



## ASBESTOS AND POTENTIALLY REGULATED MATERIALS SURVEY

For the

**Murray Towers**  
**28252 Murray Avenue**  
**Pittsburgh, Pennsylvania 15217**

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PSI Project Number: 08166046

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Murray Towers Asbestos Report - PSI, 2016

LABORATORY ACCREDITATIONS

PERSONNEL ACCREDITATIONS

## LIST OF ACRONYMS OR ABBREVIATIONS

Acronym or Abbreviation	Definition
ACM	Asbestos-Containing Material
ACBM	Asbestos-Containing Building Material
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
CAT. I NF	Category I Non-Friable
CAT. II NF	Category II Non-Friable
CFC	Chlorofluorocarbons
CFL	Compact Fluorescent Lamps
CFR	Code of Federal Regulations
CMU	Concrete Masonry Unit
EMLAP	Environmental Microbiological Laboratory Accreditation Program
EPA	U.S. Environmental Protection Agency
F	Friable
HA	Homogeneous Area
HID	High-Intensity Discharge
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
LBP	Lead-Based Paint
MJP	Mudded Joint Packing
NELAP	National Environmental Laboratory Accreditation Program
NESHAP	National Emission Standards for Hazardous Air Pollutants
NF	Non-Friable
NLLAP	National Lead Laboratory Accreditation Program (a.k.a. ELLAP)
NVLAP	National Voluntary Laboratory Accreditation Program
O&M	Operations & Maintenance
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos-Containing Material
PCB	Polychlorinated Biphenyl
PLM	Polarized Light Microscopy

Acronym or Abbreviation	Definition
PSI	Professional Service Industries, Inc., an Intertek company
PT	Point Count
RACM	Regulated Asbestos-Containing Material
TEM	Transmission Electron Microscopy
TSI	Thermal System Insulation
VFT	Vinyl Floor Tile
VJC	Vibration Joint Cloth
VSF	Vinyl Sheet Flooring
XRF	X-Ray Fluorescence device



## 1.0 INTRODUCTION

PSI was retained by Fukui Architects to perform a survey for suspect ACM and potential regulated materials at Murray Towers, located at 28252 Murray Avenue in Pittsburgh, Pennsylvania 15217.

### 1.1 AUTHORIZATION AND ACCESS

Authorization to perform the survey was given by the receipt of a signed copy of PSI Proposal Number 0816-422548, between Fukui Architects and PSI.

Access to the Project Area was provided by Sequoia. PSI was not escorted during the field work for this project. PSI was not escorted during the field work for this survey.

### 1.2 PROPERTY AND BUILDING INFORMATION

SUBJECT PROPERTY:	Murray Towers 28252 Murray Avenue Pittsburgh, Pennsylvania 15217
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CONSTRUCTION DATE:	Unknown
PREVIOUS RENOVATION DATE(S):	Not Reported
NUMBER OF FLOORS:	8 stories
ESTIMATED SQUARE FOOTAGE:	105,000
CONSTRUCTION TYPE:	Brick
VACANT? (YES/NO)	Yes
ADDITIONAL INFORMATION:	None Provided

### 1.3 DESCRIPTION OF THE PROJECT AREA

This project encompassed Murray Towers, a 105,000 8 story, slab on grade, brick apartment building, hereinafter referred to as the Project Area.

The field work was conducted on June 10, 2024.

#### 1.3.1 INFORMATION PROVIDED BY CLIENT

The following table lists the information provided for this survey.



Description of Material	Provider/Source	Date
Limited Asbestos Survey - Murry Tower Apartments	PSI (PSI Project Number 08161181-61)	April 8, 2016

## 1.4 PURPOSE AND SCOPE OF SERVICES

PSI understands that the client is planning on renovating the Project Area.

### 1.4.1 ASBESTOS

The purpose of the asbestos portion of this survey was to provide general information for the Project Area regarding the presence, condition, and quantity of accessible and/or exposed friable and non-friable materials suspected to contain asbestos.

The survey of the Project Area was conducted in general accordance with the EPA AHERA, and NESHAP sampling guidelines to determine the presence and general locations of exposed and/or physically accessible suspect ACM, depict the location of ACM or assumed ACM, and the sample locations, quantify the amount of ACM identified during the survey, and provide photographic documentation of each homogeneous area.

Each suspect material was touched, where possible, to determine the friability of the material. Samples were obtained only from suspect ACM that were readily exposed and/or physically accessible during the survey.

Samples were sent to PSI's NVLAP accredited laboratory located at 850 Poplar Street, in Pittsburgh, Pennsylvania, for analysis. Each sample underwent PLM analysis for detection of asbestos fibers in the building materials on a "positive stop" basis, which is defined as follows: if one sample in the homogenous group has an analysis indicating that the material contains asbestos at a concentration greater than 1%, then the remaining samples in that group are not analyzed.

### 1.4.2 OTHER POTENTIALLY REGULATED MATERIALS

PSI also performed a visual survey for potentially regulated materials in the Project Area that included: potentially PCB-containing light ballasts, capacitors and similar items; potentially mercury-containing thermostats, switches, and similar items; fluorescent light tubes and CFLs; fire extinguishers (possible halon-containing); emergency exit lights (possibly containing tritium, a radioactive material) and associated batteries; CFC-containing equipment (i.e. drinking water fountains, air cooling units); pressure treated wood; heating oil fuel tanks; HID lamps; flammable waste traps; or electronics.

PSI did not conduct testing on these potential materials to confirm the presence of PCBs, mercury, CFCs, or other hazardous material; thus, their actual presence in the materials surveyed is only suspected.



## **1.5 LIMITATIONS**

### **1.5.1 ASBESTOS LIMITATIONS**

This asbestos survey was intended to meet the requirements of the NESHAP for Asbestos renovation. The survey included a thorough inspection of the reported areas of planned renovation associated with the Project Area.

Roof Systems were not included in the scope of this survey.

Destructive sampling, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.) inside mechanical chases, behind mirrored walls, under carpet or tiled floors, etc., was not generally conducted to assess inaccessible or concealed materials.

Although PSI made an attempt to identify all areas of ACM, an exhaustive investigation of void spaces was not included in the scope of services for this project. There may exist conditions which were unable to be identified within the scope of this survey.

Inaccessible is defined as areas of the building that were locked, or where admittance was not permitted. It also includes areas/materials that could not be tested (sampled) without destruction of the structure or a portion of the structure, and areas/materials that could not be safely reached by the inspector or inspection team. In the event that access to a portion of the building was not obtained (which otherwise would have been tested), such limitations specifically are identified in this section.

PSI did not inspect for or sample materials in areas or locations which presented a hazard to the inspection team, such as those associated with energized electrical systems or within confined spaces.

PSI did not collect samples from building elements where the intended use would be compromised by testing, such as fire rated doors, vapor barriers, mirror mastics, etc. If observed, such materials were assumed to be asbestos-containing.

Due to the occupancy of the structure, PSI was generally not able to conduct 'destructive' sampling such as inside wall cavities or above plaster ceilings: therefore, the inspection was limited to areas that were accessible and exposed.

### **1.5.2 OTHER POTENTIALLY REGULATED MATERIALS LIMITATIONS**

This survey for other potentially regulated materials was limited to a visual assessment only. The survey included a thorough inspection of the reported areas of planned renovation associated with the Project Area.

Roof Systems were not included in the scope of this survey.

Destructive observations, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.) inside mechanical chases, behind mirrored walls, under carpet or tiled floors, etc., was not generally conducted to assess inaccessible or concealed materials.



### 1.5.3 ACCESS LIMITATIONS

This assessment was limited in that some areas were not accessible to PSI or were omitted from consideration during the assessment and reporting based on safety concerns, such as areas where energized systems, electrical or mechanical, were present or within confined spaces, or due to other considerations. Such areas are listed in the table below:

Areas Not Assessed	Reason
All Apartment Units (except Unit 503)	Occupied

### 1.5.4 OTHER LIMITATIONS

No other significant exceptions to, or deviations from, the scope of work were made during this assessment.



## 2.0 SURVEY INFORMATION

NAME OF SURVEYOR:	David Antis
LICENSE/CERTIFICATION NUMBER:	PA 063781
DATE(S) OF SURVEY AND SAMPLING:	June 10, 2024
ESCORT:	no escort



## 3.0 METHODOLOGY

If available, prior to conducting the survey, PSI reviewed any documents provided by the client, including: drawings, floor plans, historical data, maintenance records, previous survey reports, laboratory reports, etc. for information regarding construction history and building materials. This data was used to focus the walk through and scope of work to be followed over the course of our visual survey and/or sampling.

### 3.1 ASBESTOS

Survey, sampling, and analysis, procedures were performed in general accordance with the guidelines published by the EPA in 40 CFR Part 763 Subpart E, October 30, 1987 and the OSHA Asbestos Construction Standard, found in 29 CFR 1926.1101. , and in the NESHAP regulation (40 CFR Part 61, April 6, 1973, revised 1990).

#### 3.1.1 VISUAL INSPECTION PROCEDURES

An initial walkthrough of the Project Area was conducted to determine the presence and condition of suspect materials which were physically accessible and/or exposed. Materials which were similar in general appearance were grouped into HAs. In addition, the friability of the suspect material was determined. A material is defined as friable if the material can be reduced to a powder by hand pressure when dry. Non-Friable (NF) materials that are damaged can also be considered friable.

##### 3.1.1.1 HOMOGENEOUS AREA CLASSIFICATIONS

During the walk-through of the Project Area, areas of materials which were visually similar in color, texture, general appearance, and which appeared to have been installed at the same time were determined. Such materials are termed HAs by the EPA AHERA regulation. During this walk-through, the approximate locations of these HAs were also noted. Only materials which were physically accessible and/or exposed and suspected to contain asbestos were identified and placed in HAs.

Following the EPA AHERA inspection protocol, each identified HA was placed in one of the following AHERA classifications for the purposes of determining the number of samples to collect:

- Surfacing Materials: spray or trowel applied to building members;
- TSI: materials generally applied to various mechanical systems; or
- Miscellaneous Materials: any materials which do not fit either of the above categories.

Following the EPA NESHAP inspection protocol, each identified suspect homogeneous material that was confirmed as an ACM was also placed in one of the following NESHAP classifications:

- Friable Materials: NESHAP defines a friable ACM as any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.



- Category I Non-Friable (Cat. I NF): NESHAP defines a Category I non-friable ACM as packing, gaskets, resilient floor covering (except vinyl sheet flooring products which are considered friable), and asphalt roofing products which contain more than one percent asbestos.
- Category II Non-Friable (Cat. II NF): NESHAP defines a Category II non-friable ACM as any material, except for a Category I non-friable ACM, which contains more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry.

In the NESHAP regulation, a regulated asbestos-containing material (RACM) is defined as any (a) friable asbestos material; (b) Category I Non-Friable ACM that has become friable; (c) Cat. I NF ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or (d) Category II Non-Friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

### **3.1.2 SAMPLING PROCEDURES**

Following the walk-through, the inspector(s) collected selected samples of exposed and/or physically accessible materials identified as suspect ACM. Sampling was limited to those physically accessible materials not involving the destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

EPA guidelines were used to determine the sampling protocol. Sampling locations were chosen to be representative of the homogeneous area.

Where possible, samples of surfacing material, if present, were collected in general accordance with the EPA random sampling protocol outlined in the EPA publication, "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (EPA 560/5-85-030a, October, 1985). The homogeneous area was divided into a grid of nine (9) sub-areas. If nine samples were taken, one sample was taken from each sub-area. If less than nine samples were taken, the EPA random numbering diagram was used to determine which sub-areas would be sampled. While an effort was made to extract the samples from approximately the middle of the sub-area, samples were taken preferentially from already damaged areas or areas which were the least visible.

Samples of TSI and miscellaneous materials were taken as randomly as possible while again attempting to sample already damaged areas so as to minimize disturbance of the material.

After each sample was extracted, where applicable, a spray encapsulant and/or tape covering was applied to the sampled area to prevent potential fiber release.

Some suspect ACM could not be sampled. These suspect asbestos-containing materials were not sampled to avoid compromising the structural integrity of the material. Suspect asbestos-containing materials that were not sampled are assumed to be ACM. If materials that were assumed to be ACM are to be impacted during future renovation or demolition activities, then those materials, if practical, should be sampled and analyzed prior to that renovation or demolition activity or treated as ACM. Based on the analysis of the previously assumed ACM, further action may be required per the EPA NESHAP regulations.



In accordance with the agreement between PSI and the client, roofing materials were not sampled as part of this survey.

### **3.1.3 ANALYTICAL PROCEDURES**

The samples were analyzed at PSI, located in Pittsburgh, Pennsylvania. The PSI is a NVLAP Accredited (#101350-0) Laboratory. A copy of the Laboratory's Accreditation Certificate is included in the Appendix.

The samples were analyzed for asbestos on a "positive-stop" basis by PLM in accordance with the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020). Analysis was performed by visually observing the bulk samples with a stereoscope, followed by slide preparation(s) for microscopic examination and identification.

Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample. Next, the samples were then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, actinolite/tremolite), and fibrous non-asbestos constituents (mineral wool, fiberglass, cellulose, etc.). Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

It should be noted that some ACM might not be accurately identified or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard PLM method. TEM is another method that can provide a more definitive analysis of these materials, but was not in the scope of work for this project.

#### **3.1.3.1 LABORATORY QUALITY CONTROL PROGRAM**

The PSI in Pittsburgh, Pennsylvania, maintains an in-house quality control program. This program involves blind reanalysis of ten (10) percent of all samples, precision and accuracy controls, and use of standard bulk reference materials. In addition, the laboratory is accredited by NVLAP, which also has quality control procedures inherent in its program.

### **3.1.4 QUANTIFICATION**

Quantities of physically accessible and/or exposed confirmed ACM were estimated. This estimation was performed by taking approximate measurements in the field or estimating quantities based on as-built mechanical or structural drawings. Materials such as pipe insulation and associated MJP were categorized according to the outside diameter of the insulation. Pipe insulation was quantified by linear footage of the insulation while the actual number of MJPs was counted. Insulation on mechanical equipment such as boilers and duct work was quantified by the square footage of the surface area of suspect insulation. Similarly, fireproofings, plasters, ceiling and floor tiles, and cementitious panels were measured in square feet of surface area. The quantities of confirmed ACM that were identified during this investigation are reported in the Tables later in this report.



