Prince William County
PUBLIC SCHOOLS
Providing A World-Class Education

CONTRACT

CONTRACT NUMBER: R-DJ-21001-03

This Contract entered into this 5th day of November 2020 by, ***Waco, Inc, 38592 Brett Way, Suite 7, Mechanicsville, MD 20659*** *hereinafter referred to as the "Contractor" and* ***Prince William County School Board, P.O. Box 389, Manassas, VA 20108****, hereinafter referred to as the "Prince William County Public Schools", "Purchasing Agency" or "PWCS".*

WITNESSETH *that the Contractor and PWCS, in consideration of the mutual covenants, promises and agreements herein contained, agree as follows:*

1. **SCOPE OF CONTRACT**: Contractor shall provide all necessary parts, labor, tools, materials, equipment and resources as may be required for Environmental Abatement Services in accordance with the General Terms and Conditions and Special Terms and Conditions and Specifications stated herein.

2. **CONTRACT DOCUMENTS**: The contract documents shall consist of the following:

   2.1. This signed form.

   2.2. PWCS Invitation for Bid # R-DJ-21001 dated July 16, 2020.

   2.3. Contractor's bid response dated August 4, 2020.

   2.4. Certificate of Compliance (Attachment A)

3. **PERIOD OF CONTRACT**: The initial term of this contract shall be from the **November 5, 2020 to September 30, 2025** with the option to renew for two (2) additional two-year periods, two years at a time, upon mutual written consent of the parties to the contract. Proposed prices shall remain firm for the initial term of the contract.

4. **CONTRACT ADMINISTRATOR/PROJECT MANAGERS**: The following employees of PWCS are identified to use all powers under the contract to enforce its faithful performance:

   4.1. CONTRACT ADMINISTRATOR: As the Contract Administrator, the following individual, or his designee, shall serve as the interpreter of the conditions of the contract and shall use all powers under the contract to enforce its faithful performance:

   Daemien Jones, Buyer, 703.791.8740, jonesdj@pwcs.edu

   4.2. PROJECT MANAGERS: The following individuals, or his designee, shall work directly with the Contractor in scheduling and coordinating work, answering questions in connection with the scope of work, and providing general direction under the resulting contract:

   Julius R. Williams, Environmental Coordinator, 703.791.8352

5. **MANDATORY CONTRACTOR QUALIFICATIONS:** The following mandatory qualifications for this contract are identified below.

   5.1. Contractor shall have a valid Virginia **Class A** Contractors License.

   5.2. Contractor shall have a valid Virginia **Asbestos** Contractors License.

5.3. Contractor shall have a valid Virginia **Lead** Contractors License.

5.4. Contractor shall have a valid EPA **RRP certification.**

6. **SCOPE OF WORK**: This is a requirements contract to provide a ready source for Environmental Abatement Services for PWCS requirements on an "as needed basis". This contract will supplement PWCS staff. Contractor shall furnish all necessary labor, materials and equipment necessary to perform the work identified in each section herein.

6.1. ASBESTOS REMOVAL TERMINOLOGY: The following asbestos terms are used in these specifications and are defined as follows:

6.1.1. Abatement: Work practices used to remove asbestos containing material from a designated work area.

6.1.2. Aggressive Sampling: Air sampling which takes place after final clean-up while the air is being physically agitated to produce a "worst case" situation.

6.1.3. Air Filtration Equipment: Transportable air filtration equipment equipped with HEPA air filters. The filtration equipment issued to draw and filter the air inside the work area, and keep the work area at a lesser pressure than the surrounding environment.

6.1.4. Air Monitoring: The means of measuring the airborne asbestos fibers inside and outside the work area and on workers.

6.1.5. Air Lock: A system of enclosures consisting of two (2) doorways at least three feet apart, preventing air movement between clean and contaminated areas.

6.1.6. Amended Water: Water which has had a surfactant added to it for the purpose of applying it to asbestos containing material.

6.1.7. Asbestos: The asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. For purposes of determining respiratory and worker protection both the asbestiform and non-asbestiform varieties of the above minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos.

6.1.8. Asbestos-Containing Material (ACM): Any material or product which contains more than 1 percent asbestos.

6.1.9. Asbestos Containing Building Material (ACBM): Surfacing ACM, Thermal System Insulation (TSI) ACM, or Miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

6.1.10. Asbestos Fiber: Means a particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

6.1.11. Asbestos Regulated (Controlled) Area: A work area where asbestos removal operations are performed which is isolated by physical barriers to prevent unauthorized entry of personnel and the spread of asbestos dust, fibers, or debris.

6.1.12. Class 1 Asbestos Work: Activities involving the removal of TSI and Surfacing ACM and Presumed ACM (PACM).

6.1.13. Class II Asbestos Work: Activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

6.1.14. Competent Person: One who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor, or its equivalent.

6.1.15. Critical Barrier: Airtight barrier consisting of two (2) layers of minimum 6-mil plastic sheeting which separates the contaminated work area from any other air space. Installed first, these barriers cover items such as, but not limited to: all ventilation openings, lighting fixtures, doorways, windows, floor drains, other openings into and out of the work area, and containment walls which are not existing building walls.

6.1.16. Decontamination Unit: A series of connected rooms separated by air locks. The unit is comprised of a clean room, shower room and a dirty room. Its purpose is to prevent the contamination of adjacent areas when entering or exiting the work area.

6.1.17. Demolition: The wrecking or taking out of any building component, system, finish, or assembly of a facility together with any related handling operations.

6.1.18. Encapsulation: The coating of asbestos-containing material with a bonding or sealing agent to prevent the release of airborne fibers.

6.1.19. Enclosure: The construction of an airtight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

6.1.20. Fixed Object: Equipment or furniture in the work area which cannot be removed from the work area.

6.1.21. Glove Bag: Plastic, bag-type enclosure constructed of minimum six mil transparent polyethylene or polyvinyl chloride plastic with two inward projecting long sleeve gloves placed around asbestos-containing pipe lagging so that it may be removed without generating airborne fibers into the atmosphere.

6.1.22. HEPA Filter: A high-efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

6.1.23. Lockout: Installation of a locking device to prevent activation of an electrical circuit, which has been deactivated for safety reasons. Always utilized in conjunction with tag-out procedures to advise who has deactivated the circuit and in compliance with OSHA 1910.147, "Control of Hazardous Energy Source."

6.1.24. Log Book: A book containing project data and daily notes. This book is to be kept on site at all times.

6.1.25. Mini-Enclosure: The construction of a containment system to remove small amounts of asbestos containing material and for providing protection of regulated areas during invasive procedures into the contained area.

6.1.26. Owner: Prince William County School Board.

6.1.27. Phase Contrast Microscopy (PCM): - The analytical method that counts all fibers. This method of microscopy cannot distinguish between asbestos and other fibers.

6.1.28. Powered Air Purifying Respirator (PAPR): - A full face, helmet, or hooded respirator that has HEPA filtered air provided inside the respirator, under positive pressure.

6.1.29. Regulated work Area: A work area which has been demarcated, sealed, plasticized and equipped with a decontamination enclosure system.

6.1.30. Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres. Must be approved by NIOSH and used in accordance with the employer's respiratory protection program and all manufacturer procedures.

6.1.31. Surfactant: A chemical wetting agent added to water to improve penetration.

6.1.32. Transmission Electron Microscopy: (TEM) - A method of microscopic analysis which utilizes an electron beam that is focused onto a sample. A beam transmits through the sample and produces an image on a screen from which the sample can be identified and counted.

6.1.33. Wet Cleaning/Fine Cleaning: The process of eliminating asbestos contamination from all vertical and horizontal building surfaces from within a regulated area using cloth, mops or other cleaning tools.

6.1.34. Work Area: Designated rooms, spaces or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. The work area is a Regulated Area as defined by 29 CFR 1910.1101 and/or Title 40, Code of Federal Regulation, Subpart 763 – AHERA.

6.2. APPLICABLE REGULATIONS: All applicable regulations pertaining to this specification shall be adhered to at all times. The current and/or more stringent regulation shall nullify less stringent regulations, if contradicting or conflict should originate. The applicable regulations, but not limited to, are as follows:

6.2.1. Title 29, Code of Federal Regulation, Section 1926.1101 - Asbestos, Construction Industry Standards - Occupational Safety and Health Administration (OSHA).

6.2.2. Title 29, Code of Federal Regulation, Section 1910.134 - Respiratory Protection - Occupational Safety and Health Administration (OSHA).

6.2.3. Title 40, Code of Federal Regulation, Subpart M - National Emission Standard for Asbestos - U.S. Environmental Protection Agency (EPA).

6.2.4. Title 40, Code of Federal Regulation, Subpart 763 – AHERA - U.S. Environmental Protection Agency (EPA).

6.2.5. Title 40, Code of Federal Regulation, Subpart 745 – RRP - U.S. Environmental Protection Agency (EPA).

6.2.6. All State, county, and city codes and ordinances as applicable.

6.3. APPLICABLE NOTIFICATIONS: Prior to the commencement of the abatement activities specified herein, all applicable notifications must be submitted to the appropriate agencies. Cost associated with the required notifications shall be at the Contractor's sole expense. The state and federal agencies are as follows:

6.3.1. Department of Labor and Industry
600 East Main Street, Suite 207
Richmond, Virginia, 23219

This notification must be delivered in person, or by certified letter, or by facsimile (804) 371-7634, twenty (20) days prior to the start of removal.

6.3.2. U.S. Environmental Protection Agency
Region III
Mail Code 3LC62
1650 Arch Street
Philadelphia, PA 19103-2029

This notification must be delivered, no later than ten (10) days prior to the start of removal.

6.4. COUNTY AND CITY ASBESTOS PERMITS:

6.4.1. The Contractor is required to pay for and obtain all building/demolition/asbestos permits from Prince William County.

6.4.2. The Contractor shall post All Required permits on site for the duration of the project. One (1) copy of each permit shall be given to PWCS Project Manager at time of posting and an original copy shall be submitted with the close-out paper work.

6.4.3. Upon completion of the project, the Contractor shall provide PWCS evidence of Prince William County permit closure.

6.5. SUBMITTALS: The following is a listing of submittals that are required for every project.

6.5.1. Documentation verifying that all notifications have been submitted to the State of Virginia and EPA.

6.5.2. Documentation verifying that all arrangements for the transportation and disposal of asbestos waste are complete.

6.5.3. Documentation verifying the Contractor has a valid Virginia Asbestos Contractors license.

6.5.4. Documentation for all asbestos supervisors, training course, and their valid Virginia Asbestos Supervisors license(s).

6.5.5. Documentation for all asbestos workers, training course and their valid Virginia Asbestos Worker license. Worker documents including current respirator fit test can be given on first day of project.

6.5.6. Documentation verifying that all individuals (Workers, Supervisors, .etc.) have passed a medical physical as mandated by 29 CFR 1926.1101, with Appendices D & E. The documentation must be signed by the physician performing the examination.

6.5.7. Documentation on all products and equipment to be used, to include name, manufacturer, vendor, technical specifications and the Material Safety Data Sheet (MSDS) for the product.

6.5.8. The Contractor shall furnish timely notification of demolition of this project to Federal, State, regional, and local authorities in accordance with 40 CFR 61, Subpart M.

6.5.9. Record Information Booklet:

6.5.9.1. Each booklet shall be bound in a three-ring, loose-leaf binder titled, "Record Information Booklet for (project name)". Sheets 8 1/2" x 11" shall be used, except some sheets may be folded and used as pullouts.

6.5.9.2. Booklet shall contain the following, specifications, Virginia State License for Contractor, Supervisors and Workers, Sign-in log and S.S.# for each individual, Strip-chart record respirator program, all daily notes, Asbestos waste manifests, and County and City Permits.

6.5.9.3. Material and equipment descriptions shall include model or type names or numbers, color and other information required for future reordering as pertains to each job site.

6.5.9.4. Maintenance, parts, installation, and operations manuals, as well as equipment guarantees.

6.5.10. Documentation of a complete asbestos abatement plan. When required by PWCS, the plan should include the following:

6.5.10.1. Drawings of the abatement area

6.5.10.2. The cubic footage of the work area

6.5.10.3. The number of air filtration units required to achieve a minimum of four (4) air changes per hour

6.5.10.4. The location of decontamination units

6.5.10.5. Emergency plans

6.5.10.6. Sequencing of asbestos-related work

6.5.10.7. A copy of the Respirator Protection Program

6.5.10.8. A copy of the Hazard Communication Program

6.5.10.9. Historical negative exposure personal air sampling log

6.5.10.10. Documentation verifying that all local emergency agencies have been notified

6.5.10.11. Proposed Salvage, waste plan

6.5.10.12. Notifications and permits

6.5.10.13. Shipment Records (Closeout) Receipts

6.6. WORK AREA PREPERATION:

6.6.1. The PWCS Environmental Project Manager will designate work area locations. At no time will the Contractor or his/her employees depart from the designated locations and enter other areas of PWCS property.

