## PROJECT SUMMARY REPORT FOR ASBESTOS RESPONSE ACTION FLOOR TILE GREENLEAF ELEMENTARY SCHOOL, ROOM 202 58 CHADWICK STREET, HAVERHILL, MA 01835



PREPARED FOR:

HAVERHILL PUBLIC SCHOOLS 4 SUMMER STREET HAVERHILL, MA 01832

PREPARED BY:

AXIOM PARTNERS, INC. 1 PLEASURE ISLAND ROAD, SUITE 2C WAKEFIELD, MA 01880

AXIOM PROJECT NUMBER 01288.006

**SEPTEMBER 21, 2017** 

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#### SUMMARY REPORT FOR ASBESTOS RESPONSE ACTION

<u>CLIENT NAME</u> :	Haverhill Public Schools 4 Summer Street Haverhill, MA 01832
LOCATION:	Room 202 Greenleaf Elementary School 58 Chadwick Street Haverhill, MA 01835
ASBESTOS CONTRACTOR:	SenCam, Inc. (SenCam) 741 South Main Street Haverhill, MA 01835
<u>CONSULTANT</u> :	Axiom Partners, Inc. (AXIOM) 1 Pleasure Island Road Wakefield, MA 01880
PROJECT DATES:	August 18, 2017

#### I. INTRODUCTION

- A. AXIOM provided consulting support to Haverhill Public Schools during an Asbestos Response Action at Greenleaf Elementary School. It is our understanding that Room 202 has previously been unused but will be used as a kindergarten classroom for the 2017-2018 school year.
- B. The 9" x 9" floor tile in Room 202 had approximately 10% distributed damage in the form of cracked tiles and missing tile pieces/corners. Sampling determined this tile is an asbestos-containing building material (ACBM). Removal of a small area of significantly damaged floor tile around an existing floor vent was required before contractors could cover the floor with wall-to-wall carpeting.

#### II. SUMMARY OF ABATEMENT WORK

- A. AXIOM met at the site with Haverhill Facilities representative Jim Hayes and Massachusetts-licensed Asbestos Abatement Contractor SenCam, Inc. (SenCam) on July 14, 2017 to assess the damage and discuss the scope of asbestos abatement for compliance with governing asbestos regulations<sup>1</sup>.
- B. Removal of the damaged floor tile surrounding the floor vent was planned for August 18, 2017. In accordance with Massachusetts Department of Environmental Protection (DEP) regulations for floor tile quantities less than 100 square feet, SenCam elected not to submit an asbestos abatement notification ANF-001.
- C. Asbestos caution tape was placed at both entrances to Room 202 to establish a regulated area and restrict access. Removal of damaged floor tile around the heating vent was performed using hand-held heat guns to heat the floor tile adhesive so that the damaged tiles could be gently removed by hand. SenCam also removed damaged tile pieces in several other locations in Room 202.

<sup>&</sup>lt;sup>1</sup> EPA AHERA and NESHAP Regulations and Massachusetts Regulations

Axiom Partners, Inc.

D. A summary of ACBMs removed is as follows:

Material	Location	Approximate Quantity			
9" x 9" White Floor Tile	Various areas of Room 202	30 SF total			

- E. Ambient air sampling was performed during asbestos abatement activities to document the effectiveness of the contractors' work practices and engineering controls. Samples were collected according to the National Institute for Occupational Safety and Health (NIOSH) Method 7400 for Phase Contrast Microscopy (PCM). This method is recognized by the U.S. Occupational Health and Safety Administration (OSHA), the Environmental Protection Agency (EPA), the Massachusetts Department of Labor Standards (MA DLS) and MA DEP for its ability to characterize total airborne fiber levels.
- F. Upon completion of the floor tile removal, AXIOM's APM performed a post-abatement visual inspection to confirm that all specified ACBMs were completely removed. As necessary, the AXIOM APM instructed the contractor to re-clean areas that did not conform to visual inspection criteria before a certificate of visual inspection was completed.
- G. Upon completion of the visual inspection, the air samples were analyzed by AXIOM's Asbestos Project Monitor (APM) who is also a trained PCM analyst. As allowed by AHERA<sup>2</sup> for material quantities less than 160 square feet, air clearance testing was performed via PCM using high volume pumps to draw a volume of air through a membrane filter at a known rate not to exceed 15 liters per minute. Sampling volumes were between 1,200 and 1,800 liters of air. Air samples were analyzed via PCM according to NIOSH Method 7400. Air samples were analyzed by AXIOM's APM.
- H. A project may be considered complete when all air samples demonstrate airborne fiber concentrations inside the work area to be less than 0.010 fibers per cubic centimeter (f/cc), the MA DLS standard for re-occupancy following asbestos abatement. Each clearance air sample had a fiber concentration of less than 0.010 f/cc. The complete PCM analysis reports are attached (Appendix I). Upon receipt of the results, the Asbestos Contractor dismantled the regulated area and performed final work area clean-up.