Quantities identified in this report are estimates, are intended as order of magnitude information or for general policy discussions, and should be confirmed by an abatement contractor since renovation or demolition is contemplated.

### **3.1.5 PHOTOGRAPHIC DOCUMENTATION**

Photographs of HAs were taken during the course of this survey. While these photographs were not intended to provide a complete record of the survey, they do provide a visual description of the HA. Photographs of HAs are intended to depict a representative portion of that HA. The captioned photographs taken during this survey are appended.

## **3.2 POTENTIALLY REGULATED MATERIALS**

PSI also performed a visual potentially regulated materials survey of the Project Area that included: potentially PCB-containing light ballasts, capacitors and similar items; potentially mercury-containing thermostats, switches, and similar items; fluorescent light bulbs; fire extinguishers (possible halon-containing); emergency exit lights (possibly containing tritium, a radioactive material) and associated batteries; CFC-containing equipment (i.e. drinking water fountains, air cooling units); pressure treated wood; heating oil fuel tanks; HID lamps; flammable waste traps; electronics and CFLs.

PSI did not conduct testing on these potential materials to confirm the presence of PCBs, mercury, CFCs, or other hazardous material; thus, their actual presence in the building materials is only suspected.

By definition the EPA has determined that some specific wastes are hazardous. These wastes are incorporated into lists published by the EPA. These lists are organized into three categories:

1. The F-list (non-specific source wastes). This list identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources. Wastes included on the F-list can be found in the regulations at 40 CFR §261.31.
2. The K-list (source-specific wastes). This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at 40 CFR §261.32.
3. The P-list and the U-list (discarded commercial chemical products). These lists include specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded. Wastes included on the P- and U-lists can be found in the regulations at 40 CFR §261.33.

Wastes that have not been specifically listed may still be considered a hazardous waste if exhibits one of the four characteristics defined in 40 CFR Part 261 Subpart C - ignitability (D001), corrosivity (D002), reactivity (D003), and toxicity (D004 - D043).



1. **Ignitability:** Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 °C (140 °F). Examples include waste oils and used solvents.
2. **Corrosivity:** Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels.
3. **Reactivity:** Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water.
4. **Toxicity:** Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute ground water. Toxicity is defined through a laboratory procedure called the Toxicity Characteristic Leaching Procedure (TCLP) (Method 1311). The TCLP helps identify wastes likely to leach concentrations of contaminants that may be harmful to human health or the environment.

Mercury-containing equipment, mercury containing lamps, batteries and pesticides that are classified as hazardous waste can be collected under the streamlined collection standards for Universal Waste as defined by the EPA in 40 CFR §273 and, if applicable, State and local regulations.

Light fixture ballasts manufactured through 1979 and those without a "No PCBs" label should be assumed to contain PCBs. The capacitor in the ballast may contain two to three ounces of PCBs. Potting compound (used to dissipate heat from electrical components in the ballast) may be made of waste oil contaminated by PCBs. The Toxic Substances Control Act of 1976 (TSCA) regulates disposal and storage of PCB.



## 4.0 FINDINGS

### 4.1 ASBESTOS

A total of nine samples were collected from seven suspect HAs during the asbestos survey. In addition, no suspect HAs were observed during this asbestos survey that were assumed to contain asbestos until sampling and laboratory analysis can be conducted.

The tables below list the suspect ACM observed in the Project Area. Table 1 lists the materials that were sampled, along with the results of the inspection and laboratory analysis. Table 2 lists the previously identified and assumed ACM that were identified in PSI's 2016 Limited Asbestos Inspection.

The table or tables provide a description of the materials, their general locations, condition, friability, and, if applicable and/or within the scope of work, EPA NESHAP Category, and estimated quantities.

In the following table or tables, items that are confirmed or assumed to be ACM are indicated in **bold** and items that contain less than 1% asbestos, but are not 'no asbestos detected' are indicated by *italics*.



**TABLE 1 - SUSPECT ACM - SAMPLED**

HA (Number of Samples)	Material Description	Material Location	Sample Locations	F/NF	Condition	% Asbestos & Type	EPA NESHAP Category	Estimated Quantity
01 (2)	White Pipe Fitting	Boiler Room	See Sample Map	F	Good	NAD	NA	NA
02 (2)	12x12 White Floor Tile w/ Yellow Mastic and Sub Floor	3rd Floor Conference Room	See Sample Map	NF	Good	FT-NAD YM-NAD SF-NAD BM-NAD	NA	NA
03 (1)	White Sink Undercoating	3rd Floor Conference Room	See Sample Map	NF	Good	NAD	NA	NA
<b>04 (1)</b>	<b>12x12 Off White Floor Tile w/ Black Mastic</b>	<b>3rd Floor Community Room</b>	<b>See Sample Map</b>	<b>NF</b>	<b>Good</b>	FT-NAD <b>BM-2%Ch</b>	<b>Cat. I NF</b>	<b>1000 SF</b>
<b>05 (1)</b>	<b>12x12 White Floor Tile w/ Black Mastic</b>	<b>3rd Floor Laundry Room</b>	<b>See Sample Map</b>	<b>NF</b>	<b>Good</b>	FT-2%Ch <b>BM-3%Ch</b>	<b>Cat. I NF</b>	<b>200 SF</b>
<b>06 (1)</b>	<b>12x12 Tan Mottled Floor Tile w/ Yellow and Black Mastic</b>	<b>503 Kitchen</b>	<b>See Sample Map</b>	<b>NF</b>	<b>Good</b>	FT-2%Ch <b>BM-3%Ch</b>	<b>Cat. I NF</b>	<b>50 SF per Room</b>
<b>07 (1)</b>	<b>12x12 Cream w/ Tan Specks Floor Tile and Black Mastic</b>	<b>503 Bedroom</b>	<b>See Sample Map</b>	<b>NF</b>	<b>Good</b>	FT-2%Ch <b>BM-3%Ch</b>	<b>Cat. I NF</b>	<b>300 SF per Room</b>

NOTES: F=Friable, NF=Non-Friable; Dam.=Damaged, Sig. Dam.=Significantly Damaged; NAD=No Asbestos Detected, CH=Chrysotile, AM=Amosite, CR=Crocidolite, TR=Tremolite, AC=Actinolite, AN=Anthophyllite, PT=Point Count Analysis; RACM=Regulated ACM, Cat. I NF=Category I Non-Friable ACM, Cat. II NF=Category II Non-Friable ACM; SF=square feet; LF=lineal feet; EA=each; N/A=Not Applicable



**TABLE 2 - PREVIOUSLY IDENTIFIED and ASSUMED ACM (PSI 2016 Survey)**

<b>Material Description</b>	<b>Material Location</b>	<b>F/ NF</b>	<b>Condition</b>	<b>EPA NESHAP Category</b>	<b>Estimated Quantity</b>	<b>Notes</b>
Mastic Associated with 12" Floor Tile (Identified ACM)	3rd Floor Community Room	NF	Good	Cat. II NF	1,000 sf	During this survey, PSI confirmed the material to be present in the building
12" Floor Tile and Associated Mastic (Identified ACM)	Throughout Units (except Bathrooms and Kitchens)	NF	Good	Cat. I NF	490 sf (per unit)	PSI only accessed one unit during this survey therefore could not confirm the material to still be present throughout the building
Mastic Associated with 12" Floor Tile (Identified ACM)	Kitchens in All Units	NF	Good	Cat. II NF	50 sf (per unit)	PSI only accessed one unit during this survey therefore could not confirm the material to still be present throughout the building
Mastic Associated with 12" Floor Tile (Identified ACM)	Unit 202 (Bedroom) and Unit 505 (Hallway, Living Room and Bedroom)	NF	Good	Cat. II NF	490 sf (per unit)	PSI only accessed one unit during this survey therefore could not confirm the material to still be present
Acoustical Ceiling Texture (Identified ACM)	2nd Through 8th Floor Units/ Hallways and 3rd Floor Laundry Room	F	Good	RACM	370 sf (per unit) 2,000 sf (per Hallway)	PSI only accessed one unit during this survey therefore could not confirm the material to still be present throughout the units in the building



**TABLE 2 - PREVIOUSLY IDENTIFIED and ASSUMED ACM (PSI 2016 Survey)**

Material Description	Material Location	F/ NF	Condition	EPA NESHAP Category	Estimated Quantity	Notes
					200 sf (Laundry Room)	
12" Floor Tile and Associated Mastic (Identified ACM)	3rd Floor Laundry Room (under non-ACM 12" Floor Tile and Mastic)	NF	Good	Cat. I NF	200 sf	During this survey, PSI confirmed the material to be present in the building
Elevator Door Insulation (Assumed ACM)	Floors 1 Through 8	F	Good	RACM	8 doors	During this survey, PSI confirmed the material to be present in the building

NOTES: F=Friable, NF=Non-Friable; Dam.=Damaged, Sig. Dam.=Significantly Damaged; RACM=Regulated ACM, Cat. I NF=Category I Non-Friable ACM, Cat. II NF=Category II Non-Friable ACM; N/A=Not Applicable

#### 4.1.1 NON-SUSPECT MATERIAL AND OTHER OBSERVATIONS

In addition, the following materials were observed but are considered 'non-suspect' ACM due to their composition (fiberglass, rubber, etc.) and were not sampled.

- Fiberglass Pipe Insulation

#### 4.2 POTENTIALLY REGULATED MATERIALS

The following potentially regulated materials, that may require special handling or disposal, were observed in the noted quantities:

Material	Amount	General Location
Fluorescent Light Tubes	40	Per Floor
Fire Extinguishers (Halon)	2	Per Floor
Emergency Exit Lights - Tritium Containing	5	Per Floor



Material	Amount	General Location
CFC-Containing Drinking Fountains	1	Per Floor
CFC-Containing Air Cooling Units	1	Per Unit



## **5.0 CONCLUSIONS**

### **5.1 ASBESTOS**

ACM (>1% asbestos) was identified based on the samples collected from the materials at Murray Towers.

Assumed ACM was identified in the project area at Murray Towers.

Low concentrations of asbestos (trace to 1%) were not identified in the materials sampled at Murray Towers.

### **5.2 POTENTIALLY REGULATED MATERIALS**

Potentially Regulated Materials were observed during the survey.



## 6.0 RECOMMENDATIONS

### 6.1 ASBESTOS

ACM or assumed ACM should be maintained in a good, relatively undamaged condition and periodically surveyed, typically through use of an operations and maintenance (O&M) program. Damaged or significantly damaged ACM should be repaired, encapsulated, enclosed or removed.

Prior to any future maintenance, renovation or demolition activities, any assumed ACM should be tested, if practical, or treated as asbestos-containing.

Any areas that were noted as being inaccessible during this project, or any concealed areas, such as behind walls, where suspect ACM is discovered, will need to be sampled and analyzed for ACM, if practical, or suspect materials observed in such areas should be treated as asbestos-containing.

If additional suspect materials not documented in this report are encountered during work activities, the material should be considered asbestos-containing unless bulk sampling is performed and laboratory analysis proves otherwise. The renovation and/or demolition contractor should provide oversight to ensure that additional found suspect ACM is properly tested, if practical, or treated as asbestos-containing.

The Allegheny County Health Department (ACHD) regulates **all** asbestos containing materials as RACM; therefore, all ACMs must be removed prior to demolition or impacting renovations. Federal, State and Local regulations and guidelines should be strictly adhered to when removing the ACM.

The client should consult the EPA's NESHAP standard, the State of Pennsylvania's asbestos regulations, and any local regulations, for additional details regarding asbestos-related demolition or renovation procedures and requirements.

### 6.2 POTENTIALLY REGULATED MATERIALS

PSI recommends that, prior to any renovation or demolition activities, the observed materials that would be impacted by the reported demolition or renovation, be removed and properly managed according to applicable Federal, State, and local regulations and/or guidelines.



## **7.0 WARRANTY AND THIRD PARTY RELIANCE**

### **7.1 STANDARD OF CARE AND WARRANTIES**

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect ACM, and potentially regulated materials for the Project Area. PSI warrants that the findings contained herein have been prepared in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey and analytical methods have been used to provide the client with information regarding the presence of accessible and/or exposed suspect ACM existing at the time of the survey. Test results are valid only for the material or materials tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of the survey or which were not apparent during the site visit. This survey covered only those areas that were exposed and/or physically accessible to the Inspector.

PSI has assumed that factual information provided to us by the Client, or obtained from governmental sources, the public domain, interviews, and other sources is accurate, unbiased and complete. PSI assumes no liability for the accuracy of data provided to us by others and does not warrant or guarantee that the information provided by these sources is accurate, unbiased or complete.

Our services were not intended to be technically exhaustive. There is a possibility that with the proper application of methodologies, conditions may exist on the property that could not be identified within the scope of the survey or that were not reasonably identifiable from the available information. The report may not represent all conditions at the subject property or project area as it only reflects the information gathered from specific locations on the date of the survey. No inspection can wholly eliminate uncertainty regarding the potential for asbestos in connection with the subject property.

As directed by the client, PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

No other warranties are implied or expressed.

### **7.2 RELIANCE**

Fukui Architects, PSI's client, may rely on this report.



### **7.3 THIRD PARTY RELIANCE**

This report was prepared pursuant to a contract between PSI and its client. That contractual relationship included an exchange of information about the property that was unique and serves as the basis upon which this report was prepared. Because of the importance of these understandings, our assessment may not be sufficient for the intended purposes of another party.

Reliance or any use of this report by anyone other than those parties identified above for which it was prepared, except with express written permission, is prohibited and therefore not foreseeable to PSI. Any unauthorized reliance on or use of this report, including any of the information or conclusions contained herein, will be at the third party's risk. No warranties or representations expressed or implied in this report are made to any such third party.

Third party reliance letters may be issued:

- upon timely request;
- subject to the permission of our original client; and
- payment of the then-current fee for such letters.

All third parties relying on our report, by such reliance, agree that such reliance is limited by our proposal and/or General Conditions, as applicable.

