# Mary Hopkins Elementary School HVAC and Ceiling Replacement

## Designated Substance Audit Report

**Project Location:**
211 Mill Street North, Waterdown, ON

**Prepared for:**
Hamilton-Wentworth District School Board
20 Education Court, Hamilton, ON

**Prepared by:**
MTE Consultants Inc
1016 Sutton Drive, Unit A
Burlington, ON L7L 6B8

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**MTE File No.:** 53042-100

Engineers, Scientists, Surveyors.

# Contents



## Appendices

# 1.0 Introduction

MTE Consultants Inc. (MTE) was retained by Hamilton-Wentworth District School Board to conduct a Designated Substance Audit for the building located at 211 Mill Street North in Watedown, Ontario.

The purpose of the audit was to identify the presence of Designated Substances within the building in accordance with Section 30 of the Occupational Health & Safety Act (OHSA), in advance of renovation.. This report meets the requirements of Section 30 of the OHSA and the requirements of Ontario Regulation (O. Reg.) 278/05.

# 2.0 Scope of Work

As requested by the Client, this assessment was limited to accessible interior and exterior finishes. These areas are referred to in the following sections as the “Subject Area”.

The Scope of Work for this assessment was completed by MTE and included the following activities:

- Review of existing or historical reports and documentation pertaining to Designated Substances within the building;
- Visual inspection of all accessible areas within the building and all accessible exterior finishes and elements to identify the following suspect Designated Substances and Hazardous Building Materials:
    - Asbestos;
    - Lead;
    - Mercury;
    - Silica;
    - Mould growth;
    - Ozone Depleting Substances; and
    - Polychlorinated Biphenyls
- The following Designated Substances are not expected to be present due to the building use or in a form that is hazardous: Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxide, Isocyanates, and Vinyl Chloride;
- Collection of bulk building material samples suspected to contain asbestos;
- Collection of paint scrape samples suspected to contain lead;
- Collection of sealant samples to determine Polychlorinated Biphenyl (PCB) content;
- Submission of samples to an accredited and/or qualified laboratory;
- Interpretation of laboratory results; and
- Preparation of this report of findings and recommendations.

# 3.0 Methodology and Assessment Criteria

This audit was conducted using visual and laboratory identification methods for the assessment of materials outlined in Section 2.0 and their corresponding location and use. Materials that are determined to be asbestos-containing materials (ACM) are further classified by their friability and condition. The areas outlined in Section 2.0 were inspected and limited to building components, materials and service connections. Notwithstanding that reasonable attempts were made to identify all Designated Substances, the possibility of concealed substances and material exists and may not become visible until substantial demolition has occurred and therefore are currently undocumented. All work was conducted in accordance with industry accepted methods and MTE Standard Operating Procedures and did not include the following:

- Materials indicated in this report as “Potentially Concealed”;
- Locations that may be hazardous to the surveyor (located at heights, electrical equipment, confined spaces);
- Where invasive inspection could cause consequential damage to the property or impair the integrity of the equipment, such as roof system, sealants, exterior finishes, underground services or components of mechanical equipment;
- Locations concealed by building finishes that require substantial demolition or removal for access or determination of quantities (plumbing or electrical lines);
- Non-permanent items or personal contents, furnishings; and
- Settled dust or airborne agents unless otherwise stated.

# 4.0 Assessment and Results

An initial inspection of the building was conducted by MTE on March 3, 2023.

Subsequent visits to the Site were completed on November 1, 2023, January 29, 2024, February 7, 2024 and February 8, 2024.

A description of the building and assessed finishes is provided below. Refer to Section 4.1 for a summary of findings.

| Building Element | Description |
|---|---|
| **Exterior Finishes** | Concrete<br>Brick veneer and mortar<br>Sealants<br>Flat roof system |
| **Building Structure** | Structural steel<br>Wood Frame<br>Concrete<br>Concrete block |
| **Mechanical Systems/Insulations** | Boiler heating<br>Roof mounted central air conditioning<br>Window mounted air conditioning |
| | Parging on pipe fittings<br>Duct wrap<br>Fibreglass insulation on pipe straights, foil wrapped elbows<br>Fibreglass duct insulation |

| Building Element | Description |
|---|---|
| | Fiberglass insulation covered with Polyvinyl Chloride (PVC)<br>Aircell Pipe Insulation |
| **Electrical/Plumbing Systems** | Fluorescent Light tubes<br>Copper piping with solder |
| **Floor Finishes** | Vinyl sheet flooring with paper backing<br>Vinyl floor tiles<br>Hardwood<br>Concrete<br>Terrazzo |
| **Wall Finishes** | Concrete<br>Drywall<br>Plaster |
| **Ceiling Finishes** | Drywall<br>Plaster<br>Hard texture finish<br>Asbestos cement (Transite)<br>2' x 2'/4' Large Fissure Random Pinhole ceiling tiles<br>2' x 2'/4' Small Fissure Random Pinhole ceiling tiles (1996 manufacturing date stamp) |

## 4.1 Findings and Analytical Results

A summary of sampling locations and analytical results are included in **Appendix A** and is inclusive of historical sampling, as outlined in Section 4.0.

Laboratory certificates of analysis are included in **Appendix B**.

Figures of inspected areas are included in **Appendix C**.

A Photo graphic log is included in **Appendix D.**

A detailed summary of findings and recommended actions is provided in **Table 4.4 of Appendix A.**

### 4.1.1 Asbestos

Asbestos was used in building materials throughout the years with a peak usage in the 1950s and 1960s. While the manufacture of most ACM was banned in the 1970s, buildings constructed in the 1980s have the potential for ACM as well. In 1986, legislation limiting the use of asbestos in consumer products was introduced.

As part of this inspection, a total of 149 bulk samples of suspect ACM were submitted for asbestos analysis with a total of 142 analyses being performed. The difference between the number of samples submitted and the number of samples analysed can be a function of either the stop-positive method or the requirement of analyzing multiple layers, performed by the laboratory, from a single sample reported as additional samples or subsets of a sample.

Bulk samples were submitted for asbestos analysis to Paracel Laboratories Ltd. (Paracel), in Mississauga, Ontario. Paracel is certified under the Canadian Association of Laboratory Accreditation to perform asbestos analysis of bulk samples (accreditation number A3762). Laboratory analysis was conducted in accordance with the United States Environmental Protection Agency (USEPA), Test Method EPA/600-R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, June, 1993 by Polarized Light Microscopy (PLM) as prescribed by O. Reg. 278/05.

Based on the laboratory results and visual identification, ACM was confirmed present at the time of the inspection. In addition, suspect ACM was either observed or may potentially be concealed by building finishes.

### 4.1.2 Lead

Lead was historically used in mortar pigments, ceramic glazing; plumbing solder, electrical equipment and electronics solder, in pipe gaskets as packing in cast iron bell and spigot joints of sanitary drains, flexible plumbing connections, flashing panels, acoustical dampeners, phone cable casing and some architectural applications. In buildings constructed after 1990, these applications are no longer applicable outside of specialized uses (shielding for medical imaging etc.).

As part of this inspection, a total of 12 paint scrape samples were collected from surfaces and represent the paint colours observed throughout the Subject Area.

Samples were submitted for laboratory analysis by ASTM D3335-85A “Standard Method to Test for Low Concentrations of Lead in Paint by Atomic Absorption Spectrophotometry” following MOE Method E3470 Inductively Coupled Plasma Optical Emission Spectrometry to Paracel Laboratories Ltd., in Ottawa, Ontario. Paracel is accredited by the Canadian Association of Laboratory Accreditation to perform bulk lead analysis of paint.

Based on the laboratory results and visual identification, lead-containing materials were confirmed present at the time of the inspection. In addition, lead-containing solder on copper pipe connections were observed and lead packed pipe gaskets may potentially be concealed in buried lines or wall cavities.

### 4.1.3 Mercury

Mercury is typically used in building service applications such as fluorescent light tubes, compact fluorescent bulbs, metal halide (sodium halide) lamp bulbs, and neon lights as a vapour. Mercury may exist in thermostats and pipe or mechanical equipment thermometers as a liquid. Mercury is presumed to be present in the above materials.

Mercury-containing materials were visually identified at the time of the inspection.

### 4.1.4 Silica

Silica is present in rock, stone, soil, and sand. Masonry products such as concrete block, brick, and mortar, as well as concrete and associated products contain silica. Due to its ubiquitous nature, silica was historically used in a wide variety of building materials and is still used today in new construction.

Building materials that are presumed to contain silica were visually identified at the time of the inspection.

### 4.1.5 Mould

No water damaged or mould growth impacted building materials were observed during the inspection.

### 4.1.6 Polychlorinated Biphenyls (PCB)

Suspect PCB-containing light ballasts were visually identified during the inspection. All live electrical equipment that could not be properly and safely de-energized was not assessed, therefore light ballasts were not inspected. Light ballasts which were not accessed, will require additional investigation to determine their PCB content when removed from service.

As part of this inspection, a total of 3 sealant samples were collected from building components which may be disturbed during the proposed project. Samples were collected and submitted to Paracel for laboratory analysis under US EPA Method 8082A for PCBs. In Ontario, under Ontario Regulation 362, a PCB-containing solid is defined as any material or substance other than a PCB liquid that contains or is contaminated with PCBs at a concentration greater than 50 µg/g by weight of PCBs.

Based on the laboratory results, no other PCB-containing materials were confirmed present at the time of the inspection.

### 4.1.7 Ozone-Depleting Substances (ODS)

ODS are chemical compounds that include chlorofluorocarbons (cfcs), hydrochlorofluorocarbons (hcfcs), halons, methyl bromide, carbon tetrachloride, hydrobromofluorocarbons, chlorobromomethane, and methyl chloroform which are widely used in cooling and refrigeration. The use of ODS is regulated under Ontario Regulation 463/10 *Ozone Depleting Substances and Other Halocarbons* Made under the Environmental Protection Act.

Building components presumed to contain ODS were identified at the time of the inspection.

## 4.2 Conclusions and Recommendations

A detailed summary of recommended actions is provided in **Table 4.4 of Appendix A**.

In accordance with Section 30 of OHSA and Section 8 of O. Reg. 278/05, the Owner must provide a copy of this report to all contractors doing work at the building. The Owner must also provide a copy of this report to all prospective contractors.

Should any additional suspect Designated Substances be discovered during building renovation demolition, work in the vicinity should cease and the materials should not be disturbed until proper notification, testing and abatement instructions are provided. All waste generated as a result of any and all work at the Site must be handled, transported and disposed of in accordance with Ontario Regulation 347 made under the Environmental Protection Act and local by-laws. Based on the assessment findings and analytical results, the following abatement measures are presented. It should be noted that the recommended actions are the minimum required actions, as prescribed by the appropriate Acts, regulations, guidelines, standards, codes and general best practice measures.

### 4.2.1 Asbestos

ACMs were identified during the assessment. If these materials, including those deemed or suspected, will be disturbed, or will likely be disturbed, during building maintenance, renovations, construction, or demolition activities, they must be handled and disposed of in accordance with the procedures prescribed by O. Reg. 278/05.

All asbestos work must be conducted by contractors who are trained in the type of asbestos operations required, and should be overseen by a qualified third party Health, Safety and Environmental professional. In order to conduct Type 3 asbestos operations, contractors must be certified as Asbestos Abatement Workers AAW (Trade code 253W) and Asbestos Abatement Supervisors AAS (Trade code 253S) by The Ministry of Training, Colleges and Universities (Ministry of Advanced Education and Skills Development) as prescribed by Section 20 of O. Reg. 278/05. Suspect or visually confirmed ACM must be deemed to be asbestos-containing and treated as if they contain a type of asbestos other than Chrysotile.

ACM may be present in concealed locations and if construction, renovation, alteration, or maintenance activities are planned, invasive inspections of concealed locations for potential ACM must be performed prior to such activities.

Should any suspect ACM be discovered during the course of construction, renovation, alteration, or maintenance activities, work which disturbs the material must cease immediately. Suspect ACM must be treated as asbestos-containing or sampled prior to disturbance to assess the presence of asbestos.

### 4.2.2 Lead

Lead-based paint, lead-containing paint, and suspect lead-containing solder on plumbing connections were identified. As such special requirements for the management, handling and disposal of lead-containing materials by the owner, constructor, contractor, sub-contractors and workers apply. The abatement contractor should consult Environmental Abatement Council of Canada's (EACC) *Lead Guideline for Construction, Renovation, Maintenance or Repair (October 2014)* for the procedures and methods required to remove and dispose of lead-containing materials.

Low level lead-containing paint is present and the following general procedures are recommended as a precautionary measure as per Environmental Abatement Council of Canada's (EACC) *Lead Guideline for Construction, Renovation, Maintenance or Repair (October 2014)*:

- General dust control;
- The washing of hands and face at on-site facilities;
- No smoking, eating, chewing gum or drinking in the work area; and
- No removal of painted surfaces by means of abrasive blasting.

### 4.2.3 Mercury

Mercury-containing materials were identified. All mercury containing materials or sources should be removed, intact, prior to any work which may disturb or damage them and cause worker exposure to mercury liquid and/or vapour.

On-site crushing of mercury-containing materials should not occur. Care should be taken to ensure safe storage of the above until recycling or disposal can be coordinated. Under current legislation, mercury waste requires handling and disposal in accordance with Ontario Regulation 490/09 of the OHSA and Ontario Regulation 347 of the Environmental Protection Act.

### 4.2.4 Silica

Silica is presumed to be present; therefore, special requirements for management and handing are required. The contractor should also consult MOL Occupational Health and Safety Branch's Guideline: *Silica on Construction Projects* (April 2011) for the procedures and methods required to remove and dispose of silica-containing materials.

### 4.2.5 Mould

No water damage or suspect mould growth was observed during the assessment; therefore, no special management and handling requirements are warranted.

### 4.2.6 PCBs

Suspect PCB-containing fluorescent light ballasts were identified but could not be conclusively classified as PCB-containing or non-PCB-containing. PCB-containing sealant was identified within the Subject Areas; therefore, special management, handling and disposal requirements apply to the proposed work.

It is the responsibility of the owner to inspect, or ensure the inspection of all light ballasts as they are removed from service to make certain they are properly classified as PCB-containing or non-PCB containing. Fixtures will require dismantling to access date stamps (located on the back of the ballast) in order to be correctly classified in accordance with Environment Canada's document "*Identification of Lamp Ballasts Containing PCBs, Report EPS 2/CC/2 (revised), August 1991"*.

Statutory Orders and Regulations (SOR)/2008-273, the *PCB Regulations*, made under the *Canadian Environmental Protection Act,* permits continued use of in-service PCB-containing light ballasts until the end of service life or until December 31, 2025.

