

Piedmont Technical College

Invitation For Bid

Solicitation: Date Issued: Procurement Officer: Phone: E-Mail Address: Mailing Address: PTC-341 12/13/2024 Brian K. McKenna (864) 941-8314 mckenna.b@ptc.edu Piedmont Technical College PO Box 1467 Greenwood, SC 29648

DESCRIPTION: Provide new HVAC Air Handling Units for Medford Center at PTC

USING GOVERNMENTAL UNIT: Piedmont Technical College

The Term "Offer" Me Date must appear on		be submitted	d in a sealed package. Solicitation Number & Opening	
SUBMIT YOUR	SEALED OFFER TO EITHER OF THE FOLL	OWING AD	DRESSES:	
	TECHNICAL COLLEGE Kenna, Procurement Manager	PHYSICAL ADDRESS/HAND DELIVERY: PIEDMONT TECHNICAL COLLEGE Brian K. McKenna, Bldg. A, Room 195A 620 N. Emerald Road Greenwood, SC 29646		
	BY (Opening Date/Time): 01/07/2025 10:0 d in Building M, Room M124, Piedmon		(See "Deadline For Submission Of Offer" provision) I College, 620 N. Emerald Rd., Gwd., SC 29646	
QUESTIONS MUS	ST BE RECEIVED BY: 12/19/2024 10:0 0	:00 EST (s	ee "Questions From Offerors" provision)	
NUMBER OF CO	PIES TO BE SUBMITTED: ONE (1) Ha i	rd Copy Pa	per Original	
BID DOCUMENT	S MAY BE OBTAINED FROM: Brian K	. McKenna	EMAIL: mckenna.b@ptc.edu	
DATE & TIME:	TYPE: Not Applicable ferences - Pre-Bid/Proposal" & "Site Visit" provisions)		LOCATION: Not Applicable	
AWARD & AMENDMENTS				
	gree to hold Your Offer open for a minimu		g, You agree to be bound by the terms of the (30) calendar days after the Opening Date. (See	
NAME OF OFFE		Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, i.e., a separate corporation, partnership, sole proprietorship, etc.		
(full legal name of business AUTHORIZED S		DATE SIGNED		
	d to submit binding offer to contract on behalf of Offeror.)	DATE SIC	JIVED	
TITLE		STATE VENDOR NO.		
(business title of person si	gning above)	(Register to Obtain S.C. Vendor No. at www.procurement.sc.gov)		
PRINTED NAME	E	STATE OF INCORPORATION		
(printed name of person si	gning above)	(If you are a corporation, identify the state of incorporation.)		
	PE OF ENTITY: (Check one) (See "Signing Yo	-		

Corporation (tax-exempt)

Government entity (federal, state, or local)

Corporate entity (not tax-exempt)

PAGE TWO

(Return Page Two with Your Offer)

HOME OFFICE ADDRESS (Address for offeror's home office / principal place of business)				NOTICE ADDRESS (Address to which all procurement and contract related notices should be sent.) (See "Notice" clause)				
				Number - Extens	sion Facsimile			Area Code - E-mail
				Address				
PAYMENT ADDRESS (Address to which payments will be sent.) (See "Payment" clause)				ORDER ADDRESS (Address to which purchase orders will be sent) (See "Purchase Orders and "Contract Documents" clauses)				
	Address same as H Address same as N		(check only one)	Order Address same as Home Office Address Order Address same as Notice Address (check only one)				
	ACKNOWLEDGMENT OF AMENDMENTS Offerors acknowledges receipt of amendments by indicating amendment nu			mber and its date of	of issue. (See "Ameno	lments to Soli	citation" Pr	ovision)
Amendment No.			Amendment Issue Date	Amendment No. Amendment Is: Date				
DISCOUNT FOR PROMPT PAYMENT (See "Discount for Prompt Payment" clause)				dar Days (%) 30 Calendar Days (%)Calendar Days (%)				
PREFERENCES - A NOTICE TO VENDORS (SEP. 2009): On June 16, 2009, the South Carolina General Assembly rewrote the law governing preferences available to in-state vendors, vendors using in-state subcontractors, and vendors selling in-state or US end products. This law appears in Section 11-35-1524 of the South Carolina Code of Laws. A summary of the new preferences is available at www.procurement.sc.gov/preferences . ALL THE PREFERENCES MUST BE CLAIMED AND ARE APPLIED BY LINE ITEM, REGARDLESS OF WHETHER AWARD IS MADE BY ITEM OR LOT. VENDORS ARE CAUTIONED TO CAREFULLY REVIEW THE STATUTE BEFORE CLAIMING ANY PREFERENCES. THE REQUIREMENTS TO QUALIFY HAVE CHANGED. IF YOU REQUEST A PREFERENCE, YOU ARE CERTIFYING THAT YOUR OFFER QUALIFIES FOR THE PREFERENCE YOU'VE CLAIMED. IMPROPERLY REQUESTING A PREFERENCE CAN HAVE SERIOUS CONSEQUENCES. [11-35-1524(E)(4)&(6)]								
your in-state of Preference (11 must provide	office in the space 1-35-1524(C)(1) this information	ce provided below (i)&(ii)) or the to qualify for the	ow. An in-state of Resident Contra	office is necess actor Preferenc an in-state office	ase provide the a sary to claim eith e (11-35-1524(C ce is not required	er the Resid)(1)(iii)). A	dent Vend according	lor ly, you
In-State O	ffice Address sam	ne as Home Offic	e AddressI	In-State Office A	ddress same as No	otice Address	s (check	only one)

I. SCOPE OF SOLICITATION

ACQUIRE SUPPLIES / EQUIPMENT (JAN 2006)

The purpose of this solicitation is to establish a source or sources of supply for the purchase of new supplies and/or equipment as listed. [01-1015-1]

MAXIMUM CONTRACT PERIOD - ESTIMATED (JAN 2006)

Start date: 01/09/2025 End date: 06/27/2025. Dates provided are estimates only. Any resulting contract will begin on the date specified in the notice of award. See clause entitled "Term of Contract - Effective Date/Initial Contract Period". [01-1040-1]

II. INSTRUCTIONS TO OFFERORS - A. GENERAL INSTRUCTIONS

DEFINITIONS, CAPITALIZATION, AND HEADINGS (MAY 2024)

CLAUSE HEADINGS USED IN THIS SOLICITATION ARE FOR CONVENIENCE ONLY AND WILL NOT BE USED TO CONSTRUE MEANING OR INTENT. EVEN IF NOT CAPITALIZED, THE FOLLOWING DEFINITIONS APPLY TO ALL PARTS OF THE SOLICITATION, UNLESS EXPRESSLY PROVIDED OTHERWISE.

AMENDMENT means a document issued to supplement the original solicitation document.

AUTHORITY means the State Fiscal Accountability Authority or its successor in interest.

BUSINESS means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other legal entity. [11-35-310(3)]

CHANGE ORDER means any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of any contract accomplished by mutual agreement of the parties to the contract. [11-35-310(5)]

CONTRACT See clause entitled Contract Documents & Order of Precedence.

CONTRACT MODIFICATION means a written order signed by the procurement officer, directing the contractor to make changes which the clause of the contract titled "Changes," if included herein, authorizes the Procurement Officer to order without the consent of the contractor. [11-35-310(9)]

CONTRACTOR means the Offeror receiving an award as a result of this solicitation.

COVER PAGE means the top page of the original solicitation on which the solicitation is identified by number. Offerors are cautioned that Amendments may modify information provided on the Cover Page.

OFFER means the bid or proposal submitted in response this solicitation. The terms Bid and Proposal are used interchangeably with the term Offer.

OFFEROR means the single legal entity submitting the offer. The term Bidder is used interchangeably with the term Offeror. See bidding provisions entitled Signing Your Offer and Bid/Proposal As Offer To Contract.

PAGE TWO means the second page of the original solicitation, which is labeled Page Two.

PROCUREMENT OFFICER means the person, or his successor, identified as such on either the Cover Page, an amendment, or an award notice.

YOU and YOUR means Offeror.

SOLICITATION means this document, including all its parts, attachments, and any Amendments.

STATE means the Using Governmental Unit(s) identified on the Cover Page.

SUBCONTRACTOR means any person you contract with to perform or provide any part of the work.

US or WE means the using governmental unit.

USING GOVERNMENTAL UNIT means the unit(s) of government identified as such on the Cover Page. If the Cover Page identifies the Using Governmental Unit as "Statewide Contract," either optional or mandatory, the phrase "Using Governmental Unit" means any South Carolina Public Procurement Unit [11-35-4610(5)] that has submitted a Purchase Order to you pursuant to the contract resulting from this solicitation. Reference the clauses titled "Purchase Orders" and "Statewide Contract."

WORK means all labor, materials, equipment, services, or property of any type, provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract. [02-2A003-4]

AMENDMENTS TO SOLICITATION (JAN 2004)

(a) The Solicitation may be amended at any time prior to opening. All actual and prospective Offerors should monitor the following web site for the issuance of Amendments: www.procurement.sc.gov(b) Offerors shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on Page Two, (3) by letter, or (4) by submitting a bid that indicates in some way that the bidder received the amendment. (c) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged. [02-2A005-1]

AUTHORIZED AGENT (FEB 2015)

All authority regarding this procurement is vested solely with the responsible Procurement Officer. Unless specifically delegated in writing, the Procurement Officer is the only government official authorized to bind the government with regard to this procurement or the resulting contract. [02-2A007-1]

AUTHORITY AS PROCUREMENT AGENT (DEC 2015)

The Procurement Officer is an employee of the Authority acting on behalf of the Using Governmental Unit(s) pursuant to the Consolidated Procurement Code. Any contracts awarded as a result of this procurement are between the Contractor and the Using Governmental Units(s). The Authority is not a party to such contracts, unless and to the extent that the Authority is a using governmental unit and bears no liability for any party's losses arising out of or relating in any way to the contract. [02-2A030-3]

AWARD NOTIFICATION (APR 2024)

Notice regarding any award, cancellation of award, or extension of award will be posted at the location and on the date specified on the Cover Page or, if applicable, the most recent notice of extension of award. Should the contract resulting from this Solicitation have a total or potential value more than one hundred thousand dollars, such notice will be sent electronically to all Offerors responding to the Solicitation. Unless a written notice of intent to protest is timely filed pursuant to Section 11-35-4210(1)(b) or the award is otherwise suspended or canceled, the award will be effective on the calendar day (including weekends and holidays) immediately following the seventh business day after such notice is given. [02-2A010-3]

BID/PROPOSAL AS OFFER TO CONTRACT (JAN 2004)

By submitting Your Bid or Proposal, You are offering to enter into a contract with the Using Governmental Unit(s). Without further action by either party, a binding contract shall result upon final award. Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror on the Cover Page. An Offer may be submitted by only one legal entity; "joint bids" are not allowed. [02-2A015-1]

BID ACCEPTANCE PERIOD (JAN 2004)

In order to withdraw Your Offer after the minimum period specified on the Cover Page, You must notify the Procurement Officer in writing. [02-2A020-1]

BID IN ENGLISH and DOLLARS (JAN 2004)

Offers submitted in response to this solicitation shall be in the English language and in US dollars, unless otherwise permitted by the Solicitation. [02-2A025-1]

CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 2024)

GIVING FALSE, MISLEADING, OR INCOMPLETE INFORMATION ON THIS CERTIFICATION MAY RENDER YOU SUBJECT TO PROSECUTION UNDER SECTION 16-9-10 OF THE SOUTH CAROLINA CODE OF LAWS AND OTHER APPLICABLE LAWS.

- (a) By submitting an offer, the offeror certifies that-
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to-

- (i) Those prices;
- (ii) The intention to submit an offer; or
- (iii) The methods or factors used to calculate the prices offered.
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory-
- (1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; or
- (2)(i) Has been authorized, in writing, to act as agent for the offeror's principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification [As used in this subdivision (b)(2)(i), the term "principals" means the person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal];
- (ii) As an authorized agent, does certify that the principals referenced in subdivision (b)(2)(i) of this certification have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification
- (c) If the offeror deletes or modifies paragraph (a)(2) of this certification, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure. [02-2A032-2]

CERTIFICATION REGARDING DEBARMENT AND OTHER RESPONSIBILITY MATTERS (JAN 2004)

- (a) (1) By submitting an Offer, Offeror certifies, to the best of its knowledge and belief, that-
- (i) Offeror and/or any of its Principals-
- (A) Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or federal agency;
- (B) Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
- (C) Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) Offeror has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any public (Federal, state, or local) entity.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

- (b) Offeror shall provide immediate written notice to the Procurement Officer if, at any time prior to contract award, Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) If Offeror is unable to certify the representations stated in paragraphs (a)(1), Offer must submit a written explanation regarding its inability to make the certification. The certification will be considered in connection with a review of the Offeror's responsibility. Failure of the Offeror to furnish additional information as requested by the Procurement Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly or in bad faith rendered an erroneous certification, in addition to other remedies available to the State, the Procurement Officer may terminate the contract resulting from this solicitation for default.

