



**ARLINGTON COUNTY, VIRGINIA  
OFFICE OF THE PURCHASING AGENT  
SUITE 500, 2100 CLARENDON BOULEVARD  
ARLINGTON, VA 22201**

**AGREEMENT NO. 20-232-ITB**

THIS AGREEMENT is made, on the date of execution by the County, between ABM Facility Support Services LLC, 12040 Indian Creek Court, Beltsville, Maryland 20705 ("Contractor") a Delaware Limited Liability Company authorized to do business in the Commonwealth of Virginia, and the County Board of Arlington County, Virginia. The County and the Contractor, for the consideration hereinafter specified, agree as follows:

**1. CONTRACT DOCUMENTS**

The "Contract Documents" consist of this Agreement, bid of the successful Bidder (hereinafter "Contractor") and Arlington County (hereinafter "County") Invitation to Bid No. 20-232-ITB.

The Contract Documents set forth the entire agreement between the County and the Contractor. The County and the Contractor agree that no representative or agent of either party has made any representation or promise with respect to the parties' agreement that is not contained in the Contract Documents. The Contract Documents may be referred to below as the "Contract" or the "Agreement".

**2. SCOPE OF WORK**

The Contractor agrees to perform the services described in the Contract Documents (the "Work"), more particularly described in the Scope of Services included with the Invitation to Bid. The primary purpose of the Work is to provide mission critical infrastructure maintenance and repair services. The Contract Documents set forth the minimum work estimated by the County and the Contractor to be necessary to complete the Work. It will be the Contractor's responsibility, at its sole cost, to provide the services set forth in the Contract Documents and sufficient services to fulfill the purposes of the Work. Nothing in the Contract Documents limits the Contractor's responsibility to manage the details and execution of the Work.

**3. PROJECT OFFICER**

The performance of the Contractor is subject to the review and approval of the County Project Officer, who will be appointed by the Director of the Arlington County department or agency requesting the Work under this Contract.

**4. CONTRACT TERM**

Time is of the essence. The Work will commence on the date of execution of the Agreement and must be completed no later than July 31, 2021 ("Initial Contract Term"), subject to any modifications provided in the Contract Documents. Upon satisfactory performance by the Contractor the County may, through issuance of a unilateral Notice of Award, authorize continuation of the Agreement under the same contract prices for not more than four additional 12-month periods, from August 1, 2020 to July 31, 2025 (each a "Subsequent Contract Term"). The Initial Contract Term and any Subsequent Contract Term(s) are together the "Contract Term".

**5. CONTRACT PRICING**

Unless otherwise provided in the Contract Documents, the Contractor shall provide the goods and services covered in the County's Invitation to Bid No. 20-232-ITB at the prices provided in the bid of the Contractor.

**6. PAYMENT TERMS**

The Contractor must submit invoices to the County's Project Officer, who will either approve the invoice or require corrections. Each invoice must certify that the invoice submitted is a true and accurate accounting of the work performed and goods and/or services provided and must be signed and attested to by the Contractor or authorized designee. The County will pay the Contractor within 45 days after receipt of an invoice for completed work that is reasonable and allocable to the Contract and that has been performed to the satisfaction of the Project Officer. The number of the County Purchase Order pursuant to which goods or services have been delivered or performed must appear on all invoices.

If the County makes a partial payment, it may retain 5% of the estimate upon which the partial payment is based until completion and final acceptance of the Work.

**7. PAYMENT OF SUBCONTRACTORS**

The Contractor is obligated to take one of the two following actions within seven days after receipt of payment by the County for work performed by any subcontractor under this Contract:

- a. Pay the subcontractor for the proportionate share of the total payment received from the County attributable to the work performed by the subcontractor under this Contract; or
- b. Notify the County and the subcontractor, in writing, of the Contractor's intention to withhold all or a part of the subcontractor's payment, with the reason for nonpayment.

The Contractor is obligated to pay interest to the subcontractor on all amounts owed by the Contractor to the subcontractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under this Contract, except for amounts withheld as allowed in subsection b., above. Unless otherwise provided under the terms of this Contract, interest will accrue at the rate of 1% per month.

The Contractor must include in each of its subcontracts, if any are permitted, a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.

The Contractor's obligation to pay an interest charge to a subcontractor pursuant to this section may not be construed to be an obligation of the County. A Contract modification may not be made for the purpose of providing reimbursement for such interest charge. A cost reimbursement claim may not include any amount for reimbursement for such interest charge.

**8. NO WAIVER OF RIGHTS**

The County's approval or acceptance of or payment for any goods or services under this Contract will not waive any rights or causes of action arising out of the Contract.

**9. NON-APPROPRIATION**

All payments by the County to the Contractor pursuant to this Contract are subject to the availability of an annual appropriation for this purpose by the County Board of Arlington County, Virginia ("Board"). In the event that the Board does not appropriate funds for the goods or services provided under this Contract, the County will terminate the Contract, without termination charge or other liability to the County, on the last day of the fiscal year or when the previous appropriation has been spent, whichever event occurs first.

**10. ESTIMATED QUANTITIES/NON-EXCLUSIVITY OF CONTRACTOR**

This Contract does not obligate the County to purchase a specific quantity of items or services during the Contract Term. Any quantities that are included in the Contract Documents are the present expectations of the County for the period of the Contract; and the County is under no obligation to buy that or any amount as a result of having provided this estimate or of having had any normal or otherwise measurable requirement in the past. The County may require more goods and/or services than the estimated annual quantities, and any such additional quantities will not give rise to any claim for compensation other than at the unit prices and/or rates in the Contract.

The County does not guarantee that the Contractor will be the exclusive provider of the goods or services covered by this Contract. The items or services covered by this Contract may be or become available under other County contract(s), and the County may determine that it is in its best interest to procure the items or services through those contract(s).

**11. COUNTY PURCHASE ORDER REQUIREMENT**

County purchases are authorized only if the County issues a Purchase Order in advance of the transaction, indicating that the ordering County agency has sufficient funds available to pay for the purchase. If the Contractor provides goods or services without a signed County Purchase Order, it does so at its own risk and expense. The County will not be liable for payment for any purchases made by its employees that are not authorized by the County Purchasing Agent.

**12. DELIVERY**

All goods are purchased F.O.B. destination in Arlington County as described in the specifications. Transportation, handling and all related charges are included in the unit prices or discounts that the Contractor submitted with its bid.

**13. WARRANTY**

The Contractor guarantees against and will correct at its expense factory defects that occur during the manufacturer's standard warranty period. The Contractor will provide all manufacturers' warranties at the time of delivery.

All work is guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials or workmanship for one (1) year from the date of final acceptance of the work by the County. No date other than the date of final acceptance shall govern the effective date of the Guaranty, unless that date is agreed upon by the County and the Contractor in advance and in a signed writing.

**14. INSPECTION, ACCEPTANCE, TITLE, AND RISK OF LOSS**

The County will inspect all materials at the delivery location within ten days of delivery and may test the goods at its sees fit before accepting them.

The Contractor warrants that it has good title to and will require all subcontractors to warrant that they have good title to, all delivered goods.

The Contractor bears title and risk of loss or damage to all delivered goods until the County accepts them.

Neither the Contractor nor any subcontractor may retain any interest in the goods after the County accepts them.

**15. DAMAGE TO PROPERTY**

Any damage, as determined by the Project Officer, to the real or personal property, whether owned by the County or others, resulting from the Work performed under this Contract shall be timely repaired or replaced to the County's satisfaction at the Contractor's expense. The County will perform the repairs unless the County agrees that such repairs will be made by the Contractor. Any such Contractor repairs will be made within ten (10) days of the date of damage to the satisfaction of the County. All costs of the repair performed by the County shall be deducted from the Contractor's final payment.

**16. CLEANING UP**

The Contractor shall remove, as frequently as necessary, all refuse, rubbish, scrap materials and debris from any and all work sites to the extent that the trash is the result of the Contractor's operations, to the end that any and all work sites shall present a neat, orderly, and workmanlike appearance at all times. At completion of the Work, but before final acceptance, the Contractor shall remove all surplus material, falsework, temporary structures including foundations thereof, and debris of every nature resulting from the Contractor's operations or resulting from any activity on the site related to the Contractor's operations and put the site in a neat, orderly condition; if the Contractor fails to do so, the County shall have the right to remove the surplus material, falsework, temporary structures including foundations thereof, and debris, put the site in a neat, orderly condition, and charge the cost to the Contractor. The County shall be entitled to offset such cost against any sums owed by the County to the Contractor under this Contract.

**17. DISPOSAL OF PACKING MATERIALS, TRASH AND DEBRIS**

The Contractor must, at its expense and without using any County waste containers, immediately remove and legally dispose of off-site all packing materials, trash and debris ("Waste"). Otherwise, the County will contract a third party to dispose of the Waste and will deduct the expense from the final payment to the Contractor.

The County will deduct from the final payment the expense to repair any damage to County-owned or controlled property that the Contractor or its agents cause, unless the County agrees that the Contractor can make the repairs, in which case the Contractor must make the repairs at its expense within ten days of the damage and to the satisfaction of the County.

**18. OSHA REQUIREMENTS**

The Contractor certifies that all material supplied or used under this Contract meets all federal and state Occupational Safety and Health Administration ("OSHA") requirements. If the material does not meet the OSHA requirements, the Contractor will bear all costs necessary to bring the material into compliance.

**19. HAZARDOUS MATERIALS**

The Contractor must comply with all federal, state, and local laws governing the storage, transportation, and use of toxic and hazardous materials. The County is subject to the Hazard Communication Standard, 29 CFR § 1910.1200 ("Standard"). The Contractor will provide, no later than delivery or first use of the materials, Material Safety Data Sheets ("MSDS") for all hazardous materials supplied to the County or used in the performance of the Work. The Contractor will also ensure that all shipping and internal containers bear labels that meets the requirements of the Standard. The County may refuse shipments of hazardous materials that are not appropriately labeled or for which the Contractor has not timely provided MSDS. The Contractor must pay any expenses that it or the County incurs as a result of the County's refusal of goods under this section or rejection of MSDS.

**20. HAZARDOUS WASTE GENERATOR/HAZARDOUS WASTE DISPOSAL**

The County and the Contractor shall be listed as co-generators. The Contractor assumes all duties pertaining to the waste generator, including signing the Waste Shipment Record (“WSR”) and manifest. The Contractor shall supply the County Project Officer with the executed original Owner’s Copy of the WSR, as required by applicable regulatory agencies within thirty-five (35) days from the time the waste was accepted by the initial waste transporter, and prior to request for final payment. A separate WSR shall be submitted for each shipment to the disposal site.

Delayed Waste Shipment Records: The Contractor shall report in writing to the EPA Region III office within forty-five (45) days if an executed copy of the WSR is not received from the operator of the disposal site. The report to the EPA regional office shall include a copy of the original WSR and a cover letter signed by the Contractor stating the efforts taken to locate the hazardous waste shipment and the results of those efforts.

Temporary Hazardous Waste Storage Prohibited: The Contractor shall not temporarily store hazardous waste unless pre-approved by the County. If so approved, hazardous waste stored off-site in a temporary facility shall be monitored and records shall be kept on the number of containers, size, and weight. The Contractor shall inform the County when the hazardous waste is to be transported to the final disposal site. The County has the right to inspect the temporary site at any time. The Contractor shall submit copies of all relevant manifests, WSRs, and landfill receipts to the County Project Officer prior to the request for final payment. All paperwork shall be signed by the Contractor and disposal site operator as required.

**21. SAFETY**

The Contractor shall comply with, and ensure that the Contractor's employees and subcontractors comply with, all current applicable local, state and federal policies, regulations and standards relating to safety and health, including, by way of illustration and not limitation, the standards of the Virginia Occupational Safety and Health program of the Department of Labor and Industry for General Industry and for the Construction Industry, the Federal Environmental Protection Agency standards and the applicable standards of the Virginia Department of Environmental Quality.

The Contractor shall provide, or cause to be provided, all technical expertise, qualified personnel, equipment, tools and material to safely accomplish the work specified to be performed by the Contractor and subcontractor(s).

The Contractor shall identify to the County Project Officer at least one on-site person who is the Contractor's competent, qualified, and authorized person on the worksite and who is, by training or experience, familiar with and trained in policies, regulations and standards applicable to the work being performed. The competent, qualified and authorized person must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, shall be capable of ensuring that applicable safety regulations are complied with, and shall have the authority and responsibility to take prompt corrective measures, which may include removal of the Contractor's personnel from the work site.

The Contractor shall provide to the County, at the County’s request, a copy of the Contractor’s written safety policies and safety procedures applicable to the scope of work. Failure to provide this information within seven (7) days of the County’s request may result in cancellation of the contract.

**22. FAILURE TO DELIVER**

If the Contractor fails to deliver goods or services in accordance with the Contract terms and conditions, the County, after notice to the Contractor, may procure the goods or services from other sources and hold the Contractor responsible for any resulting additional purchase and administrative costs. The County shall be entitled to offset such costs against any sums owed by the County to the Contractor. However, if public necessity requires the use of nonconforming materials or supplies, they may be accepted at a reduction in price to be determined solely by the County.

**23. UNSATISFACTORY WORK**

The Contractor must within 15 days of written notice from the County remove and replace, at its expense, any goods that the County rejects as unsatisfactory. Otherwise, the County may choose to remove or replace the rejected goods at the Contractor's expense. The County may offset the costs against any amounts that it owes the Contractor. The County may also decide not to remove or replace the unsatisfactory goods and instead to adjust the Contract Amount to account for the unsatisfactory performance. This paragraph applies throughout the Contract Term and any warranty or guarantee period.

**24. PROJECT STAFF**

The County has the right to reasonably reject staff or subcontractors whom the Contractor assigns to the Project. The Contractor must then provide replacement staff or subcontractors satisfactory to the County in a timely manner and at no additional cost to the County. The day-to-day supervision and control of the Contractor's employees and its subcontractors is the sole responsibility of the Contractor.

**25. SUPERVISION BY CONTRACTOR**

The Contractor shall at all times enforce strict discipline and good order among the employees and subcontractors performing under this Contract and shall not employ on the Work any person not reasonably proficient in the work assigned.

**26. BACKGROUND CHECK**

All employees or subcontractors whom the Contractor assigns to work on this Contract must pass the County's standard background check. The background check will include fingerprinting by the County Sheriff's Office and a credit check.

**27. EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED**

During the performance of its work pursuant to this Contract:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age or disability or on any other basis prohibited by state law. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- B. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation will be deemed sufficient for meeting the requirements of this section.
- C. The Contractor will state in all solicitations or advertisements for employees that it places or causes to be placed that such Contractor is an Equal Opportunity Employer.

