paid to the total straight time hourly labor costs at the bid date renewal. Each bidder shall enter on the Bid Form the "base" for his labor rates such as "Pipefitters Local 987, present Wage Agreement". Apply this to the prevailing wage rates by the locations of each campus.

27. Payment:
   1. The contract payment made by the Owner is in equal Monthly payments for the contract period at the end of each billing period. Advance payment for each billing period not considered unless discount offered. Maintenance Reports are required monthly, or payments withheld. Payments withheld for incomplete or unacceptable reports. The University policy of net thirty-30) days on all invoices.
28. **Project Identification:**
1. Identify all correspondence, submittals, reports, invoices/statements, etc. by the name of the project shown on the Form of Proposals, and the Kent State University Project Number (by Campus) and Purchase Order Number (by Campus).

29. **Installed Equipment:**
1. The Proposal for this project is based on utilizing the existing installed equipment.
2. All bidders shall indicate on the Substitution Sheet all alternate equipment he proposes to use and the credit Kent State University will receive for use of such equipment. If approved by the University.
3. At the termination of this Maintenance Contract, the Maintenance Contractor shall remove all APPROVED Alternate Equipment including piping, electrical wiring and conduit, etc., and reinstall existing equipment removed or altered by the substitution. Existing equipment, which was removed, shall be set up for storage at no additional cost to owner and equipment will be verified operational to the extent possible when removed from service. Replacement of associated wiring, controls, and piping shall be performed at no additional cost to owner.
4. The University reserves the right to purchase said equipment if approved at the equipment’s current valued price based on age, condition and hours used. This price adjustment or payment will be made at the end of each contract period or at the time of contract termination or renewal.

30. **Special Tests:**
1. The Maintenance Contractor shall include in his proposal all labor required for Special Test such as "Eddy Tube Test" for evaporator and condenser tubes of absorption and centrifugal water chillers. If tests indicate that the equipment is not maintained and test fails, re-testing will be re-performed, at the expense of the maintenance contractor until the University accepts the test in writing by authorized personnel.
2. Pressure tests associated with high-pressure refrigerant installations will include in a report to the CA the following:
   a. The number of pounds evacuated.
   b. Type of refrigerant and number of pounds in charge
   c. Recovery process and equipment used.
   d. Vacuum level achieved during evacuation and time duration for the process.
3. If the University requests an additional test, Kent State University will pay extra for the actual cost of the test.
4. Backflow Prevention devices require testing as outlined by each of the water purveyors normally on an annual schedule. The cost for performing these tests shall be included for each of the campuses, along with any repairs or possible replacement. If replaced PM Contractor to follow the submittal process.

31. **Energy Conservation Measures:**
1. Kent State University reserves the right to require the contractor to reset room thermostats, boiler, hot water hydronic systems, chilled water and domestic hot water controls, and change outdoor reset temperature at any time without additional compensation. It is the responsibility of this contractor to operate the systems in the most energy efficient manner. Resetting temperatures shall be coordinated with facility directors or AHJ. Report all changes in reset temperature programming on daily logs and outlines in the executive report to the CA and OUA-engineers.

2. Kent State University reserves the right to institute energy conservation methods on all systems covered by this contract. Before proceeding with modifications, the associated work needs to be reviewed with mutual agreement between the Owner and the PM Contractor on requests for these types of changes requiring modifications to the scope of this contract. If no scope changes, the work will be incorporated into the PM program at no additional cost. If the modification changes scope the Owner will issue a change order to the
PM Contract, once mutually agreed upon and approved the terms and costs will be part of the revised PM contract.

3. Contractor, upon inspections and maintenance, determines that modifications to existing systems need improved by modifying of existing controls, the PM Contractor can submit proposal and recommendations to the Office of the University Architect FD and CA.

32. Equipment Replacement:
1. In the event, any equipment, as listed in specifications or Appendix, becomes un-repairable or contractor receives a notice from manufacturer that the equipment will no longer be available ie: (curtailment, obsolescence, no longer manufactured or supported). The Contractor shall notify the CA, Owner, and OUA. Contractor shall prepare as early as possible a Proposal Request with options including the following requirements:
   a. Impact to facility.
   b. Expected timeline to order and install replacement.
   c. Material Cost to replace equipment or component.
   d. Labor cost to install.
   e. Permits required to perform work.
   f. State inspections or AHJ inspections
   g. Overall Schedule

2. In the event equipment fails from a catastrophic failure, the PM Contractor will replace, as bid to reflect this built-in cost for replacement including all labor and material with no additional cost to owner. An approved schedule for replacement is required between the PM Contractor and KSU. Failure to provide replacement as scheduled and results in damage to building the PM contractor is responsible for damages up to the dollar amounts indicated in section 23800.2.14.

3. Each contract year PM Contractor shall indicate in writing (PDF file format accepted) using (excel or word) on annual report the “End of life expediency” (EOL) from equipment lists compiled under this contract on major equipment exceeding 10k in cost or components above 10k that may influence the building operations. “End of life” shall use guidelines based off ASHRAE 2023 equipment life expediency chart indicated in KSU-23800 - Appendix “B” in excel In this report the equipment or components shall be listed with the following categories and information:
   a. Create baseline estimated year equipment or components placed into service
   b. Indicate end of life expectancy (based off ASHRAE Equipment) on components costs greater than 10 thousand dollars.
   c. Equipment failure within one year (highlight in red)
   d. Equipment failure estimated within two years (highlight in yellow)
   e. Equipment replacement 5 years (highlight in blue)
   f. Equipment replacement 10 years (Highlight in green)
   g. Equipment at risk due to known condition at any time (highlight in grey)

4. For equipment having failure in year one or at any time please provide note indicating the following information:
   a. Indicate Campus and building affected.
   b. Provide Equipment tag or name.
   c. Indicate make, model and serial number if available.
   d. Indicate location within each complex (room no or floor)
   e. Indicate if controlled through Facilities Management System
   f. Estimated cost to replace (labor and material) indicate separately
   g. Estimated time to obtain and install.
   h. Current issue or nature of problem(s)
i. Alternate options for operations
j. Temporary Equipment requirements with estimated cost to implement until final replacement.

33. Asbestos:
1. Asbestos may be present on equipment and or in material used in construction. The contractor shall take all necessary precautions when working around suspect material so as not to disturb the asbestos.
2. Where handling asbestos material is unavoidable, the contractor shall notify the owner. The owner will be responsible for the abatement of the asbestos and the subsequent patching of the material if necessary. The contractor is not responsible for asbestos abatement.
3. The contractor shall notify the Office of the University Architect for the request of asbestos abatement in writing. Kent State University shall determine whether to remove or encapsulate the asbestos.

34. Dispute Clause:
1. All discrepancies in the contract interpretation shall be ascertained and determined by three disinterested persons qualified through some knowledge or experience with the service industry, one thereof to be appointed by the University and one by the contractor, the third by the two so appointed. The award shall be determined by the three and shall be final and conclusive. Each party shall pay the expenses of its appointee and one-half the fee and expense of the third person selected as arbitrator. Such Arbitration shall be in accordance with the rules of the American Arbitration Association.

35. Incomplete Repairs:
2. All repairs in progress, negotiations or disputes at the time of termination of this contract is still the responsibility of this contract. All final repairs must be completed and equipment operating to the satisfaction of the owner. The Owner shall submit a written list of outstanding items to the contractor within thirty - (30) days of expiration or termination of this contract. The Owner reserves the right to retain a consultant to determine the satisfaction of repairs.

End of Section - 23800
DIVISION 23801 - Preventative Maintenance Program-System Service Components

Definitions:

- **CA**: Contract Administrator
- **PM or PMC**: Preventative Maintenance Contractor
- **KSU**: Kent State University
- **BMP**: Best Management Practice
- **VAV**: Variable Air Volume
- **JCI**: Johnson Controls Inc
- **BAS**: Building Automation System (Metasys)
- **FMS**: Facilities Management System
- **A/C**: Air Conditioning
- **CV**: Constant Volume
- **VFD**: Variable Frequency Drive
- **VRF**: Variable Refrigerant Flow
- **MERV**: Minimum Efficiency Reporting Value (Efficiency rating for Filters)
- **ECU**: Environmental Control Unit
- **ERU**: Energy Recovery Unit
- **OUA**: Office of the University Architect Engineers
- **NAE**: Network Application Engine

General System Service Requirements:

1. The Preventative Maintenance Program (PM) shall be submitted for approval outlining contractors’ program to maintain all systems and equipment to their original specified condition, design and performance. This PM program shall include all parts, labor, miscellaneous materials, tools, testing, and programming. The program shall maintain the continuance of existing or new warranties and shall be responsible for replacement of failed equipment and systems.

2. A written maintenance service program shall be submitted for approval to the PM administrator. The program submitted is to cover all contractor maintenance programs for all systems or equipment outlined in the PM specification sections 23800, Appendix _A, 23801. Reporting, Meetings shall be in a format attached to the contract as outlined in these documents. Variances can be applied if approved by the Contract Administrator in writing. The Contractor's programs shall be equal to or superior to the manufacturer's recommendations and/or Kent State University standards as outlined hereinafter.

3. Workforce certifications and qualifications shall be submitted for each of the technicians performing work or services for KSU. Corporate certification and training programs are encouraged but actual local representation of your workforce will be required and documented. Submission of workforce certifications of personnel shall be submitted at time of Bid. KSU will evaluate the firm and their personnel qualifications for best value, workmanship and expertise of technicians. Bidders, if your firm is planning to sub-contract out any portion of the work associated with this PM contract their qualifications and certifications by employee will need to be submitted as well.

4. All Bidders are to present their employee training program, this allows KSU to make sure that the company which is performing Preventative Maintenance is keeping up with technological advancements. This requirement is needed due to the long-term contractual arrangement under this program and KSU assurance that your company is keeping up with changing technology.

5. The outlines included hereinafter are for all major equipment or systems. Any system or piece of equipment not outlined in this section shall be maintained per manufacturer's recommendations and best management practices (BMP).

6. **NOTE**: This Division 23801 is a generalized specification for equipment and/or systems. Some campuses may not have all the systems or equipment. See appendix for list of campuses outlining equipment or systems as complete as possible. Equipment which is found to be present shall be governed by this specification. The index was made to give the contractor the best reference available for each campus. The university reserves the right to modify index to meet new or existing systems or equipment. This will include new additions and buildings which could be installed or modified during this contract. When new buildings or renovations are completed and KSU
obtains certificate of occupancy or substantial completion. Contractor shall field verify all systems and equipment serving each campus and advise Contract Administrator (CA) of discrepancy so appendix and equipment/system can be updated.

**Index for specification 23801:**
1. Air Handling Equipment (Both indoor and outdoor units)
2. Air Filters
3. Chillers/Refrigerant Compressors
4. Condensers/Cooling Towers
5. Pumps
6. Chilled Water, air conditioning drain pans
7. Humidifiers and Humidifier make-up
8. Refrigerant Equipment and piping systems
9. Electrical systems
10. Temperature controls
11. Thermal Insulation
12. Sumps, Sump Pumps and Sewage Ejectors
13. Chemical Treatment and Systems (closed loop, Open Loop, Glycol, Soft Water, Metering and Reporting)
14. Exhaust fans
15. Fume Hood Exhaust Fans and systems
17. Ductwork systems, (VAV, CV, FPB, Dual Duct, and Multizone)
18. Heating systems and components
19. Boilers
20. Domestic water Heating Systems
21. Electric water heaters
22. Tankless Water Heaters
23. Air Compressors/Dryers
24. Emergency Generator and BAS UPS
25. Make-up and Domestic water systems
26. Hydronic water systems (Heating and Cooling)
27. Steam and Steam condensate systems
28. Natural Gas Piping Systems
29. Lab Gases, Lab Accessories, Medical Air and Vacuum pumps
30. Plumbing and Kitchen Fixtures
31. **Line-Item cost** for electronic fixture and flush valves.
32. Valve maintenance
33. A/C condensate systems and piping
34. Energy Recovery Units (ERU)
35. VRF systems
36. Evaporative cooler/swamp coolers systems
37. Dust Collection systems
38. Solar Thermal Systems
39. PTAC
40. Computer room DX cooling units.
41. Split Systems (DX) for (Elevator, MDF and Electrical Rooms)
42. Valves, gauges, thermometers, and equipment trim
43. Electric or Natural Gas Unit Heaters, Electric Duct Heaters, and Radiant Heating system
44. Fin-tube, Cabinet Heater, Unit Heater, Fan Coil Units, Unit Ventilators, Radiant Heating (Electric/Hydronic
45. Electric or hydronic snow melt systems
46. Domestic Hot water recirculation System
47. Expansion tanks and (air and dirt) separators
48. Strainers (all makes, models and types) and in-line filter.
49. Kitchen Equipment (Freezers, Ice Machines, Coolers) Limited to (refrigerant, compressor operation, compressor...
Preventive HVAC Maintenance for KSU Regional Campuses

Issued November 2, 2023

1. Air Handling Units:

1. Continuing maintenance shall be required for all equipment falling in this category. Such equipment will include air handling units, make-up air units, fan coil units, forced flow type cabinet heaters, unit ventilators, unit heaters, and the like.

2. Filters shall be inspected and cleaned or replaced, if dirty, on not more than a monthly basis or when an excessive pressure drop is realized and increase in energy use. Filters shall be replaced on a minimum time requirement of once every three (3) months or as recommended by unit manufacturers’ recommendation for best energy performance. Filter change out shall be scheduled with facility director so unit is able to have scheduled outage. During this time inspection and cleaning of drain pans and cooling coils can be inspected and scheduled for cleaning. The contractor is referred to 23800.3.2 of these Specifications entitled AIR FILTERS for more definitive requirements of this item.

3. On a less frequent schedule, determined by past need and the manufacturer’s recommendation for fan bearings, motor bearing, and associated Outside Air (OA) dampers, Mixed Air Dampers (MA), return air dampers (RA), Exhaust/Relief Dampers (EA)(RD) dampers shall be lubricated and inspected for proper sealing and operation.

4. Cooling or Heating coils shall be scheduled with the Facility Director. Coils shall be cleaned once per year or more often if excessive pressure drop or loss of performance is detected. Cleaning shall be done to manufacturers recommendations as called for by operations and maintenance programs provided by coil manufacturer. In no case can the time span between cleaning hamper the performance. Method of cleaning shall be reviewed by facility Director and Contract Administrator (CA).

5. On a semi-annual basis, or as specified by the manufacturer, a complete inspection shall be made including the above as well as the lubrication of damper bearings and linkage, cleaning of the fan and casing, and the tightening of all fan shaft direct drive connections, fan belts and bearing set screws. Fan belts, v-belt, gear, and synchronous belt drive shall be properly aligned by BMP. No belt is to be re-installed unless alignment has been performed and indicated in field reports on variance within manufacturer’s tolerances.

6. The unit’s system shall also be inspected for excessive vibration, rumbling, squealing, and pulsating. Corrections are to be immediately made when this condition is observed.

7. A duct system (flexible connections) to the air handling equipment shall be included under this contract. Proper operation and integrity shall be maintained at all times. Any rips, tears or signs of deterioration shall be noted and repaired or replaced with same material or an approved alternate material may be substituted upon prior approval with CA and OUA engineers. This component is included under this category for maintenance and care.

8. Gas-fired heating systems shall be regularly inspected and maintained in accordance with the manufacturer's recommendations and good practices. Special attention shall be given to the burner and controls, motor and drive, heat exchanger section, and flue system. All safety controls shall be tested annually and a report shall be submitted to the CA. Combustion controls shall be tested to maintain optimum firing and combustion. Annual combustion analyzation shall be performed to make sure the unit is running energy efficient.

9. The filter media for filters requiring 1/2" and 1" thick media shall be the same as the 2" thick media except for thickness. The filters replacements shall meet the existing Merv ratings for units being protected, but not lower than a Merv 6, (Merv 8 preferred) shall be installed in a unit. PM contractor shall submit the filter rating of each unit in an excel spreadsheet listing the Merv rating for each unit and component having a filter.