# PHOTOGRAPHS



Photo 1: HA-01



Photo 2: HA-02



Photo 3: HA-04



Photo 4: HA-06



Photo 5: HA-07



Photo 6: ACM Surfacing from Previous Survey

**LABORATORY ANALYTICAL  
REPORT AND CHAIN-OF-  
CUSTODY DOCUMENTATION**



## REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS

TESTED FOR: **PSI, Inc.**  
**850 Poplar Street**  
**Pittsburgh, PA 15220**  
**Attn: David Antis**

Project ID: **08166046**  
**Murray Towers**

Date Received: **6/11/2024**

Date Completed: **6/18/2024**

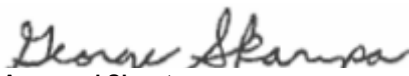
Date Reported: **6/18/2024**

Analyst: **Miranda Badanich** Work Order: **2406211** Page: **1 of 2**

Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) <i>Analyst's Comment</i>	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)
01-1	001A	(1) Beige, Pipe Fitting, Homogeneous	<b>NO ASBESTOS DETECTED</b>	10% Cellulose Fiber 10% Fibrous Glass
01-2	002A	(1) Beige, Pipe Fitting, Homogeneous	<b>NO ASBESTOS DETECTED</b>	10% Cellulose Fiber 10% Fibrous Glass
02-1	003A	(1) White, Floor Tile, Homogeneous (2) Yellow, Mastic, Homogeneous (3) White, Floor Tile, Homogeneous (4) Brown, Mastic, Homogeneous	<b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b>	None Reported None Reported None Reported None Reported
02-2	004A	(1) White, Floor Tile, Homogeneous (2) Yellow, Mastic, Homogeneous (3) White, Floor Tile, Homogeneous (4) Brown, Mastic, Homogeneous	<b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b> <b>NO ASBESTOS DETECTED</b>	None Reported None Reported None Reported None Reported
03-1	005A	(1) White, Sink Undercoating, Homogeneous	<b>NO ASBESTOS DETECTED</b>	20% Cellulose Fiber
04-1	006A	(1) Off-White, Floor Tile, Homogeneous (2) Black, Mastic, Homogeneous	<b>NO ASBESTOS DETECTED</b> 2% <b>Chrysotile</b>	None Reported None Reported
05-1	007A	(1) White, Floor Tile, Homogeneous (2) Black, Mastic, Homogeneous <i>Inseparable Black and Yellow Mastic.</i>	2% <b>Chrysotile</b> 3% <b>Chrysotile</b>	None Reported None Reported

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested as received. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA 600/M4-82-020). Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative Transmission Electron Microscopy is currently the only method that can be used to determine if the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may be reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight. NVLAP Lab Code 101350-0.

Respectfully submitted,  
PSI, Inc.

  
Approved Signatory  
George Skarupa

**Analyst:** Miranda Badanich

**Work Order:** 2406211

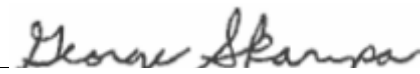
**Page:** 2 of 2

Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) <i>Analyst's Comment</i>	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)
06-1	008A	(1) Tan, Floor Tile, Homogeneous (2) Black, Mastic, Homogeneous	2% <b>Chrysotile</b> 3% <b>Chrysotile</b>	None Reported None Reported
07-1	009A	(1) Cream, Floor Tile, Homogeneous (2) Black, Mastic, Homogeneous	2% <b>Chrysotile</b> 3% <b>Chrysotile</b>	None Reported None Reported

**Report Notes:** (PT) Point Count Results

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested as received. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA 600/M4-82-020). Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative Transmission Electron Microscopy is currently the only method that can be used to determine if the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight. NVLAP Lab Code 101350-0.

Respectfully submitted,  
PSI, Inc.



Approved Signatory  
George Skarupa



2400211  
(2)

IH Laboratory  
850 Poplar Street  
Pittsburgh, PA 15220  
412-922-4000  
IHlab@intertek.com

Stop at First Positive	
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

### Chain of Custody Bulk Asbestos

Reporting Information	
Company:	PSI
Primary Contact:	David Antis
Address:	
Phone:	
Email(s) for Report:	David.Antis@Intertek.com

Billing Information		<input checked="" type="checkbox"/> Same as Reporting
Company:		
Billing Contact:		
Address:		
Phone:		
Email(s) for Invoice:		

Projection Information			
Project Name:	Murray Towers	Location:	
Project Number:	<del>08166046</del> 08166046	PO Number:	
		Quote Number:	

Method/ Matrix		
<b>PLM</b>		<b>TEM</b>
<input type="checkbox"/> Point Count-400 Points Gravimetric Reduction: <input type="checkbox"/>	<input checked="" type="checkbox"/> PLM- EPA 600/R-93/116	<input type="checkbox"/> NYELAP 198.4 NOB- Non-Friable-NY TEM
<input type="checkbox"/> Point Count- 1000 Points Gravimetric Reduction: <input type="checkbox"/>	<input type="checkbox"/> RCF-Optical & Physical	<input type="checkbox"/> ASTM D6480- Wipe
<input type="checkbox"/> NYELAP 198.1- Friable- NY	<input type="checkbox"/> NYELAP 198.8- Vermiculite	<input type="checkbox"/> ASTM D5755- Microvac
<input type="checkbox"/> NYELAP 198.6- Non-Friable-NY	<input type="checkbox"/> SM-V	<input type="checkbox"/> NYELAP 198.8 Modified- Vermiculite TEM**
<input type="checkbox"/> Other: _____		<input type="checkbox"/> ASTM D5756 Modified***
**Not suitable for Vermiculite that must comply with the NY State Dept. of Health Asbestos Regulations		
***Asbestos Weight Percent in Bulk Material by TEM (Sensitivities down to 0.0005 wt%)		

Requested Turnaround Time					
<input type="checkbox"/> RUSH (<12Hrs)*	<input type="checkbox"/> 12 hour (Same Day)	<input type="checkbox"/> 1 Day (Next Day)	<input type="checkbox"/> 2 Day	<input type="checkbox"/> 3 Day	<input checked="" type="checkbox"/> 5 Day
*Matrix and Volume dependent- must confirm with lab					

Chain of Custody		
<b>Relinquished</b>	<b>Received</b>	<b>Analyst</b>
Name: Dena Akers	Name: <i>[Signature]</i>	Name: _____
Date: 06/10/2024	Date: 6-11-24	Date: _____
Time: 1:00 PM	Time: 9 AM	Time: _____

Special Instructions	



# **Murray Towers Asbestos Report - PSI, 2016**



## **Limited Asbestos Survey Report**

**Murray Towers Apartments**  
2825 Murray Avenue  
Pittsburgh, Pennsylvania 15217

Prepared for

Housing Authority of the City of Pittsburgh  
100 Ross Street, 2<sup>nd</sup> Floor  
Pittsburgh, Pennsylvania 15219

Prepared by

Professional Service Industries, Inc.  
850 Poplar Street  
Pittsburgh, PA 15220

April 8, 2016

PSI Project # 08161181-61

April 8, 2016

Housing Authority of the City of Pittsburgh  
100 Ross Street, 2<sup>nd</sup> Floor  
Pittsburgh, Pennsylvania 15219

Attention: Mr. Jerome Frank

Subject: **Limited Asbestos Survey**  
**Murray Tower Apartments**  
2825 Murray Avenue  
Pittsburgh, Pennsylvania 15217  
PSI Project #08161181-61

Dear Mr. Frank:

Professional Service Industries, Inc. (PSI) performed the Asbestos Survey that you requested. PSI provided its services in general accordance with our agreement dated January 29, 2016. PSI transmits one electronic copy of the report with this letter.

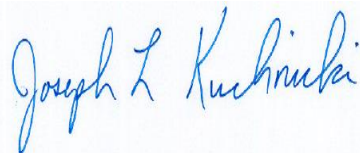
PSI thanks you for choosing us as your consultant for this project. Please contact us at 412-922-4000 if you have any questions or we may be of further service.

Respectfully Submitted,

**PROFESSIONAL SERVICE INDUSTRIES, INC.**



Douglas E. Finke  
Project Manager



Joseph L. Kuchnicki, CHMM  
Principal Consultant

P:\0816\2016\ASBISurveys\08161181 - HACPI\08161181-61 Murray Towers\08161181-61 Murray Towers final.docx

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## 1 EXECUTIVE SUMMARY

Professional Service Industries (PSI), Inc., was retained by the Housing Authority of City of Pittsburgh to conduct a limited survey for asbestos-containing materials (ACM) in the Murray Towers Apartments located 2825 Murray Avenue, Pittsburgh, Pennsylvania.

The subject building is an approximately 105,000-sq. ft., 8-story, slab-on-grade, brick structure that was constructed in the 1970s. The subject structure was occupied during the inspection. The building is used as an apartment complex that has 67 units, common areas, laundry room, boiler room, mechanical rooms, and a management office. The survey was limited to interior common areas, maintenance areas and approximately 20% of the units which were tested to be representative of the whole building. The units and areas that were tested are:

- Units 101, 201, 206, 303, 402, 501, 505, 509, 603, 607, 608, 704, 710, 711, 805, 808

The purpose of the investigation and sampling was to provide information regarding the presence, condition of accessible ACMs located at the facility for The Environmental Report associated with the HUD, Office of Multifamily Housing, Multifamily Housing Accelerated Processing Guide: Chapter 9 Environmental Review. Roof Systems and exterior were not included in the scope of this survey.

The asbestos inspection and sampling was conducted on March 7, 2016. A total of 34 samples were collected from 12 suspect asbestos-containing homogeneous materials during the survey. The samples were analyzed by polarized light microscopy (PLM).

**The following ACMs (>1% asbestos) were identified during this investigation:**

- **(MT-02) Black Mastic** – Associated with Non ACM 12" x 12" Off White Floor Tile in 3<sup>rd</sup> Floor Community Room
- **(MT-03) 12" x 12" Cream with Tan Specs Floor Tile with Black Mastic** – In Hallway, Living Room, Bedrooms of all Inspected Units. Under MT-05 in some Kitchens
- **(MT-05) Black Mastic** – Associated with Non ACM 12" x 12" Tan Mottled Floor Tile, In Units where MT-05 the only FT layer, , 2<sup>nd</sup> Floor Mechanical Room Bathroom, Under Carpet in 1<sup>st</sup> Floor Room 103/Harietta's Office
- **(MT-07) Black Mastic** – Associated with Non ACM 12" Beige Floor Tile in Rooms 202 and 505
- **(MT-09) Acoustical "Popcorn" Ceiling** – on Apartment Unit Ceilings From 2<sup>nd</sup> Floor thru 8<sup>th</sup> Floor, Hallway Ceilings 2<sup>nd</sup> Floor Thru 8<sup>th</sup> Floor, 3<sup>rd</sup> Floor Laundry Room.
- **(MT-10) White Floor Tile with Black Mastic** – Under Non ACM 12" Floor Tile in 3<sup>rd</sup> Floor Laundry Room

In addition, the following materials were not sampled due to inaccessibility, safety concerns, or in order to avoid compromising their integrity, and are assumed to be ACM:

- Elevator Doors

The identified or assumed ACMs were observed to be in good condition at the time of the field investigation.

ACMs should be maintained in a good non-damaged condition through use of an Operations and Maintenance (O&M) program. Regulated ACM (RACM) must be properly removed by a licensed asbestos abatement contractor prior to renovations or demolition that would disturb the material. The Allegheny County Health Department (ACHD) regulates **all** asbestos containing materials as RACM; therefore, all ACMs must be removed prior to demolition or impacting renovations. Federal, State and Local regulations and guidelines should be strictly adhered to when removing the ACM.

In addition, prior to any future maintenance, renovation or demolition activities, any assumed ACMs should be tested, and any areas noted as inaccessible during this project, or any concealed areas, such as behind walls, where suspect ACMs are discovered, will require a survey for ACM.

The following materials were point counted and determined to contain  $\leq 1\%$  asbestos; therefore they are not considered to be ACM by EPA or OSHA.

- (MT-01) Joint Compound - Throughout all Units Tested

These materials are unregulated by EPA, and are considered unclassified asbestos work per OSHA. Some OSHA work control practices and prohibitions will still apply, with the extent depending on whether the worker's exposure to airborne asbestos exceeds the OSHA PEL during the renovation/demolition process.

This summary does not contain all the information presented in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

## 2 INTRODUCTION

### 2.1 SCOPE OF SERVICES

The scope of services for this project consisted of conducting an asbestos survey, including inspection, sampling and analysis of accessible and exposed interior at the subject facility. Exterior areas including the roof were not included in this survey.

The subject area(s) of the facility for this investigation included common areas and a representative number (16) of apartment units throughout the entire building.

The investigation included a review of client-provided records or documents (if available), visual inspection of the subject area(s), sample collection, polarized light microscopy (PLM) sample analysis, quantification of ACMs, and report preparation & review.

### 2.2 PURPOSE

The purpose of this survey was to provide general information for the subject building(s) regarding the presence, condition, and quantity of accessible and/or exposed friable and non-friable, building materials that contain asbestos.

### 2.3 AUTHORIZATION

Authorization to conduct the investigation and sampling was given on January 29, 2016 by Kim Detrick, Contracting Officer for the Housing Authority of the City of Pittsburgh. The project was conducted in accordance with the scope, terms and conditions of PSI's Master Service Agreement MGMT#7195 BPO#1582, dated August 29, 2012.

### 2.4 LIMITATIONS

This asbestos survey was intended to meet the requirements of the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Asbestos demolition or renovation. The survey included a thorough inspection of 20% of the units, common areas and offices.

Due to the occupancy of the structure, PSI was generally not able to conduct 'destructive' sampling such as inside wall cavities or above plaster ceilings: therefore, the inspection was limited to areas that were accessible and exposed.

Exterior areas and roof Systems were not included in the scope of this survey.

Destructive sampling, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.), inside mechanical chases, behind mirrored walls, etc., was not generally conducted to assess inaccessible or concealed materials.

Inaccessible is defined as areas of the building that were locked, or where admittance was not permitted. It also includes areas/materials that could not be tested (sampled) without destruction of the structure or a portion of the structure, and areas/materials that could not be safely reached by

the inspector or inspection team. In the event that access to a portion of the building was not obtained (which otherwise would have been tested), such limitations specifically are identified in the Findings Section of this report.

PSI did not sample any system which presented a hazard to the inspection team such as energized electrical systems or within confined spaces.

PSI did not collect samples from building elements where the intended use would be compromised by testing, such as fire rated doors, vapor barriers, mirror mastics, etc.

