

INVITATION FOR BID # 22-01

COUNTY OF MONTGOMERY
 PURCHASING DEPARTMENT
 755 ROANOKE STREET, SUITE 2C
 CHRISTIANSBURG, VA 24073-3179

DATE		BID OPENING DATE AND HOUR	SEALED BID
April 28, 2021		May 27, 2021 3:00PM	Yes

ADDRESS ALL INQUIRES AND
 CORRESPONDENCE TO:
 Montgomery County Purchasing Department
 755 Roanoke Street, Suite 2C
 Christiansburg, VA 24073-3179
 Jessica H. Albert, VCO
 Telephone Number: (540) 382-5784
 Fax Number: (540) 382-5783
 e-mail address:
albertjh@montgomerycountyva.gov

SPECIAL INSTRUCTIONS

1. **Sealed Bid** responses should be returned in an envelope with the bid number and opening date indicated on the outside of the envelope.
2. Faxed responses to Sealed Bids cannot be sent directly to the Purchasing Department.
3. Responses must be submitted on this form and the attachment provided.
4. Responses should be signed below.
5. Responses will be received in the Montgomery County Purchasing Department, at the address listed above, until the bid opening date and hour or, if specified, the bid return date and hour shown above.
6. Bid award information can be located at <https://www.montgomerycountyva.gov/departments/purchasing/current-bids-rfps>
7. DELIVERY IS F.O.B. DESTINATION UNLESS OTHERWISE NOTED IN THE BODY OF THE BID.
8. Attachment A is incorporated by reference into this invitation for bid and any resulting contract.

COMMODITY: HVACR Services

NO	Description	Quantity	Unit	Unit Price	Extended Price
1.	Establish term contract for Heating, ventilating, air conditioning and refrigeration (HVACR) maintenance services per attached specifications and pricing schedule for the Courthouse, Public Safety Building, County Jail, Government Center, Health & Human Services Building, Animal Care and Adoption Center, Christiansburg Library, Blacksburg Library, and Meadowbrook Library including the Meadowbrook Center and Waldron YMCA in Shawsville. Pricing information in Section V. An optional pre-bid conference is scheduled for May 13th, 2021 at 2:00 pm in Multipurpose Room #1 at 755 Roanoke Street, Suite 2C, Christiansburg, VA. A site visit will be conducted immediately following the pre-bid. Submit one (1) original and one (1) copy of your bid.				

IN ACCORDANCE WITH THIS INVITATION FOR BID AND SUBJECT OF ALL TERMS AND CONDITIONS IMPOSED
 HERIN AND IN ATTACHMENTS, THE UNDERSIGNED OFFERS AND AGREES TO FURNISH THE ITEM(S) FOR THE
 PRICES OFFERED.

FULL LEGAL NAME (PRINT)		FEDERAL TAXPAYER NUMBER (ID#)		DELIVERY DATE	
PURCHASE ORDER ADDRESS		PAYMENT ADDRESS		TERMS NET 30	
CONTACT NAME/TITLE (PRINT)		SIGNATURE (INK)		DATE	
E-MAIL ADDRESS	TELEPHONE NUMBER	TOLL FREE NUMBER		FAX NUMBER	

- I. **PURPOSE:** The intent and purpose of this Invitation For Bid (IFB) is to establish a term contract for heating, ventilation, air conditioning, and refrigeration (HVACR) maintenance services for equipment located at the following facilities:
- A. Courthouse, 55 East Main Street in Christiansburg,
 - B. Public Safety Building, 1 East Main St. in Christiansburg,
 - C. County Jail, 16 South Franklin St., Christiansburg,
 - D. Government Center Facility (buildings A, B, & C), 755 Roanoke Street, Christiansburg,
 - E. Health & Human Services Building, 210 Pepper Street, Christiansburg,
 - F. Animal Care and Adoption Center, 480 Cinnabar Road, Christiansburg,
 - G. Montgomery-Floyd Regional Library Headquarters, 125 Sheltnan Street, Christiansburg,
 - H. Blacksburg Branch Library, 400 Draper Road in Blacksburg, Virginia, and
 - I. Meadowbrook Public Library and Meadowbrook Center (including the Waldron YMCA), 267 Alleghany Springs Road, Shawsville, all of which are part of the County of Montgomery, herein after referred to as “County.”

