Addendum #01 for RFB 0919335095

Project Name: IVH Sheeler and Loftus Remodel Phase 2

RFB #:0919335095

Date: 2/27/2019

Bids Due: **March 7, 2019 at 2:00 PM**

Acknowledge receipt of this Addendum on the proposal response. Failure to do so may subject firm to disqualification.

Addendum #1:

- Cover Page – Table of Contents, Clarifications and Questions (2 pages)
- Exhibit A – Meeting Minutes and Sign-In Sheet (3 pages)
- Exhibit B – Asbestos Specification (36 pages)
- Exhibit C – ACM Materials Map (1 page)

1) Clarifications:

   a) Bid Packages #1 and #3 will provide dumpsters for their scope of work. Bid Package #2 will provide dumpsters for all other bid packages.

   b) Bid Package #2 is responsible for new spandrel glass at existing windows. Existing windows are currently covered by drywall on the interior face and sheet metal on the exterior face. Bid Package #2 is responsible to remove exterior sheet metal and install spandrel glass into existing frames. Condition of the existing frames will be reviewed once sheet metal is removed and owner will determine if new frames will be installed. Installation of new frames to be included as part of alternate #1.

   c) Bid Package #2 includes all interior temporary protection and partitions.

   d) Existing coiling counter door to be removed and turned over to Owner.

   e) Suspended ceiling to be removed in Loftus corridor. Suspended ceiling in Sheeler is to remain except in Office S157.

   f) Existing floor tile and door caulking tested positive for asbestos.

2) Questions:

Q: Are Davis Bacon wages required for this project?
A: Davis Bacon wages **are not** required for this project.

Q: What is the overall budget for this project and is there a budget for each bid package?
A: The overall construction budget is $364,000. The approximate budget for each bid package is as follows:

BP #1 - $45,000
BP #2 - $95,000
BP #3 - $95,000 – Includes $5000 allowance
BP #4 - $50,000
BP #5 - $10,000
BP #6 - $35,000

End of Addendum #1

February 25, 2019 at 1:00 PM

Owner/DAS/CM Team Introductions:
Iowa Department of Administrative Services (DAS) – Brad Tonyan
Iowa Veterans Home (IVH) – David Haines
Construction Manager – DCI Group – Michael Steen
Designer – TSP – David Schulze
DAS Purchasing Agent – Steve Oberbroeckling

General Project Description/Overview:
Remodel of interior finishes at the Sheeler & Loftus building, including abatement of flooring, wall demo, ceiling removal, new ACT, flooring and paint. Project also includes exterior masonry repairs to the Loftus building, including tuckpointing and removal and reinstallation of existing brick.

- There is a masonry allowance of $5,000 to cover additional repairs.
- Two unit prices have been requested for the masonry work.
    - Unit Price #1 – Additional Brick Removal and Replacement
    - Unit Price #2 – Additional Tuck-Pointing
- There are (4) alternates for this project
    - Alt #1 – New Frames at Spandrel Glass
    - Alt #2 – Extend Nurse Call Station to Loftus Basement Restrooms
    - Alt #3 – Replace Northwest Sheeler Clinic Sliding Aluminum Entrance Doors
    - Alt #4 – New Bumper and Aluminum Retainer

Bid Package Process:
Overview of Instructions to Bidders – DCI Group
Bid Packages:

1) BP #1 – Abatement – Includes removal of existing carpet and base installed over tile. Tile and mastic are to be removed and floor to be cleaned and ready for installation of new flooring.
2) BP #2 – General Construction – Includes interior wall and ACT demolition. BP also includes glazing scope and mechanical scope along with interior finishes to walls and new ACT ceiling.
3) BP #3 – Masonry
4) BP #4 – Flooring
5) BP #5 – Electrical – Includes all electrical, communication, security and fire alarm scope. Bid Package also includes new light fixtures in dropped ceiling.
6) BP #6 – Fire Suppression

BIDS DUE: Thursday, **March 7th, 2019** at 2:00 PM

MAKE SURE IT IS SUBMITTED TO DAS AS THE REQUEST FOR PROPOSALS READS

1. Proposal Process
    a. All questions after this meeting and prior March 1st, 2019, to be submitted to Steve Oberbroeckling at steve.oberbroeckling@iowa.gov. Do not contact DAS, TSP or DCI Group directly for questions or clarifications.
2. Schedule
    a. Questions due **March 1st, 2019** by 2:00 PM CST
    b. An addendum will be issued to incorporate minutes and sign-in sheet from this Pre-Proposal Meeting.
    c. Final addendum will be issued no later than **March 5th, 2019** by 2:00 PM CST or no later than 48 hours prior to proposals being due.
    d. Bids due **March 7th, 2019** by 2:00 PM CST
    e. Tentatively an NOI will be issued by March 11th, 2019
    f. Anticipated construction work to take place May 6th, 2019 thru September 4th, 2019.

i. A scheduling meeting (Pull Plan Schedule) will be held shortly after execution of contracts to further develop the construction schedule. All prime contractors, subcontractors, and key suppliers shall attend.
ii. One week prior to this meeting, contractors shall provide a preliminary schedule of their activities with locations and activities of their subcontractors with durations and sequencing.

Scope of Work Overview:

1. Administrative
    a. This RFB will result in one successful proposal per bid package.
    b. Agreement between the Owner and Contractor will be a modified ConsensusDocs 802
    c. EADOC – State of Iowa project management software
        i. No cost to the contractor
    d. Pre-construction meetings and submittals.
        i. Construction kick-off meeting will be scheduled after all bid packages have been awarded.
        ii. Prime contractors shall submit a submittal schedule within five business days of receipt of Owner/Prime Contractor Agreement. See section 01 1200.16 for requirements. A template with A/E identified submittals will be provided to contractors.
2. Construction
    a. Work hours will be 7:00 AM to 5:00 PM Monday-Friday. – Contractors will need to provide 48hrs notice for any work outside of these hours, including weekend work.
    b. All areas shall be cleaned and put back to existing conditions prior to substantial completion.
        i. Bid Package #1 and Bid Package #3 to provide dumpster for their scope of work.
        ii. Bid Package #2 to provide dumpster for all other bid packages.
        iii. Contractor shall ensure construction debris is fully contained within temporary enclosures.
    c. Bid Package #2 will provide temporary toilet facilities for all bid packages.
    d. Staging and storage of materials will need to be coordinated with DCI Group/DAS
    e. Contractor shall maintain accurate as-built construction records throughout the project.
    f. Daily logs/Weekly Report/Safety Meetings and meeting requirements.
    g. Onsite supervision by Prime Contractor is required at all times when work by that contractor or their subcontractors/suppliers is taking place.
3. Close out
    a. Provide complete, clean, and legible copies of the as-built construction records to DCI Group upon completion of work. Electronic and hard copies of all O&M's and as-built drawings to be submitted. Refer to spec. section 01 7700 – Closeout Procedures for more details.