10. Filter frames, if repaired or replaced for renewable media filter pads shall be of welded construction of galvanized steel with grids on the entering and leaving air sides. The frame shall be a minimum of 20 gauge and the grids
shall be 16 gauge. Proper clipping of filter media shall be maintained per the manufacturer’s recommendations. If clips fail or are broken PM contractor to replace in kind. At no time should filters not be secured.

2-Air Filters:

1. The contractor shall provide complete inspection, service, and replacement of all heating, ventilating, and air conditioning equipment air filters. The air filters will be changed out every three months or sooner if necessary. PM contractor shall comply with unit manufacturer’s recommendation for acceptable pressure drop. NO blow-through conditions will be acceptable.

2. All air conditioning units, heating, and/or ventilating units, fan coil units, cabinet heaters, ERU, ECU, VRF, and similar units shall be equipped with permanent frames and renewable filter media. All filter frames shall become the property of Kent State University if repaired or replaced.

3. Renewable media shall have a varying density increasing in the direction of airflow with a filtration-designed adhesive. The media shall have a dust holding capacity of 90 grams per square foot at 300 FPM operating air velocity, initial air flow resistance of 0.15 " WC or less and final pressure drop of .50" WC at rated air velocity and dust holding capacity. Media thickness shall be two (2) inches unless equipment requires more.

All filters shall have a Merv 8 or greater filter rating or as required by original design and O&M requirements. Contractors survey all equipment and indicate existing filter type, rating and size for each piece of equipment being serviced. This information is to be included in the equipment lists as outlines in 23800.2. Include with

All filters shall be listed by Underwriters Laboratories as Class II filters with a Minimum of Merv 8 rating. Less filter rating use of a Merv 6 or less shall only be given with approval of the OUA.

3. All filters shall be tested and rated in accordance with ASHRAE STANDARD 52.2, ASHRAE STANDARD 62.1).

4. The following media is acceptable based on manufacturer's data. Final approval will be based on the results of independent laboratory test data:

   a. Roll Media - American Air Filter -Roil-O-Mat - Gold Air guard Industries
   b. AmerSeal Ring Panel Gold(4 Ply), Green (2 ply)
   c. AmerSeal Link – Gold (4 ply), Green (2 ply)
   d. Your filter manufacturer was approved and submitted to the CA and OUA engineers.

3-Chillers, Refrigerant and Compressors:

1. The contractor shall perform all inspections, service and repairs as required to assure efficient continuing operation of the water chillers and/or refrigerant compressors. Preventive maintenance shall be as recommended by the manufacturer. This contract shall cover all parts and labor for chiller, compressors, controls and associated components and for the replacement of refrigerant within the system or in the unit. The PM contractor shall provide a list of refrigerants to each piece of equipment within the PM program, indicate expected refrigerant type, quantity and record any amount which has been removed or leaked out of the system. Notification of any leak shall be reported to KSU-OUA engineering and CA. The report shall indicate approximate loss how the refrigerant is recovered or evacuated and what the vacuum level for evacuation was achieved. Who the certified personnel was involved in this process and how much refrigerant was added into the system. of any major loss of refrigerant greater and 5 Lbs.

2. The oil in refrigerant systems shall have an oil/acid test on an annual basis (minimum). The testing of the oil shall be based on chillers workload, performance, age and size. This may require more sampling and testing based on manufacturer’s recommendations. The oil samples should be taken when the unit is offline (not operating) the contractor shall also perform Particle Analysis once per contact period. The oil shall be replaced if found to be excessively acidic or particles are found. If particles are found to be excessive testing will be required per season or as required by the unit’s manufacturer’s recommendations or by the PM.
3. Filter/dryers on refrigerant systems shall be replaced annually.

4. The flow of refrigerant shall be checked for low level and possible leaks. Leaks shall be located and repaired immediately. Compressor suction and discharge pressures shall be checked regularly during the cooling season and compared to the manufacturer's published acceptable levels. Contractors shall bench mark each unit and provide an annual report from year to year to track the performance of each unit.

5. The owner may direct the contractor to leak test on any piping or equipment in question. This service will be at no additional cost to the owner.

6. At the conclusion of the cooling season, the contractor shall complete the winter lay-up procedure per the manufacturer's recommendations. The units shall be thoroughly inspected, drained, cleaned, pumped down etc.

7. Eddy current test for chillers shall be performed at the beginning and end of each 5yr contract period. If the eddy current test fails due to blockage or lack of maintenance the chiller tubes will be cleaned again and a second test shall be performed at no additional cost to University. Additional testing may be required if determined by the Contract Administrator (CA) and OUA engineers. If the unit’s tests are not conclusive and the units still show signs of poor performance. Testing will be at the discretion of the University CA.

8. The contractor is responsible for tracking the amount of refrigerant added or lost at any unit having a refrigerant. The report shall include the amount lost, suspected date of loss, amount added and date unit was repaired. The type of recovery equipment used and list the vacuum pressure at the time of recovery. The report shall include the certified technician name and certification number including last retraining date. This report shall be submitted at the time of discovery, location, equipment tag, make, model or anytime this type of work is performed on any unit having refrigerants greater than 5 lbs. Two Copies of report shall be submitted to the OUA. Once the report is complete the report is to be submitted to CA. This is a KSU EPA requirement. Report to be performed and submitted to KSU within 24 hours.

4-Condenser/Cooling Towers:

1. This contractor shall perform all the inspections, service and repair required to assure efficient continuing operation of the condensers and/or cooling towers. The service shall be as recommended by the manufacturer and shall include all parts and accessories such as fans, motors, bearings, pumps, tanks, fill material, water eliminators, unit casing, controls, etc.

2. This contractor shall also be responsible for remote sump tanks, pumps and associated equipment, level sensors etc. These tanks shall be inspected and flushed annually. Remote sumps shall be treated for legionella including proper treatment of tower basin, fill, and distribution headers.

3. Sump heaters shall be checked and cleaned annually to ensure proper operation.

4. Contractor shall also maintain the structural members or support associated with the condensers/towers. All surfaces showing rust or deterioration of metals shall be cleaned and painted to maintain the structure integrity and looks of the structure. Paints shall be suited for the service intended and shall be submitted to the OUA for approval prior to use. Color selection shall be made to match existing. Spot patching will not be acceptable if obvious.

5. Cooling Tower sump shall be cleaned annually and repaired as necessary. The owner may back charge this contractor for water usage due to leaks.

6. Condensers and Cooling Towers should be inspected for litter or dirt buildup and cleaned as necessary.

7. This contractor is responsible for the annual start-up and shutdown of the condensers and/or cooling tower systems. Upon shutdown of the systems, the contractor shall inspect, clean and repair or replace all defects and
malfunctions as required to keep equipment in good operating condition. When towers are to become operational
the following steps should be performed:

- Cooling tower fans are controlled off (temporarily until step J is performed)
- Drain any residual dirty water from layup.
- Flush cooling tower with clean water
- Mechanically clean louvers, drift eliminators, and accessible fill
- Replace media in filtration systems.
- Replace filter bags if present.
- Add neutralizing agent to which was introduced as part of dry layup procedure
- Initiate routine chemical treatment and Microbial control measures, PH, Oxidizing biocide level are all with acceptable parameters (control Limits)
- Prior to running tower fans make sure all pumps, filters and distribution water system are fully functional including chemical treatment.
- After all of the items indicated above are completed and the system is fully flooded and flowing can the cooling tower fans be allowed to operate.

8. Cooling Tower basins and support structures showing signs of rust or deterioration shall be sand blasted and painted with rust inhibitor paint. Color selection by OUA architect.

9. The contractor shall inspect and provide valve maintenance to ensure proper operation of isolation valves and control valves serving towers. Any valve shown not to be operational shall be repaired or replaced.

10. Tower water piping when drained shall be flushed with rust inhibitor to limit rusting of interior surfaces.

11. Contractor to inspect, repair and maintain the proper operation of tower make up water valve, level controls, distribution arrangement, sump screens and tower overflow and blow down assemblies to ensure proper operation.

5-Pumps:

1. All pump and pump motor bearings shall be lubricated on a regular basis. Excessive bearing temperatures shall be noted, defined, and repaired. Pump couplings and drives shall be maintained at the proper tension. Packing’s and/or seals shall be checked for excessive leakage and repaired/ replaced if damage to pump or motor is possible. Noise and vibration, including isolator shall be checked and corrected, if excessive or failing.

2. Belts on all rotating equipment shall be checked during each inspection and belt sets replaced if required. All belts shall be replaced at least once a year. PM contractor to track excessive belt replacement or excessive noise and inform CA to determine if additional measures are warranted.

3. All equipment drive guards shall be in good repair and shall be kept installed on operating equipment. Guards shall meet OSHA guidelines.

4. All controls associated with the pump shall be included in this contract along with all isolation valves, control valves, balance valves, check valves, suction diffusers, inline basket strainers associated with pump assembly. This contract also includes all insulation, gauges, nipples, temperature gauges, pressure gauges, DP sensors and tubing, along with all associated piping between the components associated with pump assembly. If the pump is a skid package type of assembly then the whole skid package shall be included. The contractor shall coordinate the skid package with the CA if there are any questions to the extent of coverage. (Example: SyncroFlo pump package would be covered from the connection point on the skid to the exit point of the skid). All skid pump packages are considered all-inclusive including controls and power connections.

6-Chilled Water, Air Conditioning and Refrigerants Drain Pans:

1. The PMC is responsible for maintaining the chilled water piping and air conditioning condensate and refrigerant drain and piping systems in a leak-free conditioning. The contractor is also responsible for unclogging all condensate drain piping as required, to insure positive drainage at all times. Piping subject to freezing condition
shall be inspected and repaired if becoming damaged from freezing.

2. Contractor shall clean drain enclosures, A/C condensate drain pans in all HVAC and refrigerant equipment. Inspect floats, level indicators, Level sensors and relays for proper operation and replace if malfunctioning or broken. Replace in kind.

3. Contractor shall chemically treat the drain pans to maintain the unit’s pans from slime, viruses, fungi, mold, bacteria, legionella, nematodes, amoeba, pollen, dander, and mites. Treatment must be EPA and OSHA approved. Submit program and MSDS sheets to CA prior to use.

4. Drain traps shall be verified to be fully operational and shall be adjusted over time to make sure they are fully operational.

7-Humidifier and Humidifier Make-Up:

1. The contractor is responsible for maintaining humidifier system, distribution tubes, and control devices. The contractor shall also maintain, repair, or replace associated valving and piping associated with the humidifier unit.

2. Piping is limited to the piping required for units and to the isolation valves for the unit’s system.

3. The contractor shall test and monitor the system for the property humidity levels during the winter to ensure the systems are working correctly to the base of design for the humidification levels.

4. The Contractor shall clean humidifier units at the beginning and end of the heating season. Descaling of humidifier, control valves, piping and associated valving to ensure proper operation prior to the next heating season.

8-Refrigerant Equipment and Piping Systems:

1. Refrigerant piping, valves, controls, compressor units, coils, ice makers, walk-in freezers, water coolers and related accessories and controls shall be checked and maintained for proper operation as continuing leak-free systems by this contractor. All detectable leaks shall be repaired immediately. Whenever the system is low of refrigerant, the system shall be leak-tested and all leaks repaired prior to the addition of refrigerant to the system. Contractor shall verify proper refrigerant levels per equipment manufacturer’s recommendations. Log refrigerant type and amount lost and provide written report anytime refrigerant has been lost greater than 50# or when refrigerant is to be captured or reclaimed.

2. All repairs and/or alterations to the refrigerant equipment and piping system accessories, and connections to equipment shall be silver brazed or silver solder where exposed to food or food equipment. Refrigerant lines not subject to food environment shall have brazed piping connections.

3. The contractor shall inspect all refrigeration equipment to ensure proper operation and cycling of controls. Contractors shall check all hot gas bypass configurations and settings on an annual basis to ensure proper operation. VFR systems shall be investigated and verified for proper operation between each heating and cooling season for proper operation of systems. The contractor shall make adjustment to the operating system at that time and review with the CA or OUA engineers.

4. Kent State University reserves the right to require the contractor to leak-test any system under question. If refrigerant needs to be removed to make repairs, contractor shall use refrigerant capture device. The contractor shall be certified by the manufacturer for each VRF system type prior to performing work. This is to ensure the equipment warranty, if present and active, are not compromised. The contractor shall comply with all codes and guidelines for refrigerant removal and additions to refrigeration equipment. The contractor is responsible for all refrigerant charges or refrigerant loss at no additional cost to the University. The contractor shall perform this service under the base bid and shall provide a written report each time equipment requires adding or removing
of refrigerants to meet EPA guidelines and KSU title 5 requirements.

5. At NO TIME will the contractor replace existing refrigerant with a substitute refrigerant type without the approval of the CA & the Office of the University Architect engineers and the manufacturer of equipment that the refrigerant is serving. If the refrigerant is to be substituted the contractor is to get written approval from engineer, CA and manufacturer of equipment stating substitution is approved for this equipment and shall maintain performance and any ongoing warranty.

9-Electrical Systems:

1. Electrical maintenance under this contract shall be from the line side of the equipment’s supply disconnect switch (including disconnect, breakers or fuses) to motor starter for individual motors, from the line side of disconnect switch for electric heating or cooling equipment, pumps, fans, VFD, AHU, Chillers, Towers or other mechanical/plumbing equipment outlined in these specifications. This includes power and low voltage wiring. The entire control operational system for temperature controls, pressure, and/or safety devices—wiring both line voltage and low voltage power serving the system shall be included in this maintenance contract. This includes the UPS emergency battery backup power supplies for BAS control panels and all NAE’s. The contractor is to provide inspection reports on the condition of the UPS systems as part of the monthly reports.

2. This contract shall also include the operation and fuse replacement of safety switches or control panels associated with all equipment outlined in the specification. The contractor is to monitor all VFD drives for proper operation and replace or repair all components for proper operation per unit manufacturer’s recommendation. The contractor shall evaluate the VFD’s once per year in by-pass mode of operation to make sure the equipment served by the VFD is operating through the full range of the drive and also works in by-pass mode. If Circuit breaker resetting or replacement from the power distribution panel feeding equipment indicated in these specifications shall be included in this contract. If failure of any main distribution

3. Repair and/or replacement of worn parts or components of the building electrical power system shall be included in this contract as noted hereinafter:

   a. Fuse or VFD replacement due to equipment or mechanical system malfunction shall be included in this contract. The Contractor shall replace fuse or VFD replacement due to electrical system malfunction. In case of repeat power outages, the Owner shall be advised verbally followed with a written report within 24 hours. Provide all required testing to determine the cause of the outage and coordinate the findings with the Owner.

   b. Repair and/or replacement of worn parts or components of equipment and VFD's related to electrical power systems shall be included in this contract.

   c. This contractor may, at his option, provide a phase loss or low voltage cutout protection on various pieces of equipment at his discretion. In the event these conditions occur, and result in any equipment damage, the equipment shall be repaired as part of this maintenance agreement and all incurred damage repaired.

   d. Damage to equipment due to main utility power loss, vandalism, construction outside of this contract or from a lightning strike to the incoming service at the building is to be identified under this contract. Cost to replace or repair systems or components, equipment, wiring, controls etc. shall not be included in this Contract due to lighting strike at building shall be considered an act of God. The cost of determining what caused the damage to the systems or equipment is included in this contract. The Contractor shall provide a proposal to provide labor and materials to fix the system, components, equipment, controls including wiring, fuses , VFD, MCC , etc. This process needs to be submitted as soon as possible to limit the outage and potential damage to structures or services. Contractor to include in proposal all overtime, holiday or other associated costs as a line item from your normal prevailing wage costs. Proposal shall include materials costs, labor cost, indicating all components and identify make, model and performance information with proposal. Include submittals for approval prior to acceptance of proposal and installation. The CA, owner (facility Director) and the OUA shall be copied on all documentation.

   e. The contractor shall cover all costs in testing and maintaining any emergency generators including transfer switch and associated equipment for that system. See the emergency generator section of this specification for additional
requirements.