- D. The Contractor will comply with the provisions of the Americans with Disabilities Act of 1990 ("ADA"), which prohibits discrimination against individuals with disabilities in employment and mandates that disabled individuals be provided access to publicly and privately provided services and activities.
- E. The Contractor must include the provisions of the foregoing paragraphs in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.

**28. EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED**

In accordance with §2.2-4311.1 of the Code of Virginia, as amended, the Contractor must not during the performance of this Contract knowingly employ an unauthorized alien, as that term is defined in the federal Immigration Reform and Control Act of 1986.

**29. DRUG-FREE WORKPLACE TO BE MAINTAINED BY CONTRACTOR**

During the performance of this Contract, the Contractor must: (i) provide a drug-free workplace for its employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violating such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "workplace" means the site(s) for the performance of the work required by this Contract.

**30. TERMINATION**

The County may terminate this Contract at any time as follows: (1) for cause, if, as determined by the County, the Contractor is in breach or default or has failed to perform the Work satisfactorily; or (2) for the convenience of the County.

Upon receipt of a notice of termination, the Contractor must not place any further orders or subcontracts for materials, services or facilities; must terminate all vendors and subcontracts, except as are necessary for the completion of any portion of the Work that the County did not terminate; and must immediately deliver all documents related to the terminated Work to the County.

Any purchases that the Contractor makes after the notice of termination will be the sole responsibility of the Contractor, unless the County has approved the purchases in writing as necessary for completion of any portion of the Work that the County did not terminate.

If any court of competent jurisdiction finds a termination for cause by the County to be improper, then the termination will be deemed a termination for convenience.

**A. TERMINATION FOR CAUSE, INCLUDING BREACH AND DEFAULT; CURE**

- 1. Termination for Unsatisfactory Performance. If the County determines that the Contractor has failed to perform satisfactorily, then the County will give the Contractor written notice of such failure(s) and the opportunity to cure them within 15 days or any other period specified



by the County ("Cure Period"). If the Contractor fails to cure within the Cure Period, the County may terminate the Contract for failure to provide satisfactory performance by providing written notice with a termination date. The Contractor must submit any request for termination costs, with all supporting documentation, to the County Project Officer within 30 days after the expiration of the Cure Period. The County may accept or reject the request for termination costs, in whole or in part, and may notify the Contractor of its decision within a reasonable time.

In the event of termination by the County for failure to perform satisfactorily, the Contractor must continue to provide its services as previously scheduled through the termination date, and the County must continue to pay all fees and charges incurred through the termination date.

2. Termination for Breach or Default. If the County terminates the Contract for default or breach of any Contract provision or condition, then the termination will be immediate after notice of termination to the Contractor (unless the County provides for an opportunity to cure), and the Contractor will not be permitted to seek termination costs.

Upon any termination pursuant to this section, the Contractor will be liable to the County for costs that the County must expend to complete the Work, including costs resulting from any related delays and from unsatisfactory or non-compliant work performed by the Contractor or its subcontractors. The County will deduct such costs from any amount due to the Contractor; or if the County does not owe the Contractor, the Contractor must promptly pay the costs within 15 days of a demand by the County. This section does not limit the County's recovery of any other damages to which it is entitled by law.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt the notice of the termination.

#### **B. TERMINATION FOR THE CONVENIENCE OF THE COUNTY**

The County may terminate this Contract in whole or in part whenever the Purchasing Agent determines that termination is in the County's best interest. The County will give the Contractor at least 15 days' notice in writing. The notice must specify the extent to which the Contract is terminated and the effective termination date. The Contractor will be entitled to termination costs plus any other reasonable amounts that the parties might negotiate; but no amount will be allowed for anticipatory profits.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt of the notice of the termination.

### **31. INDEMNIFICATION**

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless and indemnify the County and all of its elected and appointed officials, officers, current and former employees, agents, departments, agencies, boards and commissions (collectively the "County Indemnitees") from and against any and all claims made by third parties for any and all losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability, demands or exposure resulting from, arising out of or in any way connected with the Contractor's acts or omissions, including the acts or omissions of its employees and/or subcontractors, in performance or nonperformance of the Contract. This duty to save, defend, hold harmless and indemnify will survive the

termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

### **32. INTELLECTUAL PROPERTY INDEMNIFICATION**

The Contractor warrants and guarantees that in providing services under this Contract neither the Contractor nor any subcontractor is infringing on the intellectual property rights (including, but not limited to, copyright, patent, mask and trademark) of third parties.

If the Contractor or any of its employees or subcontractors uses any design, device, work or material that is covered by patent or copyright, it is understood that the Contract Amount includes all royalties, licensing fees, and any other costs arising from such use in connection with the Work under this Contract.

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless, and indemnify the County Indemnitees, as defined above, from and against any and all claims, losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability or exposure for infringement of or on account of any trademark, copyright, patented or unpatented invention, process or article manufactured or used in the performance of this Contract. This duty to save, defend, hold harmless and indemnify will survive the termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

### **33. COPYRIGHT**

By this Contract, the Contractor irrevocably transfers, assigns, sets over and conveys to the County all rights, title and interest, including the sole exclusive and complete copyright interest, in any and all copyrightable works created pursuant to this Contract. The Contractor will execute any documents that the County requests to formalize such transfer or assignment.

The rights granted to the County by this section are irrevocable and may not be rescinded or modified, including in connection with or as a result of the termination of or a dispute concerning this Contract.

The Contractor may not use subcontractors or third parties to develop or provide input into any copyrightable materials produced pursuant to this Contract without the County's advance written approval and unless the Contractor includes this Copyright provision in any contract or agreement with such subcontractors or third parties related to this Contract.

### **34. OWNERSHIP AND RETURN OF RECORDS**

This Contract does not confer on the Contractor any ownership rights or rights to use or disclose the County's data or inputs.

All drawings, specifications, blueprints, data, information, findings, memoranda, correspondence, documents or records of any type, whether written, oral or electronic, and all documents generated by the Contractor or its subcontractors as a result of this Contract (collectively "Records") are the exclusive property of the County and must be provided or returned to the County upon completion, termination, or cancellation of this Contract. The Contractor will not use or willingly cause or allow such materials to

be used for any purpose other than performance of this Contract without the written consent of the County.

The Records are confidential, and the Contractor will neither release the Records nor share their contents. The Contractor will refer all inquiries regarding the status of any Record to the Project Officer or to his or her designee. At the County's request, the Contractor will deliver all Records, including hard copies of electronic records, to the Project Officer and will destroy all electronic Records.

The Contractor agrees to include the provisions of this section as part of any contract or agreement related to this Contract into which it enters with subcontractors or other third parties.

The provisions of this section will survive any termination or cancellation of this Contract.

**35. CONFIDENTIAL INFORMATION**

The Contractor and its employees, agents and subcontractors will hold as confidential all County information obtained under this Contract. Confidential information includes, but is not limited to, nonpublic personal information; personal health information (PHI); social security numbers; addresses; dates of birth; other contact information or medical information about a person; and information pertaining to products, operations, systems, customers, prospective customers, techniques, intentions, processes, plans and expertise. The Contractor must take reasonable measures to ensure that all of its employees, agents and subcontractors are informed of and abide by this requirement.

**36. ETHICS IN PUBLIC CONTRACTING**

This Contract incorporates by reference Article 9 of the Arlington County Purchasing Resolution, as well as all state and federal laws related to ethics, conflicts of interest or bribery, including the State and Local Government Conflict of Interests Act (Code of Virginia § 2.2-3100 et seq.), the Virginia Governmental Frauds Act (Code of Virginia § 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2 of the Code of Virginia, as amended (§ 18.2-438 et seq.). The Contractor certifies that its bid was made without collusion or fraud; that it has not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor; and that it has not conferred on any public employee having official responsibility for this procurement any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

**37. COUNTY EMPLOYEES**

No Arlington County employee may share in any part of this Contract or receive any benefit from the Contract that is not available to the general public.

**38. FORCE MAJEURE**

Neither party will be held responsible for failure to perform the duties and responsibilities imposed by this Contract if such failure is due to a fire, riot, rebellion, natural disaster, war, act of terrorism or act of God that is beyond the control of the party and that makes performance impossible or illegal, unless otherwise specified in the Contract.

**39. AUTHORITY TO TRANSACT BUSINESS**

The Contractor must, pursuant to Code of Virginia § 2.2-4311.2, be and remain authorized to transact business in the Commonwealth of Virginia during the entire term of this Contract. Otherwise, the Contract is voidable at the sole option of and with no expense to the County.

**40. RELATION TO COUNTY**

The Contractor is an independent contractor, and neither the Contractor nor its employees or subcontractors will be considered employees, servants or agents of the County. The County will not be responsible for any negligence or other wrongdoing by the Contractor or its employees, servants or agents. The County will not withhold payments to the Contractor for any federal or state unemployment taxes, federal or state income taxes or Social Security tax or for any other benefits. The County will not provide to the Contractor any insurance coverage or other benefits, including workers' compensation.

**41. ANTITRUST**

The Contractor conveys, sells, assigns and transfers to the County all rights, title and interest in and to all causes of action under state or federal antitrust laws that the Contractor may have relating to this Contract.

**42. REPORT STANDARDS**

The Contractor must submit all written reports required by this Contract for advance review in a format approved by the Project Officer. Reports must be accurate and grammatically correct and should not contain spelling errors. The Contractor will bear the cost of correcting grammatical or spelling errors and inaccurate report data and of other revisions that are required to bring the report(s) into compliance with this section.

Whenever possible, proposals must comply with the following guidelines:

- printed double-sided on at least 30% recycled-content and/or tree-free paper
- recyclable and/or easily removable covers or binders made from recycled materials (proposals with glued bindings that meet all other requirements are acceptable)
- avoid use of plastic covers or dividers
- avoid unnecessary attachments or documents or superfluous use of paper (e.g. separate title sheets or chapter dividers)

**43. AUDIT**

The Contractor may be requested to provide to the County the complete findings and all components of an independent certified public accountant's audit of its finances and program operation within two months after the close of Contractor's fiscal year. If a management letter was not prepared with the audit, the Contractor must so certify in writing as part of the audit report to the County. The Contractor must allow the County to review its records as the County deems necessary for audit purposes within 15 calendar days of the County's receipt of the findings. All accounts of the Contractor are subject to audit.

The Contractor must retain all books, records and other documents related to this Contract for at least five years after the final payment and must allow the County or its authorized agents to examine the documents during this period and during the Contract Term. The Contractor must provide any requested documents to the County for examination within 15 days of the request, at the Contractor's expense. Should the County's examination reveal any overcharging by the Contractor, the Contractor must, within 30 days of County's request, reimburse the County for the overcharges and for the reasonable costs of the County's examination, including, but not limited to, the services of external audit firm and attorney's fees; or the County may deduct the overcharges and examination costs from any amount that the County owes to the Contractor. If the Contractor wishes to destroy or dispose of any records related to this Contract (including confidential records to which the County does not have ready access) within five years after the final payment, the Contractor must give the County at least 30 days' notice and must not dispose of the documents if the County objects.

**44. ASSIGNMENT**

The Contractor may not assign, transfer, convey or otherwise dispose of any award or any of its rights, obligations or interests under this Contract without the prior written consent of the County.

**45. AMENDMENTS**

This Contract may not be modified except by written amendment executed by persons duly authorized to bind the Contractor and the County.

**46. ARLINGTON COUNTY PURCHASING RESOLUTION AND COUNTY POLICIES**

Nothing in this Contract waives any provision of the Arlington County Purchasing Resolution, which is incorporated herein by reference, or any applicable County policy.

**47. DISPUTE RESOLUTION**

All disputes arising under this Agreement or concerning its interpretation, whether involving law or fact and including but not limited to claims for additional work, compensation or time, and all claims for alleged breach of contract must be submitted in writing to the Project Officer as soon as the basis for the claim arises. In accordance with the Arlington County Purchasing Resolution, claims denied by the Project Officer may be submitted to the County Manager in writing no later than 60 days after the final payment. The time limit for a final written decision by the County Manager is 30 days. Procedures concerning contractual claims, disputes, administrative appeals and protests are contained in the Arlington County Purchasing Resolution. The Contractor must continue to work as scheduled pending a decision of the Project Officer, County Manager, County Board or a court of law.

**48. APPLICABLE LAW, FORUM, VENUE AND JURISDICTION**

This Contract is governed in all respects by the laws of the Commonwealth of Virginia; and the jurisdiction, forum and venue for any litigation concerning the Contract or the Work is in the Circuit Court for Arlington County, Virginia, and in no other court.

**49. ARBITRATION**

No claim arising under or related to this Contract may be subject to arbitration.

**50. NONEXCLUSIVITY OF REMEDIES**

All remedies available to the County under this Contract are cumulative, and no remedy will be exclusive of any other at law or in equity.

**51. NO WAIVER**

The failure to exercise a right provided for in this Contract will not be a subsequent waiver of the same right or of any other right.

**52. SEVERABILITY**

The sections, paragraphs, clauses, sentences, and phrases of this Contract are severable; and if any section, paragraph, clause, sentence or phrase of this Contract is declared invalid by a court of competent jurisdiction, the rest of the Contract will remain in effect.

**53. NO WAIVER OF SOVEREIGN IMMUNITY**

Notwithstanding any other provision of this Contract, nothing in this Contract or any action taken by the County pursuant to this Contract shall constitute or be construed as a waiver of either the sovereign or governmental immunity of the County. The parties intend for this provision to be read as broadly as possible.

**54. ATTORNEY'S FEES**

In the event that the County prevails in any legal action or proceeding brought by the County to enforce any provision of this Contract, the Contractor will pay the County's reasonable attorney's fees and expenses.

**55. SURVIVAL OF TERMS**

In addition to any statement that a specific term or paragraph survives the expiration or termination of this Contract, the following sections also survive: INDEMNIFICATION; INTELLECTUAL PROPERTY INDEMNIFICATION; RELATION TO COUNTY; OWNERSHIP AND RETURN OF RECORDS; AUDIT; COPYRIGHT; WARRANTY; DISPUTE RESOLUTION; APPLICABLE LAW AND JURISDICTION; ATTORNEY'S FEES, AND CONFIDENTIAL INFORMATION.

**56. HEADINGS**

The section headings in this Contract are inserted only for convenience and do not affect the substance of the Contract or limit the sections' scope.

**57. AMBIGUITIES**

The parties and their counsel have participated fully in the drafting of this Agreement; and any rule that ambiguities are to be resolved against the drafting party does not apply. The language in this Agreement is to be interpreted as to its plain meaning and not strictly for or against any party.