State Rules

1. No background checks will be required for this project.
2. It is of the utmost importance to show respect and courtesy to all staff at all times.
3. Clean all debris, materials, and bring all finishes back to existing conditions in the area they were working in prior to moving to the next area.
4. No smoking or smokeless tobacco use onsite.

Open Discussion

1. Sheeler space will be unoccupied during construction activities.
2. Bid Package #2 shall remove existing ceiling mounted tables in Loftus Day Room
3. Alternate #3 – New Sliding Doors to have recessed floor track to meet ADA requirements
4. Bid Package #2 to remove existing handrail and bumper in Loftus corridor along with suspended ceiling.

DCI GROUP
DESIGN + CONSTRUCTION INTEGRATION

Project Name: Sheeler & Loftus Remodel – Phase 2

Meeting Purpose: Pre-Bid Meeting

Date: February 25th, 2019 at 1:00 PM

Attendees

Initials	Name	Company	Phone Number	E-Mail Address
DHA	David Haines	IVH	515-753-4411	david.haines@ivh.state.ia.us
	Stacey Duden	IVH		stacey.duden@ivh.state.ia.us
	Bradley VanBaale	IVH		bradley.vanbaale@ivh.state.ia.us
	Brad Tonyan	DAS	515-360-7718	brad.tonyan@iowa.gov
	David Schulze ✓	TSP	641-752-3930	schulzdd@teamtsp.com ✓
✓	Michael Steen	DCI Group	515-975-8348	michaels@dcigroup-us.com
GA	Garrett Arganbright	DCI Group	641-757-9791	garretta@dcigroup-us.com
	BRIAN RUDKIN	ESA	515-[illegible] 5289	BRIAN.RUDKIN@ESASITE.COM
	JOHN A. MAHLSTEDT	HAY CONSTRUCTION	641-752-3551	john@hayconst.com
	DAVE WARFF	APEX CONST SOLUTIONS	515-720-5096	MHENSON@APEXCSIOWA.COM
	JEFF HARCLERODE	REW SERVICES	515-259-0705	JEFF@REWIOWA.COM
	Kevin Foster	Controlled Asbestos	515-344-1714	kfoster@llinsulation.com

P.O. Box 661
410 Main Street
Slater, IA 50244-0661
800-383-3400
Fax: 515-685-2236
www.impact7g.com
info@impact7g.com

SPECIFICATIONS FOR ASBESTOS REMOVAL

IOWA VETERANS HOME – SHEELER BUILDING

1301 SUMMIT STREET

MARSHALLTOWN, IOWA 50158

CAULK, FLOOR TILE, & MASTIC

PRE-BID WALK THROUGH: FEBRUARY 25, 2019 @ 1:00 P.M.

BIDS DUE: MARCH 7, 2019 @ 2:00 P.M.

P.O. Box 661
410 Main Street
Slater, IA 50244-0661
800-383-3400
Fax: 515-685-2236
www.impact7g.com
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TABLE OF CONTENTS

Specifications
Prepared By

David D. Lester
Industrial Hygienist
Impact7G, Inc.
Accredited by the State of Iowa for Project Design

I. SCOPE OF WORK AND PLANS

A. The scope of this project is the removal of the asbestos containing caulk, floor tile, and mastic in the removal areas as delineated in the scope of work. The work is as follows:

The contractor's competent person is responsible for conducting an initial exposure assessment prior to beginning work. This initial exposure assessment will be the basis for determining appropriate respiratory protection.

Estimated quantities provided in the summary are for reference only and are in no sense warranted or binding. It is the responsibility of the contractor to field verify prevailing conditions in order to determine the actual amounts of material and extent of area affected by the summary and the specifications. No additions to the contract sum will be allowed for additional amounts of ACM discovered that amounts to less than ten percent (10%) of the total amount of ACM listed in the specification. Any discrepancies noted between the summary and observed conditions must be brought to the attention of the owner prior to submitting a bid. Such discrepancies may be resolved by addenda.

This specification reflects the laws and regulations and the enforcement of those regulations at the time of writing. Impact7G, Inc. will not be held responsible for changes in the regulations, or changes in the enforcement of those regulations after the time this specification was written.

I. SCOPE OF WORK AND PLANS (CONTINUED)

DOOR FRAME CAULK REMOVAL

Remove the asbestos containing door frame caulk as listed below. All asbestos removal work is to be done as per this specification. The door frame caulk is to be removed in an intact manner. The contractor is to place a layer of 6 mil poly on the floor beneath where the door frame caulk is to be removed.

The asbestos containing door frame caulk is to be wetted during removal. The asbestos containing material must immediately be placed in six mil poly bags or double wrapped with two layers of six mil poly with the appropriate OSHA, DOT, and waste generator labels affixed. The asbestos containing material is to be disposed of at an approved landfill.

APPROXIMATE AMOUNTS OF ASBESTOS CONTAINING DOOR FRAME CAULK

ROOM S157	35 LF

The abatement contractor is responsible for the collection and analysis of the air samples listed in the SPECIAL CONDITIONS section of this document. Impact7G, Inc, will be responsible for collection and analysis of final clearance air samples.

FLOOR TILE AND MASTIC REMOVAL

Remove the asbestos containing floor tile and mastic as listed below. All asbestos removal work is to be done as per this specification. Critical barriers are to be applied as described in this specification. The containments must have a minimum of four air changes per hour and a differential pressure of 0.02 column inches of water. A full three chamber decontamination unit must be available on site.

The asbestos containing floor tile and mastic is to be wetted during removal. The asbestos containing material must immediately be placed in six mil poly bags with the appropriate OSHA, DOT, and waste generator labels affixed. The asbestos containing material is to be disposed of at an approved landfill.

If the floor tile and mastic is under an immovable object or wall, the abatement contractor is to remove the tile and mastic evenly with the edge of the object or wall. The raw edge shall be encapsulated.

APPROXIMATE AMOUNTS OF ASBESTOS CONTAINING FLOOR TILE & MASTIC

ROOM S157	4650 SF
ROOM S152	875 SF

The abatement contractor is responsible for the collection and analysis of the air samples listed in the SPECIAL CONDITIONS section of this document. Impact7G, Inc, will be responsible for collection and analysis of final clearance air samples.

II. SPECIAL CONDITIONS

A. Work shall commence in early May 0f 2019.

B. The caulk contains <1% chrysotile asbestos. The floor tile contains 2% chrysotile asbestos. The materials were sampled on January 28, 2019 by Bradley Davison of Impact7G, Inc., license number 18-0949I.

