



ENGINEERING



LABORATORY



## **PRE-DEMOLITION DSS REPORT**



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Project No. FE- 23-13156  
August, 2023

**RECEIVED**  
By Bonita Lee at 9:42 am, Aug 16, 2023

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## 1.0. EXECUTIVE SUMMARY

Fisher Engineering Limited ('Fisher') was retained by the City of Toronto (the Client) to carry out a Pre-Demolition Designated Substances Survey (DSS) within the Metro Hall building, located at 55 John Street, Toronto, Ontario (hereinafter referred to as the "Site").

The scope of a pre-demolition DSS generally consists of a review of existing environmental reports; visual inspection for the presence of designated substances; collection and analysis of the building materials suspected to contain designated substances, particularly asbestos and lead, to identify their locations, and other potentially hazardous materials at the Site; and to providing recommendations for the safe handling or abatement of these materials prior to demolition. The site inspection and sampling work was conducted on July 13, 2023 by Mr. Iqbal Fattah of Fisher.

A summary of the designated substances identified during the survey are presented below:

### **Asbestos**

Sampling was conducted of building materials suspected to contain asbestos and expected to be impacted by planned construction activities. A total of thirty-two (32) bulk samples were collected and submitted to Fisher Environmental Laboratories for Polarised Light Microscopy (PLM) analysis, as outlined in NIOSH Method 9002. Based on the findings of the current site visit, and the results of analysis, asbestos was not found in any of the samples submitted for analysis.

**The previous report indicated the presence of asbestos-containing caulking above the drywall ceiling in Cafeteria (Loc. 1-19) and Kitchen (Loc. 1-20) on the ground floor within the project area. Quantity were not provided, as it is extremely difficult to guarantee all material was found. It should be assumed that the caulking is present anywhere above drywall ceilings.**

During the current survey, the ceiling space above these locations were inspected, and this material was not observed. However, the asbestos-containing caulking may still be present.

Prior to demolition activities at the Site, all asbestos-containing materials must be removed from the Site in accordance with MOL O. Reg. 278/05 - *Asbestos on Construction Projects and in Buildings and Repair Operations*, and disposed of at an MOE-licensed landfill in accordance with O. Reg. 558/00 (amending O. Reg. 347, *General – Waste Management*).

Specifically, Fisher recommends the following:

- Provide a copy of this report to contractors bidding on or performing work at the Site.
- When encountered, remove any asbestos-containing caulking using Type 1 Asbestos Abatement Procedures as specified in O. Reg. 278/05.

## **Lead**

Various paint colors were observed on the wall and ceiling finishes. During the current survey, four (4) bulk samples were collected and submitted to Fisher Environmental Laboratories for inductively coupled plasma (ICP) analysis, as outlined in NIOSH method 7300.

- The lead concentration for all the collected samples was found below the reporting limit for the analytical method used for analysis.
- Lead-containing batteries may be present in the emergency lighting present at the Site.
- Lead may be present in wiring connectors; grounding conductors and solder joints.

Fisher recommends the following for the removal of lead-containing materials:

- Before disposal of any building debris, verify if the receiving landfill site requires a TCLP.
- Removal of any lead-containing materials shall be carried out in accordance with the following regulations and guidelines:
  - MOL Guideline: Lead on Construction Projects;
  - Designated Substances Regulation, O. Reg. 490/09; and
  - Regulation for Construction Projects, O. Reg. 213/91.

## **Mercury**

- Mercury-containing thermometers were observed in the mechanical room on the mezzanine level.
- Mercury is presumed to be present as a component in electrical equipment at the Site.
- Mercury is present as a vapour in fluorescent light bulbs.

Fisher recommends the following for the removal of mercury-containing materials:

- If work activities affect the mercury containing thermometers, electrical equipment or fluorescent light bulbs, Fisher recommends that the presumed mercury-containing materials be removed and disposed of in accordance with O. Reg. 558/00

## **Silica**

As the building is constructed of concrete blocks on walls with concrete floors, silica is expected to be found within these components. No samples were collected for analysis of silica content.

- Demolition works that are likely to generate silica-containing dust shall be carried out in accordance with the following regulations and guidelines:
  - MOL Guideline: Silica on Construction Projects;
  - Designated Substances Regulation, O. Reg. 490/09; and
  - Regulation for Construction Projects, O. Reg. 213/91

**Other Designated Substances**

The other designated substances (acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates, and vinyl chloride) were not observed during the current survey and would not be expected to be present at the Site. No immediate recommendations are warranted with regard to these other designated substances.

## 2.0 INTRODUCTION

Fisher Engineering Limited ('Fisher') was retained by the City of Toronto (the Client) to carry out a Pre-Demolition Designated Substances Survey (DSS) within the Metro Hall building, located at 55 John Street, Toronto, Ontario (hereinafter referred to as the "Site").

The scope of a pre-demolition DSS generally consists of a review of existing environmental reports; visual inspection for the presence of designated substances; collection and analysis of the building materials suspected to contain designated substances, particularly asbestos and lead, to identify their locations, and other potentially hazardous materials at the Site; and to providing recommendations for the safe handling or abatement of these materials prior to demolition. The site inspection and sampling work was conducted on July 13, 2023 by Mr. Iqbal Fattah of Fisher.

## 3.0 REGULATIONS

The survey was conducted in compliance with the Ontario Ministry of Labour (MOL) regulations for Designated Substances; Ontario Regulation 490/09 - *Designated Substances* (O. Reg. 490/09) and Ontario Regulation 278/05 - *Asbestos on Construction Projects and in Buildings and Repair Operations* (O. Reg. 278/05) made under the Occupational Health and Safety Act (OHSA), RSO 1990.

The OHSA defines a toxic substance as a biological, chemical, or physical agent (or a combination of such agents) whose presence in the workplace may endanger the health and safety of a worker. Sections of the Act concerning toxic substances are intended to:

- Ensure worker exposure to toxic substances is controlled;
- Ensure toxic substances in the workplace are identified, and that workers are provided with enough information to be capable of handling them safely; and,
- Provide the general public with access to information about toxic substances used by industry in their communities.

The Act makes provision for a toxic substance to be "Designated" where its use in the workplace is prohibited, regulated, restricted, limited or controlled. The designation is reserved for eleven particularly hazardous substances, covered under O. Reg. 490/09 implemented on July 1, 2010, and include Acrylonitrile, Arsenic, Asbestos, Benzene, Coke Oven Emissions, Ethylene Oxides, Isocyanates, Lead, Mercury, Silica, and Vinyl Chloride. Formerly, regulations for these substances were passed separately and each outlined exposure limits where workers were likely to inhale, ingest, or absorb the Substance.

O. Reg. 490/09 provides a consistent approach to dealing with existing requirements and provisions, which outlines steps required to control worker exposure to these Substances,

including inhalation, ingestion, skin absorption or skin contact. Each Designated Substance has an allowable level of exposure based on a time-weighted average (TWA) limit and may also have a short-term exposure limit (STEL) or ceiling limit (C) assigned to it. TWA refers to the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week. STEL refers to the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed in any 15-minute period. Finally, C refers to the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.

Management of asbestos-containing building materials in the construction industry is governed by O. Reg. 278/05 – *Asbestos on Construction Projects and in Buildings and Repair Operations*. The regulation prescribes requirements for the maintenance of asbestos-containing materials in buildings and outlines the measures and procedures for the abatement of these materials.

In addition to the OHSA and regulations regarding Designated Substances, the following regulations, guidelines and standards were also taken into account or referenced:

- O. Reg. 213/91 - *Construction Projects* regulated under the OHSA and last amended by O. Reg. 443/09;
- O. Reg. 558/00 made under the Ministry of Environment (MOE) Environmental Protection Act (EPA), amending O. Reg. 347 - *General Waste Management*;
- The Transport of Dangerous Goods Act (TDGA) provides regulations for the transport of asbestos-containing materials and wastes;
- MOL *Guideline: Lead on Construction Projects*, 2011; and,
- MOL *Guideline: Silica on Construction Projects*, 2011.

## 4.0 METHODOLOGY

Fisher followed the protocols outlined in O. Reg. 278/05 for collecting and analyzing bulk samples of materials suspected to contain asbestos. Visual assessment of the material was the primary method of identification with occasional physical contact to collect bulk samples or examine for underlying layers.

Representative bulk samples were collected of materials suspected of containing asbestos. The tools used by the investigator to collect the bulk samples were cleaned after each sample was collected to avoid cross-contamination. Samples were placed in plastic sealable containers, marked with a unique sample number and transported to an accredited laboratory for analysis.

Where applicable, samples of suspect materials were collected to establish asbestos or lead content. Samples were grouped according to the similarity of appearance ("homogeneous" materials). The frequency at which the samples were collected was sufficient to obtain a general representation of the presence of these materials at the Site. Samples collected are presumed to



be representative of the respective building materials in place at the Site. However, due to potential past renovations, alterations, repairs, or phases of construction, individual materials may not be representative of the samples collected.

Sampling of materials found within non-accessible components such as insulation within electrical switch gears and wiring etc. was not performed as part of the current survey.

Samples collected during the assessment were placed in plastic zip-lock bags which were labelled and submitted for laboratory analysis. Fisher Environmental Laboratories analyzed bulk samples for asbestos type and approximate percent content by performing polarized light microscopy (PLM), as outlined in NIOSH Method 9002. Lead content analysis was performed by Fisher Laboratories through acid digestion of samples followed by inductively coupled plasma (ICP) analysis, as outlined in NIOSH Method 7303.

A summary of the sampling results of asbestos and lead analysis is presented in Appendix A; copy of the certificate of analysis is presented in Appendix B; floor plans showing the locations of the samples are presented in Appendix C; room by room survey form in Appendix D, and site photographs are presented in Appendix E.

