The Martinsburg-Berkeley County Public Library is requesting formal bids for West Virginia state certified asbestos abatement services. A mandatory pre-bid meeting will be held at the project site on Tuesday September 17, 2024, 10:00AM at 101 W. King Street Martinsburg, WV 25401. Proposals will be publicly received and registered on Tuesday October 1, 2024, 1:00PM at North Berkeley Public Library located at 1755 T J Jackson Drive Falling Waters, WV 25419. Bids received after this time will not be accepted, opened or read.

The scope of work is attached to this email.

The Library reserves the right to accept or reject any or all bids, to waive irregularities and/or informalities and to disregard all non-conforming, non-responsive, unbalanced or conditional bids. The Library complies with all Equal Opportunity requirements. All qualified Offerors will receive consideration without regard to race, creed, color, national origin, sex, marital status, religion, ancestry, mental or physical handicap or age.

The building does contain disturbed friable asbestos. Contractors wishing to enter the facility shall conform to all OSHA and State requirements including but not limited to appropriate Personal Protective Equipment. PPE or other equipment required by OSHA or the State of West Virginia will not be provided by the owner.

SECTION 02085

ASBESTOS ABATEMENT SCOPE OF WORK

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

A. General: The intent of this project is to remove all asbestos-containing materials and non-friable materials that may be rendered friable during the planned renovations of the structure comprising Martinsburg-Berkley County Public Library located at 101 West King Street in Martinsburg, WV. This scope of work includes all work necessary to reduce air concentrations of asbestos to the specified level and maintain the specified asbestos control limits during the life of the contract. It is the intent of this specification to remove all friable asbestos-containing materials and non-friable materials with a potential to become friable using full containments within regulated work areas. The Contractor is responsible for acquiring all necessary permits and variances to perform this project.

B. Drawings depicting the locations and extent of the abatement are included as part of this specification.

1. Project Location:

Martinsburg-Berkley County Public Library
101 West King Street
Martinsburg, WV 25401

2. Description of the site:

The Martinsburg-Berkley County Public Library building was constructed in 1969 with an addition added in 1978 and totals approximately 16,000 square feet.

3. It is the Contractor’s responsibility to expose and remove all friable asbestos-containing materials and non-friable materials that may be rendered friable during renovation activities throughout the building.

4. The locations of the asbestos-containing materials to be removed for this project are depicted on the Abatement Scope of Work drawings and listed in the following table:

Table 1: Identified Asbestos-Containing Materials Summary

Sample Description	Location	Approximate Quantity[2]	Friable	Condition	Asbestos, %
Spray-applied Fireproofing Including overspray	Decking, beams, & columns (See Drawings)	10,250 SF[1]	Yes	Good	20% Chrysotile
Off-White Mastic on Fiberglass Pipe Insulation	Lower Mechanical Room (See Drawings)	20 LF	No	Good	3% Chrysotile

Note 1 – This figure does not include overspray, spray applied fireproofing on vertical surfaces, or asbestos debris. The removal of overspray, fireproofing on vertical surface, and debris IS included in the scope of work.

Note 2 – The contractor is responsible for estimating the quantities of materials prior to submitting bid. See paragraph 1.01 D.

C. The removal of visible debris from the floors, furnishings, and other horizontal surfaces, is included in the scope of work.

D. The contractor will decontaminate furnishings and other movable objects as directed by the Building Owner or their designated representative.

E. The installed “Ram Board” flooring protection is to be disposed of as asbestos waste.

F. In addition to the abatement of the identified asbestos-containing materials, the abatement contractor will remove the HVAC ductwork from all floors, including the main HVAC unit on the ground floor. The ductwork should be disassembled into manageable sections and wrapped in 2 layers of 6-mil plastic sheeting for disposal as asbestos waste. If the metal ductwork is to be recycled, the ducts must be cleaned, inspected and encapsulated prior to removal from site.

G. Quantities of materials to be removed, which are provided herein, are approximate estimates provided by the Project Designer. It shall be the responsibility of the Contractor to verify understanding and agreement with quantities provided prior to submitting a bid. If the Contractor bids for this work without disputing specified quantities of described materials, this shall indicate acceptance of a Scope of Work, which includes removal of all described materials, regardless of listed quantity.

H. The Contractor is responsible for exposing the ceilings to ensure that all these materials have been removed. This work includes, but is not limited to, the demolition of suspended ceilings.

1.02 QUALITY ASSURANCE

A. Contractor Qualifications: The Contractor shall be a firm of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field) who is regularly engaged in and who maintains a regular force of workmen skilled in asbestos abatement and shall have performed this work on previous projects.

1. Contractors performing asbestos abatement work must be licensed to do asbestos work in the State of West Virginia.
2. Contractor employees assigned to active asbestos work areas shall have and demonstrate current registration as asbestos abatement workers, at a minimum, in the State of West Virginia.
3. Pursuant to NESHAP requirements, the Contractor should provide appropriate written notification at least 10 days prior to the start of asbestos abatement work to:

   U.S. EPA Region 3
   Pesticides/Asbestos Program and Enforcement Branch 3LC62
   1650 Arch Street
   Philadelphia, PA 19103-2029
   Phone: (215) 814-2029

   and to:

   West Virginia Department of Environmental Protection
   Division of Water and Waste Management
   601 57th Street, SE
   Charleston, WV 25304
   Phone: (304) 926-0499 x43854

   All notifications must now be submitted through the Electronic Submittal System (ESS); The link to sign up for an account is at:

   https://apps.dep.wv.gov/eplogin.cfm

B. Asbestos Control Limits: The enclosed work areas shall be defined as a regulated area in accordance with 29 CFR 1910.1001 and 29 CFR 1926.1101.

1. Inside Asbestos Work Area: For personnel wearing negative-pressure respirators, exposures to asbestos shall not exceed an 8-hour time weighted average of 0.1 fiber (longer than 5 microns) per cubic centimeter of air (f/cc). Regardless of the respiratory protection worn, air concentrations inside the work area will not exceed an 8-hour time weighted average of 1.0 f/cc. It is the responsibility of the Contractor to

provide an independent industrial hygiene consultant to provide the required personal air monitoring and to ensure that all safety and health procedures are followed.