#### III. ABATEMENT WORK PRACTICES AND ENGINEERING CONTROLS

- A. AXIOM prepared a work plan (design) for this Asbestos Response Action. Please see Appendix II for a copy of this work plan.
- B. A remote decontamination facility (DF) was established at the entrance to Room 202. The DF consisted of a series of chambers for workers to don personal protective equipment and to remove their contaminated disposable clothing and perform decontamination procedures before exiting the work area. Each room/chamber was separated by an airlock constructed of overlapping flaps of 6-mil polyethylene sheeting. Asbestos warning signs were posted at both entrances to Room 202 in accordance with 453 CMR 6.14(4)(a)3 and asbestos caution tape was used to demarcate the regulated area and restrict access.

<sup>&</sup>lt;sup>2</sup> EPA's Asbestos Hazard Emergency Response Act, 1986

#### Axiom Partners, Inc.

- C. Critical barriers were covered with two layers of 6-mil polyethylene sheeting and sealed with duct tape during abatement work. Asbestos materials were wetted/misted with water to maintain them in a wet condition while being removed and packaged for disposal. Abatement workers applied heat to the floor tiles using a handheld heat gun. Once tiles were loose, workers gently removed them by hand to minimize breakage and HEPA-vacuumed the area.
- D. The abatement workers were required to wear personal protective equipment during abatement activities. The required protective equipment included impervious full-body disposable coveralls, protective hand, head, and footwear, and HEPA-filtered, negative-pressure respirators (at a minimum).
- Ε. The asbestos contractor was required to comply with all waste packaging, transportation and disposal requirements specified by governing regulations including the use of Asbestos Waste Shipment Records (AWSRs).

#### IV. ASBESTOS WASTE DISPOSAL

- Α. Asbestos waste was sealed in a double layer of 6-mil polyethylene bags. The bags were then sealed and removed from the work area. The bags were marked with the required OSHA. EPA. and DOT asbestos warning labels.
- Β. The waste consisted of the ACBMs described herein, contaminated polyethylene sheeting and disposable contractor equipment and personal protective equipment. The asbestos waste was transported by SenCam to their facility located in Haverhill, Massachusetts. SenCam placed the waste in a secure enclosed container that, once filled, was transported directly to the designated asbestos landfill.
- C. Regulations require that AWSRs used to document transportation of the asbestos waste to an approved asbestos landfill must be provided to the generator within 35 days of when the waste left the project site.
- **PROJECT MONITORING PERSONNEL** V.
- Massachusetts-licensed APM David A. Rooney (License #AM 061689) was responsible for project Α. monitoring activities and for performing final visual inspections and air clearance sampling.
- Β. Heather R. Forgione, AXIOM's Project Manager, was responsible for ensuring that AXIOM personnel completed their responsibilities in compliance with governing regulations and the client's requirements.

Report Prepared by:

Statter L. Fargione

Heather R. Forgione Project Manager

Report Reviewed by:

Stephen E. Minassian Principal

### APPENDIX I

AXIOM Project Documentation

Daily Site Log Certificate of Visual Inspection Asbestos Air Monitoring Work Sheet



## SITE LOG

## **Axiom Partners, Inc.**

One Pleasure Island Road Wakefield, MA 01880 781-213-9198

Date: 08/18/17	Location: <u>Rm. 202</u>
Project Number:	Address: <u>58 Chadwick St, Haverhill MA</u>
Project Monitor: <u>David A. Rooney</u>	Project: 01288.006
License Number: <u>AM 061689</u>	On-Site Supervisor: Flavio Nunez
Contractor:SENCAM	Number of Workers: <u>1</u>