## **5.0 HISTORICAL INFORMATION**

As part of this survey, the following reports were reviewed:

- Drawing Package for the City of Toronto Metro Hall Fire Station and Early Years Child Care Centre Renovation, prepared by the Diamond Schmitt Architects, provided on June 29, 2023; and
- Annual Designated Reassessment Survey for Metro Hall, 55 John Street, Toronto, completed by ECOH Management Inc, (ECOH), dated November 14, 2014 (Project No. 15170-B106).

## **6.0 FINDINGS AND RECOMMENDATIONS**

### **6.1 Acrylonitrile**

Acrylonitrile would not be expected to be present at the Site and was not observed during the current survey. No recommendations for Acrylonitrile are warranted at this time.

### **6.2 Arsenic**

Arsenic would not be expected to be present at the Site and was not observed during the current survey. No recommendations for Arsenic are warranted at this time.

## **6.3 Asbestos**

### **6.3.1 General Information**

Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of *tremolite*, *actinolite* and *anthophyllite*) that occur naturally in the environment. Asbestos minerals have long separable fibres that are strong and flexible to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings. Some vermiculite or talc products may also contain asbestos.

Asbestos fibres may be released into the air by the disturbance of asbestos-containing material (ACM) during product use, demolition work, building or home maintenance, repair and remodeling. In general, exposure may occur only when the ACM is disturbed in some way to release particles and fibres into the air.

### **6.3.2. Friable vs. Non-Friable ACM**

Based on the requirements of O. Reg. 278/05 and due diligence, an asbestos survey and report must be available at any workplace where asbestos exists identifying locations and types of ACM in the building. The survey must include both friable and non-friable materials confirmed to contain asbestos, as well as any other materials which were not sampled but are suspected (presumed) ACM. The term, friable refers to the material(s) that could be readily reduced to dust or powder when crushed by hand or moderate pressure. Friable materials have a greater chance of releasing airborne asbestos fibres when disturbed.

In the past, the most commonly used friable asbestos-containing building materials were surfacing materials (e.g., sprayed on fireproofing, texture, decorative or acoustic plaster) as well as thermal insulation. Examples of manufactured asbestos-containing materials include vinyl floor tiles, ceiling tiles, gasket materials, asbestos cement (Transite) pipes or boards, and asbestos textiles. Depending on the above-noted formulation, these materials range from non-friable to friable. Although some products are considered non-friable when in good condition, severe damage or deterioration may cause non-friable materials to generate airborne dust more readily. Severely damaged non-friable materials, or those to be worked on with powered tools, may be considered as friable ACM for abatement purposes.

Examples of common types of ACM by friability include:

Friable ACM	Non-Friable ACM
<ul style="list-style-type: none"> <li>– Sprayed Materials (or materials installed by roller or trowel), such as fireproofing, thermal insulation, texture finishes, etc.</li> <li>– Mechanical Insulation such as boiler and breeching, ductwork, piping, tanks, and associated equipment.</li> <li>– Plaster               <ul style="list-style-type: none"> <li>• Potentially Friable ACM                   <ul style="list-style-type: none"> <li>–Acoustic Ceiling Tiles</li> <li>–Vinyl Sheet Flooring</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>– Vinyl Floor Tiles</li> <li>– Asbestos cement ("Transite") piping or paneling</li> <li>– Window Caulking</li> </ul>

### 6.3.3 Regulations

Exposure to asbestos is controlled by regulations passed under Ontario OHSA, RRO 1990:

- O. Reg. 490/09 – *Designated Substances* regarding asbestos applies to:
  - Every employer operating a mine for mining, crushing, grinding, or sifting asbestos;
  - Every employer processing, adapting, or using asbestos in connection with manufacturing or assembling of goods or products;
  - Every employer engaged in the repair, alteration or maintenance of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles;
  - Every employer engaged in work on a building that is necessarily incidental to the repair, alteration or maintenance of machinery or equipment; and,
  - To those workers of such employers who are likely to be exposed to asbestos.

Exposure limits for this substance are set at 0.1 f/cc (TWA) for all types of asbestos.

- O. Reg. 278/05 - Asbestos on Construction Projects and in Buildings and Repair Operations applies to buildings that contain friable and non-friable ACM and to the repair, alteration and / or maintenance of these buildings.

In addition to regulations for controlling work on asbestos-containing building materials on construction projects, regulations for packaging, transportation and disposal of asbestos-containing waste include:

- O. Reg. 558/00 made under the MOE EPA, amending O. Reg. 347 - General Waste Management; and
- TDGA provides regulations for the transport of ACM and wastes.

### 6.3.4 Findings

During the current survey, samples of homogenous materials suspected to contain asbestos were collected and submitted for analysis. A total of thirty-two (32) bulk samples were collected and submitted to Fisher Environmental Laboratories for polarised light microscopy (PLM) analysis, as outlined in NIOSH Method 9002. Findings are outlined in further detail below.

#### **Mechanical Insulation**

##### **A. Pipe Systems**

The pipe systems observed throughout the project area are either not insulated or are insulated with fibreglass which is not suspected to contain asbestos.

##### **B. Mechanical Equipment**

Mechanical systems observed throughout the building are either not insulated or are insulated with fibreglass which is not suspected to contain asbestos.

##### **C. HVAC System**

The ductworks of the HVAC systems are either not insulated or are insulated with fibreglass, which is not suspected to contain asbestos.

#### **Sprayed Fireproofing**

Sprayed Fireproofing (SFP) was observed within the project area at Parking Level 1 during the survey. SFP was identified and sampled as part of the previous assessment surveys completed in 2010 and 2013 by ECOH. The previous reports confirmed that the SFP does not contain any asbestos.

#### **Texture Finish**

Texture finish was not observed within the project area during the survey.

#### **Plaster**

Plaster was not observed within the project area during the survey.

#### **Drywall Joint Compound**

Drywall Joint Compound (DJC) was observed on the walls and ceiling throughout the project area. DJC was identified and sampled as part of the previous assessment surveys completed in 2012 by ECOH. The previous report confirmed that the DJC does not contain any asbestos.

During this survey, five (5) samples of DJC (23-1536-4 to 8), were collected, from locations where no samples were collected previously, and submitted for analysis. Asbestos was not identified in any of the submitted DJC samples.

#### **Ceiling Tiles**

Seven (7) distinct styles of Ceiling Tile were observed within the project area during the survey.

Ceiling Tiles 1 (2'x4' Pinprick with Small Pinhole)  
Ceiling Tiles 4 (2'x4' Textured with Pinpricks)  
Ceiling Tiles 6 (2'x4' Featureless Fiberglass)  
Ceiling Tiles 8 (2'x4' Pinprick with Fissures)  
Ceiling Tiles 9 (1.5'x5' Pinprick with Small Scattered Fissures)  
Ceiling Tiles 10 (1.5'x5' Pinprick with Patterned Pinholes), and  
Ceiling Tiles 11 (2'x4' Plain Drywall Pieces)

Ceiling Tiles 1, 4 and 8 were sampled during the previous assessment surveys. The previous report confirmed that Ceiling Tiles 1, 4 and 8 do not contain any asbestos.

Ceiling Tile 6 is described as fiberglass and Ceiling Tile 11 is described as drywall pieces. These materials are known as non asbestos-containing materials.

During this survey, three (3) samples of each, Ceiling Tiles 9 and Ceiling Tiles 10 (23-1536-9 to 11 and 23-1536-30 to 32), were collected and submitted for analysis. Asbestos was not identified in any of the submitted Ceiling Tile samples.

### **Asbestos Cement Products**

Asbestos cement products were not observed during the survey.

### **Vinyl Floor Tile**

Three (3) types of Vinyl Floor Tile (VFT) were observed within the project area during the survey.

Vinyl Floor Tile 1 - 12" x 12" Grey with Dark Grey and White Marks

Vinyl Floor Tile 2 - 12" x 12" Beige with Black Dots

Vinyl Floor Tile 3 - 12" x 12" Purple with Dark Purple Marks

All three (3) types of VFT were sampled during the assessment surveys. The previous report confirmed that Vinyl Floor Tile 1, 2 and 3 do not contain any asbestos.

### **Vinyl Sheet Flooring**

Three (3) types of Vinyl Sheet Flooring (VSF) were observed in the project area during the survey.

VSF 2 - Grey

VSF 13 - Light Grey

VSF 16 - Blue with Black and Sparkle Dots

VSF 2 and VSF 13 were sampled during the previous assessment surveys. The previous report confirmed that VSF 2 and VSF 13 do not contain any asbestos.

During this survey, three (3) samples of VSF 16 (23-1536-12 to 14), were collected and submitted for analysis. Asbestos was not identified in any of the submitted VSF samples.

## **Flooring Mastic**

### Grey Mastic

Grey mastic was observed under the VFT1 within the project area during the survey. Three (3) samples of the grey mastic (23-1536-1 to 3), were collected and submitted for analysis. Asbestos was not identified in any submitted grey mastic samples.

### Cream Mastic

Cream mastic was observed under the carpet tiles within the project area during the survey. Three (3) samples of the cream mastic (23-1536-18 to 20), were collected and submitted for analysis. Asbestos was not identified in any submitted cream mastic samples.

All flooring mastic on VFT and VSF within the project area, has been determined to be non asbestos containing, based on laboratory analysis in the current or previous assessment surveys.

## **Other ACM**

### Black Putty

Black putty was observed along the interior joints of the glass and the frames of all windows along the outer perimeter wall. Three (3) samples of the black putty (23-1536-15 to 17), were collected and submitted for analysis. Asbestos was not identified in any submitted black putty samples.