2. Outside Asbestos Work Area: Air concentrations of asbestos shall be maintained at the lowest attainable level and shall not exceed an 8-hour time weighted average of 0.01 fiber per cubic centimeter of air. This applies to all areas in the building while work is in progress except for the asbestos work area, and to the entire building, including the former work area, after final cleanup. To ensure compliance with these standards, the Building Owner will provide the required air monitoring outside the Contractor's work area and the Building Owner's industrial hygienist will have unrestricted access to the Contractor's work site. The asbestos abatement contractor may perform any air sampling he wishes to ensure compliance with this standard. If a discrepancy arises between the Contractor's air monitoring results and the Building Owner's results, the Building Owner's results shall prevail.

1.03 SUBMITTALS

A. Post-Award Asbestos Abatement Submittals: Items 1.03.A.1. through 1.03.A.7 below are to be submitted after the award but are required to be approved by the Building Owner or their designated representative prior to starting work.

1. Abatement Plan: Submit a detailed site-specific plan of the procedures proposed for use in complying with the requirements and regulations included in this specification. The plan shall include the location and layout of decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, and methods to be used to ensure the safety of building occupants and visitors to the site. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system during removal, method of removal to prohibit emissions in the work area, and packaging of removed asbestos debris.

2. Disposal Plan: Prepare a disposal plan including the location of the approved disposal site and the Contractor's method for documenting proper asbestos disposal to the Building Owner or their designated representative.

3. Environmental Protection Agency (EPA) Notification: Provide a copy of the NESHAPS Notification sent to the Regional EPA Asbestos Regulation Office (Paragraph 1.02).

4. Local Government Notification: Provide a copy of the notification sent to the appropriate State or local Governmental Asbestos Regulation Office (Paragraph 1.02).

5. Certificates of Compliance: Submit certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2.

6. Information on Encapsulating Material: Submit written evidence that material meets the latest requirements of the EPA and possesses the specified characteristics.

7. Laboratory Qualification Information: Submit proof of qualifications of testing laboratory and personnel. Accreditation by the American Industrial Hygiene Association (AIHA) for asbestos analysis and two consecutive quarterly reports showing that the laboratory analyzing the samples has been judged proficient by successful participation in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program shall be considered sufficient proof of compliance. This submittal must be approved by the Building Owner or their designated representative prior to beginning any testing.

B. During Work Asbestos Abatement Submittals: Items 1.03.B.1 through 1.03.B.2 below are to be submitted to the Building Owner or their designated representative as work progresses at the time specified.

1. Air Monitoring and Work Area Information:

   a. Air Monitoring Results: Results of all air monitoring conducted by the Contractor shall be posted within 24 hours of collection for all workers to see. A copy of the results shall be given to the Building Owner or their designated representative.

   b. Differential Air Pressure Readings: Starting when a negative pressure containment is erected and approved by the Building Owner or their designated representative, a copy of the strip chart record of the work area relative pressure shall be submitted within 24 hours after the recording was made.

   c. Work Area Inspections: The Building Owner's representative will perform visual inspections of the work area for the pre-commencement, final visual, and final clearance stages of the work. The Contractor shall notify the Building Owner or their designated representative at least 4 hours in advance of the required inspection.

2. Transporting and Disposing of Asbestos-Containing Materials (ACM):

   a. Disposal Receipts: Receipts from the landfill operator which acknowledge the Contractor's shipment of ACM from the site (NESHAPS Waste Shipment Records) shall be submitted three days following removal of ACM from the premises. Each receipt shall provide date, quantity of material removed, and signature of an authorized representative of the transporter. A signed and dated copy of the Waste Shipment Record showing receipt at an authorized landfill must be received by the Building Owner's designated representative within 30 calendar days of the date of the shipping receipt.

   b. Transportation Vehicles: Transportation shall be in vehicles dedicated to asbestos transportation. Vehicles shall be marked in accordance with DOT and NESHAPS regulations.

   c. Shipping Manifest Forms: Signed and completed Shipping Manifest Forms (NESHAPS Waste Shipment Records) shall be used for the transportation of ACM. This form shall be signed by each party who has control over the asbestos waste, and a copy retained by each party as responsibility for the waste is transferred to the next party.

C. Final Submittals: Items 1.03.C.1 and 1.03.C.2 below are to be submitted to the Owner’s designated representative at the completion of work for each work containment.

   1. Daily Log: Copies of a daily log showing the date(s) and time(s) of entrance to and exit from the work area(s) for all persons.

   2. Re-Establish Systems - Submit written certification:

1.04 CONTRACTOR RESPONSIBILITY

A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to the protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations, and shall hold the Building Owner and their designated representative harmless for failure to comply with any applicable safety or health regulation on the part of himself, their employees, or their subcontractors.

1.05 PROJECT/SITE CONDITIONS

A. Means of Egress: Establish and maintain emergency and fire exits from the work area.

B. Decontamination Facility: Throughout the time that asbestos removal is taking place, the abatement contractor will maintain a working three-stage decontamination facility at the point of access to the containment. As a minimum, the decontamination facility will consist of a clean changing area, an air space, a shower, another air space, and a contaminated changing area. The size and location of this facility shall be approved by the Building Owner's designated representative.

