

## STATEMENT OF WORK

### Subbasement Crawlspace Abatement and Task Simulation

The unfinished “crawlspace” sections of the sub-basement of the Albany VA Medical Center were abated of asbestos containing materials in 2011. However, recent surveys of this area have found residual contamination of the soil up to 2% as well as areas with asbestos containing debris on the surface. The sub- basement crawlspace area is normally unoccupied; workers only enter this area to perform maintenance and repair or similar work tasks in support of renovation projects.

The main goals of this project are to:

1. Abate known ACM surface debris.
2. Have abatement workers simulate specific activities in the project areas in order for the third-party project monitor to collect and analyze the personnel exposure samples, to provide recommendations for the PPE required for each task, in each area.

Thus, specific work activities include, but are not limited to, the following list. All items are in the BASE BID, except those specifically labeled as OPTIONS. Options shall be priced as separate line items from the base bid.

1. Provide a precise abatement and work plan, with full abatement submittals.
2. Remove surface ACM debris from locations where it has been identified; OSHA Class IV work.
  - a. Four (4) small locations found during a previous survey by Sienna:
    - i. Area 1: 9 sf of aircell pipe insulation debris on the surface in D-wing
    - ii. Area 2: 20 sf of magnesium/asbestos pipe insulation debris on the surface in D-wing
    - iii. Area 3: 20 sf of aircell pipe insulation debris on the surface under the warehouse
    - iv. Area 4: 20 sf of aircell pipe insulation debris on the surface under the warehouse
  - b. One (1) large location found during a previous survey by Adelaide:
    - i. Area 5: 2000 sf of small pieces of ACM material scattered on the surface.
    - ii. To provide better access to this area, sawcut or otherwise demo a rough door opening in an 8” concrete block wall with a 3” concrete front. Use wet method. Protect existing fire alarm conduit to remain. Opening to be roughly 3’4”x6’10”. Shore opening with temporary wood lintel and wooden support braces. (Separate contract will install a permanent 3’x6’8” door after this contract is complete.)
    - iii. Excavate soil for safe access to the area behind the opening. Expect the soil to be approximately 5’ above the subbasement floor level. Soil has tested less than 1% ACM, but may have ACM surface debris.
      1. Provide a 5’ wide by 4’ deep landing beyond the opening, 2” below the opening threshold.
      2. Lay back soil all sides 1:1.
    - iv. Remove all surface debris within the 2000 sf area, as demarcated on the attached drawing, “Subbasement Map”, area “ADcore”. Survey photos of typical debris show scattered, approximately hand-sized pieces of pipe insulation.
      1. Nearest exterior location for ventilation is 240’ from area.
    - v. After leaving this area, cover the doorway opening and wood blocking with 2 layers of type X drywall.

- c. OPTION: as a separate Contract Line Number (CLN), provide a cost for an additional abatement of 50 sf of ACM surface debris. The intent is to provide a basis for abating any additional ACM material discovered by the monitoring firm.
3. Assess potential personnel exposure by simulating anticipated work tasks in the sub-basement areas, according to the table below. Tasks to be simulated include:
- Replacing lightbulbs and similar general maintenance
  - Removal and installation of pipes
  - Minor excavation (via manual and mechanical means), as for a sump pit

For the purposes of this project, the subbasement crawlspace has been divided into eight (8) areas shown on the attached drawing "Subbasement Map": Awing, ABcore, Bwing, BCcore, Cwing, CDcore, Dwing, ADcore. Each task will be performed in each area, with data collected discretely for each task and each area.

Considerations for sampling include:

- Accurately simulating the work to obtain a valid assessment of the potential exposure
  - Sampling for a sufficient duration
  - Minimize overloading of samples with other material (dirt) from the work area.
- Operations such as drilling holes in ceiling (for hanging brackets) will be simulated.

Due to the configuration of the sub-basement, these tasks necessitate crawling on a dirt floors and climbing over and under pipes and conduit. Some walking paths exist as well (see attached drawing "Sub-basement walking paths"); these can be traversed standing, though occasional ducking under pipes is needed.