## **2.5 WARRANTY**

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect ACM for the building structure. Professional Service Industries (PSI), Inc., warrants that the findings contained herein have been prepared in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey and analytical methods have been used to provide the client with information regarding the presence of accessible and/or exposed suspect ACM existing at the time of the inspection. Test results are valid only for the material(s) tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of the study or which were not apparent during the site visit. This inspection covered only those areas that were exposed and/or physically accessible to the Inspector. The study is also limited to the information available from the client at the time it was conducted.

As directed by the client, PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

No other warranties are implied or expressed.

### 3 GENERAL BUILDING AND SURVEY INFORMATION

#### 3.1 BUILDING INFORMATION

<u>Subject Property:</u>	Murray Towers Apartments 2825 Murray Ave Pittsburgh, Pennsylvania
<u>Facility Construction Date:</u>	1970s
<u>Previous Renovation Dates:</u>	Window Replacement in 2013
<u>Number of Floors:</u>	8 Stories
<u>Est Square Feet:</u>	105,000
<u>Construction Type</u>	Brick, slab-on-grade
<u>Building Occupant(s):</u>	Occupied by tenants of Murray Towers Apartments
<u>Additional Information:</u>	Access was limited to 16 units plus common areas. PSI inspected approximately 20% of the units, hallways, common areas, mechanical spaces, boiler room, laundry room, and offices.

#### 3.2 INSPECTION INFORMATION

<u>Name of PSI Inspector(s):</u>	Douglas E. Finke #042272
<u>Date(s) of Inspection:</u>	March 7, 2016
<u>Escort:</u>	Walt, Maintenance Superintendent

## 4 METHODOLOGY

Inspection and sampling procedures were performed in general accordance with the guidelines published by the Environmental Protection Agency (EPA). The inspection and survey described below was performed by an EPA accredited and State of Pennsylvania licensed inspector.

### 4.1 RECORD DOCUMENT REVIEW

Prior to conducting the visual inspection, PSI reviewed documents provided by the client, including: drawings, floor plans, historical data, maintenance records, previous survey reports, laboratory reports, etc. for information regarding construction history and building materials.

The following document was reviewed as a part of this Asbestos Survey:

- None

This data was used to focus the walk through and scope of work to be followed over the course of our visual inspection and sampling. Information obtained from the references is included in the findings section of the report.

### 4.2 VISUAL INSPECTION PROCEDURES

An initial individual building structure walkthrough was conducted to determine the presence of suspect asbestos-containing materials that were accessible and/or exposed. Exterior areas, including the roof systems, were not included in the scope of this investigation.

The inspection and sampling was limited to those areas and materials that were accessible and did not involve destruction of walls, other building elements, physical barriers, or the structural integrity of the item being tested.

Materials which were similar in color, texture, general appearance and which appear to have been installed at the same time were grouped in Homogeneous Sampling Areas. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were also noted.

The inspector evaluated the overall condition of the material and determined whether the materials were friable or non-friable by touching the material, where practical. A friable material is defined as any material able to be crushed, crumbled, pulverized or reduced to a powder by hand press when dry.

Each material was further assessed for overall condition. Conditions were rated as good, damaged or significantly damaged. PSI's inspector also identified the EPA classification of the material: Regulated ACM (RACM), Category I non-friable ACM, and Category II non-friable ACM, based on the materials current condition. PSI's inspector provided estimated quantities of the materials identified as ACM, based only on materials that were accessible and exposed.

### **4.3 ASBESTOS SAMPLING PROCEDURES**

Following the walkthrough, the Inspector collected samples of suspect materials.

EPA guidelines were used to determine the sampling protocol. Sampling locations were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from areas already damaged or areas which were the least visible to minimize disturbance of the material.

Each sample location was sprayed with amended water and was kept wet during the entire sampling process. Samples were collected by coring through the material from the surface down to the base substrate. All layers of the material were extracted and placed into a sample container for transport to the laboratory. Sample containers were sealed and labeled with a unique sample identification number. Where appropriate, sampled materials were sealed with an encapsulant or covered with tape after sampling. PSI is not responsible for restoring the sampled areas to their presampled condition.

In accordance with the agreement between PSI and the client, roofing materials were not sampled as part of this survey.

### **4.4 ASBESTOS ANALYSIS PROCEDURES**

All samples were analyzed at AmeriSci Richmond located at 13635 Genito Road, Midlothian, Virginia 23112. The AmeriSci Richmond Asbestos Laboratory is a National Voluntary Laboratory Accreditation Program (NVLAP) Accredited (#101904-0). A copy of the Laboratory's Accreditation Certificate is included in Appendix E.

The samples were analyzed for asbestos on a "positive-stop" basis by polarized light microscopy (PLM) in accordance with the "EPA Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116 July 1993). Analysis was performed by using bulk samples for visual observation and slide preparation(s) for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, actinolite/tremolite), and fibrous non-asbestos constituents (mineral wool, fiberglass, cellulose, etc.). Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample, using a stereoscope.

The EPA method allows samples which are visually determined to have 10% or less asbestos to be quantified using a Point Count procedure. An ocular reticule (cross hair or point array) is used to visually superimpose a point or points on the microscope field of view. A total of 400 points superimposed on either asbestos fibers or non-asbestos matrix material must be counted over at least eight different preparations of representative subsamples. If an asbestos fiber and matrix particle overlap so that a point is superimposed on their visual intersection, a point is scored for both categories. Point counting provides a quantification of the area percent asbestos. Seven samples were point counted for this survey.

## 5 FINDINGS

### 5.1 ASBESTOS RESULTS

A total of 34 samples were collected from 12 suspect homogenous materials during the asbestos survey. In addition, one suspect homogeneous material was observed during the asbestos survey but were not sampled, and are assumed to contain asbestos until sampling and laboratory analysis can be conducted.

The “Report of Bulk Sample Analysis for Asbestos”, the “Asbestos Bulk Sample Log”, Sample Location diagram and Photographs are included in the Appendices. The Tables on the following pages list the suspect asbestos-containing materials observed throughout the building. Table 1 lists the materials that were sampled, along with the results of the inspection and laboratory analysis. Table 2 lists the suspect materials that were not sampled and are assumed to be ACM.

Both tables give a description of the materials, their general locations, condition, friability, EPA NESHAP Category, and estimated quantity, and an estimated cost estimate for abatement.

#### Inaccessible Areas

The following areas were inaccessible during the survey and therefore were not included in the scope of the survey.

- Behind Walls and Ceilings
- A total of 16 of the 67 units were inspected. The remainder were not accessible and are assumed to be similar to the inspected units

These areas will require an asbestos inspection prior to any demolition or renovation activities within the areas.

#### Non-Suspect Materials

The following materials were observed but are considered ‘non-suspect’ ACM due to their composition (fiberglass, rubber, etc.) and were not sampled.

- Fiberglass Pipe Insulation – In Boiler Room

#### Regulatory Guidelines

**ACM Definition** - The EPA & OSHA consider a material to be asbestos-containing if at least one sample from the homogeneous area shows asbestos in an amount greater than 1%.

**Point Count Quantification** - If a material is found to contain 10% or less asbestos via visual estimation, it can be treated as non-asbestos containing per EPA Regulations, if verified to contain 1% or less asbestos by the Point Count Quantification Procedure. If not point counted, a sample in which asbestos was visually detected and estimated (including trace to  $\leq 1\%$ ) must be assumed to be greater than 1% and treated as ACM. Please refer to the laboratory analyses

for a more detailed description of the microscopic analysis of individual samples. Seven samples were quantified by the Point Count Procedure in this Asbestos Survey.

**EPA NESHAP Category** - EPA classifies ACM into several categories. A **regulated asbestos-containing material (RACM)** as defined by the Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) is any (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. A **Category I Non-friable ACM** includes packings, gaskets, resilient floor covering, and asphalt roofing products which contain more than one percent asbestos. A **Category II Non-friable ACM** includes any material, except for a Category I non-friable ACM, which contains more than one-percent asbestos and cannot be reduced to a powder by hand pressure when dry.

**The Occupational Safety and Health Administration (OSHA)** requires all suspect materials to be analyzed by layer, even materials such as drywall/joint compound, which may sometimes be composited per the EPA. If any layer contains asbestos in a concentration >1%, the material is considered an ACM.

OSHA has a classification system (I thru IV) for ACM depending on the type of material and the disturbance. Briefly, **'Class I'** work is defined as activities involving the removal of ACM or presumed ACM (PACM) that is thermal system insulation (TSI) and surfacing materials. **'Class II'** activities involve removal of ACM/PACM other than TSI or surfacing material. **'Class III'** work includes repair and maintenance operations which are likely to disturb ACM/PACM, and **'Class IV'** work includes maintenance and custodial activities during which employees contact but do not disturb ACM/PACM.

Materials where asbestos is detected, but where point counting is conducted and determined that the concentration is  $\leq 1\%$  asbestos, are not considered to be ACM by OSHA. However, these materials are considered unclassified asbestos work per OSHA. Some OSHA work control practices and prohibitions will still apply, with the extent depending on whether the worker's exposure to airborne asbestos exceeds the OSHA permissible exposure limit (PEL).

Additional details of the OSHA asbestos regulations related to the construction industry can be found in 29 CFR part 1926.1101.

**TABLE 1 – SUSPECT ACMs - SAMPLED**

**Murray Towers**

**Survey Date(s): March 7, 2016**

<b>MATERIAL # &amp; (# SAMP)</b>	<b>MATERIAL DESCRIPTION</b>	<b>MATERIAL LOCATION</b>	<b>F/NF<sup>1</sup></b>	<b>COND.<sup>2</sup></b>	<b>% ACM &amp; TYPE<sup>3</sup></b>	<b>EPA NESHAP CAT<sup>4</sup></b>	<b>EST. QTY<sup>5</sup></b>
MT-01 (7)	Drywall and Joint Compound	Throughout Building	NF	Good	DW – NAD JC – 0.3 - 0.8% Ch (PT)	NAD	NA
<b>MT-02 (2)</b>	<b>12" x 12" Off White Floor Tile with Black Mastic</b>	<b>3<sup>rd</sup> Floor Community Room</b>	<b>NF</b>	<b>Good</b>	<b>FT – NAD BM – 3% Ch</b>	<b>CAT II NF</b>	<b>1000 SF</b>
<b>MT-03 (2)</b>	<b>12" x 12" Cream with Tan Specs Floor Tile with Black Mastic</b>	<b>Throughout Units except bathroom</b>	<b>NF</b>	<b>Good</b>	<b>FT – 3% Ch BM – 8% Ch</b>	<b>CAT I NF</b>	<b>490 SF per unit</b>
MT-04 (3)	Tan Cove Base with Yellow and Brown Mastic	Throughout Units	NF	Good	CB – NAD M – NAD	NA	NA
<b>MT-05 (3)</b>	<b>12" x 12" Tan Mottled Floor Tile with Yellow and Black Mastic</b>	<b>Kitchen Throughout</b>	<b>NF</b>	<b>Good</b>	<b>FT – NAD YM – NAD BM – 8% Ch</b>	<b>CAT II NF</b>	<b>50 SF per Kitchen</b>
MT-06 (2)	Black Cove Base with Yellow Mastic	Throughout Units	NF	Good	CB – NAD YM – NAD	NA	NA
<b>MT-07 (2)</b>	<b>12" x 12" Beige Floor Tile with Black Mastic</b>	<b>Units 202 Bedroom and 505 Hallway, Living Room and Bedroom</b>	<b>NF</b>	<b>Good</b>	<b>FT – NAD BM – 8% Ch</b>	<b>CAT II NF</b>	<b>490 SF Per Unit</b>
MT-08 (2)	Brown Cove Base with Brown Mastic	Throughout Units	NF	Good	CB – NAD BM – NAD	NA	NA

<sup>1</sup> F = Friable; NF = Non-friable

<sup>2</sup> Cond. = Condition Of Materials Either good, dam = damaged., sig. dam. = significant damage

<sup>3</sup> NAD = No Asbestos Detected, Ch = Chrysotile, Am = Amosite, PT = Point Count Analysis

<sup>4</sup> NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACBM, Cat II NF= Category II Non-Friable ACBM

<sup>5</sup> EST QTY is in the apartment unit sampled. Total estimated quantity for the building is not provided as only approximately 20% of the units were inspected. Other units not inspected are assumed to contain a similar quantity of ACM

**TABLE 1 – SUSPECT ACMs - SAMPLED**

**Murray Towers**

**Survey Date(s): March 7, 2016**

<b>MATERIAL # &amp; (# SAMP)</b>	<b>MATERIAL DESCRIPTION</b>	<b>MATERIAL LOCATION</b>	<b>F/NF<sup>1</sup></b>	<b>COND.<sup>2</sup></b>	<b>% ACM &amp; TYPE<sup>3</sup></b>	<b>EPA NESHAP CAT<sup>4</sup></b>	<b>EST. QTY<sup>5</sup></b>
MT-09 (3)	Acoustical “Popcorn” Ceiling	2 <sup>nd</sup> thru 8 <sup>th</sup> Floors Units and Hallways, 3 <sup>rd</sup> Floor Laundry Room	F	Good	4% Ch	RACM	370 SF per Unit 2,000 SF per Hallway
MT-10 (2)	12” x 12” Blue Floor Tile Alternating with 12” x 12” White Floor Tile over  White Floor Tile and Black Mastic	3 <sup>rd</sup> Floor Laundry	NF	Good	12” BFT – NAD YM – NAD 12” WFT – NAD YM – NAD  WFT – 3% Ch BM – 8% Ch	CAT I NF	200 SF
MT-11 (3)	Pipe Fitting Insulation on Fiberglass Lines	Boiler Room	F	Good	NAD	NA	NA
MT-12 (2)	2’ x 4’ Suspended Ceiling Tile	1 <sup>st</sup> Floor Hallway	F	Good	NAD	NA	NA

<sup>1</sup> F = Friable; NF = Non-friable

<sup>2</sup> Cond. = Condition Of Materials Either good, dam = damaged., sig. dam. = significant damage

<sup>3</sup> NAD = No Asbestos Detected, Ch = Chrysotile, Am = Amosite, PT = Point Count Analysis

<sup>4</sup> NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACBM, Cat II NF= Category II Non-Friable ACBM

<sup>5</sup> EST QTY is in the apartment unit sampled. Total estimated quantity for the building is not provided as only approximately 20% of the units were inspected. Other units not inspected are assumed to contain a similar quantity of ACM



**TABLE 2 – SUSPECT ACMs – ASSUMED**

**Murray Towers**

**Survey Date(s): March 7, 2016**

MATERIAL # & (# SAMP)	MATERIAL DESCRIPTION	MATERIAL LOCATION	F/NF <sup>1</sup>	COND. <sup>2</sup>	% ACM & TYPE <sup>3</sup>	EPA NESHAP CAT <sup>4</sup>
13 (0)	Elevator Door Insulation	On Floors 1-8	F	16	Assumed	RACM

<sup>1</sup> F = Friable; NF = Non-friable

<sup>2</sup> Cond. = Condition Of Materials Either good, dam = damaged., sig. dam. = significant damage

<sup>3</sup> NAD = No Asbestos Detected, Ch = Chrysotile, Am = Amosite, PT = Point Count Analysis

<sup>4</sup> NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACBM, Cat II NF= Category II Non-Friable ACBM

<sup>5</sup> EST QTY is in the apartment unit sampled. Total estimated quantity for the building is not provided as only approximately 20% of the units were inspected. Other units not inspected are assumed to contain a similar quantity of ACM



## 6 CONCLUSIONS & RECOMMENDATIONS

### 6.1 CONCLUSIONS

**Asbestos-containing materials (ACMs) were found in the Murray Towers Apartments located at 2825 Murray Avenue, Pittsburgh, PA.**

**Assumed ACMs were found in Murray Towers Apartments located at 2825 Murray Avenue, Pittsburgh, PA.**

**Materials with low concentrations of asbestos (trace to 1%) were identified in the subject facility(s).**

The identified or assumed ACMs were observed to be in good condition at the time of the field investigation.