C. Access to Work Area: Access to work areas shall be through decontamination areas. The following shall have access to work area:

1. Building Owner or Designated Representative
2. Contract Monitoring Personnel
3. OSHA Inspectors
4. EPA Inspectors
5. State & Local Building or Health Officials
6. Authorized Inspection Personnel

1.06 SEQUENCING/SCHEDULING

A. Schedule and work hours must be approved by Martinsburg-Berkley County Public Library.

PART 2 - PRODUCTS

2.01 EQUIPMENT

A. Equipment, including protective clothing and respirators used in the execution of this contract and provided to visitors to the site, shall comply with ASTM E849 and with applicable Federal, State, and local regulations. Respirators shall conform to the OSHA requirements in 29 CFR 1910.134 and 29 CFR 1926.1101, except that single use and disposable respirators shall not be used. Type of respirators required shall be as specified in 29 CFR 1926.1101. If any air sampling indicates levels above 5.0 fibers per cubic centimeter, supplied air (type "C") respirators will be required during actual removal operations. The minimum respiratory protection for this project is full-face powered air purifying respirators equipped with P100 (HEPA) cartridges.

2.02 ENCAPSULATING MATERIALS

A. Encapsulating materials (sealants) shall meet the latest requirements of the EPA and shall possess the following characteristics:

1. Adherence: The sealant eliminates fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the sprayed asbestos material.

2. Impact Penetration: It withstands impact and penetration, protects the enclosed sprayed asbestos material, and must not cause separation of sprayed asbestos material from its original substrate.

3. Flexibility: It possesses enough flexibility to accommodate atmospheric changes and settling of the structure over time.

4. Resistance to Smoke and Flame: It shall have high flame retardant characteristics and a low toxic fume and smoke emission rating.

5. Ease of Application: It must be easily applied with relative insensitivity to errors in preparation or application. Ease of repair by routine maintenance personnel is desirable.

6. Toxicity: The sealant must be neither noxious nor toxic to application workers and structure users thereafter.

7. Permeability: It should have some permeability to water vapor to prevent condensation accumulation and be resistant to common cleaning agents.

8. Stability: It should have suitable stability to weathering and aging.

B. Guarantee: Guarantee encapsulating materials to perform for a period of 1 year, in accordance with "Guarantee" clause of the General Conditions.

PART 3 - EXECUTION

3.01 PREPARATION

A. Isolate the work areas for the duration of the work by completely sealing off all openings and fixtures in the work area including, but not limited to, doorways, corridors, windows, and lighting with plastic sheeting taped securely in place. The ductwork is scheduled to be removed by the Abatement Contractor.

B. Build double barriers of plastic sheeting at all entrances and exits to the work areas so that the work area is always closed off by one barrier. Build three-stage decontamination airlocks at the worker entrance to the work areas. The waste loadouts, if separate from the main decon, must be at least two-stage. Each decon must have working showers with proper discharge filtration.

C. Before the work commences, **clean** all removable items and equipment. Remove them from the work area and store, or dispose of offsite, as directed.

D. Cover all non-removable items and equipment in the work area with 6-mil plastic sheeting taped securely in place. The covering of the bookshelves must include a durable barrier, such as fiber board, to protect the plastic from debris due to the extensive overhead removal work.

E. Remove all heating, ventilation, and air conditioning system filters, pack them in sealable plastic bags (6-mil minimum) for disposal in the approved waste disposal site.

F. Post warning signs on the primary containment as required by 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E849, and as directed by the Building Owner or their designated representative.

G. Obtain Written Approval of the Finished Primary Containment from the Building Owner's designated representative prior to starting any actual asbestos removal work.

3.02 WORK PROCEDURES:

A. General Procedures: The enclosed work areas shall be defined as an asbestos regulated area and all asbestos worker protection and work practices not addressed in this specification shall be performed in conformance with the general safety and health provisions of 29 CFR 1910.1001, 29 CFR 1910.20 and 29 CFR 1926.1101, respectively. For asbestos abatement work, use general work practices, work practices for removal, and work practices for encapsulation as specified in ASTM E849, and other appropriate work procedures approved by the EPA. If a conflict arises, the more stringent application shall apply until a determination is made by the Owner or their designated representative.

B. Local Exhaust System: Provide a local exhaust system in the asbestos control areas as required to meet the asbestos control limit and ceiling concentration. The local exhaust system shall be in accordance with ANSI

Z9.2, using HEPA filters. Equip exhaust openings with the necessary filters required to reduce the airborne asbestos concentration to below the asbestos control limit. Local exhaust equipment must be sufficient to maintain a minimum negative air pressure of 0.02 inch water gauge in the asbestos control area. **In no case shall the building ventilation system be used as the local exhaust system for asbestos control.** Filtering in vacuums and exhaust equipment shall conform to ANSI Z9.2; HEPA filters shall be used in all vacuums and exhaust equipment. If the local exhaust system does not exhaust directly to the outside, the exhaust equipment shall be tested for integrity with a dioctylphthalate (DOP) or equivalent smoke generator and spectrophotometer each time a containment is erected.

C. Coordination of Work of all Trades: Coordinate the work of all trades to ensure that their work is performed in accordance with the applicable regulations and that the asbestos control limits are maintained at all times both inside and outside the asbestos work area.

3.04 QUALITY CONTROL:

A. Monitoring: Monitoring of airborne concentrations of asbestos shall be in accordance with 29 CFR 1910.1001, 29 CFR 1926.1101, and ASTM E849. Monitor the airborne concentration of asbestos before starting work to obtain a baseline fiber concentration in the affected areas. Then monitor once every four (4) hours, continuously during the course of the work inside the asbestos work area; one time daily outside the entrance to the asbestos work area and at the exhaust opening of the local exhaust system. If monitoring shows airborne concentrations greater than the asbestos control limits, stop all work, correct the conditions causing the excessive levels, and notify the Building Owner or their designated representative immediately. In addition, monitor the airborne concentrations of asbestos after final cleanup and removal of the enclosure of the asbestos control area in accordance with Paragraph 3.05 D "Final Cleanup and Removal of Enclosures."

B. Site Inspection and Stop Work Orders: While performing asbestos abatement work, the Contractor shall be subject to on-site inspection by contracted inspection services. Work shall also be subject to inspection by OSHA and EPA inspectors and/or local building or health officials. If found to be in violation by one of these officials, the Contractor shall cease all work immediately. Until the violation is resolved, standby time required to resolve the violation shall be at the Contractor's expense. One complete set of equipment (such as respirators and disposable clothing) required for entry to the asbestos control area shall be made available within two (2) hours of

request by the Building Owner or their designated representative for inspection of the asbestos control area. Such requests will only be made during the Contractor's working hours.