TIME	NOTES						
0735	I arrive on site and bring my pumps to the 2 <sup>nd</sup> Floor where the SENCAM crew is supposed to remove about 3 SF of broken and loose tiles around a floor grate. The crew has been on site since 0600, but I was told they would start at 0730. The crew has regulated the area and removed the loose and broken tiles around the floor grate in the corner. However, they continued to remove broken tiles in other areas of the room for a total of 30 SF. Work practices include using a heat-gun and scraper. I set up pumps to collect 5 PCM area samples at 9.5 lpm. Flavio of SENCAM says that the maintenance supervisor he was supposed to meet today was not on site and another employee showed him the work area. He shows me a text with instructions to remove the loose and broken floor tile by the floor grate. I instruct them to halt work until I can contact Heather of AXIOM, leaving a message and emailing pictures of the situation.						
0830	I send a text to Pat Sennott of SENCAM with pictures of what has happened to apprise him of the situation. Heather of AXIOM calls and we discuss the project. She will contact Pat of SENCAM and Steve Minassian of AXIOM to discuss how to deal with this situation. I instruct the crew to remove the black paper underlayment from the areas where the tile was removed in order to make the area safe to walk on. They will use knives and scrapers. Per Heather's instructions I collect 2 bulk samples of the black paper underlayment for analysis.						
0930	The crew is removing the paper underlayment in the last area of abated tile. All controls are in place and operating properly. I set up and calibrate the microscope.						
1000	Abatement is completed and I perform a visual inspection. There is no visible debris and I begin gathering the area samples for analysis.						
1025	All air samples are below the clean air standard of 0.010 f/cc. I inform Flavio of SENCAM and the crew begins demobilizing.						
1050	I depart the site.						

Signature:

David Roomy



## ASBESTOS ABATEMENT

## AXIOM PARTNERS, INC.

ONE PLEASURE ISLAND ROAD WAKEFIELD, MA 01880

CERTIFICATION OF VISUAL INSPECTION FORM

781-213-9198

Site Location:	Greenleaf E	Elementary, 58 Cha	dwick St, Haverhill MA
Site Owner: Haverhill P	Public Schools		
Date: 8-18.17	Time:0830	Project No.:	01288.006
Project Name:Roor	n 202 Tile Clean-up	Project Monitor:	David A. Rooney
Contractor:SENO	CAM	Waste Quantity:	3 BAGS
Locations and Quantities of	f ACMs Abated:		
RM 202 =	30 SF FLOORTILE	(LOOSE & BR	OKEN)
	Arash E		
ACMs/PACMs Remaining (	if any): FLOOR TILES TI	HROUGHOUT	-NOT IN SCOPE
of work	C. DTY REMOVED	Jame	

A visual inspection of the above identified work area(s) has/have been completed <u>by both parties below</u> and the abatement work has been completed to the satisfaction of the parties identified below.

Contractor Authorized Representative

8-18-17

110 UNE

Printed Name

Title

Axiom Partners, Inc. Project Representative

David A. Rooney Printed Name

Project Monitor (AM061689)

Title

8.18.17

Date

Date

axiem

Axiom Certificate of Visual Inspection © 2017, Axiom Partners, Inc.



## ASBESTOS AIR MONITORING WORKSHEET

MAIN OFFICE:

www.axiomenv.com

One Pleasure Island Road Wakefield, Massachusetts 01880 (781) 213-9198 (781) 213-6992 Fax BRANCH OFFICES: 46 Watergate Lane Barnstable, Massachusetts 02668 (508) 746-0877 / (508) 732-0281 Fax