### 6.2 RECOMMENDATIONS

ACMs should be maintained in a good non-damaged condition and periodically inspected through use of an Operations and Maintenance (O&M) program. Damaged or significantly damaged ACMs should be repaired, encapsulated, enclosed or removed.

ACMs should be maintained in a good non-damaged condition through use of an Operations and Maintenance (O&M) program. Regulated ACM (RACM) must be properly removed by a licensed asbestos abatement contractor prior to renovations or demolition that would disturb the material. The Allegheny County Health Department (ACHD) regulates **all** asbestos containing materials as RACM; therefore, all ACMs must be removed prior to demolition or impacting renovations. Federal, State and Local regulations and guidelines should be strictly adhered to when removing the ACM.

Materials verified to contain low concentrations of asbestos (trace to 1%) are not considered ACM, and are not regulated by the EPA; however, some OSHA regulations will still apply based on the employee's airborne exposure.

In addition, prior to any future maintenance, renovation or demolition activities, any assumed ACMs should be tested. Any areas that were noted as being inaccessible during this project, or any concealed areas, such as behind walls, where suspect ACMs are discovered, will require a survey for ACM.

Prior to the initiation of a project that would involve abatement, a detailed engineering cost estimate and project design is recommended. The engineering cost estimate will incorporate such variables as scheduling and phasing of the project, the size and extent of the project, seasonal factors, operational factors and other restrictions, respiratory protection, alternate abatement options, and type of replacement material. An engineering cost estimate would also include professional fees, such as for project design and management, and other expenses, such as on-site air monitoring and construction supervision.

**APPENDIX A – REPORT OF BULK SAMPLE ANALYSIS FOR  
ASBESTOS**



Please Reply To:

**AmeriSci Richmond**  
13635 GENITO ROAD  
MIDLOTHIAN, VIRGINIA 23112  
TEL: (804) 763-1200 • FAX: (804) 763-1800

**FACSIMILE TELECOPY TRANSMISSION**

**To:** Doug Finke  
Professional Services Industries  
**Fax #:**  
**Email:** doug.finkle@psi.usa.com

**From:** William M. Dunstan  
**AmeriSci Job #:** 116031401  
**Subject:** PLM 48 hour Results  
**Client Project:** 08161181-61; HACP - Murray  
Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2)

**Date:** Monday, April 04, 2016

**Time:** 17:29:00

**Comments:**

**Number of Pages:** 16  
(including cover sheet)

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## PLM Bulk Asbestos Report

Professional Services Industries  
Attn: Doug Finke  
850 Poplar Street  
Pittsburgh, PA 15220

**Date Received** 03/10/16    **AmeriSci Job #** 116031401  
**Date Examined** 03/11/16    **P.O. #**  
**Page** 1 of 12  
**RE: 08161181-61; HACP - Murray Towers; 2825 Murray Ave**  
**15217 (Report Amended 4/4/2016)**

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-01-01 1 Location: Unit 101 Hall Closet; Drywall & Joint Compound  Analyst Description: White/Tan, Heterogeneous, Non-Fibrous, Drywall Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %	116031401-01.1	No	NAD (by CVES) by William M. Dunstan on 03/11/16
MT-01-01 1 Location: Unit 101 Hall Closet; Drywall & Joint Compound  Analyst Description: Off White, Heterogeneous, Non-Fibrous, Joint Compound Asbestos Types: Chrysotile 0.8 % Other Material: Non-fibrous 99.3 %	116031401-01.2	Yes	0.8 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
MT-01-02 1 Location: Unit 206 Bed Closet; Drywall & Joint Compound  Analyst Description: White/Tan, Heterogeneous, Non-Fibrous, Drywall Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %	116031401-02.1	No	NAD (by CVES) by William M. Dunstan on 03/11/16
MT-01-02 1 Location: Unit 206 Bed Closet; Drywall & Joint Compound  Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound Asbestos Types: Chrysotile 0.3 % Other Material: Non-fibrous 99.8 %	116031401-02.2	Yes	0.3 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
MT-01-03 1 Location: Unit 303 Hall Closet; Drywall & Joint Compound  Analyst Description: White/Tan, Heterogeneous, Non-Fibrous, Drywall Asbestos Types: Other Material: Cellulose 5 %, Non-fibrous 95 %	116031401-03.1	No	NAD (by CVES) by William M. Dunstan on 03/11/16

See Reporting notes on last page

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-01-03 1	116031401-03.2 Location: Unit 303 Hall Closet; Drywall & Joint Compound	Yes	0.3 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Joint Compound <b>Asbestos Types:</b> Chrysotile 0.3 % <b>Other Material:</b> Non-fibrous 99.8 %			
MT-01-04 1	116031401-04.1 Location: Unit 505 Hall Closet; Drywall & Joint Compound	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White/Tan, Heterogeneous, Non-Fibrous, Drywall <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 5 %, Non-fibrous 95 %			
MT-01-04 1	116031401-04.2 Location: Unit 505 Hall Closet; Drywall & Joint Compound	Yes	0.5 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Joint Compound <b>Asbestos Types:</b> Chrysotile 0.5 % <b>Other Material:</b> Non-fibrous 99.5 %			
MT-01-05 1	116031401-05.1 Location: Unit 608 Kitchen; Drywall & Joint Compound	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White/Tan, Heterogeneous, Non-Fibrous, Drywall <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 5 %, Non-fibrous 95 %			
MT-01-05 1	116031401-05.2 Location: Unit 608 Kitchen; Drywall & Joint Compound	Yes	0.3 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Joint Compound <b>Asbestos Types:</b> Chrysotile 0.3 % <b>Other Material:</b> Non-fibrous 99.8 %			
MT-01-06 1	116031401-06.1 Location: Unit 1711 Kitchen; Drywall & Joint Compound	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White/Tan, Heterogeneous, Non-Fibrous, Drywall <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 5 %, Non-fibrous 95 %			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**

08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217

(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-01-06 1	116031401-06.2 Location: Unit 1711 Kitchen; Drywall & Joint Compound	Yes	0.5 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Joint Compound <b>Asbestos Types:</b> Chrysotile 0.5 % <b>Other Material:</b> Non-fibrous 99.5 %			
MT-01-07 1	116031401-07.1 Location: Unit 805 Hall Closet; Drywall & Joint Compound	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White/Tan, Heterogeneous, Non-Fibrous, Drywall <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 5 %, Non-fibrous 95 %			
MT-01-07 1	116031401-07.2 Location: Unit 805 Hall Closet; Drywall & Joint Compound	Yes	0.5 % pc (by 400 pt ct) by William M. Dunstan on 04/04/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Joint Compound <b>Asbestos Types:</b> Chrysotile 0.5 % <b>Other Material:</b> Non-fibrous 99.5 %			
MT-02-01 2	116031401-08L1 Location: 3rd Floor Community Room; 12" Off White Floor Tile w/Black Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Off-White/Red, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-02-01 2	116031401-08L2 Location: 3rd Floor Community Room; 12" Off White Floor Tile w/Black Mastic	Yes	3 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow/Black, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> Chrysotile 3.0 % <b>Other Material:</b> Non-fibrous 97 %			
MT-02-02 2	116031401-09L1 Location: 3rd Floor Community Room; 12" Off White Floor Tile w/Black Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Off-White/Red, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

# PLM Bulk Asbestos Report

08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-02-02 2	116031401-09L2 Location: 3rd Floor Community Room; 12" Off White Floor Tile w/Black Mastic		NA/PS
<b>Analyst Description:</b> Mastic <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-03-01 3	116031401-10L1 Location: Unit 101 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic	Yes	3 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Cream/Tan, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> Chrysotile 3.0 % <b>Other Material:</b> Non-fibrous 97 %			
MT-03-01 3	116031401-10L2 Location: Unit 101 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic	Yes	8 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Black, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> Chrysotile 8.0 % <b>Other Material:</b> Non-fibrous 92 %			
MT-03-02 3	116031401-11L1 Location: Unit 303 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic		NA/PS
<b>Analyst Description:</b> Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-03-02 3	116031401-11L2 Location: Unit 303 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic		NA/PS
<b>Analyst Description:</b> Mastic <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-03-03 3	116031401-12L1 Location: Unit 607 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic		NA/PS
<b>Analyst Description:</b> Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b>			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-03-03 3	116031401-12L2 Location: Unit 607 Hall Closet; 12" Cream w/Tan Specs FT & Black Mastic		NA/PS
<b>Analyst Description:</b> Mastic <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-04-01 4	116031401-13L1 Location: Unit 101 Hall Closet; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Cove Base <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-04-01 4	116031401-13L2 Location: Unit 101 Hall Closet; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow/Brown, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous Talc Trace, Non-fibrous 100 %			
MT-04-02 4	116031401-14L1 Location: Unit 206 Living Room; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Cove Base <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-04-02 4	116031401-14L2 Location: Unit 206 Living Room; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow/Brown, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous Talc Trace, Non-fibrous 100 %			
MT-04-03 4	116031401-15L1 Location: Unit 303 Hall Close; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Cove Base <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

# PLM Bulk Asbestos Report

08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-04-03 4	116031401-15L2 Location: Unit 303 Hall Close; Tan Cove Base w/Yellow & Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow/Brown, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous Talc Trace, Non-fibrous 100 %			
MT-05-01 5	116031401-16L1 Location: Unit 101 Kitchen; 12" Tan Mottled FT & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-05-01 5	116031401-16L2 Location: Unit 101 Kitchen; 12" Tan Mottled FT & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-05-02 5	116031401-17L1 Location: Unit 608 Bed Closet; 12" Tan Mottled FT & Black Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-05-02 5	116031401-17L2 Location: Unit 608 Bed Closet; 12" Tan Mottled FT & Black Mastic	Yes	8 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Black/Yellow, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> Chrysotile 8.0 % <b>Other Material:</b> Non-fibrous 92 %			
MT-05-03 5	116031401-18L1 Location: Unit 710 Living Room; 12" Tan Mottled Floor Tile & BM	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Tan, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-05-03 5	116031401-18L2 Location: Unit 710 Living Room; 12" Tan Mottled Floor Tile & BM		NAPPS
Analyst Description: Mastic Asbestos Types: Other Material:			
MT-06-01 6	116031401-19L1 Location: Unit 101 Kitchen; Black Cove Base & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Black, Heterogeneous, Non-Fibrous, Cove Base Asbestos Types: Other Material: Non-fibrous 100 %			
MT-06-01 6	116031401-19L2 Location: Unit 101 Kitchen; Black Cove Base & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
MT-06-02 6	116031401-20L1 Location: Unit 501 Kitchen; Black Cove Base & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Black, Heterogeneous, Non-Fibrous, Cove Base Asbestos Types: Other Material: Non-fibrous 100 %			
MT-06-02 6	116031401-20L2 Location: Unit 501 Kitchen; Black Cove Base & Yellow Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
MT-07-01 7	116031401-21L1 Location: Unit 202 Bedroom; 12" Beige Floor Tile w/Black Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-07-01 7	116031401-21L2 Location: Unit 202 Bedroom; 12" Beige Floor Tile w/Black Mastic	Yes	Trace (<1 %) (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Black, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> Chrysotile <1. % <b>Other Material:</b> Non-fibrous 100 %			
MT-07-02 7	116031401-22L1 Location: Unit 505 Hall Closet; 12" Beige Floor Tile w/Black Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Beige, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-07-02 7	116031401-22L2 Location: Unit 505 Hall Closet; 12" Beige Floor Tile w/Black Mastic	Yes	8 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Black, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> Chrysotile 8.0 % <b>Other Material:</b> Non-fibrous 92 %			
MT-08-01 8	116031401-23L1 Location: Unit 402 Bedroom; Brown Cove Base w/Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Brown, Heterogeneous, Non-Fibrous, Cove Base <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-08-01 8	116031401-23L2 Location: Unit 402 Bedroom; Brown Cove Base w/Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Brown, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-08-02 8	116031401-24L1 Location: Unit 704 Living Room; Brown Cove Base w/Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Brown, Heterogeneous, Non-Fibrous, Cove Base <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-08-02 8	116031401-24L2 Location: Unit 704 Living Room; Brown Cove Base w/Brown Mastic	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Brown, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-09-01 9	116031401-25 Location: Unit 608 Bathroom; Acoustical "Popcorn" Ceiling Plaster	Yes	4 % (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 4.0 % <b>Other Material:</b> Non-fibrous 96 %			
MT-09-02 9	116031401-26 Location: 8th Floor Hallway; Acoustical "Popcorn" Ceiling Plaster		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-09-03 9	116031401-27 Location: Unit 805 Bathroom; Acoustical "Popcorn" Ceiling Plaster		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
MT-10-01 10	116031401-28L1 Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White FT & M Over White Floor Tile	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> White, Heterogeneous, Non-Fibrous, Floor Tile <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
MT-10-01 10	116031401-28L2 Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White FT & M Over White Floor Tile	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Yellow, Heterogeneous, Non-Fibrous, Mastic <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