II. **SCOPE OF SERVICE**

- A. **CONTRACTOR QUALIFICATIONS:** The contractor shall be able to demonstrate the ability to satisfactorily maintain and repair equipment of the type and to the degree specified herein:
- 1. Helical-Rotary Water Chiller (Air & Water Cooled)
 - 1.1 Provide evidence of factory-certified training on Operation & Maintenance of the Helical-Rotary chillers currently serving County facilities.
 - 1.2 Ability to service, diagnose, and overhaul.
 - 1.3 Comprehensive knowledge of electronic Unit Control Module.
 - 1.4 Oil and Refrigerant analysis.
 - 1.5 Eddy Current Tube Analysis.
 - 1.6 Ability to perform and interpret Vibration Analysis.
 - 1.7 Helical-rotary compressor repair facilities.
 - 1.8 Electric troubleshooting of control systems.
 - 2. Chillers with scroll compressors (e.g. Public Safety Building)
 - 2.1 Ability to service, diagnose, and overhaul.
 - 2.2 Comprehensive knowledge of electronic Unit Control Module.
 - 2.3 Oil and Refrigerant analysis.
 - 2.4 Compressor repair facilities.
 - 2.5 Electric troubleshooting of control systems.
 - 3. Heat Pumps and Split cooling systems
 - 3.1 Ability to service, repair, and overhaul.
 - 3.2 Recover and store refrigerant charge during servicing.
 - 3.3 Verify refrigerant integrity with electronic leak detector.
 - 4. Hot Water Boilers
 - 4.1 Ability to service, troubleshoot, and repair.
 - 4.2 Perform combustion efficiency testing with Bachrach electronic test kit.
 - 5. Electronic Controls
 - 5.1 Provide evidence of factory-certified training on the operation, application, and advanced programming of the Building Automation Systems currently controlling County facilities.
 - 5.2 Demonstrate the ability to service, diagnose, and repair the systems.
 - 5.3 Contractor must be able to demonstrate the ability to fully configure, diagnose, and repair operational problems with software, firmware, and hardware on all County Building

Automation Systems, Programmable Control Modules, Universal Programmable Control Modules, Unit Control Modules, Terminal Unit Controllers, VAV Control Modules, MP-581 Programmable Controllers, and ZN-520 Controllers through ownership and provision of appropriate software and communication kits.

- 5.4 All service personnel are required to provide a laptop computer during each routine inspection or emergency repair. Laptop must be loaded with all software as detailed above and a backup of Building Automation System database and controller programming shall be maintained on each computer.
- 5.5 Contractor must demonstrate the ability to remotely monitor and diagnose building problems through licensed Building Automation System Software installed on personal computer located at contractor's local office. The use of remote desktop software will not satisfy this requirement.
- 5.6 Comprehensive working knowledge of electronic controls as related to HVAC and ancillary equipment.
- 5.7 Contractor must provide, install, and maintain the latest version of software upgrades and service packs for the County's Building Automation System.
- 5.8 Provide a minimum of eight (8) hours on-site operators training annually to include verification of setpoints and programming parameters on all field panels.

6. Electric Controls

- 6.1 Ability to service, diagnose and repair/replace controls, starter, safeties, wiring and motors as related to A/C and ancillary equipment.
- 6.2 Comprehensive working knowledge of electrical control circuits as related to A/C and ancillary equipment.

7. Systems Analysis, Performance Verification, & Miscellaneous Requirements

- 7.1 Ability to diagnose system problems as related to air and water movement, chiller operation and control systems.
- 7.2 Bidder must provide list of at least five (5) current customers for whom service, including 24 hour remote monitoring, is provided on Tracer Summit Building Automation Systems.
- 7.3 Bidder must provide a list of at least five (5) current customers for whom service is provided on Helical-Rotary Chillers of the brand currently operated by the County.
- 7.4 Ability to interpret and verify design and make recommendations (engineering and technical services).
- 7.5 Ability to provide control drawings, plans and schematics as related to recommendation of systems analysis.
- 7.6 Comprehensive working knowledge of supply air, return air, make-up and ventilation requirements, and economizers as related to outside air.
- 7.7 Comprehensive working knowledge of humidification, dehumidification, latent and sensible heat loads, etc., applied to A/C engineering and design.
- 7.8 Contractor must maintain an electronic Refrigerant Management Program and provide refrigerant usage reports for all equipment annually.
- 7.9 Field reports shall be transmitted electronically to County personnel on a daily basis .

8. Other Servicing Requirements

- 8.1 Expertise and equipment required for vibration analysis and fan balancing.
- 8.2 Refrigerant recovery and reclamation services certified by EPA.
- 8.3 Expertise and equipment for chiller re-tubing.

- B. **WORK INCLUDED:** The contractor shall provide all labor, tools, materials, parts, equipment and all incidentals, (including all oil, gaskets, filters, lubricants and cleaners) required and/or implied for the complete and satisfactory maintenance and repair of the County's HVAC equipment. This work shall include, but not be limited to, scheduled maintenance, servicing, repairs, and modifications as

recommended by the manufacturer and as required to keep the equipment in a first class operating condition.

1. **Routine Maintenance and Servicing** and repairs shall be performed on a regular basis, with repairs to be made as necessary, to keep equipment in top operating condition and to minimize malfunctions and down time. Scheduled maintenance shall be performed on a regular basis, and shall include all recommended and required testing, inspections, adjustments, cleaning, filter replacements, maintenance of fluid levels, water treatment for closed and open loop systems, as well as recommended start –up and shut –down servicing at the beginning and end of the operating season. Other maintenance and repairs required due to malfunctions occurring between scheduled maintenance calls shall be performed as necessary on a call basis. All maintenance and repairs are included in the Routine Maintenance and Servicing, and corresponding yearly rates, except that defined as non-routine repairs.