**58. NOTICES**

Unless otherwise provided in writing, all legal notices and other communications required by this Contract are deemed to have been given when either (a) delivered in person; (b) delivered by an agent, such as a delivery service; or (c) deposited in the United States mail, postage prepaid, certified or registered and addressed as follows:

**Contact Information for the Contractor:**

Thomas Mollencop  
ABM Facility Support Services LLC  
12040 Indian Creek Court  
Beltsville, Maryland 20705

**Contact Information for the Department (DES-Facilities)**

Tsehay Lightfoot, Project Officer  
1400 N. Uhle Street, Suite 601  
Arlington, Virginia 22201

**AND**

Sharon T. Lewis, Purchasing Agent  
Arlington County, Virginia  
2100 Clarendon Boulevard, Suite 500  
Arlington, Virginia 22201

**59. ARLINGTON COUNTY BUSINESS LICENSES**

The Contractor must comply with the provisions of Chapter 11 (“Licenses”) of the Arlington County Code, if applicable. For information on the provisions of that Chapter and its applicability to this Contract, the Contractor must contact the Arlington County Business License Division, Office of the Commissioner of the Revenue, 2100 Clarendon Blvd., Suite 200, Arlington, Virginia, 22201, telephone number (703) 228-3060.

**60. NON-DISCRIMINATION NOTICE**

Arlington County does not discriminate against faith-based organizations.

**61. LIMITED ENGLISH PROFICIENCY**

The Contractor must comply with Executive Order 13166, Title VI of the Civil Rights Act of 1964 and make reasonable efforts to ensure that as part of the services that it provides, adequate communication services, including interpretation and translation, are available to persons who have limited English proficiency. If such services are not included in the Contract’s scope of services and pricing, the Contractor will use a County-contracted service provider, and the County will pay the fees.

**62. INSURANCE REQUIREMENTS**

Before beginning work under the Contract or any extension, the Contractor must provide to the County Purchasing Agent a Certificate of Insurance indicating that the Contractor has in force at a minimum the coverage below. The Contractor must maintain this coverage until the completion of the Contract or as otherwise stated in the Contract Documents. All required insurance coverage must be acquired from insurers that are authorized to do business in the Commonwealth of Virginia, with a rating of “A-” or better and a financial size of “Class VII” or better in the latest edition of the A.M. Best Co. Guides.

- a. Workers Compensation - Virginia statutory workers compensation (W/C) coverage, including Virginia benefits and employer’s liability with limits of \$100,000/100,000/500,000. The County will not accept W/C coverage issued by the Injured Worker's Insurance Fund, Towson, MD.
- b. Commercial General Liability - \$1,000,000 per occurrence, with \$2,000,000 annual aggregate covering all premises and operations and including personal injury, completed operations, contractual liability, independent contractors, and products liability. The general aggregate limit must apply to this Contract. Evidence of contractual liability coverage must be typed on the certificate.
- c. Business Automobile Liability - \$1,000,000 combined single-limit (owned, non-owned and hired).
- d. Additional Insured – The County and its officers, elected and appointed officials, employees and agents must be named as additional insureds on all policies except workers compensation and automotive and professional liability; and the additional insured endorsement must be typed on the certificate.
- e. Cancellation - If there is a material change or reduction in or cancellation of any of the above coverages during the Contract Term, the Contractor must notify the Purchasing Agent immediately and must, with no lapse in coverage, obtain replacement coverage that is consistent

with the terms of this Contract. Not having the required insurance throughout the Contract Term is grounds for termination of the Contract.

- f. Claims-Made Coverage - Any "claims made" policy must remain in force, or the Contractor must obtain an extended reporting endorsement, until the applicable statute of limitations for any claims has expired.
- g. Contract Identification - All insurance certificates must state this Contract's number and title.

The Contractor must disclose to the County the amount of any deductible or self-insurance component of any of the required policies. With the County's approval, the Contractor may satisfy its obligations under this section by self-insurance for all or any part of the insurance required, provided that the Contractor can demonstrate sufficient financial capacity. In order to do so, the Contractor must provide the County with its most recent actuarial report and a copy of its self-insurance resolution.

The County may request additional information to determine if the Contractor has the financial capacity to meet its obligations under a deductible and may require a lower deductible; that funds equal to the deductible be placed in escrow; a certificate of self-insurance; collateral; or another mechanism to guarantee the amount of the deductible and ensure protection for the County.

The County's acceptance or approval of any insurance will not relieve the Contractor from any liability or obligation imposed by the Contract Documents.

The Contractor is responsible for the Work and for all materials, tools, equipment, appliances and property used in connection with the Work. The Contractor assumes all risks for direct and indirect damage or injury to the property used or persons employed in connection with the Work and for of all damage or injury to any person or property, wherever located, resulting from any action, omission, commission or operation under the Contract or in connection in any way whatsoever with the Work. The Contractor's insurance shall be the primary non-contributory insurance for any work performed under this Contract.

The Contractor is as fully responsible to the County for the acts and omissions of its subcontractors and of persons employed by them as it is for acts and omissions of persons whom the Contractor employs directly.

### **63. COUNTERPARTS**

This Agreement may be executed in one or more counterparts and all of such counterparts shall together constitute one and the same instrument. Original signatures transmitted and received via facsimile or other electronic transmission (e.g., PDF or similar format) are true and valid signatures for all purposes hereunder and shall be effective as delivery of a manually executed original counterpart.



WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON  
COUNTY, VIRGINIA

AUTHORIZED SIGNATURE: DocuSigned by: Lucas Alexander  
5D2342428F9D4B4...

NAME AND TITLE: LUCAS ALEXANDER  
PROCUREMENT OFFICER

DATE: 8/5/2020

ABM FACILITY SUPPORT SERVICES LLC

AUTHORIZED SIGNATURE: DocuSigned by: Thomas Mollencop  
814B2A27A6AD43C...

NAME AND TITLE: Thomas Mollencop  
VP Finance

DATE: 7/13/2020

Exhibit A – Pricing Sheet**Table A - Maintenance Costs:**

	<b><u>Annual Price</u></b>
Emergency Call Center (ECC)- Courts/Police Facility	<b><u>\$ 54,162.00</u></b>
Bozman Center Network Operations Center (NOC) & Data Units AND Fire Alarm	<b><u>\$ 106,837.00</u></b>
Lee Pumping Station (OEM Radio Site)	<b><u>\$ 16,871.00</u></b>
BB&T Building OEM Radio Site	<b><u>\$ 7,501.00</u></b>
Court House Plaza II Radio System Master Site (OEM Radio Site)	<b><u>\$ 11,533.00</u></b>
Shirlington Tower (Penthouse Equipment Room OEM Radio Site)	<b><u>\$ 17,022.00</u></b>
Ballston Archstone Place Apartments (OEM Radio Site)	<b><u>\$ 16,972.00</u></b>
Ritz Carlton (Penthouse Equipment Room (OEM Radio Site)	<b><u>\$ 8,833.00</u></b>
Trade Center Network Operations Center (NOC)	<b><u>\$ 51,861.00</u></b>
Emergency Call Center (ECC) Court Square West	<b><u>\$ 5,030.00</u></b>

**Table B - Labor Rates:**

<b><u>Personnel Type</u></b>	<b><u>Hourly Rate</u></b>
Project Manager rate	<b><u>\$ 125.00</u></b>
HVAC Mechanic regular rate	<b><u>\$ 130.00</u></b>
HVAC Mechanic OT	<b><u>\$ 195.00</u></b>
HVAC Helper regular rate	<b><u>\$ 19.00</u></b>
HVAC Helper OT	<b><u>\$ 28.50</u></b>
Electrician regular rate	<b><u>\$ 125.00</u></b>
Electrician OT	<b><u>\$ 187.50</u></b>
Electrician Helper regular rate	<b><u>\$ 19.00</u></b>
Electrician Helper OT	<b><u>\$ 28.50</u></b>
Generator Technician regular rate	<b><u>\$ 169.00</u></b>
Generator Technician OT	<b><u>\$ 293.00</u></b>
Generator Technician Helper regular rate	<b><u>\$ 19.00</u></b>
Generator Technician Helper OT	<b><u>\$ 28.50</u></b>
UPS/PDU Technician regular rate	<b><u>\$ 198.00</u></b>
UPS/PDU Technician OT	<b><u>\$ 296.00</u></b>
Battery Technician regular rate	<b><u>\$ 150.00</u></b>
Battery Technician OT	<b><u>\$ 225.00</u></b>
Sprinkler Technician regular rate	<b><u>\$ 136.00</u></b>
Sprinkler Technician OT	<b><u>\$ 204.00</u></b>
Fire Alarm Technician regular rate	<b><u>\$ 150.00</u></b>
Fire Alarm Technician OT	<b><u>\$ 225.00</u></b>
Fire Protection Helper	<b><u>\$ 29.00</u></b>

## **Exhibit B – Scope of Work**

### **A. INTRODUCTION**

Arlington County (“County”) seeks to establish a Contract with a qualified firm to provide preventative maintenance (PM), repair, replacement, installation, and emergency response/ services for the following mission critical building systems at the County’s Mission Critical Facilities:

- HVAC
- Electrical including emergency power generation and uninterruptable power
- Fire Protection

The County Mission Critical Facilities include 911 Call Centers, Network Operation Centers, and Public Safety Radio Sites as specified in Schedule A of this solicitation. All sites are critical to the County’s operation and must be kept online 24/7/365.

### **B. SERVICE REQUIREMENTS:**

The Contractor shall furnish all necessary labor, transportation, parking fees, tools-of-the-trade including specialized diagnostic testing equipment, consumable supplies (including, by way of illustration and not limitation, lubrication, solder, caulking, tape, wire nuts, fasteners, gases, belts and other consumable items) and materials as required to provide comprehensive preventive maintenance on all mission critical building systems listed herein. The equipment listed in Schedule A represents current County inventory covered by this Contract. The Contractor shall provide emergency on-call response, repairs, testing, replacement, and installation services for the equipment listed in Schedule A, and any other equipment indicated by the County on a time and materials or project basis in accordance with the pricing listed in the Bid Form. All charges for materials, parts and equipment shall be at the Contractor’s cost and reimbursable by the County upon receipt of an invoice per the terms cited in section H. NEW AND CORRECTIVE WORK.

The contractor shall provide daily and weekly reports indicating at least the following items: the facilities that will be visited for PM or corrective work under the current Work Order, a schedule of any outage that is required to perform PM or corrective work, a list of the facilities visited the previous week, the work done and the results of these visits, and current status (e.g. normal, alarm) of major systems (e.g. HVAC, UPS) at the facilities.

No “portal to portal” charges, fuel surcharges or miscellaneous fees are permitted under the contract.

### **C. CONTRACT TERM AND PRICING**

Refer to Paragraph 4 & 5 of the contract.

### **D. *CONTRACT CHANGES***

The County reserves the right to add or remove equipment and services to or from the Contract through a written amendment. The additions or removals shall be at the sole discretion of the County. The service Contract value of listed equipment discontinued from service during the contract term shall be deducted from the Contract price. Equipment added after bid opening shall be added to the annual Contract price. The value of any such additions or subtractions shall be negotiated between the County and the Contractor.

### **E. *INSPECTION, TESTING, AND PREVENTIVE MAINTENANCE SERVICE***

The Contractor shall perform inspection, testing, and preventive maintenance of all equipment

listed in Schedule A per the guidelines identified in Schedule B. The Contractor shall provide to the County Project Officer or designee within ten (10) calendar days of the issuance of a valid County Purchase Order an inspection, testing, and preventive maintenance first-month schedule for all equipment in Schedule A for review and approval. The Contractor shall begin inspection, testing, and maintenance on all equipment in Schedule A upon County approval of the submitted schedule. The Contractor shall submit a monthly schedule with a new assigned Work Order number for approval to the County Project Officer ten (10) business days prior to the start of each month.

The initial service to any equipment shall be the annual service or next highest cyclical service (e.g. annual, semi-annual, quarterly) and shall meet the guidelines identified in Schedule B.

Upon completion of the initial service of all equipment listed in Schedule A and within ninety (90) calendar days of the County's approval of the schedule, the Contractor shall submit to the County's Project Officer, three (3) bounded hardcopies and one (1) electronic PDF copy on DVD of a written report identifying the building name, building address, the date of service visit and the following information for all equipment listed in Schedule A:

1. Equipment type, location, model number, serial number, and manufacturer (the Contractor shall verify the equipment listed in Schedule A for accuracy).
2. List of equipment in the listed locations not included on Schedule A. Include equipment type, location, model number, serial number, and manufacturer.
3. A statement as to the current condition of each piece of the equipment.
4. A description of work performed as a part of the annual preventive maintenance visit.
5. Specific recommendations for any repair or modification which the Contractor believes could enhance the operation of the equipment.
6. A price proposal for adding the equipment listed in item 2 to the Contract.
7. An estimate of the cost of each task to accomplish the work recommended in item 5 above using the Contract labor rates.

A written report meeting the criteria above shall be provided yearly after each annual service and within sixty (60) days after the contract anniversary date.

All major deficiencies found during any service visit shall be relayed by phone or in person to the County Project Officer or designee on the same day of the service visit.

All inspection, testing, and preventative maintenance of all equipment identified in Schedule A shall be performed by technicians that meet the criteria of the technicians identified in the Contractor's Personnel Requirements section below.

In order to facilitate the transition to a new contractor, at the end of the contract, the current Contractor shall provide all records of the preventive and corrective maintenance done to the equipment listed in schedule A.

F. *MONTHLY PROGRESS MEETINGS*

On a monthly basis, the Contractor's Contract Manager shall meet with the County Project Officer or designee at a time and location accommodating to the County to review the previous month's performance and to discuss any Contract related items. The Contractor shall provide to the County Project Officer or designee a preventative maintenance reports a minimum of five (5) business days prior to the monthly progress meeting. The report shall contain the following information:

1. Date scheduled maintenance was last performed and by which technician.
2. Identification of all equipment and components on which scheduled maintenance was completed.
3. Preventative maintenance schedule for the current month.
4. Summary including status of all work orders issued during the previous month.
5. Summary including status of all ongoing projects.
6. Minutes of previous month's meeting.

The Contractor shall take meeting notes and produce meeting minutes for all monthly progress meetings. The minutes shall be provided to the County Project Officer or designee within five (5) business days after the date of the meeting.

G. *MAINTENANCE EQUIPMENT LOG SHEETS*

The Contractor shall provide and maintain a separate preventive and corrective maintenance equipment log sheet for each piece of equipment listed in Schedule A. The log sheet shall be kept in a clear plastic folder with sewn edges and be posted at or near the equipment. These folders shall be posted during the initial service and shall be maintained throughout the duration of the Contract.