# PLM Bulk Asbestos Report

08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-10-01 10	116031401-28L3	Yes	3 %
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White FT & M Over White Floor Tile			(by CVES) by William M. Dunstan on 03/11/16
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Chrysotile 3.0 % Other Material: Non-fibrous 97 %			
MT-10-01 10	116031401-28L4	Yes	8 %
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White FT & M Over White Floor Tile			(by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Black, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Chrysotile 8.0 % Other Material: Non-fibrous 92 %			
MT-10-02 10	116031401-29L1	No	NAD
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White Fit & YM Over White Floor Tile			(by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Blue, Heterogeneous, Non-Fibrous, Floor Tile Asbestos Types: Other Material: Non-fibrous 100 %			
MT-10-02 10	116031401-29L2	No	NAD
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White Fit & YM Over White Floor Tile			(by CVES) by William M. Dunstan on 03/11/16
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Mastic Asbestos Types: Other Material: Non-fibrous 100 %			
MT-10-02 10	116031401-29L3		NA/PS
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White Fit & YM Over White Floor Tile			
Analyst Description: Floor Tile Asbestos Types: Other Material:			
MT-10-02 10	116031401-29L4		NA/PS
Location: 3rd Floor Laundry Room; 12" Blue FT Alt 12" White Fit & YM Over White Floor Tile			
Analyst Description: Mastic Asbestos Types: Other Material:			

Client Name: Professional Services Industries

**PLM Bulk Asbestos Report**08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MT-11-01 11	116031401-30 Location: 1st Floor Boiler Room; Pipe Fitting Insulation	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Gray, Heterogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 40 %, Non-fibrous 60 %			
MT-11-02 11	116031401-31 Location: 1st Floor Boiler Room; Pipe Fitting Insulation	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Gray, Heterogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 40 %, Non-fibrous 60 %			
MT-11-03 11	116031401-32 Location: 1st Floor Boiler Room; Pipe Fitting Insulation	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Gray, Heterogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 40 %, Non-fibrous 60 %			
MT-12-01 12	116031401-33 Location: 1st Floor Hallway; 2'x4' Ceiling Tile	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Gray, Heterogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 40 %, Fibrous glass 10 %, Non-fibrous 50 %			
MT-12-02 12	116031401-34 Location: 1st Floor Hallway; 2'x4' Ceiling Tile	No	NAD (by CVES) by William M. Dunstan on 03/11/16
<b>Analyst Description:</b> Gray, Heterogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Cellulose 40 %, Fibrous glass 10 %, Non-fibrous 50 %			

Client Name: Professional Services Industries

# PLM Bulk Asbestos Report

08161181-61; HACP - Murray Towers; 2825 Murray Ave 15217  
(Report Amended 4/4/2016)

**Reporting Notes:**

Analyzed by: William M. Dunstan William Dunstan Date 4/4/16

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: William Dunstan

**APPENDIX B – ASBESTOS BULK SAMPLE LOG/CHAIN OF CUSTODY**

Relinquished By: [Signature] Date/Time: 3/9/16 2:30 AM  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_



**BULK CHAIN OF CUSTODY**

AMERISCI RICHMOND  
 13635 GENITO ROAD  
 MIDLOTHIAN, VA 23112  
 TOLL FREE: (800) 476-5227  
 PHONE: (804) 763-1200  
 FAX: (804) 763-1800

Company: <u>PROFESSIONAL SERVICE INDUSTRIES</u>	Project: <u>HACP - MURRAY TOWERS</u>	AMERISCI #: <u>116081401</u>
Street Address: <u>850 POPLAR ST.</u>	Proj Mgr: <u>DOUG FINKE</u>	Proj #: <u>02161181-61</u>
City: <u>PITTSBURGH</u> State: <u>PA</u> Zip: <u>15220</u>	Proj Address: <u>2825 MURRAY AVE. 15217</u>	Proj State: <u>PA</u>
Phone: <u>412-922-4000</u> Fax: <u>412-922-4043</u>	Analysis: <input checked="" type="checkbox"/> PLM; <input checked="" type="checkbox"/> Positive Stop; <input type="checkbox"/> TEM; <input type="checkbox"/> NY ELAP PLM/TEM w/ NOB Prep.	
Cell: _____ Fax: _____	ASTM Dust (Microvac) (Wipe); <input type="checkbox"/> Qualitative; <input type="checkbox"/> Other (describe in comments)	
E-mail <u>doug.finke@psiusa.com</u> Verbal Results: <u>Y / N</u>	Turnaround Time: <u>48 HRS</u>	Material Type: <input checked="" type="checkbox"/> Bulk <input type="checkbox"/> Dust <input type="checkbox"/> Water
Results to: <u>DOUG FINKE</u>	Sampled By: <u>DOUG FINKE</u>	Date Sampled: <u>3/7/16</u>

Special Instructions or Comments:

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MT-01-01	UNIT 101 HALL CLOSET	↓ ↓ ↓ DRIWALL + JOINT COMPOUND	
	MT-01-02	" 206 BED CLOSET	↓ ↓ ↓	
	MT-01-03	" 303 HALL CLOSET	↓ ↓ ↓	
	MT-01-04	" 805 HALL CLOSET	↓ ↓ ↓	
	MT-01-05	" 608 KITCHEN	↓ ↓ ↓	
	MT-01-06	" 711 KITCHEN	↓ ↓ ↓	
	MT-01-07	" 805 HALL CLOSET	↓ ↓ ↓	
	MT-02-01	3 <sup>RD</sup> FLOOR COMMUNITY ROOM	↓ ↓ ↓ ↓ 12" OFF WHITE FLOOR TILE w/ BLACK MASTIC	
	MT-02-02	↓ ↓ ↓ ↓	↓ ↓ ↓ ↓	
	MT-03-01	UNIT 101 HALL CLOSET	↓ ↓ ↓	
	MT-03-02	" 303 HALL CLOSET	↓ ↓ ↓	
	MT-03-03	" 607 HALL CLOSET	↓ ↓ ↓	
	MT-04-01	UNIT 101 HALL CLOSET	↓ ↓ ↓	
	MT-04-02	206 LIVING ROOM	↓ ↓ ↓	RECEIVED
	MT-04-03	303 HALL CLOSE	↓ ↓ ↓	MAR 10 2016
	MT-05-01	UNIT 101 KITCHEN	↓ ↓ ↓	BY <u>[Signature]</u>
	MT-05-02	UNIT 608 BED CLOSET	↓ ↓ ↓	

Relinquished By: [Signature] Date/Time: 3/9/16 2:30 AM  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_



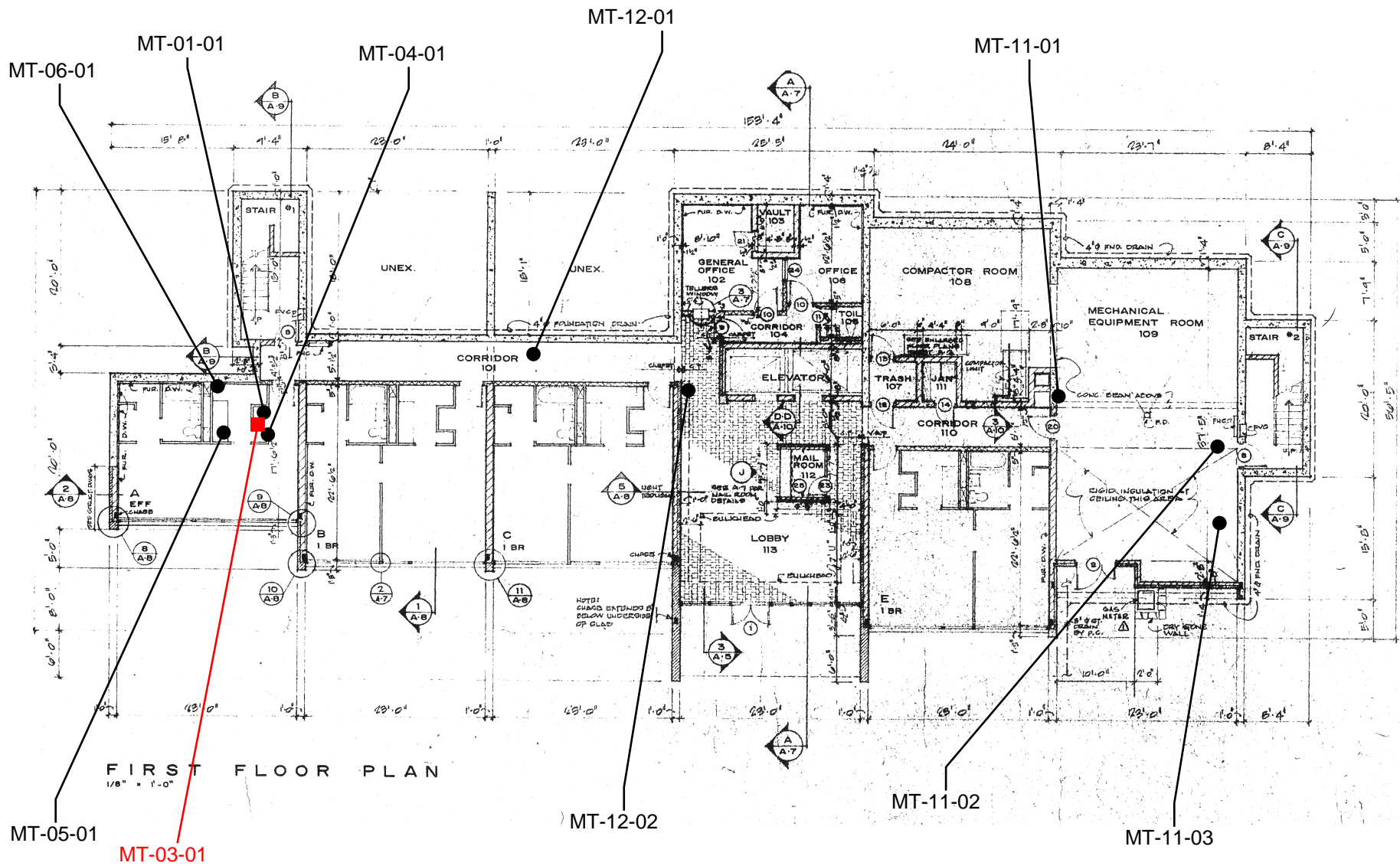
**BULK CHAIN OF CUSTODY**  
 AMERISCI RICHMOND  
 13635 GENITO ROAD  
 MIDLOTHIAN, VA 23112  
 TOLL FREE: (800) 476-5227  
 PHONE: (804) 763-1200  
 FAX: (804) 763-1800



Company: PROFESSIONAL SERVICE INDUSTRIES Project: HACP MURRAY TOWERS AmeriSci #: 116081401  
 Street Address: 850 BOLAN STREET Proj Mgr: DOUG FINKE Proj #: 00K1181-61  
 City: PITTSBURGH State: PA Zip: 15220 Proj Address: 2825 MURRAY AVE, 15217 Proj State: PA  
 Phone: 412-922-4000 Fax: 412-922-4043 Analysis:  PLM;  Positive Stop;  TEM;  NY ELAP PLM/TEM w/ NOB Prep.  
 Cell: \_\_\_\_\_ Fax: \_\_\_\_\_ ASTM Dust  (Microvac)  (Wipe);  Qualitative;  Other (describe in comments)  
 E-mail: doug.finke@psih.sa.com Verbal Results: Y / N Turnaround Time: 48 HOURS Material Type:  Bulk  Dust  Water  
 Results to: DOUG FINKE Sampled By: DOUG FINKE Date Sampled: 3/7/16

Special Instructions or Comments:

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MT-05-03	UNIT 710 LIVING ROOM	12" TAN MOTTLED FLOOR TILE + BM.	
	MT-06-01	UNIT 101 KITCHEN	BROWN COVE BASE + YELLOW MASTIC	
	MT-06-02	" 501 KITCHEN	↓ ↓ ↓	
	MT-07-01	UNIT 202 BEDROOM	12" BROWN FLOOR TILE w/ BROWN MASTIC	
	MT-07-02	" 505 HALL CLOSET	↓ ↓ ↓	
	MT-08-01	UNIT 402 BEDROOM	BROWN COVE BASE w/ BROWN MASTIC	
	MT-08-02	704 LIVING ROOM	↓ ↓ ↓	
	MT-09-01	UNIT 608 BATHROOM	ACOUSTICAL "POOCOEN" CEILING RISER	
	MT-09-02	8 <sup>TH</sup> FLOOR HALLWAY	↓ ↓ ↓	
	MT-09-03	UNIT 805 BATHROOM		
	MT-10-01	3 <sup>RD</sup> FLOOR LAUNDRY ROOM	12" BLUE TILE ALL 12" W/ 1/2" F.T. + 1/4" ALL OVER	
	MT-10-02	↓ ↓ ↓	WHITE FLOOR TILES	
	MT-11-01	1 <sup>ST</sup> FLOOR BOILER ROOM	PIPE FITTING INSULATION	RECEIVED
	MT-11-02	↓ ↓ ↓	↓ ↓ ↓	MAR 10 2016
	MT-11-03	↓ ↓ ↓		BY [Signature]
	MT-12-01	1 <sup>ST</sup> FLOOR HALLWAY	2' X 4' CEILING TILE	
	MT-12-02	" "		