This work shall be performed for a set yearly rate, to include all equipment listed on Attachment B. HVAC EQUIPEMNT INVENTORY. The yearly rate shall include all materials, parts, labor, and equipment required for the work.

Bidders must submit with the bid their proposed service schedule for each piece of equipment. The service schedule is to include details of all work that will be performed monthly, quarterly, and annually, for servicing each piece of equipment

Note: Contractor shall be responsible for providing all materials for scheduled maintenance, unless otherwise noted. The County will provide materials for scheduled maintenance where noted only.

2. **Non-routine Repairs** shall be performed as required by the specified personnel at the hourly rates as bid, with materials and parts to be purchased from this contractor or other.
3. **Emergencies.** The contractor shall provide twenty-four (24) hour monitoring of the building HVAC equipment through the Building Automation System by using a licensed copy of system software. If an alarm condition is recorded, the Building Automation system shall notify the contractor and a qualified Refrigerant Mechanic shall respond within two (2) hours. The Refrigerant Mechanic shall first troubleshoot the alarm via modem and, if necessary, will arrive at the jobsite within four (4) hours of the alarm to take corrective action. Subcontracting will NOT be allowed to satisfy this requirement of the contract.

- C. **QUALITY OF WORKMANSHIP:** All work shall be quality work performed in a professional manner according to the standard of the industry. The air conditioning equipment under this contract shall be maintained as originally specified, designed, manufactured and installed. Any wok that has to be corrected due to the Contractors faulty workmanship, equipment, tools, or materials shall be done at no additional expense to the County.

All work shall be performed in accordance with the Uniform Statewide Building Code of the Commonwealth of Virginia and the latest editions of the following reference codes and standards, whichever are more stringent:

Building Officials and Code Administrators (BOCA)
American National Standards Institute (ANSI)
American Society of Testing Materials (ASTM)
American Society of Mechanical Engineers (ASME)
Building Officials and Code Administrators (BOCA)
Sheet Metal and Air Conditioning Contractors National Association (SMACNA)

D. PERSONNEL QUALIFICATIONS: All personnel used by the contractor for the performance of this work shall be properly trained and qualified for work of this type and shall have the minimum ability and experience required for this work. The County reserves the right to refuse to accept services from any personnel deemed by the County to be unqualified, disorderly, or otherwise unable to perform assigned work. The contractor shall provide evidence of qualifications for any personnel performing work under this contract. Subcontracting will **NOT** be allowed to satisfy the personnel requirements of this contract.

1. **Refrigerant Mechanics**-The contractor shall employ at least two (2) Refrigerant Mechanics with factory-certified training on the Operation and Maintenance of the Helical-Rotary chillers currently serving County facilities. In addition, the contractor shall employ at least two (2) Refrigerant Mechanics with factory-certified training on Operation & Programming of the Building Automation System currently controlling County facilities. This requirement may be satisfied with as few as two (2) Refrigerant Mechanics or as many as six (6) Refrigerant Mechanics, depending on individual certifications. The Refrigerant Mechanics shall be qualified and certified as “journeyman” in building related mechanical operations by the Commonwealth of Virginia. At least one (1) refrigerant mechanic shall be qualified and certified as a “master” in building related mechanical operations by the Commonwealth of Virginia. The Refrigerant Mechanics shall also be certified by the applicable governing agency in recycling and recovery of refrigerants. The Refrigerant Mechanics shall have a minimum of five (5) years verifiable experience on the equipment described herein and be fully trained on the operation and remote access of the Trane Tracer Summit Building Management System.
2. **Mechanical Engineer** shall be responsible for performing Diagnostic Survey Work on an “as-needed” consultation basis. The cost for the Mechanical Engineering services shall be included in the Contractor’s prices listed in the Pricing Schedule. The Contractor shall have in his employ a minimum of one (1) Mechanical Engineer, who shall be a licensed Professional Engineer registered under the regulatory authority of the Commonwealth of Virginia. The Mechanical Engineers shall have a minimum of five (5) years experience in the design and maintenance of HVAC systems.
3. **Geographic Requirements**- The contractor shall retain in his employee all the minimum professional personnel requirements as outlined herein with permanent residences not more than thirty miles from Christiansburg, VA.

E. MATERIALS AND PARTS: All materials and parts are included in the yearly rate for routine maintenance and servicing. For non-routine repairs, materials and parts may be purchased from this contractor or others at the sole discretion of the County. Materials and parts shall be of equivalent material, strength and design as replaced material or part, and shall be new, top quality, and made by or recommended by the original manufacturer of the replaced part or material. Materials and parts purchased from the contractor shall be at contractor’s list price less 10%.

F. MISCELLANEOUS:

1. Bidders must submit evidence of qualifications with bid including training certificates, certifications, business license, and business references.
2. Bidders must submit an OSHA approved safety training program for all field personnel.
3. Contractor shall hold monthly service coordination meetings on site to verify contractual compliance and conformance.
4. Repair parts, labor, and refrigerant coverage included for both Helical-Rotary Chillers at the Government Center Building for the term of this agreement

5. Repair parts and labor coverage is included for all field panels associated with the Building Automation Systems (field panels only) controlling County facilities.
6. Software upgrades and service packs for the Building Automation Systems shall be provided as available from the manufacturer
7. Contractor shall use 1” filters at MERV 11 and 2” filters at MERV 14 changed semi-annually.
8. Vibration analysis performed annually for all Helical-Rotary Chillers.
9. Inspection and maintenance of all bi-polar ionization units shall occur annually. Clean and inspect units including, but not limited to wiring, fan controls, transformers, relays and other electrician components.