The maintenance equipment log shall show the following:

1. Dates when scheduled preventive or corrective maintenance was performed and by whom.
2. "REMARKS" column shall identify all maintenance that was performed satisfactorily.
3. If anything other than "satisfactory" is entered in the REMARKS column, the Contractor's technician shall indicate on the log sheet any uncorrected deficiencies and who they contacted to inform of the issue; reasons for deferring corrective services; critical readings taken (pressure, temperature etc.) and any other information the County may need to know regarding the condition or operational status of the equipment.
4. Recorded readings of items as required by Schedule B.

Failure by Contractor's staff to sign the maintenance log sheet will result in an amount to that represented by the equipment being deducted from the monthly bill, for each month that a failure exists. Billing will be verified by County Project Officer prior to processing for compliance.

H. NEW AND CORRECTIVE WORK

Additional work on equipment listed in Schedule A outside of the tasks specified in Schedule B and for inspection, testing, preventive maintenance, repair, replacement, and installation of equipment not listed in Schedule A and which are not due to the Contractor's improper performance or negligence, shall be completed on a time and materials or project basis using the Contract labor rates submitted in the Bid Form in accordance with procedures outlined in Paragraphs J. WORK TICKETS & WORK ORDERS and K. PROJECT WORK. The Contractor shall provide the parts and materials at cost with no additional markup. Upon request by the County, the Contractor shall provide evidence of cost of the materials. The County will reimburse the Contractor for any subcontractor work at the labor rate and materials charged by the subcontractor at the Contractor's cost. Work is not authorized unless specifically approved in advance by the County Project Officer and supported by issuance of a Purchase Order ("PO").

Proposals for any new and corrective work performed on time and materials or project basis under this Contract are capped at \$500,000.00. The County reserves the right to issue separate solicitations for projects of any dollar value, if, in its own discretion, the County determines that it would be in the best interest of the County.

Any projects of total (proposal price plus contingency) value of more than \$250,000.00 must obtain prior approval of Arlington County Board.

Tools of the trade and other trade consumables are not valid contract expenses. The cost of consumables (including, by way of illustration and not limitation, lubrication, solder, caulking, tape, wire nuts, fasteners, gases, and other consumable items) are considered administrative expenses. These shall be included as part of the hourly rates bid.

I. *WORK TICKETS & WORK ORDERS (Work less than \$5,000)*

For time and material work estimated at less than \$5,000, the County will issue Work Orders to the Contractor. All time and material work shall require associated Work Tickets indicating the Work Order number issued by the County. The Contractor's employees shall validate their time and material work through sign-off on the Work Ticket by the County Project Officer or designee. The sign-off on the Work Ticket shall be considered evidence of the site visit only and shall not be construed as the County's acceptance of any work performed during the visit or the amount of labor hours charged to the job.

The Contractor shall at the County's request submit a written proposal to be approved and accepted by the County Project Officer or designee for all projects with cost estimates exceeding \$2,500. No work shall be performed without a prior written authorization of the County Project Officer AND an approved County Purchase Order.

The Contractor shall provide a daily update to the County Project Officer or designee of all completed and open work orders.

J. PROJECT WORK

The Contractor shall submit a formal proposal for all inspection, testing, maintenance, repair, replacement, and installation projects (excluding preventive maintenance) upon request by the

County. The Contractor's proposal shall be based strictly on the Contract Labor Rates listed on the Bid Form, and on the actual cost for materials used to complete the work. The proposal shall indicate the cost for the work, all the necessary materials and the associated labor each as a separate line item. Upon acceptance of the proposal by the County Project Officer or designee, the County will issue a separate Purchase Order (PO) for the work. The Contractor shall not begin the work without receipt of the approved PO and an official written notice to proceed authorized by the County Project Officer or designee. The County reserves the right to solicit additional cost proposals or issue separate bid(s) for any such project work. At the County's request, the Contractor shall perform project work on a time and materials basis.

Proposals for any new and corrective work performed on time and materials or project basis under this Contract are capped at \$500,000.00. Any projects of total (proposal price plus contingency) value of more than \$250,000.00 must obtain prior approval of Arlington County Board.

The County reserves the right to require submission of Payment and Performance Bonds for any project work under this Contract.

K. IMPROPER MAINTENANCE, REPAIR AND/OR OPERATION:

In the event of an equipment and/or system failure due to the Contractor's improper or lack of required maintenance, improper repair, improper operation, negligence, misuse or accidents caused by the Contractor's employees including subcontractors, or as a result of actions of the Contractor's employees, including subcontractors, the Contractor shall arrive onsite with all tools and materials necessary to complete the repairs within two (2) hours of the County's notification. Such repairs shall be performed at Contractor's cost with no additional charge to the County.

The County reserves the right to complete the repairs in-house or use a different Contractor if, in its sole discretion, it is determined that such repairs must be performed immediately. The Contractor shall reimburse the County for the full cost of such repairs.

In any instance, where there is clear evidence indicating that the equipment and/or system failure was a direct result of the Contractor's repair work caused by improper or lack of required maintenance, improper repair, improper operation, negligence, misuse or accidents caused by the Contractor's employees including subcontractors, or as a result of actions of the Contractor's employees, including subcontractors, the County reserves the right to require the Contractor to reimburse the County for any and all reasonable costs that the County incurred as a result of such an event. The County may also assess liquidated damages as set forth in this section or elsewhere in this document.

If any equipment warranty is invalidated due to Contractor's negligence in providing factory certified service technicians as required, the Contractor shall be responsible for any ensuing costs.

L. WORK HOURS

Regular work hours under this Contract are defined as 7:00am to 4:00pm, Monday through Friday, except weekends and County-observed holidays. All work shall be performed during regular working hours unless indicated otherwise in this Contract or expressly authorized in writing by the County Project Officer or designee. It is the Contractor's responsibility to determine the hourly schedule and access availability for each area covered by this Contract. No overtime pay will be

approved for preventive maintenance work in those areas. No overtime payments will be allowed for work done before 7:00am or after 4:00pm when such scheduling is done at the Contractor's option.

*M. ON-CALL SERVICE*

The Contractor shall provide twenty-four (24) hours per day seven (7) days per week three hundred sixty-five (365) days per year on-call and emergency repair services. The Contractor shall arrive onsite with all tools and equipment necessary to perform the repairs within two (2) hours of a request identified as an emergency or critical and shall arrive onsite with all tools and equipment necessary to perform the repairs within four (4) hours for routine service requests. On-call repair services shall be completed on a time and materials basis using contract unit prices. No work is authorized unless specifically approved in advance by the County Project Officer or designee and unless a valid County Work Order/Purchase Order is issued.

The Contractor shall be able to receive requests via telephone and by e-mail. The County uses an automated monitoring system. The Contractor shall respond to e-mails defined as a critical alarm sent through the automated system within the timeframe specified for emergency repair services.

If the Contractor is unable to or fails to respond within the required time frame, the County reserves the right to obtain the service elsewhere. If the Contractor is unable to or fails to respond within the required time frame on two (2) or more occasions during any three (3) month period, the County may, in its own discretion, terminate the contract.

*N. OVERTIME WORK*

Work authorized in advance by the County Project Officer or designee to be performed on a time and material basis outside of regular work hours shall be paid at the overtime hourly labor rate(s) provided on the Bid Form. The Contractor shall not perform overtime work for any reason without the advance approval of the County Project Officer or designee. Work performed outside of regular work hours without the advance approval of the Project Officer or for the Contractor's convenience shall be paid for at straight-time hourly labor rate(s) only.

*O. CHECK-IN AT SITE AND SIGN-OFF*

The Contractor's employees shall check in and out with the County's Facilities Management Bureau Hotline (703-228-4422) during any work at a County facility to allow for proper notification to County staff at various sites. After hours service call, please contact duty engineer phone line at 703-887-9207.

THE CONTRACTOR'S PERSONNEL SHALL CALL THE FACILITIES MANAGEMENT BUREAU HOTLINE (703-228-4422) AND INFORM THE DISPATCHER IN ADVANCE OF THEIR TIME OF ARRIVAL AT THE COUNTY FACILITY.
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*P. MATERIAL AND WORKMANSHIP*

All equipment, parts and materials used or furnished under this Contract shall be new and genuine manufacturer's recommended or authorized replacement parts. Use of used parts or materials is



prohibited. Prior approval of the County Project Officer or designee is required on a case-by-case basis when rebuilt parts are proposed for use.

The Contractor understands and agrees that payment to the Contractor for materials used in the performance of any work under this contract on a cost-plus-a-percentage-of-cost basis is specifically prohibited. All charges for materials for all Contract work shall be at the Contractor's cost.

*Q. GUARANTEE*

The Contractor shall guarantee all parts/materials and workmanship for a period of one (1) year or the manufacturer's warranty period, whichever is longer. Any repeated repairs/corrections for the same reason or problem within this time period shall be made at no cost to the County. The Contractor guarantee shall commence upon final County payment for that specific project, item, or task.

*R. LICENSES AND PERMITS*

The Contractor shall, at its expense, obtain all necessary licenses and permits needed to conduct the work required under this Contract. The Contractor shall be responsible for providing all necessary formal notices required in conjunction with the lawful execution of the work under this Contract.

*S. CONTRACTOR'S PERSONNEL*

**1. CONTRACT MANAGER**

The Contractor shall assign a qualified individual to serve as the Contract Manager. The Contractor shall identify to the County the Contract Manager within ten (10) calendar days of Contract award. The Contract Manager shall be experienced in project management; supervision of employees; knowledgeable in all aspects of mission critical building systems; can troubleshoot problems and issues quickly and be able to consult with the County Project Officer or designee about remedies. The Contract Manager's main office of operation shall be located within seventy-five (75) miles of the Arlington County Courthouse.

The Contract Manager shall report to the County's Project Officer for communication, coordination and evaluation of inspection, testing, and maintenance services and for quality control. The Contract Manager shall serve as the single point of contact with the County for work assignments, Contractor cost proposals, and problem resolution.

The Contract Manager shall meet with the County Project Officer for progress meetings and site tours as needed to discuss performance and receive feedback on all services performed. At a minimum, the Contract Manager shall meet with the County Project Officer monthly and perform monthly site tours with the County Project Officer or designee.

The Contract Manager hours are not billable and shall be considered Contractor overhead.

## 2. PROJECT MANAGER

The Contractor shall provide project management on an as-needed basis. The Project Manager shall be responsible for project coordination of installation, repair, and replacement projects. The coordination tasks shall include, but not be limited to: scheduling, ordering and delivery of equipment and materials, project oversight, coordination, and close-out (i.e. checklist, start-up, warranty, etc.). A Project Manager may only be charged for project work over \$25,000. No overtime charges will be allowed for Project Manager's work.

## 3. HVAC MECHANIC

The Contractor shall provide HVAC Mechanics who currently hold an active Journeyman or Master tradesman certification through the Virginia Board for Contractors on an as needed basis to perform maintenance, repairs, and installation services for commercial heating, ventilating and air conditioning service. Evidence of stated license shall be made available to the County upon request at any time. Each HVAC Mechanic shall have at least three (3) years experience as a journeyman commercial mechanic providing heating, ventilating and air conditioning service repairs.

The Contractor shall employ at all times during the Contract term at least five (5) Journeyman HVAC Mechanics and one (1) Master HVAC Mechanic that are properly certified and readily available to perform work under this Contract.

## 4. HVAC MECHANIC HELPER

The Contractor shall provide a HVAC Mechanic Helper to assist on an as-needed basis in work order and project work. The HVAC Mechanic Helper shall be an apprentice or assistant level IV heating, ventilating and air conditioning mechanic. HVAC Mechanic Helper shall have the ability to assist in all types of heating, ventilating and air conditioning repairs and modifications under the supervision of a HVAC Mechanic. The HVAC Mechanic Helper shall not be used for preventive maintenance work.

## 5. ELECTRICIAN

The Contractor shall provide on an as-needed basis Electricians who currently hold an active Journeyman or Master Electrician tradesman certification through the Virginia Board for Contractors. Evidence of stated certification shall be made available to the County upon request at any time. Each Electrician must have at least five (5) years of experience in the electrical field.

The Contractor shall employ at all times during the Contract term at least three (3) Journeyman Electricians and one (1) Master Electrician that are readily available to perform work under this Contract.

6. ELECTRICIAN HELPER

The Contractor shall provide an Electrician Helper to assist the Electrician on an as needed basis for work order and project work. The Electrician Helper shall be capable of aiding the Journeyman or Master Electrician; have a minimum of one (1) year's exposure to the electrical craft; be able to work with basic tools of the trade and be able to independently perform basic electrical tasks.

7. GENERATOR TECHNICIAN

The Contractor shall provide Technicians who are qualified through factory certification, or other industry training, to work on the specific make and type of equipment installed in the County facilities. Technicians servicing equipment still under warranty shall be factory certified in order that the County's warranty with the manufacturer is not voided. Each Generator Technician must have at least five (5) years of experience in the generator field. Evidence of stated qualifications to work on Generac, Kohler and Katolight generators shall be made available to the County upon request at any time.

The Contractor shall employ at all times during the Contract term at least three (3) Generator Technicians that are readily available to perform work under this Contract.

8. GENERATOR TECHNICIAN HELPER

The Contractor shall provide a Generator Technician Helper to assist on an as-needed basis for work order and project work. The Generator Technician Helper shall be capable of aiding the Generator Technician; have a minimum of one year's exposure to the generator field; be able to work with basic tools of the trade and be able to independently perform basic tasks. The Generator Technician Helper shall not be used for preventive maintenance work.

9. UPS/PDU TECHNICIAN

The Contractor shall provide at least two (2) UPS/PDU Technicians who have been trained in the UPS/PDU factory on the specific make and type of equipment installed in the County facilities and are factory certified. The technicians shall carry a current factory certification authorizing them to work on the equipment throughout the duration of the contract. Evidence of state certification shall be made available to the County upon request at any time. The UPS/PDU Technicians shall have at least three (3) years of experience in the UPS/PDU field.

10. BATTERY TECHNICIAN

The Contractor shall provide at least two (2) Battery Technicians who have been trained in the Battery factory on the specific make and type of equipment installed in the County facilities and are factory certified. The technicians shall carry a current factory certification authorizing them to work on the equipment throughout the duration of the contract. Evidence of state certification shall be made available to the County upon request at any time. The battery Technicians shall have at least three (3) years of experience in the battery field.