6.6.2. The work area is to remain clean at all times. At no time will garbage, cut-off Tyvek™ suits, respirator cartridges, and used rolls of tape or any other incidental materials accumulate in the work area.

6.7. CONTRACTOR OFFICE SPACE:

6.7.1. The PWCS Environmental Project Manager will designate the office area location.

6.7.2. The Contractor shall request office space occupying PWCS property, if desired. The request shall be submitted at the pre-construction meeting in the submittal package.

6.7.3. CONTRACTOR STORAGE SPACE: The Contractor shall supply his/her own storage trailer. The PWCS Environmental Project Manager will designate the storage area location. Prior to the commencement of on-site operations, the Contractor shall request storage space occupying PWCS property, if desired. The request shall be submitted at the pre-construction meeting in the submittal package. PWCS shall not be responsible for loss or damage to Contractor owned equipment and/or supplies.

6.8. MATERIAL, TOOLS AND EQUIPMENT:

6.8.1. The Contractor shall use material, tools and equipment solely for the services as stated herein. Prior to the use of the material and equipment, all technical documentation shall be reviewed by the PWCS Environmental Project Manager or his designated representative.

6.8.2. The Contractor's tools, equipment and HEPA machines shall be demonstrated by the Contractor to the PWCS Environmental Project Manager or his designated representative to be free of asbestos contamination prior to entering the work site.

6.8.3. The Contractor's tools, equipment and HEPA machines shall be demonstrated by the

Contractor to the PWCS Environmental Project Manager or his designated representative to be operating correctly and efficiently prior to entering the work site.

6.9. ELECTRICAL REQUIREMENTS:

6.9.1. PWCS will allow the Contractor to use the building's existing electrical supply system. However, PWCS provides no guarantee or warranty as to the system's condition or capabilities. The Contractor shall assure himself that the electrical system is adequate for their requirements or the Contractor shall supply additional temporary electrical power at the Contractor's expense.

6.9.2. Any damage to the PWCS electrical system resulting from misuse or abuse to the existing electrical system shall be repaired or replaced by the Contractor at no expense to PWCS.

6.9.3. The Contractor shall have a licensed Electrical Contractor perform all electrical requirements and to perform the specified work herein. A copy of this electrical license must be presented to the PWCS Environmental Project Manager, or his designee, prior to commencement of any electrical work.

6.9.4. The Contractor's electrician must possess his/her card on their person when performing all work.

6.9.5. The Contractor shall install electrical sub panels equipped with Ground Fault Circuit Interrupters (GFCI's). All electrical sub-panels and GFCI's shall be located outside the containment area.

6.9.6. The Contractor shall use GFCI's on all electrical equipment, including lighting, in performance of the work specified herein.

6.10. PLUMBING AND WATER REQUIREMENTS:

6.10.1. PWCS will allow the Contractor to use the building's existing source of water; however, it shall be the responsibility of the Contractor, at his own expense, to route the water to its usage area.

6.10.2. Any damage to the plumbing resulting from misuse or abuse to the existing plumbing system shall be repaired or replaced by the Contractor at no expense to PWCS.

6.10.3. The Contractor shall have a licensed Plumbing Contractor perform all plumbing requirements and to perform the work as specified herein. A copy of this plumbing license must be presented to the PWCS Environmental Project Manager, or his designated representative, prior to commencement of any plumbing work.

6.10.4. The Contractor's Plumber must demonstrate current license while on site.

6.10.5. The Contractor shall install back-flow preventers on all fresh water supplies.

6.11. CONTAINMENT AREA PREPERATION:

6.11.1. The Contractor shall use respiratory protection and impermeable personal protection when performing preparation requirements.

6.11.2. The Contractor shall use minimum six (6) mil black polyethylene plastic for work area and non-work area separation.

6.11.3. The Contractor shall post all the required OSHA asbestos signs surrounding each

individual asbestos work area.

6.11.4. The Contractor shall establish an asbestos control area in order to prevent the escape of asbestos fibers from the contaminated asbestos removal area. The Contractor shall establish the asbestos control area by performing the following:

6.11.4.1. Walls shall be covered by a continuous membrane of two (2) layers of minimum six (6) mil polyethylene plastic in all work areas with the exception of Floor Tile and Floor Tile mastic containments which will require only one (1) layer of polyethylene plastic.

6.11.4.2. Seal off all openings, including but not limited to, corridors, doorways, vents, windows and any other penetrations of the work areas with two layers of six (6) mil Polyethylene. A three stage decontamination unit shall be incorporated as an integral part of the containment enclosure.

6.11.4.3. Negative pressure system shall be established. Openings will be allowed in the enclosures of asbestos control areas for the local exhaust system. Replace filters on the negative air ventilation system as required to maintain the efficiency of the system.

6.11.4.4. Emergency exits shall be clearly marked.

6.11.4.5. After completing the asbestos abatement operation, the plastic sheeting and critical barriers shall be properly disposed of as asbestos containing material.

6.11.4.6. Flooring in areas where floor tile is to be removed is not to be covered.

6.11.4.7. Floors in non-Floor Tile removal areas are to be covered with impermeable drop cloths and a continuous membrane of two (2) layers of minimum six (6) mil polyethylene plastic.

6.11.4.8. Individually seal all lighting fixtures that are to remain, as well as clocks, speakers, alarm system components (unless otherwise specified), thermostats and other fixed mechanical components with minimum 6-mil thick polyethylene sheeting, taped securely in place with duct tape. Ensure lighting circuits are deactivated prior to installation of critical barriers to avoid melting or burning of sheeting.

6.11.5. The Contractor shall perform asbestos abatement operations involving Wall Board Mastic in accordance with the procedures outlined in Section 6.20.5 and which meet PWCS Environmental Project Manager's approval.

6.11.6. The Contractor shall remove all Floor Tile and Associated Mastic and all identified ACM Thermal System Insulation under full containment.

6.11.7. When authorized by the PWCS Project Manager or his designee, the Contractor shall be allowed to seam and adhere polyethylene to walls with duct tape and spray glue. If surface damage occurs, the Contractor shall paint, trowel plaster, brick or fill all surface damage until a single uniform homogenous appearance is evident at no additional charge to PWCS. Final acceptance is based on PWCS Environmental Project Manager's approval.

6.11.8. The Contractor shall position the air filtration as documented in the 90% submittal package. The air filtration system is to be capable of maintaining a minimum of four (4) complete air changes per hour within the work area. The Contractor shall establish a reduced pressure (-0.02" H_2O) within the work area and shall be maintained by air filtration equipment or a sufficient number of approved HEPA vacuums.

6.11.9. The Contractor shall install strip chart recorders capable of monitoring the negative pressure 24 hours a day. Strip chart recordings shall be given to the PWCS Project Monitor for insertion into daily notes.

6.12. PRE-CLEANING:

6.12.1. The Contractor shall perform pre-cleaning requirement after the complete isolation of the work area.

6.12.2. The Contractor shall use respiratory protection and impermeable personal protection when performing pre-cleaning requirements.

6.12.3. The Contractor shall use HEPA vacuums and good wet cleaning work practices when performing pre-cleaning requirements. At no time during the pre-cleaning phase shall dust raising or dry sweeping work practices be allowed.

6.13. DECONTAMINATION FACILITIES: The Contractor shall establish decontamination units for each work location. The decontamination facilities shall consist of one worker decontamination unit and one waste load-out decontamination unit. The decontamination units shall not have a common dirty room.

6.13.1. Worker Decontamination Unit:

6.13.1.1. The worker decontamination units shall be attached to the work area, and shall consist of an equipment room, shower room, dirty room and clean room. Each room shall be divided from the adjoining room by air locks.

6.13.1.2. The dirty room shall be large enough to be occupied by multiple workers. At no time shall this area become littered with contaminated material. All contaminated material shall be disposed of in waste containers placed in the dirty room.

6.13.1.3. The shower room shall have minimum of one shower, equipped with hot and cold water.

6.13.1.4. There shall be two (2) separate water supply lines to the shower and work areas. Soap shall be kept in the shower at all times.

6.13.1.5. The water filtration system shall be a two stage system capable of filtering water to five (5) microns in size. The filtered water shall then be disposed of in a sanitary drain or a fifty gallon drum, and disposed of with the asbestos waste.

6.13.1.6. The clean room shall be large enough for multiple workers. It shall be equipped to store all decontamination equipment and personal items.

6.13.2. Equipment Decontamination Enclosure System: The Contractor shall provide or construct an equipment decontamination enclosure system consisting of two totally enclosed chambers as follows:

6.13.2.1. A washroom consisting of an airlock with a curtained doorway to the designated area of the work and a curtained doorway to the holding area.

6.13.2.2. A holding area consisting of an airlock with a curtained doorway to an uncontaminated area. The purpose of this area is to provide a means to decontaminate drums, scaffolding, material containers, vacuum and spray equipment for which the Worker Decontamination systems are not suitable.

6.14. ASBESTOS WASTE STORAGE FACILITIES:

6.14.1. The Contractor shall have asbestos waste storage containers located in the parking lot

on the PWCS Schools and/or facilities. A specific location will be determined by the PWCS Environmental Project Manager.

6.14.2. The Contractor shall have a container that is enclosed and capable of being locked. A key to the lock shall be given to the PWCS Environmental Project Manager.

6.14.3. The Contractor shall post each side of the container with the proper asbestos warning signs.

6.14.4. The Contractor shall line the container with two (2) layers of minimum six (6) mil polyethylene to prevent leakage of any liquid or material onto PWCS property.

6.14.5. In case of a leak, the Contractor shall unload the container to locate the source of the leak. The leaking asbestos waste bags or drums shall be placed in new bags or drums and reloaded in the container by the Contractor at no additional cost to PWCS.

6.14.6. The Contractor shall use the storage container solely for the storage of asbestos waste. At no time will any other material be stored in the storage facility.

6.14.7. The Contractor shall not have the waste container removed and taken to <u>any</u> other asbestos removal project.

6.15. <u>RESPIRATORY PROTECTION PROGRAMS</u>:

6.15.1. The Contractor shall perform asbestos removal activities with full-faced type Powered Air Purifying Respirators (PAPR). PAPR respiratory protection shall be used until personal air monitoring results indicates the Contractor's use of a respirator with a lower Protection Factor may commence in accordance with 6.16.4 below.

6.15.2. The Contractor's use of a lower rated respirator to commence the removal activities shall only be approved when appropriate historical data of personal air monitoring results (Negative Exposure Assessment) are submitted to PWCS' Environmental Project Manager. Historical personal air monitoring data will only be accepted with the following documentation:

6.15.2.1. The description of previous jobs within the past twelve months. Including the size of job, type of asbestos material removed, job description of individual from which the sample was collected and work experience of monitored workers and worker to perform work.

6.15.2.2. The calibration data, including both pre and post calibration data.

6.15.2.3. The laboratory results. Laboratory results should be reported in f/cc, time and volume of the sample collected.

6.15.2.4. The laboratory qualifications.

6.15.2.5. If the samples were analyzed on the project site, then the qualifications of the analyst must be submitted.

6.15.3. The Contractor's respiratory protection program is required that meets the respiratory protection requirements of 29 CFR 1910.134. All respirators used shall be approved by the National Institutes of Occupational Safety and Health (NIOSH).

6.15.4. The lowest type of respiratory protection allowed during the entire asbestos removal project shall be a Half Face Negative Pressure Air Purifying Respirator. At no time during the removal project shall fibers exceed 0.01f/cc in the respirator mask.

6.15.5. A respirator fit test shall for all workers and authorized visitors shall be performed by the Contractor prior to entering any regulated area to ensure a proper fit.

6.15.6. The Contractor shall be responsible for the collection of OSHA required personal air monitoring. Personal air monitoring shall be collected daily and the results shall be posted at the job site and given to PWCS'S Asbestos Project Monitor within twenty-four (24) of time of collection unless the Contractor has met the requirements of 29 CFR 1926.1101 (f)(3).

6.16. WORKER PROTECTION:

6.16.1. The Contractor and authorized visitors shall perform the required safety activities prior to entering any regulated work area.

6.16.2. The Contractor and authorized visitors shall sign the work area containment list or security sign-in sheet. This list shall contain the following:

6.16.2.1. The name of individual

6.16.2.2. The Employee ID number of the individual

6.16.2.3. The time of entrance to the work area

6.16.3. The Contractor and authorized visitors shall remove and store all street clothes in the area provided for storage in the clean room.