3.05 CLEANUP AND DISPOSAL:

A. Permits and Notifications: Secure necessary permits in conjunction with asbestos removal, hauling, and disposition and provide timely notification of such actions, as may be required by Federal, State, regional, and local authorities. Notify the Regional Office of the United States Environmental Protection Agency and provide copies of the notification to the Building Owner or their designated representative 10 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1) (See Paragraph 1.02).

B. Housekeeping: Essential parts of asbestos dust control are housekeeping and cleanup procedures. Maintain all surfaces throughout the building free of accumulations of asbestos fibers to prevent further dispersion. Give meticulous attention to restricting the spread of dust and debris, keep waste from being distributed over the general area or to lower floors. Use approved industrial vacuum cleaners with a HEPA filter to collect dust and small scrap. Blowing down of the space with compressed air is forbidden. Post appropriate asbestos hazard warning signs. In all possible instances, workmen shall clean up their own areas. Equip personnel engaged in cleaning up asbestos scrap and waste with necessary respiratory equipment and protective clothing.

C. Disposal of Friable Asbestos: Collect and dispose of friable asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing which may produce airborne concentrations of asbestos fibers in sealed impermeable bags. Prior to placing in bags or containers, wet down asbestos wastes to reduce airborne fiber concentrations. Waste asbestos material shall be disposed of in accordance with all Federal regulations at a sanitary landfill that meets EPA requirements. The contractor will provide the Building Owner or their designated representative with a copy of all hazardous waste manifests, haulers receipts, or landfill receiving tickets resulting from the disposal of the asbestos waste. Establishment of any on-site temporary holding area for properly packaged asbestos waste must be approved by the Building Owner or their designated representative.

D. Final Cleanup and Removal of Enclosure: The Contractor must notify the Building Owner or their designated representative that the work area is ready for final inspection. Visible asbestos materials, dust, or debris is not

permitted on any surface in or around the work area. Clean work area in accordance with EPA approved methods. The Building Owner's industrial hygienist will perform PCM and/or TEM air sampling for clearance purposes in accordance with EPA regulations and as allowed by the State of West Virginia. Perform sampling in an aggressive manner, using fans or similar equipment to create exaggerated air movement during the clearance air sampling. If the airborne fiber concentration is less than the level recommended by EPA/State of West Virginia, the Building Owner or a designated representative may authorize removal of the enclosure. ***The Building Owner's approval of final cleaning and restoration of the work is required.***

END OF SECTION 02085

SECTION 02085

ASBESTOS ABATEMENT SCOPE OF WORK

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

A. General: The intent of this project is to remove all asbestos-containing materials and non-friable materials that may be rendered friable during the planned renovations of the structure comprising Martinsburg-Berkley County Public Library located at 101 West King Street in Martinsburg, WV. This scope of work includes all work necessary to reduce air concentrations of asbestos to the specified level and maintain the specified asbestos control limits during the life of the contract. It is the intent of this specification to remove all friable asbestos-containing materials and non-friable materials with a potential to become friable using full containments within regulated work areas. The Contractor is responsible for acquiring all necessary permits and variances to perform this project.

B. Drawings depicting the locations and extent of the abatement are included as part of this specification.

1. Project Location:

Martinsburg-Berkley County Public Library
101 West King Street
Martinsburg, WV 25401

2. Description of the site:

The Martinsburg-Berkley County Public Library building was constructed in 1969 with an addition added in 1978 and totals approximately 16,000 square feet.

3. It is the Contractor’s responsibility to expose and remove all friable asbestos-containing materials and non-friable materials that may be rendered friable during renovation activities throughout the building.

4. The locations of the asbestos-containing materials to be removed for this project are depicted on the Abatement Scope of Work drawings and listed in the following table:

Table 1: Identified Asbestos-Containing Materials Summary

Sample Description	Location	Approximate Quantity[2]	Friable	Condition	Asbestos, %
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F. In addition to the abatement of the identified asbestos-containing materials, the abatement contractor will remove the HVAC ductwork from all floors, including the main HVAC unit on the ground floor. The ductwork should be disassembled into manageable sections and wrapped in 2 layers of 6-mil plastic sheeting for disposal as asbestos waste. If the metal ductwork is to be recycled, the ducts must be cleaned, inspected and encapsulated prior to removal from site.

G. Quantities of materials to be removed, which are provided herein, are approximate estimates provided by the Project Designer. It shall be the responsibility of the Contractor to verify understanding and agreement with quantities provided prior to submitting a bid. If the Contractor bids for this work without disputing specified quantities of described materials, this shall indicate acceptance of a Scope of Work, which includes removal of all described materials, regardless of listed quantity.

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provide an independent industrial hygiene consultant to provide the required personal air monitoring and to ensure that all safety and health procedures are followed.

2. Outside Asbestos Work Area: Air concentrations of asbestos shall be maintained at the lowest attainable level and shall not exceed an 8-hour time weighted average of 0.01 fiber per cubic centimeter of air. This applies to all areas in the building while work is in progress except for the asbestos work area, and to the entire building, including the former work area, after final cleanup. To ensure compliance with these standards, the Building Owner will provide the required air monitoring outside the Contractor's work area and the Building Owner's industrial hygienist will have unrestricted access to the Contractor's work site. The asbestos abatement contractor may perform any air sampling he wishes to ensure compliance with this standard. If a discrepancy arises between the Contractor's air monitoring results and the Building Owner's results, the Building Owner's results shall prevail.

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2. Disposal Plan: Prepare a disposal plan including the location of the approved disposal site and the Contractor's method for documenting proper asbestos disposal to the Building Owner or their designated representative.

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6. Information on Encapsulating Material: Submit written evidence that material meets the latest requirements of the EPA and possesses the specified characteristics.