### 4.2.7 Ozone Depleting Substances

Building components presumed to contain ODS were identified and special requirements for management, handing and disposal by the owner, constructor, contractor, sub-contractors and workers apply.

Under current legislation, there are no requirements to remove ODSs from service simply because they are present. However, prior to commencing any work where this equipment will be dismantled, destroyed or disposed of, the refrigerant must be drained by a licensed technician and tagged with a notice indicating that the equipment no longer contains refrigerant. The appropriate notices or records shall be maintained in accordance with O. Reg. 463/10 for a minimum of two (2) years and shall include, but not be limited to, service records, transfers/releases of refrigerants, refrigerant types and refrigerant systems.

# 5.0 Limitations

Services performed by **MTE Consultants Inc.** (MTE) were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Environmental Engineering & Consulting profession. No other representation expressed or implied as to the accuracy of the information, conclusions or recommendations is included or intended in this report.

This report was completed for the sole use of MTE and the Client. It was completed in accordance with the approved Scope of Work referred to in Section 2.0. As such, this report may not deal with all issues potentially applicable to the site and may omit issues that are or may be of interest to the reader. MTE makes no representation that the present report has dealt with all-important environmental features, except as provided in the Scope of Work. All findings and conclusions presented in this report are based on site conditions, as they existed during the time period of the investigation. This report is not intended to be exhaustive in scope or to imply a risk-free facility.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such third parties. MTE accepts no responsibility for liabilities incurred by or damages, if any, suffered by any third party as a result of decisions made or actions taken, based upon this report. Others with interest in the site should undertake their own investigations and studies to determine how or if the condition affects them or their plans.

It should be recognized that the passage of time might affect the views, conclusions and recommendations (if any) provided in this report because environmental conditions of a property can change. Should additional or new information become available, MTE recommends that it be brought to our attention in order that we may re-assess the contents of this report.

All of which is respectfully submitted,

**MTE Consultants Inc.**

**Aaron Rows, B.E.S.**
Indoor Environments Technologist
905-639-2552 ext. 2464
arows@mte85.com

**Gavin Oakes, B.Sc., C.E.T., CIH, CRSP**
Manager, Indoor Environments
905-639-2552 ext. 2432
goakes@mte85.com

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# Appendix A

# Tables

| TABLE 4.1: BULK ASBESTOS SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **Asbestos Results (% Type)** | **Is Material ACM** |
| **S01A** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **AIRCELL PIPE INSULATION** | **60% CHYSOTILE** | **YES** |
| **S01B** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **AIRCELL PIPE INSULATION** | **NA** | **YES** |
| **S01C** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **AIRCELL PIPE INSULATION** | **NA** | **YES** |
| **S02A** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **PIPE ELBOW INSULATION** | **70% CHRYSOTILE** | **YES** |
| **S02B** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **PIPE ELBOW INSULATION** | **NA** | **YES** |
| **S02C** | **MECHANICAL ROOM 120 (BUT OBSERVED PRESENT THROUGHOUT BASEMENT AND THIRDFLOOR CLASSOOMS** | **PIPE ELBOW INSULATION** | **NA** | **YES** |
| S03A | ROOM 223 | ROLLED SHEET FLOORING - GREEN WITH BLACK AND WHITE MARBLE STREAKS | ND | NO |
| S03B | ROOM 223 | ROLLED SHEET FLOORING - GREEN WITH BLACK AND WHITE MARBLE STREAKS | ND | NO |
| S03C | ROOM 223 | ROLLED SHEET FLOORING - GREEN WITH BLACK AND WHITE MARBLE STREAKS | ND | NO |
| S04A | ROOM 222 | ROLLED SHEET FLOORING - PEACH | ND | NO |
| | | PAPER BACKING | ND | NO |
| S04B | ROOM 222 | ROLLED SHEET FLOORING - PEACH | ND | NO |
| | | PAPER BACKING | ND | NO |
| S04C | ROOM 222 | ROLLED SHEET FLOORING - PEACH | ND | NO |
| | | PAPER BACKING | ND | NO |
| S05A | ROOM 221A | 12"x12" VINYL FLOOR TILE - BEIGE WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S05B | ROOM 221A | 12"x12" VINYL FLOOR TILE - BEIGE WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S05C | ROOM 221A | 12"x12" VINYL FLOOR TILE - BEIGE WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| **S06A** | **ROOM 218 (BUT ALSO OBSERVED IN 215)** | **12"x12" VINYL FLOOR TILE - BEIGE WITH ORANGE STREAK** | **1% CHRYSOTILE** | **YES** |
| | | MASTIC | ND | NO |

| TABLE 4.1: BULK ASBESTOS SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **Asbestos Results (% Type)** | **Is Material ACM** |
| **S06B** | **ROOM 218 (BUT ALSO OBSERVED IN 215)** | **12"x12" VINYL FLOOR TILE - BEIGE WITH ORANGE STREAK** | **NA** | **YES** |
| | | MASTIC | ND | NO |
| **S06C** | **ROOM 218 (BUT ALSO OBSERVED IN 215)** | **12"x12" VINYL FLOOR TILE - BEIGE WITH ORANGE STREAK** | **NA** | **YES** |
| | | MASTIC | ND | NO |
| S07A | ROOM 206 | 12"x12" - VINYL FLOOR TILE - GREY WITH PEACH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S07B | Room 205 | 12"x12" - VINYL FLOOR TILE - GREY WITH PEACH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S07C | Room 206 | 12"x12" - VINYL FLOOR TILE - GREY WITH PEACH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S08A | ROOM 213 | ROLLED SHEET FLOORING - BROWN | ND | NO |
| | | PAPER BACKING | <MDL | NO |
| S08B | ROOM 213 | ROLLED SHEET FLOORING - BROWN | ND | NO |
| | | PAPER BACKING | <MDL | NO |
| S08C | ROOM 213 | ROLLED SHEET FLOORING - BROWN | ND | NO |
| | | PAPER BACKING | <MDL | NO |
| S09A | CORRIDOR 301 (BUT OBSERVED THROUGHOUT STAIRWELL AND CORRIDORS) | 12"X12" VINYL FLOOR TILE - BEIGE WITH WHITE AND BROWN STREAKS | ND | NO |
| | | MASTIC | ND | NO |
| S09B | CORRIDOR 401 (BUT OBSERVED THROUGHOUT STAIRWELL AND CORRIDORS) | 12"X12" VINYL FLOOR TILE - BEIGE WITH WHITE AND BROWN STREAKS | ND | NO |
| | | MASTIC | ND | NO |
| S09C | CORRIDOR 401 (BUT OBSERVED THROUGHOUT STAIRWELL AND CORRIDORS) | 12"X12" VINYL FLOOR TILE - BEIGE WITH WHITE AND BROWN STREAKS | ND | NO |
| | | MASTIC | ND | NO |
| S10A | ROOM 303 | 12"X12" VINYL FLOOR TILE - GREY WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S10B | ROOM 309 | 12"X12" VINYL FLOOR TILE - GREY WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S10C | ROOM 305 | 12"X12" VINYL FLOOR TILE - GREY WITH WHITE STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S11A | ROOM 302 (BUT ALSO OBSERVED IN 405) | 12"X12" VINYL FLOOR TILE - WHITE WITH BROWN STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S11B | ROOM 302 (BUT ALSO OBSERVED IN 405) | 12"X12" VINYL FLOOR TILE - WHITE WITH BROWN STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S11C | ROOM 302 (BUT ALSO OBSERVED IN 405) | 12"X12" VINYL FLOOR TILE - WHITE WITH BROWN STREAK | ND | NO |
| | | MASTIC | ND | NO |
| S12A | ROOM 311 | PIPE ELBOW INSULATION | ND | NO |
| S12B | ROOM 311 | PIPE ELBOW INSULATION | ND | NO |
| S12C | ROOM 311 | PIPE ELBOW INSULATION | ND | NO |
| S13A | ROOM 408 | 12"X12" VINYL FLOOR TILE - BEIGE WITH RED STRIPE | ND | NO |
| | | MASTIC | ND | NO |
| S13B | ROOM 408 | 12"X12" VINYL FLOOR TILE - BEIGE WITH RED STRIPE | ND | NO |
| | | MASTIC | ND | NO |
| S13C | ROOM 408 | 12"X12" VINYL FLOOR TILE - BEIGE WITH RED STRIPE | ND | NO |
| | | MASTIC | ND | NO |
| S14A | STAIRWELL | 2'X4' CEILING TILE - LARGE FISSURE RANDOM PINHOLE | ND | NO |
| S14B | STAIRWELL | 2'X4' CEILING TILE - LARGE FISSURE RANDOM PINHOLE | ND | NO |
| S14C | STAIRWELL | 2'X4' CEILING TILE - LARGE FISSURE RANDOM PINHOLE | ND | NO |
| S15A | ROOM 403 | 12"X12" VINYL FLOOR TILE - WHITE WITH BLACK STRIPE | ND | NO |
| | | MASTIC | ND | NO |
| S15B | ROOM 403 | 12"X12" VINYL FLOOR TILE - WHITE WITH BLACK STRIPE | ND | NO |
| | | MASTIC | ND | NO |

| TABLE 4.1: BULK ASBESTOS SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **Asbestos Results (% Type)** | **Is Material ACM** |
| S15C | ROOM 403 | 12"X12" VINYL FLOOR TILE - WHITE WITH BLACK STRIPE | ND | NO |
| | | MASTIC | ND | NO |
| S16A | SAMPLE NOT SUBMITTED | | | |
| S16B | | | | |
| S16C | | | | |
| S17A | ROOM 116 | 12"X12" VINYL FLOOR TILE - PINK WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S17B | ROOM 102 | 12"X12" VINYL FLOOR TILE - PINK WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S17C | ROOM 117 | 12"X12" VINYL FLOOR TILE - PINK WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S18A | ROOM 116 | 12"X12" VINYL FLOOR TILE - GREEN WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S18B | ROOM 102 | 12"X12" VINYL FLOOR TILE - GREEN WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S18C | ROOM 117 | 12"X12" VINYL FLOOR TILE - GREEN WITH FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S19A | EXTERIOR | BRICK MORTAR | ND | NO |
| S19B | EXTERIOR | BRICK MORTAR | ND | NO |
| S19C | EXTERIOR | BRICK MORTAR | ND | NO |
| S20A | ROOM 214 (BUT OBSERVED THROUGHOUT NORTH WING) | PLASTER | ND | NO |
| S20B | ROOM 214 (BUT OBSERVED THROUGHOUT NORTH WING) | PLASTER | ND | NO |
| S20C | ROOM 214 (BUT OBSERVED THROUGHOUT NORTH WING) | PLASTER | ND | NO |
| S21A | GYMNASIUM - 002 | DRYWALL JOINT COMPOUND - CEILING | ND | NO |
| S21B | GYMNASIUM - 002 | DRYWALL JOINT COMPOUND - CEILING | ND | NO |
| S21C | GYMNASIUM - 002 | DRYWALL JOINT COMPOUND - CEILING | ND | NO |
| S22A | ROOM 306 | 12"X12" VINYL FLOOR TILE - WHITE WITH GREY AND BROWN FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S22B | ROOM 306 | 12"X12" VINYL FLOOR TILE - WHITE WITH GREY AND BROWN FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S22C | ROOM 306 | 12"X12" VINYL FLOOR TILE - WHITE WITH GREY AND BROWN FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S23A | ROOM 306 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S23B | ROOM 305 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S23C | CORRIDOR 401 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S23D | CORRIDOR 401 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S23E | ROOM 206 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S23F | ROOM 103 (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |

| TABLE 4.1: BULK ASBESTOS SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **Asbestos Results (% Type)** | **Is Material ACM** |
| S23G | GROUND FLOOR STAIRWELL (BUT OBSERVED THROUGHOUT INTERIOR) | PLASTER | ND | NO |
| S24A | ROOF 1 | VAPOUR BARRIER | ND | NO |
| S24B | ROOF 1 | VAPOUR BARRIER | ND | NO |
| S24C | ROOF 1 | VAPOUR BARRIER | ND | NO |
| S25A | ROOF 1 | MEMBRANE | ND | NO |
| S25B | ROOF 1 | MEMBRANE | ND | NO |
| S25C | ROOF 1 | MEMBRANE | ND | NO |
| S26A | ROOF 2 | MEMBRANE | ND | NO |
| S26B | ROOF 2 | MEMBRANE | ND | NO |
| S26C | ROOF 2 | MEMBRANE | ND | NO |
| S27A | ROOF 3 | VAPOUR BARRIER | ND | NO |
| S27B | ROOF 3 | VAPOUR BARRIER | ND | NO |
| S27C | ROOF 3 | VAPOUR BARRIER | ND | NO |
| S28A | ROOF 3 | MEMBRANE | ND | NO |
| S28B | ROOF 3 | MEMBRANE | ND | NO |
| S28C | ROOF 3 | MEMBRANE | <MDL | NO |
| S29A | ROOF 4 | VAPOUR BARRIER | ND | NO |
| S29B | ROOF 4 | VAPOUR BARRIER | ND | NO |
| S29C | ROOF 4 | VAPOUR BARRIER | ND | NO |
| S30A | ROOF 4 | MEMBRANE | ND | NO |
| S30B | ROOF 4 | MEMBRANE | ND | NO |
| S30C | ROOF 4 | MEMBRANE | ND | NO |
| S31A | ROOF 2 | GREY SEALANT | ND | NO |
| S31B | ROOF 2 | GREY SEALANT | ND | NO |
| S31C | ROOF 2 | GREY SEALANT | ND | NO |
| S32A | ROOF 1 | GREY/BLACK SEALANT | ND | NO |
| S32B | ROOF 1 | GREY/BLACK SEALANT | ND | NO |
| S32C | ROOF 1 | GREY/BLACK SEALANT | ND | NO |
| S33A | EXTERIOR | LIGHT GREY SEALANT | ND | NO |
| S33B | EXTERIOR | LIGHT GREY SEALANT | ND | NO |
| S33C | EXTERIOR | LIGHT GREY SEALANT | ND | NO |
| **CEILING INVESTIGATION SAMPLING (09/11/23)** | | | | |
| S01A | ROOM 205 | 2'X4' CEILING TILE - MEDIUM FISSURE RANDOM PINHOLE | ND | NO |
| S01B | ROOM 205 | 2'X4' CEILING TILE - MEDIUM FISSURE RANDOM PINHOLE | ND | NO |
| S01C | ROOM 205 | 2'X4' CEILING TILE - MEDIUM FISSURE RANDOM PINHOLE | ND | NO |
| S02A | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' RANDOM PINHOLE CEILING TILE | ND | NO |
| S02B | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' RANDOM PINHOLE CEILING TILE | ND | NO |
| S02C | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' RANDOM PINHOLE CEILING TILE | ND | NO |
| S03A | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' LARGE PINHOLE CEILING TILE | ND | NO |
| S03B | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' LARGE PINHOLE CEILING TILE | ND | NO |

| TABLE 4.1: BULK ASBESTOS SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **Asbestos Results (% Type)** | **Is Material ACM** |
| S03C | ROOM 205 (BUT ALSO OBSERVED THROUGHOUT GROUND FLOOR CLASSROOMS) | 1'X1' LARGE PINHOLE CEILING TILE | ND | NO |
| S04A | ROOM 215 | CEILING MASTIC | ND | NO |
| S04B | ROOM 215 | CEILING MASTIC | ND | NO |
| S04C | ROOM 215 | CEILING MASTIC | ND | NO |
| **TACKBOARD MASTIC SAMPLING (30/01/24)** | | | | |
| **S01A** | **ROOM 223** | **CHALKBOARD MASTIC** | **0.5% CHRYSOTILE** | **YES** |
| **S01B** | **ROOM 223** | **CHALKBOARD MASTIC** | **NA** | **YES** |
| **S01C** | **ROOM 223** | **CHALKBOARD MASTIC** | **NA** | **YES** |
| **FLOOR TILE SAMPLING (07/02/24)** | | | | |
| S01A | ROOM 311 | 12"x12" VINYL FLOOR TILE - GREY WITH BLACK AND WHITE FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S01B | ROOM 311 | 12"x12" VINYL FLOOR TILE - GREY WITH BLACK AND WHITE FLECK | ND | NO |
| | | MASTIC | ND | NO |
| S01C | ROOM 311 | 12"x12" VINYL FLOOR TILE - GREY WITH BLACK AND WHITE FLECK | ND | NO |
| | | MASTIC | ND | NO |