C. The work shall be scheduled so as to cause minimal interference with the work in and around asbestos removal area.

D. Water, electricity, and sanitary facilities are available on-site. The contractor is responsible for providing hook-ups and scheduling the use of facilities so as not to interfere with other work at the site.

E. Impact7G, Inc. will provide phase contrast clearance of removal areas.

F. The Contractor is responsible for collecting the necessary information required for the State of Iowa and DNR notifications.

G. Equipment and materials are to be stored in an area designated by the Owner. All equipment and materials are to be removed from the areas used by the public at the end of each work shift.

H. The abatement contractor will be responsible for collecting air samples according to the following schedule.

Representative 8 hour TWA personal air samples. 1 air sample for each 4 asbestos abatement workers is required.

1 area air sample near each removal area per day.

1 clean room air sample per day.

1 HEPA exhaust air sample per day.

1 short term excursion limit air sample for each type of removal per day.

These air samples must be analyzed by an independent laboratory and the results furnished to the owner periodically during the course of the removal project.

II. SPECIAL CONDITIONS

I. The contractor is responsible for assuring that the forms located in this specification are filled out, signed by the appropriate people, and returned along with a copy of the landfill receipt, to the Owner.

J. Before any removal work takes place, the contractor must provide copies of the following items to the Owner.

State of Iowa notification.

Iowa Department of Natural Resources notification.

Certificate of Insurance.

Current contractor's license to remove asbestos.

State of Iowa worker cards for all workers to be used on the project.

III. QUALIFICATIONS

A. Each bidding contractor shall hold a license from the Iowa Division of Labor permitting the contractor to remove or encapsulate asbestos.

B. Each bidding contractor shall submit proof that his competent person and all workers have met State of Iowa accreditation standards.

C. The Bidder shall be able to submit proof of prior experience on at least three asbestos abatement projects similar to this project at the request of the Owner.

D. The Bidder shall submit a notarized statement, signed by an officer of the Company, containing the following information:

1. Any citations issued by federal, state or local regulatory agencies. Additional information relating to these citations may also be requested.

2. Any penalties or fines levied due to non-completion of work in scheduled time, or due to non-compliance with project specifications.

3. Any instance in which an asbestos-related contract was terminated, and reasons for termination.

E. The contractor must insure that all asbestos abatement personnel to be used on this project are employees of the contractor. The contractor must further insure that no subcontractors will be used for the asbestos abatement portion of this project.

F. The Contractor must insure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, origin, age, or disability.

G. All employees of the Bidder must:

1. The supervisor shall have a valid Iowa Supervisor Certificate for asbestos abatement work.

2. Workers shall have a valid Iowa Worker Certificate for asbestos abatement work.

3. Be skilled and have experience in at least two asbestos abatement projects prior to this project.

IV. PRE-CONSTRUCTION MEETING

A. After the contract has been executed, the Contractor and supervisory personnel shall attend a pre-construction meeting.

B. At this conference, the asbestos abatement Contractor shall present, in detail, the following:

1. Abatement Plans: These plans shall include: drawings of the decontamination facilities and their locations, work area isolation plan with layout of engineering controls (e.g., HEPA filters, etc.); security program; routing plan for removal of contaminated material from the building; and a listing of all tools, equipment, and supplies proposed for use in the abatement program. No abatement work shall be performed without written approval of Abatement Plans.

2. Copy of current State of Iowa license to remove asbestos.

3. Evidence of State of Iowa Division of Labor notification.

4. Evidence of Iowa Department of Natural Resources notification.

5. List of supervisor and employees who will participate in the project along with State of Iowa certifications and State of Iowa accreditation for asbestos removal.

6. Evidence that required permits, site location, and arrangement for transport and disposal of asbestos-containing waste materials have been made.

7. Proof of insurance. Includes a complete description of the policy.

8. A list of the names of the Sub-Contractors or other persons or organizations (including all those who are to furnish all materials or equipment) proposed for such portions of the work as may be designated in the bidding requirements, or if none are so designated, the names of the Sub-Contractors proposed for the principal portions of the work.

V. DEFINITIONS

ABATEMENT: Procedures to control fiber release from asbestos containing materials. Includes removal, encapsulation, enclosure and repair.

ACBM: Asbestos Containing Building Material.

ACM: Asbestos Containing Material

ACCREDITED: Refers to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Toxic Substance Control Act.

ADDENDA: are written or graphic instruments issued by the owner prior to the execution of the Contract which modify or interpret the Bidding Documents by addition, deletions, clarifications or corrections.

ACGIH: American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Building D-5, Cincinnati, OH 45211.

AGGRESSIVE METHOD: Removal or disturbance of building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact ACM.

AIHA: American Industrial Hygiene Association, 475 Wolf Ledges Parkway, Akron, OH 44311.

AIR LOCK: A system for permitting passage with minimal air movement between a contaminated and an uncontaminated area.

ALTERNATE BID: (or alternate) is an amount stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the alternate bid.

AMENDED WATER: Water to which a surfactant has been added.

ANSI: American National Standards Institute, 1430 Broadway, New York, NY 10018.

ASBESTOS CONTAINING WASTE MATERIAL: Asbestos containing material or asbestos contaminated objects requiring disposal.

ASTM: American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

AUTHORIZED VISITOR: The Building Owner (and any designated representatives) and any representatives of a regulatory or other agency having jurisdiction over the project.

BASE BID: is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base bid.

V. DEFINITIONS (CONTINUED)

BID: is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.

BIDDER: A person or entity who submits a bid.

BIDDING DOCUMENTS: Include the Advertisement or Invitation to Bid, Instructions to Bidders, the bid form, other sample bidding and contract forms, and the proposed Contract Documents including Addenda issued prior to receipt of bids.

BRAND METHOD: A differential pressure containment system that does not infringe on the patent rights of GPAC, Inc.'s Reduced Pressurization and Filtration System.

BUILDING OWNER: The Department of Administrative Service or an authorized representative.

CEILING CONCENTRATION: The concentration of an airborne substance that shall not be exceeded.

CLASS I ASBESTOS WORK: Activities involving the removal of TSI and Surfacing ACM and PACM.

CLASS II ASBESTOS WORK: Activities involving the removal of ACM which is not TSI 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.

CLASS III ASBESTOS WORK: Repair and maintenance operations, where ACM, including TSI and surfacing material is likely to be disturbed.

CLASS IV ASBESTOS WORK: Maintenance and custodial activities during which employees contact ACM and PACM, and activities to clean up waste and debris containing ACM and PACM.

CLEAN ROOM: An uncontaminated area which is a part of the worker decontamination containment system with provisions for storage of workers' street clothes and clean protective equipment.