6.16.4. The Contractor and authorized visitors shall dress in new clean full-body impermeable protective clothing. There shall be new protective clothing in the clean room at all times. The Contractor shall provide all protective clothing for the PWCS Asbestos Project Monitors and all authorized visitors.

6.16.5. The Contractor and authorized visitors shall put on the correct respirator protection.

6.16.6. The Contractor and authorized visitors, once in the equipment room, shall put on other non-cleanable protective clothing, such as rubber boots, gloves and eye protection. At no time shall workers or authorized visitors enter the work area without foot protection.

6.16.7. The Contractor and authorized visitors shall not remove their respirator while in the regulated work area. If individuals are found without respirators, they will be asked to leave the regulated area and not be allowed to re-enter.

6.16.8. The Contractor shall supply scaffolding with handrails, regardless of height of scaffold and type of work being conducted.

6.16.9. The Contractor shall supply and use eye protection and hard hats.

6.16.10. The Contractor must provide and incorporate adequate safety precautions to prevent heat related illness.

6.16.11. The Contractor, if an emergency egress is required, shall ensure that all workers leave the work area as dictated by the emergency situation and in accordance with his emergency plan.

6.16.12. The Contractor shall perform required decontamination requirements when exiting the regulated work area.

6.16.13. The Contractor, while in the dirty room, shall remove all contaminated clothing, except respirator, and place all contaminated disposable clothing in an asbestos waste bag. All other clothing must remain in the equipment room.

6.16.14. The Contractor, after the removal of all contaminated clothing, shall proceed to the shower room. While protecting the HEPA filter of the respirator, wash head, face, hands and rest of body thoroughly.

6.16.15. The Contractor shall sign out on the sign out sheet when leaving the clean room.

6.16.16. The Contractor shall exit the work area and perform complete decontamination prior

to conversing with co-workers, Owner's Representatives and taking breaks.

6.17. PRE-REMOVAL INSPECTION:

6.17.1. The Contractor shall have a pre-removal inspection prior to the start of asbestos removal. A pre-removal inspection will be conducted to insure the integrity of the work area containment.

6.17.2. PWCS' Asbestos Project Monitor will conduct the pre-removal inspections.

6.17.3. The Contractor shall have a representative present during the inspection. All items that need to be corrected shall be identified to the Contractor. All items must be corrected by the Contractor prior to starting the abatement work.

6.17.4. PWCS' Asbestos Project Monitor will inspect for the complete isolation of the work area as required by these specifications.

6.17.5. PWCS' Asbestos Project Monitor will inspect for the covering of permanent structures/equipment remaining in the work area with minimum six (6) mil poly.

6.17.6. PWCS' Asbestos Project Monitor will inspect for asbestos warning signs.

6.17.7. PWCS' Asbestos Project Monitor will inspect for complete and correct construction of the decontamination unit as required by these specifications.

6.17.8. PWCS' Asbestos Project Monitor will inspect for the proper operation of the air filtration system equipped as described in the Contractor's submittals.

6.17.9. PWCS' Asbestos Project Monitor will inspect for the correct number of HEPA air filtration units in the work area.

6.17.10. PWCS' Asbestos Project Monitor will inspect for the proper exhausting of HEPA air filtration unit.

6.17.11. PWCS' Asbestos Project Monitor will inspect for the correct pressure differential maintained in the contained work area.

6.17.12. PWCS' Asbestos Project Monitor will inspect for the availability of a properly functioning strip chart recorder.

6.18. INSPECTION OF THE WASTE STORAGE CONTAINER:

6.18.1. The Contractor shall have a pre-removal inspection of the storage container prior to the removal of any asbestos containing material.

6.18.2. PWCS' Asbestos Project Monitor will inspect for the proper security of the storage container, review of personnel responsible for daily security.

6.18.3. PWCS' Asbestos Project Monitor will inspect for the proper lining of the waste storage container.

6.18.4. PWCS' Asbestos Project Monitor will inspect for the proper precautions to prevent leakage.

6.18.5. PWCS' Asbestos Project Monitor will inspect for the proper labeling of the waste storage container.

6.19. ASBESTOS REMOVAL OPERATIONS:

6.19.1. The Contractor shall perform the following methods, or methods similar in practice and approved by the PWCS Project Monitor and/or PWCS Environmental Project Manager and Project Designer to remove the asbestos material. The Contractor shall remove all designated asbestos containing materials utilizing Full containment, Mini enclosures and Work Area Isolation.

6.19.2. Wet asbestos material with amended water, using spray equipment capable of providing a "mist" application to reduce the release of fibers. Small hand-held sprayers or a combination of water barrel, pump, hose, and nozzle controlled sprayers

may be used.

6.19.3. All Floor Tile/Mastic, Thermal System Insulation, and Window Frames are to be removed under Containment as specified by the Project Designer.

6.19.4. Isolate work area(s) with critical barriers and/or full containment for removal of Duct Seam Mastic.

6.19.5. All Wall Board Mastic is to be removed utilizing hand methods. Mechanical methods must be approved by the PWCS Project Manager prior to use. Isolate work area(s) with critical barriers and/or full containment, or Mini enclosures.

6.19.6. Remove saturated Pipe Elbow Thermal System Insulation asbestos material in small sections with two-person teams. Place sections into sealed double plastic bags of minimum 6-mil thickness as ACM is removed. Pack the material and place in labeled containers for transport. Material shall not be allowed to dry out prior to insertion into the container.

6.19.7. Containment method for demolition and disposal of Concrete Masonry Unit (CMU) walls by Contractor will be determined by PWCS prior to beginning the project.

6.19.8. Contractor shall use extreme care when using water in removal of ACM. Damage inside and outside the asbestos control area and throughout the remainder of the facility is the sole responsibility of the Contractor. All water shall be collected and filtered to 5.0 microns and discharged into the sanitary sewer system. The Contractor may trap and collect wastewater in impermeable containers and dispose of as ACM at its option rather than filtering and draining into the sanitary sewer system.

6.19.9. Seal filled containers - If 6-mil poly asbestos disposal bags are used, they shall be double-bagged. Contractor shall place warning labels on containers in accordance with Regulation 29 CFR 1926.1101 (k)(8) and 29 CFR 1910.1200 (f). Contractor shall clean external surfaces of containers thoroughly by wet-sponging in the designated area which is part of the equipment decontamination enclosure system. Move containers to the washroom, wet-clean each container thoroughly and move to the holding area pending removal to uncontaminated areas. Ensure that containers are removed from the holding area by workers who have entered from uncontaminated areas dressed in clean protective clothing.

6.19.10. After completion of stripping work, all surfaces from which asbestos has been removed shall be nylon-brushed or wet-sponged or cleaned by an equivalent method to remove all visible material. During this work, surfaces being cleaned shall be kept wet. Keep dust down at all times. Sprinkle, or treat with dust suppressors, areas disturbed by operations as needed. Fiber release episodes shall be avoided during removal. Dry brooming and/or air blowing are prohibited. The Contractor shall use vacuuming, wet mopping, or wet sweeping. Vacuuming shall be performed with only a unit having a HEPA filter approved for use with asbestos-containing dusts.

6.19.11. If during the removal process, the negative pressure differential falls below the specified limits in the asbestos control area, all removal operation shall **STOP IMMEDIATELY**. Work shall remain stopped until the cause of the problem is identified and proper negative pressure is reestablished. The loss of negative pressure shall be fully documented and the PWCS Project Manager notified. The Contractor shall observe the outside of the containment structure for punctures, tears and similar degradation where possible release may occur and repair immediately.

6.19.12. The Contractor shall remove all Asbestos Material from the work area prior to securing the work area on a daily basis.

6.20. <u>DISPOSAL OF ASBESTOS-CONTAMINATED WASTE</u>:

6.20.1. The Contractor shall treat all insulation removed as regulated asbestos waste, except where noted otherwise.

6.20.2. The Contractor shall clean all double bagged "goose necked" waste bags and wrapped contaminated material prior to leaving the work area. If drums are to be used, then the drums shall be cleaned prior to leaving the work area.

6.20.3. The Contractor shall wrap materials that cannot be bagged, in two (2) layers of minimum six (6) mil thick polyethylene sealed with duct tape.

6.20.4. The Contractor shall utilize clear asbestos waste bags as the outer bag.

6.20.5. The Contractor shall label all waste containers with the correct OSHA and NESHAP labeling requirements. All waste containers shall comply with OSHA, NESHAP and Department of Transportation (DOT) regulations.

6.20.6. The Contractor shall provide PWCS'S Asbestos Project Monitor a total bag count at the end of each working day.

6.20.7. The Contractor shall use respiratory protection and impermeable clothing (Tyvek™) while loading the asbestos waste bags or drums into the storage containers. Transport personnel shall use appropriate respiratory protection while handling asbestos-contaminated waste.

6.20.8. The Contractor shall use transporters that are registered to transport asbestos waste with the state(s) through which the material will be transported.

6.20.9. The Contractor shall dispose of asbestos waste in accordance with the amended NESHAP (40 CFR 61).

6.20.10. The Contractor shall within thirty five (35) days of the asbestos waste and asbestos contaminated waste leaving the work site, submit the original Waste Shipment Record (WSR) to the PWCS Environmental Project Manager. Final payments will not be processed until all waste manifests returning from landfill have been given to the PWCS Environmental Project Manager.

6.20.11. The Contractor shall be responsible for obtaining all Local, State and Federal permits that are required for the transportation of asbestos waste.

6.21. <u>REGULATED AREA FINE CLEANING, INSPECTION AND ENCAPSULATION</u>:

6.21.1. The Contractor's fine cleaning shall consist of wet-wiping, HEPA vacuuming and nylon brushing all surfaces within the regulated work area.

6.21.2. The Contractor shall not perform dry sweeping, dry brushing or any other dust raising activities.

6.21.3. The Contractor shall continue fine cleaning until there is no material or visible residue within the regulated work area.

6.21.4. Once the area passes a visual observation, and upon approval of PWCS' Project Monitor, the plastic mini-enclosure may be removed at the discretion of PWCS. Critical barriers and Negative Air System shall remain in place.

6.21.5. The Contractor shall clean the top layer of the plastic enclosure as described above after a minimum of eight (8) hours or the defined time duration as required by the Project Designer for the asbestos to settle. Next, a visual observation shall be conducted by PWCS' Project Monitor to insure that it is free of visible asbestos contamination. Once the area passes a visual observation, and upon approval of PWCS' Project Monitor, the top (dirty) layer of the plastic enclosure may be removed

at the discretion of PWCS. Critical barriers and Negative Air System shall remain in place.

6.21.6. The Contractor shall encapsulate all surfaces within the work area with a lockdown type asbestos encapsulant. When the encapsulant has dried sufficiently, for a period of not less than eight (8) hours or defined time of duration as required by the Project Designer, PWCS' Project Monitor shall perform Clearance Air Monitoring as outlined in Section 6.23 - Final Air Testing.

6.22. FINAL AIR TESTING:

6.22.1. PWCS' Project Monitor will collect all final air tests using the sampling protocol as dictated by 40 CFR Part 763 CFR - Asbestos Hazard Emergency Response Act; Final Rule and Notice. The work area is to be cleared by PCM and TEM.

6.22.2. PWCS' Project Monitor may, if required by PWCS, conduct pre-final air tests in the work area using PCM (NIOSH method 7400) analysis prior to the TEM final clearance sample collection. These samples will have a clearance level of 0.01 f/cc for each of the samples collected. For PCM analysis, the total liters of air collected shall be between 1,200 and 1,800 using high volume pumps with flow rates not to exceed 10 Liters/min.

6.22.3. PWCS' Project Monitor will use Aggressive Air Sampling techniques in the work area during the collection of the pre-final air tests.

6.22.4. PWCS' Project Monitor will collect the Final air tests and have the samples analyzed by TEM. The clearance level to be obtained shall be an average of 70 structures per square millimeter for all of the five (5) inside samples collected. The collection of the final air tests collected using high volume pumps shall be between 1,200 and 1,800 Liters with flow rates not to exceed 10 Liters/min.

6.22.5. The Contractor shall provide PWCS' Project Monitor with one (1) electric "leaf blower", one (1) electric box fan per 10,000 cubic feet of air volume and the necessary electrical extension cords to operate the equipment in each work area to be tested.

6.22.6. The Contractor shall consider all electrical equipment (fans and blowers) as contaminated for each failed final air test. If required, the Contractor shall provide the additional final air testing equipment until final air tests are complete, at no additional cost to PWCS.

6.22.7. The Contractor shall continue cleaning the work area until the final air clearance criteria is achieved, at no additional cost to PWCS.