### Grey Caulking

Grey caulking was observed along the exterior joints of the window frame and the concrete floor on the north exterior of the building. Three (3) samples of the grey caulking (23-1536-21 to 23), were collected and submitted for analysis. Asbestos was not identified in any submitted grey caulking samples.

### Black Expansion Joint Material

Black expansion joint material was observed along the joints of the concrete slab on the north exterior side of the building. Three (3) samples of the black expansion joint material (23-1536-24 to 26), were collected and submitted for analysis. Asbestos was not identified in any submitted black expansion joint material samples.

### Red Fire Stop

Red fire stop was observed around the pipe and conduit penetrations on the walls and floors within the project area during the survey. Three (3) samples of red fire stop (23-1536-27 to 29), were collected and submitted for analysis. Asbestos was not identified in any fire stop samples.

### Grey Sealant

Grey sealant was observed on the ductwork within the project area during the survey. The grey sealant was determined to be silicon-based. This material is known as non asbestos-containing.

### Gasket

Brown gaskets were observed in a valve of a pipe system in the kitchen during the survey. These materials were observed to be rubberized material and is expected to be non asbestos-containing.

### Above ceiling caulking

**The previous report indicated the presence of asbestos-containing caulking above the drywall ceiling in Cafeteria (Loc. 1-19) and Kitchen (Loc. 1-20) on the ground floor within the project area. Quantity were not provided, as it is extremely difficult to guarantee all material was found. It should be assumed that the caulking is present anywhere above drywall ceilings.**

During the current survey, the ceiling space above these locations were inspected, and this material was not observed. However, the asbestos-containing caulking may still be present.

## **6.3.5 Recommendations**

Prior to demolition activities at the Site, all asbestos-containing materials must be removed from the Site in accordance with MOL O. Reg. 278/05 - *Asbestos on Construction Projects and in Buildings and Repair Operations*, and disposed of at an MOE-licensed landfill in accordance with O. Reg. 558/00 (amending O. Reg. 347, *General – Waste Management*).

Specifically, Fisher recommends the following:

- Provide a copy of this report to contractors bidding on or performing work at the Site.
- When encountered, remove any asbestos-containing caulking using Type 1 Asbestos Abatement Procedures as specified in O. Reg. 278/05.

The presence of ACM should be presumed in locations not accessed during the survey. Sampling of materials found within operating equipment or generally non-accessible components such as insulation within electrical switch gears, wiring, motors, light fixtures, fire door cores, and other materials outside the project scope, was not performed. It is possible that ACM is present at the Site that is not identified in this report. Should additional suspected ACM not outlined in this report be discovered, it should be presumed as ACM until sample analysis determines asbestos content. Precautions should be taken when dismantling solid wall or ceiling finishes, or any other building surfaces which may conceal potential ACM. Such precautions include but are not limited to, isolation measures and appropriate personal protective equipment

## **6.4 Benzene**

Benzene would not be expected to be present at the Site and was not observed during the current survey. No recommendations for benzene are warranted at this time.

## **6.5 Coke Oven Emissions**

Coke oven emissions would not be expected to be present at the Site and were not observed during the current survey. No recommendations for coke oven emissions are warranted at this time.

## **6.6 Ethylene Oxides**

Ethylene oxides would not be expected to be present at the Site and were not observed during the current survey. No recommendations for ethylene oxides are warranted at this time.

## **6.7 Isocyanates**

Isocyanates would not be expected to be present at the Site and were not observed during the current survey. No recommendations for isocyanates are warranted at this time.

## **6.8 Lead**

### **6.8.1 General Information**

Lead is a naturally occurring bluish–grey metal found in small amounts in the earth's crust. Most lead in the environment comes from human activities such as burning fossil fuels, mining and manufacturing. Lead is used in the production of batteries, ammunition, metal products (solder and pipes) and X-ray devices.

Lead does not break down, but lead compounds are changed by sunlight, air and water. Exposure occurs when eating food or drinking water that contains lead. Deteriorated lead paint can contribute to lead dust. The main target for lead toxicity is the nervous system.

### **6.8.2 Regulations**

The Ontario MOL has not prescribed criteria defining an analyzed sample of bulk material as "lead-containing". Further, the MOL has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. However, except for very aggressive disturbance of painted finishes, (e.g., abrasive blasting, torch cutting, or grinding), Fisher believes that a lead content below 0.1% by weight (1,000 ug/g or 1000 ppm) represents a concentration in which the lead content is not the limiting hazard for construction hygiene purposes. Regular construction dust suppression techniques and worker hygiene practices are sufficient for disturbance of paint finishes determined to contain less than 0.1% lead by weight, provided that work is limited to non-aggressive operations.

The regulation for the designated substance lead applies to every employer and worker at a workplace where lead is present, produced, processed, used, handled, or stored and at which a worker is likely to be exposed to lead. Exposure limits for this substance are set at 0.05 – 0.10 mg/m<sup>3</sup> (TWA) depending on the type of lead, and for tetraethyl lead 0.30 mg/m<sup>3</sup> (STEL).



Additionally, in 2011 the MOL revised *Guideline: Lead on Construction Projects* outlining practices that should be followed during construction projects to protect workers from exposure to lead. This includes the methods and equipment employed in the removal of lead-containing coatings that reduce the creation of dust, providing appropriate facilities for workers to wash after each shift, and providing protective clothing and respirators where necessary.

### 6.8.3 Findings

Various paint colors were observed on the wall and ceiling finishes. During the current survey, four (4) bulk samples were collected and submitted to Fisher Environmental Laboratories for inductively coupled plasma (ICP) analysis, as outlined in NIOSH method 7300.

- The lead concentration for all the collected samples was found below the reporting limit for the analytical method used for analysis.
- Lead-containing batteries may be present in the emergency lighting present at the Site.
- Lead may be present in wiring connectors; grounding conductors and solder joints.

### 6.8.4 Recommendations

Where any lead-containing materials may be disturbed, Fisher recommends appropriate lead abatement procedures to be used. The lead abatement procedures are determined by the method(s) of disturbance employed. Regular construction dust suppression techniques and worker hygiene practices are sufficient for disturbance of paint finishes determined to contain less than 0.1% lead by weight, provided that work is limited to non-aggressive operations.

Fisher recommends the following for the removal of lead-containing materials:

- Before disposal of any building debris, verify if the receiving landfill site requires a TCLP.
- Removal of any lead-containing materials shall be carried out in accordance with the following regulations and guidelines:
  - MOL Guideline: Lead on Construction Projects;
  - Designated Substances Regulation, O. Reg. 490/09; and
  - Regulation for Construction Projects, O. Reg. 213/91.

## 6.9 Mercury

### 6.9.1 General Information

Mercury is a naturally occurring metal. It is a shiny, silver-white and odourless liquid. It combines with other elements to form inorganic compounds or salts. Metallic mercury is used to produce chlorine gas and caustic soda and is used in thermostats and thermometers, fluorescent light bulbs, dental fillings and batteries. Exposure occurs when eating fish or shellfish contaminated with methyl mercury, breathing vapours from spills, incinerators, etc.

The nervous system is very sensitive to all forms of mercury. Exposure to high levels of metallic inorganic or organic mercury can permanently damage the brain, kidneys and developing fetus. Short-term exposure may cause lung damage, nausea, vomiting, diarrhea, as well as skin and eye irritation.

### **6.9.2 Regulations**

The regulation for mercury applies to every employer and worker at a workplace where mercury is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to mercury. Exposure limits for this substance are set at 0.025 – 0.01 mg/m<sup>3</sup> (TWA) for all forms of mercury excluding alkyl, and for alkyl compounds of mercury 0.03 mg/m<sup>3</sup> (STEL).

### **6.9.3 Findings**

Mercury-containing thermometers were observed in the mechanical room on the mezzanine level.

- Mercury is presumed to be present as a component in electrical equipment at the Site.
- Mercury is present as a vapour in fluorescent light bulbs.

### **6.9.4 Recommendations**

Fisher recommends the following for the removal of mercury-containing materials:

- If work activities affect the mercury containing thermometers, electrical equipment or fluorescent light bulbs, Fisher recommends that the presumed mercury-containing materials be removed and disposed of in accordance with O. Reg. 558/00.

## **6.10 Silica**

### **6.10.1 General Information**

Silica is a crystalline compound occurring abundantly as quartz, sand, and many other minerals, and is used to manufacture a variety of materials, especially glass and concrete. When mining this substance, silica can be deadly when it becomes airborne. If inhaled, silica dust can cause silicosis which can be fatal.

Some of the following industries have a high potential for risk to workers: construction (sandblasting, rock drilling, masonry work, jack hammering, tunnelling), mining (cutting or drilling through sandstone or granite), foundry work (grinding, mouldings, shakeout, core room), stone cutting (sawing, abrasive blasting, chipping, grinding), manufacturing and use of abrasives, etc.

### **6.10.2 Regulations**

The regulation for silica applies to every employer and worker at a workplace where silica is present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to silica. Exposure limits for this substance are set at 0.05 - 0.10 mg/m<sup>3</sup> (TWA), depending on the type of silica.

Additionally, in 2011 the MOL revised *Guideline: Silica on Construction Projects* outlining practices that should be followed during construction projects to protect workers from exposure to silica. This includes the methods and equipment employed in the removal of silica-containing materials that reduce the creation of dust, providing appropriate facilities for workers to wash after each shift, and providing protective clothing and respirators where necessary.

### **6.10.3 Findings**

As the building is constructed of concrete blocks on walls with concrete floors, silica is expected to be found within these components. No samples were collected for analysis of silica content.