III. Other Requirements:

A. **Invoices** for routine maintenance and repair may be submitted monthly, quarterly, or yearly, during the period following service. Invoices for non-routine repair work performed on an hourly rate basis shall be submitted once per week within the week following service. Invoices shall show the contract number, work order number, and shall be submitted separately for each work order number. Invoices shall include parts and materials shall be accompanied by a copy of the contractor’s invoice for the parts and materials. These requirements are in addition to and independent from any other requirements regarding invoices contained within this contract.

Invoices shall be submitted to:

Scott A. Woodrum, P.E.
Director of General Services
755 Roanoke St. Suite 1C
Christiansburg, VA 24073

Payment will be made by the County to the Contractor within thirty (30) days.

B. **Reports** shall be submitted each time a preventive maintenance or repair call is made, and shall include the following as a minimum:

- Time and date of work
- Identification of work as routine or non-routine
- Hours worked, if non-routine
- Personnel name(s)
- Equipment services
- Type of work performed
- Type, quantity, and manufacturer of materials and/or parts used
- Complete operating log, including all operating data, such as temperatures, pressures, fluid levels, voltages and amperages

C. **Tests:** at least once per year, oil samples and refrigerant samples shall be taken from all applicable equipment and sent to a qualified lab for appropriate analysis. Oil samples shall be analyzed for possible Bering and/or motor deterioration. Refrigerant samples shall be analyzed for oil, acid, and water content. Samples shall be taken during the first service call after start-up, if the machine is adequately loaded to ensure relevant test results. Copies of all reports shall be submitted to the County.

IV CONTRACT PERIOD: The initial contract shall be from July 1, 2021 through June 30, 2022. There will be an option for four (4) one- year renewals.

V. **PRICING SCHEDULE/AWARD:** In accordance with the specifications of this IFB and subject to all conditions imposed herein and in attachments, the undersigned agrees to perform this work for the price given for each item. Pricing shall remain fixed during the initial year of the contract. The award will be determined on a grand total basis. Montgomery County reserves the right to make separate awards, reject any or all bids, in whole or in part, to waive minor informalities and to delete items prior to making the award, whenever it is deemed in the sole opinion of Montgomery County to be in its best interest.

Description

A. Routine Maintenance and Servicing for 1 lot for \$_____ /year HVAC Equipment listed in Attachment B.

B. Non-routine and Emergency Hourly Rates:

1) Refrigerant Mechanic \$_____ /hourly rate x 75* hours\$_____ /year
*75 hours is only an estimate of hours needed for the year. The actual number may vary. This number is used for bid evaluation purposes only.

GRAND TOTAL \$_____ /year

ATTACHMENT A
TERMS AND CONDITIONS

GENERAL TERMS AND CONDITIONS

https://www.montgomerycountymva.gov/docs/default-source/purchasing-solicitations/ifb_terms_and_conditions.pdf?sfvrsn=97ffdc9c_2

SPECIAL TERMS AND CONDITIONS

1. **AWARD OF CONTRACT:** Awards are made to the lowest responsive and responsible Bidder. Evaluation will be based on grand total. Unit prices, extensions and grand total must be shown. In case of arithmetic errors, the unit price will govern. If cash discount for prompt payment is offered, it must be clearly shown in the space provided. Discounts for prompt payment will not be considered in making awards. Montgomery County reserves the right to reject any and all bids in whole or in part, to waive any informality, and to delete items prior to making an award.
2. **AUDIT:** The Contractor hereby agrees to retain all books, records, and other documents relative to this contract for five (5) years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. Montgomery County, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.
3. **AVAILABILITY OF FUNDS:** It is understood and agreed between the parties herein that Montgomery County shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.
4. **BID ACCEPTANCE PERIOD:** Any bid received in response to this solicitation shall be valid for (90) days. At the end of the (90) days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at that time it remains in effect until an award is made or the solicitation is cancelled.
5. **CANCELLATION OF CONTRACT:** Montgomery County reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice to the Contractor. In the event the initial contract period is for more than 12 months, the resulting contract may be terminated by either party, without penalty, after the initial 12 months of the contract period upon 60 days written notice to the other party. Any contract cancellation notice shall not relieve the Contractor of the obligation to deliver and/or perform on all outstanding orders issued prior to the effective date of cancellation.
6. **CONTRACTOR/SUBCONTRACTOR LICENSE REQUIREMENT:** By my signature on this solicitation, I certify that this firm/individual and/or subcontractor is properly licensed for providing the goods/services specified