6.22.8. PWCS' Project Monitor will request an eight (8) hour turn-around for all TEM analysis.

6.22.9. The Contractor shall assume all additional analytical costs beyond the first set of final air tests for each work area.

6.23. WORK AREA CLEAN-UP:

6.23.1. The Contractor shall remove the remaining critical barriers and all remaining polyethylene within four (4) hours from notice of passing the final clearance.

6.23.2. The Contractor shall remove all abatement equipment from the work area within four (4) hours from notice of passing the final clearance.

6.23.3. The Contractor shall be responsible to re-install all objects removed from the work area, and properly re-establish all mechanical and electrical systems to their original operating condition. **This may require the use of a licensed professional.**

6.23.4. The Contractor shall be responsible for cleaning and repairing all surfaces within the work area and areas adjacent to the work area to their original condition as identified in the pre-condition inspection. If surface damage occurs, the Contractor shall paint, trowel plaster, brick or fill all surface damage until a single uniform homogenous

appearance is evident, at no additional cost to PWCS. Final acceptance is based on approval of the PWCS Environmental Project Manager.

6.24. **LEAD CONTAINING SURFACE COATING SPECIFICATIONS:** Construction activities that involve lead are regulated by Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1926.62. The standard currently does not define a specific concentration of lead that must be present within paint for it to be considered "lead-containing." Therefore, painted and glazed surfaces that contain any detectable concentrations of lead must be handled in accordance with the OSHA regulations. Since OSHA does not define a specific concentration of lead which must be present within paint for it to be considered "lead-containing," any Contractor performing work that could impact surface coatings that have detectable concentrations of lead should be informed of the testing results, and should take appropriate actions to comply with OSHA Lead in Construction Standard 29 CFR 1926.62.

Certain levels of engineering controls, worker protection, and worker training are required when impacting building components with lead-containing surface coatings. The increased level of engineering controls, worker protection, and worker training are determined based upon the specific work practice or activity and the related potential exposure to lead.

For the purposes of this specification and work activities expected to impact lead-based surface coatings as defined by Title 40, Code of Federal Regulation, Subpart 745 – RRP all the work activities shall be conducted per RRP requirements and or the categorized levels listed below as required by the Project Designer.

For the purposes of this specification and work activities expected to impact lead- containing surface coatings, the work activities have been categorized into three levels.

6.25. **LEVEL 1**

6.25.1. Level 1 work activities are demolition activities that would generate minimal to low amounts of lead-contaminated dust and require minimal engineering controls, worker protection, and worker training. Examples of these work activities would include demolition of a structure by a wrecking ball or by a front-end loader or similar type of heavy equipment. During this type of demolition activities, methods to control the generation of dust must be implemented. Demolition activities that grind, abrade, sand, cut, or otherwise create high amounts of visible dust should not be permitted. Manual demolition techniques, consisting of the use of non-powered hand tools to disassemble building components are also included in Level1 work activities.

6.25.2. For Level 1 work activities, at a minimum, the Contractor shall comply with the following:

6.25.3. Level 1 Engineering Controls:

6.25.3.1. Adequately wet the structure or building components being impacted;

6.25.3.2. Dry shoveling, dry sweeping, and the use of compressed air are prohibited; and

6.25.3.3. Use of plastic drop cloths, wet rags and/or mops, and vacuums equipped with High Efficiency Particulate Air (HEPA) filter to aide in clean up following manual dismantling of building components.

6.25.4. Level 1 Worker Protection:

6.25.4.1. Gloves and disposable shoe coverlets;

6.25.4.2. Face shields, vented goggles, or other appropriate eye protective equipment;

6.25.4.3. Appropriate hand washing and worker hygiene facilities; and

6.25.4.4. Providing that the Contractor has historical data establishing a Negative Exposure Assessment (NEA) in accordance with 29 CFR 1926.62, paragraph (d) *Exposure Assessment,* proving that similar demolition work activities will not generate airborne lead levels above the OSHA Permissible Exposure Limit (PEL) of 50 micrograms lead per cubic meter of air (µg/M³), the Contractor is not required to provide any additional personal protective equipment.

6.25.5. Level 1 Worker Training: Provide a training program in accordance with 29 CFR 1926.62, paragraph (l) *Employee Information and training;* and Two-hour Lead Awareness Training. When required; provide training per Title 40, Code of Federal Regulation, Subpart 745 – RRP.

6.26. **LEVEL 2**

6.26.1. Level 2 work activities are demolition activities that would generate low to moderate amounts of lead-contaminated dust and require moderate engineering controls, worker protection, and worker training. Examples of these work activities would include stripping or scraping a lead-containing surface coating and the demolition of a structure by the use of rotating blade power tools or dismantling building components with powered hand tools that grind, abrade, sand, cut, or otherwise create high amounts of visible dust. During this type of demolition activities, methods to control the generation of dust must be implemented as well as increased worker protection and lead training.

6.26.2. It is assumed that during Level 2 work activities workers will be exposed to lead above the OSHA Permissible Exposure Limit of 50 micrograms per cubic meter (µg/M³) lead. A Negative Exposure Assessment (NEA) in accordance with 29 CFR 1926.62, paragraph (d) *Exposure Assessment*, must be conducted by the Contractor prior to decreasing engineering controls, worker protection, or worker training requirements.

6.26.3. For Level 2 work activities, at a minimum, the Contractor shall comply with the following in addition to Level 1 engineering controls, worker protection, and worker training.

6.26.4. Level 2 Engineering Controls:

6.26.4.1. Administrative controls;

6.26.4.2. Demolition work areas shall be demarcated with barrier tape and lead warning signs in accordance with 29 CFR 1926.62, paragraph (m) *Signs;*

6.26.4.3. Fully contain the lead work areas with a enclosure constructed of minimum 6-mil polyethylene plastic, a three-stage decontamination chamber with a shower, and HEPA filter equipped air filtration units providing a minimum of -0.02" water pressure differential between the contained work areas and the surrounding areas;

6.26.4.4. Building components shall be demolished in a manner as to minimize the generation of dust;

6.26.4.5. The work area shall be misted with water as necessary to keep airborne dust levels to a minimum;

6.26.4.6. Contractor shall utilize powered hand tools equipped with HEPA filter shrouds when feasible; and

6.26.4.7. Prior to the end of each demolition work shift, the Contractor shall clean the demolition work area floors using HEPA filter equipped vacuums and wet sweeping/mopping techniques.

6.26.5. Level 2 Worker Protection:

6.26.5.1. Proper respiratory protection is required in accordance with 29 CFR 1926.62, paragraph (f) *Respiratory Protection* and 29 CFR 1910.134, Respiratory Protection, until an exposure assessment has been conducted in accordance with 29 CFR 1926.62, paragraph (d) *Exposure Assessment*. The appropriate respiratory protection for each specific work activity shall be selected based upon the exposure assessment data and 29 CFR 1926.62, Table - Respiratory Protection for Lead Aerosols;

6.26.5.2. Launderable coveralls or disposable semi-permeable full-body covering;

6.26.5.3. Medical surveillance in accordance with 29 CFR 1926.62, paragraphs (j) *Medical Surveillance* and (k) *Medical Removal Protection*;

6.26.5.4. Food, beverages, and tobacco products as well as the application of cosmetics are prohibited in the lead work areas; and

6.26.5.5. Clean change areas, showers, and eating facilities shall be provided by the Contractor in accordance with 29 CFR 1926.62, paragraph (i) *Hygiene Facilities and Practices*.

6.26.6. Level 2 Worker Training:

6.26.6.1. In accordance with EPA accredited training and Commonwealth of Virginia regulation Title 54.1, Chapter 5;

6.26.6.2. Workers performing Level 2 work activities must have successfully completed an EPA accredited 32-hour lead abatement worker training program;

6.26.6.3. Supervisors shall have successfully completed an EPA accredited 40-hour lead abatement supervisor training program; and

6.26.6.4. When required; provide training per Title 40, Code of Federal Regulation, Subpart 745 – RRP.

6.27. LEVEL 3

6.27.1. Level 3 work activities are demolition activities that would generate moderate to high amounts of airborne lead and require increased engineering controls, worker protection, and worker training. Examples of these work activities would include abrasive blasting, torch cutting, or welding of lead-containing surface coatings. It is highly recommended that these work activities be prohibited, as the potential to exposure to elevated amounts of airborne lead is extremely high. The recommended alternative to these work activities is to remove the lead-containing surface coating from the specific locations where the lead-containing surface coating is to be torch cut or welded in order to reduce the exposure to airborne lead.

6.27.2. It is assumed that during Level 3 work activities workers will be exposed to lead well above the OSHA Permissible Exposure Limit of 50 micrograms per cubic meter ($\mu g/M^3$) lead. Only properly trained lead abatement workers and supervisors shall perform Level 3 work activities. A Negative Exposure Assessment (NEA) in accordance with 29 CFR 1926.62, paragraph (d) *Exposure Assessment*, must be conducted by the Contractor prior to decreasing engineering controls, worker protection, or worker training requirements.

6.27.3. For Level 3 work activities, at a minimum, the Contractor shall comply with the following in addition to Level 1 and Level 2 engineering controls, worker protection, and worker training:

6.27.4. Level 3 Engineering Controls: Fully contain the lead work areas with a negative pressure enclosure constructed of minimum 6-mil polyethylene plastic, a three-stage decontamination chamber with a shower, and HEPA filter equipped air filtration units providing a minimum of -0.02" water pressure differential between the contained work areas and the surrounding areas

6.27.5. Level 3 Worker Protection: Same as Level 2 requirements.

6.27.6. Level 3 Worker Training: Same as Level 2 requirements.

6.28. DEMOLITION: The general scope of work includes the demolition of:

6.28.1. Ceiling systems, but not limited to drywall, ceiling panels, plaster and wood.

6.28.2. Walls to include, but not limited to, drywall, CMU, brick, paneling, and metal.

6.28.3. Flooring to include, but not limited to, floor tile, carpeting, sheet goods, concrete and terrazzo.

6.28.4. The Contractor shall prepare a Demolition Plan. Include in the plan procedures for careful removal and disposal of materials. A detailed description of methods and equipment to be used for each operation and of the sequence of operations.

6.28.5. The Contractor shall not begin demolition work until authorization is received from the PWCS Project Manager.

6.28.6. The Contractor shall not begin demolition work until all utility disconnections have been made by or coordinated with the PWCS Project Manager.

6.28.7. The Contractor shall remove demolition debris, and rubbish from project site, and transport in such a manner that prevents spillage on streets or adjacent areas. The Contractor shall apply all applicable federal, state and local regulations.

6.28.8. After complete demolition and cleanup, Contractor shall rough grade area to a uniform condition and seed project area.

6.28.9. Contractor shall evenly seed the area as soon as possible. Seed should be Kentucky Blue grass or approved equivalent by the PWCS Project Manager. After seeding, the Contractor shall mulch the area in a manor approved by the PWCS Project Manager.

6.29. DUST CONTROL:

6.29.1. The Contractor shall prevent the spread of dust and debris to occupied portions of the PWCS facility, to include but not limited to, adjacent classrooms, workrooms, offices and hallways.

6.29.2. The Contractor shall shut down and/or coordinate the de-energizing for HVAC equipment servicing the area, to include but not limited to, Fan Coil Units (FCUs), Air Handling Units (AHUs), and Root Top Units (RTUs). If HVAC systems are unable to be shut down, the systems shall be altered to prevent the spread of dust and debris.

6.29.2.1. Doors, windows, wall partitions are to remain closed during all demolition activities. The Contractor shall coordinate with the PWCS Project Manager, the use of air filtration equipment with high-efficiency particulate air (HEPA) filters capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers. If methods are not adequate to prevent the spread of dust and debris, the Contractor shall install construction barriers at each opening of the work area. At the minimum, barriers shall be made of six (6) mil polyethylene.

6.29.2.2. At the end of each work shift, the Contractor shall broom sweep the floor

and/or be HEPA vacuumed. Halls leading to the work area shall be wet mopped each day or as directed by the PWCS Project Manager.

6.29.2.3. Work activities such as masonry saw cutting, fiberglass insulation removal and sand blasting are required to have an airless water sprayer in the work area to help the spread of dust and debris. All electrical equipment are required to have GFCI's installed. Contractor shall not use water if it results in hazardous or objectionable conditions such as, but not limited to, flooding, or pollution.

6.30. PROTECTION:

6.30.1. Where occupant and student safety is endangered, physical barricades shall be installed to prevent accidental entrance into the work area.

6.30.2. Construction zone signage shall be posted in areas adjacent to the work area.

6.30.3. Provide protective measures to control accumulation and migration of dust and dirt.

6.30.4. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, or demolition work performed under this contract.