7. Laboratory Qualification Information: Submit proof of qualifications of testing laboratory and personnel. Accreditation by the American Industrial Hygiene Association (AIHA) for asbestos analysis and two consecutive quarterly reports showing that the laboratory analyzing the samples has been judged proficient by successful participation in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program shall be considered sufficient proof of compliance. This submittal must be approved by the Building Owner or their designated representative prior to beginning any testing.

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   a. Air Monitoring Results: Results of all air monitoring conducted by the Contractor shall be posted within 24 hours of collection for all workers to see. A copy of the results shall be given to the Building Owner or their designated representative.

   b. Differential Air Pressure Readings: Starting when a negative pressure containment is erected and approved by the Building Owner or their designated representative, a copy of the strip chart record of the work area relative pressure shall be submitted within 24 hours after the recording was made.

   c. Work Area Inspections: The Building Owner's representative will perform visual inspections of the work area for the pre-commencement, final visual, and final clearance stages of the work. The Contractor shall notify the Building Owner or their designated representative at least 4 hours in advance of the required inspection.

2. Transporting and Disposing of Asbestos-Containing Materials (ACM):

   a. Disposal Receipts: Receipts from the landfill operator which acknowledge the Contractor's shipment of ACM from the site (NESHAPS Waste Shipment Records) shall be submitted three days following removal of ACM from the premises. Each receipt shall provide date, quantity of material removed, and signature of an authorized representative of the transporter. A signed and dated copy of the Waste Shipment Record showing receipt at an authorized landfill must be received by the Building Owner's designated representative within 30 calendar days of the date of the shipping receipt.

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   c. Shipping Manifest Forms: Signed and completed Shipping Manifest Forms (NESHAPS Waste Shipment Records) shall be used for the transportation of ACM. This form shall be signed by each party who has control over the asbestos waste, and a copy retained by each party as responsibility for the waste is transferred to the next party.

C. Final Submittals: Items 1.03.C.1 and 1.03.C.2 below are to be submitted to the Owner’s designated representative at the completion of work for each work containment.

   1. Daily Log: Copies of a daily log showing the date(s) and time(s) of entrance to and exit from the work area(s) for all persons.

   2. Re-Establish Systems - Submit written certification:

1.04 CONTRACTOR RESPONSIBILITY

A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to the protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations, and shall hold the Building Owner and their designated representative harmless for failure to comply with any applicable safety or health regulation on the part of himself, their employees, or their subcontractors.

1.05 PROJECT/SITE CONDITIONS

A. Means of Egress: Establish and maintain emergency and fire exits from the work area.

B. Decontamination Facility: Throughout the time that asbestos removal is taking place, the abatement contractor will maintain a working three-stage decontamination facility at the point of access to the containment. As a minimum, the decontamination facility will consist of a clean changing area, an air space, a shower, another air space, and a contaminated changing area. The size and location of this facility shall be approved by the Building Owner's designated representative.

C. Access to Work Area: Access to work areas shall be through decontamination areas. The following shall have access to work area:

1. Building Owner or Designated Representative
2. Contract Monitoring Personnel
3. OSHA Inspectors
4. EPA Inspectors
5. State & Local Building or Health Officials
6. Authorized Inspection Personnel

1.06 SEQUENCING/SCHEDULING

A. Schedule and work hours must be approved by Martinsburg-Berkley County Public Library.

PART 2 - PRODUCTS

2.01 EQUIPMENT

A. Equipment, including protective clothing and respirators used in the execution of this contract and provided to visitors to the site, shall comply with ASTM E849 and with applicable Federal, State, and local regulations. Respirators shall conform to the OSHA requirements in 29 CFR 1910.134 and 29 CFR 1926.1101, except that single use and disposable respirators shall not be used. Type of respirators required shall be as specified in 29 CFR 1926.1101. If any air sampling indicates levels above 5.0 fibers per cubic centimeter, supplied air (type "C") respirators will be required during actual removal operations. The minimum respiratory protection for this project is full-face powered air purifying respirators equipped with P100 (HEPA) cartridges.

2.02 ENCAPSULATING MATERIALS

A. Encapsulating materials (sealants) shall meet the latest requirements of the EPA and shall possess the following characteristics:

1. Adherence: The sealant eliminates fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the sprayed asbestos material.

2. Impact Penetration: It withstands impact and penetration, protects the enclosed sprayed asbestos material, and must not cause separation of sprayed asbestos material from its original substrate.

3. Flexibility: It possesses enough flexibility to accommodate atmospheric changes and settling of the structure over time.

4. Resistance to Smoke and Flame: It shall have high flame retardant characteristics and a low toxic fume and smoke emission rating.

5. Ease of Application: It must be easily applied with relative insensitivity to errors in preparation or application. Ease of repair by routine maintenance personnel is desirable.

6. Toxicity: The sealant must be neither noxious nor toxic to application workers and structure users thereafter.

7. Permeability: It should have some permeability to water vapor to prevent condensation accumulation and be resistant to common cleaning agents.

8. Stability: It should have suitable stability to weathering and aging.

B. Guarantee: Guarantee encapsulating materials to perform for a period of 1 year, in accordance with "Guarantee" clause of the General Conditions.

PART 3 - EXECUTION

3.01 PREPARATION

A. Isolate the work areas for the duration of the work by completely sealing off all openings and fixtures in the work area including, but not limited to, doorways, corridors, windows, and lighting with plastic sheeting taped securely in place. The ductwork is scheduled to be removed by the Abatement Contractor.

B. Build double barriers of plastic sheeting at all entrances and exits to the work areas so that the work area is always closed off by one barrier. Build three-stage decontamination airlocks at the worker entrance to the work areas. The waste loadouts, if separate from the main decon, must be at least two-stage. Each decon must have working showers with proper discharge filtration.

C. Before the work commences, **clean** all removable items and equipment. Remove them from the work area and store, or dispose of offsite, as directed.

D. Cover all non-removable items and equipment in the work area with 6-mil plastic sheeting taped securely in place. The covering of the bookshelves must include a durable barrier, such as fiber board, to protect the plastic from debris due to the extensive overhead removal work.