11. SPRINKLER TECHNICIAN

The Contractor shall provide Sprinkler Technicians who currently hold an active National Institute for Certification in Engineering Technologies (NICET) Level II or above certification on an as-needed basis to perform maintenance, testing and inspection services. Evidence of stated certification shall be made available to the County upon request at any time. Each Sprinkler Technician shall have at least three (3) years of experience in the sprinkler/pipe-fitter field.

The Contractor shall employ at all times during the Contract term at least three (3) Sprinkler Technicians that are properly certified and readily available to perform work under this Contract.

12. FIRE ALARM TECHNICIAN

The Contractor shall provide Fire Alarm Technicians who currently hold an active NICET Level II or above certification on an as-needed basis to perform maintenance, testing and inspection services. The Fire Alarm Technicians provided by the Contractor must have factory certifications for all fire alarm systems identified in Schedule A. Evidence of stated certifications shall be made available to the County upon request at any time. Each Fire Alarm Technicians must have at least three (3) years of experience in the fire alarm field.

The Contractor shall employ at all times during the Contract term at least three (3) Fire Alarm Technicians that are properly certified and readily available to perform work under this Contract.

13. FIRE EXTINGUISHER TECHNICIAN

The Contractor shall provide Fire Extinguisher Technicians who are currently trained and certified to perform services on all types of fire extinguishers on an as-needed basis to perform maintenance, testing and inspection. Evidence of stated training and certifications shall be made available to the County upon request at any time.

The Contractor shall employ at all times during the Contract Term at least two (2) Fire Extinguisher Technicians that are properly certified and readily available to perform work under this Contract.

14. FIRE PROTECTION HELPER

The Contractor shall provide a Fire Protection Helper to assist technicians on an as needed basis for work order and project work. A Fire Protection Helper shall not be used for inspection, testing, or preventive maintenance work.

The Fire Protection Helper shall be capable of aiding the Journeyman or Fire Alarm or Sprinkler Technician; have a minimum of one (1) year's exposure to fire protection systems; be able to work with basic tools of the trade and be able to independently perform basic fire protection tasks.

All employees shall be uniformed or otherwise neatly attired with appropriate employment identification displayed and shall conduct themselves in a professional manner at all times.

The County reserves the right to reject any of Contractor's service personnel, who, in the County's sole judgment, are not adequately qualified to perform the work, and require the Contractor to replace them with qualified personnel.

Contractor's personnel, including the supervisor(s), who perform work in the facilities covered by the Contract, shall wear clean company uniform and safety shoes. The company name shall appear on the uniform. The supervisor may wear dress clothes and dress shoes and shall display a name tag with the supervisor's name and company name.

*T. PAYMENT FOR CONTRACT SERVICES*

Payments for work performed by the Contractor and accepted by the County Project Officer or designee will be made by the County to the Contractor upon completion of service and submission by the Contractor of a proper and correct invoice with all associated documentation attached. For large projects, submission of monthly invoices is allowed. Work Tickets and inspection/testing reports shall be provided for all work including preventive maintenance and shall reference the appropriate Work Order numbers. Invoices submitted without work tickets, inspection/testing reports, and associated work order numbers shall not be paid and shall be returned to the Contractor. The Contractor may submit electronic and legible copies of the inspection/testing reports in lieu of hardcopies if approved by the County Project Officer.

Payments for all labor performed on a time and materials basis shall be for work performed and services rendered on the job site only. No "portal to portal" charges, fuel surcharges or miscellaneous fees are permitted under the contract.

*U. TIMELY COMPLETION OF WORK*

The Contractor shall proceed diligently to complete the work during regular working hours without interruption, except for scheduled lunch breaks. The County will deduct from Contractor's invoices any charges for time spent by the Contractor's crew on extended lunch breaks or other breaks.

Scheduling of priority work, including the interruption of a current assignment, requires the advance approval of the Project Officer. Priority work identified by the County Project Officer or designee shall take precedence over current work.

*V. COUNTY'S RIGHT TO STOP WORK*

The County reserves the unilateral right to cancel any job assigned and in progress if the Contractor, in the opinion of the County Project Officer or designee, is not performing work at a satisfactory pace or fails to perform work in a professional manner commensurate with accepted trade and safety standards. If a job is canceled, the County will reimburse the Contractor for all work performed and all reasonable quantities of materials delivered to the site prior to the time of cancellation. The County reserves the right to contract for completion of such work with another vendor.

The County reserves the right to cancel any job assigned if the County, in its sole discretion, determines that such cancellation is in the County's best interest. In such case, the County will reimburse the Contractor for all work performed and all reasonable quantities of materials delivered to the site prior to the time of cancellation.

W. SPECIAL TERMS AND CONDITIONS

1. TRAFFIC MANAGEMENT:

The Contractor shall be responsible for maintaining traffic flow, and for protection and safety of vehicles and pedestrians in the area affected by all Contract work. The Contractor must provide all signs, barricades, flashers, and flag-personnel required to maintain traffic flow and safety. Signs and other traffic control devices must be in accordance with the most current Virginia Department of Transportation (VDOT) standards. At least one Contractor employee at each site where traffic control is required shall be a VDOT certified flagger trained on Basic Work Zone Traffic Control.

2. EQUIPMENT ACCESSIBILITY:

The Contractor shall provide the means and methods to access all equipment included in this Contract. This includes, but is not limited to, ladders and scissors lifts (man-lifts). Cost for access shall be considered Contractor overhead and shall not be charged separately.

3. ROOF SAFETY:

The Contractor shall follow all applicable federal, state, and local safety requirements and regulations for roof safety.

4. MATERIAL DISPOSAL:

The Contractor shall be responsible for proper disposal of all waste and shall remove all trash and waste produced by service. Disposal shall be in accordance with all applicable local, state, and federal regulations. The Contractor shall not dispose of any materials in County-owned or operated refuse devices and/or equipment (i.e. trash cans, dumpsters, etc.).

5. SAFETY WORK PLAN:

The Contractor shall provide a safety work plan to the County Project Officer or designee upon request from the County Project Officer or designee. This plan shall be submitted for approval at the beginning of the contract with the initial schedule and separately at County's request for any project work prior to the start of work.

6. CODES AND STANDARDS:

All work performed under this Contract shall be in strict accordance with all applicable codes, industry standards, and County Standards. Should permits for any work performed by the Contractor be required by Arlington County, the Contractor shall prepare, submit, and obtain approval and the permit from the County. The Contractor shall be responsible for all permit fees.

7. PARKING:

Parking for the Contractor will not be provided. The Contractor is responsible all parking fees and fines associated with its vehicles on job assignments.

X. *JUSTICE CENTER BACKGROUND CHECK AND SECURITY REQUIREMENTS*

All Contractor personnel anticipated to work in the Courthouse facility must obtain background check clearance from the Arlington County Sheriff's Office to access the Justice Center. Personnel who successfully pass the background check must attend a one-day Arlington County Sheriff's Office security class to be allowed to work in the Arlington County Detention Facility (ACDF) and Courthouse buildings. The one-day training session provided by the Sheriff's Office will include, but will not be limited to, required onsite security protocols, responsibilities and compliance with the Prison Rape Elimination Act (PREA) as specified in 28 CFR Part 115 of the Federal Registry. All personnel shall also be required to attend an annual one-day security/PREA refresher training. The Contractor shall not be reimbursed for time required for ACDF security trainings.

When entering or performing work at the ACDF, all Contractor's personnel carrying tools and replacement parts shall carry such tools and replacement parts in a locked tool bag or mobile tool cart with lockable drawers/doors. In addition, the Contractor shall ensure that each tool bag or mobile toll cart has a current (daily) inventory of the list of tools, replacement parts and any hazardous materials or products contained in the bag or mobile cart prior to entering and leaving the ACDF.

All contractor personnel anticipated to perform work in the Emergency Communications Center locations must also complete Criminal Justice Information Services Awareness Training- Level 1. this one-day online training session is provided by the office of Emergency Communications Center. The Contractor shall not be reimbursed for time required for CJIS (Criminal Justice Information Services Awareness) training.

Y. *METHOD OF MEASURING PERFORMANCE*

The performance of the Contractor will be measured throughout the term of the Contract by consideration of the following performance criteria:

1. Failure to adhere to the contract requirements.
2. Failure to meet the approved monthly testing, inspection, and maintenance schedule described herein.
3. Failure to provide appropriately certified and trained personnel as required in Section S. CONTRACTOR'S PERSONNEL.
4. Number of call-backs to correct malfunctions/failures.
5. Failure to respond to requests for work as provided for in the Scope of Work.
6. Failure to perform services within accepted industry standards and codes.

7. Failure to adhere to contractual requirement for onsite response for emergency work and routine service calls.
8. Failure to perform services within the time prescribed within accepted industry standards and codes. Excessive time to complete work on three (3) or more jobs within a three (3) month period, may result in termination of the Contract by the County for default.
9. Contract Manager's failure to evaluate performance, provide quality control, and effectively communicate and/or report to the County's Project Officer as required in Section S. CONTRACTOR'S PERSONNEL.
10. Failure to follow all applicable local, state and federal standards regarding confined space entry and material disposal.



SCHEDULE A - EQUIPMENT LIST

1. EMERGENCY CALL CENTER (ECC) - COURTS/POLICE FACILITY, 1425 North Courthouse Road

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Air Handling Unit	Trane	GEVB300441D2BBOTBB 011000200000000	W07F37349	7 <sup>TH</sup> floor ECC
1	Air Handling Unit	Trane	GEV1318041D2ABBOTB B011000200000000	W07F37350	7 <sup>TH</sup> floor ECC
1	Heat Pump	Liebert	MCD69W34H4 AHU: MMD60K-AHOLD	0719N147428 0719N147658	7 <sup>TH</sup> floor ECC, evaporator and condenser section
1	Heat Pump	Liebert	MCD98W3AH3 AHU: MMD96K-AHOLD	0719N147450 0719N147568	7 <sup>TH</sup> floor ECC, evaporator and condenser section
1	Heat Pump	Liebert	MMD60K-AHOLD	0719N147450	7 <sup>TH</sup> floor ECC TELEPHONE
1	Split System	Mitsubishi Evaporator Condensing Unit	MS-A12WA MU- 212WA	6003739 6001082	Serves 13 <sup>TH</sup> floor radio room, AC-1
1	Dry Cooler	Liebert	DOD880A	0722697721	8 fans, FC-1, 13 <sup>TH</sup> floor roof
2	Pump	Liebert	EVD184TTDR7322EVE	0407-3303002 0407-3303004	Package pump set, serves FC-1, 13 <sup>TH</sup> floor roof
1	Glycol make up station	N/A	Injector pump- 5KH32FN5586X	07D05183	Has a filter MN: BFS-15B-2 SN:87276 TANK=65 GAL. injector pump 1/3 HP 115VAC 1725RPM 5.6A
1	Fan	Greenheck	BCF-110-7-TH-X	07D05183	SF-1 with duct heater INDEECO MN 19NH3, located on 13 <sup>th</sup> floor mechanical room.
1	Air Handling Unit	Mitsubishi	PKA-A36KAU	12M00449	Comp room.
1	Ductless Split system	Mitsubishi	PUY-A36NHA4	01UO1433B	On roof atrium, access thru Rm 5314
1	Air Handling Unit	Liebert	MMD24E7X00D0	1020N198167	Behind Locker
1	Generator	Generac	8136070100		400kw, Roof

1	Automatic transfer switch	ASCO	HTACTBB30600N5XC	845146 WE	480 V – 600 A
2	Exhaust Fan	BDF-80			Located in the custodial office serving battery room
1	Batteries	C&D Technologies			Flooded Cell Design. Vented Lead Acid (VLA). 480 V (DC). 480 jars
2	AHU	TRANE	GAM5AOC6OM51SAA	(1) 123015F52V (2)12265S6K2X	Serving Battery room.
2	Condenser Units	TRANE	4TWB4060E1; 4TWR306B1000AB	12405UPY45; 12405UM84F	13 <sup>TH</sup> Floor serves the battery room
1	AHU	LG	LSN300HV2	302KATM00056	13 <sup>th</sup> Floor serves the UPS hallway
1	Minisplit CU	LG	LSU360HV2		13 <sup>th</sup> Floor serves the UPS hallway

2. BOZMAN CENTER NETWORK OPERATIONS CENTER (NOC), 2100 Clarendon Boulevard

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Generator- 500KW	GENERAC	1005920	2099871	G-4 level - Generator and ATS Room
1	Automatic Transfer Switch #1 –elect dist	ASCO	H07ATBA30800N5XC	1501454WE	G-4 level - Generator and ATS Room. 400 amps 480 vac
1	Automatic Transfer Switch #2 – mech dist	ASCO	E03ATSA30400N GSC	1148741 RE	G-4 level - Generator and ATS Room. 400 amps 480 vac
1	UPS 1 & Battery cabinet	LIEBERT EXM	51SN200LAA000CY	M18KDH003	Penthouse UPS room/output 200kw 480 VAC 241 MAX AMPS
1	UPS 2 & Battery cabinet	LIEBERT EXM	51SN200LAA000CY	M18KDH0004	Penthouse UPS room/output 200kw 480 VAC 241 MAX AMPS
1	Power Distribution Unit (PDU)	MGE	PMN168-42-100S	L08-10198	6 <sup>th</sup> floor suite 610

1	Power Distribution Unit (PDU)	MGE	PMN168-42-100S	L08-10197	6 <sup>th</sup> floor suite 610
2	CRAC UNITS	Stulz	COSO96-G	8079069 8079070	Penthouse Computer Room
7	CRAC UNIT	Stulz	COSO96-G	8079068 8079067 8079066 8079065 8079064 8079063 8079062	6 <sup>th</sup> floor suite 610
1	Drycooler	Stultz	FDS802BVG	E08D42842001001	Dry Cooler #1 on upper roof
1	Drycooler	Stultz	FDS802BVG	E08D42842001002	Dry Cooler #2 on upper roof
1	Drycooler- Pump Package	Stultz	Unknown	Unknown	Near Dry Coolers on upper roof
1	Halon Fire Suppression	ANSUL – 2 tanks	Sapphire/PN:570639	46140	6 <sup>th</sup> floor suite 610
1	Halon Fire Suppression	ANSUL – 1 small tank	Sapphire/PN:570586	46139	Penthouse Computer Room
1	Fire Suppression	ANSUL- 1 tank	Sapphire/PN: Not accessible	Not available	Penthouse UPS Room
3	Fire extinguishers				Dry chemical; 6 <sup>th</sup> floor suite 610
2	Fire alarm control panels	Simplex	4010		1 panel is located in the NOC room. 1 panel is located Penthouse Computer Room.
57	Smoke detectors				53 are located in the NOC room. 4 are located Penthouse Computer Room.
3	pull station	N/A			One in penthouse UPS room and 2 in the 6 <sup>th</sup> floor suite 610
4	bypass switch	N/A			400 amp 480 vac SSCR: 65 kaio