Contractor Name: _____ Subcontractor Name: _____

License #: _____ Type: _____

7. **SPECIAL OR PROMOTIONAL DISCOUNTS:** The Contractor shall extend any special promotional sale prices or discounts immediately to Montgomery County during the term of the contract. Such notice shall also advise the duration of the specific sale or discount price.
8. **IDENTIFICATION OF SEALED BID ENVELOPE:** The signed bid should be returned in a separate envelope or package, sealed and addressed as follows:
MONTGOMERY COUNTY
Purchasing Department
755 Roanoke Street, Suite 2C
Christiansburg, Virginia 24073-3179
Reference the opening date and hour, and Bid Number in the lower left corner of the envelope or package.
If a bid not contained in the special envelope is mailed, the bidder takes the risk that the envelope, even if marked as described above, may be inadvertently opened and the information compromised which may cause the bid to be disqualified. No other correspondence or other bids should be placed in the envelope. Bids may be hand delivered to the Montgomery County Purchasing Department.
9. **INDEPENDENT CONTRACTOR:** The contractor shall not be an employee of Montgomery County, but shall be an independent contractor. Nothing in this agreement shall be construed as authority for the contractor to make commitments which shall bind Montgomery County, or to otherwise act on behalf of Montgomery County, except as Montgomery County may expressly authorize in writing.
10. **INSURANCE:**
By signing and submitting a bid under this solicitation, the Bidder certifies that if awarded the contract, it will have the following insurance coverages at the time the work commences. Additionally, it will maintain these during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission. During the period of the contract, Montgomery County reserves the right to require the Contractor to furnish certificates of insurance for the coverage required.

INSURANCE COVERAGES AND LIMITS REQUIRED:

- A. Worker's Compensation - Statutory requirements and benefits.
 - B. Employers Liability - \$100,000.00
 - C. General Liability - \$500,000.00 combined single limit. Montgomery County and the Commonwealth of Virginia shall be named as an additional insured with respect to goods/services being procured. This coverage is to include Premises/Operations Liability, Products and Completed Operations Coverage, Independent Contractor's Liability, Owner's and Contractor's Protective Liability and Personal Injury Liability.
 - D. Automobile Liability - \$500,000.00
- The contractor agrees to be responsible for, indemnify, defend and hold harmless Montgomery County, its officers, agents and employees from the payment of all sums of money by reason of any claim against them arising out of any and all occurrences resulting in bodily or mental injury or property damage that may happen to occur in connection with and during the performance of the contract, including but not limited to claims under the Worker's Compensation Act. The contractor agrees that it will, at all times, after the completion of the work, be responsible for, indemnify, defend and hold harmless Montgomery County, its officers, agents and employees from all liabilities resulting from bodily or mental injury or property damage directly or indirectly arising out of the performance or nonperformance of the contract.
11. **NEGOTIATION WITH THE LOWEST BIDDER:** Unless all bids are cancelled or rejected, Montgomery County reserves the right granted by Section 2.2-4318 of the Code of Virginia to negotiate with the lowest responsive, responsible bidder to obtain a contract price within the funds available to Montgomery County whenever such low bid exceeds Montgomery County's available funds. For the purpose of determining when such negotiations may take place, the term "available funds" shall mean those funds which were budgeted by Montgomery County for this contract prior to the issuance of the written Invitation for Bids. Negotiations with the low bidder may include both modifications of the bid price and the Scope of Work/Specifications to be performed. Montgomery County shall initiate such negotiations by written notice to the lowest

responsive, responsible bidder that its bid exceeds the available funds and that Montgomery County wishes to negotiate a lower contract price. The times, places, and manner of negotiating shall be agreed to by Montgomery County and the lowest responsive, responsible bidder.

12. **PRIME CONTRACTOR RESPONSIBILITIES:** The Contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime Contractor. The Contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.
13. **SAFETY:** All contractors working on projects for Montgomery County must maintain an adequate safety program to insure the safety of contractor employees, subcontractor employees, and all other individuals working under this contract. The Virginia Occupational Health Act (VOSHA) provides for safety and health protection for employees on the job. The contractor is required to comply with the VOSHA standards. In addition, the contractor must also provide Montgomery County with a written safety program that he intends to follow in pursuing work under this contract. In lieu of providing such a program, the contractor may elect to comply with the "Montgomery County Safety Guide for Contractors and Subcontractors" and advise Montgomery County in writing of his election to do so. No work under this contract will be permitted until Montgomery County is assured that the contractor has an adequate safety program in effect.
14. **SUBCONTRACTS:** No portion of the work shall be subcontracted without prior written consent of Montgomery County. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall furnish Montgomery County the names, qualifications and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work to be done by his subcontractor(s) and shall assure compliance with all requirements of the contract.
15. **WARRANTY (COMMERCIAL):** The Contractor agrees that the supplies or services furnished under any award resulting from this solicitation shall be covered by the most favorable commercial warranties the contractor gives any customer for such supplies or services and that the rights and remedies provided therein are in addition to and do not limit those available to Montgomery County by any other clause of this solicitation. A copy of this warranty must be furnished with the bid.
16. **WORK SITE DAMAGES:** Any damage to existing utilities, equipment or finished surfaces resulting from the performance of this contract shall be repaired to the Owner's satisfaction at the Contractor's expense.
17. **PRICE ESCALATION/DEESCALATION:** Price adjustments may be permitted only for changes in the Contractor's cost of materials not to exceed the increase in the following index/indices: CPI-W SERVICES. No price increases will be authorized for 365 calendar days after the effective date of the contract. Price escalation may be permitted only at the end of this period and each 365 days thereafter and only where verified to the satisfaction of the Montgomery County Purchasing Department. However, "across the board" price decreases are subject to implementation at any time and shall be immediately conveyed to Montgomery County. Contractor shall give not less than 30 days advance notice of any price increase to the Montgomery County Purchasing Department. Any approved price changes will be effective only at the beginning of the calendar month following the end of the full 30 day notification period. The Contractor shall document the amount and proposed effective date of any general change in the price of materials. Documentation shall be supplied with the Contractor's request for increase which will: (1) verify that the requested price increase is general in scope and not applicable just to Montgomery County; and (2) verify the amount or percentage of increase which is being passed on to the Contractor by the Contractor's suppliers.
The Montgomery County Purchasing Department will notify the Contractor in writing of the effective date of any increase which it approves. However, the Contractor shall fill all purchase orders received prior to the effective date of the price adjustment at the old contract prices. The Contractor is further advised that decreases which affect the cost of materials are required to be communicated immediately to the Montgomery County Purchasing Department.