10 Diamond Drive Derry, New Hampshire 03038 (603) 434-5245 / (603) 434-5172 Fax

Site Address:	58 Chadwick S	dwick St, Haverhill, MA			Project No: 01288.006									
Project Name:	Greenleaf Elementary Rr	n. 202 Loose Tile	le Removal		_	Client: Haverhill Public Schools								
Sampler Name:	David A. Rooney	Date:	August 18	, 2017	Loc	ation(s) S	Sampled:				Rm. 2	202		
Analyst Name:	David A. Rooney	Date:	August 18	, 2017	_	State L	icense #:				AM 061	1689		
				Sa	mpling T	ime		Flow Ra	ite	Total	Fiber	L imit of		RESULT
Sample		Sample	Work	(Minut	es-Militar	y format)	(Lite	ers per N	linute)	Volume	Density	Detection	Fiber	Fibers/Cubic
Number	Sample Location	Type*	Activity**	Start	Stop	Total	Start	Stop	Average	(Liters)	(f/mm <sup>2</sup> )	(f/mm <sup>2</sup> )	Count #	Centimeter
081817-22-01	Field Blank												0.0	
081817-22-02	Field Blank												0.0	
081817-22-03	IWA / by Floor Plate	BG	3, 6	7:48	10:07	139	9.6	8.3	8.95	1244.1	22.3	22.3	17.5	0.007
081817-22-04	IWA / by Floor Plate	BG	3, 6	7:48	10:07	139	9.6	8.3	8.95	1244.1	26.8	26.8	21.0	0.008
081817-22-05	IWA / by Floor Plate	BG	3, 6	7:47	10:03	136	9.6	9.6	9.56	1300.2	24.2	24.2	19.0	0.007
081817-22-06	IWA / by Floor Plate	BG	3, 6	7:47	10:03	136	9.6	9.6	9.56	1300.2	27.4	27.4	21.5	0.008
081817-22-07	IWA / by Floor Plate	BG	3, 6	7:47	10:03	136	9.6	9.6	9.56	1300.2	26.1	26.1	20.5	0.008
	CHAIN-OF-CUSTODY						<u>*Sam</u>	nple Type	e Codes		<u>**N</u>	/ork Activi	ty Codes	
Relinquished by:			Microscope ID # 5A85609			IWA = Inside Work Area			1 = Background 9 = Pre-Abatement					
Printed Name:			Rotam	eter ID #			OWA = C	Outside Wo	ork Area	2 = Work A	rea Prep		10 = Gross	Removal
Date:			A		7400 841	Dutes	HEPA = H	HEPA Exha	aust	3 = Asbesto	s Removal		11 = Fine C	leaning
l ime:			f/mm <sup>2</sup> - fibers pe	r square mi	illimeter	Rules	BG = Bac	kground		4 = Waste L	.oadout		12 = Repail	/Encapsulation
Received By:			Effective Filter A	rea = 385 n	nm <sup>2</sup>		CL = Close	arance		6 = Clearan	co Toet		14 - Mainte	
Printed Name:				Field Area $= 0.00785 \text{ mm}^2$			DF = Dec	DF = Decontam Facility		$7 = \text{Repair/Encapsulation} \qquad 15 = Other$		Address Address		
Date:			<ul> <li>Fibers per 100</li> </ul>	Fields unle	ess specifie	ed	OT = Oth	er	onity	8 = Cleaning	g/Decontami	nation		
Time:			Fibers/	CC = <u>(SAM</u>	PLE fibers	/field) - (BL	ANK fibers	s/field) x (3	<u>85)</u>	Analyst Sig	jnature:	1	10	M
MA PCM Lab ID # AA000179 AIHA Lab # 121587					(7.8	5) x (liters)						Dat	1 1200	8
New Hampshire Only (	(fax copy of form to NH Air Resources at 603-27	'1-1381):	Project	t Scope (Ch	neck One):		Major (>	10 Inft/25 s	of Friable	e ACM)	Minor (≤ 10	Inft/25 sqft c	of Friable AC	M)

## APPENDIX II

AXIOM Asbestos Response Action Work Plan



#### ABATEMENT WORK PLAN FOR ASBESTOS RESPONSE ACTION ASBESTOS-CONTAINING FLOOR TILE

<u>CLIENT NAME</u> :	Haverhill Public Schools 4 Summer Street Haverhill, MA 01832
LOCATION:	Room 202 Greenleaf Elementary School 58 Chadwick Street Haverhill, MA 01835
ASBESTOS CONTRACTOR:	SenCam, Inc. (SenCam) 741 South Main Street Haverhill, MA 01835
<u>CONSULTANT</u> :	Axiom Partners, Inc. (AXIOM) 1 Pleasure Island Road Wakefield, MA 01880
PROJECT DATE:	August 18, 2017

Prepared by Axiom Partners, Inc.

Stephen E. Minassian Massachusetts Asbestos Designer AD 051928 August 17, 2017

#### SUMMARY OF WORK

The work involves the removal of a small damaged area (approximately 3 square feet) of asbestoscontaining floor tile from Room 202 as identified on the attached site plan. The damaged tile must be removed before contractors can cover the floor with wall-to-wall carpeting.

The attached drawing provides a generalized arrangement for the preparation of the abatement work; however, the Massachusetts-licensed Asbestos Abatement Contractor (Contractor) will establish the regulated area based upon field conditions.

#### GENERAL REQUIREMENTS

The Contractor and their supervisor(s) and workers shall be licensed in the Commonwealth of Massachusetts to perform asbestos abatement work. The Contractor shall strictly adhere to all applicable federal, state and local laws and regulations. Where any conflict arises between this work plan and federal, state or local laws or regulations, the laws/regulations shall supersede. Waste



packaging, handling and disposal will be in accordance with this work plan and all regulatory requirements in force at the time of the work.