E. Remove all heating, ventilation, and air conditioning system filters, pack them in sealable plastic bags (6-mil minimum) for disposal in the approved waste disposal site.

F. Post warning signs on the primary containment as required by 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E849, and as directed by the Building Owner or their designated representative.

G. Obtain Written Approval of the Finished Primary Containment from the Building Owner's designated representative prior to starting any actual asbestos removal work.

3.02 WORK PROCEDURES:

A. General Procedures: The enclosed work areas shall be defined as an asbestos regulated area and all asbestos worker protection and work practices not addressed in this specification shall be performed in conformance with the general safety and health provisions of 29 CFR 1910.1001, 29 CFR 1910.20 and 29 CFR 1926.1101, respectively. For asbestos abatement work, use general work practices, work practices for removal, and work practices for encapsulation as specified in ASTM E849, and other appropriate work procedures approved by the EPA. If a conflict arises, the more stringent application shall apply until a determination is made by the Owner or their designated representative.

B. Local Exhaust System: Provide a local exhaust system in the asbestos control areas as required to meet the asbestos control limit and ceiling concentration. The local exhaust system shall be in accordance with ANSI

Z9.2, using HEPA filters. Equip exhaust openings with the necessary filters required to reduce the airborne asbestos concentration to below the asbestos control limit. Local exhaust equipment must be sufficient to maintain a minimum negative air pressure of 0.02 inch water gauge in the asbestos control area. **In no case shall the building ventilation system be used as the local exhaust system for asbestos control.** Filtering in vacuums and exhaust equipment shall conform to ANSI Z9.2; HEPA filters shall be used in all vacuums and exhaust equipment. If the local exhaust system does not exhaust directly to the outside, the exhaust equipment shall be tested for integrity with a dioctylphthalate (DOP) or equivalent smoke generator and spectrophotometer each time a containment is erected.

C. Coordination of Work of all Trades: Coordinate the work of all trades to ensure that their work is performed in accordance with the applicable regulations and that the asbestos control limits are maintained at all times both inside and outside the asbestos work area.

3.04 QUALITY CONTROL:

A. Monitoring: Monitoring of airborne concentrations of asbestos shall be in accordance with 29 CFR 1910.1001, 29 CFR 1926.1101, and ASTM E849. Monitor the airborne concentration of asbestos before starting work to obtain a baseline fiber concentration in the affected areas. Then monitor once every four (4) hours, continuously during the course of the work inside the asbestos work area; one time daily outside the entrance to the asbestos work area and at the exhaust opening of the local exhaust system. If monitoring shows airborne concentrations greater than the asbestos control limits, stop all work, correct the conditions causing the excessive levels, and notify the Building Owner or their designated representative immediately. In addition, monitor the airborne concentrations of asbestos after final cleanup and removal of the enclosure of the asbestos control area in accordance with Paragraph 3.05 D "Final Cleanup and Removal of Enclosures."

B. Site Inspection and Stop Work Orders: While performing asbestos abatement work, the Contractor shall be subject to on-site inspection by contracted inspection services. Work shall also be subject to inspection by OSHA and EPA inspectors and/or local building or health officials. If found to be in violation by one of these officials, the Contractor shall cease all work immediately. Until the violation is resolved, standby time required to resolve the violation shall be at the Contractor's expense. One complete set of equipment (such as respirators and disposable clothing) required for entry to the asbestos control area shall be made available within two (2) hours of

request by the Building Owner or their designated representative for inspection of the asbestos control area. Such requests will only be made during the Contractor's working hours.

3.05 CLEANUP AND DISPOSAL:

A. Permits and Notifications: Secure necessary permits in conjunction with asbestos removal, hauling, and disposition and provide timely notification of such actions, as may be required by Federal, State, regional, and local authorities. Notify the Regional Office of the United States Environmental Protection Agency and provide copies of the notification to the Building Owner or their designated representative 10 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1) (See Paragraph 1.02).