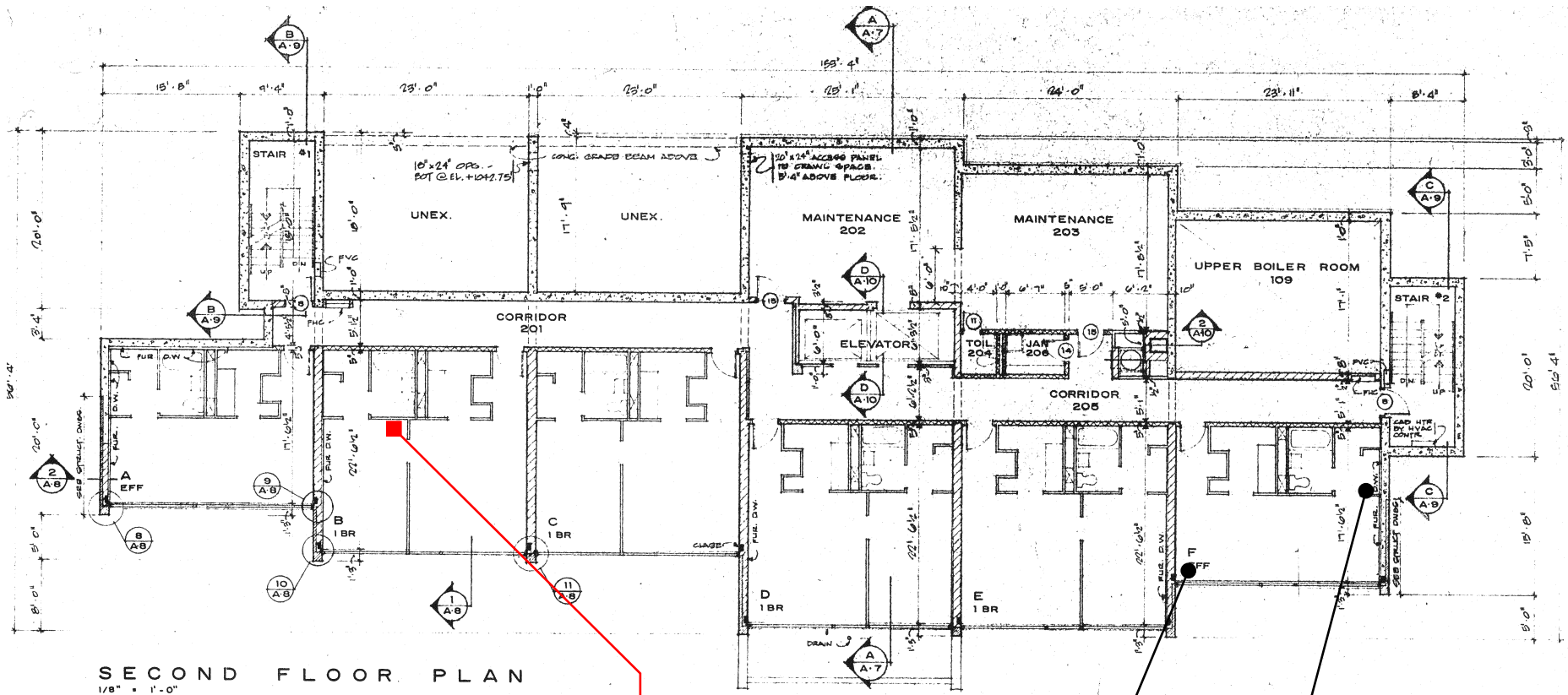
**APPENDIX C – SITE LAYOUT AND SAMPLE LOCATION DRAWING(S)**



KEY	
	Non Asbestos Containing Material
	Asbestos Containing Material

SAMPLE LOCATION MAP  
**Murray Towers**  
 2825 Murray Ave, Pittsburgh, PA  
**psi** Information  
*To Build On*  
 Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	1st Floor
----------------	--------------------------	-----------



SECOND FLOOR PLAN  
1/8" = 1'-0"

MT-07-01

MT-04-02

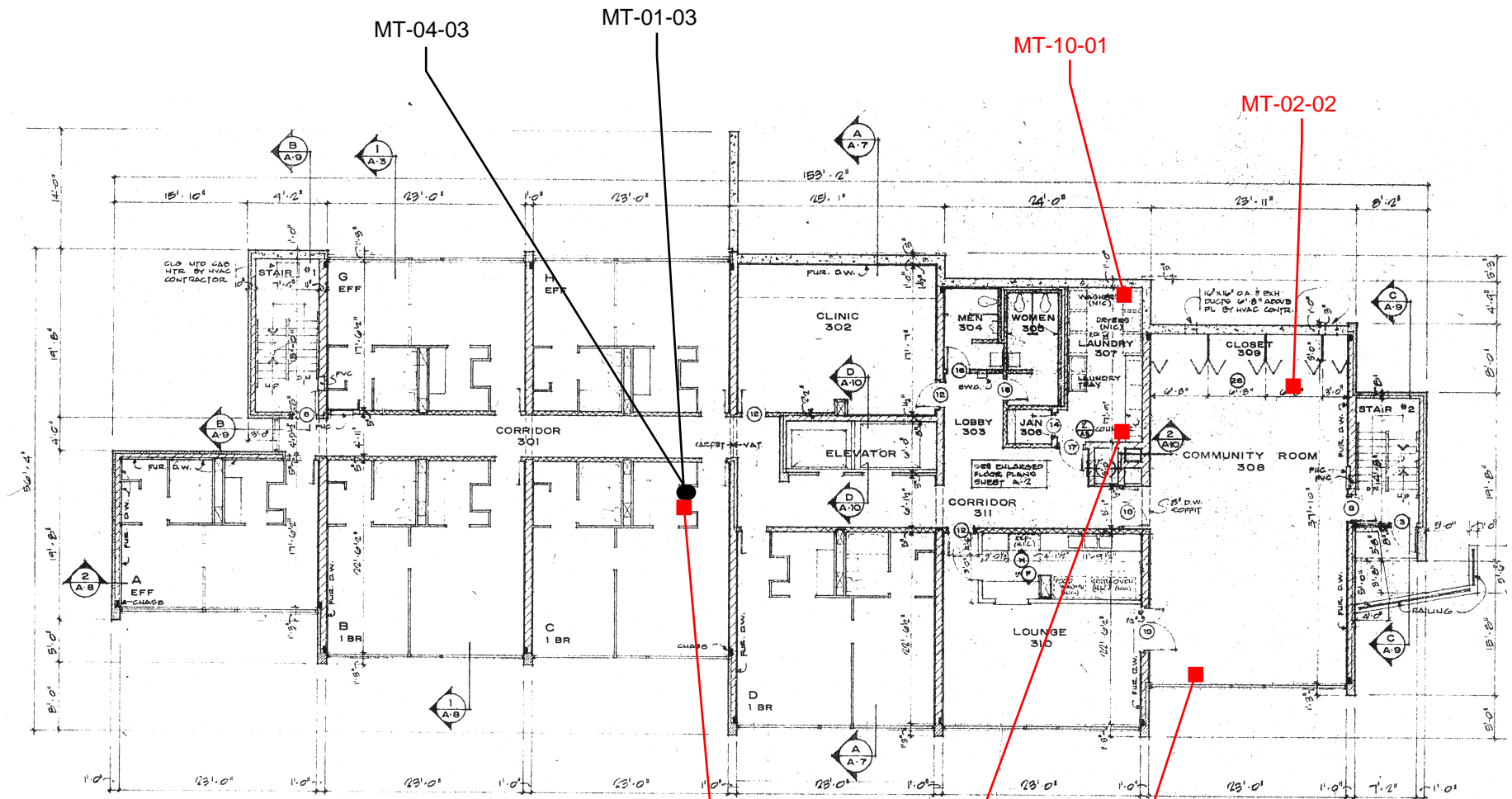
MT-01-02

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

SAMPLE LOCATION MAP  
Murray Towers  
2825 Murray Ave, Pittsburgh, PA

**psi** Information  
To Build On  
Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	2nd Floor
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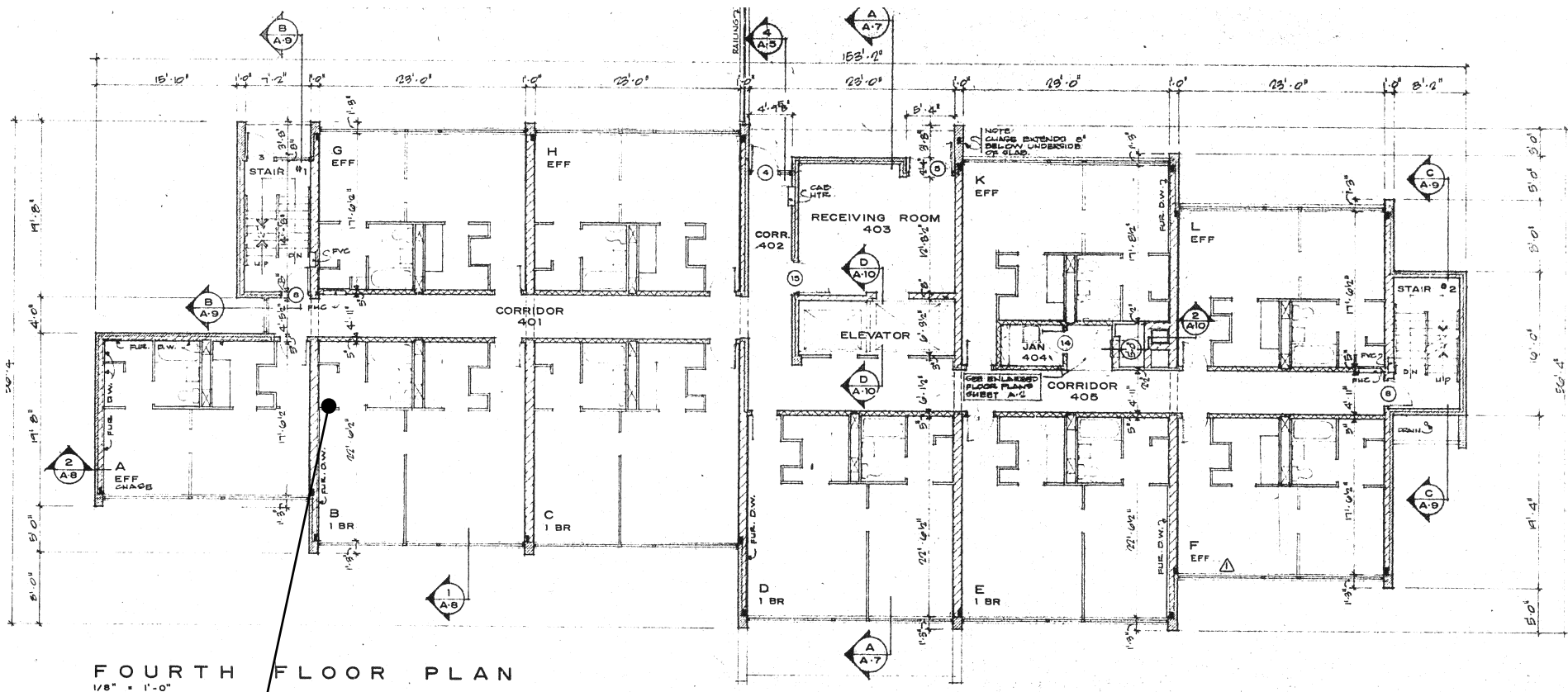


THIRD FLOOR PLAN

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

SAMPLE LOCATION MAP  
**Murray Towers**  
 2825 Murray Ave, Pittsburgh, PA  
**psi** Information  
*To Build On*  
 Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	3rd Floor
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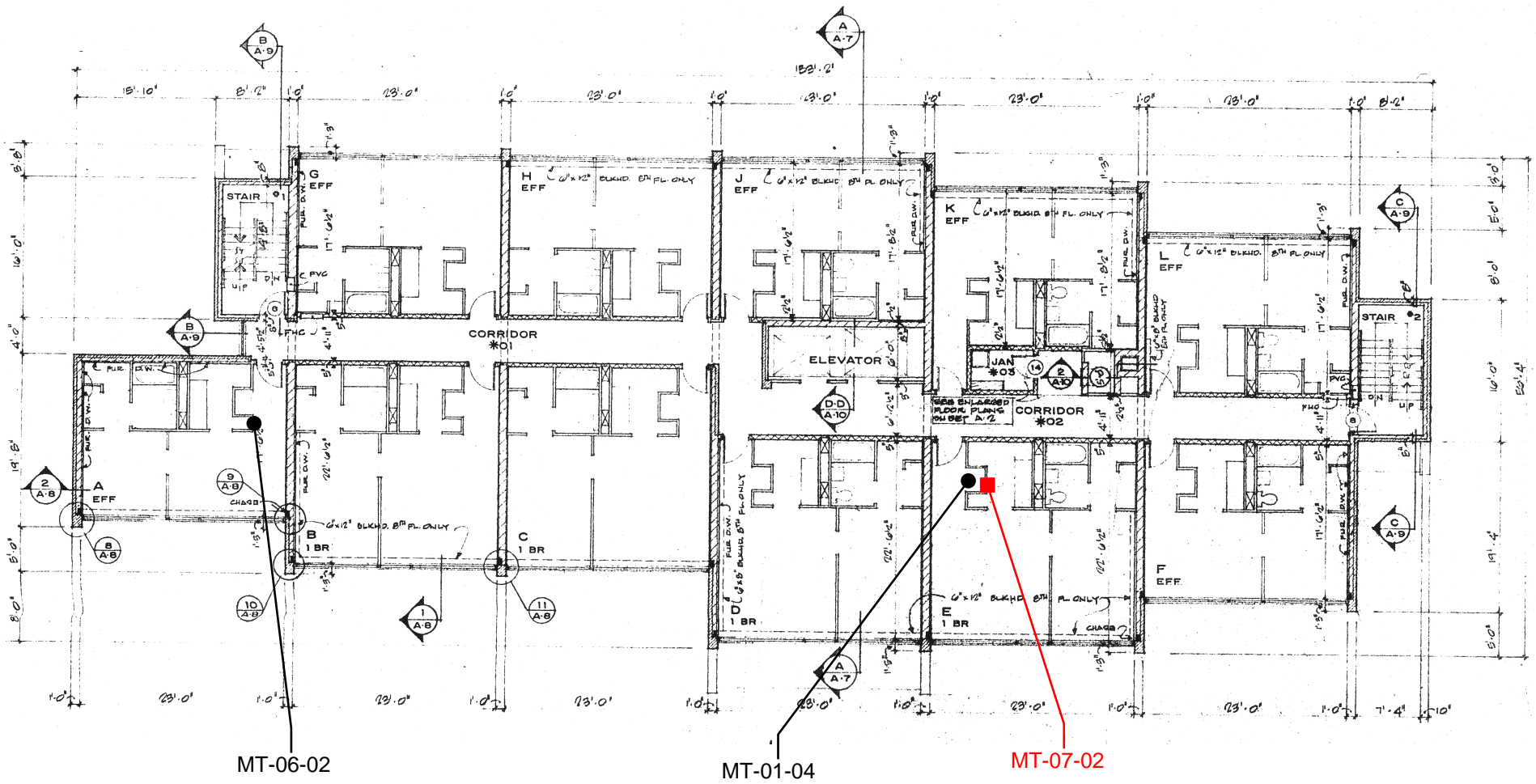
FOURTH FLOOR PLAN  
1/8" = 1'-0"