A bulk material sample containing 0.5% or more asbestos therefore establishes that material as asbestos-containing. In accordance with Table 1 of O. Reg. 278/05, a minimum number of samples for the material to be classified as non asbestos. A homogeneous material is defined by O. Reg. 278/05 “as material that is uniform in colour and texture”. Homogeneous samples are identified by an alphabetical suffix to sample names to represent multiple samples of a homogeneous material. When a homogeneous material is analysed it is determined to be asbestos-containing upon the first positive detection of asbestos equal to or greater than 0.5%. Subsequent samples of the same material are therefore not analysed. Some bulk samples are comprised of multiple layers and as such will require multiple analysis. In such cases each layer is isolated at the laboratory and analysed individually to determine asbestos content. As a result the laboratory may report additional samples beyond the submitted number of samples or include multiple analyses as subsets within a sample.

| TABLE 4.2: LEAD IN PAINT SAMPLE SUMMARY TABLE | | | | | |
|---|---|---|---|---|---|
| **Sample #** | **Location** | **Colour** | **Material** | **Lead Content (ug/g)** | **Classification** |
| LP1 | BOILER ROOM | GREEN | WALLS | <5 | LOW LEVEL LEAD-CONTAINING |
| LP2 | BOILER ROOM | WHITE | WALLS | 31 | LOW LEVEL LEAD-CONTAINING |
| **LP3** | **THROUGHOUT INTERIOR** | **BEIGE** | **WALLS** | **1,050** | **LEAD-CONTAINING** |
| **LP4** | **THROUGHOUT INTERIOR CLASSROOMS** | **GREY** | **WALLS** | **1100** | **LEAD-CONTAINING** |
| **LP5** | **LEARNING COMMONS** | **WHITE** | **WALLS** | **1570** | **LEAD-CONTAINING** |
| LP6 | BASEMENT | DARK GREY | WALLS | 7 | LOW LEVEL LEAD-CONTAINING |
| **LP7** | **BASEMENT** | **GREY** | **FLOORS AND STAIRS** | **2720** | **LEAD-CONTAINING** |
| **LP8** | **BASEMENT BATHROOM AND STAFFROOM** | **WHITE** | **WALLS** | **1400** | **LEAD-CONTAINING** |
| **LP9** | **EXTERIOR BASE** | **WHITE** | **CONCRETE FOUNDATION** | **14800** | **LEAD-BASED** |
| LP10 | CLASSROOMS/MAIN OFFICE | GREY | WALLS | 320 | LOW LEVEL LEAD-CONTAINING |
| LP11 | CLASSROOMS | WHITE | WALLS AND RADIATORS | 17 | LOW LEVEL LEAD-CONTAINING |
| **LP12** | **EXTERIOR** | **BROWN** | **DOORS AND WINDOWS** | **13800** | **LEAD-BASED** |

**"<":** The samples analysed reported concentrations of lead to be less than 1000 ug/g and are therefore classified as low level lead-containing. However, no lead concentrations were reported above the sample specific laboratory detection limit.

As outlined in EACO's Lead Guideline for Construction, Renovation, Maintenance or Repair (October 2014), for the purpose of classifying surface coatings and mortars by laboratory analysis, any material containing lead at a concentration:

- Greater than 0.5% by weight (5,000 µg/g, mg/kg, ppm) is considered lead-based;
- Between 0.1 % and 0.5% by weight (1,000 to 5,000 µg/g, mg/kg, ppm) is considered lead-containing; or
- Less than 0.1% (1,000 µg/g, mg/kg, ppm) is considered low level lead-containing.

| TABLE 4.3: BULK PCB SAMPLE SUMMARY TABLE | | | | |
|---|---|---|---|---|
| **Sample #** | **Location** | **Material Description** | **PCB Content (ug/g)** | **Classification** |
| PCB01 | ROOF 1 | GREY/BLACK SEALANT | <5 | Non-PCB |
| PCB02 | EXTERIOR | LIGHT GREY SEALANT | <5 | Non-PCB |
| PCB03 | ROOF 2 | GREY SEALANT | <5 | Non-PCB |

As outlined in the Statutory Orders and Regulations (SOR)/2008-273, the PCB Regulations, made under the Canadian Environmental Protection Act, 1999, any material containing PCB at a concentration:

• Greater than 50 µg/g is considered PCB-Containing

| Table 4.4 - Summary of Designated Substances and Recommended Actions | | | | |
|---|---|---|---|---|
| **211 Mill Street North, Waterdown, ON** | | | | |
| **Material** | **Location(s)** | **Material Description** | **Management Requirements If No Impacts to Material** | **Recommended Actions If Material Will Be Or Likely Be Impacted By Maintenance, Renovation, Construction or Demolition Activities** |
| **Asbestos Friable** | Priping Throughout Basement (Excluding Mechanical Crawl Space 005, 005, 006 and Boiler Room 120, 120A, 120C, 120D, which have been Abated) | Insulation on Pipe Fittings | In place management in accordance with O. Reg. 278/05 | Removal in accordance with O. Reg. 278/05 < $1m^2$ as a Type 2 or Type 2 Glove Bag Operation and for > $1m^2$ as a Type 2 Glove Bag or Type 3 Operation |
| **Asbestos Friable** | Priping Throughout Basement (Excluding Mechanical Crawl Space 005, 005, 006 and Boiler Room 120, 120A, 120C, 120D, which have been Abated) and Third Floor | Air Cell Insulation on Piping | In place management in accordance with O. Reg. 278/05 | Removal in accordance with O. Reg. 278/05 < $1m^2$ as a Type 2 or Type 2 Glove Bag Operation and for > $1m^2$ as a Type 2 Glove Bag or Type 3 Operation |
| **Asbestos Non-Friable** | Room 218 and 215 | 12"x12" Beige with orange streak Floor Tile | In place management in accordance with O. Reg. 278/05 | Removal in accordance with O. Reg. 278/05 as a Type 1 Operation |
| **Asbestos Non-Friable** | Throughout Interior Classrooms Behind Chalkboards | Board Gasket/Mastic | In place management in accordance with O. Reg. 278/05 | Removal in accordance with O. Reg. 278/05 as a Type 1 Operation |
| **Potentially Concealed Asbestos** | Walls Behind Non-Asbestos Plaster | Various Wall Finishes and Components | In place management in accordnace with O. Reg. 278/05 | Invasive inspection and sampling prior to maintenance/renovations/construction/demolition activities, if sampling confirms as ACM, removal in accordance with O. Reg. 278/05 |
| **Potentially Concealed Asbestos** | Boiler | Boiler Refractory/Gaskets | In place management in accordance with O. Reg. 278/05 | Invasive inspection and sampling prior to maintenance/renovations/construction/demolition activities, if sampling confirms as ACM, removal in accordance with O. Reg. 278/05 |
| **Potentially Concealed Asbestos** | Electrical Wiring Throughout Interior of Building | Jacketing on Electrical Wiring | In place management in accordance with O. Reg. 278/05 | Invasive inspection and sampling prior to maintenance/renovations/construction/demolition activities, if sampling confirms as ACM, removal in accordance with O. Reg. 278/05 |
| **Potentially Concealed Asbestos** | Basement Mechanical Room | Door Core Insulation | In place management in accordance with O. Reg. 278/05 | Invasive inspection and sampling prior to maintenance/renovations/construction/demolition activities, if sampling confirms as ACM, removal in accordance with O. Reg. 278/05 |
| **Potentially Concealed Asbestos** | Wall Cavities | Vermiculite Loose-Fill Insulation | In place management in accordance with O. Reg. 278/05 | Invasive inspection and sampling prior to maintenance/renovations/construction/demolition activities, if sampling confirms as ACM, removal in accordance with O. Reg. 278/05 |

| Table 4.4 - Summary of Designated Substances and Recommended Actions | | | | |
|---|---|---|---|---|
| **211 Mill Street North, Waterdown, ON** | | | | |
| **Material** | **Location(s)** | **Material Description** | **Management Requirements If No Impacts to Material** | **Recommended Actions If Material Will Be Or Likely Be Impacted By Maintenance, Renovation, Construction or Demolition Activities** |
| **Lead-Based Paint** | Exterior | White Paint on Concrete Foundation | In place management in accordance with EACC's Lead Guideline | Removal as required prior to maintenance, renovations, construction or demolition activities in accordance with EACC's Lead Guideline as a:<br>Class 1, Class 2A, Class 3A, or a Class 3B Operation<br><br>If paint is not removed prior to disposal of any metal building finishes, these materials must be deemed hazardous waste, then manifested and disposed of off-site at a MOECP facility that is licensed to accept hazardous waste.<br><br>If this paint is not removed prior to disposal of any other building finishes, these materials require analysis of Leachable Lead according to Ontario Regulation 558/00. If confirmed or deemed hazardous waste, materials must then be manifested and disposed of off-site at a MOECP facility that is licensed to accept hazardous waste. |
| | Exterior | Brown Paint on Exterior Windows and Doors | | |
| **Lead-Containing Paint** | Throughout Interior | Beige Paint on Walls | In place management in accordance with EACC's Lead Guideline | Removal as required prior to maintenance, renovations, construction or demolition activities in accordance with EACC's Lead Guideline as a:<br>Class 1, Class 2A, Class 3A, or a Class 3B Operation |
| | Throughout Interior Classrooms | Grey Paint on Walls | In place management in accordance with EACC's Lead Guideline | |
| | Learning Commons | White Paint on Walls | In place management in accordance with EACC's Lead Guideline | |
| | Basement | Grey Paint on Floors and Stairs | In place management in accordance with EACC's Lead Guideline | |
| | Basement Bathroom and Staffroom | White Paint on Walls | In place management in accordance with EACC's Lead Guideline | |
| **Low Level Lead-Containing Paint** | Boiler Room | Green Paint on Walls | None | General hygiene procedures during renovation activities:<br>General dust control,<br>Washing of hands and face at on-site facilities,<br>No smoking, eating, chewing gum or drinking in the work area,<br>No abrasive blasting |
| | Boiler Room | Whte Paint on Walls | | |
| | Basement | Dark Grey Paint on Walls | | |
| | Classrooms and Main Office | Grey Paint on Walls | | |
| | Classrooms | White Paint on Walls and Radiators | | |

| Table 4.4 - Summary of Designated Substances and Recommended Actions | | | | |
|---|---|---|---|---|
| **211 Mill Street North, Waterdown, ON** | | | | |
| **Material** | **Location(s)** | **Material Description** | **Management Requirements If No Impacts to Material** | **Recommended Actions If Material Will Be Or Likely Be Impacted By Maintenance, Renovation, Construction or Demolition Activities** |
| **Lead** | Throughout Interior of Building on Plumbing Connections | Lead Solder on Copper Pipe | In place management in accordance with EACC's Lead Guideline | Removal prior to renovation/demolition activities in accordance with EACC's Lead Guideline as a:<br>Class 1 Operation |
| **Potentially Concealed Lead** | Concealed on Sanitary/Waste Lines | Lead Packed Pipe Gaskets | None | Invasive inspection prior to renovation or demolition activities. If confirmed present, removal in accordance with EACC's Lead Guideline as a:<br>Class 1 Operation |
| **Mercury** | Throughout Interior of Building in Light Fixtures | Fluorescent Light Tubes in Light Fixtures | None | Intact removal and storage with no on-site crushing and disposal of materials to a licensed facility |
| **Silica** | Throughout Interior and Exterior of Building | Concrete, Concrete Block Walls | None | Conduct any work during renovation, demolition activities in accordance with the Ministry of Labour Guideline Silica on Construction Projects |
| **PotentialIs Concealed PCBs** | Light Fixtures Throughout | Fluorescent Light Ballasts in Light Fixtures | SOR/2008-273, the PCB Regulations, permits continued use of in-service PCB-containing light ballasts until the end of service life or until December 31, 2025 | Assess Each Ballast Upon Removal From Service Appropriate storage and disposal of any PCB-containing ballasts in accordance with SOR/2008-273 |
| **ODS** | Rooftops, and Classrooms | Rooftop Air Conditioning Units, Window Mounted Air Conditioning Units | None | Prior to the removal and disposal of equipment suspected of containing ODS, a licensed technician should be retained to drain and tag the equipment in a manner authorized under O. Reg. 463/10 |

Notes:
1) A copy of this report should be provided to all prospective contractors prior to quotation, in accordance with Section 30 of the Occupational Health and Safety Act.
2) Recommended actions are the minimum required actions, as prescribed by the appropriate Acts, regulations, guidelines, standards, codes and general best practice measures. Prior to demolition, the Contractor may choose to alter the approach and combine or break out sections of work. This is acceptable provided that the appropriate Acts, regulations, guidelines, standards and codes are followed and afford protection for the health and safety of workers, occupants and the public that is at least equal to the protection that would be provided by complying with the minimum requirements.
3) All waste generated is subject to characterization and disposal in accordance with Ontario Regulation 347.