### **6.10.4 Recommendations**

Demolition works that are likely to generate silica-containing dust shall be carried out in accordance with the following regulations and guidelines:

- MOL Guideline: Silica on Construction Projects;
- Designated Substances Regulation, O. Reg. 490/09; and
- Regulation for Construction Projects, O. Reg. 213/91

## **6.11 Vinyl Chloride**

Vinyl chloride would not be expected to be present at the Site and was not observed during the current survey. No recommendations for vinyl chloride are warranted at this time.

## 7.0 LIMITATIONS

Fisher Engineering Limited accepts responsibility for the competent performance of its duties in executing this assignment within the normal standards of the profession, but disclaims responsibility for consequential damages, if any.

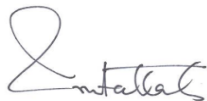
The scope of the survey is based on prior agreement with the client, and the rationale given in this report. The building survey findings rely on the professional interpretation of selective sampling and analysis. Sample analysis results have been applied to homogenous materials in unsampled locations; it was not within the scope of work to carry out an exhaustive sampling and analysis program. For non-accessible building spaces, the likelihood of the presence or absence of asbestos and other designated substances has been described, but such assessment is not a definitive statement of presence or absence.

This report was prepared for the City of Toronto. The scope of services performed may not be appropriate for the purposes of other users, and any use or reuse of this document or its findings or recommendations represented herein is at the sole risk of any other user.

We trust that the information provided in the report meets your current requirements. If you have any questions or concerns, please do not hesitate to contact the undersigned.

Respectfully submitted,

Prepared by:



Iqbal Fattah, M.Sc.  
Project Manager

Reviewed by:



David A. Fisher, C.Chem., P.Eng.  
Principal

## **APPENDIX A – RESULTS OF SAMPLING AND ANALYSIS**

**Table 1**

Summary of Bulk Sample Analysis Results for the Presence of Asbestos  
by Polarized Light Microscopy (PLM)  
Collected on July 13, 2023

Sample Number	Sample Description	Sample Location	Analysis Results (% and Type of Asbestos)
23-1536-1	Grey Mastic	Loc. P1-32a, Men's Changeroom, under VFT-1	None Detected
23-1536-2	Grey Mastic	Loc. P1-32c, Men's Washroom, under VFT-1	None Detected
23-1536-3	Grey Mastic	Loc. P1-32d, Women's Changeroom, under VFT-1	None Detected
23-1536-4	Drywall Joint Compound	Loc. P1-33 Kitchen Storage, Wall	None Detected
23-1536-5	Drywall Joint Compound	Loc. P1-31 Corridor, Wall	None Detected
23-1536-6	Drywall Joint Compound	Mezzanine, Above the YMCA Kitchen Ceiling, Wall	None Detected
23-1536-7	Drywall Joint Compound	Ground Floor, Warming Area Northwest Corner (Loc. 1-18), Wall	None Detected
23-1536-8	Drywall Joint Compound	Loc. 1-23, Office, Ceiling	None Detected
23-1536-9	CT-9, 1.5'x5' - Pinprick with Small Scattered Fissures	Loc. 1-24 Mail Delivery Room, Ceiling	None Detected
23-1536-10, 11	CT-9, 1.5'x5' - Pinprick with Small Scattered Fissures	Loc. 1-23, Office, Ceiling	None Detected
23-1536-12, 13	VSF-16, Blue with Black and Sparkle Dots	Loc. 1-20 Kitchen Area, Floor	None Detected
23-1536-14	VSF-16, Blue with Black and Sparkle Dots	Loc. P1-33, Kitchen Storage, Floor	None Detected
23-1536-15	Black Putty	Ground Floor, Warming Area, Glass Wall, Along the Joint of the Glass and the Frame	None Detected
23-1536-16	Black Putty	Loc. 1-23, Office, Glass Wall, Along the Joint of the Glass and the Frame	None Detected
23-1536-17	Black Putty	Loc. 1-18, Office, Glass Wall, Along the Joint of the Glass and the Frame	None Detected
23-1536-18	Cream Mastic	Loc. 1-23, Office, Under Carpet Tiles	None Detected
23-1536-19, 20	Cream Mastic	Loc. 1-24 Mail Delivery Room, Under Carpet Tiles	None Detected
23-1536-21 to 23	Grey Caulking	North Side Exterior, Along the Joint of the Glass Wall Frame and the Concrete Floor	None Detected
23-1536-24 to 26	Black Expansion Joint Material	North Side Exterior, Along the Joint of the Concrete Slabs on the Floor	None Detected
23-1536-27 to 29	Red Fire Stop	Loc. P1-10, Storage, Wall, Around the Conduit Penetration	None Detected
23-1536-30	CT-10, 1.5'x5' - Pinprick with Patterned Pin holes	Loc. P1-31, Corridor	None Detected
23-1536-31	CT-10, 1.5'x5' - Pinprick with Patterned Pin holes	Loc. P1-32c, Men's Washroom	None Detected
23-1536-32	CT-10, 1.5'x5' - Pinprick with Patterned Pin holes	Loc. 1-23 Office	None Detected

**Table 2**

Summary of Bulk Sample Analysis Results for Lead by  
Inductively Coupled Plasma (ICP) analysis  
Collected on July 13, 2023

Sample No.	Sample Description	Sample Location	Lead Content (ppm and % by Weight)
23-1536-33	Pink Paint	Loc. P1-31 Corridor, Wall	< 10 ppm (0.001%)
23-1536-34	Grey Paint	Mezzanine Mechanical Room (Above YMCA Kitchen), Floor	< 10 ppm (0.001%)
23-1536-35	Brown Paint	Ground Floor, North Side Warming Area, Column	< 10 ppm (0.001%)
23-1536-36	Beige Paint	Loc. 1-25 Corridor, Wall	< 10 ppm (0.001%)

## **APPENDIX B – CERTIFICATES OF ANALYSIS**





# FISHER ENVIRONMENTAL LABORATORIES

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**Client:** City of Toronto  
Facilities Management  
**Address:** 2nd Floor, Metro Hall  
55 John Street, Toronto, ON  
M5V 3C6  
**Tel.:** 416-392-9024  
**Attn:** Inder Bhamra

**F.E. Job #:** 23-1536  
**Project Name:** DSS  
**Project ID:** FM-P 23-13156  
**Date Sampled:** 13-Jul-2023  
**Date Received:** 19-Jul-2023  
**Date Reported:** 28-Jul-2023  
**Location:** 55 John Street (North Side)  
Toronto, ON

## Certificate of Analysis

<b>Analysis Requested:</b>	Asbestos, Lead		
<b>Sample Description:</b>	36 Bulk Sample(s)		

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
1A - Grey Mastic	Loc. P1-32A, Men's Changing Room, under VFT-1	23-1536-1	Not Detected
1B - Grey Mastic	Loc. P1-32C, Men's Washroom, under VFT-1	23-1536-2	Not Detected
1C - Grey Mastic	Loc. P1-32D, Women's Washroom, under VFT-1	23-1536-3	Not Detected
2A - Drywall Joint Compound	Loc. P1-33 Kitchen Storage, Wall	23-1536-4	Not Detected
2B - Drywall Joint Compound	Loc. P1-31 Corridor, Wall	23-1536-5	Not Detected
2C - Drywall Joint Compound	Mezzanine, above the YMCA Kitchen Ceiling, Wall	23-1536-6	Not Detected
2D - Drywall Joint Compound	Ground Floor, Warming Area Northwest Corner (Loc. 1-18), Wall	23-1536-7	Not Detected
2E - Drywall Joint Compound	Loc. 1-23, Office, Ceiling	23-1536-8	Not Detected

## Certificate of Analysis

<b>Analysis Requested:</b>	Asbestos, Lead
<b>Sample Description:</b>	36 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
3A - Ceiling Tiles-9, 1.5'x5', Pinprick with Small Scattered Fissures	Loc. 1-24, Mail Delivery Room, Ceiling	23-1536-9	Not Detected
3B - Ceiling Tiles-9, 1.5'x5', Pinprick with Small Scattered Fissures	Loc. 1-23, Office, Ceiling	23-1536-10	Not Detected
3C - Ceiling Tiles-9, 1.5'x5', Pinprick with Small Scattered Fissures	Loc. 1-23, Office, Ceiling	23-1536-11	Not Detected
4A - Vinyl Sheet Flooring-16, Blue with Black and Sparkle Dots	Loc. 1-20 Kitchen Area, Floor	23-1536-12	Not Detected
4B - Vinyl Sheet Flooring-16, Blue with Black and Sparkle Dots	Loc. 1-20 Kitchen Area, Floor	23-1536-13	Not Detected
4C - Vinyl Sheet Flooring-16, Blue with Black and Sparkle Dots	Loc. P1-33, Kitchen Storage	23-1536-14	Not Detected
5A - Black Putty	Ground Floor, Warming Area, Glass Wall, along the Joint of the Glass and the Frame	23-1536-15	Not Detected
5B - Black Putty	Loc. 1-23, Office, Glass Wall, along the Joint of the Glass and the Frame	23-1536-16	Not Detected
5C - Black Putty	Loc. 1-18, Office, Glass Wall, along the Joint of the Glass and the Frame	23-1536-17	Not Detected
6A - Cream Mastic	Loc. 1-23, Office, under Carpet Tiles	23-1536-18	Not Detected
6B - Cream Mastic	Loc. 1-24, Mail Delivery Room, under Carpet Tiles	23-1536-19	Not Detected
6C - Cream Mastic	Loc. 1-24, Mail Delivery Room, under Carpet Tiles	23-1536-20	Not Detected