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. In addition, for Class I and Class II work who is specially trained in a training course which meet the criteria of EPA's Model Accreditation Plan for project designer or supervisor, or its equivalent and, for Class III and Class IV work, who is trained in an Operations & Maintenance (O&M) course developed by EPA.

CONTRACT DOCUMENTS: consist of the Owner/Contractor Agreement, the Conditions of the Contract (General and Supplementary Conditions), the Drawings, the Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract.

V. DEFINITIONS (CONTINUED)

CONTRACTOR: The individual and/or business with Building Owner arranges to perform the asbestos abatement.

CURTAINED DOORWAY: A device to allow passage from one room to another while permitting minimal air movement between the rooms, by placing two overlapping sheets of plastic in doorway with both secured at top and opposite vertical edges. This doorway is to be used only by GPAC, Inc. approved licensees.

DECONTAMINATION CONTAINMENT SYSTEM: A series of connected rooms separated from the work area and from each other by airlocks, for the decontamination of workers and equipment.

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

DISTURBANCE: Contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM or PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained on one glove bag or waste bag which shall not exceed 60 inches in length and width.

ENCAPSULANT: A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

BRIDGING ENCAPSULANT: an encapsulant that forms a discrete layer on the surface of an in situ asbestos matrix.

PENETRATING ENCAPSULANT: an encapsulant that is absorbed by the in situ asbestos matrix without leaving a discrete surface layer.

ENCLOSURE: An air tight, impermeable barrier made of enclosure material to control release of asbestos fibers from contaminated building surfaces.

ENCLOSURE MATERIAL: Polyethylene sheeting or spray applied water-based strippable coating.

EQUIPMENT ROOM: A contaminated area which is part of the worker decontamination containment system with provisions for storage of contaminated clothing and equipment.

EPA: U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460.

FRIABLE ASBESTOS: Asbestos containing material which can be crumbled to dust (when dry) under hand pressure.

GPAC, Inc.: Patent holders of the Reduced Pressurization and Filtration System.

V. DEFINITIONS (CONTINUED)

HVAC: Heating, ventilation and air conditioning system.

HEPA FILTER: A High Efficiency Particulate Air filter capable of removing particles .3 microns in diameter with 99.97% efficiency.

HEPA VACUUM: A vacuum system equipped with HEPA filtration.

HOMOGENEOUS AREA: An area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

NEGATIVE EXPOSURE ASSESSMENT: A demonstration by the employer, that the employee exposure during an operation is expected to be consistently below the PEL's.

NESHAP: The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

NIOSH: The National Institute for Occupational Safety and Health, CDC-NIOSH, Building J. N.E. Room 3007, Atlanta, GA 30033.

NIST: National Institute of Standards and Technology.

NPE: Negative Pressure Enclosure

OSHA: The Occupational Safety and Health Administration, 200 Constitution Avenue, Washington, D.C. 20210.

PACM: Presumed asbestos containing material.

PAT PROGRAM: Proficiency Analytical Testing Program.

PEL: Permissible Exposure Limit, for asbestos currently 0.1 f/cc for an 8 hour TWA.

PROTECTION FACTOR: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

REMOVAL: The stripping of any asbestos containing material from surfaces or components of a facility.

REPAIR: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM attached to structures or substrates.

V. DEFINITIONS (CONTINUED)

SHOWER ROOM: A room between the clean room and the equipment room in the worker decontamination containment with hot and cold or warm running water controllable at the top and suitably arranged for complete showering during decontamination.

STAGING AREA: Either the holding area or some area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

STRIP: To take off friable asbestos materials from any part of the facility.

SURFACTANT: A chemical wetting agent added to water to improve penetration.

TIME WEIGHTED AVERAGE (TWA): The average concentration of a contaminant in air during a specific time period.

TSI: Thermal System Insulation.

UNIT PRICE: is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed Contract Documents.

VISIBLE EMISSIONS: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed, uncombined water vapor.

WASTE GENERATOR: The individual and/or business who performs the asbestos abatement.

WASTE TRANSFER AIRLOCK: A decontamination system utilized for transferring containerized waste from inside to outside of the work area.

WET CLEANING: The process of eliminating asbestos contamination from building surfaces and objects by using cloth, mops, or other cleaning utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

WORK AREA: Designated rooms, spaces, or areas of project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination containment system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination containment system.

VI. APPLICABLE STANDARDS AND GUIDELINES

A. The following standards, regulations, codes and other applicable documents form a part of this specification:

1. Title 29 Code of Federal Regulations Section 1910.1001, General Industry Standard for Asbestos.

2. Title 29 Code of Federal Regulations Section 1926.1101, Construction Industry Standard for Asbestos.

3. Title 29 Code of Federal Regulations Section 1910.134, General Industry Standard for Respiratory Protection.

4. Title 29 Code of Federal Regulations Section 1910.2, Access to Employee Exposure and Medical Records.

5. Title 29 Code of Federal Regulations Section 1910.1200, Hazard Communication Rule.

6. Title 40 Code of Federal Regulations Part 61 Subpart A and Subpart M (revised Subpart B), National Emissions Standard for Hazardous Air Pollutants.

7. Iowa Administrative Code Section 875 Chapter 155, Asbestos Removal & Encapsulation.

8. Title 49 Code of Federal Regulations Part 171 - 180, Department of Transportation, Transportation of Hazardous Waste.

B. The most recent edition of any relevant regulation, standard, document or code shall be in effect. Where conflict among the requirements or with these Specifications exists, the most stringent requirements shall be utilized.

VII. NOTIFICATIONS AND SUBMITTALS

A. The Contractor will provide the following:

1. Notification in accordance to 40 CFR Part 61.145 at least ten (10) days prior to the beginning of work. This notification must be sent to the Iowa Department of Natural Resources

2. Notification in accordance of the Iowa Administrative Code Section 875 Chapter 155.5 Ten-day notices.

3. State of Iowa asbestos certifications for all workers to be involved in abatement and State of Iowa accreditation for the competent person and all abatement workers.

4. Physician's statement stating that personnel to be involved are physically able to work using respirators.

5. Manufacturer's certification that HEPA vacuums and negative pressure ventilation units conform to ANSI 29.2-79.

6. NIOSH and manufacturer's certification of HEPA filtration capabilities for all cartridges and filters used.

7. A list of personnel authorized to enter the work site.

8. A copy of the contractor's authorization to use the GPAC Inc.'s patented system if the alternative Brand system is not used.

VIII. HAZARD COMMUNICATION

A. The Owner will provide the following:

1. Prior to beginning work, will identify the presence, location, and quantity of ACM and/or PACM at the work site. The ACM and PACM will include all TSI and surfacing material on buildings components or substrates constructed no later than 1980. Resilient flooring material installed not later than 1980 will also be identified as ACM.