# Appendix B

# Laboratory Certificates of Analysis

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# Certificate of Analysis

**MTE Consultants Inc. (Burlington)**

1016 Sutton Drive, Unit A
Burlington, ON L7L 6B8
Attn: Gavin Oakes

Client PO:
Project: 53042-100 Mary Hopkins HVAC & Ceiling Replacement
Custody:

Report Date: 14-Mar-2023
Order Date: 8-Mar-2023

**Order #: 2310223**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

| Paracel ID | Client ID |
|---|---|
| 2310223-01 | S01A - Aircell Pipe Insulation |
| 2310223-02 | S01B - Aircell Pipe Insulation |
| 2310223-03 | S01C - Aircell Pipe Insulation |
| 2310223-04 | S02A - Pipe Elbow Insulation |
| 2310223-05 | S02B - Pipe Elbow Insulation |
| 2310223-06 | S02C - Pipe Elbow Insulation |
| 2310223-07 | S03A - RSF - Green With Black/White Marble Streaks - Room 223 |
| 2310223-08 | S03B - RSF - Green With Black/White Marble Streaks - Room 223 |
| 2310223-09 | S03C - RSF - Green With Black/White Marble Streaks - Room 223 |
| 2310223-10 | S04A - RSF - Peach |
| 2310223-11 | S04A - RSF - Peach |
| 2310223-12 | S04B - RSF - Peach |
| 2310223-13 | S04B - RSF - Peach |
| 2310223-14 | S04C - RSF - Peach |
| 2310223-15 | S04C - RSF - Peach |
| 2310223-16 | S05A - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-17 | S05A - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-18 | S05B - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-19 | S05B - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-20 | S05C - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-21 | S05C - VFT - Beige With White Streak - Room 221 A/B |
| 2310223-22 | S06A - VFT - Beige With Orange Streak - Room 218 |
| 2310223-23 | S06A - VFT - Beige With Orange Streak - Room 218 |
| 2310223-24 | S06B - VFT - Beige With Orange Streak - Room 218 |
| 2310223-25 | S06B - VFT - Beige With Orange Streak - Room 218 |
| 2310223-26 | S06C - VFT - Beige With Orange Streak - Room 218 |

Approved By:

Emma Diaz
Senior Analyst

| | |
|---|---|
| 2310223-27 | S06C - VFT - Beige With Orange Streak - Room 218 |
| 2310223-28 | S07A - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-29.1 | S07A - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-29.2 | S07A - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-30 | S07B - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-31 | S07B - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-32.1 | S07C - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-32.2 | S07C - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-33 | S07C - VFT - Grey With Peach Fleck - Room 205/206 |
| 2310223-34 | S08A - RSF - Brown - Room 213 |
| 2310223-35 | S08A - RSF - Brown - Room 213 |
| 2310223-36 | S08B - RSF - Brown - Room 213 |
| 2310223-37 | S08B - RSF - Brown - Room 213 |
| 2310223-38 | S08C - RSF - Brown - Room 213 |
| 2310223-39 | S08C - RSF - Brown - Room 213 |
| 2310223-40 | S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-41.1 | S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-41.2 | S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-42 | S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-43.1 | S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-43.2 | S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-44 | S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-45.1 | S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-45.2 | S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls |
| 2310223-46 | S10A - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-47 | S10A - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-48 | S10B - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-49 | S10B - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-50 | S10C - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-51 | S10C - VFT -Grey With White Streak - Room 309/305/303 |
| 2310223-52 | S11A - VFT - White With Brown Streak - Room 302/405 |
| 2310223-53 | S11A - VFT - White With Brown Streak - Room 302/405 |
| 2310223-54 | S11B - VFT - White With Brown Streak - Room 302/405 |
| 2310223-55 | S11B - VFT - White With Brown Streak - Room 302/405 |
| 2310223-56 | S11C - VFT - White With Brown Streak - Room 302/405 |
| 2310223-57 | S11C - VFT - White With Brown Streak - Room 302/405 |
| 2310223-58 | S12A - Pipe Elbow Insulation - Room 311 |
| 2310223-59 | S12B - Pipe Elbow Insulation - Room 311 |
| 2310223-60 | S12C - Pipe Elbow Insulation - Room 311 |
| 2310223-61 | S13A - VFT - Beige W/Red Stripe - Room 408 |
| 2310223-62 | S13A - VFT - Beige W/Red Stripe - Room 408 |
| 2310223-63 | S13B - VFT - Beige W/Red Stripe - Room 408 |
| 2310223-64 | S13B - VFT - Beige W/Red Stripe - Room 408 |
| 2310223-65 | S13C - VFT - Beige W/Red Stripe - Room 408 |

| | |
|---|---|
| 2310223-66 | S13C - VFT - Beige W/Red Stripe - Room 408 |
| 2310223-67 | S14A - CT - Large Fissure Random Pinhole - Stairwell |
| 2310223-68 | S14B - CT - Large Fissure Random Pinhole - Stairwell |
| 2310223-69 | S14C - CT - Large Fissure Random Pinhole - Stairwell |
| 2310223-70 | S15A - VFT - White With Black Stripe - Room 403 |
| 2310223-71 | S15A - VFT - White With Black Stripe - Room 403 |
| 2310223-72 | S15B - VFT - White With Black Stripe - Room 403 |
| 2310223-73 | S15B - VFT - White With Black Stripe - Room 403 |
| 2310223-74 | S15C - VFT - White With Black Stripe - Room 403 |
| 2310223-75 | S15C - VFT - White With Black Stripe - Room 403 |
| 2310223-77 | S17A - VFT - Pink With Fleck |
| 2310223-78 | S17A - VFT - Pink With Fleck |
| 2310223-79 | S17B - VFT - Pink With Fleck |
| 2310223-80 | S17B - VFT - Pink With Fleck |
| 2310223-81 | S17C - VFT - Pink With Fleck |
| 2310223-82 | S17C - VFT - Pink With Fleck |
| 2310223-83 | S18A - VFT - Green With Fleck |
| 2310223-84 | S18A - VFT - Green With Fleck |
| 2310223-85 | S18B - VFT - Green With Fleck |
| 2310223-86 | S18B - VFT - Green With Fleck |
| 2310223-87 | S18C - VFT - Green With Fleck |
| 2310223-88 | S18C - VFT - Green With Fleck |
| 2310223-89 | S19A - Brick Mortar |
| 2310223-90 | S19B - Brick Mortar |
| 2310223-91.1 | S19C - Brick Mortar |
| 2310223-91.2 | S19C - Brick Mortar |
| 2310223-94 | S20A - Plaster - Room 214 |
| 2310223-95 | S20B - Plaster - Room 214 |
| 2310223-96 | S20C - Plaster - Room 214 |
| 2310223-97 | S21A - Drywall - Gymnasium Ceiling |
| 2310223-98 | S21B - Drywall - Gymnasium Ceiling |
| 2310223-99 | S21C - Drywall - Gymnasium Ceiling |
| 2310223-AA | S22A - VFT - White With Grey and Brown Fleck |
| 2310223-AB | S22A - VFT - White With Grey and Brown Fleck |
| 2310223-AC | S22B - VFT - White With Grey and Brown Fleck |
| 2310223-AD | S22B - VFT - White With Grey and Brown Fleck |
| 2310223-AE | S22C - VFT - White With Grey and Brown Fleck |
| 2310223-AF | S22C - VFT - White With Grey and Brown Fleck |
| 2310223-AG | S23A - Plaster |
| 2310223-AH | S23B - Plaster |
| 2310223-AI | S23C - Plaster |
| 2310223-AJ | S23D - Plaster |
| 2310223-AK | S23E - Plaster |
| 2310223-AL | S23F - Plaster |

| | |
|---|---|
| 2310223-AM.1 | S23G - Plaster |
| 2310223-AM.2 | S23G - Plaster |
| 2310223-AN | S24A - Vapour Barrier - Roof 1 |
| 2310223-AO | S24B - Vapour Barrier - Roof 1 |
| 2310223-AP | S24C - Vapour Barrier - Roof 1 |
| 2310223-AQ | S25A - Membrane - Roof 1 |
| 2310223-AR | S25B - Membrane - Roof 1 |
| 2310223-AS | S25C - Membrane - Roof 1 |
| 2310223-AT | S26A - Membrane - Roof 2 |
| 2310223-AU | S26B - Membrane - Roof 2 |
| 2310223-AV | S26C - Membrane - Roof 2 |
| 2310223-AW | S27A - Vapour Barrier - Roof 3 |
| 2310223-AX | S27B - Vapour Barrier - Roof 3 |
| 2310223-AY | S27C - Vapour Barrier - Roof 3 |
| 2310223-AZ | S28A - Membrane - Roof 3 |
| 2310223-BA | S28B - Membrane - Roof 3 |
| 2310223-BB | S28C - Membrane - Roof 3 |
| 2310223-BC | S29A - Vapour Barrier - Roof 4 |
| 2310223-BD | S29B - Vapour Barrier - Roof 4 |
| 2310223-BE | S29C - Vapour Barrier - Roof 4 |
| 2310223-BF | S30A - Membrane - Roof 4 |
| 2310223-BG | S30B - Membrane - Roof 4 |
| 2310223-BH | S30C - Membrane - Roof 4 |
| 2310223-BI | S31A - Grey Sealant - Roof 2 |
| 2310223-BJ | S31B - Grey Sealant - Roof 2 |
| 2310223-BK | S31C - Grey Sealant - Roof 2 |
| 2310223-BL | S32A - Grey/Black Sealant - Roof 1 |
| 2310223-BM | S32B - Grey/Black Sealant - Roof 1 |
| 2310223-BN | S32C - Grey/Black Sealant - Roof 1 |
| 2310223-BO | S33A - Light Grey Sealant - Exterior |
| 2310223-BP | S33B - Light Grey Sealant - Exterior |
| 2310223-BQ | S33C - Light Grey Sealant - Exterior |

Certificate of Analysis

Report Date: 14-Mar-2023

**Client:** **MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100 Mary Hopkins HVAC & Ceiling Replacement**

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-01 | 03-Mar-23 | Beige | Insulation | **Yes** | **Client ID: S01A - Aircell Pipe Insulation** | |
| | | | | | **Chrysotile** | 60 |
| | | | | | Cellulose | 10 |
| | | | | | Non-Fibers | 30 |
| 2310223-02 | 03-Mar-23 | Beige | Insulation | | **Client ID: S01B - Aircell Pipe Insulation** | |
| | | | | | not analyzed, positive stop | |
| 2310223-03 | 03-Mar-23 | Beige | Insulation | | **Client ID: S01C - Aircell Pipe Insulation** | |
| | | | | | not analyzed, positive stop | |
| 2310223-04 | 03-Mar-23 | Grey | Insulation | **Yes** | **Client ID: S02A - Pipe Elbow Insulation** | |
| | | | | | **Chrysotile** | 70 |
| | | | | | Non-Fibers | 30 |
| 2310223-05 | 03-Mar-23 | Grey | Insulation | | **Client ID: S02B - Pipe Elbow Insulation** | |
| | | | | | not analyzed, positive stop | |
| 2310223-06 | 03-Mar-23 | Grey | Insulation | | **Client ID: S02C - Pipe Elbow Insulation** | |
| | | | | | not analyzed, positive stop | |
| 2310223-07 | 03-Mar-23 | Green | Flooring | No | **Client ID: S03A - RSF - Green With Black/White Marble Streaks - Room 223** | |
| | | | | | Non-Fibers | 100 |
| 2310223-08 | 03-Mar-23 | Green | Flooring | No | **Client ID: S03B - RSF - Green With Black/White Marble Streaks - Room 223** | |
| | | | | | Non-Fibers | 100 |
| 2310223-09 | 03-Mar-23 | Green | Flooring | No | **Client ID: S03C - RSF - Green With Black/White Marble Streaks - Room 223** | |
| | | | | | Non-Fibers | 100 |
| 2310223-10 | 03-Mar-23 | Brown | Flooring | No | **Client ID: S04A - RSF - Peach** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-11 | 03-Mar-23 | Brown | Paper Backing | No | **Client ID: S04A - RSF - Peach** | |
| | | | | | Non-Fibers | 20 |
| | | | | | Other fibers | 80 |
| 2310223-12 | 03-Mar-23 | Brown | Flooring | No | **Client ID: S04B - RSF - Peach** | |
| | | | | | Non-Fibers | 100 |
| 2310223-13 | 03-Mar-23 | Brown | Paper Backing | No | **Client ID: S04B - RSF - Peach** | |
| | | | | | Non-Fibers | 20 |
| | | | | | Other fibers | 80 |
| 2310223-14 | 03-Mar-23 | Brown | Flooring | No | **Client ID: S04C - RSF - Peach** | |
| | | | | | Non-Fibers | 100 |
| 2310223-15 | 03-Mar-23 | Brown | Paper Backing | No | **Client ID: S04C - RSF - Peach** | |
| | | | | | Non-Fibers | 20 |
| | | | | | Other fibers | 80 |
| 2310223-16 | 03-Mar-23 | Beige | Tile | No | **Client ID: S05A - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |
| 2310223-17 | 03-Mar-23 | Black | Mastic | No | **Client ID: S05A - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |
| 2310223-18 | 03-Mar-23 | Beige | Tile | No | **Client ID: S05B - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |
| 2310223-19 | 03-Mar-23 | Black | Mastic | No | **Client ID: S05B - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |
| 2310223-20 | 03-Mar-23 | Beige | Tile | No | **Client ID: S05C - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |
| 2310223-21 | 03-Mar-23 | Black | Mastic | No | **Client ID: S05C - VFT - Beige With White Streak - Room 221 A/B** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-22 | 03-Mar-23 | Beige | Tile | **Yes** | **Client ID: S06A - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | **Chrysotile** | 1 |
| | | | | | Non-Fibers | 99 |
| 2310223-23 | 03-Mar-23 | Black | Mastic | No | **Client ID: S06A - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | Non-Fibers | 100 |
| 2310223-24 | 03-Mar-23 | Beige | Tile | | **Client ID: S06B - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | not analyzed, positive stop | |
| 2310223-25 | 03-Mar-23 | Black | Mastic | No | **Client ID: S06B - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | Non-Fibers | 100 |
| 2310223-26 | 03-Mar-23 | Red | Tile | | **Client ID: S06C - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | not analyzed, positive stop | |
| 2310223-27 | 03-Mar-23 | Black | Mastic | No | **Client ID: S06C - VFT - Beige With Orange Streak - Room 218** | |
| | | | | | Non-Fibers | 100 |
| 2310223-28 | 03-Mar-23 | Grey | Tile | No | **Client ID: S07A - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |
| 2310223-29.1 | 03-Mar-23 | Black | Mastic | No | **Client ID: S07A - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |
| 2310223-29.2 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S07A - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |
| 2310223-30 | 03-Mar-23 | Orange | Tile | No | **Client ID: S07B - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |
| 2310223-31 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S07B - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |
| 2310223-32.1 | 03-Mar-23 | Grey | Tile | No | **Client ID: S07C - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | | Material Identification | % Content |
|---|---|---|---|---|---|---|---|
| 2310223-32.2 | 03-Mar-23 | Orange | Tile | No | | **Client ID: S07C - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | | Non-Fibers | 100 |
| 2310223-33 | 03-Mar-23 | Yellow | Mastic | No | | **Client ID: S07C - VFT - Grey With Peach Fleck - Room 205/206** | |
| | | | | | | Non-Fibers | 100 |
| 2310223-34 | 03-Mar-23 | Brown | Flooring | No | | **Client ID: S08A - RSF - Brown - Room 213** | |
| | | | | | | Cellulose | 20 |
| | | | | | | Non-Fibers | 80 |
| 2310223-35 | 03-Mar-23 | Black | Paper Backing | **Yes** | | **Client ID: S08A - RSF - Brown - Room 213** [AS-PRE] | |
| | | | | | [ASTrc] | **Chrysotile** | <MDL |
| | | | | | | Cellulose | 70 |
| | | | | | | Non-Fibers | 30 |
| 2310223-36 | 03-Mar-23 | Brown | Flooring | No | | **Client ID: S08B - RSF - Brown - Room 213** | |
| | | | | | | Cellulose | 20 |
| | | | | | | Non-Fibers | 80 |
| 2310223-37 | 03-Mar-23 | Black | Paper Backing | **Yes** | | **Client ID: S08B - RSF - Brown - Room 213** [AS-PRE] | |
| | | | | | [ASTrc] | **Chrysotile** | <MDL |
| | | | | | | Cellulose | 70 |
| | | | | | | Non-Fibers | 30 |
| 2310223-38 | 03-Mar-23 | Brown | Flooring | No | | **Client ID: S08C - RSF - Brown - Room 213** | |
| | | | | | | Cellulose | 20 |
| | | | | | | Non-Fibers | 80 |
| 2310223-39 | 03-Mar-23 | Black | Paper Backing | **Yes** | | **Client ID: S08C - RSF - Brown - Room 213** [AS-PRE] | |
| | | | | | [ASTrc] | **Chrysotile** | <MDL |
| | | | | | | Cellulose | 70 |
| | | | | | | Non-Fibers | 30 |
| 2310223-40 | 03-Mar-23 | Beige | Tile | No | | **Client ID: S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-41.1 | 03-Mar-23 | Black | Mastic | No | **Client ID: S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-41.2 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S09A - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-42 | 03-Mar-23 | Beige | Tile | No | **Client ID: S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-43.1 | 03-Mar-23 | Black | Mastic | No | **Client ID: S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-43.2 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S09B - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-44 | 03-Mar-23 | Beige | Tile | No | **Client ID: S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-45.1 | 03-Mar-23 | Black | Mastic | No | **Client ID: S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-45.2 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S09C - VFT - Beige With White and Brown Streaks - Stairwell and Halls** | |
| | | | | | Non-Fibers | 100 |
| 2310223-46 | 03-Mar-23 | Grey | Tile | No | **Client ID: S10A - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |
| 2310223-47 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S10A - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |
| 2310223-48 | 03-Mar-23 | Grey | Tile | No | **Client ID: S10B - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |
| 2310223-49 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S10B - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |

Certificate of Analysis

Report Date: 14-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100 Mary Hopkins HVAC & Ceiling Replacement**

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-50 | 03-Mar-23 | Grey | Tile | No | **Client ID: S10C - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |
| 2310223-51 | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S10C - VFT -Grey With White Streak - Room 309/305/303** | |
| | | | | | Non-Fibers | 100 |
| 2310223-52 | 03-Mar-23 | White | Tile | No | **Client ID: S11A - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-53 | 03-Mar-23 | Black | Mastic | No | **Client ID: S11A - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-54 | 03-Mar-23 | White | Tile | No | **Client ID: S11B - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-55 | 03-Mar-23 | Black | Mastic | No | **Client ID: S11B - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-56 | 03-Mar-23 | White | Tile | No | **Client ID: S11C - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-57 | 03-Mar-23 | Black | Mastic | No | **Client ID: S11C - VFT - White With Brown Streak - Room 302/405** | |
| | | | | | Non-Fibers | 100 |
| 2310223-58 | 03-Mar-23 | Off-white | Insulation | No | **Client ID: S12A - Pipe Elbow Insulation - Room 311** | |
| | | | | | Cellulose | 10 |
| | | | | | MMVF | 5 |
| | | | | | Non-Fibers | 85 |
| 2310223-59 | 03-Mar-23 | Off-white | Insulation | No | **Client ID: S12B - Pipe Elbow Insulation - Room 311** | |
| | | | | | Cellulose | 10 |
| | | | | | MMVF | 5 |
| | | | | | Non-Fibers | 85 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-60 | 03-Mar-23 | Off-white | Insulation | No | **Client ID: S12C - Pipe Elbow Insulation - Room 311** | |
| | | | | | Cellulose | 10 |
| | | | | | MMVF | 5 |
| | | | | | Non-Fibers | 85 |
| 2310223-61 | 03-Mar-23 | Beige | Tile | No | **Client ID: S13A - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-62 | 03-Mar-23 | Black | Mastic | No | **Client ID: S13A - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-63 | 03-Mar-23 | Beige | Tile | No | **Client ID: S13B - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-64 | 03-Mar-23 | Black | Mastic | No | **Client ID: S13B - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-65 | 03-Mar-23 | Beige | Tile | No | **Client ID: S13C - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-66 | 03-Mar-23 | Black | Mastic | No | **Client ID: S13C - VFT - Beige W/Red Stripe - Room 408** | |
| | | | | | Non-Fibers | 100 |
| 2310223-67 | 03-Mar-23 | Grey | Ceiling Tile | No | **Client ID: S14A - CT - Large Fissure Random Pinhole - Stairwell** | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | 30 |
| | | | | | Non-Fibers | 30 |
| 2310223-68 | 03-Mar-23 | Grey | Ceiling Tile | No | **Client ID: S14B - CT - Large Fissure Random Pinhole - Stairwell** | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | 30 |
| | | | | | Non-Fibers | 30 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-69 | 03-Mar-23 | Grey | Ceiling Tile | No | **Client ID: S14C - CT - Large Fissure Random Pinhole - Stairwell** | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | 30 |
| | | | | | Non-Fibers | 30 |
| 2310223-70 | 03-Mar-23 | White | Tile | No | **Client ID: S15A - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-71 | 03-Mar-23 | Black | Mastic | No | **Client ID: S15A - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-72 | 03-Mar-23 | White | Tile | No | **Client ID: S15B - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-73 | 03-Mar-23 | Black | Mastic | No | **Client ID: S15B - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-74 | 03-Mar-23 | White | Tile | No | **Client ID: S15C - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-75 | 03-Mar-23 | Black | Mastic | No | **Client ID: S15C - VFT - White With Black Stripe - Room 403** | |
| | | | | | Non-Fibers | 100 |
| 2310223-77 | 03-Mar-23 | Pink | Tile | No | **Client ID: S17A - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-78 | 03-Mar-23 | Black | Mastic | No | **Client ID: S17A - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-79 | 03-Mar-23 | Pink | Tile | No | **Client ID: S17B - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-80 | 03-Mar-23 | Black | Mastic | No | **Client ID: S17B - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-81 | 03-Mar-23 | Pink | Tile | No | **Client ID: S17C - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-82 | 03-Mar-23 | Black | Mastic | No | **Client ID: S17C - VFT - Pink With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-83 | 03-Mar-23 | Green | Tile | No | **Client ID: S18A - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-84 | 03-Mar-23 | Black | Mastic | No | **Client ID: S18A - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-85 | 03-Mar-23 | Green | Tile | No | **Client ID: S18B - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-86 | 03-Mar-23 | Black | Mastic | No | **Client ID: S18B - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-87 | 03-Mar-23 | Green | Tile | No | **Client ID: S18C - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-88 | 03-Mar-23 | Black | Mastic | No | **Client ID: S18C - VFT - Green With Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-89 | 03-Mar-23 | Grey | Mortar | No | **Client ID: S19A - Brick Mortar** | |
| | | | | | Non-Fibers | 100 |
| 2310223-90 | 03-Mar-23 | Grey | Mortar | No | **Client ID: S19B - Brick Mortar** | |
| | | | | | Non-Fibers | 100 |
| 2310223-91.1 | 03-Mar-23 | Grey | Mortar | No | **Client ID: S19C - Brick Mortar** | |
| | | | | | Non-Fibers | 100 |
| 2310223-91.2 | 03-Mar-23 | Red | Brick | No | **Client ID: S19C - Brick Mortar** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-94 | 03-Mar-23 | Grey | Plaster | No | **Client ID: S20A - Plaster - Room 214** | |
| | | | | | Non-Fibers | 100 |
| 2310223-95 | 03-Mar-23 | Grey | Plaster | No | **Client ID: S20B - Plaster - Room 214** | |
| | | | | | Non-Fibers | 100 |
| 2310223-96 | 03-Mar-23 | Grey | Plaster | No | **Client ID: S20C - Plaster - Room 214** | |
| | | | | | Non-Fibers | 100 |
| 2310223-97 | 03-Mar-23 | White | DJC | No | **Client ID: S21A - Drywall - Gymnasium Ceiling** | |
| | | | | | Non-Fibers | 100 |
| 2310223-98 | 03-Mar-23 | White | DJC | No | **Client ID: S21B - Drywall - Gymnasium Ceiling** | |
| | | | | | Non-Fibers | 100 |
| 2310223-99 | 03-Mar-23 | White | DJC | No | **Client ID: S21C - Drywall - Gymnasium Ceiling** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AA | 03-Mar-23 | White | Tile | No | **Client ID: S22A - VFT - White With Grey and Brown Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AB | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S22A - VFT - White With Grey and Brown Fleck** [AS-LW] | |
| | | | | | Cellulose | 5 |
| | | | | | Non-Fibers | 95 |
| 2310223-AC | 03-Mar-23 | White | Tile | No | **Client ID: S22B - VFT - White With Grey and Brown Fleck** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AD | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S22B - VFT - White With Grey and Brown Fleck** [AS-LW] | |
| | | | | | Cellulose | 5 |
| | | | | | Non-Fibers | 95 |
| 2310223-AE | 03-Mar-23 | White | Tile | No | **Client ID: S22C - VFT - White With Grey and Brown Fleck** | |
| | | | | | Non-Fibers | 100 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-AF | 03-Mar-23 | Yellow | Mastic | No | **Client ID: S22C - VFT - White With Grey and Brown Fleck** [AS-LW] | |
| | | | | | Cellulose | 5 |
| | | | | | Non-Fibers | 95 |
| 2310223-AG | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23A - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AH | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23B - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AI | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23C - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AJ | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23D - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AK | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23E - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AL | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23F - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AM.1 | 03-Mar-23 | Grey | Plaster | No | **Client ID: S23G - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AM.2 | 03-Mar-23 | White | Plaster | No | **Client ID: S23G - Plaster** | |
| | | | | | Non-Fibers | 100 |
| 2310223-AN | 03-Mar-23 | Black | Vapour barrier | No | **Client ID: S24A - Vapour Barrier - Roof 1** [AS-PRE] | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | <MDL |
| | | | | | Non-Fibers | 60 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-AO | 03-Mar-23 | Black | Vapour barrier | No | **Client ID: S24B - Vapour Barrier - Roof 1** [AS-PRE] | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | <MDL |
| | | | | | Non-Fibers | 60 |
| 2310223-AP | 03-Mar-23 | Black | Vapour barrier | No | **Client ID: S24C - Vapour Barrier - Roof 1** [AS-PRE] | |
| | | | | | Cellulose | 40 |
| | | | | | MMVF | <MDL |
| | | | | | Non-Fibers | 60 |
| 2310223-AQ | 03-Mar-23 | Black | Membrane | No | **Client ID: S25A - Membrane - Roof 1** [AS-PRE] | |
| | | | | | MMVF | 11 |
| | | | | | Non-Fibers | 89 |
| 2310223-AR | 03-Mar-23 | Black | Membrane | No | **Client ID: S25B - Membrane - Roof 1** [AS-PRE] | |
| | | | | | MMVF | 11 |
| | | | | | Non-Fibers | 89 |
| 2310223-AS | 03-Mar-23 | Black | Membrane | No | **Client ID: S25C - Membrane - Roof 1** [AS-PRE] | |
| | | | | | MMVF | 7 |
| | | | | | Non-Fibers | 93 |
| 2310223-AT | 03-Mar-23 | Black | Membrane | No | **Client ID: S26A - Membrane - Roof 2** [AS-PRE] | |
| | | | | | MMVF | 10 |
| | | | | | Non-Fibers | 90 |
| 2310223-AU | 03-Mar-23 | Black | Membrane | No | **Client ID: S26B - Membrane - Roof 2** [AS-PRE] | |
| | | | | | MMVF | 6.5 |
| | | | | | Non-Fibers | 93.5 |
| 2310223-AV | 03-Mar-23 | Black | Membrane | No | **Client ID: S26C - Membrane - Roof 2** [AS-PRE] | |
| | | | | | MMVF | 8 |
| | | | | | Non-Fibers | 92 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | | Material Identification | % Content |
|---|---|---|---|---|---|---|---|
| 2310223-AW | 03-Mar-23 | Black/Brown | Vapour barrier | No | | **Client ID: S27A - Vapour Barrier - Roof 3** [AS-PRE] | |
| | | | | | | Cellulose | 20 |
| | | | | | | MMVF | 3 |
| | | | | | | Non-Fibers | 77 |
| 2310223-AX | 03-Mar-23 | Black/Brown | Vapour barrier | No | | **Client ID: S27B - Vapour Barrier - Roof 3** [AS-PRE] | |
| | | | | | | Cellulose | 20 |
| | | | | | | MMVF | 8 |
| | | | | | | Non-Fibers | 72 |
| 2310223-AY | 03-Mar-23 | Black/Brown | Vapour barrier | No | | **Client ID: S27C - Vapour Barrier - Roof 3** [AS-PRE] | |
| | | | | | | Cellulose | 20 |
| | | | | | | MMVF | 8 |
| | | | | | | Non-Fibers | 72 |
| 2310223-AZ | 03-Mar-23 | Black | Membrane | No | | **Client ID: S28A - Membrane - Roof 3** [AS-PRE] | |
| | | | | | | Cellulose | 3 |
| | | | | | | MMVF | 5 |
| | | | | | | Non-Fibers | 92 |
| 2310223-BA | 03-Mar-23 | Black | Membrane | No | | **Client ID: S28B - Membrane - Roof 3** [AS-PRE] | |
| | | | | | | Cellulose | 3 |
| | | | | | | MMVF | 9 |
| | | | | | | Non-Fibers | 88 |
| 2310223-BB | 03-Mar-23 | Black | Membrane | **Yes** | | **Client ID: S28C - Membrane - Roof 3** [AS-PRE, AS-PT] | |
| | | | | | [ASTrc] | **Chrysotile** | <MDL |
| | | | | | | Cellulose | 3 |
| | | | | | | MMVF | 5 |
| | | | | | | Non-Fibers | 92 |
| 2310223-BC | 03-Mar-23 | Brown/black | Vapour barrier | No | | **Client ID: S29A - Vapour Barrier - Roof 4** [AS-PRE] | |
| | | | | | | Cellulose | 90 |
| | | | | | | Non-Fibers | 10 |