6.30.5. Before, during and after the demolition work, the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the project site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element shall be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while Contractor's work force is removing debris or performing other work in the immediate area.

6.31. EXISTING CONDITIONS: The Contractor shall:

6.31.1. Before beginning any demolition, survey the site and examine the specifications to determine the extent of the work. Record existing conditions or conflicting requirements and submit to the PWCS Project Manager within twenty-four hours of the survey.

6.31.2. Document the condition of structures and other facilities adjacent to areas of demolition. Photographs shall be acceptable as a record of existing conditions.

6.31.3. Include in the record, walls, finish floor elevations, possible conflicting electrical conduits, plumbing lines, alarms systems, the location and extent of existing cracks and other damage and description of surface conditions that exist prior to before starting work.

6.31.4. It is the Contractor's responsibility to verify and document all required outages which will be required during the course of work, and to note these outages on the record document.

6.31.5. Contractor shall not disturb existing building areas or grounds beyond the extent required for the demolition.

6.31.6. Contractor shall take necessary precautions to avoid damage to existing items to remain in place to include structural, mechanical and plumbing equipment. This equipment is intended to be reused, or to remain the property of PWCS.

6.31.7. Contractor shall (at their expense) repair or replace damaged items as approved by the Project Manager.

6.32. UTILITY SERVICE:

6.32.1. Prior to start of work, the Contractor shall coordinate with PWCS Project Manager, the use of electrical utilities serving the work area or have all utilities shut off by PWCS.

6.32.2. Prior to start of work, the Contractor shall coordinate with PWCS Project Manager, the use of plumbing utilities serving the work area or have all utilities shut off by PWCS.

6.33. RESTROOM FACILITIES:

6.33.1. Contractor's work force is not permitted to use PWCS rest room facilities. Portable rest rooms shall be supplied by the Contractor.

6.33.2. Prior to the start of demolition, the Contractor shall request an area of storage for restroom facilities.

6.34. STRUCTURAL STEEL: The Contractor shall:

6.34.1. Dismantle structural steel at field connections and in a manner that will prevent bending or damage. Salvage for reuse or recycle structural steel, steel joists, girders, angles, plates, columns and shapes. Do not use flame-cutting torches. A flame-cutting torch is only permitted when other methods of dismantling are not practical and is approved by the PWCS Project Manager prior to usage.

6.34.2. Transport steel joists and girders as whole units and not dismantled. Transport structural steel shapes to a designated recycling facility.

6.35. AIR CONDITIONING EQUIPMENT:

6.35.1. PWCS will remove/recover air conditioning, refrigeration, and other equipment containing Refrigerants.

6.35.2. Certification of refrigerant removal shall be provided to the Contractor.

6.36. ITEMS WITH UNIQUE/REGULATED DISPOSAL REQUIREMENTS:

6.36.1. PWCS will remove and recycle fluorescent lamps.

6.36.2. PWCS will remove and recycle lamp ballasts.

6.36.3. PWCS will remove and recycle mercury containing thermostats and equipment.

6.37. **MOLD CONTAMINATED SERVICES**: Certain levels of engineering controls, worker protection, and worker training are required when impacting building components with mold contaminated surfaces. The increased level of engineering controls, worker protection, and worker training are determined based upon the specific work practice or activity and the related potential exposure to mold.

For the purposes of this specification and work activities expected to disturb mold contaminated surfaces, the work activities have been categorized into three levels. Listed are the methods, which shall be required to abate/clean the materials.

6.37.1. METHOD 1: Wet vacuum. Steam Cleaning may be an alternative for carpets and some upholstered furniture.

6.37.2. METHOD 2: Damp-wipe surfaces with plain water or with detergent and scrub as needed.

6.37.3. METHOD 2A: Mist/fog materials with a 1:10 bleach solution. Let stand for a twenty-minute contact time, wipe dry if required. HEPA vacuum clean.

6.37.4. METHOD 3: High-Efficiency particulate air (HEPA) vacuum after the material has been thoroughly dried. Dispose of the contents of the HEPA vacuum in well-sealed plastic bags.

6.37.5. METHOD 4: Discard – remove water damaged materials and seal in plastic gags while inside of containment, if present. Dispose of as normal waste. HEPA vacuum area after it is dried.

6.37.6. METHOD 5: Discard in well-sealed plastic bags. Dispose of as normal waste.

6.37.7. METHOD 6: Clean pan so that condensate is unobstructed and flowing. If required or recommended, place biocide tablets in pans.

6.37.8. METHOD 7: Clean coils with detergent or approved coil cleaner. Prior to cleaning, HEAP vacuum coil surface.

6.37.9. METHOD 8: HEPA vacuum liner, coat with liner repair product.

6.38. **LEVEL 1**: Level 1 work activities are abatement/cleaning activities that have an approximate TOTAL SURFACE AREA OF LESS THAN 10 SQUARE FEET and have the following recommended engineering controls, worker protection, and worker training. For Level 1 work activities, the Contractor shall comply with the following:

Material	Methods	PPE	Containment/Special Criteria/Clearance
Papers	Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Books	Method 2, Method 2A Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Concrete, brick, and cinder block	Method 2 Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Carpeting and Padding	Method 1 Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Flooring	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Rugs	Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Ceiling tiles, 1-3 Tiles	Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Hard Surface	Method 2 Method 2A Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Bulletin and Cork Boards	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Drywall	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Wood Surfaces	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Upholstered Furniture	Method 1 Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Exterior Walls and walks	Method 2 Method 2A	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None

Material	Methods	PPE	Containment/Special Criteria/Clearance
			Clearance: Visual inspection by Environmental Project Manager
Fiberglass Pipe Insulation	Method 2, Method 2a Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
Fiberglass Batt Insulation	Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: None Clearance: Visual inspection by Environmental Project Manager
HVAC Drain Pan – Typical Fan Coil Unit	Method 6 Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
HVAC Coils – Typical Fan Coil Unit	Method 7	N-95 or approved respirator, Gloves, and goggles	Containment: Not required Special Criteria: Deenergize HVAC, HEPA prior to cleaning coils Clearance: Visual inspection by Environmental Project Manager
HVAC Liner – Fiberglass – Typical Fan Coil Unit	Method 8 Method 5	N-95 or approved respirator, Gloves, and goggles	Containment: Not required Special Criteria: Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
HVAC Cabinet – Typical Fan Coil Unit	Method 3	N-95 or approved respirator, Gloves, and goggles	Containment: Not required Special Criteria: Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager

6.39. **LEVEL 2:** Level 2 work activities are abatement/cleaning activities that have an approximate SURFACE AREA OF 10 - 100 CONTINUOUS SQUARE FEET and require limited engineering controls, worker protection, and worker training. For Level 2 work activities, the Contractor shall comply with the following:

Material	Methods	PPE	Containment
Papers	Method 5	N-95, Gloves, and goggles	Containment: Not required, or determined in field by Environmental Project Manager. Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Books 10 – 100 books	Method 2, Method 2A Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required, or determined in field by Environmental Project Manager. Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Concrete, brick, and cinder block	Method 2 Method 3	N-95, Gloves, and goggles	Containment: Not required Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Carpeting and Padding	Method 1 Method 3 Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or, Mini-containment Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project

Material	Methods	PPE	Containment
			Manager
Flooring	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or, Mini-containment Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Rugs	Method 3 Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Ceiling tiles 3-6 Tiles	Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris Clearance: Visual inspection by Environmental Project Manager
Ceiling tiles 7-12 Tiles	Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or, Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
Hard Surface	Method 2 Method 2A Method 3 Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
Bulletin and Cork Boards	Method 2 Method 2A Method 3 Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
Drywall	Method 2 Method 2A Method 3	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
Wood Surfaces	Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
Upholstered Furniture	Method 5	N-95, Gloves, and goggles	Containment: Not required Special Criteria: Limited access, Deenergize HVAC Clearance: Visual inspection by Environmental Project Manager
Exterior Walls and walks	Method 2 Method 2A	N-95, Gloves, and goggles	Non required
Fiberglass Pipe Insulation	Method 2, Method 2a Method 3 Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project

Material	Methods	PPE	Containment
			Manager
Fiberglass Batt	Method 5	N-95, Gloves, and goggles	Containment: Limited, Critical Barriers and/or , Mini-containment Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris, scrub air (HEPA filtration) Clearance: Visual inspection by Environmental Project Manager
HVAC Drain Pan – AHUs and RTUs	Method 6 Method 3	N-95, Gloves, and goggles	Shut down HVAC
HVAC Coils – AHUs and RTUs	Method 7	N-95 or approved respirator, Gloves, and goggles	Containment: Limited, determined in field Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning Clearance: Visual inspection by Environmental Project Manager
HVAC Liner – Fiberglass – AHUs and RTUs	Method 8 Method 5	N-95 or approved respirator, Gloves, and goggles	Containment: Limited, determined in field Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning Clearance: Visual inspection by Environmental Project Manager
HVAC Cabinet – AHUs and RTUs	Method 3	N-95 or approved respirator, Gloves, and goggles	Containment: Limited, determined in field Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning Clearance: Visual inspection by Environmental Project Manager

6.40. **LEVEL 3**: Level 3 work activities are abatement/cleaning activities that have an approximate TOTAL SURFACE AREA OF > 100 SQUARE FEET and require engineering controls, worker protection, and worker training. For Level 3 work activities, the Contractor shall comply with the following:

Material	Methods	PPE	Containment
Papers	Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Limited, Critical Barriers and/or, Mini-containment, determined in field. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Books > 100 books	Method 2, Method 2A Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Limited, Critical Barriers and/or, Mini-containment, or determined in field. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Concrete, brick, and cinder block	Method 2 Method 3	N-95, ½ half, Full face, Gloves, goggles, and disposable	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air

Material	Methods	PPE	Containment
		overalls.	(HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Carpeting and Padding	Method 1 Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Flooring	Method 2 Method 2A Method 3	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Rugs	Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Ceiling tiles	Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager, shut down HVAC, Critical openings,
Hard Surface	Method 2 Method 2A Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Bulletin and Cork Boards	Method 2 Method 2A Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Drywall	Method 2 Method 2A Method 3	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning.

Material	Methods	PPE	Containment
			Clearance: Visual inspection by Environmental Project Manager
Wood Surfaces	Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Upholstered Furniture	Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Exterior Walls and walks	Method 2 Method 2A	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager.
Fiberglass Pipe Insulation	Method 2, Method 2A Method 3 Method 5	N-95, ½ half, Full face, Gloves, goggles, and disposable overalls.	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
Fiberglass Batt	Method 5	N-95, ½ half, Full face, Gloves, and goggles	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
HVAC Drain Pan	Method 6 Method 3	N-95, ½ half, Full face, Gloves, and goggles	Containment: Full, and/or , Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
HVAC Coils	Method 7	N-95, ½ half, Full face, Gloves, and goggles	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air (HEPA filtration) while cleaning.

Material	Methods	PPE	Containment
			Clearance: Visual inspection by Environmental Project Manager
HVAC Liner - Fiberglass	Method 8 Method 5	N-95, ½ half, Full face, Gloves, and goggles	Containment: Full, and/or , Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
HVAC Cabinet	Method 3	N-95, ½ half, Full face, Gloves, and goggles	Containment: Full, and/or , Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning, scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager
HVAC Duct	Contracted	Contracted	Containment: Full, and/or, Mini-containment, containments equipped with three (3) stage decontamination unit. Special Criteria: Limited access, Deenergize HVAC, HEPA vacuum all dust and debris after cleaning. Scrub air (HEPA filtration) while cleaning. Clearance: Visual inspection by Environmental Project Manager

6.41. PERFORMANCE REQUIREMENTS: The Contractor shall complete all service calls as indicated below:

6.41.1. Abatement Services (normal): PWCS requires that service response to be made at destination within five (5) working days after initial receipt of call by PWCS for routine abatement service.

6.41.2. Emergency Services: In the event of an emergency, the PWCS Environmental Project Manager shall notify the Contractor to meet at the project site with the PWCS Environmental Project Manager within eight (8) hours from the initial contact. At that time the PWCS Environmental Project Manager will give the Contractor the Project Manual, drawings, and/or verbal directions, walk through the work area and answer all questions pertaining to the project. The Contractor shall begin abatement services immediately following this meeting. The Contractor shall complete emergency services seven days per week, 24 hours per day.

6.41.2.1. If the Contractor fails to respond to an emergency call within the time allowed after verbal notification, PWCS has the right to call another vendor to make the emergency repairs, and the Contractor shall be charged by PWCS for cost in excess of the original contract amount.

6.41.2.2. The Contractor shall provide means of contact to PWCS for Emergency Services.

6.42. COST PROPOSALS:

6.42.1. The Contractor shall meet at the project site with the PWCS Environmental Project Manager within five (5) working days of the initial contact to ascertain site conditions. At that time the PWCS Environmental Project Manager will provide the

Contractor with a Project Manual and/or drawings, walk through the work area and answer all questions pertaining to the project.