2. Notification in writing as to the presence, location, and quantity of ACM to the following persons or their authorized representatives:

    a. Prospective employers applying or bidding for work whose employees can reasonably be expected to work in or adjacent to areas containing this ACM.
    b. Employees of the owner who will work in or adjacent to areas containing this ACM.
    c. On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing this ACM.
    d. Tenants who will occupy areas containing this ACM.

B. The abatement contractor is responsible for the following:

1. Before work begins, the contractor must identify the presence, location, and amount of ACM.

2. The contractor is responsible for informing the following persons of the locations and amounts of ACM and/or PACM present, and the precautions to be taken to insure that airborne asbestos is confined to the area.

    a. Owners of the building or facility.
    b. Employees who will perform the work and employers of employees who work and/or will be working in adjacent areas.

3. Within ten working days of the completion of the work, the contractor shall inform the Owner and employers of employees who will be working in the area, the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results.

4. If additional ACM and/or PACM is discovered on a worksite, the contractor shall, within 24 hours, inform the owner and the employers of employees working at the work site of the amount and location of the newly discovered material.

IX. SITE SECURITY

A. The work area shall be restricted to only authorized personnel.

B. Unauthorized entry to the work area shall be reported to the Building Owner.

C. Contractor shall have control of the site security during abatement in order to protect the work site and equipment.

D. A log book shall be maintained in the clean room area of the worker decontamination system. Anyone who enters the work area must record name, affiliation, time in and time out for each entry.

X. EMERGENCY PLANNING

A. An emergency plan shall be developed prior to beginning the abatement project.

B. The emergency plan will be written and available at the work site.

C. Personnel shall read and sign off on these procedures indicating receipt and understanding.

D. The Contractor shall establish emergency exits from the work area.

E. The Contractor shall be prepared to administer first aid to injured personnel at the job site.

F. Before beginning actual abatement activities, local emergency personnel will be notified as to the dangers of entering the work area. The Contractor shall help form a plan of action should emergency personnel be required to enter the work area.

G. Telephone numbers of all emergency personnel and the location of the nearest phone shall be posted at the job site.

XI. MATERIALS

A. The Contractor shall provide all materials and supplies necessary to complete the project.

B. Store all materials so as to prevent damage or contamination.

C. Damaged or deteriorating materials shall not be used.

D. Containment materials shall be a minimum of 4 mil thick for walls and covering stationary objects. Containment materials for floors and other uses shall be at least 6 mil in thickness.

E. Disposal bags shall be a minimum of 6 mil in thickness, pre-printed with labels as required by 40 CFR 61.22(j)(3)(i)(C) and 49 CFR Part 172.

F. Disposal drums shall be metal or fiberboard with locking ring tops. Stick on labels conforming to (E) shall be applied.

G. Warning signs as specified by OSHA 29 CFR 1910.1001(j)(1)(ii) shall be used.

H. Surfactant shall be a 50/50 mixture of polyoxyethyleneether and polyoxyethylene ester, or equivalent, mixed 1 fluid ounce to 5 gallon proportion, or as specified by the manufacturer.

XII. EQUIPMENT

A. General Equipment

1. The Contractor shall supply all tools and equipment necessary to complete the project.

2. A sufficient quantity of HEPA filtered air filtration units shall be supplied.

3. Full body disposable protective clothing impenetrable to asbestos shall be provided to all authorized personnel as needed.

4. Additional approved safety equipment shall be provided as needed.

5. A sufficient supply of scaffolds, ladders, and hand tools, and other tools shall be provided as needed.

6. HEPA filtered vacuums shall be available as needed during the project.

7. Rubber or plastic dustpans, shovels and squeegees shall be provided for cleanup in the work area.

B. Respiratory equipment

1. Respiratory protection in compliance with applicable OSHA regulations shall be provided.

2. For Class I asbestos work, the abatement workers and supervisors shall wear, at a minimum, powered air-purifying respirators with appropriate HEPA filters until such time that personal and short term excursion limit samples show airborne asbestos levels of 0.3 f/cc or less. After these levels are achieved, the abatement workers and supervisors may switch to 1/2 face negative pressure respirators. If airborne asbestos levels reach a level of over 0.3 f/cc, PAPR's must again be used.

XIII. EXECUTION

A. Preparation

1. The Contractor shall post signs at all entrances to the job site, or 20 feet from the work area at 30 foot intervals around the perimeter of the job site. 24-hour site security should be provided to eliminate unauthorized entry to the work area.

2. The Contractor will shut off and lock out all electric power feeding the job site. The Contractor will then provide temporary power together with ground fault circuit interrupters to supply the electrical needs of the project. The Owner will provide electrical power.

3. All alterations to the work area for purposes of containment set up or removal shall be the responsibility of the Contractor unless agreed upon previously with the Owner.

4. The Contractor will shut down and lock out all HVAC systems that supply or pass through the work area. Seal all vents with tape and two layers of 6 mil polyethylene.

5. The Contractor will arrange for sanitary facilities for abatement personnel outside the work area and maintain them in a sanitary condition.

6. The Owner will provide water for project purposes.

7. The Contractor will preclean all movable objects in the work area and remove them to an uncontaminated area.

8. The Contractor shall preclean all fixed objects and surfaces in the work area. After precleaning, enclose fixed objects in 4 mil polyethylene sheeting and seal securely with tape. Use the precleaning form in this specification to record the date, method, area, and identity of the supervisor.

9. The Contractor shall seal all openings to the work area with 4 mil polyethylene sheeting and tape.

10. The Contractor shall cover floors in the work area with two layers of 6 mil containment material. Floor material shall extend at least 12 inches up side walls. Seams that may allow leakage will be minimized and staggered.

PRE-CLEANING RECORD

BUILDING NAME: _____

ADDRESS: _____

_____

ASBESTOS PROGRAM MANAGER:_____

DATE:_____

DATE	AREA	TECHNIQUE	SUPERVISOR	INITIAL

XIII. EXECUTION (CONTINUED)

A. Preparation (Continued)

11. The Contractor shall cover walls in the work area with two layers of 4 mil containment material. Wall material shall overlap floor material by at least 12 inches.

12. The Contractor shall provide a worker decontamination system where workers will enter and exit the work area.

13. Containment walls shall be secured adequately to prevent them from falling away from the walls.

14. Walls shall be constructed of wood or metal framing to support barriers in all openings larger than 4' x 8'. A sheathing material (plywood, drywall) of at least 3/8" thickness shall be applied to framing.

15. The clean room shall be adequate for the work crew size and be used for changing into street clothes. Storage of respirators, cartridges, towels and other items should be accommodated. An area for notices and postings should also be considered. Whenever possible, a lockable door shall be used to permit access into the clean room to decrease unauthorized entrance.