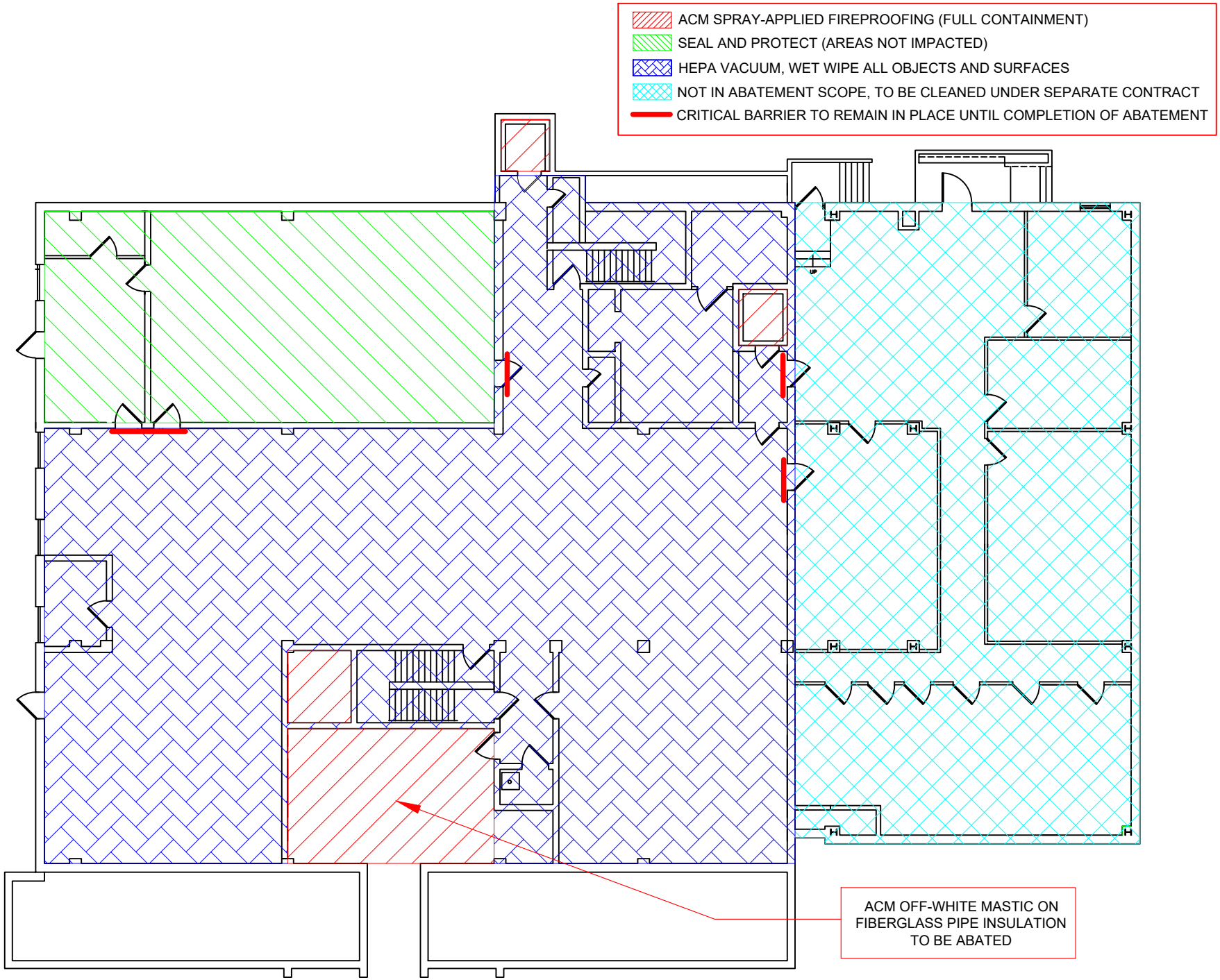
B. Housekeeping: Essential parts of asbestos dust control are housekeeping and cleanup procedures. Maintain all surfaces throughout the building free of accumulations of asbestos fibers to prevent further dispersion. Give meticulous attention to restricting the spread of dust and debris, keep waste from being distributed over the general area or to lower floors. Use approved industrial vacuum cleaners with a HEPA filter to collect dust and small scrap. Blowing down of the space with compressed air is forbidden. Post appropriate asbestos hazard warning signs. In all possible instances, workmen shall clean up their own areas. Equip personnel engaged in cleaning up asbestos scrap and waste with necessary respiratory equipment and protective clothing.

C. Disposal of Friable Asbestos: Collect and dispose of friable asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing which may produce airborne concentrations of asbestos fibers in sealed impermeable bags. Prior to placing in bags or containers, wet down asbestos wastes to reduce airborne fiber concentrations. Waste asbestos material shall be disposed of in accordance with all Federal regulations at a sanitary landfill that meets EPA requirements. The contractor will provide the Building Owner or their designated representative with a copy of all hazardous waste manifests, haulers receipts, or landfill receiving tickets resulting from the disposal of the asbestos waste. Establishment of any on-site temporary holding area for properly packaged asbestos waste must be approved by the Building Owner or their designated representative.

D. Final Cleanup and Removal of Enclosure: The Contractor must notify the Building Owner or their designated representative that the work area is ready for final inspection. Visible asbestos materials, dust, or debris is not

permitted on any surface in or around the work area. Clean work area in accordance with EPA approved methods. The Building Owner's industrial hygienist will perform PCM and/or TEM air sampling for clearance purposes in accordance with EPA regulations and as allowed by the State of West Virginia. Perform sampling in an aggressive manner, using fans or similar equipment to create exaggerated air movement during the clearance air sampling. If the airborne fiber concentration is less than the level recommended by EPA/State of West Virginia, the Building Owner or a designated representative may authorize removal of the enclosure. ***The Building Owner's approval of final cleaning and restoration of the work is required.***