Attachment B
HVAC Equipment Inventory

FACILITY	QTY	DESCRIPTION	MODEL NUMBER	SERIAL NUMBER
CTHOUSE	1	TRANE SCREW CHILLER	RTAA-150	U95B06048
	3	TRANE CLIMATE CHANGERS	N/A	N/A
	1	TRANE RETURN FAN	Q27-91-HF	N/A
	1	TRANE RETURN FAN	Q49-92-HF	N/A
	4	BRASH ELECTRIC HEAT COILS	N/A	N/A
	1	TRANE AUTO ROLL FILTER	N/A	N/A
	88	TRANE VAV BOXES	N/A	N/A
	3	CONDENSER/CHILLED PUMPS	N/A	N/A
	1	MARLEY COOLING TOWER	N/A	N/A
	1	JCI COMPRESSOR/AIR DRYER	N/A	N/A
	1	REIMERS ELECTRIC HUMIDIFIER	N/A	N/A
	1	CARNES ELECTRIC HUMIDIFIER	L-5	U-27207-1-1A
	10	BUILDING EXHAUST FANS	N/A	N/A
	1	LIEBERT DATA PROC. UNIT	N/A	N/A
	1	TRACER SUMMIT BCU	BMTS	N/A
	4	TRANE PROG. CONTROLLERS	PCM	N/A
PSB	1	TRANE SYSTEM CONTROLS	BMTX	NOS-3860652
	1	TRANE SYSTEM CONTROLS	BMTX	NOS-3860654
	1	TRANE AIR COOLED CHILLER	CGAM070F2J	U13H38084
	1	TRANE AIR COOLED CHILLER	CGAM070F2J	U13H38085
	1	TRANE PERFORMANCE CLIMATE CHANGER	CSAA021UAF	K13H68418
	1	TRANE PERFORMANCE CLIMATE CHANGER	CSAA030UAF	K13H68430
	1	TRANE PERFORMANCE CLIMATE CHANGER	CSAA040UAE	K13G62153
	1	TRANE UNIT HEATERS	FFJB0201LA	T14A00567
	1	TRANE UNIT HEATERS	FFJB0201LA	T14A00568
	1	TRANE UNIT HEATERS	FFJB0201LA	T14A00569
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30042
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30043
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30044
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30045
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30046
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30047
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30048
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30049
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30050
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30051
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30052

	1	TRANE UNIT HEATERS	UHSBA181T	F14A30053
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30054
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30055
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30056
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30057
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30058
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30059
	1	TRANE UNIT HEATERS	UHSBA181T	F14A30060
	1	BELL & GOSSETT PUMPS	1510	NOS-3860610
	1	BELL & GOSSETT PUMPS	1510	NOS-3860611
	1	BELL & GOSSETT PUMPS	1510	NOS-3860612
	1	BELL & GOSSETT PUMPS	1510	NOS-3860618
	1	BELL & GOSSETT PUMPS	60	NOS-3860622
	1	BELL & GOSSETT PUMPS	60	NOS-3860623
	1	BELL & GOSSETT PUMPS	60	NOS-3860619
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	150R8B	NOS-3860643
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	150WH4B	NOS-3860649
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	195R8B	NOS-3860633
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	202WMX	NOS-3860650
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	245QMX	NOS-3860648
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	245QMX	NOS-3860651
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	24A6B	NOS-3860646
	1	LOREN COOK COMPANY CENTRIFUGAL ROOF EXHAUST FANS	24A7B	NOS-3860644
	1	UNKNOWN CENTRIFUGAL ROOF EXHAUST FANS	3044BD-2	NOS-3860626
	1	MITSUBISHI HEAVY INDUSTRIES TRG- PACKAGED TERMINAL AIR CONDITIONER	ASU24CL1	NOS-3860609
	1	MITSUBISHI HEAVY INDUSTRIES TRG- PACKAGED TERMINAL AIR CONDITIONER	ASU24CL1	NOS-3860606
	1	BOILERS	F-350W	NOS-3860548
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K7T	NOS-3860594
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860596
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860597
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860598
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860600
	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860601