6.42.2. Within five (5) working days of the project site visit, the Contractor shall submit a written not to exceed amount cost proposal based on the unit prices identified herein, to the PWCS Environmental Project Manager and indicate their ability to meet the project schedule requirements. It is at the sole discretion of the PWCS Environmental Project Manager on which Contractor to contact for each given project.

6.42.3. Prior to the acceptance of the cost proposal and issuance of a valid PWCS Purchase Order, the PWCS Environmental Project Manager and Contractor shall mutually agree upon an expected start and completion date for each particular job order. Such dates shall be included on the ensuing Purchase Order.

6.42.4. Specific start and end dates are specified for project phases and are inclusive of the final air testing and analysis. These are times set forth to indicate that the project phase needs to be released to the Contractor; the Contractor shall be totally out of the area by the end date.

6.42.5. Cost Proposals shall include all travel, labor, disposal fees, tools, equipment, permits, notifications, profit and overhead, and all other expenses as may be necessary to complete the necessary work.

6.42.6. The Contractor is not authorized to start work until in receipt of a valid PWCS purchase order.

6.42.6.1. A valid PWCS purchase order will be issued after receipt and approval of the cost proposal.

6.42.6.2. Any work performed without receiving a valid PWCS purchase order is not authorized and subject to nonpayment.

6.42.6.3. Any changes or modifications to an authorized valid PWCS purchase order shall be approved by the PWCS Environmental Project Manager in writing prior to starting said work.

6.43. WORK HOURS:

6.43.1. The Contractor may be required to perform abatement services at any time during the year, on an emergency or non-emergency basis.

6.43.2. Routine abatement work shall be performed Monday through Friday from 6:00 a.m. to 4:30 p.m. (except for PWCS observed holidays).

6.43.3. Bidder shall indicate, on the Pricing Schedule, a contact person's name and telephone number for normal working hours, 6:00 a.m. – 4:30 p.m., Monday through Friday and for work outside the normal working hours.

6.43.4. Any service requests that are made or work required by PWCS beyond the normal PWCS working hours, PWCS observed holidays and/or weekends shall be considered as overtime.

6.43.5. Man-hours paid under this contract shall be for productive hours at the job site only as evidenced with signed work tickets provided by the Contractor to the PWCS Environmental Project Manager, or his designee. Travel time to PWCS sites is not considered part of the work day.

6.44. WORKMANSHIP/EXPERIENCE:

6.44.1. The Contractor shall employ fully qualified and skilled personnel who must perform all abatement related work in a thorough workmanship like manner.

6.44.2. Prior to the start of work, the PWCS Environmental Project Manager shall coordinate and distribute to the Contractor individual Employee Identification Badges which shall be displayed by each Contractor's employee upon entering any PWCS property. The Contractor's personnel shall sign in and out of the PWCS buildings through the main office at each site. The PWCS Environmental Project Manager shall provide a Point of Contact should the Project Manager be unable to meet the Contractor at the project site.

6.44.3. The Contractor shall have one (1) employee at each job site, which is designated as a supervisor. This individual shall be the liaison between the Contractor and PWCS Environmental Project Manager, or his designee. This individual shall be able to communicate freely in English and easily with the PWCS personnel and shall have on hand a list of phone numbers for the PWCS project contacts. The Contractor's employees shall also have a way to contact his/her supervisor should the need arise.

6.44.4. The Contractor shall obtain prior approval from PWCS for the use of subcontractors who perform work under this contract. The Contractor shall be responsible to completely supervise and direct all work under this contract, and all subcontractors, material suppliers, etc., engaged in the required work. The Contractor shall remain fully liable and responsible for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.

6.44.5. The Contractor shall arrive at the job site prepared with the correct materials and equipment (such as service vehicles, ladders, tools) and shall maintain an adequate supply of manpower to complete the work assignment in a safe and timely manner.

6.44.6. All work shall be done in such a manner as to cause as little inconvenience as possible to the building patrons and general public.

6.44.7. All work shall be high quality, first class and performed in a neat and workmanship like manner. When notified by the PWCS Environmental Project Manager, all substandard work, materials and/or damages, when discovered, shall be removed immediately, not to exceed forty-eight (48) hours and repaired by the Contractor at no additional expense to PWCS.

6.44.8. If the Contractor shall neglect or refuse to remove such unsatisfactory work or materials within 48 hours after the receipt of the above mentioned notice, or if they shall not make satisfactory progress in doing so, the PWCS Environmental Project Manager may correct the work or remove the materials to have them corrected in accordance with contract specifications, and the additional expense shall be charged to the Contractor. Such expense shall be deducted from any monies due or to become due to the Contractor under the contract.

6.44.9. The Contractor shall not act on requests or take direction from anyone except the designated PWCS Environmental Project Manager or their designee.

6.44.10. At the discretion of the PWCS Environmental Project Manager, any employee of the Contractor and/or subcontractor may be removed with or without cause, from any project site.

6.44.11. The Contractor shall be capable of performing multiple assignments at one time for

both emergency and non-emergency calls.

6.45. INVOICES: The Contractor shall provide a service ticket for each order that must include a minimum of the following information:

6.45.1. Contractor's Name

6.45.2. PWCS Purchase Order Number

6.45.3. Job Location(s)

6.45.4. Detailed Description of Work Done

6.45.5. Date(s) of Work

6.45.6. Hours worked each day for each employee for services rendered

6.45.7. Itemized List of Materials and Rental Equipment with line item pricing

6.45.8. Costs incurred for transportation of workers; material acquisition; handling and delivery for movement of Contractor-owned equipment or rented equipment; project administration; inspections; disposal fees; estimates and administrative duties **are not chargeable directly, but are considered to be overhead and must be included in the hourly labor rates quoted under this solicitation.**

6.45.9. The Contractor will only be paid for materials actually used. Any materials that the Contractor was authorized to purchase for a specific job assignment and not fully used to capacity shall be treated as residual materials and shall be turned over to the PWCS Environmental Project Manager upon completion of the job assignment. No allowances will be made for other materials ordered by the Contractor that were not authorized by PWCS.

6.45.10. Once an invoice has been submitted, the PWCS Environmental Project Manager shall inspect the work for compliance with the PWCS Purchase Order. If there are corrections to be made, written notice will be sent to the Contractor within ten (10) days. When corrective work has been completed and verified, the PWCS Environmental Project Manager will approve the invoice for payment.

6.45.11. The Contractor may be required to provide materials, equipment rental (such as cranes, aerial lifts, scaffolding, temporary fencing) and/or subcontractors to fulfill the requirements of the contract. If the Contractor provides materials, equipment rental or subcontractors for items not already identified in the specifications and pricing, the compensation will be based on the actual cost of the materials, equipment rental and subcontractors with an administrative fee equal to the percentage indicated:.

Materials Administrative Fee: 6%
Equipment Rental Administrative Fee: 7%
Subcontracting Administrative Fee: 5%

6.45.12. Invoices which include material, equipment rental or subcontractor charges shall be accompanied by suppliers/subcontractor's itemized invoices to substantiate cost to Contractor.

7. **PRICING:** The Contractor shall provide a firm fixed unit price, hourly rates for Environmental Abatement Services in accordance with the specifications, and terms and conditions identified herein. Prices and rates shall include all direct and indirect costs such as travel, disposal fees, permits, profit and overhead, supervision, etc.

Item #	Description	Unit of Measure	Unit Price
Containment's - Asbestos, Lead, and Mold. Based on Surface Area of Total Project (Price to include decontamination units, air filtration machines, and waste disposal)			
1	Full containment - 0-15' above floor	SF	$1.18
2	Full containment – 16'-30' above floor	SF	$1.77
THERMAL STRAIGHT PIPE INSULATION (Price to include waste disposal)			
3	Asbestos thermal insulation 0 - 6" dia, 0 -500 L.F., 0 -15' above floor	LF	$3.75
4	Asbestos thermal insulation 0 - 6" dia, >500 K.F., 0 -15' above floor	LF	$5.60
5	Asbestos thermal insulation 0 - 6" dia, 0 -500 L.F., 16' - 30' above floor	LF	$8.75
6	Asbestos thermal insulation 0 - 6" dia, >500 L.F., 16' - 30' above floor	LF	$12.65
THERMAL PIPE FITTING INSULATION (One fitting is equivalent to three linear feet of insulation) (Price to include waste disposal)			
7	Asbestos pipe fittings 0 - 6" dia, 0 - 100 ea. 0 -15' above floor	EA	$4.29
8	Asbestos pipe fittings 0 - 6" dia, >100 ea. 0 -15' above floor	EA	$6.64
9	Asbestos pipe fittings 0 - 6" dia, 0 - 100 ea. 16' - 30' above floor	EA	$9.85
10	Asbestos pipe fittings 0 - 6" dia, >100 ea. 16' - 30' above floor	EA	$13.50
STRAIGHT PIPE AND THERMAL PIPE FITTING FIBERGLASS INSULATION WITH ASBESTOS VAPOR BARRIER/CONSTRUCTION MASTIC (Price to include disposal)			
11	Asbestos mastic on thermal insulation 0 - 6" dia, 0 - 500 L.F., 0 - 15' above floor	LF	$5.91
12	Asbestos mastic on thermal insulation 0 - 6" dia, >500 L.F, 0 - 15' above floor	LF	$5.54
13	Asbestos mastic on thermal insulation 0 - 6" dia, 0 - 500 L.F., 16' – 30' above floor	LF	$7.64
14	Asbestos mastic on thermal insulation 0 - 6" dia, > 500 L.F., 16' – 30' above floor	LF	$6.91
ASBESTOS FLOOR TILE, COVEBASE AND ASSOCIATED MASTIC (Price to include waste disposal)			
15	Asbestos floor tile and mastic 0 – 5000 S.F.	SF	$3.50
16	Asbestos floor tile and mastic > 5,000 S.F.	SF	$2.75
17	Two layers of floor tile and mastic 0 – 5000 S.F.	SF	$6.26
18	Two layers of floor tile and mastic > 5,000 S.F.	SF	$5.91
19	Three layers of floor tile and mastic 0 – 5000 S.F.	SF	$7.64
20	Three layers of floor tile and mastic > 5,000 S.F.	SF	$7.36
21	Carpet, asbestos floor tile and mastic 0 – 5000 S.F.	SF	$3.50

22	Carpet, asbestos floor tile and mastic > 5,000 S.F.	SF	$2.75
23	Two layers of floor tile, 3/4" plywood underlayment and mastic 0 – 5000 S.F.	SF	$4.36
24	Two layers of floor tile, 3/4" plywood underlayment and mastic > 5,000 S.F.	SF	$2.75
REMOVAL OF ASBESTOS PIPE DEBRIS AND CONTAMINATED EARTH (Price to include waste disposal)			
25	Removal of dry earth and debris 0 - 2500 S.F., per inch of soil	SF	$4.45
26	Removal of dry earth and debris >2500 S.F., per inch of soil	SF	$3.82
27	Removal of wet earth and debris 0 - 2500 S.F., per inch of soil	SF	$5.25
28	Removal of wet earth and debris >2500 S.F., per inch of soil	SF	$4.45
29	Removal of mud earth and debris 0 - 2500 S.F., per inch of soil	SF	$6.20
30	Removal of mud earth and debris >2500 S.F., per inch of soil	SF	$5.54
HVAC DUCT INSULATION WITH ASBESTOS VAPOR BARRIER/CONSTRUCTION MASTIC (Price to include waste disposal)			
31	Asbestos mastic on HVAC duct 0 - 30", 0 – 15' above floor 0 – 15", 0 - 500 L.F.	LF	$2.94
32	Asbestos mastic on HVAC duct 0 - 30", 0 – 15' above floor, > 500 L.F.	LF	$4.25
33	Asbestos mastic on HVAC duct 0 - 30", 16' - 30' above floor, 0 - 500 L.F.	LF	$6.24
34	Asbestos mastic on HVAC duct 0 - 30", 16' - 30' above floor, > 500 L.F.	LF	$5.64
ASBESTOS SPRY-ON FIRE PROFFING (All spray-on is fibrous) (Price to include waste disposal)			
35	Asbestos spay-on fire proofing. 0 – 15' above floor, 0 - 500 S.F	SF	$13.26
36	Asbestos spay-on fire proofing > 500 S.F. 0 – 15' above floor, > 500 L.F.	SF	$12.81
37	Asbestos spay-on fire proofing 16' – 30' above floor, 0 - 500 S.F	SF	$15.26
38	Asbestos spay-on fire proofing > 500 S.F. 16' – 30' above floor, > 500 L.F.	SF	$14.81
ASBESTOS TRANSITE PIPE (Pipe will be exposed by other) (Price to include waste disposal)			
39	Asbestos transite pipe 0 - 500 L.F.	LF	$79.75
40	Asbsetos transite pipe > 500 L.F	LF	$75.50
ASBESTOS TRANSITE DUCT (Price to include waste disposal)			
41	Asbestos transite duct 0 - 500 L.F.	LF	$79.75
42	Asbestos transite duct > 500 L.F.	LF	$75.50
ASBESTOS TRANSITE BOARD (Price to include waste disposal)			
43	Asbsetos transite board 0 - 500 S.F.	SF	$2.50
44	Asbestos transite board > 500 S.F.	SF	$3.50
DRYWALL WALL WITH ASBESTOS JOINT COMPOUND (Price to include waster disposal)			