## Certificate of Analysis

<b>Analysis Requested:</b>	Asbestos, Lead
<b>Sample Description:</b>	36 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Asbestos Content and Fibre Type
7A - Grey Caulking	North Side Exterior, along the Joint of the Glass Wall Frame and the Concrete Floor	23-1536-21	Not Detected
7B - Grey Caulking	North Side Exterior, along the Joint of the Glass Wall Frame and the Concrete Floor	23-1536-22	Not Detected
7C - Grey Caulking	North Side Exterior, along the Joint of the Glass Wall Frame and the Concrete Floor	23-1536-23	Not Detected
8A - Black Expansion Joint Material	North Side Exterior, along the Joint of the Concrete Slabs on the Floor	23-1536-24	Not Detected
8B - Black Expansion Joint Material	North Side Exterior, along the Joint of the Concrete Slabs on the Floor	23-1536-25	Not Detected
8C - Black Expansion Joint Material	North Side Exterior, along the Joint of the Concrete Slabs on the Floor	23-1536-26	Not Detected
9A - Red Fire Stop	Loc. P1-10, Storage, Wall, around the Conduit Penetration	23-1536-27	Not Detected
9B - Red Fire Stop	Loc. P1-10, Storage, Wall, around the Conduit Penetration	23-1536-28	Not Detected
9C - Red Fire Stop	Loc. P1-10, Storage, Wall, around the Conduit Penetration	23-1536-29	Not Detected
10A - Ceiling Tiles-10, 1.5'x1.5', Pinprick with Patterned Pin Holes	Loc. P1-31, Corridor	23-1536-30	Not Detected
10B - Ceiling Tiles-10, 1.5'x1.5', Pinprick with Patterned Pin Holes	Loc. P1-32C, Men's Washroom	23-1536-31	Not Detected
10C - Ceiling Tiles-10, 1.5'x1.5', Pinprick with Patterned Pin Holes	Loc. 1-23, Office Area (Mail Room)	23-1536-32	Not Detected

Fisher Environmental Laboratories (Lab ID #: 2745) is accredited by CALA (Canadian Association for Laboratory Accreditation Inc.) for asbestos analysis by PLM.

**ANALYTICAL METHOD:**

Asbestos has been done in accordance with normal professional standard using the following Fisher Environmental Lab Method: Asbestos by PLM (Polarized Light Microscope) F-26, Rev.2.2.

## Certificate of Analysis

<b>Analysis Requested:</b>	Asbestos, Lead
<b>Sample Description:</b>	36 Bulk Sample(s)

Sample Matrix and Client Sample Description	Client Sample Location	Lab Sample ID	Lead (ppm)
L1 - Pink Paint	Loc, P1-31 Corridor, Wall	23-1536-33	<10
L2 - Grey Paint	Ground Floor, Mezzanine Mechanical Room (above YMCA Kitchen), Floor	23-1536-34	<10
L3 - Brown Paint	Ground Floor, North Side Warming Area, Column	23-1536-35	<10
L4 - Beige Paint	Loc. 1-25 Corridor, Wall	23-1536-36	<10

< result obtained was below RL (Reporting Limit).

## QA/QC Report

Parameter	Blank (ppm)		LCS (%)		CRM/MS (%)	
	Result	RL	Recovery	AR	Recovery	AR
Lead	<10	10	94	80-120	100	70-130

Parameter	Duplicate (%)					
	RPD	AR				
Lead	1.3	0-30				

### LEGEND:

RL - Reporting Limit

LCS - Laboratory Control Sample

MS - Matrix Spike

AR - Acceptable Range

RPD - Relative Percent Difference

### ANALYTICAL METHODS:

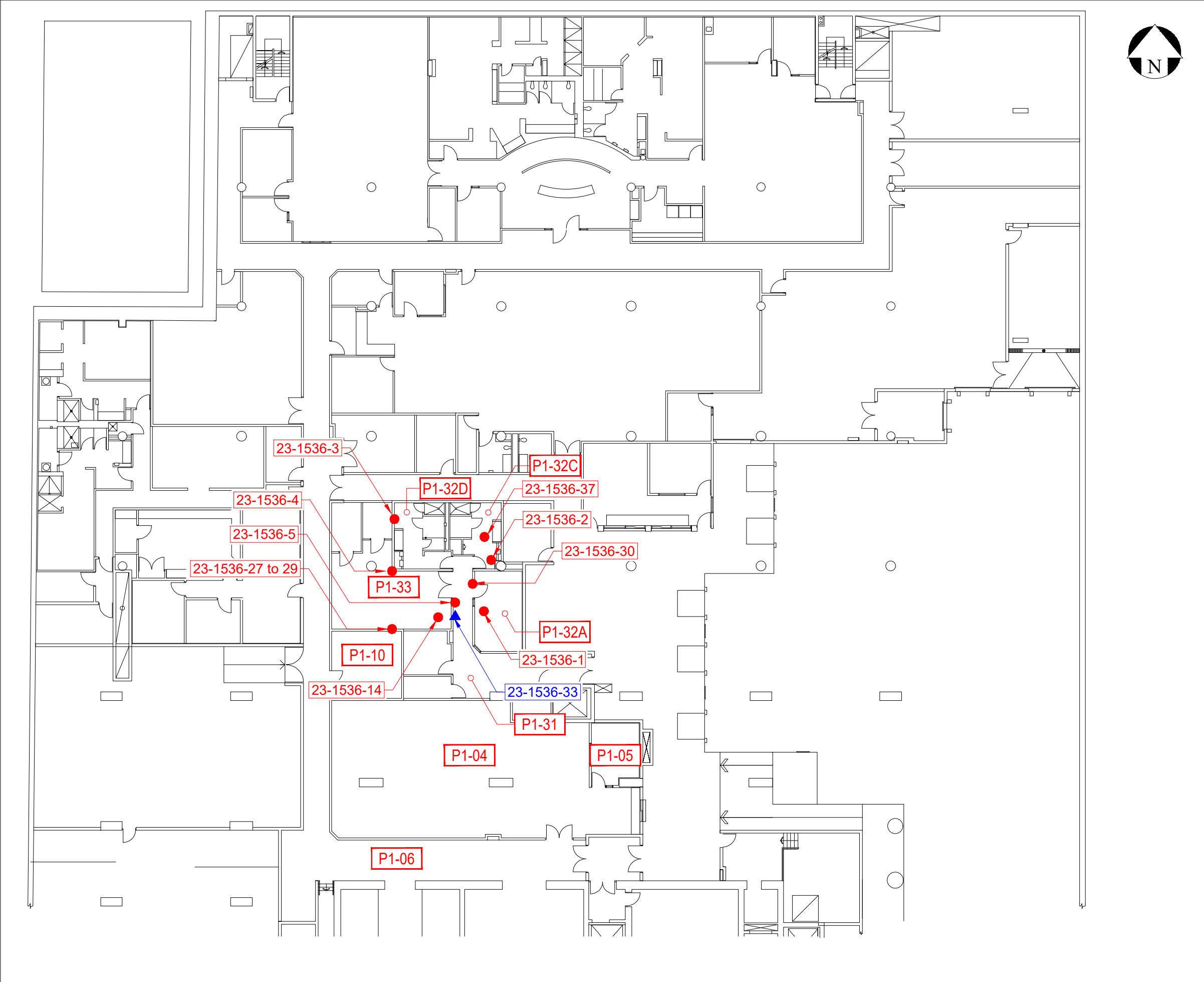
Metals (Lead) - Method # F-1, Rev. 4.5, Standard Operation Procedure for determination of Metals by the Inductively Coupled Plasma- Optical. Method used by Fisher Environmental Lab complies with the Standard Methods for the Examination of Water and Wastewater, 20th Ed 3120-B.

Authorized by:

*Ronggen Lin*  
 Roger Lin, Ph. D., C. Chem.  
 Laboratory Manager



## **APPENDIX C – FLOOR PLANS**



Legend

- Asbestos Sample Location
- ▲ Lead Sample Location
- P1-31 Location Number

Figure 1

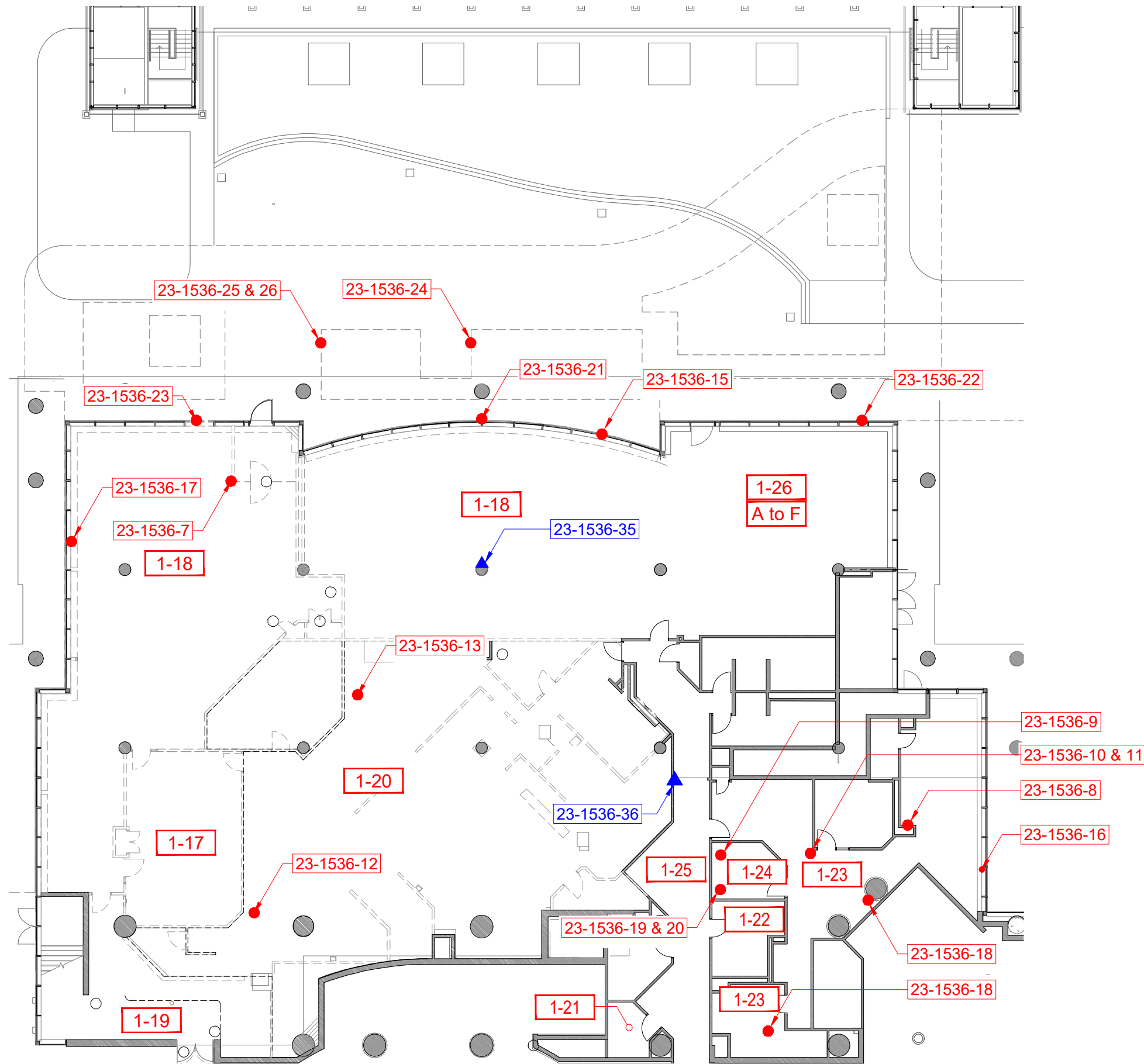
LOCATION: 55 John Street  
Toronto, Ontario

BUILDING NAME: Metro Hall

Parking Level 1 (North Section)  
Asbestos & Lead Sample Locations

CLIENT: City of Toronto		
PROJECT NUMBER: FE- 23-13156	DATE: August 2023	DRW BY: AM
CAD FILE: FIG1	SCALE: Not to Scale	CHK BY: IF





Legend

- Asbestos Sample Location
- ▲ Lead Sample Location
- 1-18 Location Number

Figure 2

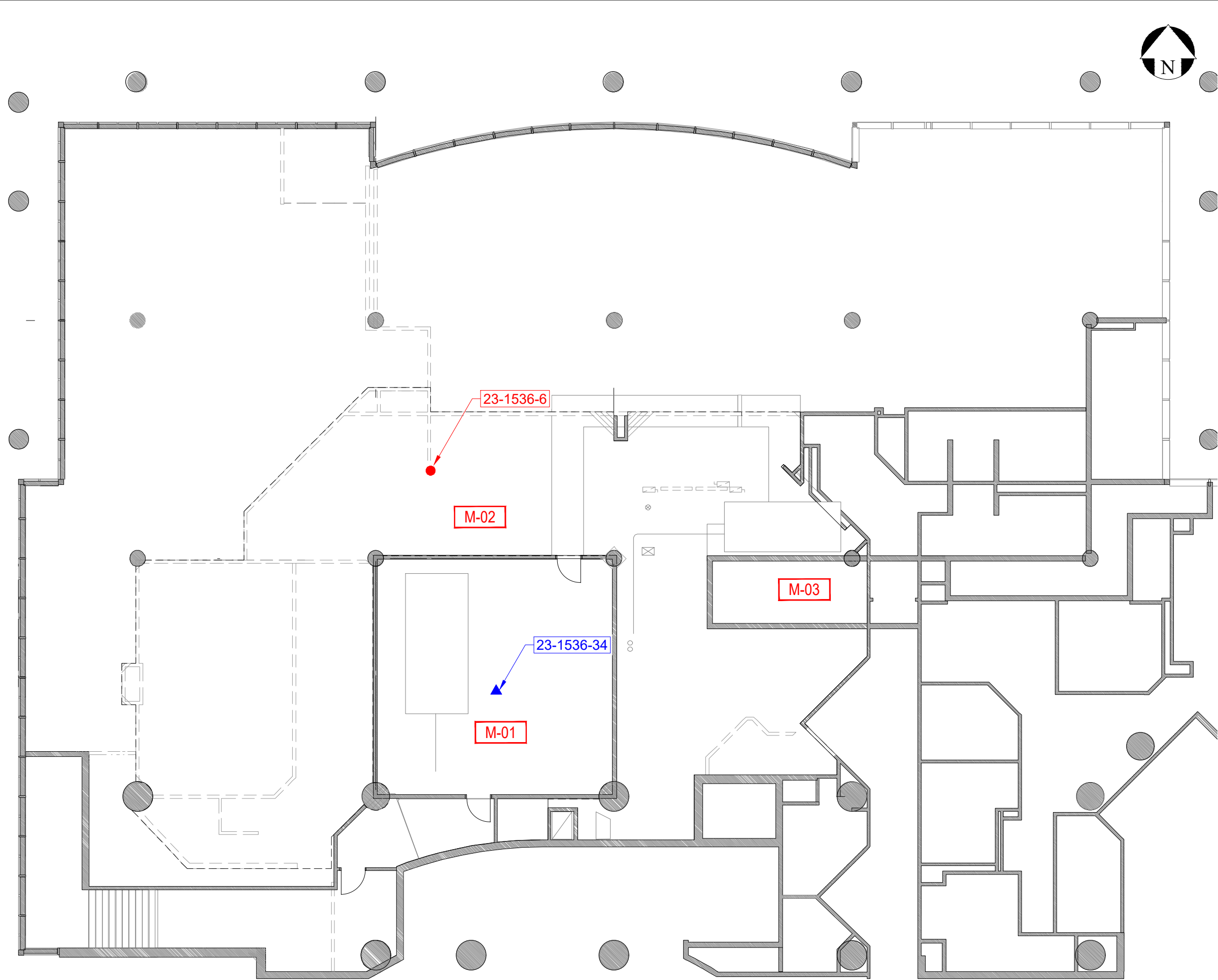
LOCATION:  
55 John Street  
Toronto, Ontario

BUILDING NAME:  
Metro Hall

Ground Floor - Lower Level  
Asbestos & Lead Sample Locations

CLIENT: City of Toronto		
PROJECT NUMBER: FE- 23-13156	DATE: August 2023	DRW BY: AM
CAD FILE: FIG2	SCALE: Not to Scale	CHK BY: IF





### Legend

- Asbestos Sample Location
- ▲ Lead Sample Location
- M-02 Location Number


### Figure 3

**LOCATION:** 55 John Street  
Toronto, Ontario

**BUILDING NAME:** Metro Hall

Ground Floor - Mezzanine Level  
Asbestos & Lead Sample Locations

CLIENT: City of Toronto		
PROJECT NUMBER: FE- 23-13156	DATE: August 2023	DRW BY: AM
CAD FILE: FIG3	SCALE: Not to Scale	CHK BY: IF





## **APPENDIX D – ROOM BY ROOM SURVEY FORM**

APPENDIX D - ROOM BY ROOM SURVEY FORM

Building Address: 55 John Street				Date(s) of Current Reassessment: July 13, 2023					
Building Name: Metro Hall				Organization Completing Reassessment: Fisher Engineering Limited / Project FE 23-13156					
Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Notes/Required Action
0-00	Building Exterior	Floor	Concrete	N/A	N/A	N/A	N/A	N/A	
0-00	Building Exterior	Floor	Expansion Joint	Asbestos	23-1536-24 to 26*	None Detected	N/A	N/A	Black *From Fisher Project No. 23-13156, Dated August 2023
0-00	Building Exterior	Wall	Stone	N/A	N/A	N/A	N/A	N/A	
0-00	Building Exterior	Wall	Glass	N/A	N/A	N/A	N/A	N/A	
0-00	Building Exterior	Wall	Caulking	Asbestos	23-1536-21 to 23*	None Detected	N/A	N/A	Grey *From Fisher Project No. 23-13156, Dated August 2023
P1-04	Mail Delivery Room	Floor	Vinyl Floor Tile 1	Asbestos	15170-B106-50B	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks Collected during ECOH 2012 Reassessment Survey
P1-04	Mail Delivery Room	Wall	Drywall Joint Compound	Asbestos	15170-B106-02C	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
P1-04	Mail Delivery Room	Ceiling	Ceiling Tiles 1	Asbestos	Homogeneous w/ 14075-B106-01	None Detected	N/A	N/A	2'x4' Pinprick With Small Pinholes
P1-05	Office	Floor	Vinyl Floor Tile 3	Asbestos	15170-B106-51A	None Detected	N/A	N/A	12" x 12" Purple with Dark Purple Marks Collected during ECOH 2012 Reassessment Survey
P1-05	Office	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-05	Office	Ceiling	Ceiling Tiles 1	Asbestos	Homogeneous w/ 14075-B106-01	None Detected	N/A	N/A	2'x4' Pinprick With Small Pinholes
P1-06	Corridor	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-06	Corridor	Floor	Vinyl Floor Tile 2	Asbestos	Homogeneous w/ 13747-04-01	None Detected	N/A	N/A	12" x 12" Beige with Black Dots
P1-06	Corridor	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-06	Corridor	Ceiling	Ceiling Tiles 10	Asbestos	Homogeneous w/ 23-1536-30 to 32	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes
P1-10	Maintenance Room	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-10	Maintenance Room	Wall	Concrete	N/A	N/A	N/A	N/A	N/A	
P1-10	Maintenance Room	Wall	Fire Stop	Asbestos	23-1536-27 to 29*	None Detected	N/A	N/A	Red *From Fisher Project No. 23-13156, Dated August 2023
P1-10	Maintenance Room	Ceiling	Concrete	N/A	N/A	N/A	N/A	N/A	
P1-31	Corridor	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-31	Corridor	Wall	Drywall Joint Compound	Asbestos	23-1536-5*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
P1-31	Corridor	Wall	Paint	Lead	23-1536-33*	< 10 PPM	N/A	N/A	Pink *From Fisher Project No. 23-13156, Dated August 2023
P1-31	Corridor	Ceiling	Ceiling Tiles 10	Asbestos	23-1536-30*	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes *From Fisher Project No. 23-13156, Dated August 2023
P1-32a	Men's Changeroom	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-32a	Men's Changeroom	Floor	Grey Mastic	Asbestos	23-1536-1*	None Detected	N/A	N/A	Under VFT-1 *From Fisher Project No. 23-13156, Dated August 2023
P1-32a	Men's Changeroom	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-32a	Men's Changeroom	Ceiling	Ceiling Tiles 10	Asbestos	Homogeneous w/ 23-1536-30 to 32	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes

APPENDIX D - ROOM BY ROOM SURVEY FORM

Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Notes/Required Action
P1-32b	Women's Changeroom	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-32b	Women's Changeroom	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-32b	Women's Changeroom	Ceiling	Ceiling Tiles 10	Asbestos	Homogeneous w/ 23-1536-30 to 32	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes
P1-32c	Men's Washroom	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-32c	Men's Washroom	Floor	Grey Mastic	Asbestos	23-1536-2*	None Detected	N/A	N/A	Under VFT-1 *From Fisher Project No. 23-13156, Dated August 2023
P1-32c	Men's Washroom	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-32c	Men's Washroom	Ceiling	Ceiling Tiles 10	Asbestos	23-1536-31*	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes *From Fisher Project No. 23-13156, Dated August 2023
P1-32d	Women's Washroom	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
P1-32d	Women's Washroom	Floor	Grey Mastic	Asbestos	23-1536-3*	None Detected	N/A	N/A	Under VFT-1 *From Fisher Project No. 23-13156, Dated August 2023
P1-32d	Women's Washroom	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-02	None Detected	N/A	N/A	
P1-32d	Women's Washroom	Ceiling	Ceiling Tiles 1	Asbestos	Homogeneous w/ 14075-B106-01	None Detected	N/A	N/A	2'x4' Pinprick With Small Pinholes
P1-32d	Women's Washroom	Ceiling	Ceiling Tiles 10	Asbestos	Homogeneous w/ 23-1536-30 to 32	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes
P1-33	Kitchen Storage	Floor	Vinyl Sheet Flooring 16	Asbestos	23-1536-14*	None Detected	N/A	N/A	Blue with Black and Sparkle Dots *From Fisher Project No. 23-13156, Dated August 2023
P1-33	Kitchen Storage	Wall	Drywall Joint Compound	Asbestos	23-1536-4*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
P1-33	Kitchen Storage	Ceiling	Concrete	N/A	N/A	N/A	N/A	N/A	
1-17	Meeting Room	Floor	Vinyl Sheet Flooring 13	Asbestos	15170-B106-37A - C	None Detected	N/A	N/A	Light Grey Collected during ECOH 2012 Reassessment Survey
1-17	Meeting Room	Wall	Drywall Joint Compound	Asbestos	15170-B106-03B	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-17	Meeting Room	Ceiling	Ceiling Tiles 9	Asbestos	Homogeneous w/ 23-1536- 9 to 11	None Detected	N/A	N/A	1.5'x5' Pinprick with Small Scattered Fissures
1-18	Office	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-18	Office	Wall	Concrete	N/A	N/A	N/A	N/A	N/A	
1-18	Office	Wall	Drywall Joint Compound	Asbestos	23-1536-7*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
1-18	Office	Column	Paint	Lead	23-1536-35*	< 10 PPM	N/A	N/A	Brown *From Fisher Project No. 23-13156, Dated August 2023
1-18	Office	Window	Black Putty	Asbestos	23-1536-15 and 17*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
1-18	Office	Ceiling	Ceiling Tiles 9	Asbestos	Homogeneous w/ 23-1536- 9 to 11	None Detected	N/A	N/A	1.5'x5' Pinprick with Small Scattered Fissures
1-18	Office	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-19	Cafeteria	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-19	Cafeteria	Wall	Drywall Joint Compound	Asbestos	15170-B106-03C	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-19	Cafeteria	Ceiling	Ceiling Tiles 9	Asbestos	Homogeneous w/ 23-1536- 9 to 11	None Detected	N/A	N/A	1.5'x5' Pinprick with Small Scattered Fissures

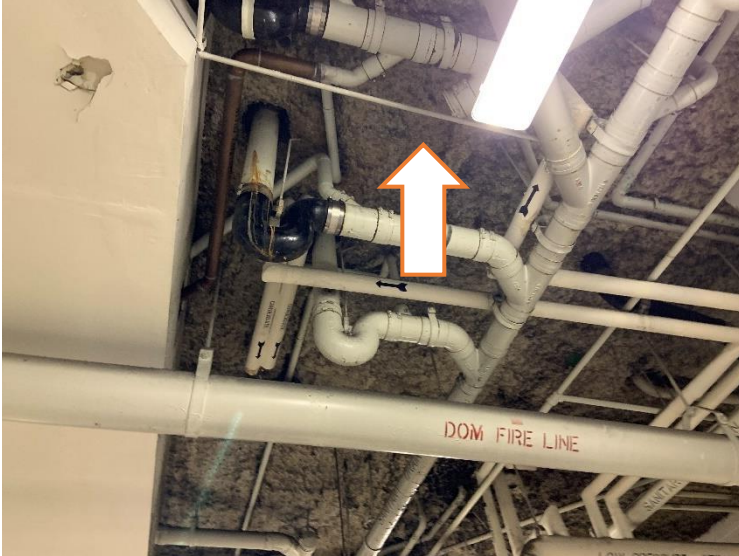
APPENDIX D - ROOM BY ROOM SURVEY FORM

Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Notes/Required Action
1-19	Cafeteria	Other	Caulking 3*	Asbestos	Visually consistent with 74676-S003	5% Chrysotile	**N/A	Good	*Located above the drywall finishes, above the ceiling **Quantity not provided, as extremely difficult to guarantee all material was found. It should be assumed that the caulking is present anywhere above ceiling Collected during Pinchin 2012 Hazardous Building Materials Assessment
1-20	Kitchen Area	Floor	Vinyl Sheet Flooring 16	Asbestos	23-1536-12 and 13*	None Detected	N/A	N/A	Blue with Black and Sparkle Dots *From Fisher Project No. 23-13156, Dated August 2023
1-20	Kitchen Area	Wall	Drywall Joint Compound	Asbestos	15170-B106-03D	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-20	Kitchen Area	Ceiling	Ceiling Tiles 11	Asbestos	Not Sampled	Visually Negative	N/A	N/A	2'x4' Plain Drywall Pieces
1-20	Kitchen Area	Other	Caulking 3*	Asbestos	Visually consistent with 74676-S003	5% Chrysotile	**N/A	Good	*Located above the drywall finishes, above the ceiling **Quantity not provided, as extremely difficult to guarantee all material was found. It should be assumed that the caulking is present anywhere above ceiling Collected during Pinchin 2012 Hazardous Building Materials Assessment
1-21	Custodial Storage	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
1-21	Custodial Storage	Wall	Drywall Joint Compound	Asbestos	15170-B106-03E	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-21	Custodial Storage	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-22	Washroom	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-22	Washroom	Wall	Drywall Joint Compound	Asbestos	15170-B106-03F	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-22	Washroom	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-23	Office of Partnership	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
1-23	Office of Partnership	Floor	Carpet	N/A	N/A	N/A	N/A	N/A	
1-23	Office of Partnership	Floor	Cream Mastic	Asbestos	23-1536-18*	None Detected	N/A	N/A	Under carpet tiles *From Fisher Project No. 23-13156, Dated August 2023
1-23	Office of Partnership	Wall	Drywall Joint Compound	Asbestos	15170-B106-03G	None Detected	N/A	N/A	Collected during ECOH 2012 Reassessment Survey
1-23	Office of Partnership	Window	Black Putty	Asbestos	23-1536-16*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
1-23	Office of Partnership	Ceiling	Ceiling Tiles 9	Asbestos	23-1536-10 and 11*	None Detected	N/A	N/A	1.5'x5' Pinprick with Small Scattered Fissures *From Fisher Project No. 23-13156, Dated August 2023
1-23	Office of Partnership	Ceiling	Ceiling Tiles 10	Asbestos	23-1536-32*	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes *From Fisher Project No. 23-13156, Dated August 2023
1-23	Office of Partnership	Ceiling	Drywall Joint Compound	Asbestos	23-1536-8*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
1-24	Mail Delivery Room	Floor	Carpet	N/A	N/A	N/A	N/A	N/A	
1-24	Mail Delivery Room	Floor	Cream Mastic	Asbestos	23-1536-19 and 20*	None Detected	N/A	N/A	Under carpet tiles *From Fisher Project No. 23-13156, Dated August 2023
1-24	Mail Delivery Room	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-24	Mail Delivery Room	Ceiling	Ceiling Tiles 9	Asbestos	23-1536-9*	None Detected	N/A	N/A	1.5'x5' Pinprick with Small Scattered Fissures *From Fisher Project No. 23-13156, Dated August 2023
1-25	Corridor	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-25	Corridor	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-25	Corridor	Wall	Paint	Lead	23-1536-36*	< 10 PPM	N/A	N/A	Beige *From Fisher Project No. 23-13156, Dated August 2023