10-Temperature Controls:

1. The contractor shall be responsible for maintaining the temperature control system controlling all HVAC equipment. Programming modification and adjustments to programs shall be part of this contract. Component repair or replacement will include all sensors, relays, wiring (line voltage or low voltage), control panels, Humidity Sensor, CO2 sensors, smoke and fire device interface, integrators, thermostats, NIE, NAE, FEC or other field devices, head end computers, both pneumatic/electronic controllers and associated equipment and hardware utilized for a complete BAS and Facilities management system. This includes all Lab control systems and their components, wiring and field devices. Contractor’s personnel shall have proper training and knowledge of all control systems. The contractor shall submit technician’s qualifications that will be working on control systems. The technician’s qualifications must meet the type of equipment being serviced and shall be factory trained in each type of controls being served. (Example: If Johnson Controls system then the technician should be a trained by Johnson Controls, if Trane, Diakin (McQuay), or others shall require the same level of training by each of the manufacturers if controls are factory provided. If the contractor is not able provide proof of this training then contractor is to sub-contract the correct qualified vendor/technician who can provide the technical expertise to maintain, repair or replace said system, equipment, components etc.) This added subcontractor service is provided at no additional cost to this PM contract. Failure to provide documentation and proof of training and qualifications for this vendor or technician shall be reason to terminate contract as described in sections of 23800.2 specifications.

2. The bypassing or de-commissioning or change in any control program or sequence of operations shall only be done if approved by Office of the University Architect Engineers or by a program implemented by The Office of the University Architect or by an authorized KSU department or associate. Changes made by the University or authorized associate will be coordinated with contractor so you are aware of the modification. Changes made by the University unless additional equipment is to be added to your scope of work shall not bear any additional cost to the university.

11-Thermal Insulation:

1. All existing systems, equipment and piping shall be identified within the first sixty (60) days and reported to the Office of the University Architect on insulation, which is missing, damaged or in need of repair. Provide proposal and submit timeline for replacement.

2. Thermal insulated piping, ductwork, and equipment which is removed or damaged while performing services outlined in this contract shall be replaced in kind for thickness, material type, “r” value, vapor barrier and finish. The cost to replace shall be included in this contract. If insulation is proposed to be different than what is currently installed shall be submitted to the OUA and approved prior to making this substitution and installation.

3. The contractor shall maintain and repair all non-asbestos thermal insulation for equipment, external insulated pipe and duct systems included under this contract in good repair at all times. If insulation containing asbestos is required to be removed to service equipment the PMC is to provide 10-day notice to the owner so removal can be coordinated. Cost of abatement is not part of this contract.

4. The PM contract administrator at his discretion can request additional repair of any system, piping, ductwork which they believe jeopardizes the performance, operations or danger to any systems being serviced under this contract. This cost will not be added to this contract and shall be billed under a separate invoice as additional services. The contractor is responsible to identify insulation under item 1 for exclusion/exception from this contract.

12-Sumps, Sump Pumps and Sewage Ejectors:
1. The contractor shall inspect all sump pumps and sewage ejectors for proper operation. Verify all floats, support rods, controls, and pumps for proper operation. Clean all clear water sump basins including storm sump basins on an annual schedule. Check and replace all worn hangers, pull rods, and floats if damaged, missing or needs repaired or replaced. Replace pumps and controls if fail, which cannot be repaired. Contact Office of The University Architect Office immediately if pump are to become non-operational so other arrangements can be made. Contractor shall provide all manpower to keep system operational. Sewage ejectors shall be coordinated with local pumping service so facility can remain operational. The cost for this service shall be reviewed by CA. If failure is determined to be no fault of PM contractor cost to maintain pumping service shall be made by KSU until sewage ejector is repaired by PMC. If failure is determined by poor service by PMC the cost of pumping service shall be by PMC until the existing system is restored.

13-Chemical Treatment:

- The contractor shall obtain the services of one of the three approved chemical treatment companies to service and provide the chemical treatment systems necessary for this preventative maintenance contract. The companies are as follows: Nalco Chemical, International Chemtex, or State Chemical.

- The chemical treatment program for all of the different campuses and facilities shall be submitted with the base bid indicating the type of program, what existing components, that can be reused and components that need to be updated. The chemical treatment program shall indicate the basic upgrades to the facilities, which currently do not have the necessary components needed for proper chemical treatment for the systems.

- The base bid program shall utilize the current systems with minimal upgrades. All upgrades shall be reviewed with the successful contractor awarded this project prior to performing the upgrade. The contractor shall provide as an alternate price as indicated on the bid form a separate price to provide a complete and fully automated chemical treatment system with state of the art technology.

- Each contractor shall submit a detailed technical proposal/outline along with the bid alternate for the fully automated chemical treatment system. The automated chemical treatment system must be able to communicate directly to or through a BACnet to the current building management system.

- The chemical treatment program shall provide the basic requirements indicated below:

  a. All necessary chemicals, maintenance, inspections, reports, trend logs, laboratory support, testing, chemical removal, and chemical feed systems required to treat the following types of systems: Open Condenser Loops Closed Chilled Water Loops Closed Hot Water Loops Steam Boiler Systems (Maintain 7.5 to 8.2 Ph) Hot Water Boiler Systems Water Softener System Maintain and monitor all Glycol systems

  b. Legionella program must be included in the overall program along with an antimicrobial program for the AHU and cooling tower systems.

  c. Provide the proper metering devices, shot feeders, controllers etc. were needed if outdated or not present or currently nonfunctional. Outdated equipment must be identified and will need approval by the owner prior to replacement.

  d. Recommended testing and monitoring for the following systems:

      ▪ Closed chilled or heating water loop requires monthly testing.

      ▪ Open condenser loops require monthly testing. The first test shall be performed at the initial fill of the system. With a test every month during the cooling season.

      ▪ Closed Hot Water Loop requires monthly testing.
Steam to hot water boiler systems requires monthly testing at a minimum.

Hot water Boiler Systems requires quarterly testing unless water usage warrants a monthly test.

e. Water Softener Systems shall be serviced based on salt usage and number of regenerations. Testing and inspection of beds shall be performed on bi-annual schedule. Testing and inspection of controls and hardness shall be inspected and tested quarterly. Maintain softener system per manufacturer’s recommendations tested each spring and fall season to verify proper solution concentrations. Salt for water softeners is to be included.

f. Provide Water treatment training and manuals. Training is for observation of systems and troubleshooting of equipment that is malfunctioning or in alarm. Owner maintenance personnel shall be able to indicate to chemical treatment contractor which device or system is not working right or system color is not indicating the norm.

g. Calibration of existing equipment, water treatment controllers and pumps.

h. The contractor shall provide a checklist and training on an annual basis to the KSU maintenance staff for the proper daily boiler procedures that is needed to maintain a steam boiler. (Example: top and bottom blow down procedures, make-up water, safeties, checking for proper water level, daily testing or record keeping which the chemical treatment company deems necessary. The contractor is responsible for keeping KSU personnel up to date on any changes and shall notify the Office of the University engineers if these duties do not appear to be happening or are not being performed.

i. Systems, which are to be laid up over the winter months, shall be winterized by means of a rust inhibitor program. Draining of the whole system shall be reviewed to determine if this will be the best course of action or if partial draining of system will help lessen system deterioration. Contractor to submit record of procedure.

j. Scaling, fouling, or damage to any system being treated by the chemical treatment contractor by improper treatment, malfunctioning chemical treatment equipment or controllers, operators, that results in damaged equipment, piping, chillers, towers, boilers or any other associated component receiving chemical treatment or lack of will require the system to be chemically cleaned, repaired, or replaced at NO charge to the owner.

k. The use of toxic or non-chromate, non-polluting agents that are not approved by local, state or federal laws and codes shall be strictly prohibited and will be cause for immediate termination. All fines and costs associated by the authorities for clean-up, legal fees, etc. shall be paid by the chemical treatment contractor.

l. No acids of any type shall be used in any water treatment system unless the make-up water coming into complex is above 8.2 ph. Contractor to provide proper training and install containment vessels for storage and distribution into system.

m. All chemical treatment shall also be in accordance with the type of system or equipment being treated at the level acceptable to the manufacturer of that equipment or system.
   - Chemical treatment systems that are being cycled shall be done so as to minimize the acceptable cycles or bleed-off and shall limit the water consumption to the minimal cycles required. Excessive cycles may result in a back charge to the contractor if excessive water usage or consumption is determined by miss programming or improper cycle settings.

14-Exhaust Fans:

1. This contractor shall be responsible for the general maintenance of all exhaust fans. Annual cleaning of fan blades and wheels. Maintain fans in proper balance, lubricate damper linkage, motor bearings if applicable, fan bearings and correct bearing overheating conditions. The contractor shall also be responsible for the fan motors, drives, vibration isolators, backdraft or motorized dampers, including actuators etc.

2. Repair or replacement of damaged canvas and vinyl flexible connections, and vibration isolators shall apply.

3. Exhaust fans equipment curbs shall be maintained and painted with rust inhibiting paint. Color to be selected by
Architect within the OUA.

4. All exhaust fans shall be verified on an annual basis for proper operation. If fan is no longer working to original design parameters PMC to notify CA and local maintenance staff.

5. Exhaust fan roof curbs are to be maintained. If rusting, they are to be cleaned and painted with a rust inhibitor paint. Paint will require a submittal for approval and shall be low voc. Provide proper prep for painting of all surfaces.

15-Fume Hood Exhaust Fans:

1. The maintenance contract requirements for fume hood exhaust systems shall be limited to parts of the system not exposed to exhaust fumes such as motors, pulleys, belts, bearings, etc. All safety devices shall be included and cleaned and tested annually. Contractors shall also maintain fume hood controls in proper working order. Maintain system per manufacturer’s recommendations. Contractor to provide Semi-annual reports on all fume hoods performance indicating the face velocity of each hood is maintained at minimum of 100 fpm and verify the system controls and alarms are working correctly. Hoods are to be certified by NEBB balancing contractor. Testing to comply with LABS 21, ASHRAE 110, ANSI/AIHA Z9.5, US OSHA, 29 CFR part 1910.1450 for laboratory ventilation. Fume hoods and fume hood fans which are showing signs of deterioration shall be identified and brought to the attention of the CA for possible replacement. Hoods which are tested and fail or continue to be problematic and are trended with multiple alarms shall be tested every 3 months. This test is to be reviewed by the CA and facilities Director. Cost of additional testing shall be reviewed with CA and proposal shall be provided by PMC for testing for more than twice a year.

2. Fume hood roof curbs shall be maintained and painted with rust inhibiting paint if the curb shows signs of deterioration. Guy wires if showing signs of failure shall be reported to the owner and OUA for replacement. The cost of guy wires shall be part of this contract.

16-Kitchen Exhaust Fans, Hoods and Ductwork:

1. In addition to all the work described for exhaust fan maintenance and repair (23800.3.14), the maintenance contractor shall be responsible for cleaning the interior of the exhaust fan and associated ductwork on an annual basis. The Kitchen Hood maintenance for cleaning of the ductwork shall be scheduled with the Kitchen Dinning Services and Owner. The contractor will be responsible for cleaning above the grease filters to the Kitchen Exhaust Fan. The contractor shall coordinate the removal of the filter prior to cleaning of fan and ductwork with KSU dining services. Work shall be performed at a time and date which works with the operations of the facility. No additional cost to the contract will be made. **Grease filter cleaning or changing of filters is NOT part of the maintenance program. PMC is to notify kitchen staff if dirty filters are impairing exhaust fan performance.** Contractors shall evaluate performance on an annual basis prior to start-up of kitchen use. This can be different for each campus and will need to be coordinated with local staff and facilities. **Filters are to be cleaned and maintained by Kitchen operator.** When system is to be cleaned the contractor shall coordinate with the Kitchen services to provide the necessary cleaning of their filter so the kitchen hood and fan can be tested for proper air flow as originally designed. The contractor shall also coordinate that all safety devices associated with Kitchen hood are in proper working order.

2. This contractor shall notify the Owner in writing if there are abnormal quantities of grease build-up in the ductwork, fan or fan discharge ductwork to atmosphere or excessive grease build up on the roof or wall.

17-Ductwork, systems, (VAV, CV,FPB, Dual Duct, and Multizone):

1. This contractor shall be responsible for the ductwork system specialties such as terminal units, terminal unit control boxes, reheat coils, dampers (manual or automatic) and associated controls, actuators, bellows, etc. The maintenance and repair of the diffusers, grilles and ductwork are not included unless the ductwork has excessive air flow leakage coming out of the ductwork or into the supply, exhaust or return ductwork which is affecting the performance of the system. Repairs of ductwork under these conditions will require notification of the CA and if
determined by The Office of The University Architects Office Engineers that the performance of the system is impaired or is not meeting design requirements then corrective action shall be performed under this contract. If damage is deemed to be too great or extensive then the contractor shall submit the cost of material and labor to the CA prior to facilitating large scale replacement or repairs of ductwork. This contractor is responsible for cleaning the ductwork of any internal blockage caused by loose insulation, leaves, trash etc. The contractor on an annual schedule shall inspect and clean exhaust, return air grilles, supply air diffusers for proper operation of their damper operators for proper operation. All louvers are to be cleaned prior to each season heating and cooling. This included insect screens, louvers from dirt build-up, bird nests etc.

2. Reheat coils shall be inspected regularly (minimum once per year) and cleaned as needed. Provide cleaning process summary. The contractor shall provide FD, CA with a list of all units which have no access doors to be able to facilitate this work. Provide a cost proposal to cut into the ductwork as a means to clean the coils in question.

3. Electric coils shall be cleaned annually to ensure proper operation of all coils, stages, and safety devices.

4. Access The contractor shall provide the FD, CA with a list of all units which have no access doors to be able to facilitate this work. Provide a cost proposal to cut into the ductwork to clean the coils in question. Access doors shall be inspected on an annual basis for proper operation. Contractor is to very if access door air seal is operational and is responsible to correct if currently not sealing. Replace gaskets which are missing or damaged as part of this contract.

18-Heating Systems and Components:

1. This contractor shall be responsible for the maintenance of all building heating systems (electric or Hydronic), equipment and associated components and controls. Examples include cabinet heaters (wall, ceiling or floor), Hydronic Unit Heaters, Solar Thermal Systems, Heat Pumps, Fan Coil Units, Unit Ventilators, Radiant Ceiling Panels, Radiant Heating Tube Systems, PTAC, Fin-Tube Radiation and Bare Element Fin-Tube, Electric or Hydronic Duct Heaters, Electric Unit Heaters, Electric Wall Heaters, Heat Trace Cabling Systems, DX & VRF type systems, Heat Pipe, Energy Recovery, Heat Wheels, and all Snow Melt System (electric or hydronic), Reheat Coils, Preheat Coil etc.

2. All finned heating elements located in cabinet heaters, fan coil units, unit heaters, unit ventilators, VRF, PTAC, fin-tube radiation, which is accessible, all electric cabinet, wall heaters, Preheat and Reheat Coils etc. shall be inspected regularly (minimum once per year) and cleaned on an annual basis. Units shall have controls inspected, replaced or repaired for proper operation once a year or if the unit is not operating or performing as designed and performance is not maintained repair or replace of unit or components shall be made. All damper and control linkage shall be lubricated per manufacturer’s recommendations and if not indicated the units shall be lubricated one per year or more if showing signs of excessive ware. Filters replaced as indicated under 23800.3.2.

3. The heating system shall also be checked for proper flow and calibration twice per contract and will be coordinated with air and water balancing. The contractor shall provide a written report to the finding to the CA.

19-Boilers:

1. The maintenance requirements for both steam and hydronic boilers and related accessories shall be maintained in optimal performance. The boilers need to be maintained in the best operating condition in accordance with state, local, and utility company laws and regulations. The boilers will be inspected by the State Boiler Code Official once per year. The PMC will be responsible for repairing/replace or modifying the system to meet the boiler code official annual report. The boilers will be inspected every year by the state boiler inspector and shall submit their findings to the University CA and Facilities Director and OUA. If any deficiencies are found by the inspector the finding shall be corrected immediately. The contractor shall be responsible for all parts/labor for the boiler and accessories such as controls, safety devices, circulating pumps, feed water pumps, condensate tanks, feed water tanks, bladder tanks, expansion tanks, air separators, air vents, flues (not masonry chimneys), combustion and air intake ductwork, boiler insulation, barometric dampers, fuel train, cabinet, induced draft fans, heat exchangers combustion blower and controls, and other associated hardware or components associated with the boilers and its system etc.
2. The fire side of the boilers shall be cleaned yearly and prepared for inspection as required by the boiler inspector.