4	EPO	N/A			6 <sup>th</sup> floor suite 610/2 for the PDU's and 2 for the CRAC units
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3. BOZMAN CENTER DATA UNITS AND FIRE ALARM, 2100 Clarendon Blvd

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Drycooler	Liebert	Not legible	Not legible	Network room on 8 <sup>th</sup> floor & traffic control room on the 9 <sup>th</sup> floor & NR8
2	Drycooler	Flowserve/Marathon	P02-0340/PVC-56T34D5312B P	1184248CHPOO3F	3/4HP 3450 RPM
1	Air Handler # 2	STULZ	CCU-61-W	8266094	R-22/10 <sup>TH</sup> FLOOR DATA ROOM
1	Pre-action system	Viking	TotalPac2	TOT20139	175PSI/120VAC. 1/6HP
1	Air Compressor	5KH33GN293KX			
1	Strobe light	Edwards			Traffic control room 9 <sup>th</sup> floor
1	Pull station	Edwards			Traffic control 9 <sup>th</sup> floor
3	Smoke detector				2 in the traffic control room

					9 <sup>th</sup> floor and 1 in the pre-action system room.
1	WSHP	McQuay	W.FMS.2.042.F.Z.00.AA.1.1.Z.Z.A.1	28545700	Traffic control room 9 <sup>th</sup> floor/R-22.
1	WSHP	McQuay	W.CMS.2.012.E.Z.00.Z.00.AC.12.Z.Z.A.1	285315600	unit is in the freight elevator area and serves the traffic control room in 9th floor
1	WSHP	TRANE	GEHB01271JA110L.R001000010000000000	W04C14428	Unit is in the freight elevator area and serves the NR8 room in 8th floor. R-22
1	WSHP	TRANE	GEHB01271JA110L.R001000010000000000	W04C14429	Unit is in the freight elevator area and serves the NR8 room in 7th floor. R-22. Condenser water from the bldg cooling tower

1	FCU	McQuay			Suite 600 conference room
1	WSHP	TRANE	W.CCW.4.019.B.E.Y.L.S.0.1.YY.A.C.Y.YY	669735400	NR6 behind storage S-6/R-410A
1	WSHP	McQuay	W.CMS.2.012.E.Z.00.Z.00.AC.12.Z.Z.A.1	285315700	NR5. R22
1	WSHP	McQuay	W.CCW.5.012.B.J.Y.L.S.01.YY.A.C.Y.YY.Y.YYY.YYY.YYY.A.Y.YYY.Y.Y.Y.C.1.Y.1	669561000	The unit is in the ceiling of room 406 but serves Network room 404
1	WSHP	McQuay	W.CCW.5.048.B.K.Y.R.S.01.YY.A.C.Y.YY	669810100	ROOM AVN409/R410A
1	WSHP	McQuay	W.CCW.5.012.B.J.Y.L.S.01.YY.A.C.Y.YY.Y.YYY.YYY.YYY.A.Y.YYY.Y.Y.Y.C.1.Y.1	669560200	Serves the room NR-205 but the unit is behind the room in the county personnel office space/R410A
1	WSHP	McQuay	Not Legible	Not legible	County board room AV room behind stage WSHP 1 TON

4. LEE PUMPING STATION (OEM RADIO SITE), 2400 North Wakefield Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Air Handler # 1	Trane	TWE090A300EL	5413S4YBD	Electric Heat Design: PSI High 376 PSI LOW 150 Each Use – 3pcs of 15” x 25” x 1’ filter - Has one inside condenser relief pump
1	Air Handler # 2	Trane	TWE090A300EL	5381MP9BD	Electric Heat Design: PSI High 376 PSI LOW 150 Each Use – 3pcs of 15” x 25” x 1’ filter - Has one condenser relief pump
2	Electric Heat on Air Handler	Trane	BAYHTRL410AB	5293Y3TCD	Electric. This is a part of the Air Handler. 480 Volts
2	Condenser Units	Trane	TTA090A400FA TTA090A400FA	5422YP6AD 5422J9TAD	Located on the side of the building
2	Unit Heaters	QMark			One in Radio room and another in the generator room
1	UPS	Liebert – Nfinity	NB20R0612600 N900E1200000	0534000003BZL4	Feeds thru one main disconnect and two separate panel boxes.
1	UPS	Liebert – Nfinity	DSNN200120612		Feeds thru one main disconnect and two separate panel boxes.
1	Generator	John Deer with Kohler Power System	100R0ZJ71	T06059T358919 289305	Unit has a fuel tank beneath it with the relief vent in the room. Tank size - 200 gallons/ 100kw 125kva Unit located inside the building
1	Automatic Transfer Switch	KOHLER	K-16631-150	K38560	
2	Fire extinguishers	Simplex			Dry chemical type BC size II
1	Fire alarm panel	Simplex	4005		

2	Smoke detector	N/A			
2	A/V device	EDWARDS			
2	Duct detector	EDWARDS			
2	Pull station	EDWARDS			
1	Heat detector	N/A	N/A	N/A	Generator room

5. BB&T BUILDING (OEM RADIO SITE), 6400 Arlington Boulevard, Suite 928 (Fairfax County)

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
2	Split Unit (R410A)	Mitsubishi - Mr. Slim Condensers:	PKA-A36FA	65A00653C 65A00654C	Condensers are on the roof. Has no condensate pump. Directly drained.
1	UPS	Liebert – Nfinity	N900E1200000	0602001008BZ 5L4	Feeds thru one main disconnect and two separate panel boxes. Input Volts: 208/220/230/240 Current: 24 Amps Max Frequency: 50/60Hz, Phase 1 Output DC: Volt – 120 DC, Current – 120 Amps DC
1	UPS	Liebert – Nfinity	NB20R0612600	053370902700 9G1	Input Volts: 208/240 Current: 110 Amp Max Amps Max Frequency: 60/60Hz, Phase 1 Output AC: Volt – 120/120/208/240 or 120 DC Current – 155 Amps DC
1	UPS BYPASS SWITCH	VERTIV			
2	Fire extinguishers				Dry chemical



6. COURT HOUSE PLAZA II - RADIO SYSTEM MASTER SITE (OEM RADIO SITE), 2300 Clarendon Boulevard

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Air Handler # 1	Trane	TWE120A300EL	6196N25BD	Electric Heat Design: PSI High 376 PSI LOW 150 Each Use – 4pcs of 16” x 25” x 1’ filter - Has one inside condenser relief pump
1	Air Handler # 2	Trane	TWE120A300EL	6196N24BD	Electric Heat Design: PSI High 376 PSI LOW 150 Each Use – 4pcs of 16” x 25” x 1’ filter - Has one condenser relief pump
2	Condenser Units	Trane Odyssey	TTA120A400FA TTA120A400FA	607520MAD6185KE3AD	Located on the Roof. R22 refrigerant
2	UPS	Liebert – Nfinity	NB20R0612600 N900E1200000	0533709005009G1 0602001008BZ5L4	Feeds thru one main disconnect and two separate panel boxes.
1	Fire alarm Panel				
2	Smoke Detectors				
1	Duct smoke detector				Located in the main supply duct of both AHU’s
1	UPS Bypass switch	Liebert	NMBHW81		
2	Fire extinguishers				Dry chemical

7. SHIRLINGTON TOWER-- (PENTHOUSE EQUIPMENT ROOM - OEM RADIO SITE), 2900 South Quincy Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
2	Split System	Mitsubishi Mr. Slims	PUGH36AYB1 PUGH36AYB1	W0K5919509 W0K5919510	Has two condenser relief pumps
2	UPS	Liebert – Nfinity	N900E1200000 NB20R061200	0602001007BZ 5L4	Feeds thru one main disconnect and two separate panel boxes.
1	Generator	Katolight, 75kW Rating: Standby Engine: 4045TF250 John Deere RPM: 1800, 60HZ, 75KW, 94KVA, 120/240V AC generator – Marathon Synchronous	SD275FRS4  4045TF250  362CSL1606-1	126356-0506   669081 4-06	Unit is fence in the rear of the building Call: 507-625-7973 Fuel tank is attached below the generator
1	Automatic Transfer Switch	ZENITH	ZS2B01531- 04E410X	N149313	Electric room in basement
1	Fire alarm Panel	Silent knight	FFP-50		
4	Smoke Detectors				
1	Pull station	Silent knight			
2	Audiovisuals				
1	Preaction system	Air Compressor; flow device; dry valve; tamper valve; control valve	OL11016AC-LP	OL110- 07270503	Oil-less compressor
1	Flow device				
1	Control valve				
2	Fire extinguishers				Dry chemical type BC size II

8. BALLSTON ARCHSTONE PLACE APARTMENTS (OEM RADIO SITE), 901 North Pollard Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Air Handler # 1	Trane	2TEC3F48A1000AA	6135CSS2V	Electric Heat Design: PSI High 376 PSI LOW 150 R22 – 480PSI Has one inside condenser relief pump
1	Air Handler # 2	Trane	2TEC3F48A1000AA	6135A811V	Electric Heat Design: PSI High 376 PSI LOW 150 Has one condenser relief pump R22 only at 480PSI
2	Condensers	Trane Odyssey	2TTA0048A3000AA 2TTA0048A3000AA	612549A3F 61255A03F	Located on the Roof. HCFC – 22, 3.09Kg(SI)
2	UPS	Liebert – Nfinity	NB20R0612600 N900E1200000	0602001005BZ5L4	Feeds thru one main disconnect and two separate panel boxes.
1	Generator	Katolight John Deere Engine: KVA 469, KW 375, RPM 1800, Hz 60 Rating - Standby Marathon Electric AC Power generator	SD375FRJ4T2 6125HF070  433PSL6216	131047-0906  WA-552313-0806	Unit has a fuel tank adjacent to it. The relief vent vents in the room.
1	Automatic Transfer Switch	ZENITH		N/A	
2	Fire extinguishers				Dry chemical

1	Bypass Maintenance switch	Liebert	NMBHW81	0602300004BZ8L4	Penthouse
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9. RITZ CARLTON (PENTHOUSE EQUIPMENT ROOM - OEM RADIO SITE), 1250 South Hayes Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Air Handler # 1	Trane	TWE090A300EL	6074NR6BD	Electric Heat Design: PSI High 376 PSI LOW 150 Has one inside condenser relief pump
1	Air Handler # 2	Trane	TWE090A300EL	6023UTJBD	Electric Heat Design: PSI High 376 PSI LOW 150 Has one condenser relief pump
2	Condenser Units	Trane Odyssey	TTA090A400FA TTA090A400FA	548124SAD 545514PAD	Located on the Roof. R22
2	UPS	Liebert – Nfinity	NB20R0612600 N900E1200000	0602301001BZ5L4	Feeds thru one main disconnect and two separate panel boxes.
2	Fire extinguishers				Dry chemical/CO2
2	Duct smoke detectors				
1	UPS bypass switch				

10. TRADE CENTER NETWORK OPERATIONS CENTER (NOC), 2770 South Taylor Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
1	Generator	Generac	12006040200	2106910	Parking Lot

1	Automatic Transfer Switch	Zenith	Z85SB10036- 07E601X 1000AMP	1608265-1	Electrical RM, 106
1	Unit heater	QMARK	EFQ60048	N/A	Receiving area - dock
1	UPS 1 & Battery cabinet	MGE	GWTUPS200 200 KVA	50XL12009	VRLA – 40 jars Electrical RM, 106
1	UPS 2 & Battery cabinet	MGE	GWTUPS200 200 KVA	50XL1200B	VRLA – 40 jars Electrical RM 106
1	UPS Maintenance By-pass	MGE			Electrical RM 106
1	PDU 1	MGE	PMN168-42-200F	L10-10515	Computer Room
1	PDU 2	MGE	PMN168-42-200F	L10-10516	Computer Room
6	CRAC UNITS	Stulz	VFS-120-DG-FC	10001199 10001195 10001197 10001196 10001194 10001198	Computer Room
2	CRAC UNIT 7	Stulz	COS-060-G-FC	10001200 10001201	Electrical RM 106
1	RTU	Trane	WSC048E4	102711590L	Roof
1	Drycooler	Stultz	ATS-FDS-804BVG	E10G519967 01001	Roof
1	Drycooler	Stultz	ATS-FDS-804BVG	E10G519967 01002	Roof
1	Dry-cooler Pump	Stultz	GPS-100-S-A		Roof
1	Dry-cooler Pump	Stultz	GPS-100-S-A		Roof
1	FM-200 Fire Suppression System	Siemens	Firefinder XLS		Entrance Wall
1	Pre-Action Sprinkler	Tyco	DV-5		Entrance Wall
5	Fire extinguishers				Dry chemical
1	Generator	Generac	12006040200	2106910	Parking Lot, 600KW/750KVA Generator fuel tank = 500 gallons

64	Smoke detectors	N/A			
8	Tanks	Sinorix 227			6 active and 2 spare tanks of Siemens
16	annunciation devices	N/A			6 active and 2 spare tanks Siemens
7	pull stations	N/A			
6	bypass switch	N/A			

11. EMERGENCY CALL CENTER (ECC) – COURT SQUARE WEST, 5<sup>th</sup> floor, 1400 North Uhle Street

Qty	Equipment Type	Manufacturer	Model #	Serial #	Remarks
4	UPS	Ferrups- Best	(2)FD12.5 KVA (1)FD7KVA (1)FD10KVA		(2).Radio room and (2)in Computer Room

## SCHEDULE B - EQUIPMENT PREVENTIVE MAINTENANCE, INSPECTION, AND TESTING GUIDELINES

At a minimum, the Contractor shall provide all necessary personnel to perform the following maintenance tasks requirements below for all equipment indicated in Schedule A. County staffing will not be available to assist the Contractor.

Any deviations from the requirements below require the advance approval of the County Project Officer. This list is not represented as being all-inclusive of the services to be performed or the frequency required. The Contractor is required to perform all services necessary to provide a safe and efficient maintenance program commensurate with recommended practices as specified by each manufacturer.

The following sections apply to in all equipment indicated in Schedule A:

During annual visits the Contractor shall also perform all semi-annual, quarterly, monthly, weekly and daily tasks in addition to the annual task items. During semi-annual visits the Contractor shall also perform all quarterly, monthly, weekly and daily tasks in addition to the semi-annual task items. During quarterly visits the Contractor shall also perform all monthly, weekly and daily tasks in addition to the quarterly task items. During monthly visits the Contractor shall also perform weekly and daily tasks in addition to the monthly tasks.