 [02-2A035-1]

CODE OF LAWS AVAILABLE (JAN 2006)

The South Carolina Code of Laws, including the Consolidated Procurement Code, is available at: http://www.scstatehouse.gov/code/statmast.php

The South Carolina Regulations are available at: http://www.scstatehouse.gov/coderegs/statmast.php

[02-2A040-2]

DISCLOSURE OF CONFLICTS OF INTEREST OR UNFAIR COMPETITIVE ADVANTAGE (APR 2024)

DISCLOSURE OF CONFLICTS OF INTEREST OR UNFAIR COMPETITIVE ADVANTAGE (JUL 2023) ("OCI FAQ for Contractors" is available at www.procurement.sc.gov)

- (a) You certify that, after reasonable inquiry, to the best of your knowledge and belief: (1) your offer identifies any services that relate to either this solicitation or the work and that have already been performed by you, a proposed subcontractor, or an affiliated business or consultant of either; and (2) there are no relevant facts or circumstances that may give rise to an actual or potential organizational conflict of interest, as defined in S.C. Code Ann. Reg. 19-445.2127, or that your offer identifies and explains any unfair competitive advantage you may have in competing for the proposed contract and any actual or potential conflicts of interest that may arise from your participation in this competition or your receipt of an award.
- (b) If you, a proposed subcontractor, or an affiliated business or consultant of either, have an unfair competitive advantage or an actual or potential conflict of interest, the State may withhold award. Before withholding award on these grounds, the State will notify you of the concerns and provide a reasonable opportunity for you to respond. The State may consider efforts to avoid or mitigate such concerns, including restrictions on future activities.
- (c) The certification in paragraph (a) of this provision is a material representation of fact upon which the State will rely when considering your offer for award. [02-2A047-3]

DEADLINE FOR SUBMISSION OF OFFER (JAN 2004)

Any offer received after the Procurement Officer of the governmental body or his designee has declared that the time set for opening has arrived, shall be rejected unless the offer has been delivered to the designated purchasing office or the governmental body's mail room which services that purchasing office prior to the opening. [R.19-445.2070(G)] [02-2A050-1]

DRUG FREE WORKPLACE CERTIFICATION (JAN 2004)

By submitting an Offer, Contractor certifies that, if awarded a contract, Contractor will comply with all applicable provisions of The Drug-free Workplace Act, Title 44, Chapter 107 of the South Carolina Code of Laws, as amended. [02-2A065-1]

DUTY TO INQUIRE (FEB 2015)

Offeror, by submitting an Offer, represents that it has read and understands the Solicitation and that its Offer is made in compliance with the Solicitation. Offerors are expected to examine the Solicitation thoroughly and should request an explanation of any ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation. Failure to do so will be at the Offeror's risk. All ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation shall be interpreted to require the better quality or greater quantity of work and/or materials, unless otherwise directed by amendment. Offeror assumes responsibility for any patent ambiguity in the Solicitation that Offeror does not bring to the State's attention. See clause entitled "Questions from Offerors." [02-2A070-2]

ETHICS CERTIFICATE (MAY 2008)

By submitting an offer, the offeror certifies that the offeror has and will comply with, and has not, and will not, induce a person to violate Title 8, Chapter 13 of the South Carolina Code of Laws, as amended (ethics act). The following statutes require special attention: Section 8-13-700, regarding use of official position for financial gain; Section 8-13-705, regarding gifts to influence action of public official; Section 8-13-720, regarding offering money for advice or assistance of public official; Sections 8-13-755 and 8-13-760, regarding restrictions on employment by former public official; Section 8-13-775, prohibiting public official with economic interests from acting on contracts; Section 8-13-790, regarding recovery of kickbacks; Section 8-13-1150, regarding statements to be filed by consultants; and Section 8-13-1342, regarding restrictions on contributions by contractor to candidate who participated in awarding of contract. The state may rescind any contract and recover all amounts expended as a result of any action taken in violation of this provision. If contractor participates, directly or indirectly, in the evaluation or award of public contracts, including without limitation, change orders or task orders regarding a public contract, contractor shall, if required by law to file such a statement, provide the statement required by Section 8-13-1150 to the procurement officer at the same time the law requires the statement to be filed. [02-2A075-2]

OMIT TAXES FROM PRICE (JAN 2004)

Do not include any sales or use taxes in Your price that the State may be required to pay. [02-2A080-1]

OPEN TRADE REPRESENTATION (JUN 2015)

By submitting an Offer, Offeror represents that Offeror is not currently engaged in the boycott of a person or an entity based in or doing business with a jurisdiction with whom South Carolina can enjoy open trade, as defined in SC Code Section 11-35-5300. [02-2A083-1]

MULTIPLE OFFERS (MAR 2024)

Offerors may submit more than one Offer, provided that each Offer has significant differences other than price. Each separate Offer must satisfy all Solicitation requirements. If this solicitation is an Invitation for Bids, each separate offer must be submitted or uploaded as a separate document and must clearly indicate that it is a separate offer. If this solicitation is a Request for Proposals, multiple offers may be submitted or uploaded as one document, provided that you clearly differentiate between each offer and you submit a separate cost proposal for each offer, if applicable. [02-2A079-1]

PRICING (MAR 2024)

(a) Fixed Price. If a fixed price is required, award will not be made on an Offer if the total possible price to the State cannot be determined. (b) Price Reasonableness: Any offer may be rejected if the Procurement Officer determines in writing that it is unreasonable as to price. (c) Unbalanced Pricing. The State will analyze all offers with separately priced line items or subline items to determine if the prices are unbalanced. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more line items is significantly over or understated. The responsible procurement officer may reject an offer as unreasonably priced if she determines that unbalanced pricing increases performance risk (e.g., it is so unbalanced as to be tantamount to allowing an advance payment) or could result in payment of unreasonably high prices. S.C. Code Ann. Reg. 19-445.2122C. [02-2A082-2]

PROTESTS (MAY 2024)

If you are aggrieved in connection with the solicitation or award of the contract, you may be entitled to protest, but only as provided in Section 11-35-4210. To protest the solicitation or an amendment, your written protest must be received within fifteen Days of the date the applicable solicitation document is issued. To protest an award, (i) written notice of your intent to protest must be received within seven Business Days of the date the award notice is posted, and (ii) your actual written protest must be received within fifteen Days of the date the award notice is posted. Time periods are computed in accordance with Section 11-35-310(13) and the definitions for Day and Business Day. Both protests and notices of intent to protest must be received by the appropriate Chief Procurement Officer (CPO). See clause entitled "Protest-CPO." (b) Pursuant to Section 11-35-410, documents directly connected to a procurement activity may be available within five days after request. All document requests should be directed to DocReq@mmo.sc.gov. If a protest is pending, the protestant's lawyer may access otherwise unavailable information by applying to the CPO for the issuance of a protective order. Additional information is available at www.procurement.sc.gov/legal [02-2A085-3]

PROHIBITED COMMUNICATIONS AND DONATIONS (FEB 2015)

Violation of these restrictions may result in disqualification of your offer, suspension or debarment, and may constitute a violation of law.

- (a) During the period between publication of the solicitation and final award, you must not communicate, directly or indirectly, with the Using Governmental Unit or its employees, agents or officials regarding any aspect of this procurement activity, unless otherwise approved in writing by the Procurement Officer. All communications must be solely with the Procurement Officer. [R. 19-445.2010]
- (b) You are advised to familiarize yourself with Regulation 19-445.2165, which restricts donations to a governmental entity with whom you have or seek to have a contract. You represent that your offer discloses any gifts made, directly or through an intermediary, by you or your named subcontractors to or for the benefit of the Using Governmental Unit during the period beginning eighteen months prior to the Opening Date. [R. 19-445.2165] [02-2A087-1]

PUBLIC OPENING (JAN 2004)

Offers will be publicly opened at the date/time and at the location identified on the Cover Page, or last Amendment, whichever is applicable. [02-2A090-1]

QUESTIONS FROM OFFERORS (MODIFIED)

(a) Any prospective Offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing. All questions must be submitted in writing and received by the Procurement Officer for this solicitation no later than **THE DATE AND TIME LISTED ON COVER PAGE 1.**

(b) Email is the preferred method for submitting questions to the Procurement Manager, Title the "Subject Line" of your email, "Questions PTC-341 - "HVAC Air Handling Units for Medford Center at PTC" Questions must be submitted in writing in an easily copied format such as MS Word and received by the Procurement Manager; Email: mckenna.b@ptc.edu no later than December 19, 2024, at 10:00 AM EST.

(c) Oral explanations or instructions will not be binding. [See R. 19-445.2042(B)] Any information given a prospective Offeror concerning a solicitation will be furnished promptly to all other prospective Offerors as an Amendment to the solicitation if that information is necessary for submitting offers or if the lack of it would be prejudicial to other prospective Offerors. See clause entitled "Duty to Inquire." **We will not identify you in our answer to your question.**

REJECTION/CANCELLATION (JAN 2004)

The State may cancel this solicitation in whole or in part. The State may reject any or all proposals in whole or in part. [SC Code Section 11-35-1710 & R.19-445.2065] [02-2A100-1]

RESPONSIVENESS (MAR 2024):

Award will not be made on a nonresponsive offer. An offer is nonresponsive (i) if it does not constitute an unambiguous offer to enter into a contract with the State, or (ii) if it imposes conditions inconsistent with, or does not unambiguously agree to, the solicitation's material requirements. (b) Bid as Specified. Offers for supplies or services other than those specified will not be considered unless authorized by the Solicitation. [02-2A105-3]

SIGNING YOUR OFFER (JAN 2004)

Every Offer must be signed by an individual with actual authority to bind the Offeror. (a) If the Offeror is an individual, the Offer must be signed by that individual. If the Offeror is an individual doing business as a firm, the Offer must be submitted in the firm name, signed by the individual, and state that the individual is doing business as a firm. (b) If the Offeror is a partnership, the Offer must be submitted in the partnership name, followed by the words by its Partner, and signed by a general partner. (c) If the Offeror is a corporation, the Offer must be submitted in the corporate name, followed by the signature and title of the person authorized to sign. (d) An Offer may be submitted by a joint venturer involving any combination of individuals, partnerships, or corporations. If the Offeror is a joint venture, the Offer must be submitted in the name of the Joint Venture and signed by every participant in the joint venture in the manner prescribed in paragraphs (a) through (c) above for each type of participant. (e) If an Offer is signed by an agent, other than as stated in subparagraphs (a) through (d) above, the Offer must state that is has been signed by an Agent. Upon request, Offeror must provide proof of the agent's authorization to bind the principal. [02-2A115-1]

STATE OFFICE CLOSINGS (JAN 2004)

If an emergency or unanticipated event interrupts normal government processes so that offers cannot be received at the government office designated for receipt of bids by the exact time specified in the solicitation, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first workday on which normal government processes resume. In lieu of an automatic extension, an Amendment may be issued to reschedule bid opening. If state offices are closed at the time a pre-bid or pre-proposal conference is scheduled, an Amendment will be issued to reschedule the conference. Useful information may be available at: https://scemd.org/closings [02-2A120-3]

DISCLOSURE OF YOUR BID / PROPOSAL and SUBMITTING CONFIDENTIAL DATA (FEB 2021)

(a) According to Section 11-35-410, any person submitting a document in response or with regard to any solicitation or other request must "comply with instructions provided in the solicitation for marking information exempt from public disclosure. Information not marked as required by the applicable instructions may be disclosed to the public." IF YOU IDENTIFY YOUR ENTIRE RESPONSE AS EXEMPT FROM PUBLIC DISCLOSURE, OR IF YOU DO NOT