APPENDIX D - ROOM BY ROOM SURVEY FORM

Location Number	Location Name	Building System	Material Observed	Potential Hazardous Material	Sample ID	Analytical Result	Quantity	Condition	Notes/Required Action
1-25	Corridor	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26a	Office Area	Floor	Carpet	N/A	N/A	N/A	N/A	N/A	
1-26a	Office Area	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26a	Office Area	Ceiling	Ceiling Tiles 10	Asbestos	Homogeneous w/ 23-1536-30 to 32	None Detected	N/A	N/A	1.5'x5' Pinprick With Patterned Pinholes
1-26a	Office Area	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26b	Kitchen	Floor	Vinyl Sheet Flooring 2	Asbestos	15170-B106-33C	None Detected	N/A	N/A	Grey Collected during ECOH 2012 Reassessment Survey
1-26b	Kitchen	Wall	Concrete	N/A	N/A	N/A	N/A	N/A	
1-26b	Kitchen	Ceiling	Ceiling Tiles 6	Asbestos	Not Sampled	Visually Negative	N/A	N/A	2'x4' Featureless (Fibreglass)
1-26c	Storage	Floor	Vinyl Floor Tile 1	Asbestos	Homogeneous w/ 15170-B106-50	None Detected	N/A	N/A	12" x 12" Grey with Dark Grey and White Marks
1-26c	Storage	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26c	Storage	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26d	Corridor	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-26d	Corridor	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26d	Corridor	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26e	Women's Washroom	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-26e	Women's Washroom	Wall	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-26e	Women's Washroom	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
1-26f	Men's Washroom	Floor	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-26f	Men's Washroom	Wall	Ceramic	N/A	N/A	N/A	N/A	N/A	
1-26f	Men's Washroom	Ceiling	Drywall Joint Compound	Asbestos	Homogeneous w/ 15170-B106-03	None Detected	N/A	N/A	
M-01	Mechanical Room	Floor	Concrete	N/A	N/A	N/A	N/A	N/A	
M-01	Mechanical Room	Floor	Paint	Lead	23-1536-34*	< 10 PPM	N/A	N/A	Grey *From Fisher Project No. 23-13156, Dated August 2023
M-01	Mechanical Room	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 23-1356-4 to 8	None Detected	N/A	N/A	
M-01	Mechanical Room	Ceiling	Concrete	N/A	N/A	N/A	N/A	N/A	
M-02	Above YMCA Kitchen	Floor	Metal	N/A	N/A	N/A	N/A	N/A	
M-02	Above YMCA Kitchen	Wall	Drywall Joint Compound	Asbestos	23-1536-6*	None Detected	N/A	N/A	*From Fisher Project No. 23-13156, Dated August 2023
M-02	Above YMCA Kitchen	Ceiling	Concrete	N/A	N/A	N/A	N/A	N/A	
M-03	Electrical Room	Floor	Concrete	N/A	N/A	N/A	N/A	N/A	
M-03	Electrical Room	Wall	Drywall Joint Compound	Asbestos	Homogeneous w/ 23-1356-4 to 8	None Detected	N/A	N/A	
M-03	Electrical Room	Ceiling	Concrete	N/A	N/A	N/A	N/A	N/A	

## **APPENDIX E – SITE PHOTOGRAPHS**



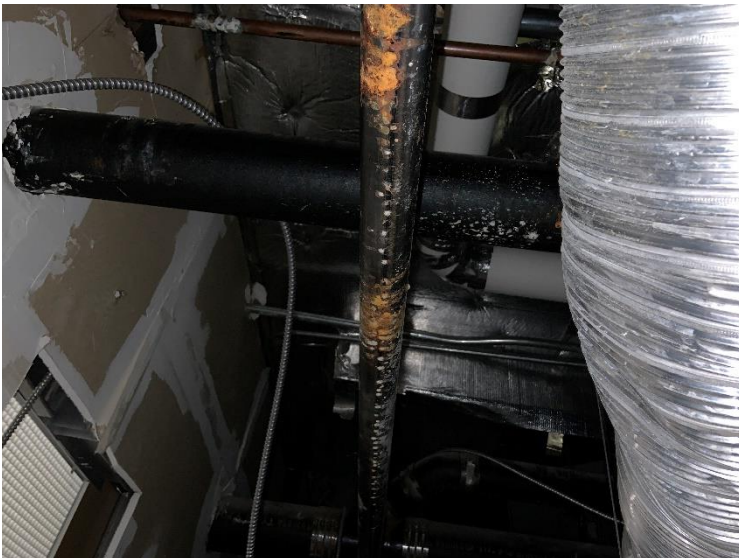
**Photo 1:**

View of the non-asbestos-containing SFP on the deck of the Parking Level adjacent to YMCA Kitchen.



**Photo 2:**

Example of the fiberglass insulation pipe systems in Kitchen Storage Area (Loc. P1-33)



**Photo 3:**

Example of the non-insulated pipe system in the ceiling space in Men's Washroom (Loc. P1-32C).





**Photo 4:**

Example of the non-insulated duct work in the ceiling space above the Kitchen (Loc. 1-20).



**Photo 5:**

View of the non-asbestos containing Ceiling Tile 10 (1.5'x5' Pinprick with Patterned Pinholes)



**Photo 6:**

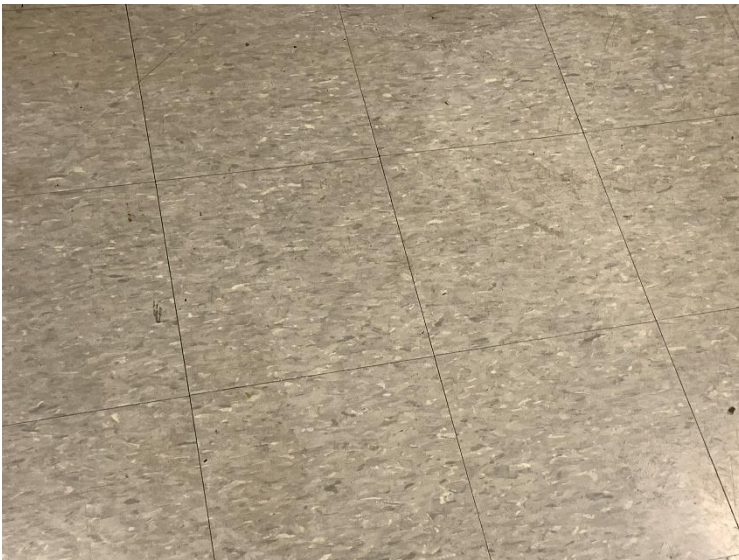
View of the non-asbestos containing Ceiling Tile 9 (1.5'x5' Pinprick with Small Scattered Fissures)





**Photo 7:**

View of the non-asbestos containing Ceiling Tile 11 (2'x4' Drywall Pieces) in Kitchen (Loc. 1-20). .



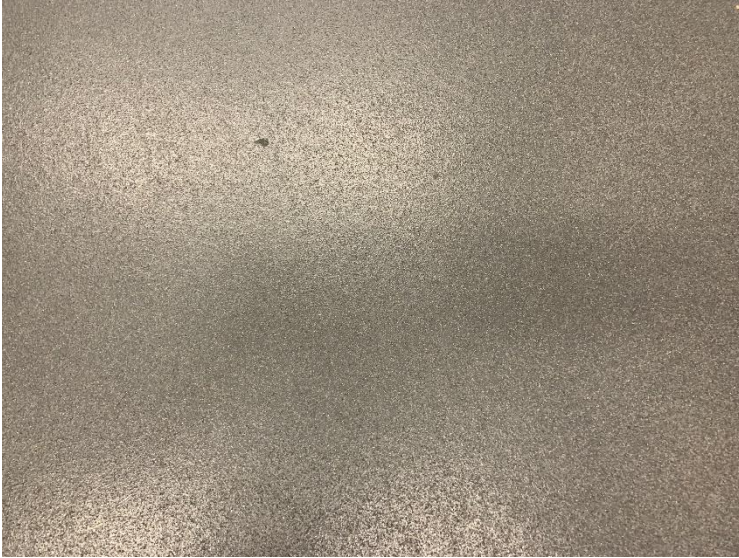
**Photo 8:**

View of the non-asbestos-containing VFT-1 12" x 12" (Grey with Dark Grey and White Marks) in the Men's Washroom (Loc. P1-32C)



**Photo 9:**

View of the non-asbestos-containing VFT-2 (12" x 12" Beige with Black Dots) in Corridor (Loc. P1-06).



**Photo 10:**

View of the non-asbestos-containing VSF-16 (Blue with Black and Sparkle Dots) in Kitchen (Loc. 1-20)



**Photo 11:**

View of the non-asbestos-containing gaskets in a valve within the Kitchen (Loc. 1-20).



**Photo 12:**

View of the non-asbestos-containing silicon based sealant on ductwork in the ceiling space above Kitchen (Loc. 1-20).





**Photo 13:**

Example of the non-asbestos-containing grey mastic under VFTs in Men's Change Room (Loc. 1-32a).



**Photo 14:**

Example of the non-asbestos-containing cream mastic under the carpet in the Office (Loc. 1-23).



**Photo 15:**

View of mercury-containing thermometer in mechanical room on the mezzanine level (Loc. M-01).