1. Environmental Units – CRAC Units (Air-Cooled, Glycol Cooled, Water Cooled, Electric Heat, Heat Pump) Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.  
Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:
  - Check in with ECC OEM; discuss any operating issues or deficiencies.
  - Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
  - Check unit for proper operation, interlocks, tagging and excessive noise or vibration. Perform preventive maintenance and fill out maintenance report; note any problems.
  - Visually inspect units, piping and accessories for any signs of oil or refrigerant leakage. Note any leakages found and schedule necessary repairs.
  - Check condensate pumps and associated high level alarms for proper operation.
  - Check condensate pans for blockage and proper drainage.
  - Check associated equipment thermostat/senor for proper operation. Replace batteries as needed.
  - Replace air filters monthly and include date in the equipment log sheet.
  - Replace humidifier canisters annually.
  - Visually inspect coils for damage, obstructions and cleanliness. Brush, if needed, or schedule chemical cleaning.
  - Pressure wash coils and fans with biodegradable coil cleaning solution (annually).
  - Check belts for condition, proper tensions and alignment; adjust and/or replace as needed, but at a minimum annually, and include date in the equipment log sheet.
  - Check condition of and lubricate motors and/or shaft bearings, if applicable.
  - Inspect fans or blowers for bent blades, imbalance, trash, dirt, proper rotation and airflow.
  - Check operation and settings of fan cycling, fan speed and temperature controls, if applicable.
  - Inspect electrical wiring, components and connections for signs of wear or overheating and correct/tighten if necessary.
  - Remove any loose debris or old parts around equipment and notify customer if excessive.

- Check operation of refrigeration cycle, pump down cycle, controls, refrigerant charge and oil level (if applicable); note any deficiencies.
- Check operation of compressor; note any deficiencies.
- Perform seasonal startup or shutdown; check operation of low ambient options installed; note any deficiencies.
- Check refrigerant charge using Design Temperature Difference method.

Glycol Cooled, Water Cooled – in addition to the items above:

- Check for proper water/glycol flow and heat exchange; note any deficiencies.
- Check operation of water/glycol regulating valves, flow safeties, changeover controls and pumps, if applicable.
- Check condition of water/glycol piping, valves, hoses, supports, gauges, thermometers, etc.; note any deficiencies.
- Check glycol concentration and level; note any problems and schedule corrective actions to prevent freezing or other related problems.
- Check operation of drycooler and pump if applicable (see drycooler PM procedures).

## 2. Drycoolers

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Check in with customer to discuss any operating issues or deficiencies.
- Check unit for proper operation, interlocks, tagging and excessive noise or vibration. Perform PM and fill out maintenance report; note any problems.
- Visually inspect coils for damage, obstructions and cleanliness. Brush if needed or schedule chemical cleaning.
- Pressure wash coils and fans with biodegradable coil cleaning solution annually.
- Check condition of and lubricate motors and/or shaft bearings if applicable.
- Inspect fans or blowers for bent blades, imbalance, trash, dirt, proper rotation and air flow.
- Check belts for condition, proper tensions and alignment; adjust and/or replace as needed, but at a minimum annually and include date in the equipment log sheet.
- Check operation and settings of fan cycling, fan speed and temperature controls, if applicable.
- Inspect electrical wiring, components and connections for signs of wear or overheating and correct/tighten if necessary.
- Remove any loose debris or old parts around equipment and notify customer if excessive.
- Check unit controls, thermostat, economizer, valves, dampers, louvers, linkage and shutters; lubricate pivot points if applicable.
- Check for proper water/glycol flow and heat exchange; note any deficiencies.
- Check operation of water/glycol regulating valves, flow safeties, changeover controls and pumps if applicable.
- Check condition of water/glycol piping, valves, hoses, supports, gauges thermometers, etc.; note any deficiencies.
- Check glycol concentration and level; note any problems and schedule corrective actions to prevent freezing or other related problems.
- Check condition, operation and proper liquid/air levels in expansion tank. Should have positive pressure, if applicable.
- Lubricate pumps and motor where applicable based on manufactory recommendation.



### 3. Pumps

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Check in with customer to discuss any operating issues or deficiencies.
- Check unit for proper operation, interlocks, tagging and excessive noise or vibration. Perform PM and fill out maintenance report; note any problems.
- Inspect electrical wiring, components and connections for signs of wear or overheating and correct/tighten if necessary.
- Remove any loose debris or old parts around equipment; notify customer if excessive.
- Check and lubricate pump and motor per manufacturer's specifications, do not grease sealed bearings.
- Check pump and system pressures, note deficiencies, i.e.: cavitations, hi/low pressures, etc.
- Check condition of pump seals and seal flush lines if applicable; note any deficiencies.
- Check condition and operation of gauges and thermometers; note any deficiencies. Check pressure differential across unit.
- Check motor amp draw and surface temperature; note any deficiencies.
- Check condition and alignment of coupling assembly and inserts if applicable; note any deficiencies.
- Verify proper check valve operation; check balancing valve and shut off valve positions if applicable; note any deficiencies.
- Check operation of pump controls and interlocks, rotate lead/lag if applicable; note any deficiencies.
- Check condition and operation of back up pump and controls; note any deficiencies.
- Clean installed strainer on suction of pump if applicable.
- Lubricate pumps and motor where applicable based on manufactory recommendation.

### 4. Uninterruptible Power Systems (UPS)

Scheduled preventive maintenance inspections shall be performed annually.

Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

#### MAJOR UPS INSPECTION

The following is an outline of general checks performed during a Major PM inspection of the UPS Power Module. All checks are designed to be performed either during normal operation with no danger to the UPS's operation condition and the critical load, or during off line operation, in the bypass mode. All checks or processes may not be applicable to all equipment models. The Contractor is responsible to provide or engage a third party (Manufacturer) all preventive maintenance on the equipment necessary to meet manufacturer's warranty requirements. In addition, the Contractor will be required to coordinate the purchase from the UPS manufacturer a preventive maintenance program that will ensure full warranty of the equipment.

#### A. Visual Inspection

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Inspect all printed circuit boards connections for cleanliness, swab contacts if necessary.
- Inspect all power connections for signs of overheating.
- Inspect all subassemblies, bridges and legs for signs of component defects or stress
- Inspect all DC capacitors for signs of leakage.
- Inspect all AC capacitors for signs of leakage.
- Inspect and inventory all customer owned spare parts.
- Inspect for, and perform as required, any open engineering changes.

**B. Internal Operating Parameters shall include diagnostic and visual inspection/verification of: DC Ground Detection Offset.**

- Inverter leg current average balance.
- Output filter current average phase balance.
- Rectifier bridge current average leg balance.
- AC Protection settings and operation.
- DC Protection settings and operation.
- Input and Output Frequency and Voltage Bandwidth settings.
- Verify DC filter capacitance.
- Verify AC tank and trap filter capacitance.
- Power Supply voltages and waveforms.
- Replace Power Module backup batteries.
- Static Switch leakage testing.

**C. External Operating Parameters shall include diagnostic and visual inspection/verification of:**

- System Input Voltages (all phases). System Input Currents (all phases).
- DC Charging Voltage (float and equalize), record settings, adjust to nominal.  
Rectifier phase on and step up.
- Inverter phase on and step up.
- Adjust all panel meters to measured values.
- System Bypass Voltages (all phases).
- Manual and UV Transfer Testing, verify uninterrupted transfer waveform.
- Outage simulation, and battery capability testing, and verify charger current limit.
- Generator operation and interface verification.

**D. Environmental Parameters**

- Check UPS area ambient temperature and condition of ventilating equipment.
- Check general Cleanliness of UPS Power Module and wipe down as needed.
- Check general Cleanliness of UPS area.
- Replace all air filters.
- Clean control panel/CRT screen.

**E. Battery Cabinet Checks (VRLA Only)**

- Check general appearance of Battery System (all types).
- Check general cleanliness of Battery System area (all types).
- Inspect cells for physical abnormalities.
- Inspect all DC connections for abnormalities.

- Check battery System area ambient temperature and condition of ventilating equipment.
- F. Monitoring System Parameters
- Alarm archive review and printing.
  - Alarm lamp test - local and remote.
  - Replace all open monitor bulbs.

Following the Major PM inspection, a written report will be provided detailing the results of the inspection, and making specific recommendations toward future remedial action, upgrades, or sparing.

## 5. *Sealed Battery Systems*

Scheduled preventive maintenance inspections shall be performed during normal working hours 2 times per year on the following schedule: Semi-annually.

Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Inspect the Integrity of the battery rack or cabinet. Check the terminal posts and connectors for evidence of corrosion and batteries for cracks, leaks or excessive bulging.
- Measure and record ambient temperature and all negative post temperatures.
- Measure and record all the intercell/unit connector and battery cable contact resistances using a digital low resistance ohmmeter to verify that connection resistances are within the acceptable values determined for the particular battery, per manufacturers' guidelines.
- Check the hardware torque of 10% of the battery connectors to manufacturer specifications during semi-annual inspection. During an annual visit check the hardware torque of 100% of the battery connectors.
- Visually inspect conditions and appearance of the following:
  - Main terminal connections, intercell/unit connectors, cables, and associated hardware.
  - Cell/unit covers, containers, and post seals.
  - Battery racks or cabinets and associated components and hardware.
- Mechanicals and Housekeeping Review:
  - Retorque all battery connections found to be beyond acceptable contact resistance values. Connection resistances remaining above acceptable limits should be analyzed to determine the effect of the increased resistance on connection integrity, remedy as required.
  - Record the DC voltage and internal battery resistance of each block of the battery strings. Measure and record DC float voltage and DC charge current, as well as ensure AC ripple voltage and current are within design specifications. Perform overall system diagnostics and battery voltage and current data for analysis and trending through module or battery level measurements.
  - Perform cleaning of accessible surfaces and surrounding areas.
- Inspect and/or adjust the following:
  - Float and equalize voltage settings.
  - Operation of output current and voltage meters.
- Review of Customer maintained records and safety documentation.

Following the Major PM inspection, a written report will be provided detailing the results of the inspection, and making specific recommendations toward future remedial action, upgrades, or sparing.

#### 6. *Flooded Cell Design (VLA) Battery Inspection*

Scheduled preventive maintenance inspections shall be performed during normal working hours 4 times per year on the following schedule: Quarterly. Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- All inspections shall be made under normal float conditions if possible. All measurements & observations shall be recorded for future comparisons.
- Measure and record the following:
  - 100% cell/jar float voltage.
  - 10% cell/jar specific gravity.
  - 10% cell/jar temperature.
  - Total battery plant/string DC float voltage.
  - Total battery plant/string AC ripple current/volts.
- Visually inspect each cell/jar for the following:
  - Proper electrolyte levels.
  - Excessive sediment build-up.
  - Sulfation and/or contamination.
  - Plate shedding.
  - Post Seal integrity.
  - Cover/jar cracks and/or leaks.
  - IC link/hardware corrosion/integrity.
  - Flame Arrestor Vent Caps.
- Analyze the recorded and observed data.
- Provide final report, with any recommendations and actions taken (if any).
- Add distilled water to cells as needed.

Scheduled preventive maintenance inspections shall be performed during normal working hours 1 time per year on the following schedule: Annually.

- All the above "Quarterly" actions, plus:
- Measure and record 100% cell/jar (IC) link resistance.
- Measure and record 100% cell/jar specific gravity.
- Measure and record 100% cell/jar temperature.
- Review data and re-torque IC Connector hardware connections per mfg. specifications (if necessary). Battery must be offline for re-torque.
- Inspect Racking & Re-torque hardware per mfg. specifications (if necessary).
- Minor jar surface cleaning as needed. Battery must be offline for major cleaning.
- Check of operation & preventive maintenance recommended by manufacturer of "Battery Cycle Monitor Plus" device system installed for ECC at Court Police Facility.

#### 7. *Power Distribution Units*

Scheduled preventive maintenance inspections shall be performed annually. Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Check in with customer to discuss any operating issues or deficiencies.
- Fill out maintenance check list of below inspection bullets and report any deficiencies.
- Notify proper customer personnel prior to testing, transferring and shutting down of any electrical equipment.
- Visually inspect all electrical components and enclosures for debris and cleanliness, clean as necessary.
- Inspect all components for proper settings and calibrations, adjust as necessary.
- Visually inspect all wiring & cabinet safety ground, conductors and fastenings.
- Check all access panels for proper closure.
- Check to be certain that there are no exposed high voltage terminals within normal access of operating personnel (Missing panel covers or breaker blanks). Check for any safety or code violations.

8. *Automatic Transfer Switch*

Scheduled preventive maintenance inspections shall be performed outside normal business hours 4 times per year on the following schedule: Quarterly. A program for complying with manufacturers' recommended maintenance procedures shall be done. This program requires a two (2) to four (4) hour service time. Utility and emergency power sources must be interrupted during this service period. Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Provide and/or update the equipment log sheet in a plastic pouch in a conspicuous location by the equipment.
- Check in with customer to discuss any operating issues or deficiencies.
- Fill out maintenance checklist and report any deficiencies.
- Notify proper customer personnel prior to testing, transferring and shutting down of any electrical equipment.
- Visually inspect all electrical components and enclosures for debris and cleanliness and clean as necessary.
- Check automatic transfer switch components for proper operation (this would include the generator metering and any analog meters at site that are generator related)
- Visually inspect all wiring and cabinet safety ground, conductors and fastenings. Check all access panels for proper closure.
- Check to be certain that there are not exposed high voltage terminals within normal access of operating personnel.
- Check for any safety or code violations.
- Perform Infrared Scanning of ATS.
- All by-pass transfer switch shall be racked-out, and perform all preventive maintenance and all components.

9. *Fire Extinguishers*

All fire extinguishers shall be inspected, tested, and maintained in strict accordance with the minimum requirements, including notification, frequencies and recording, of the latest County adopted version of NFPA 10 including any amendments by Arlington County Fire Prevention Code and Virginia Statewide Fire Prevention Code.

All refills, 6-year test, and hydrostatic tests shall be at the unit cost indicated in the Bid Form. All other work shall be a part of the annual facility inspection, testing, and maintenance cost indicated in the Bid Form.

10. Cooling Facilities (Air Conditioning and Refrigeration)  
This section includes split and packaged self-contained units.