MT-08-01

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

SAMPLE LOCATION MAP  
**Murray Towers**  
 2825 Murray Ave, Pittsburgh, PA  
*Information*  
**PSI**  
*To Build On*  
 Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	4th Floor
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MT-06-02

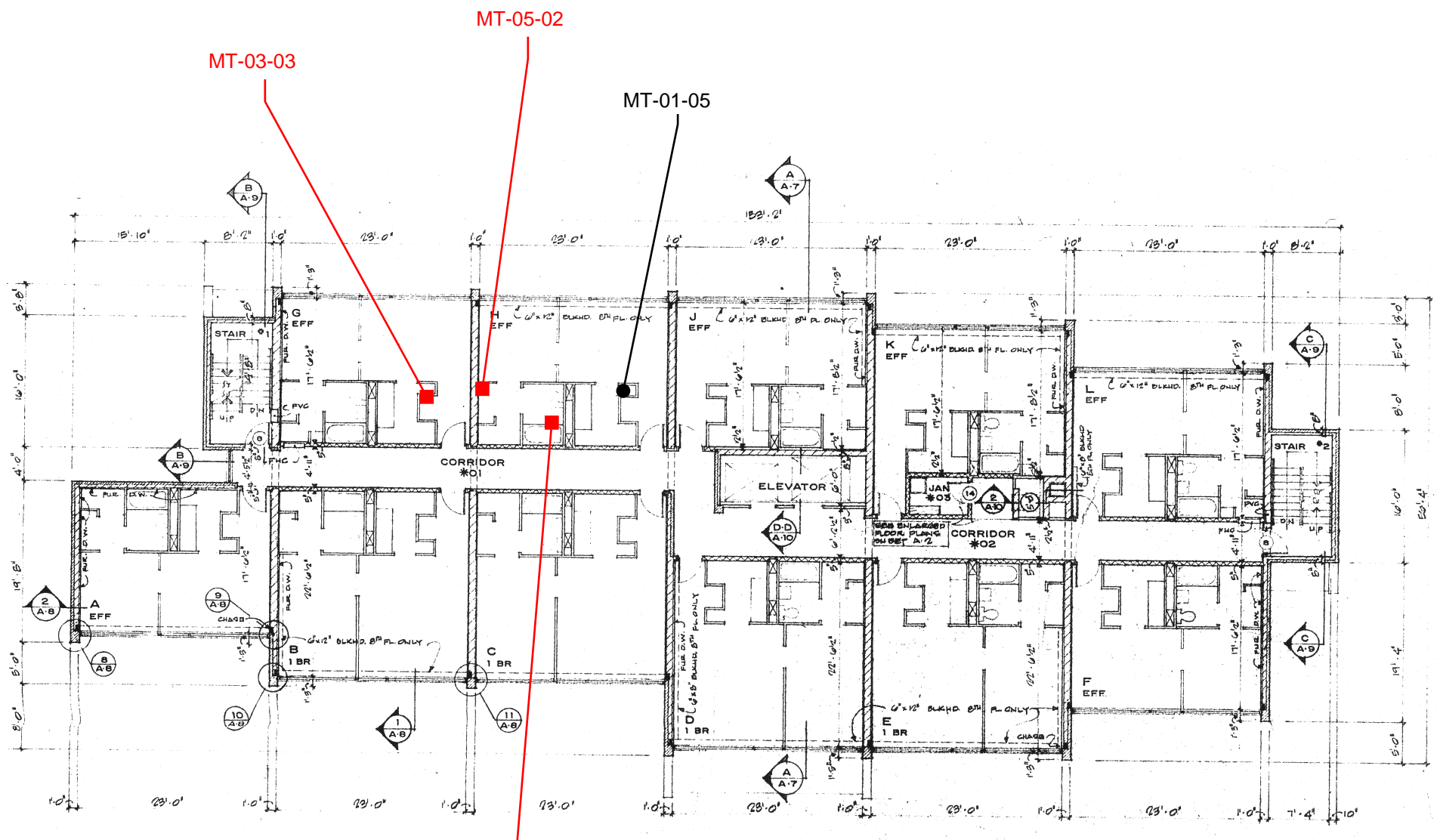
MT-01-04

MT-07-02

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

**SAMPLE LOCATION MAP**  
**Murray Towers**  
 2825 Murray Ave, Pittsburgh, PA  
  
 Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	5th Floor
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MT-03-03

MT-05-02

MT-01-05

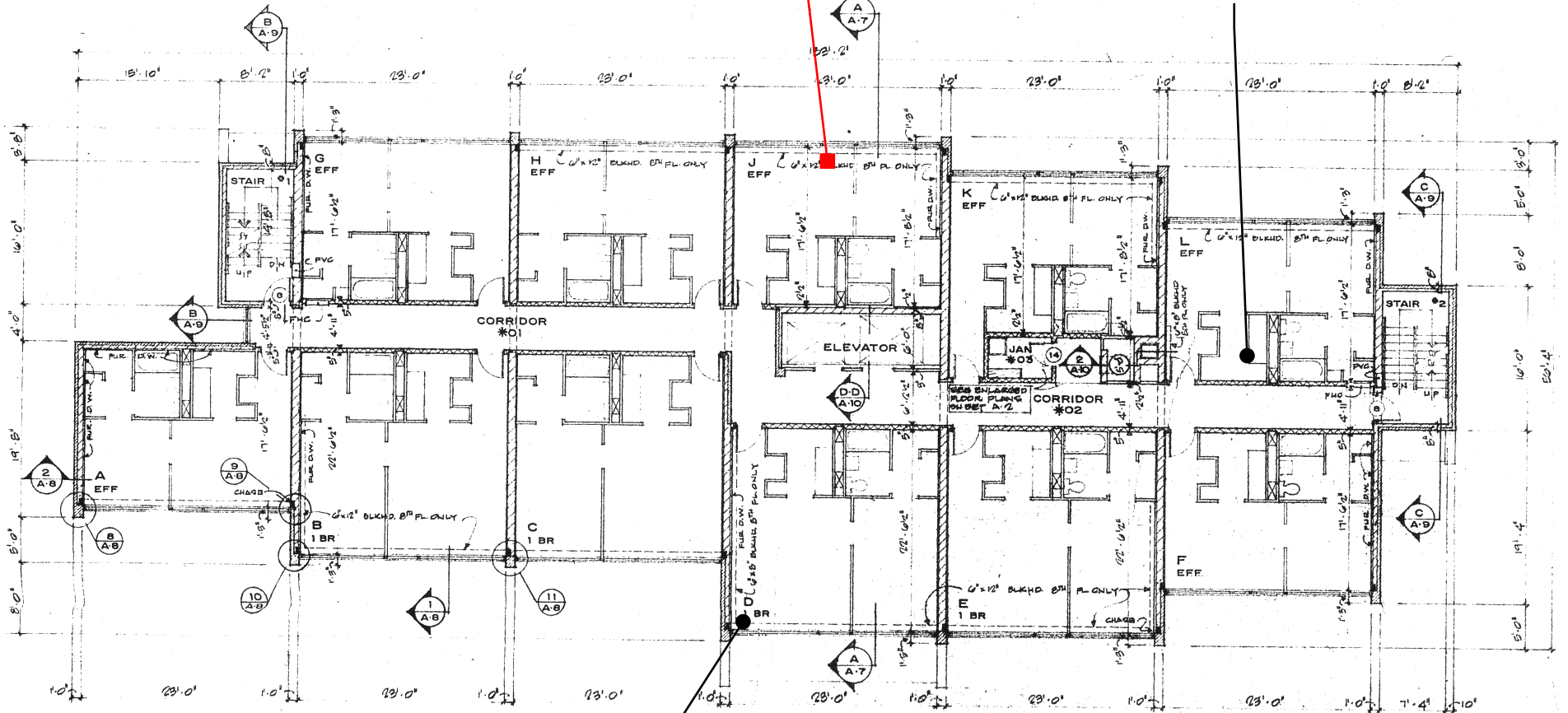
MT-09-01

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

SAMPLE LOCATION MAP <b>Murray Towers</b> 2825 Murray Ave, Pittsburgh, PA <b>psi</b> Information <i>To Build On</i> Engineering • Consulting • Testing		
DATE 3/7/16	PROJ. NO. 08161181-61	6th Floor

MT-05-03

MT-01-06



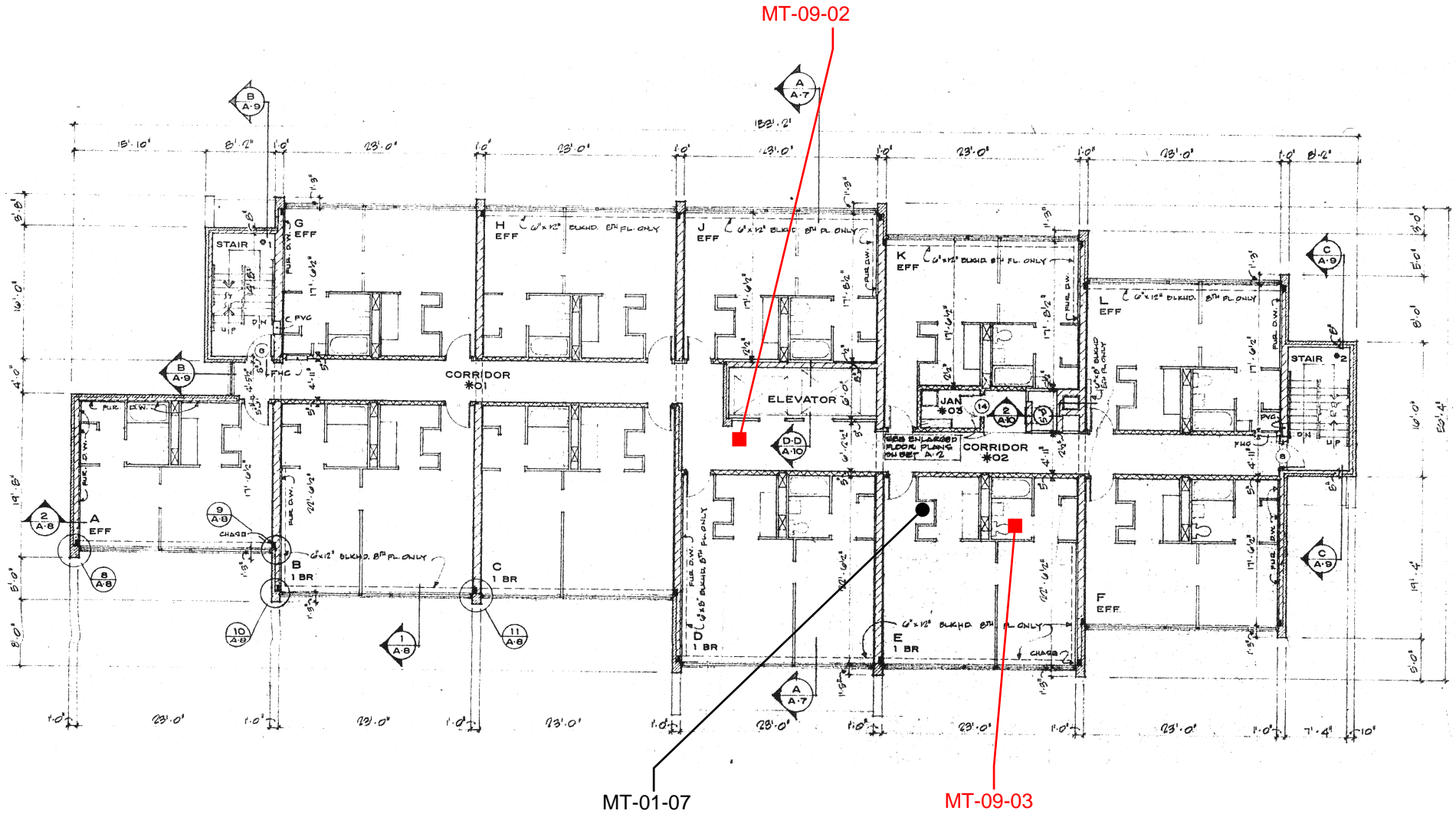
MT-08-02

KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

SAMPLE LOCATION MAP  
Murray Towers  
2825 Murray Ave, Pittsburgh, PA

**psi** Information  
To Build On  
Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	7th Floor
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KEY	
●	Non Asbestos Containing Material
■	Asbestos Containing Material

**SAMPLE LOCATION MAP**  
**Murray Towers**  
**2825 Murray Ave, Pittsburgh, PA**  
**psi** Information  
**To Build On**  
 Engineering • Consulting • Testing

DATE 3/7/16	PROJ. NO. 08161181-61	8th Floor
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## **APPENDIX D – INSPECTOR & LABORATORY CERTIFICATIONS**

PENNSYLVANIA ASBESTOS CERTIFICATION

042272



Sex	Height:	Eyes	Birth Date:
M	5'08"	BRN	<del>01/01/1984</del>

Expires:	Issue Date:
09/03/2016	11/13/2015

Class  
INSPECTOR  
DOUGLAS FINKE

~~XXXXXXXXXXXX~~

*DF*

# **LABORATORY ACCREDITATIONS**

United States Department of Commerce  
National Institute of Standards and Technology



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## Certificate of Accreditation to ISO/IEC 17025:2017

---

NVLAP LAB CODE: 101350-0

**Intertek-PSI, Inc.**  
Pittsburgh, PA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

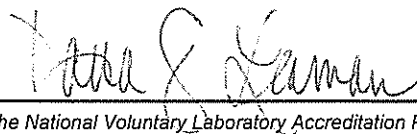
### **Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué on ISO/IEC 17025).*

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2024-07-01 through 2025-06-30

*Effective Dates*



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For the National Voluntary Laboratory Accreditation Program

# **PERSONNEL ACCREDITATIONS**

PENNSYLVANIA ASBESTOS CERTIFICATION



063781

DAVID M ANTIS

Expires  
03/07/2025

Issue Date  
04/18/2024

Sex  
M

Height  
6' 00"

Eyes  
BRO

Class  
MANAGEMENT PLANNER

*DA*

Birth Date

PENNSYLVANIA ASBESTOS CERTIFICATION



063781

DAVID M ANTIS

Expires  
03/07/2025

Issue Date  
04/18/2024

Sex  
M

Height  
6' 00"

Eyes  
BRO

Class  
INSPECTOR

*DA*

Birth Date