3. All chemical treatment for boilers shall be maintained to meet the manufacturer’s recommendations. Contractor shall submit an annual report on chemical treatment and test results in a graphic format.

4. The boilers shall be adjusted to operate at maximum efficiency and combustion. PMC to provide KSU OUA with field report on combustion analysis.

5. Safety devices shall be evaluated regularly to ensure proper operation.

6. Acid Dilution drains and devices will be required to be maintained or replaced based on media deterioration.

7. At the conclusion of the heating season, this contractor will complete the summer lay-up procedure and clean, inspect, and repair surfaces including tubes, controls, heads, plates, insulation, breeching, ducts, and fire box. He shall prepare and schedule each boiler for summer insurance inspection and affect all necessary repairs as a result of the inspection.

8. The maintenance contractor shall also be responsible for any work required for operating permits including the demonstration of the equipment for the inspection.

9. Contractor shall instruct KSU maintenance personnel of proper blow down and daily maintenance items needed for proper operation. Provide a weekly log sheet to be reviewed by each P.M. inspection. Inform the Office of the University Architect if log is not being kept up to date by KSU personnel.

10. Review chemical treatment and log results on effects on color of blow down, Ph, etc. Advise chemical treatment program and chemical treatment contractors of results. Provide report to Office of the University Architect on semi-annual basis.

**20-Domestic Water Heating Systems:**

1. This contractor shall be responsible for the maintenance of the domestic water heating systems. This shall include the Water heater (Electric, Gas or Steam), Solar heating unit/system, heat exchangers, Recirculation Pumps, Master Mixing Valves, anode rods, all related controls, storage tanks and all related accessories.

2. The water side of submerged heating coil(s) shall be inspected annually and cleaned as necessary. Isolation valves serving unit shall be inspected and serviced for proper operation. Replace or repair isolation valves or dielectric fittings if determined unreliable or shows signs of failure.

3. The storage tank shall annually be drained and sediment flushed from the tank. The associated expansion tank, if applicable, shall be inspected and tested to ensure proper pressure settings are maintained and condition of the bladder if that type is working correctly and is checked for proper operation. Non Bladder tanks are to be inspected and set to make sure proper operation and pressure setting is being maintained. If the tank comes with sight glass the glass shall be checked and cleaned for proper operation.

4. The safety relief valve shall be tested regularly to ensure proper operation. If found to be unreliable relief valves are to be replaced.

5. The contractor shall inspect the tank anode and replace it if used up or damaged.

6. Submit report to the Office of the University Architect on the condition of domestic water heating system and project expected life of units based on your annual and monthly reports.

7. PMC to review water quality and if determined that additional water treatment is necessary to prevent premature unit failures the PMC is to provide an alternate solution and cost proposal to KSU.
21-Electric Water Heaters:

1. This contractor shall be responsible for the maintenance and replacement of the electric water heater in its entirety. Including any shut off valves, thermostats, heating elements, controls, wiring from disconnect (included in contract) to unit and all dielectric connections on the cold or hot water piping if showing signs of failure.
2. The Contractor shall also inspect the electrical resistant coils which make up the heating unit and repair or replace if either damaged or not meeting performance requirements based off manufacturers performance documentation.
3. The contractor shall test all safety devices to ensure proper working order. Repair or replace all safety devices not working correctly. Perform testing on devices per manufacturer’s recommendation but not less than once a month.

22-Tankless Water Heaters (vent or vent less):

1. This contractor shall be responsible for the maintenance and replacement of the tankless water heater in its entirety. Including any shut off valves, control panels, thermostats, heating elements, wiring from disconnect to unit and all dielectric connections on the cold or hot water piping if showing signs of failure.
2. The contractor shall flush and clean the heating elements per manufacturer’s recommendation or at least twice per year.
3. Check the unit’s flow rate on an annual basis to ensure proper operation. If the flow rate is found to be low advise the CA and see if you are able to determine the cause of restricted flow.
4. Check to make sure if gas pressure is adequate and adjust flow and pressure. If flow remains low contact CA or Gas utility
5. Check flue for obstructions or damage. Fix or replace flue as needed for proper ventilation/combustion.
6. Test safety devices and maintain in good working order, if found to be unreliable replace.

23-Air Compressors/Dryers:

1. This contractor shall be responsible for the maintenance of the air compressor and dryers, storage tank, desiccants devices including media replacement, verify operation and the condition of moisture downstream of such device. The contractor is responsible for blow-down devices and associated controls and accessories. Desiccant dryers shall be maintained to meet the original O&M performance or the original design intent.
2. The compressed air tank shall be drained of accumulated moisture each month. If existing tanks do not have an automatic feature contractor shall indicate to PM and provide proposal to install. All auto-blow down devices shall be provided with manual isolation valve between auto valve and tank.
3. Inspect, clean and verify proper operation of dryer and compressor. The contractor is responsible for the complete maintenance of these units. Repair, replace with same type manufacturer if unit fails to operate. Verify service and operation of controls, safeties, filters, refrigerant charge, and repair or replace as needed.
4. The contractor is also responsible for all downstream air filters, moisture separators and accessories/equipment associated with the compressors.
5. Maintain or install all safety devices, OSHA guards, belts etc.

24-Emergency Generators and Building Automation UPS Devices:

1. Emergency generators shall be maintained in accordance with the manufacturer's maintenance recommendation and recorded in the PREVENTIVE MAINTENANCE LOG. Provide certifications and qualifications of firms or
individuals to CA or OUA engineers. Approval of testing personnel or firms will be required under this contract. Testing report shall be submitted after each test.

2. Generators and transfer switches shall be "test run" once a month. Test run shall be coordinated with Owner. Units shall be operated for the following period of time unless otherwise stated:

   a. (1) Monthly - 30 minutes (no load)
   b. An actual load bank test shall only be required if the generator has to be replaced or the extent of the repairs puts in question for the emergency generator to fulfill its intended function and fails to perform the current operations of the facility. The OUA electrical engineers shall have the final say as to whether a load bank test is required. The OUA- Electrical engineer shall oversee this operation and all associated costs to perform shall be included as a line item cost in this bid proposal as an attached cost. **Do not include in the base bid number for this contract.**

3. All repair parts shall be the same or as listed in manufacturer maintenance manuals. Substitution will only be accepted if written approval is given by the Office of the University Architect engineers, FD and CA.

4. Contractor shall provide all battery testing, lubricants, oils, air cleaners, test antifreeze and replace if needed, check coolant level, inspect hoses and belts, Check engine heater operation, check air intakes and outlets, check transfer tank operation, drain exhaust line if needed, inspect silencer advise if silencer is going bad and submit report to PM, Check batter charge and replace if not operational, Check charge rate from battery charger, Check battery electrolyte levels and specific Gravity, Clean battery terminals, Check generator output levels and if needed adjust. Get a factory technician or qualified technician to facilitate all repairs. This technician is to Check Governor and make adjustments, check generator controllers and all associated control systems. On an annual bases check and perform engine tune up as needed for maintaining said devices. If any electrical wiring between generators is damaged or is in need of repair this work is to be done by a qualified electrician. The wiring is to be covered between the generator and transfer switch. The Transfer switch and all its associated devices are covered under this contract. Generator battery, charger and their associated cables and devices are covered under this contract. Generator batters are to be tested and once the unit is less than required to meet the O&M requirements it shall be replaced in kind.

5. Once an annual contract period this contractor is to replace air filters, coolant, belts, Engine thermostat, coolant hoses and radiator hoses, check condition of all caps if inspection indicates the need. If not replaced in the current year, in the next year these items shall be replaced in kind. The radiator shall be flushed, cleaned, and refilled once in a contract period in any five-year cycle.

6. The contractor is also responsible for the removal of any fluids to an approved EPA landfill or recycling center.

**25-Make-Up and Domestic Water Systems:**

1. The maintenance of all make-up and supply water systems shall begin at the outlet port of the shut-off valves at the cold water main. All connections shall be in accordance with the latest Ohio Building Code requirements. The maintenance of all valves and specialties are included.

2. The contractor shall also include the maintenance and required testing of all backflow protection devices. The test shall be performed annually by a mechanic certified for backflow protection device testing. The testing certification shall be posted near the device with a copy submitted to the regional campus designate, water purveyor, Office of the University Architect and CA.

3. The cost of testing shall be part of this contract, along with the coordination and timing of the tests which are required by each of the water companies and also coordinated with University as to when the tests can be performed. All costs associated with this testing shall be part of this contract.
**26-Hydronic Water Systems:**

1. The maintenance requirements for the hydronic heating and cooling piping shall incorporate the entire systems including all valves, controls, accessories, and equipment, with the exception of the pipe itself. Any piping work required for the repair or replacement of the above is included in this contract. This also includes insulation removal and re-insulation.

2. Strainers shall be cleaned regularly and if strainers are showing ware and are in need of replacement shall be included in this contract.

3. All pressure and temperature gauges, temperature sensors shall be verified for proper operation. Replace all gauges and sensors that are found to not be in good working order. Gauges on or near vibrating equipment shall be liquid filled. Replace in same for size and scale.

4. Piping and fitting associated with valves, controls which serve the equipment being isolated, controlled shall be included under this contract. Example on a pump package the piping between the main isolation valves for the skid and on the skid are to be included for leaks or replacement). Piping installed between valves associated with reheat coils, pumps, AHU, cabinet heaters, fan coil units, unit ventilators etc shall be included under this contract. Distribution throughout the building is not to be included. Insulation on all piping, valves and accessories shall be included as part of the maintenance and repairs of the equipment.

5. Piping between the units isolation valve to the equipment is to be included under this contract. Only piping distribution is exempt from coverage.

**27- Steam and Condensate Piping Systems:**

1. The maintenance requirements for steam and condensate piping system under this contract shall incorporate the entire system including all valves, controls, steam traps, accessories, and equipment with the exception of the pipe itself, unless found to be leaking. PMC is to notify Owner and CA upon discovery. Repair of this system shall be performed after notification on a time and material basis. Due to safety concerns, piping distribution needs to be inspected under this contract but repairs are to be reviewed on a case by case with T&M proposal.

2. All accessories such as drip and reap assemblies, pressure reducing stations, relief valves, expansion joints, anchor, vacuum breakers, slides, control valves, etc. are included in this contract.

3. Dirt pockets, strainers (by annual) and trap assemblies shall be cleaned and inspected by annually during coordinated shutdown and reported on annual report log.

4. Steam condensate pumps, steam coils, convectors, fin-tube, water heaters, heat exchangers etc shall be inspected and maintained per manufacturer’s recommendations.

5. Inspect all safety devices on a regular basis and test on an annual basis. All safety devices are required to be maintained or replaced if leaking or nonoperational.

**28-Natural Gas Piping Systems:**

1. The Maintenance Contractor shall be responsible for gas piping from the equipment shut off valve, including the valve, regulators, safety, drip legs, and associated materials to the equipment. Maintenance shall include all valves, regulators, specialties, and pipe from the valve to the connection point on the unit. Pipe material shall match existing material and pressure classification per National Fuel Code.

2. All natural gas safety devices shall be assessed annually and maintained for proper operation.

3. Check and verify that all gas vents are clean and have free discharge per applicable codes.

4. Contractor to record and submit all natural gas systems in the equipment list and include operating pressure, meter face color, capacity and who the natural gas supplier is. Provide contact number and emergency contact and plan in case of a natural gas line leak.
29-Lab Gases, Lab Accessories, Medical/Lab Air and Vacuum Pumps:

1. The maintenance contractor shall be responsible for all lab vacuum pumps, medical air compressors, Lab Air Compressors, gas outlets, filters, alarm stations, isolation valves, regulators, controls etc. All equipment shall be maintained to manufacturer’s recommendations. The contractor shall also inspect vents, intakes, exhausts, filters, lubricants, belts, vanes, etc.

2. All medical/Lab air and vacuum pumps shall be tested on an annual basis and coordinated with the end users. Contractor to submit report on condition of equipment.

3. Temperature control air compressors are part of this contract but is covered in more detail under the building automation and control section.

4. The contractor shall also assess the performance of both Medical/Lab air and vacuum pumps to the factory setting. Test all alarm points associated with each device. Vacuum pumps shall have their oil assessed to ensure there is no contamination or damage to vanes. This testing shall be done according to manufacturer’s recommendations and incorporated into the PM plan for these units.

5. Vacuum Pumps shall be maintained to meet the manufacturer’s service requirements and follow the inspection protocols.

6. All lab tank regulators or Tank Farm regulators, manual and automatic change over valves and controls shall be maintained to factory setting and units factory maintenance requirements. All systems that have auto-change over features shall be tested per manufacturer’s recommendations, but not less than once a year.

30-Plumbing and Kitchen Fixtures:

1. Contractor is responsible to check the operation and maintain, repair or replace the following devices:

   a. Electric water coolers and bottle filling stations- including the p-trap and sanitary piping back to the wall flange and water piping back to and including the angle stop. The contractor shall adjust the water flow from device per manufacturer’s recommendations for proper operation. Replace the water filters in all bottle filling stations as outlined in their O&M documents for number of cycles. The cost of filters are to be included under this contract. (See refrigeration section of specifications for additional requirements)

   b. Ice machines (See refrigeration section of this specification for additional requirements) if water cooled shall be maintained, repaired or replaced. The following associated control devices and components associated with ice machine operation back to the main isolation valves shall be part of this contract. The contractor shall also be responsible for cleaning the A/C condensate line, coils and making sure insulation on the drain line is intact if present, repair or replace if damaged. Contractor shall notify owner if insulation is missing. If the insulation is not present at the time of contract acceptance, the contractor is not responsible for installing it under this contract. The contractor shall provide the owner with a cost proposal to install outside of the PM contract.

   c. Kitchen Coolers and Freezers refrigeration systems and associated controls are part of this contract. Check operation, monitor points if present, temperature sensors, units control systems and make sure drain lines are cleaned once a year or more if necessary. Ensure units are trapped correctly and maintained. The refrigeration units for these devices are part of this contract. (See refrigeration section of specifications for additional requirements)

   d. Kitchen Coolers and Freezers which are monitored through the BAS shall be coordinated with Dinning services and tested on an annual basis. The PM contractor is to provide proposals for any units which is currently not monitored and provide this proposal to the CA and FD for the possible inclusion of this device into the contract if installed.
**31-PMC to provide line item price to perform the following under this contract by campus as an attachment to the bid document. Do not include the price into your base bid:**

1. Electronic Faucets, Electronic Flush Valves with sensors shall be tested twice per year for proper operation. The Contractor is to adjust units for proper flow and sensitivity. If faucets or flush valves are found to be damaged or vandalized and are not operational, the contractor is to notify the owner. Replacement or damaged or vandalized units are not covered under this contract. If the fixture (electronic device) is no longer operational under normal conditions units are to be repaired or replaced. *(This does not include battery replacement; battery replacement is not part of this contract)* only the Faucet, mixing valve and their sensor would be replaced in kind.

2. Flush valves electronics and control valves, sensors, auto flow devices, wiring on or in units, automatic mixing station, power generation unit, and fuel cell etc. are to be covered. If repairs are not possible to these devices then contractor is to replace Flash Valves and sensor in kind or of a make or model approved by FM and the office of the university architect or CA contract administrator.

**32- Valve Maintenance:**

1. Contractor is responsible for inspection and testing of the building systems main isolation valves, post indicator valves, all control valves, balance valves, triple duty valves, pressure reducing valves, safety relief valves, pressure regulators, and backpressure valves that serve the following systems:
   a. Air Handling systems heating and cooling coils.
   b. Heating water systems Heat exchangers, pumps, coils, including reheat systems coils, fin- tube, cabinet heaters, unit heaters, and radiant panels
   c. Chilled Water systems, chillers, pumps, and coils
   d. Condenser water system, towers, chillers, and pumps
   e. Refrigerant Systems, compressors, condensers, condensing units
   f. Domestic water (main isolation valves to building) and valves associated backflow devices and domestic water heaters, and recirculation pumps associated with domestic water heaters and the main fire suppression valves to building. Do not include fire suppression valves inside of the building. KSU life safety personnel evaluate these valves and systems. Coordinate the testing of the main fire valves outside of the building with KSU life safety, CA and FD prior to testing to make sure fire alarm system has been addressed. This testing shall be indicated on field reports by building and campus when performed.