16. The shower room shall contain showers with hot and cold running water as well as shampoo and soap. The shower water shall be collected and filtered through a 0.5-1.0 micron filter before being released to the sewer.

17. All waste water that is not disposed of as asbestos waste must be filtered through a 0.5-1.0 micron filter before being released to the sewer.

18. The equipment room shall be used for storage of equipment and tools after being decontaminated. A collection container for disposable clothing should be located in this room.

19. Following completion, allow the containment to stand overnight and inspect.

20. Impermeable drop cloths shall be placed on surfaces beneath all removal activity.

21. At least 4 air changes per hour required in the NPE.

22. A minimum of 0.02 column inches of water pressure differential, relative to outside pressure, shall be maintained within the NPE.

23. Before beginning work within the enclosure and at the beginning of each shift, the NPE shall be inspected and smoke tested for leaks.

XIII. EXECUTION (CONTINUED)

B. Air Filtration and Decontamination Unit Set-up (GPAC)

1. GPAC Reduced Pressurization and Filtration System

a. This system may be used only by contractors that are approved licensees authorized to use this system.

b. The worker decontamination system shall consist of at least a clean room, shower room, and equipment room separated from each other by double layered, curtained doorways. The clean room, shower room, and equipment room must be large enough so that no more than one set of doors can be opened by any one person at any one time.

c. A waste container airlock may be constructed to be used to pass out bagged or barreled asbestos waste. The airlock will be constructed with a curtained doorway with access to the work area, a cleaning area, and another curtained doorway with access to the outside. The waste container airlock shall not be used for entry or exit to the work area.

d. Engage negative pressure ventilation and test the effectiveness of the containment with smoke tubes. Whenever possible, exhaust from negative pressure ventilation shall be vented outside the building or to unoccupied areas. A sufficient quantity of HEPA filtered negative pressure ventilation units shall be supplied to provide one work area air exchange each fifteen minutes.

XIII. EXECUTION (CONTINUED)

C. Air Filtration and Decontamination Unit Set-up (Brand System)

1. Brand Differential Pressure Containment System

a. This system may be used by any contractor that wishes to use it.

b. The worker decontamination system as shown on the following page shall consist of:

A clean room consisting of fixed walls with a rigid louvered door at the exit to the exterior and a rigid gasketed door at the entrance to the shower room with a 12" x 12" HEPA filter mounted between the clean room and shower room.

A shower room with fixed walls and a rigid louvered door at the entrance to the dirty room. The doors in the shower room are to be linked in such a manner as to prevent both doors from opening at the same time.

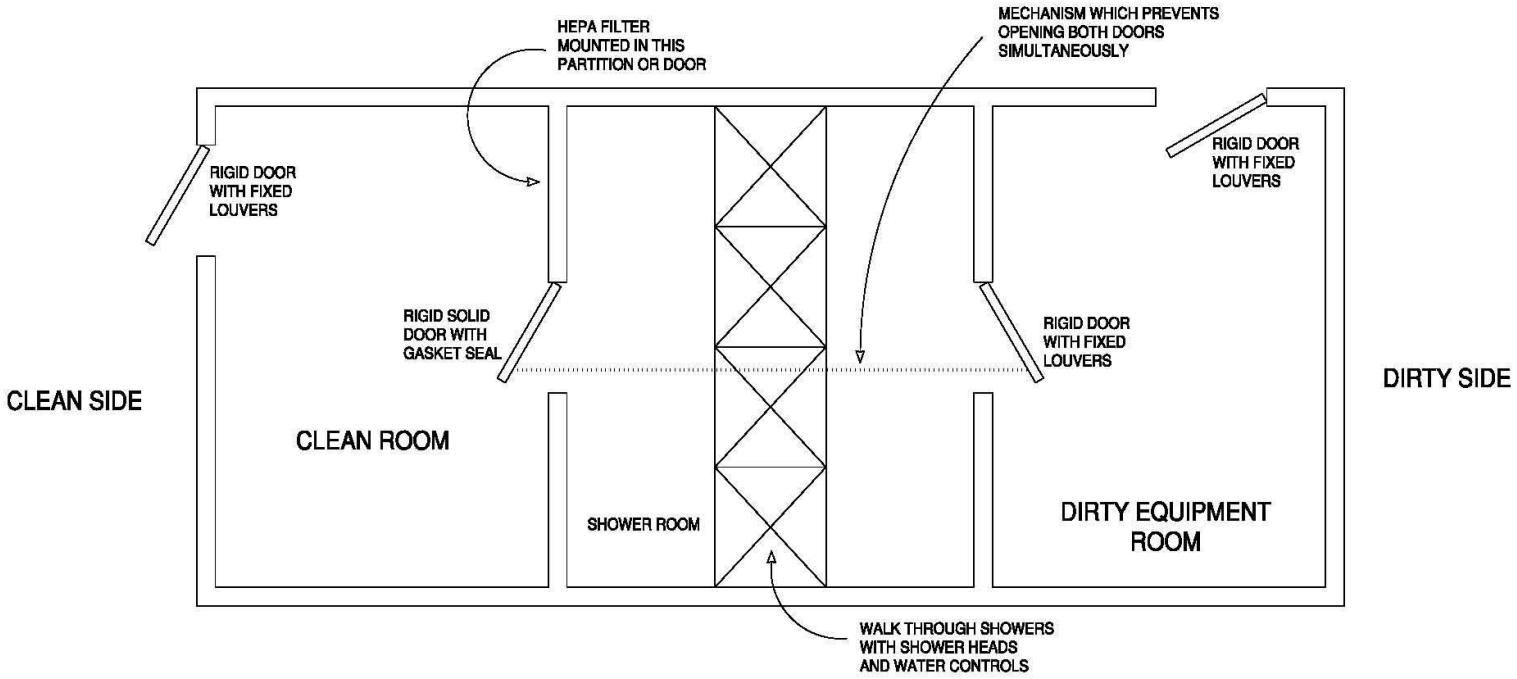
An equipment room with fixed walls and a rigid louvered door to the work area.

c. A waste container airlock may be constructed to be used to pass out bagged or barreled asbestos waste. The airlock is to be constructed in the same manner as the worker decontamination unit above. The waste container airlock shall not be used for entry or exit to the work area.

d. HEPA filtered air is to be exhausted from the work area to the outside in a sufficient quantity to reduce the interior pressure by 0.02 to 0.04 inches of water.

e. Additional air filtration units are to be provided within the work area to filter the total volume of air in the work area four times per hour as preferred by OSHA. The intake and exhaust of these units are to be directed in such a manner as to prevent increased disturbance of asbestos debris in the work area and to prevent damage to the critical barriers.

f. If any hazardous solvent or compound is to be used in the work area, personal protection equipment including Grade D air on type C supplied air respirators shall be used.