45	Asbestos drywall with joint compound 0-15' above floor, 0 - 1000 S.F.	SF	$4.00
46	Asbestos drywall with joint compount 0-15' above floor, >1000 S.F.	SF	$2.00
ASBESTOS PLASTER WALLS AND CEILINGS (Price to include waste disposal)			
47	Asbestos walls and ceilings 0 - 15' above floor, 0 - 1000 S.F.	SF	$9.00
48	Asbestos walls and ceilings 0 - 15' above floor, > 1000 S.F.	SF	$8.25
BLACKBOARD AND ASBESTOS MASTIC (Price to include waste disposal)			
49	Small tack or blackboard and mastic, up to 4' x 8'	EA	$4.25
50	Large tack or blackboard and mastic, up to 4' x 16'	EA	$2.50
GLUED CEILING PANEL WITH ASBESTOS GLUE (Priced to include waste disposal)			
51	Glued ceiling panel 0-15' above floor, 0 -1000 S.F.	SF	$6.25
52	Glued ceiling panel 0-15' above floor, >1000 S.F.	SF	$5.25
53	Glued ceiling panel 16'-30' above floor, 0-1000 S.F.	SF	$8.25
54	Glued ceiling pane 16'- 30' above floor, >1000 S.F.	SF	$7.25
CHASE PENETRATIONS AND WALL DEMOLITION UNDER CONTAINMENT (Price to include waste disposal)			
55	CMU penetration/wall demolition, non-load barring, 0 - 500 S.F.	SF	$7.79
56	CMU penetration/wall demolition, non-load barring, >500 S.F.	SF	$6.25
ACM ROOFING, MASTIC (Price to include waste disposal)			
57	Field, Mastic, flashing, 0 - 5000 S.F.	SF	$1.50
58	Field, Mastic, flashing, > 5000 S.F.	SF	$2.50
DUMPSTER/WASTE			
59	Construction debris dumpster, roll-off, 30 cubic yard, per month	MTH	$75.00
60	Construction debris dumpster, cubic yard	CY	$45.00
61	Lead waster (hazardous waste) cubic yard	CY	$250.00
62	Lead waster (hazardous waste) per 55 gallon drum	DRUM	$650.00
ASBESTO LABOR			
63	Supervisor - regular rate	HOUR	$50.99
64	Supervisor - overtime rate	HOUR	$73.93
65	Worker - regular rate	HOUR	$36.95
66	Worker - overtime rate	HOUR	$53.58
LEVEL 1 LEAD LABOR - MANUAL METHOD			

67	Supervisor - regular rate	HOUR	$50.99
68	Supervisor - overtime rate	HOUR	$73.93
69	Asbestos worker - regular rate	HOUR	$36.95
70	Asbestos worker - overtime rate	HOUR	$53.58
LEVEL 1 LEAD LABOR - CHEMICAL METHODS/HEAT			
71	Supervisor - regular rate	HOUR	$50.99
72	Supervisor - overtime rate	HOUR	$73.93
73	Asbestos worker - regular rate	HOUR	$36.95
74	Asbestos worker - overtime rate	HOUR	$53.58
LEVEL 2 LEAD LABOR (Manual methods, 0-15') (Includes waste if Non-hazardous)			
75	Chemical stripping of lead-containing door frames with multiple layers of paint	EA	$650.00
76	Stripping or scrapping lead-containing surfaces with multiple layers paint, 0-250 S.F.	SF	$15.00
77	Stripping or scrapping lead-containing surfaces with multiple layers paint, >250 S.F.	SF	$14.00
78	Removal of ceramic wall tile and/or CMU block with lead-containing glazing with thing-set mortar adhesive, 0-100 S.F.	SF	$17.89
79	Removal of ceramic wall tile and/or CMU block with lead-containing glazing with thing-set mortar adhesive, >100 S.F.	SF	$9.00
LEVEL 3 LEAD LABOR (Manual Methods)			
80	Supervisor - regular rate	HOUR	$45.00
81	Supervisior - overtime rate	HOUR	$67.50
82	Worker - regular rate	HOUR	$34.00
83	Worker - overtime rate	HOUR	$51.00
DEMOLITION (includes dump fee, and Demolition permits.)			
84	Non-asbestos lay-in ceiling panels and grid 0-5000 S.F.0 - 15' above floor	SF	$2.00
85	Non-asbestos lay-in ceiling panels and grid >5000 S.F. 0 - 15' above floor	SF	$1.00
86	Non-asbestos lay-in ceiling panels and grid 0-5000 S.F. 16' - 30' above floor	SF	$6.25
87	Non-asbestos lay-in celing panels and grid >5,000 S.F. 16' - 30' above floor	SF	$5.50
88	Non-asbestos lay-in ceiling panels, grid and drop-in Lamps 0-5000 S.F. 0 - 15' above floor	SF	$3.25
89	Non-asbestos lay-in ceiling panels, grid and drop-in Lamps >5,000 S.F. 0 - 15' above floor	SF	$2.50
90	Non-asbestos lay-in celing panels, grid and drop-in Lamps 0 -5000 S.F. 16 -30' above floor	SF	$4.29
91	Non-asbestos lay-in celing panels, grid and drop-in Lamps >5,000 S.F. 16 -30 above floor	SF	$3.50
92	Floor tile, cove base and associated mastic 0 - 5000 S.F.	SF	$4.00

93	Floor tile, cove base and associated mastic >5,000 S.F.	SF	$3.50
94	Carpet, cove base and associated mastic 0 - 5000 S.F.	SF	$1.25
95	Carpet, cove base and associated mastic > -5,000 S.F.	SF	$0.75
96	Interior wall/window, drywall with wood framing, 0 - 300 S.F. 0 - 15' above floor	SF	$2.75
97	Interior wall/window, drywall with wood framing, > - 300 S.F. 0 - 15' above floor	SF	$2.00
98	Interior wall/window, CMU, 0 - 300 S.F. 0 - 15' above floor	SF	$7.00
99	Interior wall/window, CMU, >300 S.F. 0 - 15' above floor	SF	$7.26
100	Small tack or blackboard and mastic, up to 4' x 8'	EA	$150.00
101	Large tack or blackboard and mastic, up to 4' x 16'	EA	$250.00
DEMOLITION LABOR (Manual Methods)			
102	Supervisor - regular rate	HOUR	$45.00
103	Supervisor - overtime rate	HOUR	$67.50
104	Worker - regular rate	HOUR	$34.00
105	Worker - overtime rate	HOUR	$51.00
MOLD ABATEMENT (includes dump fee, and Demolition permits.)			
Drywall Removal			
106	0-100	SF	$6.10
107	>100	SF	$5.25
Ceiling Tile Removal			
108	0-100	SF	$4.25
109	>100	SF	$3.25
Wall Board Removal			
110	Small tack or blackboard and mastic, up to 4' x 8'	EA	$200.00
111	Large tack or blackboard and mastic, up to 4' x 16'	EA	$300.00
Carpet and Pad Removal			
112	0-100	SF	$1.50
113	>100	SF	$1.25
Fiberglass Duct and Pipe Insulation Removal			
114	0-100 S.F.	SF	$4.10
115	101 - 1,000 S.F.	SF	$3.30

116	>1,000 S.F.	SF	$3.10
Mold Abatement (Manual Methods)			
117	Supervisor - regular rate	HOUR	$45.00
118	Supervisor - overtime rate	HOUR	$67.50
119	Worker - regular rate	HOUR	$34.00
120	Worker - overtime rate	HOUR	$51.00

8. **PAYMENT TERMS**: Net 30

9. **GENERAL TERMS AND CONDITIONS:** Refer to the General Terms and Conditions of the above referenced IFB for a complete list of all terms and conditions.

10. **SPECIAL TERMS AND CONDITIONS**:

10.1. AUDIT: The Contractor shall retain all books, records, and other documents relative to this contract for five (5) years after final payment, or until audited by PWCS, whichever is sooner. PWCS, its authorized agents shall have full access to and the right to examine any of said material during said period.

10.2. AUTHORITY TO TRANSACT BUSINESS IN THE COMMONWEALTH: Any Bidder registered or organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or a registered limited liability partnership shall be authorized to transact business in the Commonwealth of Virginia as a domestic or foreign business entity as described in the Virginia Public Procurement Act (VPPA) § 2.2-4311.2. The proper legal name of the firm or entity, form of the firm (i.e. corporation, limited partnership, etc) and the identification number issued to the Bidder by the State Corporation Commission must be written in the space provided on the bid submission form (cover page), Pricing Schedule, and Vendor Information Form. Any Bidder not required to be authorized to transact business in the Commonwealth of Virginia shall include in its proposal a statement/documentation from their legal counsel describing why the Bidder is not required to be registered. Failure of a prospective and/or successful Bidder to provide such documentation shall be grounds for rejection of their proposal. For further information, refer to the Commonwealth of Virginia State Corporation Commission Web site at: www.scc.virginia.gov. Any falsification or misrepresentation contained in the statement submitted by the Bidder pursuant to the VPPA § 2.2-4311.2., Code of Virginia, Title 13.1 or Title 50 may be cause for debarment by PWCS.

10.3. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that PWCS shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this contract.

10.4. CONTRACT PRICES: Prices shall be in the form of a firm fixed unit price or hourly rate for each item during the contract period. These prices/rates are to be used for specified work and/or additional and/or decrease in specified work. Contractor agrees to provide services in accordance with the specifications, general and special terms and conditions identified herein.

10.5. CERTIFICATE OF COMPLIANCE: Contractor must certifies that neither the Contractor, any employee of the Contractor, nor any other person who will provide services under the Contract and will have direct contact with students on school property during regular school hours or school-sponsored activities, have been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child. Contractor further acknowledges that such certification shall be binding on the Contractor throughout the term of any Contract, including renewals or extensions, thereof, and agrees to provide immediate notice to PWCS of any event which might render such certification untrue, including the arrest

indictment, or investigation of any individual providing such services.

10.6. CLEANING OF SITE:

10.6.1. The Contractor shall at all times, keep the premises free from accumulation of waste materials or rubbish caused by the work performed. Upon completion of the work, waste materials, rubbish, tools, equipment, machinery and surplus materials shall be removed from and about the job, and the Contractor shall clean all building surfaces and leave the work area "broom clean".

10.6.2. The Contractor shall be solely responsible for the proper disposal of all materials (lamps, ballasts, packaging, etc.) according to state and local guidelines.

10.7. CONTRACTOR REGISTRATION: If a contract for construction, removal, repair or improvement of a building or other real property is for one hundred twenty thousand dollars ($120,000) or more, or if the total value of all such contracts undertaken by the Bidder within any twelve-month period is seven hundred fifty thousand dollars (**$750,000**) or more, the Bidder is required under Title 54.1-1100, Code of Virginia (1950), as amended, to be licensed by the State Board of Contractors as a "**CLASS A CONTRACTOR.**

10.8. COORDINATION OF WORK: The Contractor shall plan and coordinate all work through the PWCS Project Manager.

10.9. EXTRA CHARGES NOT ALLOWED: The prices shall be for the complete installation, delivery and ready for PWCS use, and shall include all applicable freight charges; extra charges will not be allowed.

10.10. FAILURE TO DELIVER: Failure to comply with the terms and conditions of this solicitation or to deliver goods and/or services identified in the solicitation and resulting contract at the firm fixed prices quoted will be considered default of the contract. Should the Contractor be found in default of the contract, any excess cost which may result from default actions shall be at the expense of the Contractor. The Contractor shall, in this instance, be responsible for any and all costs incurred by PWCS to procure such products and services elsewhere.

10.11. FINAL INSPECTION: At the conclusion of the work, the Contractor shall demonstrate to the authorized PWCS representative that the work is fully operational and in compliance with contract specifications and codes. Any deficiencies shall be promptly and permanently corrected by the Contractor at the Contractor's sole expense prior to final acceptance of the work.