SUBMIT A REDACTED COPY AS REQUIRED, THE STATE MAY, IN ITS SOLE DISCRETION, DETERMINE YOUR BID OR PROPOSAL NONRESPONSIVE AND INELIGIBLE FOR AWARD. (b) By submitting a response to this solicitation or request, Offeror (1) agrees to the public disclosure of every page, or portion thereof, of every document regarding this solicitation or request that was submitted at any time prior to entering into a contract (including, but not limited to, documents contained in a response, documents submitted to clarify a response, and documents submitted during negotiations), unless the page, or portion thereof, was redacted and conspicuously marked "Trade Secret" or "Confidential" or "Protected", (2) agrees that any information not redacted and marked, as required by these bidding instructions, as a "Trade Secret" is not a trade secret as defined by the Trade Secrets Act, and (3) agrees that, notwithstanding any claims or markings otherwise, any prices, commissions, discounts, or other financial figures used to determine the award, as well as the final contract amount, are subject to public disclosure. (c) If your offer includes any information that you claim is exempt from public disclosure, you must submit one complete copy of your offer from which you have removed or concealed such information (the redacted copy). Except for the information removed or concealed, the redacted copy must be identical to your original offer. (d) Do not mark your entire response (bid, proposal, quote, etc.) as confidential, trade secret, or protected. If only portions of a page are subject to some protection, do not redact the entire page. The redacted copy must reflect the same pagination as the original and show the empty space from which information was redacted. The Procurement Officer must be able to view, search, copy and print the redacted copy without a password. If your response, or any part thereof, is improperly marked as confidential or trade secret or protected, the State may, in its sole discretion, determine it nonresponsive. (e) On the redacted copy, you must identify the basis of your claim by marking each redaction as follows: You must separately mark with the word "CONFIDENTIAL" every page, or portion thereof, that you redacted and claim as exempt from public disclosure because it is either (1) a trade secret as defined in Section 30-4-40(a)(1) of the Freedom of Information Act, or (2) privileged and confidential, as that phrase is used in Section 11-35-410. You must separately mark with the words "TRADE SECRET" every page, or portion thereof, that you redacted and claim as exempt from public disclosure as a trade secret pursuant to Section 39-8-20 of the Trade Secrets Act. You must separately mark with the word "PROTECTED" every page, or portion thereof, that you redacted and claim as exempt from public disclosure pursuant to Section 11-35- 1810. All markings must be conspicuous; use color, bold, underlining, or some other method in order to conspicuously distinguish the mark from the other text. (f) In determining whether to release documents, the State will detrimentally rely on your redaction and marking of documents, as required by these bidding instructions, as being either "Confidential" or "Trade Secret" or "Protected". By submitting a response, you agree to defend, indemnify and hold harmless the State of South Carolina, its agencies, officers and employees, from every claim, demand, loss, expense, cost, damage or injury, including attorney's fees, arising out of or resulting from withholding information by the State of South Carolina or any of its agencies, that you have redacted or marked as "Confidential" or "Trade Secret" or "Protected". (All references to S.C. Code of Laws.) [02-2A125-3]

SUBMITTING A PAPER OFFER OR MODIFICATION (MAR 2015)

Unless specifically instructed otherwise in the solicitation, you should submit your offer or modification in accordance with the clause titled "ON-LINE BIDDING INSTRUCTIONS." Paper offers are discouraged. If you must submit a paper offer or modification the following instructions apply. (a) All prices and notations should be printed in ink or typewritten. Errors should be crossed out, corrections entered and initialed by the person signing the bid. Do not modify the solicitation document itself (including bid schedule). (b) (1) All copies of the offer or modification, and any other documents required to be submitted with the offer shall be enclosed in a sealed, opaque envelope or package. (2) Submit your offer or modification to the address on the Cover Page. (3) The envelope or package must show the time and date specified for opening, the solicitation number, and the name and address of the bidder. If the offer or modification is sent by mail or special delivery service (UPS, Federal Express, etc.), the outermost envelope or wrapper must be labeled "OFFER ENCLOSED" on the face thereof. (c) If you are responding to more than one solicitation, submit each offer in a separate envelope or package. (d) Submit the number of copies indicated on the Cover Page. (e) Facsimile or e-mail offers, modifications, or withdrawals, will not be considered unless authorized by the Solicitation. [02-2A130-2]

TAX CREDIT FOR SUBCONTRACTING WITH DISADVANTAGED SMALL BUSINESSES (APR 2024)

TAX CREDIT FOR SUBCONTRACTING WITH DISADVANTAGED SMALL BUSINESSES (APR 2024): Pursuant to Section 12-6-3350, a taxpayer having a contract with this State who subcontracts with a socially and economically disadvantaged small business is eligible for an income tax credit equal to four percent of the payments to that subcontractor for work pursuant to the contract. The subcontractor must be certified as a socially and economically disadvantaged small business as defined in Section 11-35-5010 and regulations pursuant to it. The credit is limited to a maximum of fifty thousand dollars annually. A taxpayer is eligible to claim the credit for ten consecutive taxable years beginning with the taxable year in which the first payment is made to the subcontractor that qualifies for the credit. After the above ten

consecutive taxable years, the taxpayer is no longer eligible for the credit. A taxpayer claiming the credit shall maintain evidence of work performed for the contract by the subcontractor. The credit may be claimed on Schedule TC-2, "Credit for State Contractors Subcontracting with Socially and Economically Disadvantaged Small Business." A copy of the subcontractor's certificate from the Division of Small and Minority Business Contracting and Certification is to be attached to the contractor's income tax return. Questions regarding the tax credit and how to file are to be referred to: SC Department of Revenue, http://dor.sc.gov. Questions regarding subcontractor certification are to be referred to: Division of Small and Minority Business Contracting and Certification, http://smbcc.sc.gov. [02-2A135-2]

VENDOR REGISTRATION MANDATORY (MAY 2024)

You must have a state vendor number to be eligible to submit an offer. To obtain a state vendor number, visit www.procurement.sc.gov and select Doing Business with Us. Then select New Vendor Registration. (To determine if your business is already registered, go to "Vendor Search"). Upon registration, you will be assigned a state vendor number. **Note that your vendor registration submission may take up to 30 days to process due to high numbers of registrants.** Vendors must keep their vendor information current. If you are already registered and know your User ID and Password, you can update your information by selecting Update Vendor Registration. If you need to update information but do not have your User ID/Password, you must complete a new vendor registration and On Step 9 – Messages to Administration indicate "Update vendor number" with your existing 10-digit vendor number. (Please note that vendor registration does not substitute for any obligation to register with the S.C. Secretary of State or S.C. Department of Revenue. You can register with the agencies at South Carolina Business One Stop, http://scbos.sc.gov) [02-2A145-2].

WITHDRAWAL OR CORRECTION OF OFFER (JAN 2004)

Offers may be withdrawn by written notice received at any time before the exact time set for opening. If the Solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for opening. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid. The withdrawal and correction of Offers is governed by S.C. Code Section 11-35-1520 and Regulation 19-445.2085. [02-2A150-1]

II. INSTRUCTIONS TO OFFERORS -- B. SPECIAL INSTRUCTIONS

PREFERENCES - A NOTICE TO VENDORS (SEP 2009)

On June 16, 2009, the South Carolina General Assembly rewrote the law governing preferences available to in-state vendors, vendors using in-state subcontractors, and vendors selling in-state or US end products. This law appears in Section 11-35-1524 of the South Carolina Code of Laws. A summary of the new preferences is available at www.procurement.sc.gov/preferences. ALL THE PREFERENCES MUST BE CLAIMED AND ARE APPLIED BY LINE ITEM, REGARDLESS OF WHETHER AWARD IS MADE BY ITEM OR LOT. VENDORS ARE CAUTIONED TO CAREFULLY REVIEW THE STATUTE BEFORE CLAIMING ANY PREFERENCES. THE REQUIREMENTS TO QUALIFY HAVE CHANGED. IF YOU REQUEST A PREFERENCE, YOU ARE CERTIFYING THAT YOUR OFFER QUALIFIES FOR THE PREFERENCE YOU'VE CLAIMED. IMPROPERLY REQUESTING A PREFERENCE CAN HAVE SERIOUS CONSEQUENCES. [11-35-1524(E)(4)&(6)] [02-2B111-1]

PREFERENCES - SC/US END-PRODUCT (SEP 2009)

Section 11-35-1524 provides a preference to vendors offering South Carolina end-products or US end-products, if those products are made, manufactured, or grown in SC or the US, respectively. An end-product is the tangible project identified for acquisition in this solicitation, including all component parts in final form and ready for the use intended. The terms "made," "manufactured," and "grown" are defined by Section 11-35-1524(A). By signing your offer and checking the appropriate space(s) provided and identified on the bid schedule, you certify that the end-product(s) is either made, manufactured or grown in South Carolina, or other states of the United States, as applicable. Preference will be applied as required by law. Post award substitutions are prohibited. See "Substitutions Prohibited - End Product Preferences (Sep 2009)" provision. [02-2B112-1]

PREFERENCES - RESIDENT VENDOR PREFERENCE (SEP 2009)

To qualify for the RVP, you must maintain an office in this state. An office is a nonmobile place for the regular transaction of business or performance of a particular service which has been operated as such by the bidder for at least one year before the bid opening and during that year the place has been staffed for at least fifty weeks by at least two employees for at least thirty five hours a week each. In addition, you must either: (1) maintain at a location in South Carolina at the time of the bid an inventory of expendable items which are representative of the general type of commodities for which the award will be made and which have a minimum total value, based on the bid price, equal to the lesser of fifty thousand dollars [\$50,000] or the annual amount of the contract; or (2) be a manufacturer headquartered and having an annual payroll of at least one million dollars in South Carolina and the end product being sold is either made or processed from raw materials into a finished end product by that manufacturer or its affiliate (as defined in Section 1563 of the Internal Revenue Code). [02-2B114-1]

PROTEST - CPO - MMO ADDRESS (MAR 2024)

Any protest must be addressed to the Chief Procurement Officer, Materials Management Office, and submitted in writing.

(a) by email to protest-mmo@mmo.state.sc.us , or

(b) by post or delivery to 1201 Main Street, Suite 600, Columbia, SC 29201.

[02-2B122-2]

RESPONSIVENESS - CORRECTION OF NON-CONFORMITY (MAR 2024):

Offerors will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Officer. [02-2B127-1]

UNIT PRICES REQUIRED (JAN 2006)

Unit price to be shown for each item. [02-2B170-1]

III. SCOPE OF WORK/SPECIFICATIONS

PROJECT DESCRIPTION

It is the purpose and intent of the invitation to secure bids for HVAC equipment only for the Medford Center for Piedmont Technical College. Bids will be received until 10:00 AM local time, Tuesday, January 07, 2025.

GENERAL INFORMATION

ENGINEERING SPECIFICATIONS:

PACKAGED, SMALL-CAPACITY, AIR-CONDITIONING UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Two (2) 30-ton, packaged, small-capacity, rooftop mounted air-conditioning units.

1.2 ACTION SUBMITTALS

- A. Product Data: For each Air Handling Unit.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 2. Include rated capacities, dimensions, required clearances, characteristics, furnished specialties, and accessories.
 - 3. Include unit dimensions and weight.
 - 4. Include cabinet material, metal thickness, finishes, insulation, and accessories.
 - 5. Fans:
- a. Include certified fan-performance curves with system operating conditions indicated.
- b. Include certified fan-sound power ratings.
- c. Include fan construction and accessories.
- d. Include motor ratings, electrical characteristics, and motor accessories.
- Include certified coil-performance ratings with system operating conditions indicated.
- 7. Include filters with performance characteristics.
- 8. Include gas furnaces with performance characteristics.
- 9. Include dampers, including housings, linkages, and operators.
- B. Shop Drawings: For each packaged, small-capacity, air-conditioning units.
 - 1. Include plans, elevations, sections, and mounting details.
 - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 3. Include diagrams for power, signal, and control wiring.
- C. Delegated-Design Submittal: For AHU supports indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - 1. Include design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
 - 2. Wind and Seismic-Restraint Details: Detail fabrication and attachment of wind and seismic restraints and

snubbers. Show anchorage details and indicate quantity, diameter, and depth of penetration of anchors.

1.3 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For AHUs to include in emergency, operation, and maintenance manuals.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Filters: Two (2) sets of filters for each unit.
 - 2. Gaskets: One set for each access door.

1.5 WARRANTY

- A. Warranty: Manufacturer agrees to repair or replace components of outdoor, air-handling unit that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 5 years whole unit: parts, labor, compressor, and refrigerant.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by an NRTL, and marked for intended location and application.
- B. NFPA Compliance: Comply with NFPA 90A for design, fabrication, and installation of AHU and components.
- C. ASHRAE 62.1 Compliance: Applicable requirements in ASHRAE 62.1, Section 5 "Systems and Equipment" and Section 7 "Construction and Startup."
- D. ASHRAE 15 Compliance: For refrigeration system safety.
- E. ASHRAE/IES 90.1 Compliance: Applicable requirements in ASHRAE/IES 90.1, Section 6 "Heating, Ventilating, and Air-Conditioning."
- F. UL Compliance: Comply with UL 1995.
- G. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design mounting and restraints for AHU, including comprehensive engineering analysis.
 - 1. Design AHU supports to comply with wind and seismic performance requirements.
- H. Seismic Performance: AHU shall withstand the effects of earthquake motions determined according to ASCE 7.
 - 1. The term "withstand" means "the unit will remain in place without separation of any parts when subjected to the seismic forces specified."