2. Main Isolation Valves which are inspected and tested, fail to operate correctly and have broken seals, seats, cracked housings, dripping and are not operating per manufacturers specifications shall be replaced with a fully coordinated schedule with the Owner(KSU), and Key Personnel including the Contract Administrator, and OUA Engineers. Contractor shall notify all Life Safety Personnel, Building Automation Personnel and Head of Maintenance for Facilities prior to replacing or repairing these types of valves. 7-day notice shall be given unless valve failure is jeopardizing building or building critical operations. If additional service provisions are required to implement this type of outage the cost of this additional work which is outside the scope of this contract shall be invoiced after the proposal has been approved by the owner (KSU) and Contract Administrator. Contractor is responsible to provide proposal to Owner if additional work or equipment is required outside of the actual repair or replacement of valve. Example: dewatering, barrier containment, excavators etc.

**33-A/C Condensate systems and piping:**

1. All Air Conditioning Condensate piping, pumps and drain pans shall be inspected cleaned as required but not less than twice a year. The condensate drain pans, pumps and piping are to be cleaned and verified to be fully
operational. Drain pans to be inspected and cleaned under the chemical treatment guidelines within the specifications, but not less than sessional change over on systems. The contractor is responsible for maintaining or replacing drain pans to avoid damage to building structures. Check to make sure A/C condensate drains for cooling coils and ice machines are properly insulated. If not present provide a proposal to the CA, FD for installing insulation to piping to reduce condensate drips.

2. Legionella protocols are to be coordinated and provided under this contract with chemical treatment program for A/C drain pans, this legionella program is to be submitted under your PM program to meet today’s BMP.

3. Energy Recovery Units (ERU):

1. Contractor shall maintain heat wheels to strict maintenance requirements for each type of wheel installed per the manufacturer’s written instructions. No variations will be given unless written approval from the Contract Administrator (CA), OUA, and manufacturer of said units. The Contractor to test and verify the unit shows no signs of cross contamination and full inspection and adjustments shall be made of all wheel guides, seal clearance, belts, pulleys, bearings, bearing seals and transfer media are in good working order. Units are to be maintained to meet all manufacturers’ safety and performance and operating requirements. Only qualified personnel with written proof that they have been trained to work on these units shall be allowed. The contractor is to provide qualification that they have been trained by manufacturer to the CA prior to working on these units.

2. All heat wheel cleaning agents shall be approved by each heat wheel manufacturer prior to use and contractor shall submit MSDS sheets for all products being used on said equipment.

3. Contractor shall inspect units monthly for any kind of moisture transfer, fungal growth in desiccant based enthalpy wheels. Contractor to take corrective action if found and shall notify CA and OUA as soon as possible.

4. Contractor shall submit cleaning procedures for approval on all ERU’s by Manufacturer to the CA.

3. VRF Systems:

1. Contractor is to inspect, maintain or replace any system component associated with any VRF system. This will include wall units, ceiling cassettes, inline units or floor mounted units, distribution piping controllers, control panels, communication boards, A/C pumps, unit filters, heat trace, low ambient kits, split systems etc. All replacement filters are to meet manufacturers filter specifications and the requirements within this specification. Refrigerant pressure shall be evaluated and tested and any amount to be added or recovered shall be accounted for to meet EPA and this specification section on refrigerants. PMC to report on associated controls, system components, and the addition or removal of refrigerants from these systems. All outdoor units shall be inspected for foreign debris and cleaned. The condensing unit’s coils shall be cleaned before each heating and cooling season. More often if exposed to cotton wood fallout. Replacement parts shall meet original manufacturer’s replacement parts list. Substitutions will require CA and OUA approval.

2. Systems that have extended warranties in place shall be serviced to meet the manufacturer’s warranty requirements. Field reports on units shall be required to be produced to warranty provider when requested. Repair of units under warranty shall be reviewed by CA to ensure that all work performed meets units warranty when completed by PM maintenance personnel or work outsourced to other maintenance personnel. Work outsourced deemed to be not compliant by PM contractor to a satisfactory condition shall notify the Contract Administrator (CA) at time of service so corrective action can be taken to insure warranty work performed by outside contractors is corrected to meet warranty requirements. The cost for the inspection is to be covered under this contract.

3. Cost of refrigerant for these systems is to be included in this contract along with any refrigerant cost associated with Refrigerant recovery and disposal. Contractor is responsible for disposal of refrigerant as dictated by EPA rules and regulations and within the requirements of this specification. The contractor is responsible for recording any added refrigerant or removed refrigerant from these systems and making two copies of the report for CA.
36-Evaporative Coolers/Swamp Cooler Systems:

1. Contractor to inspect equipment, evaluate filter change out based on unit’s operational use and time of year. Filter changes are critical to proper operation, adjust frequency as needed to maintain optimal operating conditions.

2. Ensure water level is adequate for operation per manufacturer’s recommendations and clean units of all mineral deposits every 3 months unless excessive then adjust cleaning as required. Notify CA if additional cleaning is required beyond what is scheduled within the PM scope.

3. Provide chemical treatment to prevent mineral build-up, bacteria growth and corrosion.

37-Dust Collection Systems:

1. Maintain Dust collector to meet all EPA and OSHA requirements for proper operation. Inspect bad and pressure drop associated with unit. Advise end users that dust collector bag needs changing. PM contractor is NOT responsible to perform general bag cleaning. Record on field work order sheets when these have been replaced or not replaced so appropriate PM can be made.

2. The contractor is responsible once per year to clean units and check blower, bags, grounding, electrical components and general operations to ensure equipment is running to manufacturer’s recommendation. Contractor is to clean and perform general maintenance on unit prior to the beginning of the fall class schedule. The contractor is to coordinate with KSU maintenance personnel when best to clean and perform general maintenance. (Example: belts, grease, clean bearing, fan wheels etc.).

3. The contractor shall also verify once a year that the system is providing the proper air flow and pressure drop. If the system is not performing correctly notify the CA and submit a report on findings as to why the unit is no longer performing to original design intent.

38-Solar thermal system:

1. Inspect evacuated tubes and associated media each quarter or on a system failure or Alarm. If damaged the contractor is to replace in-kind and coordinate with unit and system manufacturer on replacement protocols.

2. Great care is to be maintained during the draining of this type of system. All fluids are to be captured and at no time are they to be discharged into the sanitary or storm systems without proper pretreatment and authorization in writing by CA, FM or OUA-Engineers.

3. Contractor to inspect all sensors, sensing lines and structural members which are holding the array. Maintain, repair or replace structural members which are showing sign of failure or structural fatigue. If rusting contractor is to remove rust, and prep structure for painting with a rust inhibitor type of product. Color and specification sheet shall be submitted to CA and OUA for approval for use.

4. PMC shall evaluate system glycol concentration levels to meet the original design intent and that of the unit’s manufacturer’s recommendation. All mixtures shall be reviewed with CA, FM or OUA-Engineers.

5. Testing of all media, safety devices, sensors, control valves, control systems, chemical treatment shall be performed to meet manufacturer’s recommendations and original design intent.

6. PMC shall review system operations on Metasys and within the building analytics system for proper operation and performance.

7. Replacement of any part associated with this type of system shall be made in-kind. Any variance shall be reviewed by OUA-engineers, CA, and FM and approved prior to installation.

39-PTAC Units:

i) Contractor to maintain units to original O&M requirements, provide filter change out min. of once per quarter, Bi-polar units if installed shall be tested for operation and cleaned per manufactures recommendation. Units shall be tested prior to any heating and cooling season. Coils shall be cleaned once per year and dampers and controls shall be checked on an annual basis for proper operation.

ii) Units are to be set for 72 deg. and the unit disconnects should be tagged do not operate unless by authorized personnel.
40-Computer Room DX cooling units:
   1. The units are to be maintained to the O&M manuals associated with each unit. The unit’s filters shall be changed to maintain the lowest pressure drop so as not to compromise the unit’s overall performance. The system’s refrigerant shall be checked on a quarterly basis for proper refrigerant charge and loss. Contractor to check and record head pressure, condition of all expansion valves, coils, condenser coils and cleaned in the spring as needed to maintain clear cooling pathway for cotton wood or other debris which would affect the units performance. The contractor shall verify proper make up water to humidifier section if present, descale unit, clean filters and coils, test each cooling circuit and the seq. of operation.
   2. Under the condition of failure the contractor will be required to install temporary cooling units to maintain temperature within the space to 68 to 70 deg. and maintain some kind of humidity control within the space as dictated by OUA-Engineers. The cost of this shall be included in this contract until new or replacement parts are installed, and original units are back into full operation. If temporary cooling is extended beyond 26 weeks the CA, and FD shall consider a split cost for the rental equipment until the units can be replaced or repaired if due to supply chain issues in the market.
   3. The refrigerant for these units shall be stored so that a full charge can be delivered in case of catastrophic failure and the loss of refrigeration on the system.
   4. Testing of the monitoring points on BAS shall be done each month to ensure proper operation. Building analytics shall monitor every system and record the baseline of operation and performance for changes.
   5. Changing of any programming shall be reviewed with OUA-Engineers. No temperature changes shall be made without written approval of the CA, FD, OUA-Engineers, The contractor and the computer room operators.
   6. The contractor shall provide the CA and FD the expected life span of the units for capital replacement if extensive maintenance is being done to maintain operation or units a two year assessment will be required prior to the contractor from exempting this piece of equipment from the replacement requirement.
   7. The condensate drains are to be cleaned and Legionella protocols are to be maintained on the systems and program shall be implemented under the chemical treatment program similar to all AHU’s and air delivery systems.

41-Split systems (DX) for (Elevator, MDF and Electrical rooms when present)
   1. The Split system units are to be maintained to the O&M manuals associated with each unit. The unit’s filters shall be changed to maintain the lowest pressure drop so as not to compromise the unit’s overall performance. The system’s refrigerant shall be checked on a quarterly basis for proper refrigerant charge and loss. Contractor to check and record head pressure, condition of all expansion valves, coils, condenser coils and cleaned in the spring as needed to maintain clear cooling pathway for cotton wood or other debris which would affect the units performance.
   2. Th A/C condensate trays shall be inspected monthly and cleaned and floats are to be checked and tested to make sure units condensate trays shut down the units operation.
   3. The units Bas connections shall be tested each month and operation shall be part of the building analytics shall maintain a log on these systems for performance.

42-Valves, Gauges, Thermometers and Equipment Trim:
   1. The contractor shall be responsible to maintain and replace all valving, from isolation valves on distribution system back to each piece of equipment including the associated piping, unions, flanges and fittings, insulation all gauges, sensors, thermometers, drains, and testing Pete’s plugs or any other type of valve or control device.
   2. All pressure gauges shall be tested, and cleaned or replaced is not reading correctly. Gauges which are associated with vibrating equipment shall be liquid filled. All gages which are replaced shall be in the same pressure range as the system or temperature range associated with the equipment in which the gauges are to be used.
   3. All gauges shall match the performance and size of the gauge which is being replaced. Smaller gauges shall not be installed. Maintain the same size when possible. See KSU design guide for recommended size and manufacturing types.
   4. Thermometers shall not have mercury and shall be within the same temperature range as existing and shall be selected to be within the temperature range of the system being installed if replaced. Thermometers shall be evaluated to be operational on an annual basis.
   5. All trim tubes to be cleaned if gauges and thermometers are not recording correctly or sensors are not testing correctly.
6. All piping is to match existing copper, steel, and fittings. Material type construction shall match existing gauges and material. The contractor shall be responsible for replacing all gaskets, seals and associated nuts and bolts to meet the expected pressure and temperature range of the system served. In no case can substitutions be made with written notice from the FD< CA and OU-A-Engineers. Failure to provide this documentation shall fall on the contractor to replace it with the correct type and material at their own expense.

7. The contractor shall also re-insulate the piping and tubing to maintain the proper vapor barrier if repairs are made. Insulation is to match existing except for any asbestos type of material. NO asbestos s material is to be installed. If asbestos material is encountered the PMC shall notify the FD and CA so proper removal and abatement can take place for the repair in question. The expense for abatement is not part of this PM contract. Please note a 10-day notice will be required to EPA prior to any abatement can be performed. The PM contractor shall develop a schedule to the FD so they can inform the occupants of the building if systems will be taken offline to facilitate the repairs.

43-Electric or Gas Unit Heaters, duct heaters and radiant heating units:
1. The contractor shall maintain the above systems and pieces of equipment including the OA intakes, exhaust flues and any roof penetrations associated with such systems.
2. The unit heaters and duct heaters shall be tested for proper operation and the coils shall be cleaned each year.
3. The controls of all these devices shall be assessed and verified if tied into the BAS. If stand along the contractor shall test the thermostat of the control device to ensure the unit is maintaining the desired temperature with the space serving.
4. The contractor is responsible for maintaining, repairing, or replacing the control components for this equipment at no additional cost to the owner.
5. On Natural Gas unit heaters and natural gas radiant heaters the contractor shall record the incoming gas pressure and regulator size in case the units or regulator needs to be replaced or repaired.
6. Flues for any gas related equipment shall be installed with b-vent rated and constructed of stainless steel for condensing flue gases on interior lining and exterior lining may be reviewed with CA and FM or OU-A-engineers if replacement is needed. The slope of flues shall be coordinated with manufacturer for proper installation. In no case shall the seams be against the condensate flow within the flue allowing the condensate to drip between the seams. High temperature duct sealant shall also be installed, and submittal of products shall be submitted to the OU-A-engineers for approval prior to installation. In no case can a product of inferior material type of less than the performance requirements and warranty of the existing system installed.

44-Fin-Tube, Cabinet Heaters, Fan coil Units, Unit Ventilators, Radiant Heating systems:
1. The contractor shall set up a PM program to maintain filter changes, cleaning of coils and drain pans, setting up for monitoring of the system sequence of operations. The contractor shall review the air flow, natural gas flow and pressure and Hydronic water flow in and out of the devices and ensure the units are operating to the design intent and air, natural gas flow and pressure and water flow rates are get for optimum operation. For air flow systems maintaining the discharge air temperature and outside air requirements meet the design intent.
2. Once a year the contractor verifies the operation of each unit through the BAS or through local control devices. Contactor to verify that the Outside Air dampers are functioning per design and maintaining freeze protection when Outside air conditions are outside of the low temp parameters.
3. The contractor shall clean the drain panels and follow the legionella protocols for each unit and flush out the condensate drain lines once per year to ensure proper operation of the systems.
4. The contractor shall evaluate the radiant heating system for proper operation. Cleaning of the reflective shield shall be performed every other year. The gas pressure and flow is to be re-calibrated and ensure the flame arrestor is being maintained. The flue duct system is inspected every year. Replace as needed and ensure the wall or roof penetration is addressed with proper heat penetration detail or thimble. Contractor to submit to OU-A-Engineer for approval and evaluation.
5. All systems controls are part of this contract along with all stand-alone temperature controls. All systems are to be assessed prior to seasonal changes. If monitored by BAS these system shall be included in the building analytics system.
45-Domestic Hot water heaters and recirculation pumps:
1. The contractor shall maintain the domestic water heaters to optimum operating conditions. The domestic water heater is to operate at 140 deg. and the master mixing valve system is to be adjusted to maintain 120 deg at each domestic plumbing fixture through their asse 1070 mixing valves, or master mixing systems. The system is to be tested from time to time when operating to ensure the system is being purged to maintain the domestic water system for control of legionella protocols.
2. The domestic water heaters, if replaced, shall be required to maintain the same performance requirements and storage capacity as the unit in service. The rate of rise shall not be less than the existing unit and will be equal or better.
3. The water heaters anode rods shall be checked each year and replaced when found to be less than 90% of its rated life expectancy or if the contractor feels the units are more aggressive than normal.
4. The water heaters are to be flushed every 6 months to back syphon the debris out of the tanks. This is not required on non-storage systems or instantaneous systems.
5. Natural gas units shall have their flues inspected and replaced anytime the flues show signs of failure. The flues are to match the existing flue type and if not known the flues shall be double walled if appropriate. For units which are high efficient the water heaters flue shall encompass 10’ of metal prior to transitioning to PVC and sloped back to water heater. A condensing flue shall be equipped with an acid neutralization system with removal and replaceable neutralization media.
6. The heating water system recirculation system is to maintained to prevent legionella growth and is to be tested once a year and if any detrimental material is found the domestic hot water system is to be purged at 140 deg for up to min. of 30 minutes until the system can be retested and cleared on any legionella levels detected. The Contractor shall perform this purge during non-operating hours so as to limit scalding of any personnel within the complex. This testing must be coordinated with the FD and the CA.
7. All mixing valves are to be verified that they are always working correctly. The building analytics system shall monitor the domestic water system if discharge water temperature sensors are tied into the BAS or from any water heater which is tied into the BAS system.
8. The contractor shall be responsible for maintaining the hot water recirculation pump and its associated strainers, isolation valves, and check valves associated with the hot water recirculation system. This includes making sure the system’s return water flow rate is being properly maintained. Pumps shall be of high temperature and shall be maintained per manufacturers O&M requirements.
9. The heating water expansion tanks are also covered under this contract. The contractor shall replace it in kind and set the bladder to maintain the system pressure.
10. The contractor shall also verify every other year the natural gas drip leg and drain the leg from moisture.
11. If the water heater is insulated with an external wrap then the new unit shall be maintained when replaced and re-installed to match thermal heat loss.
12. The contractor shall also maintain any soft water system associated with the domestic water heating systems to reduce hardness and scale build up from poor incoming water quality. This also includes the salt required to maintain the system as called for by the chemical treatment program and for the levels outlined for optimum performance and protection of the domestic water system.
13. The contractor shall also maintain any domestic storage tanks, air/dirt separators, inline filters etc. Filter media shall match existing and is to be maintained to match the unit mfg. recommendations and O&M requirements.