*(A) Air Conditioning (Refrigeration Systems)*

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures:

- Check the general operation conditions, system pressures or superheat, refrigerant sight glass, amperage of motors check condition of wiring etc. and record.
- Check and record compressor oil level. If the level remains low, contact the County Project Officer before adding oil. Use oil per manufacturer's recommendation.
- Observe and record oil pressure when available. The oil pressure gauge reading should be 20 to 35 psi above the CRANKCASE pressure gauge reading.
- Check the condition of all associated system air filters and air handling equipment and replace filters (Air Handling Units).
- Lubricate fan and motor bearings, if applicable.
- Check belt tension and alignment, adjust or replace as needed. This includes heat wheel belts. All replacement belts shall be dated in a visible location.
- Check all sheaves and couplings, tighten if loose, check alignment and wear.
- Check condition of condensing equipment.
- Air cooled: observe condition of condenser coil; clean as necessary for energy efficient operation.
- Inspect all equipment for excessive noise and vibration and adjust or repair to correct.
- Take amperage reading of motors and compressors and record in work ticket for each piece of equipment.
- Check refrigerant pressures or superheat and refrigerant charge.
- Check control panel, control devices, and safeties within equipment for loose connections, wire overheating, corrosion, burnt-out contacts or evidence of component failure.
- Check and clean the blower dirt, drain pane and coil as necessary.
- Refrigerant charge check using the Design Temperature Difference Method.

*(B) Air Handling Units*

This may be part of a package unit or a built-up unit consisting of fan, plenum, coils, humidifier, sprays, eliminators, filters, louvers and controls. Those units needing P.M. are covered as individual items. Service shall include the equipment listed in Schedule A and shall include the following preventive maintenance procedures.

Replacement schedule of filters shall be as follows unless indicated in the exceptions below.  
Bag and box filters – within a minimum of one (1) year of the last replacement, or sooner if necessary.  
Link filters - within three (3) months, or sooner if necessary. Pleated filters – monthly, no exceptions.  
All filters shall be clearly dated with the date of replacement. Contractor's failure to adhere to this filter replacement time schedule will result in a deduction from the monthly contract price for that facility pro-rated on a percentage of days for that month that the Contractor was in violation. Replacement of only some of the filters in one unit is not acceptable.

All filters are to be replaced at the same time.

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

- Replace filters following the above schedule.
- Feel fan and motor bearing housings for excessive heat.
- Check for vibration and unusual noise and adjust or repair to correct. Lubricate fan and motor.
- Check belt tension and adjust or replace as necessary. All replacement belts shall be dated in a visible location.
- Check end play (set collars or thrust bearing).
- Check and record motor amperage.
- Check coupling alignment.
- Check bearing play.
- Check control panel, control devices, and safeties within equipment for loose connections, wire overheating, corrosion, burnt-out contacts or evidence of component failure.

Note: All filters where tracks are available shall be the 3M-link type with non-migrating tackifier for one and two inch filter. Where an individual filter is to be used, the pleated type filter shall be used. Where bag filters are required a non moisture absorbency type shall be used with a minimum 80-85% efficiency, with a minimum of 45% efficiency when new. The filters are to be installed with no gaps between filter and no spacer is acceptable. Box filters shall be used in the Courts Police Building with the same requirement as outlined for bag-type filters.

11. *Wet Chemical Extinguishing Systems*

All wet chemical extinguishing systems shall be inspected, tested, and maintained in strict accordance with the minimum requirements including notification, frequencies and recording of the latest County adopted version of NFPA 17A including any amendments by Arlington County Fire Prevention Code and Virginia Statewide Fire Prevention Code.

The Contractor shall provide completed forms with associated County work order numbers for all inspection, testing and maintenance service(s) performed to the County Project Officer. The Contractor shall use the forms provided in NFPA 17A. The Contractor must submit sample forms to the County Project Officer for approval prior to use.

12. *Fire Protection Systems (Water Based)*

All water-based fire protection systems shall be inspected, tested and maintained in strict accordance with the minimum requirements, including notification, frequencies and recording of the latest County adopted version of NFPA25 including any amendments by Arlington County Fire Prevention Code and Virginia Statewide Fire Prevention Code.

The contractor shall provide completed forms with associated County work order numbers for all inspection, testing, and maintenance service(s) performed to the County Project Officer. The Contractor shall use the forms provided in NFPA 25. The Contractor must submit sample forms to the County Project Officer for approval prior to use.

13. *Fire Alarm Systems*

All fire alarm systems shall be inspected, tested and maintained in strict accordance with the minimum requirements, including notification, frequencies and recording of the latest County

adopted version of NFPA 72 including any amendments by Arlington County Fire Prevention Code and Virginia Statewide Fire Prevention Code.

The contractor shall provide completed forms with associated County work order numbers for all inspection, testing, and maintenance service(s) performed to the County Project Officer. The Contractor shall use the forms provided in NFPA 72. The Contractor must submit sample forms to the County Project Officer for approval prior to use.

14. *Additional Fire Protection Systems Requirements*

In addition to maintenance, inspection, and testing requirements identified by NFPA, the following shall be performed at the indicated frequencies. In the event where the frequencies and/or requirements indicated conflict with NFPA, then NFPA shall take precedence. OS&Y valves – Monthly.

Provide inspection tags for all valves.

Inspect all valves and adjust, repack or replace packing as required to maintain sufficient working order.

- Fire alarm panels – Monthly provide visual inspection of fire alarm panels and components.

15. *Fans, Exhaust*

Exhaust fans are package units, roof and wall exhausters and the like. Large fans set in plenums or ducted for exhaust are to be treated as fans.

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

- Report any problems found during PM to the County Project Officer.
- Check louver operation and screen openings.
- Check belt tension adjust and replace as needed. All belt replacements shall be dated in a visible location.
- Check for excessive noise.
- Check for accumulation of lint and dirt. Clean as required to maintain efficient operation of the equipment.
- Clean and lubricate fan and motor.
- Check enclosure (especially outdoor housings). Report any problem to County Project Officer to repair or replace as needed.
- Check control panel, control devices, and safeties within equipment for loose connections, wire overheating, corrosion, burnt-out contacts or evidence of component failure.

16. *Fans, Supply and Return (AHU's)*

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

- Check fan and motor bearing housings for excessive heat and play.
- Grease or lubricate (caution not to over grease or over lubricate).
- Check for vibration and unusual noise and adjust or repair to correct.
- Record lubrication of fan and motor.
- Check belt for wear and proper tension, adjust. Replace as needed. All replacement belts shall be dated in a visible location.
- Check end-play (set collars or thrust bearing).
- Check motor amperage and record reading. Identify any abnormality.



- Clean fan wheel, blades and casing of dirt and other foreign matters to prevent accumulation and unbalanced operation.
- Check fan for out of round or indication of being out of balance.
- Check drive sheaves and set screws or other fasteners.
- Clean motor, blower housing and air vent opening in casing for proper cooling.
- Replace filters.

17. *Heat Pump Units*

Scheduled preventive maintenance inspections shall be performed during normal working hours 12 times per year on the following schedule: Monthly.

- Inspect and record the system's superheat.
- Observe and record excessive noise and vibration. Replace filter.
- Record all abnormalities and report them to the County Project Officer.
- Record Superheat, amperage draw, check operation.
- Check the operation of the auxiliary and emergency electric heaters.
- Check control panel, control devices, and safeties within equipment for loose connections, wire overheating, corrosion, burnt-out contacts or evidence of component failure.
- Refrigerant charge to be checked using Design Temperature Difference Method.

Scheduled preventive maintenance inspections shall be performed during normal working hours 2 times per year on the following schedule: Bi-annually.

- Observe for excessive noise and vibration for both the heat pump unit and the AHU.
- Transfer the unit from the previous seasonal control mode (Note: If the system has already been manually switched over, shut unit down, perform service requirements and proceed to inspect and test by starting-up the system).
- Verify that the complete system is in operation and functioning correctly, including the AHU and electric heaters.
- Lubricate all associated equipment, e.g. fans and motors.
- Measure the compressor suction and discharge pressures or superheat.
- Confirm that unit has the proper refrigerant charge, and adjust as needed for proper, efficient operation.
- Measure the compressor amperage at load.
- Check capacitors for proper operation.
- Verify proper cycling of the reversing valve and defrost cycle (this includes verifying the defrost timer motor or board and defrost thermostat are functioning properly and auxiliary heaters are working properly).
- Verify the entire system control is satisfactory.

18. *Diesel Generator, Electrical/Mechanical Systems, Inspection and Testing*

Scheduled preventive maintenance inspections shall be performed during normal working hours 4 times per year on the following schedule: Quarterly.

Updating Software shall be done to the generators as needed basis.

- Check coolant level and add provide manufacturer recommended coolant as necessary to maintain the proper level in the radiator and coolant reservoir. When coolant is added it shall have a freeze to a minimum of -34°F or as recommended by manufacturer for local climate conditions.
- Check cooling system for leaks and tighten any loose hose connections.
- Check engine oil and provide oil as required.
- Check oil filter for signs of leaks, tighten as needed.

- Check V-belts, adjust or replace with new belt as required. Belts showing cracks shall be replaced.
- Check condition of all flexible hoses and replace as necessary. Any hose showing signs of cracks, shall be replaced.
- Check water level and specific gravity in all batteries. Check service and add battery solution as necessary to ensure battery reliability. Provide and add distilled water as necessary. Check battery charge and electrolyte corrosion, clean as required. Record readings.
- Inspect and test external battery charger and/or battery charger alternator for proper operation. Check operation of battery trickle charger.
- Check condition of batteries, battery cables and check terminals for tightness. Cables showing signs of corrosion shall be cleaned, and if they cannot be cleaned, then replaced.
- Check condition, setting and operation of all automatic and safety controls at generator. Record this information in PM work ticket.
- Check condition of gauges, switches and meters for proper operation. Adjust as required.
- Perform 30-minute generator run test with building load. Check for proper operation, record engine temperature, RPM, run hours when engine is started and when engine is turned off, natural gas pressure (if applicable), any problem with fuel pressure, fuel tank level and visible condition. Check transfer switch for proper operation.
- Transfer load and check transfer switch for proper operation. Inspect and test transfer switch to ensure that it automatically starts the generator and is transferring properly, plus all options, such as "time delay emergency to normal", "time delay cool down", and "plant exerciser".
- Manually operate generator set at NO LOAD and verify generator is producing rated AC voltage and frequency and that all control panel instruments and gauges are functioning. Calibrate transfer switch voltage sensors.
- Check exhaust line(s) for leaks and proper support.
- Clean and wipe equipment so that all oils or coolant that may have leaked or spilled are cleaned off.
- Inspect transfer switch for evidence of damage hardware, loose or damaged wires due to overheating and for excessive contact erosion.
- Check transfer switch control settings and any sign of damage or defect.
- Check all indicator lights for burned out bulb or indicator. Provide new bulbs/indicators to replace burned out ones.
- Check spark plugs (if applicable) and cables condition.
- Check for any evidence of vibration or noise which may indicate operating problems, record and report to County Project Officer, with recommendations on what should be done to accurately identify the problem and correct.
- Clean, lube and assure free movement of all linkages.
- Check condition of electrical hardware, connections, and wires.
- Check the cool-down run time of the generator and the time it takes to transfer when normal power is restored, and record in service ticket and log sheet.
- Clean and adjust spark plugs, points, rotor and distributor cap (if applicable).
- Check engine timing and adjust as necessary (if applicable).
- Check oil heater for proper operation.
- Completely inspect air intake and exhaust systems including louvers and shutters for correct operation when the generator is running in both Manual and Automatic mode.
- Open and drain exhaust system condensate traps.
- Apply anti-corrosion grease to terminals and connections.
- Visually inspect vibration isolators, ductwork, weatherproof enclosures, worn and/or rubbing parts and components.

- Inspect all contacts and conductors associated with the generator system including the transfer switch and tighten as needed.
- Check the generator starter for loosed connection or any overheated signs.
- Perform annual load bank on all diesel generators.

Scheduled preventive maintenance inspections shall be performed during normal working hours 1 time per year on the following schedule: annually.

- Replace spark plugs, points, rotor and distributor cap (if applicable). Adjust gap check condition and replace complete set if any of the wires have cracks in the insulation or show signs of wear.
- Replace engine oil and oil filter with new oil and filter that meet manufacturer recommendations.
- Replace fuel filter with new filter that meets manufacturer recommendations. Check fuel system for leaks. Drain sediment from fuel filter canister, prime and make sure the generator runs properly.
- Perform tune-up (where applicable), check and ensure speed control and synchronization. Operate properly under a full load (perform annual load-bank test on Diesel generators). Record engine speed and amperage load when test is done.
- Replace air filter with new filter that meets manufacturer recommendations. Clean filter housing.
- Check and clean injectors, and replace as needed, check air fuel mixture adjustment to ensure it is set to manufacturer recommendations.
- Perform in conjunction with load transfer switch and maintenance of transfer switch, a check of the voltage pick up point and drop point to make sure that transfer switch is working at optimal performance. Adjust as necessary.
- Lubricate transfer switch.
- Check main current carrying contacts.
- Brush, vacuum, and dust generator and associated generator components including the transfer switch.
- Perform full load bank test in accordance with NFPA 110 using a resistive load bank. The Contractor shall provide all necessary materials to perform this test. These materials shall include, but not limited to, cabling, resistive load bank, and connectors.
- Check condition of all contact material. Replace contacts when pitted or excessively worn.
- Test the electrical operation of the transfer switch.
- Check turbocharger for signs of worn bearings and leaking seals. Also, check for signs of cracked housing or any other abnormality.
- Perform fuel test and analysis. Provide report of fuel condition with recommendations.

#### 19. *Fuel Oil Transfer Pumps*

Scheduled preventive maintenance inspections shall be performed during normal working hours 4 times per year on the following schedule: Quarterly

- Check for proper motor operation.
- Check Main Disconnect Switch, door and hinge operation.
- Check cabinet mounting hardware at feet and wall mounting flange. Tighten as necessary.
- Test pumps in duplex pump sets. Ensure both pumps are operating normally, test each pump individually, test simultaneous operation, test alternating operation.
- Check pump/motor hardware for tightness. Adjust as needed.
- Rotate shaft by hand and check for smooth operation. Check pump/motor coupler shown at left for proper alignment and spacing.
- Check all electrical terminals and connections for tightness.

- Check all plumbing joints for leaks. Tighten fittings and joints as necessary. Drain accumulated fuel in catch basin as necessary by removing catch basin plug. Drain accumulated fuel in catch basin as necessary by removing catch basin plug.
- Inspect all fuel strainers. Disassemble strainer and clean strainer element, replace as necessary. Reassemble unit and check for leaks.
- Test hand pump operation, check for fuel leaks, tighten as necessary.
- Lubricate motors and pumps per manufacturer's instructions.
- Check the operation of day tank to make sure it is filled automatically and/ or manually. Check for any leakage. Check level controller.

The Contractor shall provide work tickets with associated County work order numbers for all inspection, testing, and maintenance service(s) performed to the County Project Officer. The Contractor must submit sample forms to the County Project Officer for prior to use.