10.12. GUARANTEE OF WORK:

10.12.1. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects to materials, equipment or workmanship for one (1) year from the date of final acceptance of the entire project by PWCS in writing.

10.12.2. If, within the guarantee period, defects are noticed by PWCS which require repairs or changes in connection with the guaranteed work, those repairs or changes being in the opinion of PWCS rendered necessary as the result of the use of materials, equipment or workmanship, which are defective, or inferior or not in accordance with the terms on the contract, then the Contractor shall promptly upon receipt of notice from PWCS, such notice being given not more than two weeks after the guarantee period expires, and without expense to PWCS:

10.12.2.1. Place in satisfactory condition in every particular all such guaranteed work and correct all defects therein;

10.12.2.2. Make good all damage to the structure, site, equipment, or contents thereof, which is the result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract; and

10.12.2.3. Make good any work, materials, equipment, contents of structures, and/or disturbance of the site in fulfilling any such guarantee.

10.12.3. In any case, where in fulfilling the requirements of the contract or any guarantee embraced in or required thereby, the Contractor disturbs any work guaranteed under the contract, he shall restore such work to a condition satisfactory to PWCS and guarantee such restored work to the same extent as it was guaranteed under such other contract.

10.12.4. If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, PWCS may have the defects corrected and the Contractor shall be liable for all expense incurred.

10.13. INSURANCE: By signing and submitting a bid or proposal under this solicitation, the Bidder certifies that if awarded the contract, it will have the following insurance coverage at the time the work commences. Additionally, that will maintain these during the entire term of the contract and that all insurance coverage's will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission. During the period of the contract, PWCS reserves the right to require the Contractor to furnish certificates of insurance for the coverage required by the PWCS and the Commonwealth of Virginia as indicated below:

10.13.1. Workers Compensation – Statutory requirements and benefits.

10.13.2. Employer's Liability - $100,000.

10.13.3. Commercial General Liability - $1,000,000 combined single limit coverage with $2,000,000 general aggregate covering all premises and operations and including Personal Injury, Completed Operations, Contractual Liability, and where applicable to the project (as determined by PWCS), Products and Independent Contractors. The general aggregate limit shall apply to this project. **Prince William County School Board is to be names as an additional insured with respect to the services being provided.**

10.13.4. Automobile Liability - $1,000,000 per occurrence.

10.14. LIQUIDATED DAMAGES: For each project a clause will be inserted in the Contract between PWCS/OWNER and Contractor to the effect that, from the compensation otherwise to be paid, the PWCS may retain the sum of **one thousand dollars ($1,000.00)** for each calendar day beyond the substantial completion date stipulated in the Contract, that the Work is not completed. Once substantial completion has been awarded by PWCS Architect, five (5) days will be allowed for the Contractor to complete any remaining "punch list" items. If these items are not completed within the allotted time, then the PWCS may retain the sum of **one thousand dollars ($1,000.00)** for each calendar day beyond the allotted time the work is not completed. These sums shall not be considered as a penalty, but as a sum mutually agreed upon as the ascertained damages suffered by the PWCS because of the delay.

10.15. MEETINGS AND ADMINISTRATION:

10.15.1. Preconstruction meeting will be scheduled to be held within 10 working days after PWCS has issued the Notice to Proceed. Provide attendance by authorized representatives of the Contractor and Subcontractors.

Minimum Agenda:

10.15.1.1. Channels of Communications;

10.15.1.2. Construction Schedule;

10.15.1.3. Processing of Submittals, etc.;

10.15.1.4. Procedures for safety, security, quality control and related matters

10.15.2. Project meeting will be held when necessary as established by PWCS.

10.16. METHOD OF PAYMENT: The Contractor shall be paid on the basis of invoices submitted, to be paid net thirty (30) days from receipt and approval by an authorized PWCS official, upon satisfactory completion of delivery and/or installation. Payment shall be made after satisfactory performance of the contract in accordance with all of the provisions thereof and upon receipt of a properly completed invoice. The School Board reserves the right to withhold any or all payments or portions thereof for contractor's failure to perform in accordance with the provisions of the contract or any modifications thereto.

In any contract resulting from this IFB, the contractor shall be paid 95% of the amount due of each progress payment, with the remaining 5% being retained to assure faithful performance of the contract. All amounts withheld shall be included in the final payment.

Any subcontract which provides for similar progress payments shall be subject to the same limitations.

10.16.1. Final Application Payment: The Contractor is to obtain and submit the following documents with (or prior to) the final application for payment:

10.16.1.1. Complete release of liens with General Contractor's certification,

10.17. OWNERSHIP OF MATERIAL: Ownership of all data, material and documentation originated and prepared by the Contractor for PWCS pursuant to this solicitation and any resulting contract shall belong exclusively to PWCS and be subject to public inspection in accordance with the Virginia Freedom of Information Act.

10.18. PERFORMANCE AND PAYMENT BONDS FOR PROJECTS OVER $100,000.00: Upon receiving Notice of Acceptance of Cost Proposal from PWCS for a particular project, the Contractor shall, within ten (10) days furnish to PWCS a signed AIA Form Document A107 along with the following bonds. Notice to proceed will not be given until all documents are received, reviewed and accepted by PWCS.

10.18.1. A Performance Bond in the sum of the contract amount conditioned upon the faithful performance of the contract in strict conformity with the plans, specifications and conditions of the contract. Reference is made to AIA Form and Document A311.

10.18.2. A Payment Bond in the sum of the project amount. Such bond shall be for the protection of claimants who have and fulfill contracts to supply labor or materials to the prime Contractor to whom the contract was awarded, or to any Subcontractors, in the prosecution of the Work provided for in such contract, and shall be conditioned upon the prompt payment for all such material furnished or labor supplied or performed in the prosecution of the Work. "Labor or materials" shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site.

Each of such bonds shall be executed by one or more surety companies, selected by the Contractor, which are legally authorized to do business in the Commonwealth of Virginia.

Acceptance of bonds furnished shall be subject to the review and approval of the school board attorney.

10.19. PRICES AND PRICE ADJUSTMENT:

10.19.1. All unit prices and hourly rates shall be in a form of a firm fixed F.O.B. Destination pricing and shall include all charges that may be imposed in fulfilling the terms of the contract. Prices shall include all direct and indirect costs such as travel, insurance, profit and overhead.

10.19.2. PWCS will only pay for actual work performed per hourly rate.

10.19.3. The Contractor agrees that for firm fixed price contracts, prices shall remain firm for 365 days. If the price is increased after 365 days, the firm fixed unit price(s) may be increased only upon approval of a written request to the Purchasing Office. Upon receipt of the Contractor's request, PWCS shall make determination to approve or adjust the requested price increase based upon its investigations and the information provided by the Contractor. Any price adjustment agreed to shall take place only in accordance with the schedule defined above.

10.19.4. The request for a change to the firm fixed price(s) shall include as a minimum, 1) the cause for the adjustment; 2) proposed effective date; and, 3) the amount of the change requested adjustment (i.e., appropriate Bureau of Labor Statistics Index, change in manufacturer's price, etc.). Circumstances outlines above must be fully documented.

10.19.5. The request must be received at least 30 days prior to the effective date and shall become effective only upon approval by the Supervisor of Purchasing. The increased contract unit price shall not apply to orders received by the Contractor prior to the effective date of the approved increased contract unit price. Orders placed via PWCS Purchase Order (PD/DO/CT), shall be considered to have been received by the Contractor after the fifth (5^{th}) calendar day following the date of issuance. The Supervisor of Purchasing may cancel, without liability to either party, any portion of the contract affected by the requested increase and any materials, supplies or services undelivered at the time of such cancellation.

10.19.6. Price decreases shall be made in accordance with paragraph 33 *PRICE REDUCTION,* of the General Terms and Conditions.

10.20. PRIME CONTRACTOR RESPONSIBILITES: The Contractor shall be responsible for completely supervising and directing the work under this contract and all subcontractors that he may utilize, using his best skill and attention. Subcontractors who perform work under this contract shall be responsible to the prime Contractor. The Contractor agrees that he is as fully responsible for the acts and omissions of his subcontractors and of persons employed by them as he is for the acts and omissions of his own employees.

10.21. PROTECTION OF PERSONS AND PROPERTY:

10.21.1. The Contractor expressly undertakes, both directly and through its Subcontractor(s), to take every precaution at all times for the protection of persons and property, including PWCS' employees and property and its own.

10.21.2. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

10.21.3. The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect PWCS' property from injury or loss arising in connection with this contract. The Contractor shall make good any such damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of PWCS. The Contractor shall adequately protect adjacent property as provided by law and the Contract Documents, and shall provide and maintain all passageways, guard fences, lights and other facilities for protection required by public authority, local conditions, or any of the Contract Documents.

10.21.4. In an emergency affecting the safety or life of individuals, or of the work, or of

adjoining property, the Contractor, without special instruction or authorization from PWCS, is hereby permitted to act, at its discretion, to prevent threatened loss or injury, be instructed or authorized to act by PWCS, he shall so act, without appeal. Any additional compensation or extension of time claimed by the Contractor on account of any emergency work shall be determined as provided in the contract.

10.22. USE OF PREMISES AND REMOVAL OF DEBRIS:

The Contractor shall expressly undertake, either directly or through its Subcontractor:

10.22.1. To perform this Contract in such a manner as not to interrupt or interfere with the operation of any existing activity on the premises, at the location of the work, or with the work of any contractor;

10.22.2. To store its apparatus, materials, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of PWCS or any other Contractor.

10.22.3. To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work.

10.22.4. To effect all cutting, filling, or patching of its work required to make the same conform to the plans and specifications, and except with the consent of PWCS Project Manager, not to cut or otherwise alter the work of any other Contractor. The Contractor shall not damage or endanger any portion of the work by cutting, patching or otherwise altering any work, or by excavation; and

10.22.5. To clean up daily all refuse, rubbish, scrap materials and debris caused by its operation, or as necessary so that at all times the area of the work presents a safe, neat, orderly, and workmanlike appearance.

10.23. WORK SITE DAMAGES: Any damage to existing facilities or equipment resulting from the performance of this contract shall be repaired to PWCS' satisfaction at the Contractor's expense. Damages to existing utilities, such as underground utilities, or conduit for utilities shall be the responsibility of the Contractor. Back-charging for the damage may be necessary.

The Contractor is required to call the Virginia One Call Utility Center a minimum of seventy-two (72) hours prior to digging. Failure to do so will result in liquidated damages being assessed and appropriate disciplinary action taken, which may include reporting to the Virginia Department of Occupational and Professional Regulation.

Prince William County does not discriminate against faith-based organizations in accordance with the *Code of Virginia*, §2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

This contract shall constitute the whole agreement between the parties. There are no promises, terms and conditions, or obligations other than those contained herein, and this contract shall supersede all previous communications, representations, or agreements, written or verbal, between the parties hereto related to the provision of goods (including leases thereof), services and/or insurances described herein.

IN WITNESS THEREOF, the parties have caused this Contract to be executed by the following duly authorized officials:

CONTRACTOR:

Authorized Signature

Steven E. Williams
Type Name

PWCS AGENCY:

for Jerry Stokes
Authorized Signature

Anthony Crosby, CPPO
Type Name

Vice President
Title

11-16-20
Date

Supervisor of Purchasing
Title

11/17/2020
Date

ATTACHMENT B

Prince William County
PUBLIC SCHOOLS
Providing A World-Class Education®

CERTIFICATE OF COMPLIANCE

Code of Virginia §22.1-296.1

As a condition of contract award, Contractor/Vendor providing contracted services requiring direct contact with students on school property during regular school hours or school-sponsored activities/programs shall execute this document certifying that neither the Contractor nor any employee of the Contractor has been convicted of a felony or any offense involving the sexual molestation, physical or sexual abuse or rape of a child or a barrier crime as defined and regulated under VA statutes 19.2-392.02 and 63.2-1719 through 1725 as applicable.

This certification shall be binding upon the Contractor and their employees providing services throughout the term of the contract or purchase order, including any extensions or renewals.

Contractor/Vendor acknowledges that, pursuant to the *Code of Virginia* §22.1-296.1 (A), any person making a materially false statement on this certification, shall be guilty of a Class 1 misdemeanor, and upon conviction, the fact of such conviction shall be grounds for revocation of the contract or purchase order.

Waco, Inc.
Company Name

38592 Brett Way, Ste. 7
Mechanicsville, MD 20659
Company Address

Steven E. Williams
Print Name of Authorized Representative

Authorized Representative Signature

R-DJ-21001-03
Purchase Rider/Contract/Solicitation #

301-290-1333
Company Phone Number

Vice President
Authorized Representative Title

11-16-20
Date

Revised 7/20/18