	1	TRANE TR1 2900- VARIABLE FREQUENCY DRIVES	TR200P5K5T	NOS-3860603
	1	HUMIDIFIERS, CENTRAL VACUUMS, AIR CLEANERS	VLC36-3	NOS-3860782
CTY JAIL	1	TRANE SPLIT HTG/CLG SYSTEM	BTA120D300AC	B45143732D
	1	TRANE SPLIT HTG/CLG SYSTEM	BTA090C300MB	C06194681
	1	TRANE SPLIT HTG/CLG SYSTEM	TTA072A300A1	B47297497
	1	TRANE SPLIT SYSTEM (KITCHEN)	N/A	N/A
	1	TRANE SPLIT SYSTEM (DISPATCH)	N/A	N/A
	LOT	BUILDING EXHAUST FANS	N/A	N/A
	2	THERMIFIC GAS BOILERS	N/A	N/A
	1	RUUD GAS HOT WATER HEATER	N/A	N/A
	LOT	HOT WATER CIRC. PUMPS	N/A	N/A
	1	TRANE PKG HTG/CLG SYSTEM	N/A	N/A
	1	LENNOX SPLIT SYSTEM	N/A	N/A
	1	MITUSBISHI SPLIT COOLING SYSTEM	N/A	N/A
	8	BARD PKG. COOLING UNITS	N/A	N/A
	1	TRANE DDC BLDG. AUTO. SYSTEM	N/A	N/A
GOVT. CENTER	1	TRANE HELICAL-ROTARY CHILLER	RTAA1854	U01E09832
	2	B&G CHILLED WATER PUMPS		
	4	LOCHINVAR GAS-FIRED BOILERS		
	2	B&G HOT WATER PUMPS		
	10	TRANE MODULAR CLIMATE CHGRS.		
	10	GREENHECK RETURN FANS		
	20	ABB VARIABLE FREQUENCY DRIVES	ACH401	
	16	TRANE BLOWER COIL AIR HDLRS.	BC12-90	

	114	TRANE FAN-PWRD. VAV BOXES	VSWE	
	1	TRANE T-SERIES AIR HANDLER	TSCX14	
	30	GREENHECK BLDG. EXHAUST FANS		
	4	TRANE CABINET UNIT HEATERS	FFBB0201J	
	19	TRANE HOT WATER UNIT HEATERS	UHSA020/070	
	5	TRANE WALL FIN HEATERS	N/A	
	3	LIEBERT DATA PROCESSING UNITS		
	1	BIOCLIMATIC AIR PURIF. SYSTEM	MC-600E	
	2	TRANE TRACER SUMMIT BCU'S	BMTW	
	10	TRANE UNIVERSAL PROG. CONTROL MODULES		
	2	TRANE PROG. CONTROL MODULES		
	14	TRANE TERMINAL UNIT CONTROLLERS		
	1	TRANE SPLIT COOLING SYSTEM		
	1	FRIEDRICH DUSTLESS MINI SPLIT	MR12C1	LHBC04625
GC BLDG C	1	TRANE HELICAL-ROTARY CHILLER	RTUA	
	1	TRANE AIR-COOLED CONDENSER	RTCA	
	2	B&G CHILLED WATER PUMPS		
	2	TRANE MODULAR CLIMATE CHGRS.	MCCB	
	6	TRANE BLOWER COIL AIR HDLRS.	BCXC	
	8	TRANE FAN COIL UNITS	FCCB	
	25	TRANE VAV BOXES	VCWF	
	38	TRANE FAN-PWRD VAV BOXES	VSWF	
	2	TRANE HOT WATER UNIT HEATERS	UHSA060	
GC BLDG C	1	TRANE CABINET UNIT HEATER	FFBB0301L	
	4	ABB VARIABLE FREQ. DRIVES	ACH500	
	1	LIEBERT DATA PROCESSING UNIT		
	LOT	BUILDING EXHAUST FANS		
	1	TRACER SUMMIT BAS	BMTX	
	3	TRANE MP-581 PROGRAMMABLE CONTROLLERS		
	8	TRANE ZN-520 CONTROLLERS		
H&HS BLDG	2	TRANE SPLIT HTG/CLG SYSTEMS	TTA150B300BB	L192HOMAH
				L192493AH
	2	TRANE SPLIT HTG/CLG SYSTEMS	TTA150B300BB	N/A
	2	TRANE SPLIT HTG/CLG SYSTEMS	TTS180B300CB	L192W4FAH L192WHGAH