#### SPECIAL CONSIDERATIONS

The work is to be conducted in a school facility. Extra care shall be taken to ensure that all work is performed in an appropriate manner.

Air sampling will be conducted following the Asbestos Hazard Emergency Response Act (AHERA) PCM protocol based on the quantity of material to be removed.

Contractor will note that the Owner (Haverhill Public Schools) will pay for one (1) clearance inspection and test for this project. The Contractor shall reimburse the Owner for any testing required beyond the initial clearance inspection and testing to achieve acceptable clearance results, regardless of the reason(s) for the failure of the original clearance samples or inspection.

As applicable, the Contractor shall pay for and obtain required regulatory permits and notifications prior to the start of the work.

#### CODES AND STANDARDS

The publications listed below form part of this Abatement Work Plan to the extent referenced and applicable to the work described herein. The procedures outlined in this Work Plan have been developed to incorporate the requirements of these regulations and standards. The current edition of each reference shall be applicable. Note that the following list is not to be interpreted as inclusive of all applicable regulations.

- 1. Environmental Protection Agency (EPA):
  - a. 40 CFR Part 763 Asbestos Hazard Emergency Response Act
  - b. 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants
  - c. EPA 340/1-90-019 Asbestos/NESHAP Adequately Wet Guidance (December 1990)
  - d. EPA 340/1-90-018 Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance (1990)
  - e. EPA 560/5-85-024 Guidance for Controlling Asbestos Containing Materials in Buildings (1985)
  - f. EPA 340/1-92-013 A Guide to Normal Demolition Practices Under the Asbestos NESHAP
- 2. Occupational Health and Safety Administration (OSHA):
  - a. 29 CFR 1910.1001 General Industry
  - b. 29 CFR 1926.1101 Asbestos Standard for the Construction Industry
  - c. 29 CFR 1910.1001/29 CFR 1926.58 Amendment
  - d. 29 CFR Part 1910.134
- 3. Commonwealth of Massachusetts Department of Environmental Protection (MA DEP) and Department of Labor Standards (MA DLS):
  - a. 310 CMR 7.15 Asbestos (MA DEP)
  - b. 453 CMR 6.00 The Removal, Containment or Encapsulation of Asbestos (MA DLS)



#### PERSONAL PROTECTIVE EQUIPMENT

All workers performing the abatement work area shall be required to have and use the following personal protective equipment.

- 1. Half-face, negative pressure respirators with P-100 HEPA filters;
- 2. Safety glasses;
- 3. Work boots;
- 4. Disposable, full-body work suits; and
- 5. Gloves.

#### **REGULATED WORK AREAS**

The affected area of the site shall be contained within a regulated area. This includes any adjoining area(s) where debris and asbestos waste accumulates or where airborne concentrations of asbestos exceed or may exceed 0.01 fibers per cubic centimeter of air (f/cc) by NIOSH Method 7400.

All asbestos abatement work or any other operations where airborne asbestos can potentially exceed 0.01 f/cc, will be performed within this regulated area. Only authorized personnel may enter the regulated work area. The Contractor's designated "Competent Person" (e.g., abatement supervisor) will supervise all asbestos work performed in the area.

The Contractor shall demarcate the regulated area in any manner that minimizes the number of persons within the area and prevents access by unauthorized personnel and protects persons outside the area from exposure to airborne asbestos. This may be achieved by using asbestos caution tape to demarcate the area. Proper asbestos warning signs will be prominently displayed at all points of access to the regulated area. The signs will bear the following information:

#### DANGER ASBESTOS CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY RESPIRATORY AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

Contractor employees will not eat, drink, smoke, chew tobacco or gum or apply cosmetics in regulated areas.

#### HYGIENE FACILITIES

The Contractor shall establish a remote decontamination facility (DF) immediately adjacent to the regulated work area for the decontamination of employees, packaged asbestos waste and their equipment.

The DF shall consist of a series of chambers for workers to don personal protective equipment and to remove their contaminated disposable clothing and perform decontamination procedures before exiting the work area. Each room/chamber shall be separated by an airlock constructed of overlapping flaps of 6-mil polyethylene sheeting. Note that entry to the work area shall only occur through the DF.



All equipment and the surfaces of containers filled with asbestos-containing materials will be cleaned prior to removal from the site. The Contractor shall ensure employees utilize the DF when exiting the work area.