Under OSHA regulation (29CFR1926.1101), the above work is Class III (definition below):  
*"Class III asbestos work means repair and maintenance operations, where "ACM", including TSI and surfacing ACM and PACM, is likely to be disturbed."*

#### Personal Samples:

Sampling shall be performed during simulated work activities. Samples shall have a minimum of 3 hours of sampling time. Sampling rate will be 2 lpm (liters per minute). Four man-hours are given for each activity to allow for entry/exit and decon from the areas. The exact locations and schedule of the activities will be determined at the start of the project. Piping for the simulation will be supplied by the VA.

# of Sample	Man-hours	Activity	Sub tasks to be performed/simulated:
4	16	Changing Lightbulbs	<ul style="list-style-type: none"> <li>• Crawling on dirt floor</li> <li>• Carrying of tools and materials to work area</li> </ul>
8	32	Installation of new pipes and the removal of existing pipes.	<ul style="list-style-type: none"> <li>• Crawling on dirt floor</li> <li>• Carrying of tools and materials to work area</li> <li>• Drilling hole into ceiling to attached pipe support</li> <li>• Use of tools (saw) to cut pipe from structure</li> <li>• Cutting of removed pipe on ground into smaller sections</li> <li>• Storing of cut pipe in work area</li> <li>• Removal of pipe from work area</li> </ul>
8	32	Manual Digging of pit for new pump.	<ul style="list-style-type: none"> <li>• Digging with hand tools including shovel and pick</li> <li>• Dirt is to be placed into buckets and be carried to a</li> </ul>

		Diameter and depth = 24"	collection area • Dirt is to be wetted periodically to suppress dust
2	8	Digging using air hammer/chisel to break up rock. Use wet methods to dampen rock periodically Diameter and depth = 24"	<ul style="list-style-type: none"> <li>• Use of air hammer or chisel</li> <li>• Digging with hand tools including shovel and pick</li> <li>• Dirt put in buckets and carried to a collection area</li> <li>• Dirt is to be wetted periodically to suppress dust</li> </ul>
<b>Total Samples</b> 22	<b>Total Hours</b> 88		

Area samples will be collected in walkway areas to simulate exposure for persons walking through areas when work is being conducted. Soil samples will be collected from the dirt collected while digging.

Soil Samples: The soil samples will be used to determine asbestos content for classification of waste.

Asbestos is regulated at the Federal level by the USEPA and the Occupational Safety, and Health Administration (OSHA). In the State of New York asbestos is regulated under the New York Department of Labor (NYSDOL) 12 NYCRR Part 56. NYSDOL has no jurisdiction on federal property but their SOP's found in Code Rule 56 are utilized. In addition, there is a Veterans Health Administration (VHA) Directive 2010-036 titled "Asbestos Management Program" issued August 2010. NYS CR56 Regulations would not be applicable to the Class III exposure assessment portion of this project.

#### Work Specifications:

**Regulated Area:** The entire sub-basement crawl space would be the work area. There are seven entrances into the crawlspace: A-Wing has 1, B-Wing has 1, C-Wing has 1 on one side and 2 on the other side (area under the warehouse), and D-Wing has 2, one of which is external. Unused entrances shall be covered with critical barriers. There are no windows in this area.

**Decontamination Area:** A decontamination area (3-chamber) shall be placed at one entrance. If access is through another wing, an OSHA wash station shall be set up in that area.

**Waste:** The only waste material will be from the ACM debris abatement. Dirt from excavation activities will remain in the sub-basement in piles or containers provided by the VA.

**Ventilation:** The area shall be ventilated using HEPA filtration units vented externally through Bilco doors located in the D-wing or through an external door in S-22. Exhaust vents in the will need to be covered with critical barriers.

**Wet methods:** Wet methods will be used when applicable (i.e. during excavation). Wet methods would not be practical for other tasks as the potential for disturbance is due to walking, crawling or dragging materials on the dirt surface.

**Personal Protective Equipment (PPE):** Employees entering the crawlspace shall wear PPE including but not limited to respiratory protection, coveralls, gloves and shoe covers. The contractors shall provide appropriate training and clearance for the use of PPE.

**Monitoring:** Personal and area monitoring will be performed by a third party contractor. Monitoring will be in accordance with a job-specific monitoring plan to be developed by the VA.

**Training:** All workers are to have a current NYS Asbestos Handlers and/or Supervisors license.