PERSONNEL DECONTAMINATION UNIT

USED WITH PERMISSION BY THE BRAND COMPANIES, INC.

PERSONNEL DECONTAMINATION UNIT

AMES ENVIRONMENTAL, INC.

DRAWN BY	mh
APP'D	DL
SCALE	NONE
DRAWING NUMBER	BRAND

XIII. EXECUTION (CONTINUED)

D. Work Place Entry and Exit Procedures

1. All workers and authorized personnel shall enter the work area through the worker decontamination containment system.

2. All personnel who enter the work area must sign the entry log, located in the clean room, upon entry and exit.

3. All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection requirements (including workplace entry and exit procedures) and emergency procedures. A sign-off sheet shall be used to acknowledge that these procedures have been reviewed and understood by all personnel prior to entry.

4. All personnel shall proceed first to the clean room, remove all street clothes and appropriately don respiratory protection and launderable and/or disposable coveralls, head covering and foot covering. Hard hats, eye protection and gloves shall also be utilized if required. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.

5. Before leaving the work area all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and /or wet wiping procedures. Each person shall clean bottoms of protective footwear in the walk-off pan just prior to entering the equipment room.

6. Personnel shall proceed to equipment room where they remove all protective equipment except respirators. Deposit disposable and/or launderable clothing into appropriately labeled containers for disposal and/or laundering.

7. Still wearing respirators, personnel shall proceed to the shower area, clean the outside of the respirators and the exposed face area under running water prior to removal of respirator and shower and shampoo to remove residual asbestos contamination. Various types of respirators will require slight modification of these procedures.

XIII. EXECUTION (CONTINUED)

E. Class II Asbestos Work - Flooring

1. Resilient flooring shall be removed by wetting the sharp point where the material will be cut and during delamination. Rip-up of resilient flooring is prohibited.

2. Mechanical chipping is prohibited unless performed in a NPE.

3. Tiles shall be removed intact unless the employer demonstrates that intact removal is not possible.

F. Class II Asbestos Work - Other

1. The material must be thoroughly wetted with amended water prior to removal.

2. The material shall be removed in an intact manner unless the employer demonstrates that intact removal is not possible.

3. Cutting, abrading, or breaking of these materials shall be prohibited unless the employer can demonstrate that other methods less likely to release asbestos fibers cannot be used.

4. ACM removed, shall be immediately bagged or wrapped, or kept wetted until transferred to a closed receptacle, no later than the end of the work shift.

XIII. EXECUTION (CONTINUED)

G. Work Area Release

1. Following abatement, the work area shall be inspected by the Building Owner. Should any visible residue remain, it will be assumed to be asbestos and the work area will be recleaned by the Contractor and reinspected. Visual inspection form will be signed by Contractor following passing of visual inspection.

2. Following successful completion of the visual inspection, Impact7G, Inc. will conduct aggressive clearance monitoring. Number and placement of clearance samples will be determined by Impact7G, Inc. All clearance samples will indicate concentrations of 0.01 fibers per cubic centimeter (f/cc) or lower with a 95% upper confidence limit for release of the work area for phase contrast analysis.

3. Areas exceeding 0.01 f/cc for phase contrast analysis will be recleaned and retested until satisfactory levels are measured.

4. After acceptable clearance sample levels have been achieved, the containment material may be removed. Exposed surfaces may then be wet cleaned or HEPA vacuumed as needed.

CERTIFICATION OF VISUAL INSPECTION

BUILDING_____

LOCATION_____

_____

CONTRACTOR CERTIFICATION OF VISUAL INSPECTION

The contractor hereby certifies that he has visually inspected the work area (all surfaces including pipes, beams, ledges, walls, ceiling and floor, Decontamination Unit, sheet plastic, etc.) and has found no dust, debris or residue to the best of his knowledge.

by: _____ _____
Signature Date

_____
Print Name

_____
Print Title

XIII. EXECUTION (CONTINUED)

H. Disposal Procedures

1. As work proceeds, containerized waste shall be transported to the authorized disposal location. The hauler of the asbestos containing material must be trained according to the requirements of 49 CFR part 172.

2. All disposal receipts and Chain-of-custody forms shall be delivered to the Owner. The following page is a copy of the Chain-of-custody waste disposal form which includes the names and addresses of the Work Site, Generator (Contractor), Owner, disposal site, the estimated quantity of the asbestos waste and the type of containers used. The form shall be signed by the Generator, the Transporter, and the Disposal Site Operator, as the responsibility for the material changes hands. If a separate hauler is employed, his name, address telephone number and signature should also appear on the form.

3. Containerized waste should be loaded into an enclosed truck lined with 6 mil containment material to prevent contamination during transport to the landfill.

4. Personnel loading or unloading asbestos waste shall wear protective clothing and half-face air purifying respirators.

5. Loading or unloading shall be done so as to not to damage asbestos waste containers.

6. Following unloading, the truck cargo area shall be decontaminated so that no visible residue remains.

7. Copies of the form below are to be completed and provided to the following:

   a. Waste Generator (Contractor)

   b. Transporter

   c. Waste Disposal Site

   d. Owner

WASTE SHIPMENT RECORD

GENERATOR	1. Work site name and mailing address	Owner's name	Owner's telephone number
	2. Operator's name and address		Operator's telephone number
			Waste Generator Number
	3. Waste disposal site (WDS) name, mailing address, and physical site location		WDS telephone number
	4. Name and address of responsible agency		
	5. Description of materials Asbestos, ID # NA 2212, PACKAGING GROUP 111	6. Containers	7. Total Quantity m^3 (yd^3)
	8. Special handling instructions and additional information		
	9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.		
	Printed/typed name and title	Signature	Month Day Year
TRANSPORTER	10. Transporter 1 (Acknowledgment of receipt of materials)		
	Printed/typed name and title	Signature	Month Day Year
	Address & telephone number		
	11. Transporter 2 (Acknowledgment of receipt of materials)		
	Printed/typed name and title	Signature	Month Day Year
	Address & telephone number		
DISPOSAL SITE	12. Discrepancy indication space		
	13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.		
	Printed/typed name & title	Signature	Month Day Year

XIII. EXECUTION (CONTINUED)

I. Monitoring and Testing Procedures

1. If air samples collected outside the work area during abatement indicate fiber concentrations greater than 0.01 f/cc or pre-measured background levels, work shall immediately stop and inspection, repair of barriers, and cleanup will be done.

2. Work shall immediately stop if work area becomes dusty or if the air samples collected inside the work exceed 1.0 f/cc. Work practices will change to lower dust concentration.

3. Air samples must be by an AIHA accredited laboratory and/or one that successfully participates in the NIOSH PAT program.