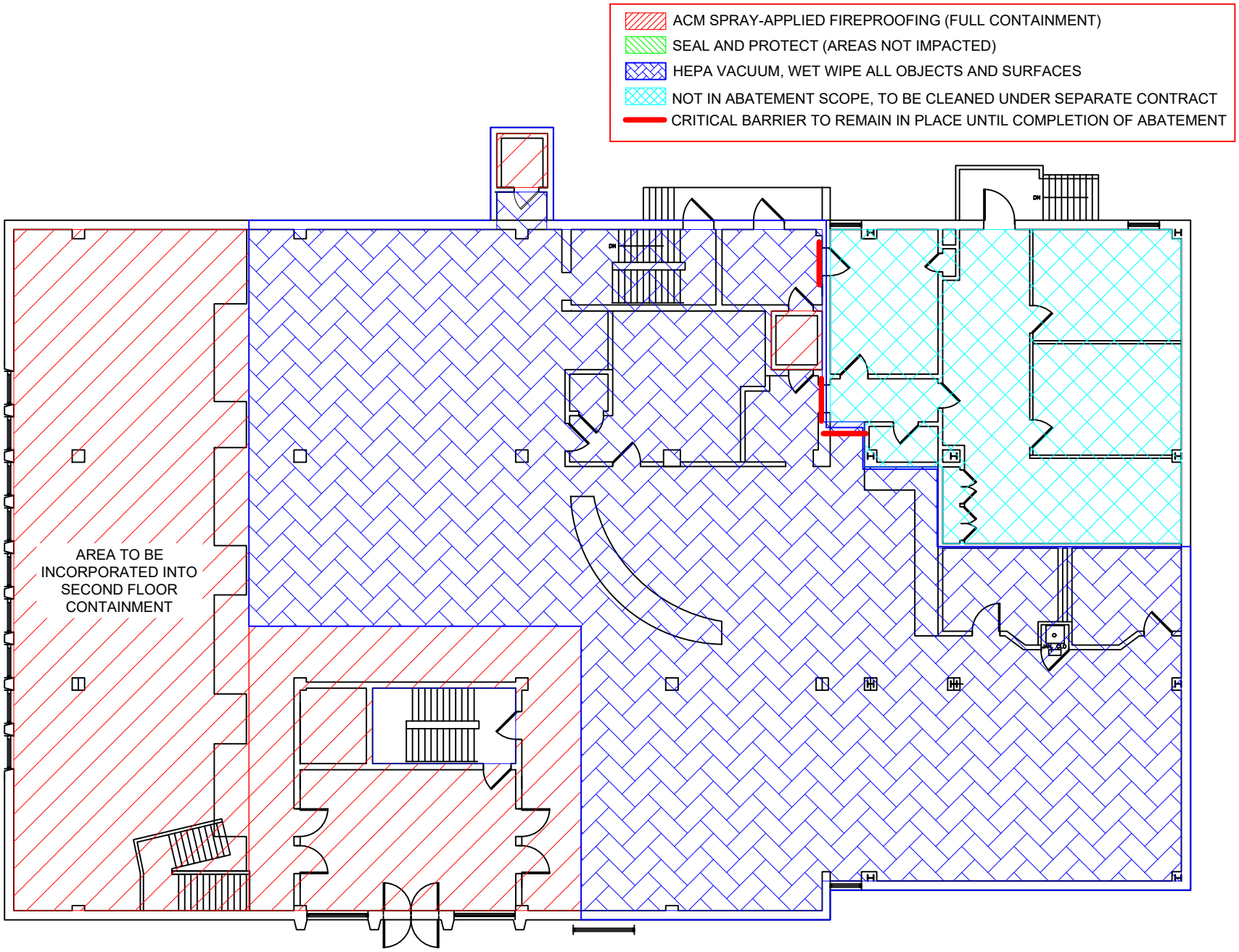
END OF SECTION 02085



ABATEMENT SCOPE OF WORK

GROUND FLOOR

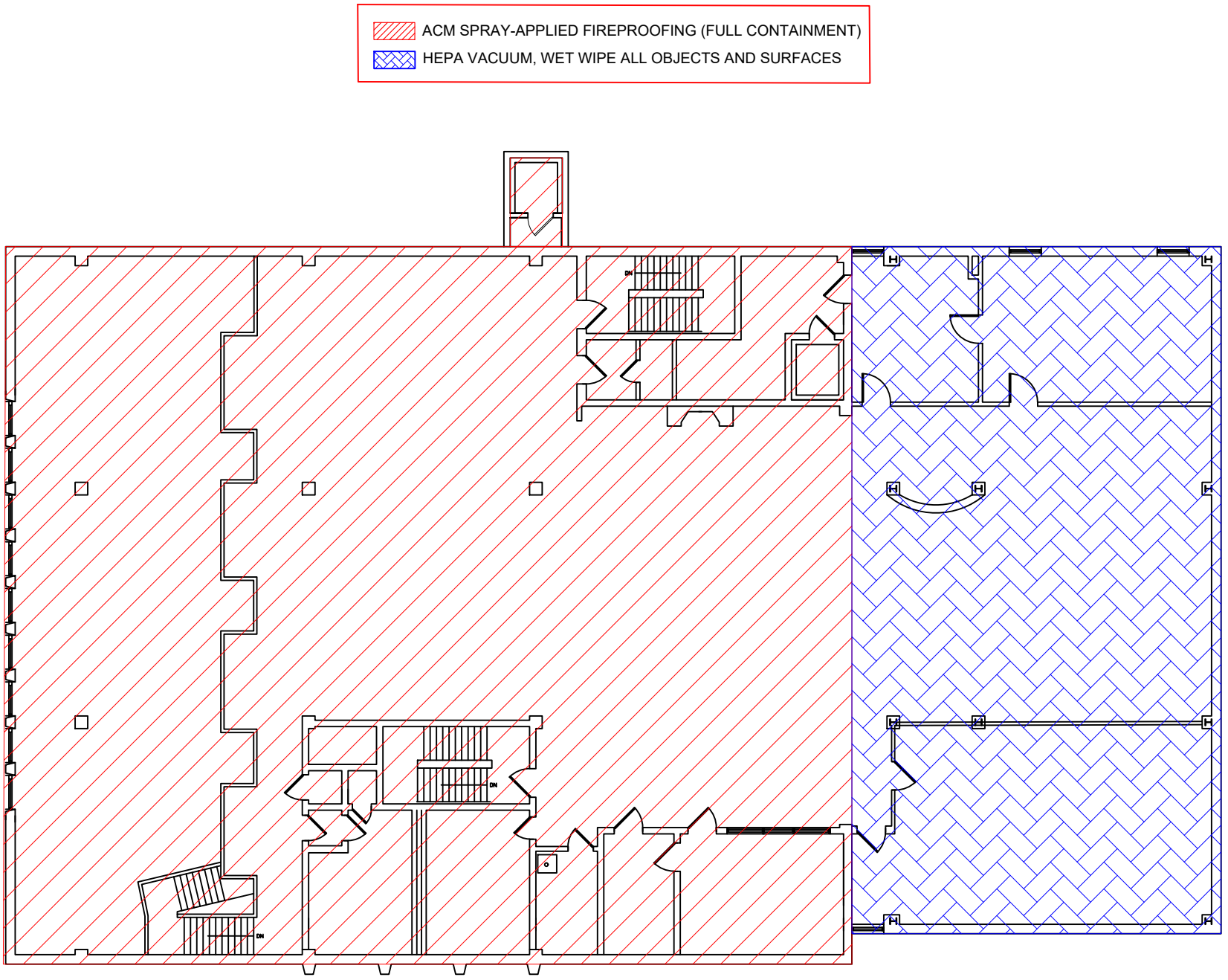
MARTINSBURG-BERKLEY LIBRARY



ABATEMENT SCOPE OF WORK

FIRST FLOOR

MARTINSBURG-BERKLEY LIBRARY



ABATEMENT SCOPE OF WORK

SECOND FLOOR

MARTINSBURG-BERKLEY LIBRARY