	2	TRANE SPLIT HTG/CLG SYSTEMS	TTA120B300BB	L19325JAH
				L1933C7AH
	1	TRANE SPLIT HTG/CLG SYSTEM	TTA090A300CB	L193TFEAH
	1	CARRIER SPLIT CLG. SYSTEM	38YCC042-571	1203E39030
	9	TRANE CLIMATE CHANGERS	N/A	N/A
	7	ABB VARIABLE FREQ. DRIVES	ACH501	N/A
	28	TRANE VAV BOXES	VCWE	N/A
	32	TRANE VAV BOXES-FAN PWRD.	VCWF	N/A
	7	TRANE HOT WATER UNIT HTRS	N/A	N/A
	6	TRANE CABINET UNIT HTRS	N/A	N/A
	1	TRANE HOT WATER RHT COIL	N/A	N/A
	1	BURNHAM HOT WATER BOILER	4FW-154-45-G-PF	N/A
	2	BELL & GOSSETT HW PUMPS	N/A	N/A
	1	TJ ERMLUND DRAFT INDUCER	DJ3	N/A
	8	BUILDING EXHAUST FANS	N/A	N/A
	1	TRANE TRACER BCU	BMTX	N/A
	10	TRANE PROG. CONTROL MODS	PCM	N/A
ANIMAL CARE & ADOPT.	1	ERV-1 GREENHECK	ERCH-45-30L-S-EH-01	N/A
	1	ERV-2 GREENHECK	ERCH-45-15L-S-EH-01	N/A
	1	CU-1 DAIKIN	RCS11F125D	N/A
	1	CU-2 DAIKIN	RCS07F090D	N/A
	1	AHU-1 AMERICAN STANDARD	TWE090	N/A
	1	HP-1 AMERICAN STANDARD	TWA090	N/A
	1	AHU-2 AMERICAN STANDARD	TWE090	N/A
	1	HP-2 AMERICAN STANDARD	TWA073	N/A
	1	AHU-3 AMERICAN STANDARD	GAM2AOB42	N/A
	1	HP-3 AMERICAN STANDARD	4TWA3036	N/A
	1	AHU-4 AMERICAN STANDARD	GAM2AOB48	N/A
	1	HP-4 AMERICAN STANDARD	4TWA3042	N/A
	1	AHU-5 ABOVE AIR	VKE-120D-4-HGHP0-00-OA-TR-D2-B	N/A

	1	DH-1 AHU-5 SUPPLY DUCT HEATER	N/A	N/A
	4	ELEC. WALL HEATER MARKEL 6300	N/A	N/A
	1	DUCTLESS A/C SPLIT SYSTEM DAIKIN	FAQ24PVJU	N/A
	1	DUCTLESS A/C SPLIT SYSTEM DAIKIN	FTXS36LVJU	N/A
	1	DUCTLESS A/C SPLIT SYSTEM DAIKIN	FAQ24PVJU	N/A
	13	EXHAUST & SUPPLY FANS	VARIOUS	N/A
LIB HQ CBG	2	CARRIER HEAT PUMPS	38AQS016-530	2501F92129/129
	1	CARRIER HEAT PUMP	38AQS008-501	2001G0309
	1	CARRIER HEAT PUMP	38AQS008-501	2001G0309
	LOT	BUILDING EXHAUST FANS	N/A	N/A
BBG LIB	15	WATER SOURCE HEAT PUMPS	N/A	N/A
	1	EVAPCO FLUID COOLER	LSWA-41A	N/A
	1	BRYAN HOT WATER BOILER	AB90-W-FDG	77779
	2	TACO CIRCULATING PUMPS	N/A	N/A
	6	EXHAUST/SUPPLY FANS	N/A	N/A
	1	UNIT HEATER	N/A	N/A
	1	TRANE PROG. CONTROL MOD.	PCM	N/A
MDBRK LIB	1	TRANE PKG. HTG/CLG UNIT	TCD181C	519100153D
	1	TRANE PKG. HTG/CLG UNIT	THC092A	518100572L
	1	TRANE PKG. HTG/CLG UNIT	TSC048A	518100776L
	1	TRANE PKG. HTG/CLG UNIT	TCC030F	5134Y1A1H
	1	EMI SPLIT COOLING SYSTEM	SHC18DF	1-05-D-6177-16

	1	EMI SPLIT COOLING SYSTEM	SHC12DA	1-05-D-6165-16
	2	BUILDING EXHAUST FANS	N/A	N/A
WALDRON	5	CARRIER HEAT PUMPS		
YMCA	1	CARRIER PTAC		
MEADOW BROOK CTR.	3	CARRIER PTAC UNITS		
	9	DUCTLESS MINI SPLIT UNITS		
	1	GOODMAN PACKAGE UNIT		

As part of this contract, please list the cost per building that makes up your total lot price.

Courthouse	\$ _____
Public Safety Building	\$ _____
County Jail	\$ _____
Government Center Buildings A & B	\$ _____
Government Center Building C	\$ _____
Health & Human Services Building	\$ _____
Animal Care and Adoption Center	\$ _____
Montgomery-Floyd Regional Library, Christiansburg	\$ _____
Blacksburg Branch Library	\$ _____
Meadowbrook Library	\$ _____
Meadowbrook Center (including the Waldron YMCA)	\$ _____