#### HOUSEKEEPING

Asbestos waste, scrap, debris, bags, containers, equipment and contaminated clothing consigned for disposal will be collected and disposed of in sealed, labeled, impermeable bags or other approved impermeable containers.

The Contractor shall affix warning labels to all asbestos waste containers. Labels will be printed in large, bold letters on a contrasting background and used in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). All labels will contain a warning statement against breathing asbestos fibers and contain the following wording:

#### DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD

In addition, labels identifying the site owner and location of waste generation will be affixed to each container of asbestos waste.

#### EMERGENCY RESPONSE PROCEDURES

The Contractor shall post in a conspicuous location at the site the name and address of the closest hospital with a route map illustrating the route from the work site to the hospital.

A sign-in log will be utilized to account for all personnel and visitors entering the regulated work area. The log will be administered by the abatement supervisor and will be used to account for all personnel after an emergency evacuation.

All work site injuries will be promptly reported by the Contractor to the Owner. In the event of an unsafe condition or emergency (e.g., fire, loss of electricity), the Contractor shall evacuate all personnel from the regulated area and, if necessary, from the building. An assessment of the problem will be made and appropriate actions implemented. No personnel shall be allowed to reenter the building or work area until the Competent Person/abatement supervisor and/or the Owner determines that it is safe for work to resume. Work will not commence until all emergency response activities are completed and hazard control issues are resolved.

#### METHODS OF ABATEMENT

The Contractor shall move all remaining non-fixed items out of the work area. The work area shall be pre-cleaned using either High Efficiency Particulate Air (HEPA) vacuums or wet wiping of all surfaces.

The work will be performed within a regulated area. Critical barriers will be covered with two layers of 6-mil polyethylene sheeting and sealed with duct tape during abatement work. Asbestos materials will be wetted with water while being removed and packaged for disposal. Removal of asbestos flooring materials shall be performed using handheld heating guns to heat the tiles and mastic until tiles can be manually removed. Every effort shall be made to prevent further breakage of tiles during removal.



August 17, 2017

The Contractor shall provide the Asbestos Project Monitor (APM) notice of the completion of the abatement work as soon as possible. Prior to the clearance inspection, all packaged asbestos waste and non-essential tools shall be removed from the work area.

#### AIR MONITORING/CLEARANCE AIR SAMPLING

After a thorough cleaning of the workspace, and if a high degree of cleanliness has been achieved, the Contractor shall notify the Asbestos Project Monitor (APM) that the workspace is ready for inspection and final testing. The APM, with the assistance of the Contractor, will then visually inspect the workspace for the detection of any visible asbestos dust, residue or contamination. If the visual inspection does not reveal dust, residue or other signs of contamination, final air testing shall commence.

As allowed by AHERA for material quantities less than 160 square feet, air clearance testing will be performed via Phase Contrast Microscopy. If the results of the final testing are not satisfactory, thorough wet cleaning and/or HEPA vacuuming shall be repeated until the required decontamination levels are achieved. The work area shall remain demarcated and off-limits to building employees and the public until air clearance analysis is satisfactorily completed.

Should the Contractor fail to achieve final air clearance per the requirements of this section during the first air clearance sampling conducted by the APM, the Contractor shall bear all further costs associated with preparation of the work area for re-testing, as well as the costs for the re-testing (APM costs and Owners associated administrative costs) and any costs resulting from schedule delay for failure to meet the air clearance requirements of the Contract until acceptable air clearance testing is achieved.

#### WASTE HANDLING AND DISPOSAL

The Contractor shall follow all regulatory requirements for the packaging, handling and disposal of asbestos-containing or asbestos-contaminated waste generated during this project.

The Contractor shall count or measure the volume of each filled container leaving the work area, and maintain a <u>written</u> record of such.

Asbestos waste disposed of by the Contractor shall be disposed of at a landfill acceptable to the Owner and approved by the EPA or local state to accept asbestos waste. Each load of waste leaving the project site shall have a Waste Shipment Record (WSR) completed per EPA requirements. A copy of the completed WSR shall be provided to the Owner within 30 days from the date the materials leave the project site.

Disposal of asbestos waste shall be in conformance with USEPA NESHAPS Regulations 40 CFR Part 61 and Massachusetts DEP Regulations regarding asbestos waste disposal.

Prior to transportation of any ACM waste, all waste haulers will clearly label the containers/trucks with the appropriate United States Department of Transportation Placards bearing the numbers 2212.

END OF WORK PLAN



## **ATTACHMENT 1**

## SITE DRAWING





# For Official Use Only

Second Floor

## Side D