2.2 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Daikin or comparable product by one of the following:
 - 1. AAON
 - 2. Trane
 - 3.Valent
- B. All comparable products must match the specified unit size, capacities and options included in this specification.
- C. Manufacturer must clearly define any exceptions made to Plans and Specifications. Any deviations in layout or arrangement shall be submitted to consulting engineer prior to bid date. Acceptance of deviation(s) from specifications shall be in the form of written approval from the consulting engineer. Mechanical Contractor is responsible for expenses that occur due to exceptions made.

2.3 GENERAL UNIT DESCRIPTION

- A. Unit performance and electrical characteristics shall be per the job schedule.
- B. Fabricate as detailed on prints and drawings:
 - 1. Return plenum / economizer section
 - 2. Filter section
 - 3. Cooling coil section
 - 4. Supply fan section
 - 5. Gas heating section.
- C. The complete unit shall be cETLus listed.
- D. The unit shall be ASHRAE 90.1-2022 compliant and labeled.
- E. Each unit shall be specifically designed for outdoor application and include a weatherproof cabinet. Each unit Shall be completely factory assembled and shipped in one piece. Packaged units shall be shipped fully charged with R-32 or R-454B Refrigerant and oil.
- F. The unit shall undergo a complete factory run test prior to shipment. The factory test shall include a refrigeration circuit run test, a unit control system operations checkout, a unit refrigerant leak test and a final unit inspection.
- G. All units shall have decals and tags to indicate caution areas and aid unit service. Unit nameplates shall be fixed to the main control panel door. Electrical wiring diagrams shall be attached to the control panels. Installation, operating and maintenance bulletins and start-up forms shall be supplied with each unit.
- H. Performance: All scheduled EER, IEER, capacities and face areas are minimum accepted values. All scheduled amps, kW, and HP are maximum accepted values that allow scheduled capacity to be met.

2.4 CABINET, CASING, AND FRAME

A. Panel construction shall be double-wall construction for all panels. All floor panels shall have a solid galvanized steel inner liner on the air stream side of the unit to protect insulation during service and maintenance. Insulation shall be a minimum of 2" thick with an R-value of 13 and shall be 2-part injected foam. Panel design shall include no exposed insulation edges. Unit cabinet shall be designed to operate at total static pressures up to 5.0 inches w.g.

- B. Unit construction for all walls, doors, ceiling and floor shall be double wall with a solid stainless-steel liner that provides a cleanable, corrosion resistant interior.
- C. Exterior surfaces shall be constructed of painted galvanized steel, for aesthetics and long-term durability. Paint finish will include a base primer with a high-quality polyester resin topcoat. Finished, unabraded panel surfaces shall be exposed to an ASTM B117 salt spray environment and exhibit no visible red rust at a minimum of 3,000 hours exposure. Finished, abraded surfaces shall be tested per ASTM D1654, having a mean scribe creepage not exceeding 1/16" at 1,000 hours minimum exposure to an ASTM B117 salt spray environment. Measurements of results shall be quantified using ASTM D1654 in conjunction with ASTM D610 and ASTM D714 to evaluate blister and rust ratings.
- D. Service doors shall be provided on the fan section, filter section, control panel section, and heating vestibule in order to provide user access to unit components. All service access doors shall be mounted on multiple, stainless-steel hinges and shall be secured by a latch system. Removable service panels secured by multiple mechanical fasteners are not acceptable.
- E. The unit base frame shall be constructed of pre-painted steel to prevent base rail corrosion.

2.5 OUTDOOR / RETURN AIR SECTION

- A. Unit shall be provided with an outdoor air economizer section. The economizer section shall include outdoor, return, and exhaust air dampers. The economizer operation shall be fully integral to the mechanical cooling and allow up to 100% of mechanical cooling if needed to maintain the cooling discharge air temperature. The outdoor air hood shall be factory installed and constructed from galvanized steel finished with the same durable paint finish as the main unit. The hood shall include moisture eliminator filters to drain water away from the entering air stream. The outside and return air dampers shall be sized to handle 100% of the supply air volume. The dampers shall be parallel blade design. Damper blades shall be gasketed with side seals to provide an air leakage rate of 1.5 cfm / square foot of damper area at 1" differential pressure in according with testing defined in AMCA 500. A modulating exhaust damper shall be provided to exhaust air out of the back of the unit. A bird screen shall be provided to prevent infiltration of rain and foreign materials. Exhaust damper blades shall be lined with vinyl gasketing on contact edges. Control of the dampers shall be by a factory installed direct coupled actuator. Damper actuator shall be of the modulating, spring return type. A comparative enthalpy control shall be provided to sense and compare enthalpy in both the outdoor and return air streams to determine if outdoor air is suitable for "free" cooling. If outdoor air is suitable for "free" cooling, the outdoor air dampers shall modulate in response to the unit's temperature control system.
- B. Outdoor air damper blades shall be fully gasketed and side sealed and arranged vertically in the hood. Damper leakage shall be less than 1.5 CFM/Sq. Ft. of damper area at 1.0-inch static pressure differential. Leakage rate to be tested in accordance with AMCA Standard 500. Damper blades shall be operated from multiple sets of linkages mounted on the leaving face of the dampers. Control of the dampers shall be from a factory installed actuator. Damper actuator shall be of the modulating type.
- C. Unit is provided with a factory installed and tested outdoor air monitor, with +/- 15% accuracy down to 40 cfm/ton, and a field installed Duct/Space mounted C02 sensor. Outside air damper position will modulate between the Demand Control Ventilation Limit (minimum position setpoint) and the Ventilation Limit (maximum non-economizer position setpoint) to satisfy the space requirements. Damper position will be controlled to the greater of the two command signals, either minimum outside air flow or space IAQ (CO2).

2.6 FILTERS

- A. Unit shall be provided with a draw-through filter section. The filter rack shall be designed to accept a 2" prefilter and a 4" final filter. The unit design shall have a hinged access door for the filter section. The manufacturer shall ship the rooftop unit with 2" MERV-8 and 4" MERV-13 construction filters. The contractor shall furnish and install, at building occupancy, the final set of filters per the contract documents.
- B. Unit shall be provided with a through the wall minihelic filter gauge that displays filter loading on the exterior of the unit.

2.7 COOLING COIL

- A. The indoor coil section shall be installed in a draw through configuration, upstream of the supply air fan. The coil section shall be complete with a factory piped cooling coil and an ASHRAE 62.1 compliant double sloped drain pan.
- B. The direct expansion (DX) cooling coils shall be fabricated of seamless high efficiency copper tubing that is mechanically expanded into high efficiency aluminum plate fins. Coils shall be a multi-row, staggered tube design with a minimum of 3 rows. All cooling coils shall have an interlaced coil circuiting that keeps the full coil face active at all load conditions. All coils shall be factory leak tested with high pressure air under water.
- C. The cooling coil shall have an electronic controlled expansion valve. The unit controller shall control the expansion valve to maintain liquid subcooling and the superheat of the refrigerant system.
- D. The refrigerant suction lines shall be fully insulated from the expansion valve to the compressors.
- E. The drain pan shall be stainless steel and positively sloped. The slope of the drain pan shall be in two directions and comply with ASHRAE Standard 62.1. The drain pan shall have a minimum slope of 1/8" per foot to provide positive draining. The drain pan shall extend beyond the leaving side of the coil. The drain pan shall have a threaded drain connection extending through the unit base.
- F. A drain pan overflow safety shall shut off the unit and issue a warning before overflow occurs.

2.8 HOT GAS REHEAT

- A. Unit shall be equipped with a fully modulating hot gas reheat coil with hot gas coming from the unit condenser.
- B. Hot gas reheat coil shall be a Micro Channel design. The aluminum tube shall be a micro channel design with high efficiency aluminum fins. Fins shall be brazed to the tubing for a direct bond. The capacity of the reheat coil shall allow for a 20°F temperature rise at all operating conditions.
- C. The modulating hot gas reheat systems shall allow for independent control of the cooling coil leaving air temperature and the reheat coil leaving air temperature. The cooling coil and reheat coil leaving air temperature setpoints shall be adjustable through the unit controller. During the dehumidification cycle the unit shall be capable of 100% of the cooling capacity. The hot gas reheat coil shall provide discharge temperature control within +/- 2°F.
- D. Each coil shall be factory leak tested with high-pressure air under water.

2.9 SUPPLY FAN

- A. Supply fan shall be a single width, single inlet (SWSI) airfoil centrifugal fan. The fan wheel shall be Class II construction with fan blades that are continuously welded to the hub plate and end rim. The supply fan shall be a direct drive fan mounted to the motor shaft. Belts and sheaves are not acceptable due to the additional maintenance.
- B. Fan assembly shall employ a solid steel fan shaft. Heavy-duty pillow block type, self- aligning, grease lubricated ball bearings shall be used. Bearings shall be sized to provide a L-50 life at 250,000 hours. The entire fan assembly shall be isolated from the fan bulkhead with a flexible collar and mounted on 1" spring isolators.
- C. All fan assemblies shall be statically and dynamically balanced at the factory, including a final trim balance, prior to shipment.
- D. The motor shall be T Frame and open drip proof. Overload protection and speed control is provided by the factory installed VFD unit controller. The motor shall have phase failure protection and prevent the motor from operation in the event of a loss of phase. Motors shall be premium efficiency.
- E. The supply fan shall be capable of airflow modulation from 30% to 100% of the scheduled designed airflow. The fan shall not operate in a state of surge at any point within the modulation range.
- F. All supply fans shall include a factory installed flow measuring station. Airflow needs to be readable through the unit controller.

2.10 VARIABLE AIR VOLUME CONTROLS

- A. An electronic variable frequency drive shall be provided for the supply air fan. Each drive shall be factory installed out of the air stream in a conditioned cabinet. Drives shall meet UL Standard 95-5V. The completed unit assembly shall be listed by a recognized safety agency, such as ETL. Drives are to be accessible through a hinged door assembly. Mounting arrangements that expose drives to high temperature unfiltered ambient air are not acceptable.
- B. The unit manufacturer shall install all power and control wiring.
- C. The supply air fan drive output shall be controlled by the factory installed main unit control system and drive status and operating speed shall be monitored and displayed at the main unit control panel.

2.11 HEATING SECTION

- A. The unit shall include a natural gas heating section. The gas furnace design shall be one natural gas fired heating module factory installed downstream of the supply air fan in the heat section. The heating module shall be a tubular design with in-shot gas burners.
- B. The module shall be complete with furnace controller and control valve capable of 12:1 modulating operation.
- C. The heat exchanger tubes shall be constructed of stainless steel.
- D. The module shall have an induced draft fan that will maintain a negative pressure in the heat exchanger tubes for the removal of the flue gases.
- E. Each burner module shall have two flame roll-out safety protection switches and a high temperature limit switch

that will shut the gas valve off upon detection of improper burner manifold operation. The induced draft fan shall have an airflow safety switch that will prevent the heating module from turning on in the event of no airflow in the flue chamber.

- F. The factory installed DDC unit control system shall control the gas heat module. Field installed heating modules shall require a field ETL certification. The manufacturer's unit ETL certification shall cover the complete unit including the gas heating modules.
- G. The coil shall have freeze protection and shall be controlled by the unit DDC controller. With the detection of a freeze condition the heating coil valve shall be driven fully open. The unit controller shall indicate an alarm.
- H. Coil shall be factory leak tested with high pressure air under water.

2.12 CONDENSING SECTION

- A. Outdoor coils shall be cast aluminum, micro-channel coils. Plate fins shall be protected and brazed between adjoining flat tubes such that they shall not extend outside the tubes. A sub-cooling coil shall be an integral part of the main outdoor air coil. Each outdoor air coil shall be factory leak tested with high-pressure air under water.
- B. Outdoor coils shall have seamless copper tubes, mechanically bonded into aluminum plate-type fins. The fins shall have full drawn collars to completely cover the tubes. A sub-cooling coil shall be an integral part of the main outdoor air coil. Each outdoor air coil shall be factory leak tested with high-pressure air under water.
- C. Fan motors shall be an ECM type motor for proportional control. The unit controller shall proportionally control the speed of the condenser fan motors to maintain the head pressure of the refrigerant circuit in ambient conditions up to 125°F. Mechanical cooling shall be provided to 0°F. The motor shall include thermal overload protection and protect the motor in the case of excessive motor temperatures. The motor shall have phase failure protection and prevent the motor from operation in the event of a loss of phase.
- D. The condenser fan shall be low noise blade design. Fan blade design shall be a dynamic profile for low tip speed. Fan blade shall be of a composite material.
- E. The unit shall have scroll compressors. One of the compressors shall be an inverter compressor providing full proportional control from 15-100% load. The unit controller shall control the speed of the compressor to maintain the discharge air temperature. The inverter compressor shall have a separate oil pump and an oil separator for each compressor that routes oil back to the compressor instead of through the discharge line.
- F. Pressure transducers shall be provided for the suction pressure and head pressure. Temperature sensor shall be provided for the suction temperature and the refrigerant discharge temperature of the compressors. All of the above devices shall be an input to the unit controller and the values be displayed at the unit controller.
- G. The refrigerant circuit shall have a bypass valve between the suction and discharge refrigerant lines for low head pressure compressor starting and increased compressor reliability. When there is a call for mechanical cooling the bypass valve shall open to equalizing the suction and discharge pressures. When pressures are equalized the bypass valve shall close and the compressor shall be allowed to start.
- H. Each circuit shall be dehydrated, and factory charged with R-32 or R-454B Refrigerant and oil.