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-BD | 03-Mar-23 | Brown/black | Vapour barrier | No | **Client ID: S29B - Vapour Barrier - Roof 4** [AS-PRE] | |
| | | | | | Cellulose | 90 |
| | | | | | Non-Fibers | 10 |
| 2310223-BE | 03-Mar-23 | Brown/black | Vapour barrier | No | **Client ID: S29C - Vapour Barrier - Roof 4** [AS-PRE] | |
| | | | | | Cellulose | 90 |
| | | | | | Non-Fibers | 10 |
| 2310223-BF | 03-Mar-23 | Black/Brown | Membrane | No | **Client ID: S30A - Membrane - Roof 4** [AS-PRE] | |
| | | | | | Cellulose | 5 |
| | | | | | MMVF | 3 |
| | | | | | Non-Fibers | 92 |
| 2310223-BG | 03-Mar-23 | Black/Brown | Membrane | No | **Client ID: S30B - Membrane - Roof 4** [AS-PRE] | |
| | | | | | Cellulose | 5 |
| | | | | | MMVF | 4 |
| | | | | | Non-Fibers | 91 |
| 2310223-BH | 03-Mar-23 | Black/Brown | Membrane | No | **Client ID: S30C - Membrane - Roof 4** [AS-PRE] | |
| | | | | | Cellulose | 5 |
| | | | | | MMVF | 3 |
| | | | | | Non-Fibers | 92 |
| 2310223-BI | 03-Mar-23 | Grey | Sealant | No | **Client ID: S31A - Grey Sealant - Roof 2** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |
| 2310223-BJ | 03-Mar-23 | Grey | Sealant | No | **Client ID: S31B - Grey Sealant - Roof 2** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |
| 2310223-BK | 03-Mar-23 | Grey | Sealant | No | **Client ID: S31C - Grey Sealant - Roof 2** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |
| 2310223-BL | 03-Mar-23 | Grey/Black | Sealant | No | **Client ID: S32A - Grey/Black Sealant - Roof 1** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |

Certificate of Analysis

Report Date: 14-Mar-2023

**Client:** **MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100 Mary Hopkins HVAC & Ceiling Replacement**

## Asbestos, PLM Visual Estimation **MDL - 0.5%**

| Paracel ID | Sample Date | Colour | Description | Asbestos Detected | Material Identification | % Content |
|---|---|---|---|---|---|---|
| 2310223-BM | 03-Mar-23 | Grey/Black | Sealant | No | **Client ID: S32B - Grey/Black Sealant - Roof 1** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |
| 2310223-BN | 03-Mar-23 | Grey/Black | Sealant | No | **Client ID: S32C - Grey/Black Sealant - Roof 1** [AS-PRE] | |
| | | | | | Non-Fibers | 100 |
| 2310223-BO | 03-Mar-23 | Light Grey | Sealant | No | **Client ID: S33A - Light Grey Sealant - Exterior** | |
| | | | | | Non-Fibers | 100 |
| 2310223-BP | 03-Mar-23 | Light Grey | Sealant | No | **Client ID: S33B - Light Grey Sealant - Exterior** | |
| | | | | | Non-Fibers | 100 |
| 2310223-BQ | 03-Mar-23 | Light Grey | Sealant | No | **Client ID: S33C - Light Grey Sealant - Exterior** | |
| | | | | | Non-Fibers | 100 |

* MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

**** Analytes in bold indicate asbestos mineral content.**

## Analysis Summary Table

| Analysis | Method Reference/Description | Lab Location | Lab Accreditation | Analysis Date |
|---|---|---|---|---|
| Asbestos, PLM Visual Estimation | AppE to SubE of 40CFR Part763 and EPA/600/R-93/116 | 1 - Mississauga | CALA 3762 | 13-Mar-23 |

Mississauga Lab: 15 - 6800 Kitimat Rd Mississauga, Ontario, L5N 5M1

## Qualifier Notes

Sample Qualifiers :

AS-LW: Low sample volume

AS-PRE: Due to the difficult nature of the bulk sample (interfering fibers/binders), additional NOB preparation was required prior to analysis

AS-PT: Asbestos quantitation by PLM Point Count method.

ASTrc: Trace asbestos was observed below the noted detection limit but could not be accurately quantified.

## Work Order Revisions | Comments

None

PARACEL LABORATORIES LTD.

**Paracel ID: 2310223**


ad Office
-2319 St. Laurent Blvd.
awa, Ontario K1G 4J8
1-800-749-1947
paracel@paracellabs.com


**Chain of Custody**
(Lab Use Only)



| | |
|---|---|
| Client Name: MTE Consultants | Project Reference: 53042-100 - Mary Hopkins HVAC & Ceiling Replacement |
| Contact Name: Gavin Oakes; Aaron Rows | Quote #: MTE Standing Offer |
| Address: 1016 Sutton Drive, Unit A<br>Burlington, ON L7L 6B8 | PO #: |
| Telephone: 905-639-2552 | Email Address: goakes@mte85.com<br>arows@mte85.com |

**Turnaround Time:**

- ☐ Immediate ☐ 1 Day
- ☐ 4 Hour ☐ 2 Day
- ☐ 8 Hour ☐ 3 Day
- ☒ Regular

Date Required: March 14/23

## ASBESTOS & MOLD ANALYSIS

**Matrix:** ☐ Air ☒ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☒ ON ☐ QC ☐ AB ☐ SK ☐ Other:

**Analyses:** ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☒ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

**Paracel Order Number:** 2310223

| | Sample ID | Sampling Date | Air Volume (L) | Analysis Required | Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) * | Positive Stop? |
|---|---|---|---|---|---|---|
| 1 | S01 A-C - Aircell Pipe Insulation | Mar 3/23 | - | PLM | | ☒ |
| 2 | S02 A-C - Pipe Elbow Insulation | Mar 3/23 | - | PLM | | ☒ |
| 3 | S03 A-C - RSF - Grenn with black/white Marble streaks - Room 223 | Mar 3/23 | - | PLM | | ☒ |
| 4 | S04 A-C - RSF - Peach | Mar 3/23 | - | PLM | Flooring and paper backing | ☒ |
| 5 | S05 A-C - VFT - Beige with White streak - Room 221 A/B | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 6 | S06 A-C - VFT - Beige with Orange streak - Room 218 | Mar 3/23 | - | PLM | Tile and mastic | ☒ |
| 7 | S07 A-C - VFT - Grey with Peach Fleck - Room 205/206 | Mar 3/23 | - | PLM | Tile and mastic | ☒ |
| 8 | S08 A-C - RSF - Brown - Room 213 | Mar 3/23 | - | PLM | Flooring and paper backing | ☒ |
| 9 | S09 A-C - VFT - Beige with white and brown streaks - Stairwell and Halls | Mar 3/23 | - | PLM | Tile and mastic | ☒ |
| 10 | S10 A-C - VFT - Grey with white streak - Room 309/305/303 | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 11 | S11 A-C - VFT - White with Brown streak - Room 302/405 | Mar 3/23 | - | PLM | Tile and mastic | ☒ |
| 12 | S12 A-C - Pipe Elbow Insulation - Room 311 | Mar 3/23 | - | PLM | | ☒ |

*** If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.**

Comments:

Method of Delivery: Purolator

| Relinquished By (Sign): | Received at Depot: | Received at Lab: | Verified By: |
|---|---|---|---|
| Relinquished By (Print): | | | |
| Date/Time: | Date/Time: | Date/Time: Mar 8/23 9:30 | Date/Time: Mar 8/23 11:19 |

PARACEL LABORATORIES LTD.

**Paracel ID: 2310223**

Office
19 St. Laurent Blvd.
, Ontario K1G 4J8
0-749-1947
cel@paracellabs.com

**Chain of Custody**
(Lab Use Only)



| | |
|---|---|
| Client Name: MTE Consultants | Project Reference: 53042-100 - Mary Hopkins HVAC & Ceiling Replacement |
| Contact Name: Gavin Oakes; Aaron Rows | Quote #: MTE Standing Offer |
| Address: 1016 Sutton Drive, Unit A<br>Burlington, ON L7L 6B8 | PO #: |
| Telephone: 905-639-2552 | Email Address: goakes@mte85.com<br>arows@mte85.com |

**Turnaround Time:**

☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ☐ 3 Day
☒ Regular

Date Required: March 14/2023

## ASBESTOS & MOLD ANALYSIS

**Matrix:** ☐ Air ☒ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☒ ON ☐ QC ☐ AB ☐ SK ☐ Other:

**Analyses:** ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☒ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

**Paracel Order Number:** 2310223

| | Sample ID | Sampling Date | Air Volume (L) | Analysis Required | Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) * | Positive Stop? |
|---|---|---|---|---|---|---|
| 1 | S13 A-C - VFT - Beige w/ Red Stripe - Room 408 | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 2 | S14 A-C - CT - Large Fissure Random Pinhole - Stairwell | Mar 3/23 | - | PLM | | ☒ |
| 3 | S15 A-C - VFT - White with Black Stripe - Room 403 | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 4 | S16 - Sample Not Submitted | Mar 3/23 | - | PLM | Sample Not Submitted | ☒ |
| 5 | S17 A-C - VFT - Pink with Fleck | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 6 | S18 A-C - VFT - Green with Fleck | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 7 | S19 A-E - Brick mortar | Mar 3/23 | - | PLM | | ☒ |
| 8 | S20 A-C - Plaster- Room 214 | Mar 3/23 | - | PLM | | ☒ |
| 9 | S21 A-C - Drywall - Gymnasium Ceiling | Mar 3/23 | - | PLM | | ☒ |
| 10 | S22 A-C - VFT - White with Grey and Brown Fleck | Mar 3/23 | - | PLM | Tile and Mastic | ☒ |
| 11 | S23 A-G - Plaster | Mar 3/23 | - | PLM | | ☒ |
| 12 | S24 A-C - Vapour Barrier - Roof 1 | Mar 3/23 | - | PLM | | ☒ |

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments:

Method of Delivery: Purolator

| Relinquished By (Sign): | Received at Depot: | Received at Lab: | Verified By: |
|---|---|---|---|
| Relinquished By (Print): | | | |
| Date/Time: | Date/Time: | Date/Time: Mar 8/23 9:30 | Date/Time: Mar 8/23 11:19 |

PARACEL LABORATORIES LTD.

**Paracel ID: 2310223**

ffice
9 St. Laurent Blvd.
Ontario K1G 4J8
-749-1947
el@paracellabs.com

**Chain of Custody**
(Lab Use Only)



| | |
|---|---|
| Client Name: MTE Consultants | Project Reference: 53042-100 - Mary Hopkins HVAC & Ceiling Replacement |
| Contact Name: Gavin Oakes; Aaron Rows | Quote #: MTE Standing Offer |
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**Turnaround Time:**

- ☐ Immediate
- ☐ 4 Hour
- ☐ 8 Hour
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Regular

Date Required: March 14 / 2023

## ASBESTOS & MOLD ANALYSIS

**Matrix:** ☐ Air ☒ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☒ ON ☐ QC ☐ AB ☐ SK ☐ Other:

**Analyses:** ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☒ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

**Paracel Order Number:** 2310223

| | Sample ID | Sampling Date | Air Volume (L) | Analysis Required | Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) * | Positive Stop? |
|---|---|---|---|---|---|---|
| 1 | S25 A-C - Membrane - Roof 1 | Mar 3/23 | - | PLM | | ☒ |
| 2 | S26 A-C - Membrane - Roof 2 | Mar 3/23 | - | PLM | | ☒ |
| 3 | S27 A-C - Vapour Barrier - Roof 3 | Mar 3/23 | - | PLM | | ☒ |
| 4 | S28 A-C - Membrane - Roof 3 | Mar 3/23 | - | PLM | | ☒ |
| 5 | S29 A-C - Vapour Barrier - Roof 4 | Mar 3/23 | - | PLM | | ☒ |
| 6 | S30 A-C - Membrane - Roof 4 | Mar 3/23 | - | PLM | | ☒ |
| 7 | S31 A-C - Grey Sealant - Roof 2 | Mar 3/23 | - | PLM | | ☒ |
| 8 | S32 A-C - Grey/Black Sealant - Roof 1 | Mar 3/23 | - | PLM | | ☒ |
| 9 | S33 A-C - Light Grey Sealant - Exterior | Mar 3/23 | - | PLM | | ☒ |
| 10 | | | | | | ☐ |
| 11 | | | | | | ☐ |
| 12 | | | | | | ☐ |

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments:

Method of Delivery: Purolator

| Relinquished By (Sign): | Received at Depot: | Received at Lab: | Verified By: |
|---|---|---|---|
| Relinquished By (Print): | | | |
| Date/Time: | Date/Time: | Date/Time: Mar 8/23 9:30 | Date/Time: Mar 8/23 11:19 |

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# Certificate of Analysis

**MTE Consultants Inc. (Burlington)**

1016 Sutton Drive, Unit A
Burlington, ON L7L 6B8
Attn: Gavin Oakes

Client PO:
Project: 53042-100 - Mary Hopkins HVAC Upgrades
Custody:

Report Date: 13-Mar-2023
Order Date: 8-Mar-2023

**Order #: 2310204**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

| Paracel ID | Client ID |
|---|---|
| 2310204-01 | LP01-Green-Boiler Room |
| 2310204-02 | LP02-White-Boiler Room |
| 2310204-03 | LP03-Beige-Throughout |
| 2310204-04 | LP04-Grey-Throughout |
| 2310204-05 | LP05-White-Learning Commons |
| 2310204-06 | LP06-Dark Grey-Basement Walls |
| 2310204-07 | LP07 - Grey-Basement Floor/Stairs |
| 2310204-08 | LP08-White-Basement Bath/StafRM |
| 2310204-09 | LP09-White-Exterior Base |
| 2310204-10 | LP10-Grey-Classrooms/Main office |
| 2310204-11 | LP11-White-Classrooms |
| 2310204-12 | LP12-Brown-Exterior |

Approved By: Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis

Report Date: 13-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100 - Mary Hopkins HVAC Upgrades**

## Analysis Summary Table

| Analysis | Method Reference/Description | Extraction Date | Analysis Date |
|---|---|---|---|
| Metals, ICP-MS | EPA 6020 - Digestion - ICP-MS | 10-Mar-23 | 13-Mar-23 |

**Qualifier Notes:**

***Sample Qualifiers :***

1 : Complete separation of paint from substrate not possible for this sample and a small amount of substrate has been included in the paint digestion.