4. Air sample collection methods must be consistent with criteria set forth by OSHA technical manuals.

J. Clearance Monitoring

1. Clearance monitoring will be performed by Impact7G, Inc.

XIII. EXECUTION (CONTINUED)

K. Restoration and Repairs After Containment Removal

1. Resecure mounted objects removed from their former positions during area preparation activities.

2. Relocate objects that were removed to temporary locations back to their original positions.

3. Reestablish HVAC, mechanical and electrical systems in proper working order. Remove contaminated HVAC system filters and dispose of as asbestos contaminated waste. Decontaminated filter assembly using HEPA vacuums and wet cleaning techniques. Install new filters in HVAC systems.

4. Any damage to the finishes, walls, floors or any other fixtures resulting from the Contractor's actions shall be restored to their original condition at the Contractor's expense.

XIV. SUPPORT ACTIVITIES AND PERSONNEL

A. The Owner will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work.

B. The Owner will carry out the following:

1. Enforce the contract procedures.

2. Agree with the Contractor on pre-abatement conditions of the work area.

3. Inspect the job site.

4. Review work progress.

5. Request, review, and maintain Contractor submittals.

C. The Owner shall have the authority to stop any project activities if they are not being performed in accordance with regulations or the requirements of this procedure.

Certificate of Completion

DAVID LESTER

DOB: 01-15-1961

Issued: 01-29-2018

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

Impact7G, Inc.

certifies that

David Lester

License Type	Number	Expires
PROJET DESIGNER	18-9580	01-19-2019

DIVISION OF LABOR IOWA Asbestos

Michael A. Mauro
Labor Commissioner

has successfully completed and passed the associated examination for the

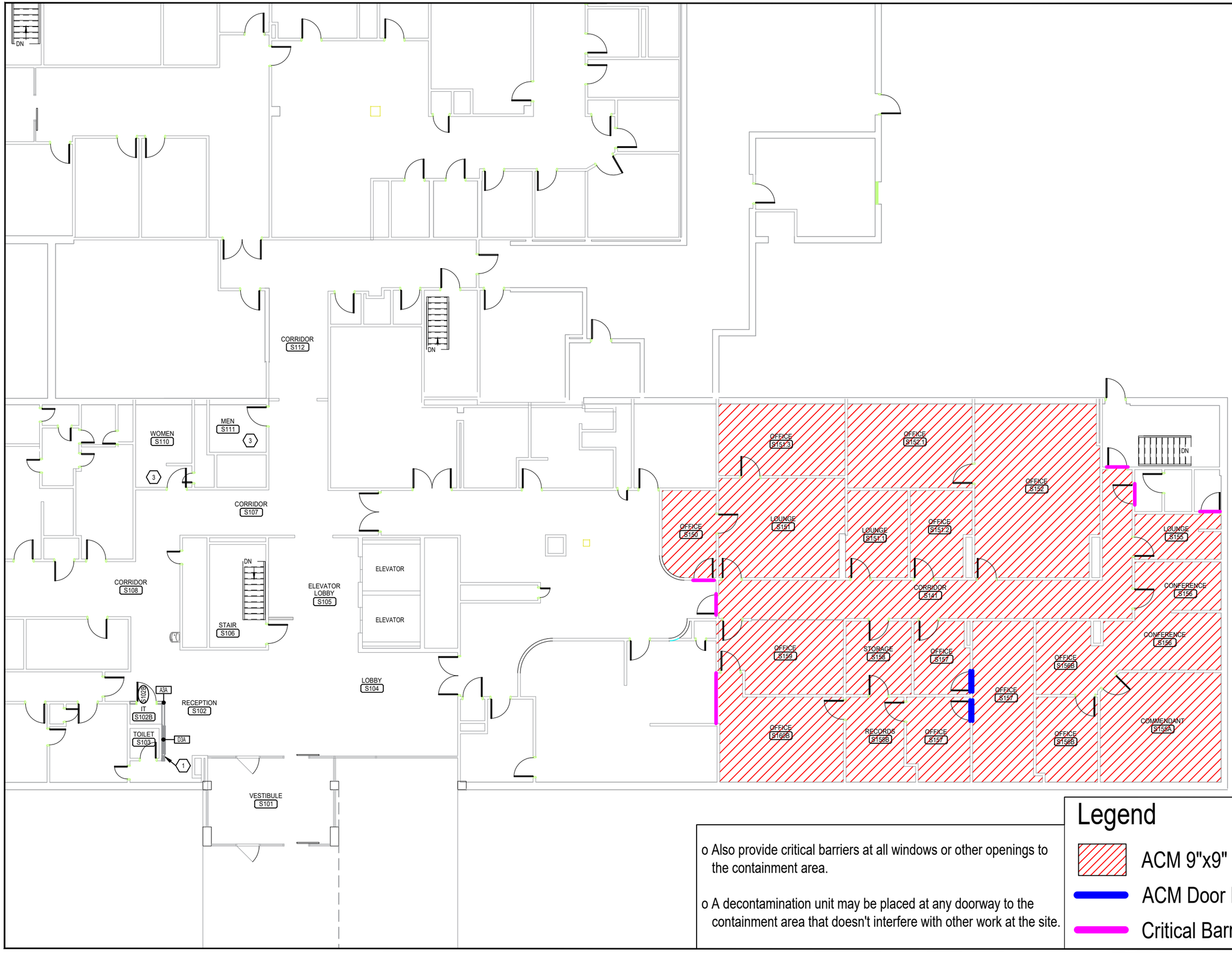
Asbestos Project Designer Annual Review

course accredited by the State of Missouri and conducted in accordance with the requirements of 40 CFR 763. The person receiving this certificate has completed the required training for asbestos certification under TSCA Title II.

IMPACT7G

Course Date: January 19, 2018
Examination Date: January 19, 2018
Expiration Date: January 19, 2019
Course Location: 9550 Hickman Road, Suite 105, Clive, IA
Certificate Number: IAVIII7G_19004

Director of Training
9550 Hickman Road, Suite 105
Clive, IA 50325
515-473-6256



- o Also provide critical barriers at all windows or other openings to the containment area.
- o A decontamination unit may be placed at any doorway to the containment area that doesn't interfere with other work at the site.

Legend

- ACM 9"x9" Floor Tile
- ACM Door Frame Caulk
- Critical Barrier

N

W E

S

IMPACT7G

SHEET TITLE: ACM Homogeneous Materials Map First Floor

JOB DESCRIPTION: Iowa Veterans Home Sheeler Building Marshalltown, Iowa Asbestos Inspection

DATE: 02/21/19

DRAWN BY: TS

CHECKED BY: JR

SCALE: N/A

FILENAME: DAS

PROJECT NO: N/A

SHEET NO. 1 OF 1