2.13 ELECTRICAL RATINGS AND CONNECTIONS

A. Unit wiring shall comply with NEC requirements and with all applicable UL standards. All electrical components

shall be UL recognized where applicable. All wiring and electrical components provided with the unit shall be number and color-coded and labeled according to the electrical diagram provided for easy identification. The unit shall be provided with a factory wired weatherproof control panel. Unit shall have a single point power terminal block for main power connection. A terminal board shall be provided for low voltage control wiring. Branch short circuit protection, 115-volt control circuit transformer and fuse, system switches, and a high temperature sensor shall also be provided with the unit. Each compressor and condenser fan motor shall be furnished with contactors and inherent thermal overload protection. Supply fan motors shall have contactors and external overload protection. Knockouts shall be provided in the bottom of the main control panels for field wiring entrance.

- B. A GFI receptacle shall be unit mounted. The receptacle shall be powered by a factory installed and wired 120V, 15-amp power supply. The power supply shall be wired to the line side of the unit's main disconnect, so the receptacle is powered when the main unit disconnect is off. This option shall include a GFI receptacle, 2.0 KVA transformer and a branch circuit disconnect. The electrical circuit shall be complete with primary and secondary overload protection.
- C. A single non-fused disconnect switch shall be provided for disconnecting electrical power at the unit. Disconnect switches shall be mounted internally to the control panel and operated by an externally mounted handle.

2.14 UNIT CONTROLS

- A. Provide a complete integrated microprocessor based Direct Digital Control (DDC) system to control all unit functions including temperature control, scheduling, monitoring, unit safety protection, including compressor minimum run and minimum off times, and diagnostics. This system shall consist of all required temperature sensors, pressure sensors, controller and keypad/display operator interface. All MCBs and sensors shall be factory mounted, wired and tested.
- B. The DDC control system shall permit starting and stopping of the unit locally or remotely. The control system shall be capable of providing a remote alarm indication. The unit control system shall provide for outside air damper actuation, emergency shutdown, remote heat enable/disable, remote cool enable/disable, heat indication, cool indication, and fan operation.
- C. The DDC control system shall permit starting and stopping of the unit locally or remotely. The control system shall be capable of providing a remote alarm indication. The unit control system shall provide for outside air damper actuation, emergency shutdown, remote heat enable/disable, remote cool enable/disable, heat indication, cool indication, and fan operation.
- D. All digital inputs and outputs shall be protected against damage from transients or incorrect voltages. All field wiring shall be terminated at a separate, clearly marked terminal strip.
- E. The DDC controller shall have a built-in time schedule. The schedule shall be programmable from the unit keypad interface. The schedule shall be maintained in nonvolatile memory to ensure that it is not lost during a power failure. There shall be one start/stop per day and a separate holiday schedule. The controller shall accept up to sixteen holidays each with up to a 5-day duration. Each unit shall also have the ability to accept a time schedule via BAS network communications.
- F. The keypad interface shall allow convenient navigation and access to all control functions. The unit keypad/display character format shall be 4 lines x 20 characters. All control settings shall be password protected against unauthorized changes. For ease of service, the display format shall be English language readout. Coded formats with look-up tables will not be accepted. The user interaction with the display shall provide the following information as a minimum:

- 1. Return air temperature
- 2. Discharge air temperature
- 3. Outdoor air temperature
- 4. Space air temperature
- 5. Outdoor enthalpy, high/low
- 6. Compressor suction temperature and pressure
- 7. Compressor head pressure and temperature
- 8. Expansion valve position
- 9. Condenser fan speed
- 10. Inverter compressor speed
- 11. Dirty filter indication
- 12. Airflow verification
- 13. Cooling status
- 14. Control temperature (Changeover).
- 15. VAV box output status
- 16. Cooling status/capacity
- 17. Unit status
- 18. All time schedules
- 19. All time schedules
- 20. Previous alarms with time and date
- 21. Optimal start
- 22. Supply fan and exhaust fan speed
- 23. System operating hours
- G. The user interaction with the keypad shall provide the following:
 - 1. Controls mode.
 - 2. Cooling and heating change-over temperature with deadband
 - 3. Cooling discharge air temperature (DAT)
 - 4. Supply reset options
 - 5. Temperature alarm limits
 - 6. Lockout control for compressors
 - 7. Compressor interstage timers
 - 8. Night setback and setup space temperature
 - 9. Building static pressure
 - 10. Economizer changeover
 - 11. Currently time and date
 - 12. Tenant override time
 - 13. Occupied/unoccupied time schedule
 - 14. One event schedule
 - 15. Holiday dates and duration
 - 16. Adjustable set points
 - 17. Service mode
- H. If the unit is to be programmed with a night setback or setup function, an optional space sensor shall be provided. Space sensors shall be available to support field selectable features. Sensor options shall include:
 - 1. Zone sensor with tenant override switch
 - 2. Zone sensor with tenant override switch plus heating and cooling set point adjustment. (Space Comfort Control systems only)
- I. To increase the efficiency of the cooling system the DDC controller shall include a discharge air temperature

reset program for part load operating conditions. The discharge air temperature shall be controlled between a minimum and a maximum discharge air temperature (DAT) based on one of the following inputs:

- 1. Airflow
- 2. Outside air temperature
- 3. Space temperature
- 4. Return air temperature
- 5. External signal of 1-5 vdc
- 6. External signal of 0-20 mA
- 7. Network signal
- J. Units shall contain eight programmable input/output control ports to be controlled using the connected building automation system. These ports shall be input/output capable of utilizing the following signal types:
 - 1. mA signal (0-20 mA Adjustable)
 - 2. VDC (0-10 VDC Adjustable)
 - 3. 10k Thermistor

PART 3 - EXECUTION

3.1 STARTUP SERVICE

A. Factory-authorized service representative to perform startup service no later than 6 months after delivery.

3.2 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: No longer than 6-months after delivery, A factory- authorized service representative shall test and inspect components, assemblies, and equipment installations, including connections.
- B. A factory-authorized service representative shall perform the following tests and inspections no longer than 6-months after delivery:
 - 1. After the AHU has been installed and after electrical circuitry has been energized, test units for compliance with requirements.
 - 2. Inspect for and remove shipping bolts, blocks, and tie-down straps.
 - 3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 - 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- C. AHU will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.3 DEMONSTRATION

- A. A factory-authorized service representative shall train the Owner's maintenance personnel to adjust, operate, and maintain AHUs no longer than 1-month following unit test and inspection report approval by the owner/engineer.
- B. Provide preventative maintenance service agreement for at least a 12-month period after unit installation Including at minimum 2 equipment inspections per OEM recommendations.

C. The manufacturer shall furnish complete submittal wiring diagrams of the package unit as applicable for field maintenance and service.

END OF SECTION

Schedule:

Contractor shall submit shop drawings within 10 days of receipt of Purchase Order/Contract.

SEE BIDDING SCHEDULE

See Bidding Schedule [03-3005-1]

DELIVERY/PERFORMANCE LOCATION -- SPECIFIED (JAN 2006)

After award, all deliveries shall be made and all services provided to the following address, unless otherwise specified:

Piedmont Technical College Facilities Management – Building M 620 North Emerald Road Greenwood, SC 29646

[03-3030-1]

DELIVERY DATE – (MODIFIED)

Provide anticipated delivery schedule. Delivery schedule will be confirmed by PTC at "Pre-performance Meeting" at time of award.

QUALITY -- NEW (JAN 2006)

All items must be new. [03-3060-1]

IV. INFORMATION FOR OFFERORS TO SUBMIT

INFORMATION FOR OFFERORS TO SUBMIT -- GENERAL (MAR 2015)

You shall submit a signed Cover Page and Page Two. Your offer should include all other information and documents requested in this part and in parts II.B. Special Instructions; III. Scope of Work; V. Qualifications; VIII. Bidding Schedule/Price Proposal; and any appropriate attachments addressed in Part IX. Attachments to Solicitations. You should submit a summary of all insurance policies you have or plan to acquire to comply with the insurance requirements stated herein, if any, including policy types; coverage types; limits, sub-limits, and deductibles for each policy and coverage type; the carrier's A.M. Best rating; and whether the policy is written on an occurrence or claims-made basis. [04-4010-2]

MINORITY PARTICIPATION (APR 2024):

Is the bidder a South Carolina Certified Minority Business? [] Yes [] No						
Is the bidder a Minority Business certified by another governmental entity? [] Yes [] No						
If so, please list the certifying governmental entity:						
Will any of the work under this contract be performed by a SC certified Minority Business as a subcontractor? [] Yes [] No						
If so, what percentage of the total value of the contract will be performed by a SC certified Minority Business as a						
subcontractor?						
Will any of the work under this contract be performed by a minority business certified by another governmental entity as						
subcontractor? [] Yes [] No						
If so, what percentage of the total value of the contract will be performed by a minority business certified by another						
governmental entity as a subcontractor?						
If a certified Minority Business is participating in this contract, please indicate all categories for which the Business is						
certified:						
[] Traditional minority						
[] Traditional minority, but female						
[] Women (Caucasian females)						
[] Hispanic minorities						
[] DOT referral (Traditional minority)						
[] DOT referral (Caucasian female)						
[] Temporary certification						
[] SBA 8 (a) certification referral						
[] Other minorities (Native American, Asian, etc.)						

(If more than one minority contractor will be utilized in the performance of this contract, please provide the information above for each minority business.)

The Department of Administration, Division of Small and Minority Business Contracting and Certification, publishes a list of certified minority firms. The Minority Business Directory is available at the following URL: http://smbcc.sc.gov (.) [04-4015-4]

V. QUALIFICATIONS

QUALIFICATIONS OF OFFEROR (MAR 2015)

(1) To be eligible for award, you must have the capability in all respects to perform fully the contract requirements and the integrity and reliability which will assure good faith performance. We may also consider a documented commitment from a satisfactory source that will provide you with a capability. We may consider information from any source at any time prior to award. We may elect to consider (i) key personnel, any predecessor business, and any key personnel of any predecessor business, including any facts arising prior to the date a business was established, and/or (ii) any subcontractor you identify. (2) You must promptly furnish satisfactory evidence of responsibility upon request. Unreasonable failure to supply requested information is grounds for rejection. (3) Corporate subsidiaries are cautioned that the financial capability of an affiliated or parent company will not be considered in determining financial capability; however, we may elect to consider any security, e.g., letter of credit, performance bond, parent-company corporate guaranty, that you offer to provide. Instructions and forms to help assure acceptability are posted on procurement.sc.gov, link to "Standard Clauses & Provisions." [05-5005-2]

VI. AWARD CRITERIA

AWARD CRITERIA -- BIDS (JAN 2006)

Award will be made to the lowest responsible and responsive bidder(s). [06-6020-1]

AWARD TO ONE OFFEROR (JAN 2006)

Award will be made to one Offeror. [06-6040-1]

CALCULATING THE LOW BID

The quantity will be multiplied by the unit price to determine the extended price. [06-6050-1]

COMPETITION FROM PUBLIC ENTITIES (JAN 2006)

If a South Carolina governmental entity submits an offer, the Procurement Officer will, when determining the lowest offer, add to the price provided in any offers submitted by non-governmental entities a percentage equivalent to any applicable sales or use tax. S.C. Code Ann. Regs 117-304.1 (Supp. 2004). [06-6057-1]

UNIT PRICE GOVERNS (JAN 2006)

In determining award, unit prices will govern over extended prices unless otherwise stated. [06-6075-1]

VII. TERMS AND CONDITIONS -- A. GENERAL

ASSIGNMENT, NOVATION, AND CHANGE OF NAME, IDENTITY, OR STRUCTURE (FEB 2015)