46-Mixing valves for domestic, central heating water systems and backflow devices:
1. The contractor shall maintain all central mixing valves and those ASSE 1070 mixing valves both manual or electronic serving plumbing fixtures, master domestic mixing valves and master mixing vales associated with maintaining system pressure for hydronic heating systems.
2. The Contractor shall certify and report on each backflow device and coordinate with each local water purveyor as to when the backflow devices are to be tested by. The contractor is responsible for maintaining these devices to minimize disruption to building services. Taking a building offline for repair during normal business hours is prohibited. Contractor is to take all precautions so as not to have to take the domestic water systems off line for any extended period of time unless approved by the FM and CA. All backflow devices are to be tested annually and a formal report is to be submitted to all AHJ, FM, CA and OUA-Engineers.
3. Backflow devices are to be repaired or replaced under this contract. The contractor is to ensure that the backflow drains are free and clear so as not to flood the building. The testing procedure shall be submitted to the CA as part
4. The contractor shall perform repairs as needed while any backflow device is covered by warranties, which may be beyond the normal PM program.
5. The contractor is to add these to the parts list and include make and model and size.

**47-Expansion Tank and Air and Dirt Separators:**
1. All expansion tanks, for hydronic and domestic water system are to be covered under this PM contract. The contractor is to add to the equipment list and indicate for each campus and system what the expansions set pressure is and verify that the units are operating correctly and that the systems safety reliefs are not lifting.
2. Air and dirt separators shall be blown down to ensure the system is not fouling the overall system and that the system is not becoming air bound.
3. The separators shall be inspected during the contract period and more often if excessive debris is seen during their blow down. The internal screens shall be inspected and cleaned, and an evaluation should be done to determine what is the cause and make recommendations as to how to correct.

**48-Strainers and In-line Filters**
1. All strainers are to be cleaned, repaired, and checked for proper operation. The strainers screens shall be pulled and cleaned when the system sees an excessive pressure drop but not less than six months. During new systems start-up make sure the construction screens have been removed and permanent screens are in place.
2. In-line filters shall be evaluated based on need and use. Filter for cooling towers shall be checked and cleaned monthly if not found to be needed more often. Filter systems on closed loop system shall be checked for elevated pressure drop. Filter media when changed out shall match the current media which is in place. Do not substitute with other media unless approved by CA, OUA-engineers.

**49-Kitchen Equipment**
1. Kitchen equipment shall be maintained for freezers, ice machines, commercial refrigerators and cooler units and associated refrigeration system only. This also includes the control devices and associated sensor and devices. This contract does include the replacement of freezers, coolers, Ice Machines, and commercial refrigeration units. Only the refrigeration components of these devices shall be repaired or replaced. Does not include the kitchen equipment device or built-in units.
2. The contractor shall make sure the temperature control devices and sensors are operational and these devices are included in the contract.
3. All food storage units’ coolers and freezers are to be monitored and tied into the BAS. A special call tree is to be maintained at BACC. If the existing units are not connected to the BAS the contractor is to provide a proposal to modify the units so monitoring can be done. Alarm limits shall be determined by food services and the time delays have to be accounted for when setting these limits, so the BAS system does not create false alarms. All ice machines are to be protected with backflow device for the water supply along with in-line filters to limit smell, and excessive particle size as recommended by the piece of equipment if not supplied with the units at time of installation.

**50-testing, monitoring and Building analytics:**
1. **Testing Under this contract shall include the following:**
   (1) All fume hoods shall be certified by a registered professional TAB contractor approved by OUA-Engineers and CA. Verify air flow and place safety tag on hood is hood passed and tag needs to be signed by testing agency with date and time and all performance information.
   (2) All Backflow devices shall be certified to meet the AHJ and the State of Ohio guidelines for testing of backflow devices including any additional requirements by local water purveyor. Copies of the inspection report shall be submitted to local water departments, FD, CA and included in the annual report.
   (3) The Emergency Generator and transfer switch shall be tested monthly, and a formal report is to be issued to FD and CA.
   (4) Kitchen Hoods, ductwork and kitchen exhaust fan systems are to be cleaned and verified operational including any m-link systems on an annual basis.
   (5) All chillers are to be eddy current tested once per contract period. (min. every 5 years) test results are to be sent
to the KSU-OUA engineers and CA for evaluation. If the tests results show tube degradation then a meeting with all parties needs to take place and the contractor is to propose recommendations and a corrective action plan to correct. The cost to perform the corrective action will be paid by the PM contractor. (See Appendix “A” for campuses which will require this testing.)

(6) Overall system verification of airflow and hydronic operations through the building analytics program and through the Johnson Controls Metasys system for verification of heating and cooling modes of operation shall be tested on an annual basis Written report on the condition of each system by building shall be submitted to the FD and CA. Include in annual report.

(7) Testing and verification of all room thermostats, smoke detectors, freeze stats, alarm sump pumps, Bi-polar ionization units are operating correctly. If found to be unreliable then the units are to be repaired or replaced. No additional cost to owner.

(8) All CO2 monitors, room sensors and sensors associated with Air Handling Units shall be assessed and Re-calibrated on an annual basis. If units continue to become unreliable then the units are to be replaced.

(9) All Air handling devices and open hydraulic systems (Cooling Towers, Water Features and Fountains) shall be tested for legionella and shall follow the legionella chemical treatment program. If Legionella is found to be present, then complete eradication and cleaning of said system or unit shall be done within 24 hours of detection. Re-testing of systems or equipment shall continue until the system or piece of equipment falls within the recommended safety limits as outlined by EPA, Safe Drinking Water Act (SDWA) and department of Health Guidelines.

2. Monitoring under this contract shall include the following:

(1) The contractor shall check the Johnson Controls system Metasys alarms and system alarms not less than every week and shall address every alarm condition. The technicians shall be able to log into the system from a local and also remote. Each technician will need to be registered and added to the guest account at KSU. Coordinate with the Office of the University Architects Office, OUA engineers and Building Automation and Control Center (BACC). Each technician shall complete the access requirements. This process will be active for only one year and will require it to be renewed on an annual basis. Failure to be able to log into the BAS will limit them from working within each building complex. Use of other personnel for logging into the system is strictly prohibited and subject to termination from KSU facilities and possible termination of this PM contract.

(2) The PM contractor shall be included in the critical alarm contact phone list and the number must be picked up by an actual person or service and not an email or voice mail type of system will not be accepted. Failure to be reached when contacted for response to a critical alarm condition will state the 4 hour response time line as outlined in these specifications.

(3) This contractor is required to be able to monitor the BAS systems and all local control panels and systems. The technicians need to be able to understand the schedules, operating conditions and sequence of operations of all of the systems within each complex which they are assigned. The contractor will get approval from the OUA engineers, FD, and CA shall have the ability to adjust the control systems and sequence of operations. Approval by CA, FM and OUA-engineers shall be made prior to making any changes to the program. JCI must be the vendor who makes these changes without exception.

3. Building analytics shall include the following requirements under this contract:

(1) Provide and install all data collection software or hardware and incorporate it into the KSU network and BAS with close coordination and collaboration with KSU-OUA, JCI and KSU-IT department and KSU energy technicians. The contractor shall provide all labor and materials as required to facilitate the necessary communication information protocols, network safety firewalls in a read only platform.

(2) This system shall be set up to monitor all available input from the JCI Metasys system and have the ability to interpret the raw data an formulate a P&ID sequences to track temperatures, pressure relationships, flow rates, humidity, outside air, return air, supply air temperature and flow rates. OA conditions including humidity when sensor technology is available.

(3) This system shall have the ability to track hydronic flow conditions, control valve positions on equipment and perform the necessary programming to determine how the system are operating and the ability to trend these conditions over time.

(4) The BA system shall incorporate a historian feature so each building and campus can be tracked independently. This feature shall be able to track two years’ worth of data so the programs can evaluate each sessional change
from heating to cooling.

(5) The BA system shall report to the FD and CA on a quarterly basis once the base lines have been established and reviewed with the OUA engineer and CA.

(6) This program shall be able to be interpreted to evaluate the building and system operation so abnormalities can be seen so corrective action or adjustment to the building automatic system programming can be adjusted or system can be corrected thru repairs to the equipment and valving associated with the equipment.

(7) **The system shall be able to determine if the system is operating at peek efficiency and has the ability to track the energy or deviations from the set parameters which are to be set up for each system and agreed upon by all parties. The contractor shall provide KSU with the system expectations and system evaluations as what is to be provided at the time of BID. Provide an example of the program in a hard format so KSU can evaluate what your BA system is providing to KSU.**

*(End of Part 2 and Section 6.)*
DIVISION 23800-APPENDIX “A”

ASHTABULA CAMPUS:
1. Air Handling Equipment And Appurtenances
2. Exhaust Fans
3. Fume Hood Exhaust Fans
4. Fume Hood monitoring devices and annual certification of face velocity
5. Kitchen Exhaust Fans and Cleaning of Hood exhaust system
6. Kitchen Ice Machines and refrigeration units
7. General Exhaust Fans
8. Refrigeration Equipment
9. Ductwork Systems
10. Air Filters
11. Building Heating Systems
12. Building Cooling Systems
13. Boilers
14. Chillers
15. Refrigerant Compressors
16. Condensers
17. Cooling Towers
18. Pumps
19. Sumps, pumps and sewage ejectors
20. Kitchen refrigeration Equipment (cooler, Freezers, Ice Machines)
21. Plumbing fixture mixing valves, PRV, electronic faucets and flush valve(excluding batteries)  Optional Cost
   proposal to include these device
22. Air Compressors (Lab and temperature Control), Vacuum Pumps
23. Make-up Water Systems & Backflow Protection Devices and (annual certified inspection)
24. Hydronic Piping Systems
25. Refrigerant Piping Systems
26. A/C condensate piping systems
27. Electrical System
28. Temperature Control Systems and Associated Devices
29. Thermal Insulation
30. Water Treatment Systems including chemicals
31. Domestic Water Heaters (Gas, Electric)
32. Emergency Generator and Transfer Switch
33. Heat Recovery Units
34. Energy Recovery Units
35. Gas Piping Systems
36. Valves, Strainers, Traps, expansion tanks, Air Separators etc.
37. Domestic Water Heating Systems, expansion tanks, master mixing valve, safety relief valves, backflow
   devices including annual certification.
38. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
39. Terminal Boxes To Include Associated Controls & Appurtenances
40. Lab terminal units and Associated Controls& Appurtenances
41. Building Radiation Systems and Perimeter Heating Systems
42. Window Air Conditioners
43. PTAC Units
44. ERU, VRF
45. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Radiators
46. Dust Collection System
47. Electric Water Cooler, Drinking Fountains, Water Bottle Filling Stations

**SPECIAL CONDITIONS:**

1. The Preventive Maintenance inspections shall be a minimum of Twenty-Two (22) hours per month on-site. The twenty-Two (22) hours minimum does not include normal maintenance repairs, emergency calls, or travel time. (One hour is for lodge)

2. An "Eddy Current tube test" shall be made on the evaporator and condenser tubes of the centrifugal water chillers, prior to the start of the cooling season. This test shall include all costs for repairs or replacement of parts, deemed necessary because of the findings of the test results and are to be included in this contract.

3. The condenser water heads shall be removed for inspection and cleaning at the end of each cooling season. The chilled water heads shall be removed for inspection and cleaning, every second cooling season starting with the second contract period. The above inspections shall be made within 45 days of the cooling season shut-down or start-up. The Owner's designate shall be notified at least two (2) days prior to the cleaning, so he may have the opportunity to inspect the chillers condition.

4. Boiler inspection required and coordinated. Upon inspection, any modifications based on boiler inspection shall be made within two weeks after notice.

**STARK CAMPUS:**

1. Air Handling Equipment And Appurtenances
2. Exhaust Fans
3. Fume Hoods and Fume Hood Exhaust Fans
4. Fume Hood annual certification of face velocity and monitor devices
5. Kitchen Exhaust Fans and Cleaning of Kitchen Hood Exhaust system
6. General Exhaust Fans
7. Refrigeration Equipment
8. Ductwork Systems
9. Air Filters
10. Building Heating Systems
11. Building Cooling Systems
12. Boilers
13. Chillers
14. Heat Rejection Chiller
15. Refrigerant Compressors
16. Condensers
17. Cooling Towers and cooling tower sumps
18. Pumps (chilled water, heating water, tower water, reheat-heating pumps, and domestic recirculation pumps, including both HVAC primary, secondary and tertiary pumping systems. Including AHU run around pumps are also included.

19. Includes point of use domestic water heaters for dishwashers
20. Sumps, pumps and sewage ejectors
22. Lab Air Compressors and Lab Vacuum Pumps
23. Make-up Water Systems & Backflow Protection Devices and (annual Certified inspection)
24. Hydronic Piping Systems
25. Refrigerant Piping Systems
26. Electrical System
27. Temperature Control Systems and Associated Devices
28. Thermal Insulation
29. Water Treatment Systems including chemicals (Includes salt and Glycol)
30. Domestic Water Heaters
31. Emergency Generator, Transfer Switch and BAS UPS
32. Solar Thermal Domestic Hot water Heating System
33. Heat Recovery Units
34. Gas Piping Systems
35. Lab gases, lab Accessories- Medical/Lab Air compressors and Vacuum Pumps
36. Equipment Valves, Strainers, Traps, Expansion tanks, Air Separators etc.
37. Valve Maintenance for main isolation valves
38. Domestic Water Heating Systems (Gas, Electric and Solar)
39. Plumbing and Kitchen Fixtures, coolers, freezers and ice machines
   a. Plumbing Domestic Hot Water PRV, Hot Water Master Mixing tempering valve
   b. Drinking Fountains and Electric Water Cooler
   c. Contract (Does not include (ASSE 1070) mixing valves at sinks).
40. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
41. Terminal Boxes To Include Associated Controls & Appurtenances
42. Lab terminal units and Associated Controls & Appurtenances
43. Building Radiation Systems and Perimeter Heating Systems
44. PTAC Units
45. ERU, VRF systems, DX split systems
46. A/C condensate and piping
47. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, fin-tube radiation
48. Snow melt system (Electric)
49. Fountain Pumps
50. Plumbing fixture mixing valves, PRV, electronic faucets and flush valve (excluding batteries) Optional Cost proposal to include these devices.
51. Temperature control air compressors

SPECIAL CONDITIONS:
1. The Preventive Maintenance inspections shall be a minimum of fifty (50) hours per month on-site. The fifty (50) hours minimum does not include normal maintenance repairs, emergency calls, or travel time.
2. An "Eddy Current tube test" shall be made on the evaporator and condenser tubes of the centrifugal water chillers, prior to the start of the cooling season. This test shall include all costs for repairs or replacement of parts, deemed necessary because of the findings of the test results and are to be included in this contract.
3. The condenser water heads shall be removed for inspection and cleaning at the end of each cooling season. The chilled water heads shall be removed for inspection and cleaning, every second cooling season starting with the second contract period. The above inspections shall be made within 45 days of the cooling season shut-down or start-up. The Owner's designate shall be notified at least two (2) days prior to the cleaning, so he may have the opportunity to inspect the chillers condition.
4. Boiler inspection required and coordinated. Upon inspection, any modifications, repairs or replacement based off boiler inspection are made within two weeks after notice.