(a) Contractor shall not assign this contract, or its rights, obligations, or any other interest arising from this contract, or delegate any of its performance obligations, without the express written consent of the responsible procurement officer. The foregoing restriction does not apply to a transfer that occurs by operation of law (e.g., bankruptcy; corporate reorganizations and consolidations, but not including partial asset sales). Notwithstanding the foregoing, contractor may assign monies receivable under the contract provided that the state shall have no obligation to make payment to an assignee until thirty days after contractor (not the assignee) has provided the responsible procurement officer with (i) proof of the assignment, (ii) the identity (by contract number) of the specific state contract to which the assignment applies, and (iii) the name of the assignee and the exact address or account information to which assigned payments should be made. (b) If contractor amends, modifies, or otherwise changes its name, its identity (including its trade name), or its corporate, partnership or other structure, or its FEIN, contractor shall provide the procurement officer prompt written notice of such change. (c) Any name change, transfer, assignment, or novation is subject to the conditions and approval required by Regulation 19-445.2180, which does not restrict transfers by operation of law. [07-7A004-2]

BANKRUPTCY - GENERAL (FEB 2015)

(a) Notice. In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to the Using Governmental Unit. This notification shall be furnished within two (2) days of the initiation of the proceedings relating to the bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of all State contracts against which final payment has not been made. This obligation remains in effect until final payment under this Contract. (b) Termination. This contract is voidable and subject to immediate termination by the State upon the contractor's insolvency, including the filing of proceedings in bankruptcy. [07-7A005-2]

CHOICE-OF-LAW (JAN 2006)

The Agreement, any dispute, claim, or controversy relating to the Agreement, and all the rights and obligations of the parties shall, in all respects, be interpreted, construed, enforced and governed by and under the laws of the State of South Carolina, except its choice of law rules. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by the solicitation. [07-7A010-1]

CONTRACT AWARDED PURSUANT TO CODE (MAR 2024):

Any contract resulting from this solicitation is formed pursuant to the South Carolina Consolidated Procurement Code and is deemed to incorporate all applicable provisions thereof and the ensuing regulations. See also clause titled "Code of Laws Available." [07-7A012-1]

CONTRACT DOCUMENTS & ORDER OF PRECEDENCE (MAY 2024)

- (a) Any contract resulting from this solicitation shall consist of the following documents: (1) the solicitation, as amended, (2) your offer, as amended, (3) any statement reflecting the State's final acceptance (a/k/a "award"), and (4) purchase orders. These documents shall be read to be consistent and complementary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above.
- (b) The terms and conditions of documents (1) through (4) above shall apply notwithstanding any additional or different terms and conditions in any other document, including without limitation, (i) any instrument submitted by the State other than a purchase order, (ii) any invoice or other document submitted by Contractor, or (iii) any privacy policy, terms of use, or end user agreement. Except as otherwise allowed by the solicitation, the terms and conditions of all such documents and any purchase orders shall be void and of no effect.
- (c) No contract, license, or other agreement containing contractual terms and conditions will be signed by any Using Governmental Unit. Any document signed or otherwise agreed to by persons other than the Procurement Officer shall be void and of no effect. [07-7A015-2]

DISCOUNT FOR PROMPT PAYMENT (JAN 2006)

- (a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a discount for prompt payment in conjunction with the offer, offerors awarded contracts may include discounts for prompt payment on individual invoices.
- (b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office receives a proper invoice, provided the state annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day.

 [07-7A020-1]

DISPUTES (MAY 2024)

(1) Choice-of-Forum. All disputes, claims, or controversies relating to the Agreement shall be resolved exclusively by the appropriate Chief Procurement Officer in accordance with Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws, or in the absence of jurisdiction, only in the Court of Common Pleas for, or a federal court located in, Richland County, State of South Carolina. Contractor agrees that any act by the government regarding the Agreement is not a waiver of either the government's sovereign immunity or the government's immunity under the Eleventh Amendment of the United States Constitution. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by the solicitation. The government does not consent to the jurisdiction of any judicial or administrative tribunals in any other state or to any forum of alternative dispute resolution. (2) Service of Process. Contractor consents that any papers, notices, or process necessary or proper for the initiation or continuation of any disputes, claims, or controversies relating to the Agreement; for any court action in connection therewith; or for the entry of judgment on any award made, may be served on Contractor by certified mail (return receipt requested) addressed to Contractor at the address provided as the Notice Address on Page Two or by personal service or by any other manner that is permitted by law, in or outside South Carolina. Notice by certified mail is deemed duly given upon deposit in the United States mail. [07-7A025-2]

EQUAL OPPORTUNITY (JAN 2006)

Contractor is referred to and shall comply with all applicable provisions, if any, of Title 41, Part 60 of the Code of Federal Regulations, including but not limited to Sections 60-1.4, 60-4.2, 60-4.3, 60-250.5(a), and 60-741.5(a), which are hereby incorporated by reference. [07-7A030-1]

FALSE CLAIMS (JAN 2006)

According to the S.C. Code of Laws Section 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime. [07-7A035-1]

FIXED PRICING REQUIRED (JAN 2006)

Any pricing provided by contractor shall include all costs for performing the work associated with that price. Except as otherwise provided in this solicitation, contractor's price shall be fixed for the duration of this contract, including option terms. This clause does not prohibit contractor from offering lower pricing after award. [07-7A040-1]

NO INDEMNITY OR DEFENSE (FEB 2015)

Any term or condition is void to the extent it requires the State to indemnify, defend, or pay attorney's fees to anyone for any reason. [07-7A045-2]

NOTICE (MAY 2024)

(A) After award, any notices shall be in writing and shall be deemed duly given (1) upon actual delivery, if delivery is by hand, (2) upon receipt by the transmitting party of automated confirmation or answer back from the recipient's device if delivery is by telex, telegram, facsimile, or electronic mail, or (3) ten days after deposit into the United States mail, if postage is prepaid, a return receipt is requested, and either registered or certified mail is used. (B) Notice to contractor shall be to the address identified as the Notice Address on Page Two. Notice to the state shall be to the Procurement Officer's address on the Cover Page. Either party may designate a different address for notice by giving notice in accordance with this paragraph. [07-7A050-2]

OPEN TRADE (JUN 2015)

During the contract term, including any renewals or extensions, Contractor will not engage in the boycott of a person, or an entity based in or doing business with a jurisdiction with whom South Carolina can enjoy open trade, as defined in SC Code Section 11-35-5300. [07-7A053-1]

PAYMENT and INTEREST (FEB 2021)

- (a) The State shall pay the Contractor, after the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified herein, including the purchase order, payment shall not be made on partial deliveries accepted by the Government.
- (b) Unless otherwise provided herein, including the purchase order, payment will be made by electronic funds transfer (EFT). See clause titled "EFT Information."
- (c) Notwithstanding any other provision, payment shall be made in accordance with S.C. Code Section 11-35-45, or Chapter 6 of Title 29 (real property improvements) when applicable, which provides the Contractor's exclusive means of recovering any type of interest from the Owner. Contractor waives imposition of an interest penalty unless the invoice submitted specifies that the late penalty is applicable. Except as set forth in this paragraph, the State shall not be liable for the payment of interest on any debt or claim arising out of or related to this contract for any reason. (d) Amounts due to the State shall bear interest at the rate of interest established by the South Carolina Comptroller General pursuant to Section 11-35-45 ("an amount not to exceed fifteen percent each year"), as amended, unless otherwise required by Section 29-6-30. (e) Any other basis for interest, including but not limited to general (pre- and post-judgment) or specific interest statutes, including S.C. Code Ann. Section 34-31-20, are expressly waived by both parties. If a court, despite this agreement and waiver, requires that interest be paid on any debt by either party other than as provided by items (c) and (d) above, the parties further agree that the applicable interest rate for any given calendar year shall be the lowest prime rate as listed in the first edition of the Wall Street Journal published for each year, applied as simple interest without compounding. (f) The State shall have all of its common law, equitable and statutory rights of set-off.[07-7A055-4]

PUBLICITY (JAN 2006)

Contractor shall not publish any comments or quotes by State employees or include the State in either news releases or a published list of customers, without the prior written approval of the Procurement Officer. [07-7A060-1]

PURCHASE ORDERS (JAN 2006)

Contractor shall not perform any work prior to the receipt of a purchase order from the using governmental unit. The using governmental unit shall order any supplies or services to be furnished under this contract by issuing a purchase order. Purchase orders may be used to elect any options available under this contract, e.g., quantity, item, delivery date, payment method, but are subject to all terms and conditions of this contract. Purchase orders may be electronic. No particular form is required. An order placed pursuant to the purchasing card provision qualifies as a purchase order. [07-7A065-1]

SURVIVAL OF OBLIGATIONS (JAN 2006)

The Parties' rights and obligations which, by their nature, would continue beyond the termination, cancellation, rejection, or expiration of this contract shall survive such termination, cancellation, rejection, or expiration, including, but not limited to, the rights and obligations created by the following clauses: Indemnification - Third Party Claims, Intellectual Property Indemnification, and any provisions regarding warranty or audit. [07-7A075-1]

TAXES (JAN 2006)

Any tax the contractor may be required to collect or pay upon the sale, use or delivery of the products shall be paid by the State, and such sums shall be due and payable to the contractor upon acceptance. Any personal property taxes levied after delivery shall be paid by the State. It shall be solely the State's obligation, after payment to contractor, to challenge the applicability of any tax by negotiation with, or action against, the taxing authority. Contractor agrees to refund any tax collected, which is subsequently determined not to be proper and for which a refund has been paid to contractor by the taxing authority. In the event that the contractor fails to pay, or delays in paying, to any taxing authorities, sums paid by the State to contractor, contractor shall be liable to the State for any loss (such as the assessment of additional interest) caused by virtue of this failure or delay. Taxes based on Contractor's net income or assets shall be the sole responsibility of the contractor. [07-7A080-1]

TERMINATION DUE TO UNAVAILABILITY OF FUNDS (JAN 2006)

Payment and performance obligations for succeeding fiscal periods shall be subject to the availability and appropriation of funds therefor. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period, the contract shall be canceled. In the event of a cancellation pursuant to this paragraph, contractor will be reimbursed the resulting unamortized, reasonably incurred, nonrecurring costs. Contractor will not be reimbursed any costs amortized beyond the initial contract term. [07-7A085-1]

THIRD PARTY BENEFICIARY (JAN 2006)

This Contract is made solely and specifically among and for the benefit of the parties hereto, and their respective successors and assigns, and no other person will have any rights, interest, or claims hereunder or be entitled to any benefits under or on account of this Contract as a third party beneficiary or otherwise. [07-7A090-1]

WAIVER (JAN 2006)

The State does not waive any prior or subsequent breach of the terms of the Contract by making payments on the Contract, by failing to terminate the Contract for lack of performance, or by failing to strictly or promptly insist upon any term of the Contract. Only the Procurement Officer has actual authority to waive any of the State's rights under this Contract. Any waiver must be in writing. [07-7A095-1]

VII. TERMS AND CONDITIONS -- B. SPECIAL

CISG (JAN 2006)

The parties expressly agree that the UN Convention on the International Sale of Goods shall not apply to this agreement. [07-7B030-1]

DEFAULT - SHORT FORM (FEB 2015)

The state may terminate this contract, or any part hereof, for cause in the event of any default by the contractor, or if the

contractor fails to comply with any material contract terms and conditions, or fails to provide the state, upon request, with adequate assurances of future performance. In the event of termination for cause, the state shall not be liable to the contractor for any amount for supplies or services not accepted, and the contractor shall be liable to the state for any and all rights and remedies provided by law. If it is determined that the state improperly terminated this contract for default, such termination shall be deemed a termination for convenience. [07-7B080-2]

LIMITATION OF LIABILITY -- SINGLE AGENCY (MAY 2020)

- (1) Contractor's liability for damages to the Using Governmental Unit shall not exceed [a dollar amount].
- (2) The parties waive claims against each other for (i) exemplary or punitive damages and (ii) special or consequential damages.
- (3) The foregoing limitations shall not apply: (a) to claims for physical damage to real or tangible personal property, (b) to claims regarding bodily injury, sickness, disease or death, (c) to claims arising from reckless or intentional misconduct, (d) to amounts due or obligations under a clause (regardless of how named) providing for liquidated damages, or if such a clause is ruled unenforceable as a penalty, (e) to amounts due or obligations under the following clauses, if included: (i) Indemnification-Third Party Claims-General, (ii) Indemnification-Intellectual Property, (iv) Information Security Safeguarding Requirements, (v) Information Security-Location of Data, (vi) Information Use and Disclosure Standards, or (vii) Service Provider Security Representations; (f) to amounts due or obligations under a clause imposing a duty to defend or indemnify, or (g) to any loss or claim to the extent the loss or claim is covered by a policy of insurance maintained, or required by this contract to be maintained, by contractor.
- (4) The absence in any subcontract of a similar clause limiting contractor's liability shall not effectively increase the obligation of the Using Governmental Unit beyond what it would have been had the subcontract contained such a clause.
- (5) The Using Governmental Unit's liability for damages, if any, shall in no event exceed [*a dollar amount*]. Nothing herein shall be construed to waive any law or clause regarding the availability or appropriation of funds, sovereign immunity, or any other immunity, restriction, or limitation on payment or recovery provided by law.
- (6) The State of South Carolina's total liability for any obligation under any clause imposing any duty of confidentiality or non-disclosure shall not exceed an amount equal to fifty thousand dollars. [07-7B117-1]

MATERIAL AND WORKMANSHIP (JAN 2006)

Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended. [07-7B120-1]

SHIPPING / RISK OF LOSS (JAN 2006)

F.O.B. Destination. Destination is the shipping dock of the Using Governmental Unit's designated receiving site, or other location, as specified herein. (See Delivery clause) [07-7B220-1]

SUBSTITUTIONS PROHIBITED - END PRODUCT PREFERENCES (SEP 2009)

If you receive the award as a result of the South Carolina end product or United States end product preference, you may not substitute a nonqualifying end product for a qualified end product. If you violate this provision, the State may terminate your contract for cause, and you may be debarred. In addition, you shall pay to the State an amount equal to twice the difference between the price paid by the State and your evaluated price for the item for which you delivered a substitute. [11-35-1534(B)(4)] [07-7B236-1]

TERM OF CONTRACT -- EFFECTIVE DATE / INITIAL CONTRACT PERIOD (JAN 2006)

The effective date of this contract is the first day of the Maximum Contract Period as specified on the final statement of award. The initial term of this agreement is 0years, 3months, 0days from the effective date. Regardless, this contract expires no later than the last date stated on the final statement of award. [07-7B240-1]

TERMINATION FOR CONVENIENCE -- SHORT FORM (JAN 2006)

The Procurement Officer may terminate this contract in whole or in part, for the convenience of the State. In such a termination, the Procurement Officer may require the contractor to transfer title and deliver to the State in the manner and to the extent directed by the Procurement Officer: (a) any completed supplies; and (b) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing material") as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract. Upon such termination, the contractor shall (a) stop work to the extent specified, (b) terminate any subcontracts as they relate to the terminated work, and (c) be paid the following amounts without duplication, subject to the other terms of this contract: (i) contract prices for supplies or services accepted under the contract, (ii) costs incurred in performing the terminated portion of the work, and (iii) any other reasonable costs that the contractor can demonstrate to the satisfaction of the State, using its standard record keeping system, have resulted from the termination. The contractor shall not be paid for any work performed or costs incurred that reasonably could have been avoided. As a condition of payment, contractor shall submit within three months of the effective date of the termination a claim specifying the amounts due because of the termination. The absence of an appropriate termination for convenience clause in any subcontract shall not increase the obligation of the state beyond what it would have been had the subcontract contained such a clause. [07-7B260-1]

WARRANTY -- STANDARD (JAN 2006)

Contractor must provide the manufacturer's standard written warranty upon delivery of product. Contractor warrants that manufacturer will honor the standard written warranty provided. [07-7B280-1]

VIII. BIDDING SCHEDULE / PRICE-BUSINESS PROPOSAL

BIDDING SCHEDULE (NOV 2007)

Line Number	Quantity	Unit of Measure	Unit Price	Extended Price	
0001	2.0	each			
Item Description: 30-ton, packaged, small-capacity, rooftop mounted air-conditioning unit.					

Antici	pated Deliver	y Date:	

IX. ATTACHMENTS TO SOLICITATION

Attachment I

IMPORTANT TAX NOTICE - NONRESIDENTS ONLY

Withholding Requirements for Payments to Nonresidents: Section 12-8-550 of the South Carolina Code of Laws requires persons hiring or contracting with a nonresident conducting a business or performing personal services of a temporary nature within South Carolina to withhold 2% of each payment made to the nonresident. The withholding requirement does not apply to (1) payments on purchase orders for tangible personal property when the payments are not accompanied by services to be performed in South Carolina, (2) nonresidents who are not conducting business in South Carolina, (3) nonresidents for contracts that do not exceed \$10,000 in a calendar year, or (4) payments to a nonresident who (a) registers with either the S.C. Department of Revenue or the S.C. Secretary of State and (b) submits a Nonresident Taxpayer Registration Affidavit - Income Tax Withholding, Form I-312 to the person letting the contract.

The withholding requirement applies to every governmental entity that uses a contract ("Using Entity"). Nonresidents should submit a separate copy of the Nonresident Taxpayer Registration Affidavit - Income Tax Withholding, Form I-312 to every Using Entity that makes payment to the nonresident pursuant to this solicitation. Once submitted, an affidavit is valid for all contracts between the nonresident and the Using Entity, unless the Using Entity receives notice from the Department of Revenue that the exemption from withholding has been revoked.

Section 12-8-540 requires persons making payment to a nonresident taxpayer of rentals or royalties at a rate of \$1,200.00 or more a year for the use of or for the privilege of using property in South Carolina to withhold 7% of the total of each payment made to a nonresident taxpayer who is not a corporation and 5% if the payment is made to a corporation. Contact the Department of Revenue for any applicable exceptions.

For information about other withholding requirements (e.g., employee withholding), contact the South Carolina Department of Revenue at 1-844-898-8542 or visit the Department's website at: dor.sc.gov

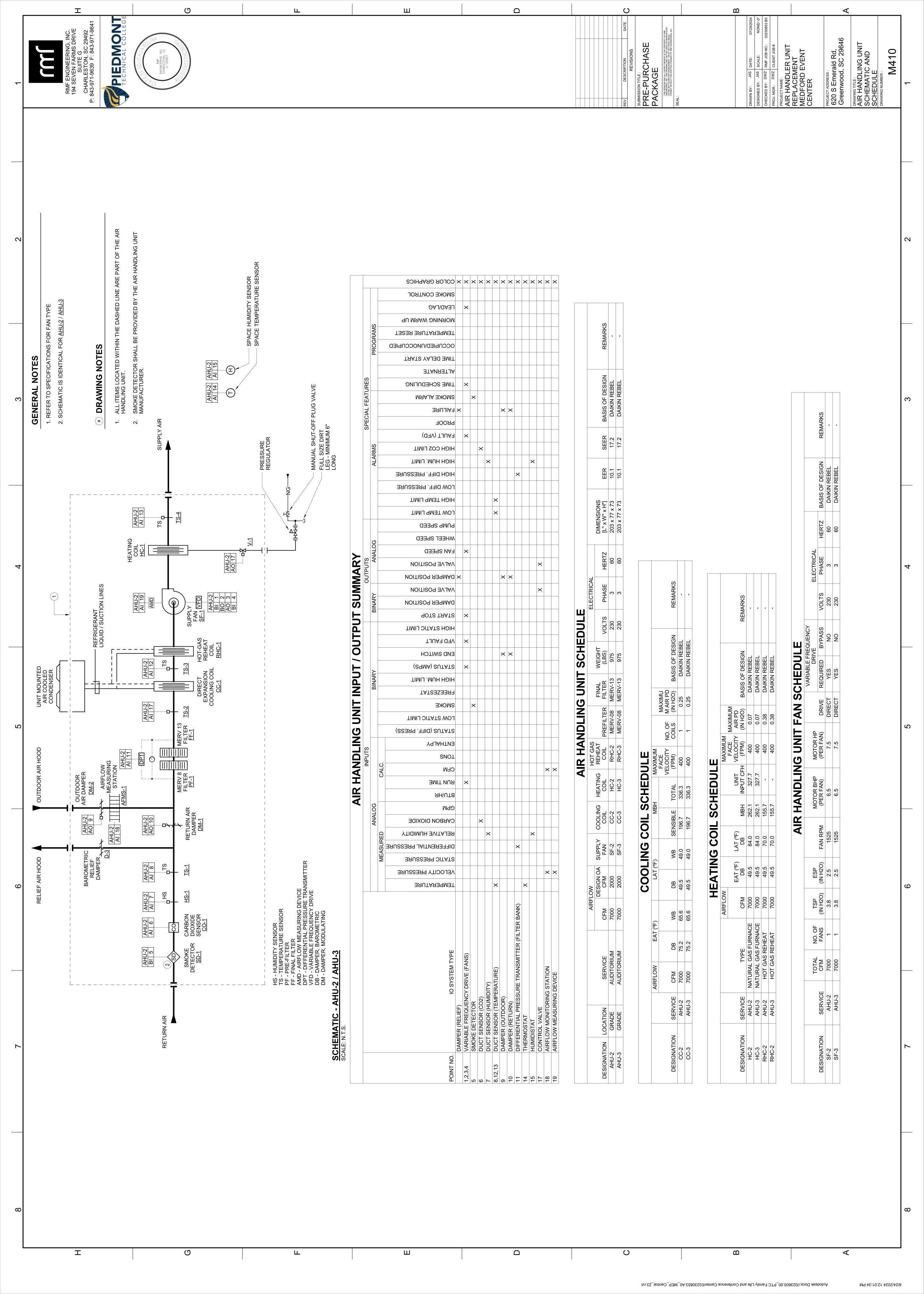
This notice is for informational purposes only. This agency does not administer and has no authority over tax issues. All registration and withholding tax questions should be directed to the South Carolina Department of Revenue at 1-844-898-8542. Additional contact information can be found by visiting the Department's website at dor.sc.gov PLEASE SEE THE "NONRESIDENT TAXPAYER REGISTRATION AFFIDAVIT INCOME TAX WITHHOLDING" FORM (FORM NUMBER I-312) LOCATED AT: dor.sc.gov [09-9005-5]

OFFEROR'S CHECKLIST -- AVOID COMMON BID/PROPOSAL MISTAKES

- 1. Review this checklist prior to submitting your bid/proposal.
- 2. If you fail to follow this checklist, you risk having your bid/proposal rejected.
- 3. Do not include any of your standard contract forms!
- 4. Unless expressly required, do not include any additional boilerplate contract clauses.
- Reread your entire bid/proposal to make sure your bid/proposal does not take exception to any of the state's mandatory requirements.
- 6. Make sure you have properly marked all protected, confidential, or trade secret information in accordance with the instructions entitled: SUBMITTING CONFIDENTIAL INFORMATION. <u>DO NOT</u> mark your entire bid/proposal as confidential, trade secret, or protected! <u>Do not</u> include a legend on the cover stating that your entire response is not to be released!
- 7. Have you properly acknowledged all amendments? Instructions regarding how to acknowledge an amendment should appear in all amendments issued.
- 8. Make sure your bid/proposal includes a copy of the solicitation cover page. Make sure the cover page is signed by a person that is authorized to contractually bind your business.
- 9. Make sure your Bid/proposal includes the number of copies requested.
- 10. Check to ensure your Bid/proposal includes everything requested!
- 11. If you have concerns about the solicitation, do not raise those concerns in your response! After opening, it is too late! If this solicitation includes a pre-bid/proposal conference or a question & answer period, raise your questions as a part of that process! Please see instructions under the heading "submission of questions" and any provisions regarding pre- bid/proposal conferences.

[09-9010-1]





エ Ŋ \circ \Box \triangleleft PECHNICAL COLLEGE RMF ENGINEERING, INC. 194 SEVEN FARMS DRIVE SUITE G CHARLESTON, SC 29492 9: 843-971-9639 F: 843-971-9641 620 S Emerald Rd, Greenwood, SC 29646 AIR HANDLING UNIT SEQUENCE OF OPERATIONS PROJECT NAME:

AIR HANDLER UNIT
REPLACEMENT
MEDFORD EVENT
CENTER PRE-PURCHASE PACKAGE JAS DATE:
: JAS SCALE:
DWZ RMF JOB NO.:
DWZ CLIENT JOB #: M420 FAN FAILURE: A FAILURE OF THE SUPPLY FAN AS SENSED BY ITS RESPECTIVE CURRENT TRANSDUCER SHALL BE ALARMED AT THE UCP. UPON SENSING FAILURE, THE UCP SHALL INDICATE ALARM AND DISABLE THE FAILED FAN. DAMPER FAILURE: A FAILURE OF ANY OF THE DAMPERS THAT ARE REQUIRED TO BE PROVEN OPEN FOR NORMAL OPERATION SHALL BE ALARMED AT THE UCP. UPON SENSING FAILURE, THE UCP SHALL INDICATE ALARM, DISABLE THE UNIT AND RETURN ALL CONTROLS TO THEIR NORMAL POSITION.

HIGH NETURN AIR TEMPERATURE: IF THE RETURN AIR TEMPERATURE IS GREATER THAN 80°F FOR MORE THAN 30 MINUTES, THE UCP SHALL INDICATE ALARM.

LOW RETURN AIR TEMPERATURE: IF THE RETURN AIR TEMPERATURE IS LESS THAN 65°F FOR MORE THAN 30 MINUTES, THE UCP SHALL INDICATE ALARM.