TUSCARAWAS CAMPUS
1. Air Handling Equipment And Appurtenances
2. Fume Hood and Hood Exhaust Fans
3. Fume hood certification of face velocity and monitoring devices
4. Kitchen Exhaust Fans and Annual Cleaning of Kitchen hood exhaust system
5. General Exhaust Fans
6. Refrigeration Kitchen Equipment Includes(Coolers, Freezers and Ice machines)
7. Ductwork Systems
8. Air Filters
9. Building Heating Systems
10. Building Cooling Systems
11. Hydronic Control Valves
12. Boilers (includes work required from boiler inspectors)
13. Chillers
14. Refrigerant Compressors, dryers, filter and associated components
15. Condensers
16. Cooling Towers and Tower Sump
17. Pumps (chilled water, heating water, tower water, reheat-heating pumps, domestic recirculation pumps, including both HVAC primary and secondary pump systems. AHU run around pumps are also included.)
18. Sumps, pumps and sewage ejectors
19. Electric Water Coolers, Drinking Fountains, and Water Bottle Filling Stations
20. Plumbing Domestic Hot Water heaters (gas and electric), Pressure Relief Valve, Hot Water Master Mixing tempering valve, expansion tank.
21. Contract (Does not include (ASSE 1070) mixing valves at sinks).
22. Air Compressors (lab and temperature control)
23. Make-up Water Systems & Backflow Protection Devices and (annual certified inspection)
24. Hydronic Piping Systems
25. Refrigerant Piping Systems
26. A/C condensate piping
27. Electrical System
28. Temperature Control Systems and Associated Devices
29. Thermal Insulation
30. Water Treatment Systems including chemicals (includes salt and glycol)
31. Emergency Generator and transfer switch
32. Heat Recovery Units
33. Gas Piping Systems
34. HVAC Equipment Valves (including all control valve types), Strainers, Traps, expansion tanks, Air Separators etc.
35. Valve and Valve maintenance on main HVAC system Isolation Valves
36. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
37. Terminal Boxes To Include Associated Controls & Appurtenances
38. Lab terminal units and Associated Controls& Appurtenances
39. Medical Air and Vacuum Systems
40. Building Radiation Systems and Perimeter Heating Systems
41. PTAC Units
42. ERU
43. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Radiators, Fin –tube, Radiant Ceiling Panels

**SPECIAL CONDITIONS:**

1. The Preventive Maintenance inspections shall be a minimum of Twenty-Four (24) hours per month on-site. The Twenty-Four (24) hours minimum does not include normal maintenance repairs, emergency calls, or travel time.
2. An “Eddy Current tube test” shall be made on the evaporator and condenser tubes of the centrifugal water chillers, prior to the start of the cooling season. This test shall include all costs for repairs or replacement of parts, deemed necessary because of the findings of the test results and are to be included in this contract.
3. The condenser water heads shall be removed for inspection and cleaning at the end of each cooling season. The chilled water heads shall be removed for inspection and cleaning, every second cooling season starting with the second contract period. The above inspections shall be made within 45 days of the cooling season shut-down or start-up. The Owner's designate shall be notified at least two (2) days prior to the cleaning, so he may have the opportunity to inspect the chillers condition.
4. Boiler inspection required and coordinated. Upon inspection, any modifications based on boiler inspection are made within two weeks after notice.
TRUMBULL CAMPUS
1. Air Handling Equipment And Appurtenances
2. General Exhaust Fans
3. Fume Hoods and Fume Hood Exhaust Fans
4. Annual Fume Hood certification of face velocity and hood monitoring devices
5. Kitchen Exhaust Fans and annual cleaning of Kitchen hood exhaust system
6. A/C condensate piping
7. Refrigeration Equipment (includes Coolers, Freezers and Ice machines)
8. Ductwork Systems
9. Air Filters
10. Building Heating Systems
11. Building Cooling Systems
12. Boilers
13. Chillers
14. Refrigerant Compressors
15. Condensers
16. Cooling Towers
17. Pumps (chilled water, heating water, tower water, reheat-heating pumps, domestic hot water recirculation pumps, including both HVAC primary and secondary pump systems. AHU run around pumps are also included.)
18. Sumps, pumps and sewage ejectors
19. Electric Water Coolers, Drinking Fountains and Water Bottle Fill Stations
20. Plumbing Domestic Master mixing valves, Water Heater PRV, expansion tank
21. Air Compressors and dryers
22. Make-up Water Systems & Backflow Protection Devices and (annual certification inspection)
23. Hydronic Piping Systems
24. Refrigerant Piping Systems
25. Electrical System
26. Temperature Control Systems and Associated Devices
27. Thermal Insulation
28. Water Treatment Systems including chemicals (including Salt and Glycol)
29. Domestic Water Heaters (Gas and Electric)
30. Emergency Generators and transfer switch
31. Heat Recovery Units
32. Gas Piping Systems
33. HVAC Equipment Valves, Strainers, Traps, Expansion Tanks, Air Separators etc.
34. Valve maintenance for main HVAC isolation valves
35. Domestic Water Heating units (gas and Electric)
36. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
37. Terminal Boxes To Include Associated Controls & Appurtenances
38. Lab Terminal Units and Associated Controls& Appurtenances
39. Medical Air and Vacuum pumps
40. Building Radiation Systems and Perimeter Heating Systems
41. PTAC Units
42. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Radiators, Fin –tube, Radiant Ceiling Panels , Radiant Heating units
43. Swamp Coolers/ Evaporative Coolers

SPECIAL CONDITIONS:
1. The Preventive Maintenance inspections shall be a minimum of Thirty Two (32) hours per month on-site. The Thirty Two (32) hours minimum does not include normal maintenance repairs, emergency calls, or travel time.
2. An "Eddy Current tube test" shall be made on the evaporator and condenser tubes of the centrifugal water chillers, prior to the start of the cooling season. This test shall include all costs for repairs or replacement of parts, deemed necessary because of the findings of the test results and are to be included in this contract.

3. The condenser water heads shall be removed for inspection and cleaning at the end of each cooling season. The chilled water heads shall be removed for inspection and cleaning, every second cooling season starting with the second contract period. The above inspections shall be made within 45 days of the cooling season shut-down or start-up. The Owner's designate shall be notified at least two (2) days prior to the cleaning, so he may have the opportunity to inspect the chillers condition.

4. Boiler inspection required and coordinated. Upon inspection, any modifications based on boiler inspection are to be made within two weeks after notice.

EAST LIVERPOOL CAMPUS
1. Air Handling Equipment And Appurtenances
2. General Exhaust Fans
3. Fume hoods, fume hood exhaust fans
4. Annual fume hood certification of hood face velocity and hood monitoring devices
5. Refrigeration Equipment
6. Ductwork Systems
7. Air Filters
8. Building Heating Systems
9. Building Cooling Systems
10. Boilers
11. Chillers
12. Refrigerant Compressors (DX Split Systems, VRF, etc.)
13. Condensers
14. Cooling Towers (Fluid Cooler)
15. Pumps (chilled water, Heating water, Domestic Hot water recirculation)
16. Sumps, pumps and sewage ejectors
17. Electric Water Coolers, drinking fountains and Water bottle fill stations.
18. Plumbing master mixing tempering valves, PRV, expansion tanks
19. Air Compressors
20. Make-up Water Systems & Backflow Protection Devices and (annual certified inspection)
21. Hydronic Piping Systems
22. Refrigerant Piping Systems
23. A/C condensate systems and piping
24. Electrical System
25. Emergency Generator and Transfer Switch
26. Temperature Control Systems and Associated Devices
27. Thermal Insulation
28. Water Treatment Systems including chemicals (including Salt and Glycol)
29. Domestic Water Heaters (Gas and Electric) Including point of use
30. Gas Piping Systems
31. HVAC Equipment Valves, control valves, Strainers, Traps, expansion tanks, Air Separators etc.
32. HVAC main isolation valves, Valve maintenance
33. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
34. Terminal Boxes To Include Associated Controls & Appurtenances
35. Building Radiation Systems and Perimeter Heating Systems
36. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Radiators, Heat Pumps (two and four Pipe), Radiators, Fin-tube
SPECIAL CONDITIONS:
1. The Preventive Maintenance inspections shall be a minimum of Sixteen (16) hours per month on-site. The Sixteen (16) hours minimum does not include normal maintenance repairs, emergency calls, or travel time.
2. An "Eddy Current tube test" shall be made on the evaporator and condenser tubes of the centrifugal water chillers, prior to the start of the cooling season. This test shall include all costs for repairs or replacement of parts, deemed necessary because of the findings of the test results and are to be included in this contract.
3. The condenser water heads shall be removed for inspection and cleaning at the end of each cooling season. The chilled water heads shall be removed for inspection and cleaning, every second cooling season starting with the second contract period. The above inspections shall be made within 45 days of the cooling season shut-down or start-up. The Owner's designate shall be notified at least two (2) days prior to the cleaning, so he may have the opportunity to inspect the chillers condition.
4. Boiler inspection required and coordinated. Upon inspection, any modifications based on boiler inspection are to be made within two weeks after notice.

GEAUGA (MAIN CLASSROOM AND CITY CENTER) AND TWINSBURG
1. Air Handling Equipment And Appurtenances
2. Fume Hoods and Fume Hood Exhaust Fans
3. Annual fume hood face velocity certification and fume hood monitoring devices
4. General Exhaust Fans
5. Lab Exhaust Fans and Appurtenances
6. Refrigeration Equipment
7. Ductwork Systems
8. Air Filters
9. Building Heating Systems
10. Building Cooling Systems
11. Boilers (Gas or Electric)
12. Refrigerant Compressors (DX, VRF, Split Systems etc.)
13. Condensers and VRF low ambient hoods (Including VRF controls and compressors)
14. HVAC Pumps (chilled Water, heating water and run around pumps)
15. Sumps, pumps and sewage ejectors
16. Electric Water Coolers, Drinking Fountains, Water Bottle Filling Stations
17. Plumbing Master tempering mixing valves, PRV, expansion tanks
18. Air Compressors (lab and temperature control)
19. Make-up Water Systems & Backflow Protection Devices and (annual certified inspection)
20. Hydronic Piping Systems
21. Refrigerant Piping Systems (Whole System)(Including all unit and system Isolation valves
22. A/C condensate systems
23. Electrical System
24. Emergency generator and transfer switch
25. Temperature Control Systems and Associated Devices
26. Thermal Insulation
27. Water Treatment Systems including chemicals (includes salt and Glycol)
28. Domestic Water Heaters (Electric and Gas)
29. Gas Piping Systems
30. HVAC Equipment Valves, Strainers, Traps, expansion tanks, Air Separators etc.
31. HAVC main Isolation Valve maintenance
32. Variable Frequency Drives, Motor Starters, Disconnects and Wiring
33. Terminal Boxes To Include Associated Controls & Appurtenances
34. Building Radiation Systems and Perimeter Heating Systems
35. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Fin-tube, Convector
36. Energy Recovery Systems (including Glycol)
37. Air Cooled Chiller
38. VFR systems and terminal unit devices (floor, wall or Ceiling), Ds split systems, Refrigerant Monitoring and replacement (including condensate pumps remote or internal to units.
39. VRF control system including wiring, sensors, t-stats etc.
40. Temperature Control system including interface with VRF. Contract Includes System Front end computer, Interface unit to VRF, UPS for JCI NAE’s and all remaining sensor, control valves, and hardware etc.

**SPECIAL CONDITIONS:**
1. The Preventive Maintenance inspections shall be a minimum of Eight (8) hours per month per complex on-site. (two area’s) The Eight (8) hours per complex minimum does not include normal maintenance repairs, emergency calls, or travel time.
2. Boiler inspection required and coordinated. Upon inspection any modifications based on boiler inspection shall be made within two weeks after notice.

**SALEM AND SALEM CITY CENTER**
1. Air Handling Equipment And Appurtenances
2. General Exhaust Fans
3. Fume Hoods and Fume Hood Exhaust Fans
4. Annual fume hood certification and monitoring devices
5. Lab and fume hood Control systems
6. Refrigeration Equipment
7. Ductwork Systems
8. Air Filters
9. Building Heating Systems
10. Building Cooling Systems
11. Boilers (Hot water and Steam)
12. Refrigerant Compressors
13. Condensers
14. Pumps (All types)
15. Medical Air and Vacuum pumps
16. Lab gases, Lab Accessories (including change over valve assemblies-Manual or automatic)
17. Sumps, pumps and sewage ejectors
18. Electric Water Coolers, Drinking Fountains, Water Bottle Filling Stations
19. Plumbing Master mixing tempering valves, PRV, expansion tanks
20. Domestic water heaters (Gas and Electric)
21. Air Compressors for temperature Controls
22. Make-up Water Systems & Backflow Protection Devices and (annual certified inspection)
23. Hydronic Piping Systems
24. Refrigerant Piping Systems
25. A/C condensate systems
26. Electrical System
27. Temperature Control Systems and Associated Devices (including NAE UPS)
28. Thermal Insulation
29. Water Treatment Systems including chemicals (including Salt and Glycol)
30. Boilers and boiler feed water systems, softeners, condensate pumps, Pressure Relief Valves, including all associated Appurtenances associated with a steam /hot water boiler system.
31. Heat Exchangers, Pressure reducing station/control stations
32. Steam Traps, air / water dirt separators, air scoops, low and high-pressure steam traps, strainers and screens, control valves etc.
33. Gas Piping Systems  
34. HVAC Equipment Valves, Control valves, PRV, Strainers, Traps, expansion tanks, Air Separators etc.  
35. HVAC Main Isolation Valve Maintenance  
36. Variable Frequency Drives, Motor Starters, Disconnects and Wiring  
37. Terminal Boxes To Include Associated Controls & Appurtenances(Main Classroom Bldg.)  
38. Building Radiation Systems and Perimeter Heating Systems  
39. Unit Heaters, Cabinet Heaters, Unit Ventilators, Fan Coil Units, Radiators, Convectors, Fin-tube, etc.  
40. VRF System(City Center)  
41. ERU, ECU, and DX split systems  
42. Emergency Generator and transfer switch

**SPECIAL CONDITIONS:**  
1. The Preventive Maintenance inspections shall be a minimum of Eight (8) hours per month onsite Per Complex.  
The Eight (8) hours per complex minimum does not include normal maintenance repairs, emergency calls, or travel time.  
2. Boiler inspection required and coordinated. Upon inspection, any modifications based on boiler inspection are to be made within two weeks after notice.
### ASHRAE Equipment Life Expectancy chart

ASHRAE is the industry organization that sets the standards and guidelines for most all HVAC-R equipment. For additional info about ASHRAE the website is [www.ashrae.org](http://www.ashrae.org).