HIGH RETURN AIR HUMIDITY: IF THE RETURN AIR HUMIDITY IS GREATER THAN 10% RH ABOVE DEHUMIDIFICATION MODE SETPOINT, OR GREATER THAN UPPER LIMIT OF 70% FOR MORE THAN 30 MINUTES, THE UCP SHALL INDICATE ALARM.

FILTERS: DIFFERENTIAL PRESSURE TRANSMITTER INSTALLED ACROSS THE FILTER BANK SHALL ALARM THE UCP WHEN ITS RESPECTIVE SETTINGS ARE REACHED. INITIAL HIGH DIFFERENTIAL PRESSURE SET POINTS SHALL BE PER FILTER MANUFACTURER'S RECOMMENDATIONS. SUPPLY AIR TEMPERATURE RESET: THE SUPPLY AIR SET POINT SHALL BE RESET WITH TRIM AND RESPOND DEMAND BASED LOGIC IN ACCORDANCE WITH ASHRAE STANDARD 90.1, AS FOLLOWS: THE INITIAL LEAVING AIR TEMPERATURE SHALL BE 53°F. IF THE SUPPLY FAN ARRAY SPEED IS AT MINSPEED FOR 10 MINUTES FOR 5 MINUTES, THE LEAVING AIR TEMPERATURE SET POINT SHALL BE INCREASED 0.5°F. IF THE SUPPLY FAN ARRAY SPEED IS AT 95% MAXCOOLSPEED FOR 10 MINUTES, THE LEAVING AIR TEMPERATURE SET POINT SHALL BE DECREASED 0.5°F. MAXIMUM LEAVING AIR TEMPERATURE SHALL BE 60°F. OUTSIDE AIR DAMPER SHALL FAIL CLOSED. RETURN DAMPER SHALL FAIL OPEN. 2 **FAILURE MODES PROGRAMS** 5. Š ' BULB TEMPERATURE IS LESS THAN 70°F AND THE ENTHALPY IS LESS THAN 28 BTU/LB OF DRY AIR, THE UTDOOR AIR AND RETURN AIR DAMPERS IN SEQUENCE TO MAINTAIN THE UNIT LEAVING AIR 52°F. L BE DISABLED IF OUTDOOR AIR DRY BULB TEMPERATURE RISES ABOVE 72°F, ENTHALPY RISES ABOVE T'S LEAVING AIR TEMPERATURE DROPS BELOW 50°F. THE OUTDOOR AIR DAMPER SHALL BE CLOSED DURING COOL-DOWN, WARM-UP AND UNOCCUPIED MODES.

DURING OCCUPIED MODE, OUTDOOR AIR DAMPER SHALL INITIALLY OPEN TO ITS MINIMUM POSITION. MINIMUM OUTDOOR AIR POSITION/QUANTITY SHALL BE SET BY THE TAB CONTRACTOR BASED ON BUILDING POSITIVE PRESSURE.

WHENEVER UNIT RETURN AIR CO2 SENSOR INDICATES A CO2 LESS THAN 1100 PPM, THE UNIT OA DAMPER SHALL BE AT ITS MINIMUM OPEN POSITION.

WHEN THE CO2 LEVEL EXCEEDS THE HIGH LIMIT SET POINT OF 1100 PPM FOR 10 MINUTES, THE UNIT OA DAMPER SHALL INCREMENTALLY OPEN AT A RATE OF 10% EVERY 15 MINUTES UNTIL THE CO2 LEVEL DROPS BELOW 1000 PPM.

WHEN THE AHU RETURN AIR CO2 SENSOR REMAINS BELOW 1000 PPM FOR 15 MINUTES, THE UNIT OA DAMPER SHALL RETURN TO ITS MINIMUM POSITION.

ON A RISE IN UNIT RETURN AIR OR SPACE CO2 TO 1200 PPM THE UCP SHALL INDICATE ALARM. HANDLING UNIT SHALL BE DEENERGIZED WHEN THE UNOCCUPIED MODE IS INITIATED. THE SUPPLY HEN OUTDOOR AIR TEMPERATURE DROPS BELOW THE SPACE TEMPERATURE DROPS BELOW TEMPERATURE SET POINT OF 60°F. THE RETURN DAMPER SHALL BE OPEN. OUTDOOR AIR DAMPER EMAIN CLOSED. THE AIR HANDLING UNIT SHALL BE DEENERGIZED WHEN THE TEMPERATURE IN THE HANDLING UNIT SHALL BE DEENERGIZED WHEN THE UNOCCUPIED MODE IS INITIATED. THE SUPPLY MINSPEED WHEN OUTDOOR AIR TEMPERATURE RISES ABOVE 90°F AND SPACE TEMPERATURE RISES CUPIED TEMPERATURE SET POINT OF 84°F. RETURN DAMPER SHALL BE OPEN. OUTDOOR AIR SHALL BE CLOSED. THE AIR HANDLING UNIT SHALL BE DEENERGIZED WHEN THE SPACE AXIMUM OF 79°F.

SHALL DETERMINE THE COOL-DOWN MODE START AND STOP TIMES BASED ON THE OPTIMAL START LEART AT MAXCOOLSPEED WHEN THE UNIT IS INDEXED TO COOL-DOWN MODE BY THE UCP. PEN. OUTDOOR AIR DAMPER AND RELIEF DAMPER SHALL BE CLOSED. WHEN THE SPACE SHES THE COOL-DOWN SETPOINT OF 76°F, THE SYSTEM SHALL BE CONTROLLED AS INDICATED IN AND CONNECTED TO THE BUILDING FIRE ALARM SYSTEM IN ACCORDANCE JNNING; RETURN AND OUTDOOR DAMPERS SHALL BE OPEN TO THEIR BALANCED POSITIONS.
JNNING AT MINSPEED, THE UCP SHALL SLOWLY MODULATE THE REFRIGERANT CIRCUIT TO MAINTAIN
PERATURE SET POINT OF 52°F.
PERATURE ABOVE THE OCCUPIED SETPOINT, THE SUPPLY FAN SPEED SHALL MODULATE FROM
PEED TO MAINTAIN SPACE TEMPERATURE SETPOINT. WITH SMOKE DETECTORS AND CONNECTED TO THE BUILDING FIRE ALARM SYSTEM IN ACCORDANCE E AND MECHANICAL CODES.

DISTRIBUTION (HVAC) SMOKE DETECTOR SHALL, UPON ACTIVATION, SHUT DOWN ALL OPERATIONAL STIVE AIR DISTRIBUTION SYSTEM. THE AIR HANDLING UNIT AND SUPPLY FAN SHALL DEENERGIZE AND IATED AT THE UCP.

S SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM AND ACTIVATE A VISIBLE AND AUDIBLE ORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL FIRE AND MECHANICAL CODES. AIDITY ABOVE 60% RH ALL TEMPERATURE CONTROL, ECONOMIZER AND CO2 SEQUENCES SHALL BE ND RETURN AIR DAMPERS SHALL RETURN TO THEIR MINIMUM BALANCED POSITIONS.
HALL ENERGIZE TO REDUCE DISCHARGE AIR TEMPERATURE BY 3°F, AND THE HOT GAS REHEAT COIL PEN TO MAINTAIN SPACE TEMPERATURE SETPOINT.
TIVE HUMIDITY DROPS BELOW 55% FOR 15 MINUTES, THE DEHUMIDIFICATION MODE SHALL BE IT CIRCUIT SHALL BE CONTROLLED TO MAINTAIN THE DISCHARGE AIR SETPOINT (52°F). COOLING MODE CONTROI Ö. 9. ш. R HANDLING UNIT SHALL BE ENERGIZED VIA SIGNAL FROM THE UCP. THE UCP SHALL DETERMINE R HANDLING UNIT SHALL BE ENERGIZED VIA SIGNAL FROM THE UCP. THE UCP SHALL DETERMINE GRAPHIC INTERFACE SCHEDULE PROGRAM.

UM START: THE UCP SHALL COMMAND THE SYSTEM ON BASED ON THE OPTIMUM START CONTROL ESTATIC. THE UCP SHALL COMMAND THE SYSTEM ON BASED ON THE OPTIMUM START STRATECY SHALL COMPARE THE SPACE ESTATURE TO ITS OCCUPIED TEMPERATURE SETPOINT AND DETERMINE THE LENGTH OF TIME ENATURE TO ITS OCCUPIED TEMPERATURE SETPOINT AND DETERMINE THE LENGTH OF TIME ENATURE TO ITS OCCUPIED SPACE SETPOINT ON THE SYSTEMS PREVIOUS OPERATING HISTORY AND CURRENT OUTSIDE TEMPERATURE AND ITY COMDITIONS. THE UCP SHALL WAIT AS LONG AS POSSIBLE TO START THE LINT SO THAT THE PLATE OF SHALL WAIT AS LONG AS POSSIBLE TO START THE UNIT SO THAT THE SPACE MAY BE AND STOP: THE UCP SHALL BEFORE THA HEATING/COOLING TO THE SPACE MAY BE AND SINTS BEFORE THE END OF THE OCCUPIED SCHEDULE. THE SUPPLY FAN, RETURN AIR DAMPER, AND OUTSIDE AIR DAMPER SHALL CONTINUE TO OPERATE TO PROVIDE AIRFLOW AND LATION THE RETURN AIR DAMPER SHALL CONTINUE TO OPERATE TO PROVIDE AIRFLOW AND CED POSITION AND THE RETURN AIR DAMPER SHALL FULLY OPEN THE SUPPLY FAN SHALL BE SOFT SED TO MINIMUM SPEED.

SASEEN BY THE SPACE TEMPERATURE SET POINTS SHALL BE AS FOLLOWS: EED: THE SPEED THAT PROVIDES SUPPLY AIRFLOW EQUAL TO MINIMUM OUTSIDE AIR WITH THE ATSPEED THAT PROVIDES SUPPLY AIRFLOW EQUAL TO THE DESIGN HEATING ATSPEED: THE SPEED THAT PROVIDES SUPPLY AIRFLOW EQUAL TO THE DESIGN HEATING MIRFLOW SHALL BE HALF OF THE MAXIMUM COOLING SPEED.

W. DESIGN HEATING AIRFLOW SHALL BE HALF OF THE MAXIMUM COOLING SPEED.

W. SCHEDULED.

Y FAN SHALL BE PROVIDED WITH A RAMP FUNCTION TO PREVENT CHANGES IN FAN SPEED OF THAN 10% PER MINUTE. SPEED AND SUPPLY AIR TEMPERATURE SET POINTS SHALL BE RESET SIMULTANEOUSLY AND AE SIGNAL: THE VALUE OF THE HEATING LOOP OR COOLING LOOP.

Y FAN SHALL BE PROVIDED WITH A HIGH LIMIT CONTROL FUNCTION WHICH SHALL LIMIT THE E FAN TO 115% OF ITS SCHEDULED QUANTITY. THE HIGH LIMIT CONTROL FUNCTION SHALL SYSTEM STATIC PRESSURE CONTROL, SIGNAL ALARM AT THE UCP AND DEENERGIZE THE N IF THE CFM EXCEEDS THE HIGH CFM LIMIT.

AIR HANDLING UNIT IS DEENERGIZED THROUGH THE BAS, ALL CONTROLS SHALL RETURN TO MAL POSITION READY FOR RESTARTING. SUPPLY FAN SHALL BE DISABLED. OUTSIDE AIR AND DAMPERS SHALL CLOSE; COOLING COIL REFRIGERANT CIRCUIT SHALL BE DEENERGIZED AND AS HEAT SHALL BE OFF. RETURN AIR DAMPER SHALL BE OPEN. R HANDLING UNIT ON BASED ON THE
HALL BE PROVIDED BY THE OWNER) AND ENABLE TH
) BELOW.

NG AND COOLING MODES AS SELECTED IN
RISE IN OUTDOOR AIR TEMPERATION TO HALL BE RUNNING AT MINSPEED, RETURN, RELIEF, AND OUTDOOR DAMPER SHALL BE NSPEED, THE UCP SHALL MODULATE THE OUTSIDE AIR AND ILY TO MAINTAIN SPACE TEMPERATURE SETPOINT.

E SETPOINT WITH THE OUTSIDE AIR DAMPER IN ITS MINIMUM E NATURAL GAS FURNACE AT ITS LOWEST TURNDOWN RATE BE MANUALLY INDEXED TO THE AUTOMATIC MODE AT ITS RESPECTIVE VARIABLE SYSTEM CONTR TING MODE IED AIR HANDLING OCCUP MASTER SEQUENCE OF Ω. Ċ S. œ. <u>ග</u> Ċ. \Box ⋖ m ∞ \circ \Box \triangleleft

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