<table>
<thead>
<tr>
<th>Equipment Item</th>
<th>Median Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air conditioners</strong></td>
<td></td>
</tr>
<tr>
<td>Window unit</td>
<td>10</td>
</tr>
<tr>
<td>Residential single or Split</td>
<td>15</td>
</tr>
<tr>
<td>Package</td>
<td></td>
</tr>
<tr>
<td>Commercial through-the-wall</td>
<td>15</td>
</tr>
<tr>
<td>Water-cooled package</td>
<td>15</td>
</tr>
<tr>
<td><strong>Heat Pumps</strong></td>
<td></td>
</tr>
<tr>
<td>Residential air-to-air</td>
<td>15</td>
</tr>
<tr>
<td>Commercial air-to-air</td>
<td>15</td>
</tr>
<tr>
<td>Commercial water-to-air</td>
<td>19</td>
</tr>
<tr>
<td><strong>Roof-top air conditioners</strong></td>
<td></td>
</tr>
<tr>
<td>Single-zone</td>
<td>15</td>
</tr>
<tr>
<td>Multi-zone</td>
<td>15</td>
</tr>
<tr>
<td><strong>Boilers, hot water (steam)</strong></td>
<td></td>
</tr>
<tr>
<td>Steel water-tube</td>
<td>24 (30)</td>
</tr>
<tr>
<td>Steel fire-tube</td>
<td>25 (26)</td>
</tr>
<tr>
<td>Cast iron</td>
<td>35 (30)</td>
</tr>
<tr>
<td>Electric</td>
<td>15</td>
</tr>
<tr>
<td><strong>Burners</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>Furnaces</strong></td>
<td></td>
</tr>
<tr>
<td>Gas- or oil-fired</td>
<td>18</td>
</tr>
<tr>
<td><strong>Unit heaters</strong></td>
<td></td>
</tr>
<tr>
<td>Gas or electric</td>
<td>13</td>
</tr>
<tr>
<td>Hot water or steam</td>
<td>20</td>
</tr>
<tr>
<td><strong>Radiant Heaters</strong></td>
<td></td>
</tr>
<tr>
<td>Electric</td>
<td>10</td>
</tr>
<tr>
<td>Hot water or steam</td>
<td>25</td>
</tr>
<tr>
<td><strong>Equipment Item</strong></td>
<td>Median Years</td>
</tr>
<tr>
<td>Air terminals</td>
<td>27</td>
</tr>
<tr>
<td>Diffusers, grilles, and registers</td>
<td>20</td>
</tr>
<tr>
<td>Induction and fan coil units</td>
<td>20</td>
</tr>
<tr>
<td>VAV and double-duct boxes</td>
<td>20</td>
</tr>
<tr>
<td>Insulation</td>
<td></td>
</tr>
<tr>
<td>Air washers</td>
<td>17</td>
</tr>
<tr>
<td>Ductwork</td>
<td>30</td>
</tr>
<tr>
<td>Dampers</td>
<td>20</td>
</tr>
<tr>
<td>Fans</td>
<td></td>
</tr>
<tr>
<td>Centrifugal</td>
<td>25</td>
</tr>
<tr>
<td>Axial</td>
<td>20</td>
</tr>
<tr>
<td>Propeller</td>
<td>15</td>
</tr>
<tr>
<td>Ventilating roof-mounted</td>
<td>20</td>
</tr>
<tr>
<td>Condensate 15</td>
<td></td>
</tr>
<tr>
<td>Reciprocating engines</td>
<td>20</td>
</tr>
<tr>
<td>Steam turbines</td>
<td>30</td>
</tr>
<tr>
<td>Electric motors</td>
<td>18</td>
</tr>
<tr>
<td>Motor starters</td>
<td>17</td>
</tr>
<tr>
<td>Electric transformers</td>
<td>30</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
</tr>
<tr>
<td>Pneumatic</td>
<td>20</td>
</tr>
<tr>
<td>Electric</td>
<td>16</td>
</tr>
<tr>
<td>Electronic</td>
<td>15</td>
</tr>
<tr>
<td>Valve actuators</td>
<td></td>
</tr>
<tr>
<td>Hydraulic</td>
<td>15</td>
</tr>
<tr>
<td>Pneumatic</td>
<td>20</td>
</tr>
<tr>
<td>Self-contained</td>
<td>10</td>
</tr>
</tbody>
</table>
7.0 **DEFINITIONS**

**Addendum(a):** Written instruments, issued solely by the Kent State University Procurement Department, that detail amendments, changes, modifications, or clarifications to the specifications, terms and conditions of this Request for Proposal (RFP). Such written instruments shall be the sole method employed by the Procurement Department to amend, change, modify or clarify this RFP, and any claims (from whatever source) that verbal amendments, changes, modifications or clarifications have been made shall be summarily rejected by the Procurement Department.

**Agreement, Contract, Purchase Order:** Formal award resulting from the RFP.

**DI:** “Design Innovation”

**FTE:** “Full Time Equivalent/Equivalency”

**HECVAT:** “Higher Education Cloud Vendor Assessment Tool Lite” (see §4.46)

**KSU:** “Kent State University”

**LMS:** “Learning Management System”

**MSA:** “Master Service(s) Agreement”

**May, Should:** Indicates something that is requested but not mandatory. If the Proposer fails to provide information, the Kent State University Procurement Department may, at its sole option, either request that the Proposer provide the information, or evaluate the Proposal without the information.

**OUA:** “Office of the University Architect”

**Proposal Closing Date:** The date and time specified in the RFP by which a sealed proposal must be received by the Kent State University Procurement Department. Proposals received after the stated date and time will not be considered.

**Proposal Issue Date:** The date and time the RFP process is opened for submission by prospective vendors.

**Proposal, Quotation:** Response provided by proposer.

**Proposer, Vendor, Carrier, Provider, Offeror:** Respondent to the RFP.

**RFP:** “Request for Proposal”

**Shall, Must, Will:** Indicates a mandatory requirement. Failure to meet mandatory requirements will invalidate the proposal, or result in the rejection of a proposal as non-responsive.

**SLA:** “Service Level Agreement”

**SOW:** “Statement of Work”

**SSO:** “Single Sign-On”

**VPAT:** “Voluntary Product Accessibility Template” (see §3.16)

**WCAG:** “Web Content Accessibility Guidelines”
8.0 **SAMPLE OF RESPONSE FORMS 1-9** AS FOUND IN DYNAMICFORMS
(FOR ILLUSTRATIVE PURPOSES ONLY.)

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**Procurement Department**

*Request for Proposal Forms*

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**Form 1: Request for Proposal Attestation Form**

Kent State University Kent Campus

RFP No.: [sequential RFP number]

RFP Description: [RFP Title]

Date of Issue: [Day, Month, Date, Year]

Proposals Due: [Day, Month, Date, Year] no later than 4:30 PM Eastern.

---

Proposals must be received electronically through DynamicForms. No other submission method will be accepted, unless otherwise disclosed in the RFP Instructions and Specifications. The confirmation of receipt of your response must be noted as “Signed” no later than the "Proposals Due” date and time specified above. The Forms History of your DynamicForms account will also note the date and time of your proposal submission. Proposals submitted after the "Proposals Due” date and time specified above will be rejected.

Proposals are to be submitted in accordance with the RFP Instructions and Specifications. There will not be a formal proposal opening.

The Procurement Department shall at all times reserve the right to reject any or all proposals, award partial proposals, waive any proposal informalities or irregularities, and request new proposals if doing so is deemed to be in the best interests of Kent State University.

By signing this document, I am agreeing, on behalf of my firm, to the specifications of this Request for Proposal and accepting, without exception or amendment the Instructions, Agreement Terms, and Specifications as set forth in this document. Any and all Purchase Orders resulting from this Request for Proposal shall be subject to these Instructions, Agreement Terms and Specifications, as incorporated herein.

---

Submitted By

Company Name

Authorized Signature

Date

Printed Name

Title

The Proposal, including all appendices, must be submitted in a single PDF file. Forms requiring signature(s) will be signed and submitted via DynamicForms within this document.

Official Proposal

Supplementary Document

Additional supplementary PDF documents should be attached, **only** if mandated in the Request for Proposal Instructions. In addition to its PDF file attachment, spreadsheets in .xls format must be emailed directly to Contract Manager if it is a requirement of the Request for Proposal.
Form 2: Respondent Signature and Information Form

In addition to the information requested in the previous sections, please complete the following:

By signing below, Contractor represents and warrants the following:
   a. that it is not subject to an unresolved finding for recovery under ORC 9.24;
   b. that it is not under any suspension or debarment by any office of the state of Ohio or the federal government; and
   c. that it is not boycotting any jurisdiction with whom the State of Ohio can enjoy open trade, including Israel, and will not do so during the contract period.

If any of the representations and warranties set forth herein are false on the date the parties sign an Agreement resulting from this RFP, such Agreement shall be void ab initio, and the Contractor shall be required to immediately repay to the State any funds paid under any such Agreement.

Payment Terms

Firm Name

Address

City, State, Zip

Telephone Number  Fax Number

Email

Authorized Signature  Date

Name of Signee

Title

*All bids submitted are taken by the University as offers to sell by the Proposer and acceptance shall occur only by the issuance of a University purchase order or where appropriate, upon the execution of a written contract.

Please attach a copy of the firm’s W-9 or W-8 for taxpayer verification and filing purposes. This form will complete the firm’s profile within the Kent State University internal vendor system.

Taxpayer Verification Form*
Form 3: Type of Business Form: (check all applicable classifications)

- **Large Business**
- **Small Business** – An independently owned and operated business which, together with affiliates, has 250 or fewer employees or average annual gross receipts of $10 million or less averaged over the previous three years. Department of Minority Business Enterprise (DMBE) certified women-owned and minority-owned business shall also be considered small business when they have received DMBE small business certification.
- **Women-Owned Business** – A business concern that is at least 51% owned by one or more women who are U. S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law, and both the management and daily business operations are controlled by one or more women who are U. S. citizens or legal resident aliens.
- **Minority-Owned Business** – A business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.
- **Ohio Certified MBE** (Attach Certificate)
- **Ohio Certified EDGE** (Attach Certificate)
- **Ohio OMSDC/NMSDC Certification** (Attach Certificate)
- **Veteran-Owned Business** (Attach Certificate)
- **WBENC Certification** (Attach Certificate)
- **Other MBE or Women-Owned Certification** (Attach Certificate)
Form 4: Buy Ohio Bidder and Product Information

All bidders are requested to complete the following information:

1. Is bidder an Ohio vendor?
   * ☐ Yes  ☐ No

2. Bidder qualifies as an Ohio bidder because it:
   ☐ Is offering an Ohio product.
   ☐ Has a significant Ohio economic presence.
   ☐ Is located in a border state (Kentucky, Michigan, New York, Indiana or Pennsylvania) that imposes no greater restriction than contained in section 125.09 and 125.11 of the Ohio Revised Code.

3. ☐ Bidder does not qualify as an Ohio bidder

4. All products offered in this bid are Ohio products except those listed below:
Form 5: Buy American Certificate Form

The Bidder or Offeror hereby certifies that each end product, except the end products listed below, is a domestic source end product as defined in the Buy America Act; and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States:

Certified:

Name (Please Print)

Signature Date

Title
Form 6: Standard Affirmation and Disclosure Form for Executive Order 2010-09S Banning the Expenditure of Public Funds on Offshore Services

CONTRACTOR/SUBCONTRACTOR AFFIRMATION AND DISCLOSURE: By the signature affixed to this response, the Bidder/Offeror affirms, understands and will abide by the requirements of Executive Order 2011-12K issued by Ohio Governor John R. Kasich. If awarded a contract, the Bidder/Offeror becomes the Contractor and affirms that both the Contractor and any of its subcontractors shall perform no services requested under this Contract outside of the United States. The Executive Order is available at the following website: (https://www.scph.org/sites/default/files/editor/N-002B-E0%202011-12K.pdf).

The Bidder/Offeror shall provide all the name(s) and location(s) where services under this Contract will be performed in the spaces provided below or by attachment. Failure to provide this information as part of the response will deem the Bidder/Offeror not responsive and no further consideration will be given to the response. Bidder/Offeror’s offering will not be considered. If the Bidder/Offeror will not be using subcontractors, indicate “Not Applicable” in the appropriate spaces.

1. Principal location of business of Contractor:

| Street Address | City, State, Zip |

Name/Principal location of business of subcontractor(s):

| Name | Street Address, City, State, Zip |
| Name | Street Address, City, State, Zip |

2. Location where services will be performed by Contractor:

| Street Address | City, State, Zip |

Name/Location where services will be performed by subcontractor(s):

| Name | Street Address, City, State, Zip |
| Name | Street Address, City, State, Zip |
3. Location where state data will be stored, accessed, tested, maintained or backed-up, by Contractor:

<table>
<thead>
<tr>
<th>Street Address</th>
<th>City, State, Zip</th>
</tr>
</thead>
</table>

Name/Principal location of business of subcontractor(s):

<table>
<thead>
<tr>
<th>Name</th>
<th>Street Address, City, State, Zip</th>
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</thead>
<tbody>
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</tbody>
</table>

4. Location where services to be performed will be changed or shifted by Contractor:

<table>
<thead>
<tr>
<th>Street Address</th>
<th>City, State, Zip</th>
</tr>
</thead>
</table>

Name/Location(s) where services will be changed or shifted to be performed by subcontractor(s):

<table>
<thead>
<tr>
<th>Name</th>
<th>Street Address, City, State, Zip</th>
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</thead>
<tbody>
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</table>
Form 7: Electronic Information Technology ("EIT") Compliance Form

☐ I have completed Section Electronic Information Technology ("EIT") Compliance section of the RFP and submitted all the required documents

Electronic Information Technology ("EIT") Compliance: If the proposed product or service is an Electronic Information Technology ("EIT") product or service as such products or services are defined below in this Section, then your proposal must include a response to this section so the proposed product or service can be evaluated by University personnel for compliance with the University Policy 4-16.

"EIT" product(s) and/or service(s) include, but are not limited to, systems and application software (including mobile), online services such as learning management systems, content management systems, access portals, online marketing solutions, websites, web content and multimedia, digital materials (video, audio, etext, ebooks, lab simulations), telecommunications, and self-contained products such as displays, kiosks, touchscreens, operable controls (key carded door openers), and personal response systems.

If the proposed product or service is not an EIT product or service, consider this section complete.

Pursuant to University Policy 4-16, Kent State University is committed to ensuring that its electronic and information technologies, including but not limited to, all information provided through university and thirdparty websites, online learning and course management systems, and curriculum, institutional and administrative data systems: (a) provide equal opportunity to the educational benefits and opportunities afforded by the technology; (b) provide equal treatment in the use of such technology; and (c) be accessible to individuals with disabilities in compliance with Section 504 of the Rehabilitation act of 1973, as amended and the Americans with Disabilities Act of 1990, as amended (ADA-AA) and other applicable laws of the State of Ohio.

Requirements for Vendors submitting a proposal for an "EIT" product and/or service: Provide information about the digital accessibility of proposed product(s) and/or services(s). This process is handled via an online form. Please carefully read the instructions below:

a. In a web browser, visit bit.ly/eitvendorsurvey. The form should be completed by Vendor’s lead technical staff member best suited to share information about the digital accessibility of the product and/or service.
   i. PLEASE DO NOT START FORM until previewing of the list of questions that will be asked.
   ii. If available, please make sure to attach a completed VPAT when completing the form. A blank template of the VPAT is available at www.itic.org/policy/accessibility.
   iii. NOTE: KSU may, in its sole discretion, deem as non-responsive, any form submission that is deemed by the university as incomplete.

☐ I am not required to complete Section 4.49 Electronic Information Technology ("EIT") Compliance section of the RFP.
Form 8: Data Security Requirements/PCI Compliance Form

Will this product or service have involvement in creating, storing, processing, transmitting, or accessing University data or handling financial transactions?

If yes, will any data be removed by, accessed from, copied to, or created within systems that do not reside within the geographical boundaries of Kent State University?

If yes, complete the appendage titled “Security Questionnaire for External Service Providers”. Include a copy of any applicable audit or security assessment reports or certifications such as: SAS 70 or its replacement SSAE 16, SOC 2, or ISO 27001 and include copies of any applicable corporate information security policies or other supporting documentation that will substantiate the questionnaire responses.

☐ I have completed Section Data Security Requirements/PCI Compliance section of the RFP and submitted all the required documents.

☐ I am not required to complete Section Data Security Requirements/PCI Compliance section of the RFP.
Form 9: Electronic Invoicing and Payment Capability Form

All bidders are required to complete the following information:

Does your company offer electronic invoicing?    ☐ Yes    ☐ No

Is your company capable of receiving payment via ACH transfer?  ☐ Yes  ☐ No

Signature _______________________________ Date: _______________________________

(End of document.)