**Sample Data Revisions**

None

**Work Order Revisions/Comments:**

None

**Other Report Notes:**

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

Certificate of Analysis

Report Date: 13-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100 - Mary Hopkins HVAC Upgrades**

## *Sample Results*

### Lead

**Matrix: Paint**

| Paracel ID | Client ID | Sample Date | Units | MDL | Result |
|---|---|---|---|---|---|
| 2310204-01 | LP01-Green-Boiler Room | 3-Mar-23 | ug/g | 5 | <5 |
| 2310204-02 | LP02-White-Boiler Room | 3-Mar-23 | ug/g | 5 | 31 |
| 2310204-03 | LP03-Beige-Throughout | 3-Mar-23 | ug/g | 5 | 1050 |
| 2310204-04 | LP04-Grey-Throughout | 3-Mar-23 | ug/g | 5 | 1100 |
| 2310204-05 | LP05-White-Learning Commons | 3-Mar-23 | ug/g | 5 | 1570 [1] |
| 2310204-06 | LP06-Dark Grey-Basement Walls | 3-Mar-23 | ug/g | 5 | 7 |
| 2310204-07 | LP07 - Grey-Basement Floor/Stairs | 3-Mar-23 | ug/g | 5 | 2720 |
| 2310204-08 | LP08-White-Basement Bath/StafRM | 3-Mar-23 | ug/g | 5 | 1400 |
| 2310204-09 | LP09-White-Exterior Base | 3-Mar-23 | ug/g | 5 | 14800 [1] |
| 2310204-10 | LP10-Grey-Classrooms/Main office | 3-Mar-23 | ug/g | 5 | 320 |
| 2310204-11 | LP11-White-Classrooms | 3-Mar-23 | ug/g | 5 | 17 |
| 2310204-12 | LP12-Brown-Exterior | 3-Mar-23 | ug/g | 5 | 13800 |

## *Laboratory Internal QA/QC*

| Analyte | Result | Reporting Limit | Units | Source Result | %REC | %REC Limit | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Matrix Blank** | | | | | | | | | |
| **Lead** | **ND** | **5** | **ug/g** | | | | | | |
| **Matrix Duplicate** | | | | | | | | | |
| **Lead** | **1060** | **5** | **ug/g** | **1050** | | | **0.89** | **50** | |
| **Matrix Spike** | | | | | | | | | |
| Lead | 97.7 | 5.00 | ug/g | 42.1 | 111 | 70-130 | | | |

PARACEL LABORATORIES LTD.

**Paracel ID: 2310204**

| Paracel Order Number (Lab Use Only) | **Chain Of Custody** (Lab Use Only) |
|---|---|

| | | |
|---|---|---|
| Client Name: MTE Consultants | Project Ref: 53042-100 - Mary Hopkins HVAC Upgrades | Page 1 of 2 |
| Contact Name: Gavin Oakes; Aaron Rows | Quote #: MTE Standing Offer | **Turnaround Time** |
| Address: 1016 Sutton Drive, Unit A<br>Burlington, ON L7L 6B8 | PO #: | ☐ 1 day ☐ 3 day<br>☐ 2 day ☑ Regular |
| Telephone: 905-639-2552 | E-mail: goakes@mte85.com<br>arows@mte85.com | Date Required: March 14/2023 |

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table ___
For RSC: ☐ Yes ☐ No

**Other Regulation**

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun: ___
☐ Other:

**Matrix Type:** S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

**Required Analysis**

| | Sample ID/Location Name | Matrix | Air Volume | # of Containers | Sample Taken: Date | Sample Taken: Time | Lead |
|---|---|---|---|---|---|---|---|
| 1 | LP01 - Green - Boiler Room | P | - | 1 | Mar 3/23 | 10:00 | X |
| 2 | LP02 - White - Boiler Room | | - | 1 | | 10:30 | X |
| 3 | LP03 - Beige - Throughout | | - | 1 | | 10:35 | X |
| 4 | LP04 - Grey - Throughout | | - | 1 | | 10:40 | X |
| 5 | LP05 - White - Learning Commons | | - | 1 | | 10:45 | X |
| 6 | LP06 - Dark Grey - Basement Walls | | - | 1 | | 10:50 | X |
| 7 | LP07 - Grey - Basement Floor/Stairs | | - | 1 | | 10:55 | X |
| 8 | LP08 - White - Basement Bath/Staff Rm | | - | 1 | | 11:00 | X |
| 9 | LP09 - White - Exterior Base | | - | 1 | | 11:05 | X |
| 10 | LP10 - Grey - Classrooms/Main office | ↓ | ↓ | ↓ | ↓ | 11:10 | X |

Comments:

Method of Delivery: Paracel Courier

| | | | |
|---|---|---|---|
| Relinquished By (Sign): | Received By Driver/Depot: | Received at Lab: Sandra Demajo | Verified By: |
| Relinquished By (Print): | Date/Time: | Date/Time: Mar 8 9:25 | Date/Time: Mar 8/23 9:58 |
| Date/Time: | Temperature: °C | Temperature: | pH Verified: ☐ By: |

PARACEL LABORATORIES LTD.

**Paracel ID: 2310204**

| Paracel Order Number (Lab Use Only) | Chain Of Custody (Lab Use Only) |
|---|---|
| | |

| | | |
|---|---|---|
| Client Name: MTE Consultants | Project Ref: 53042-100 - Mary Hopkins HVAC Upgrades | Page 2 of 2 |
| Contact Name: Gavin Oakes;Aaron Rows | Quote #: MTE Standing Offer | **Turnaround Time** |
| Address: 1016 Sutton Drive, Unit A<br>Burlington, ON L7L 6B8 | PO #: | ☐ 1 day ☐ 3 day<br>☐ 2 day ☑ Regular |
| Telephone: 905-639-2552 | E-mail: goakes@mte85.com<br>arows@mte85.com | Date Required: March 14/2023 |

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table ___
For RSC: ☐ Yes ☐ No

**Other Regulation**

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun: ___
☐ Other:

**Matrix Type:** S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

| | Sample ID/Location Name | Matrix | Air Volume | # of Containers | Sample Taken: Date | Sample Taken: Time | Lead | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LP11 - White - Classrooms | P | - | 1 | Mar 3/23 | 11:15 | X | | | | | | | | | | |
| 2 | LP12 - Brown - Exterior | P | - | 1 | ↓ | 11:20 | X | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
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| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

**Required Analysis**

Comments:

Method of Delivery: Paracel Purolator

| | | | |
|---|---|---|---|
| Relinquished By (Sign): | Received By Driver/Depot: | Received at Lab: Sandra Demaine | Verified By: Mayu |
| Relinquished By (Print): | Date/Time: | Date/Time: Mar 8 9:25 | Date/Time: March 8/23 9:58 |
| Date/Time: | Temperature: °C | Temperature: | pH Verified: ☐ By: |

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www.paracellabs.com

# Certificate of Analysis

**MTE Consultants Inc. (Burlington)**

1016 Sutton Drive, Unit A
Burlington, ON L7L 6B8
Attn: Gavin Oakes

Client PO:
Project: 53042-100-Mary Hopkins HVAC Upgrades
Custody:

Report Date: 13-Mar-2023
Order Date: 8-Mar-2023

**Order #: 2310208**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

| Paracel ID | Client ID |
|---|---|
| 2310208-01 | PCB1-Roof 1- grey/Black Sealant |
| 2310208-02 | PCB2 - Light grey - Exterior Sealant |
| 2310208-03 | PCB3 - Roof 2-grey sealant |

Approved By: Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis

Report Date: 13-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100-Mary Hopkins HVAC Upgrades**

## Analysis Summary Table

| Analysis | Method Reference/Description | Extraction Date | Analysis Date |
|---|---|---|---|
| PCBs, total | SW846 8082A - GC-ECD | 7-Mar-23 | 10-Mar-23 |

Certificate of Analysis

Report Date: 13-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100-Mary Hopkins HVAC Upgrades**

| | | | | | |
|---|---|---|---|---|---|
| | **Client ID:** | PCB1-Roof 1-grey/Black Sealant | PCB2 - Light grey - Exterior Sealant | PCB3 - Roof 2-grey sealant | - |
| | **Sample Date:** | 03-Mar-23 12:00 | 03-Mar-23 12:05 | 03-Mar-23 12:05 | - |
| | **Sample ID:** | 2310208-01 | 2310208-02 | 2310208-03 | - |
| | **MDL/Units** | Other | Other | Other | - |
| **PCBs** | | | | | |
| PCBs, total | 5 ug/g | <5 | <5 | <5 | - |
| Decachlorobiphenyl | Surrogate | 128% | 136% | 132% | - |

## Method Quality Control: Blank

| Analyte | Result | Reporting Limit | Units | Source Result | %REC | %REC Limit | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **PCBs** | | | | | | | | | |
| PCBs, total | ND | 5 | ug/g | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *6.22* | | *ug/g* | | *124* | *60-140* | | | |

## Method Quality Control: Duplicate

| Analyte | Result | Reporting Limit | Units | Source Result | %REC | %REC Limit | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **PCBs** | | | | | | | | | |
| PCBs, total | ND | 5 | ug/g | ND | | | NC | 40 | |
| *Surrogate: Decachlorobiphenyl* | *6.14* | | *ug/g* | | *123* | *60-140* | | | |

Certificate of Analysis

Report Date: 13-Mar-2023

**Client: MTE Consultants Inc. (Burlington)**

Order Date: 8-Mar-2023

**Client PO:**

**Project Description: 53042-100-Mary Hopkins HVAC Upgrades**

## Method Quality Control: Spike

| Analyte | Result | Reporting Limit | Units | Source Result | %REC | %REC Limit | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **PCBs** | | | | | | | | | |
| PCBs, total | 26 | 5 | ug/g | ND | 130 | 60-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *6.55* | | *ug/g* | | *131* | *60-140* | | | |

**Qualifier Notes:**

**Sample Data Revisions**

None

**Work Order Revisions / Comments:**

None

**Other Report Notes:**

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

PARACEL LABORATORIES LTD.

**Paracel ID: 2310208**

| Paracel Order Number (Lab Use Only) | **Chain Of Custody** (Lab Use Only) |
|---|---|

Client Name: MTE Consultants
Contact Name: Gavin Oakes, Aaron Raus
Address: 1016 Sutton Drive, Unit A
Burlington ON, L7L 6B8
Telephone:

Project Ref: 53042-100 - Mary Hopkins HVAC Upgrades
Quote #: MTE Standing offer
PO #:
E-mail: goakes@mte85.com
araus@mte85.com

Page 1 of 1

**Turnaround Time**
☐ 1 day ☐ 3 day
☐ 2 day ☐ Regular
Date Required: March 14, 2023

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table ___
For RSC: ☐ Yes ☐ No

**Other Regulation**
☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun: ___
☐ Other:

**Matrix Type:** S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

| | Sample ID/Location Name | Matrix | Air Volume | # of Containers | Sample Taken: Date | Sample Taken: Time | PHCs F1-F4+BTEX | VOCs | PAHs | Metals by ICP | Hg | CrVI | B (HWS) | PCBs | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PCB1 - Roof 1 - grey/Black Sealant | O | - | 1 | Mar 3/23 | 12:00 | | | | | | | | X | | | | |
| 2 | PCB2 - light grey - Exterior Sealant | O | - | 1 | ↓ | 12:05 | | | | | | | | X | | | | |
| 3 | PCB3 - Roof 2 - grey Sealant | O | - | 1 | ↓ | 12:10 | | | | | | | | X | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

**Required Analysis**

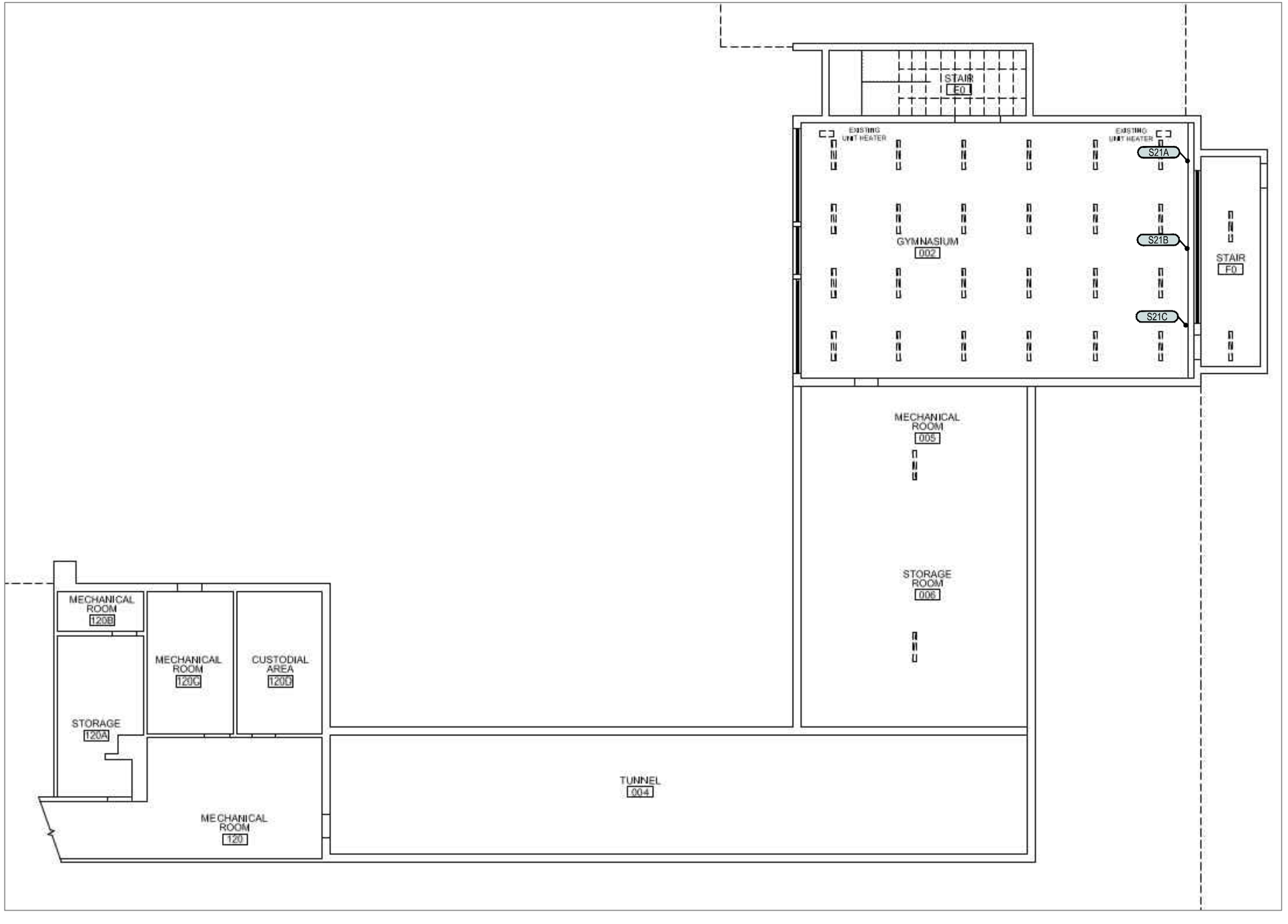
Comments:

Method of Delivery: Paracel Courier

| Relinquished By (Sign): | Received By Driver/Depot: | Received at Lab: Sarika Dewan | Verified By: |
|---|---|---|---|
| Relinquished By (Print): | Date/Time: | Date/Time: Mar 8, 9:25 | Date/Time: March 8/23 10:06 |
| Date/Time: | Temperature: °C | Temperature: | pH Verified: ☐ By: |

# Appendix C

# Figures




**Notes:**

ALL DRAWINGS TO BE REFERENCED WITH THE DSA REPORT. LOCATIONS AND QUANTITIES ARE APPROXIMATE.

ALL KNOWN OR SUSPECT DESIGNATED SUBSTANCES ARE NOT DEPICTED ON THIS FIGURE. REFER TO THE DSA REPORT FOR A COMPLETE LIST OF IDENTIFIED KNOWN AND SUSPECT DESIGNATED SUBSTANCES.

THIS FIGURE IS COLOUR DEPENDENT, PHOTOCOPIES MAY ALTER INTERPRETATION OF FIGURE. ALWAYS REFER TO ORIGINAL DRAWINGS AND DSA REPORT.

## Designated Substances and Hazardous Materials Legend

- SM-1234 — Sample Identification
- ACM Pipe Insulation Straights
- ACM Pipe Insulation Elbows/Fittings
- Post 1990 Construction
- ACM Vinyl Floor Tile
- Fire Door

MTE
Ph. (905) 639-2552 www.mte85.com

CLIENT
HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

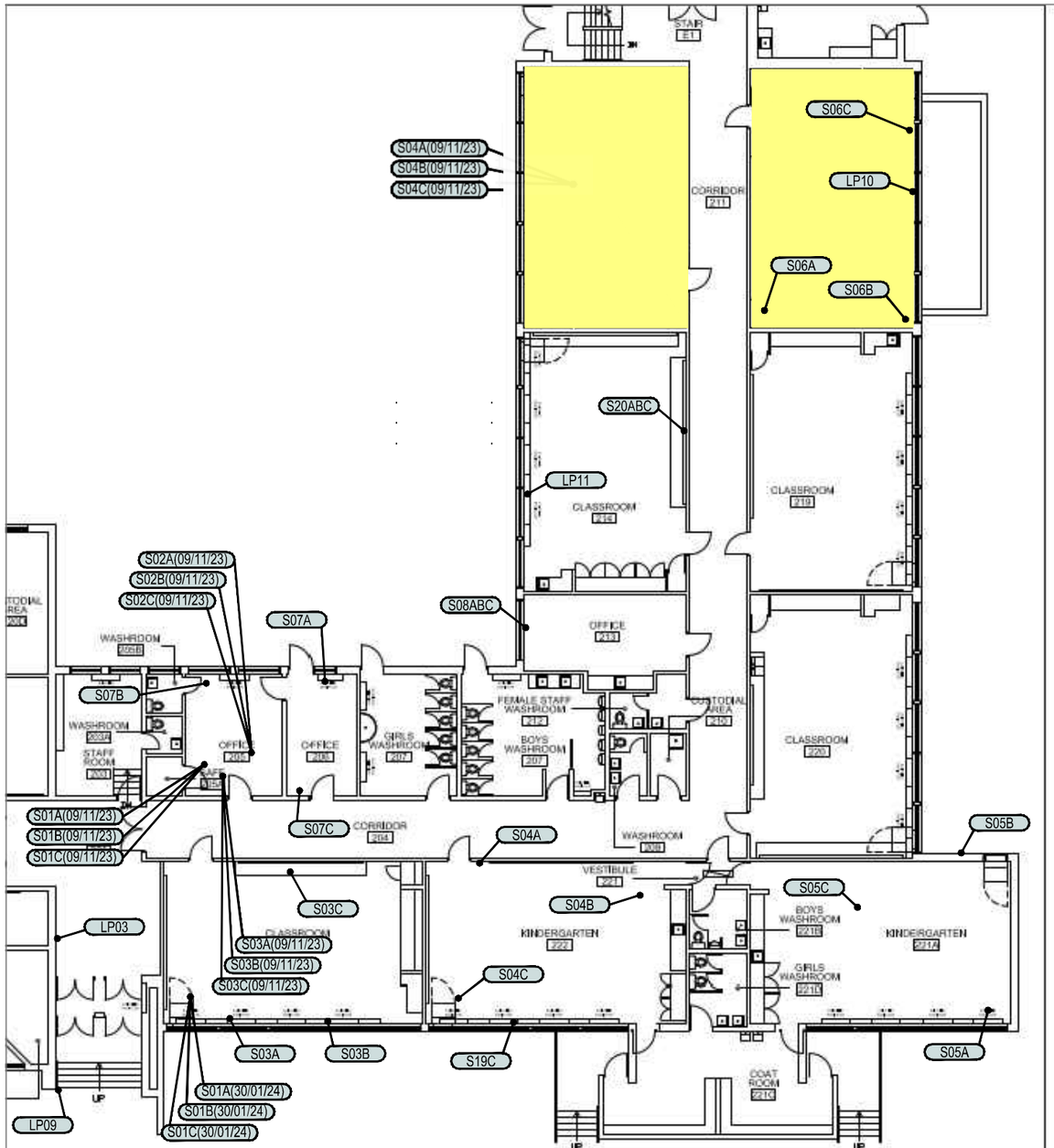
PROJECT
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

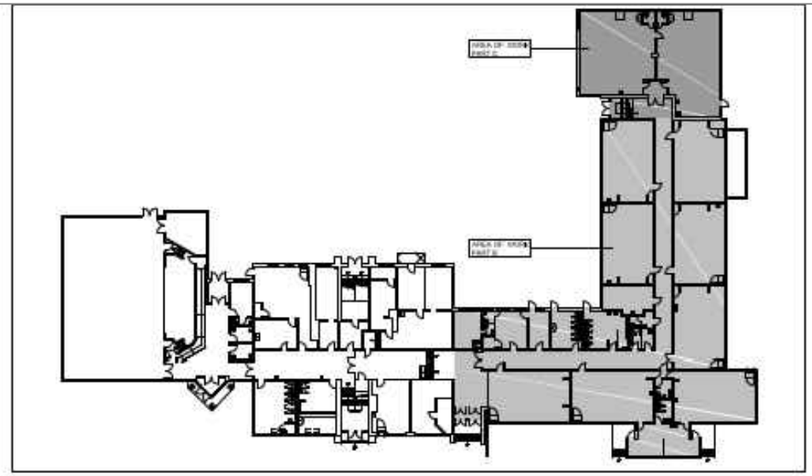
DRAWING
MARY HOPKINS ELEMENTARY SCHOOL

BASEMENT LEVEL

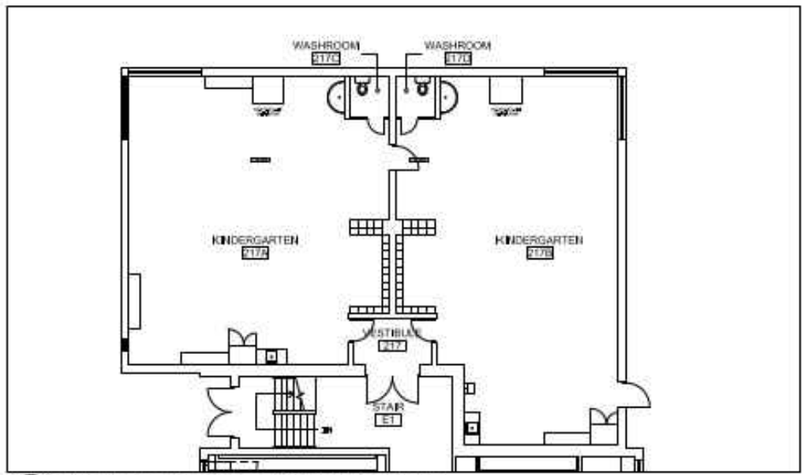
| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | FEBRUARY 2024 |
| Baseplan By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV/ SXS | Drawing No. | 1.0 |
| Scale | N.T.S. | | |

Project: 52258-102 CAD: P:\P\53042\100\53042-100 FIGURE.DWG
March 1, 2023 - 2:00 pm - Plotted By: MVanRuyven



KEY PLAN
SCALE: NTS




2 A1.01 PARTIAL GROUND FLOOR DEMOLITION PLAN - PART C
SCALE: 1:100

**Notes:**

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Designated Substances and Hazardous Materials Legend

- SM-1234 — Sample Identification
- ACM Pipe Insulation Straights
- ACM Pipe Insulation Elbows/Fittings
- Post 1990 Construction
- ACM Vinyl Floor Tile
- Fire Door

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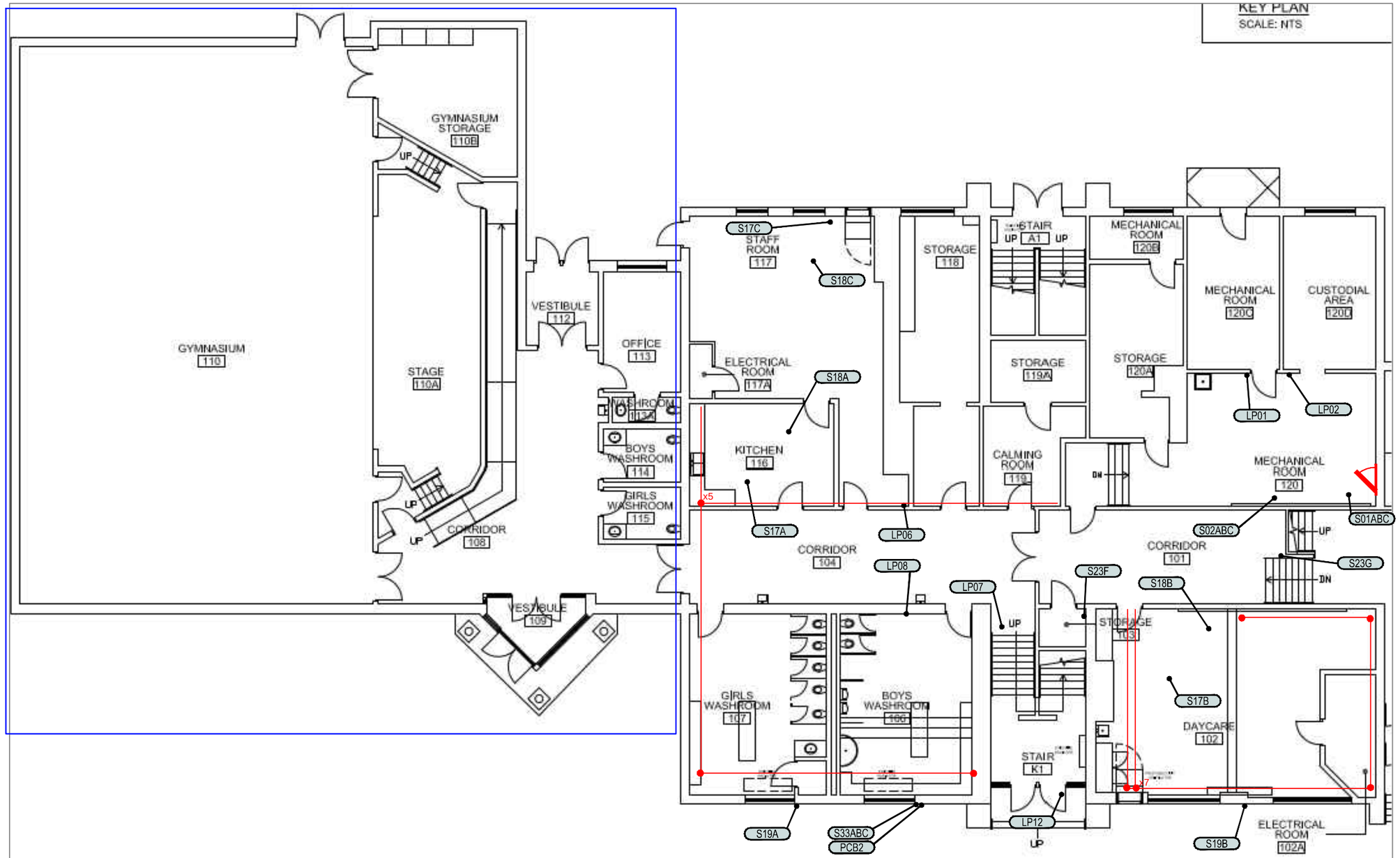
PARTIAL GROUND LEVEL

| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | FEBRUARY 2024 |
| Baseplan By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV/ SXS | Drawing No. | 1.1 |
| Scale | N.T.S. | | |

Project: 52258-102 CAD: P:\P\53042\100\53042-100 FIGURE.DWG
March 1, 2023 - 2:00 pm - Plotted By: MVanRuyven

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## Designated Substances and Hazardous Materials Legend

- SM-1234 — Sample Identification
- ACM Pipe Insulation Straights
- ACM Pipe Insulation Elbows/Fittings
- Post 1990 Construction
- ACM Vinyl Floor Tile
- Fire Door

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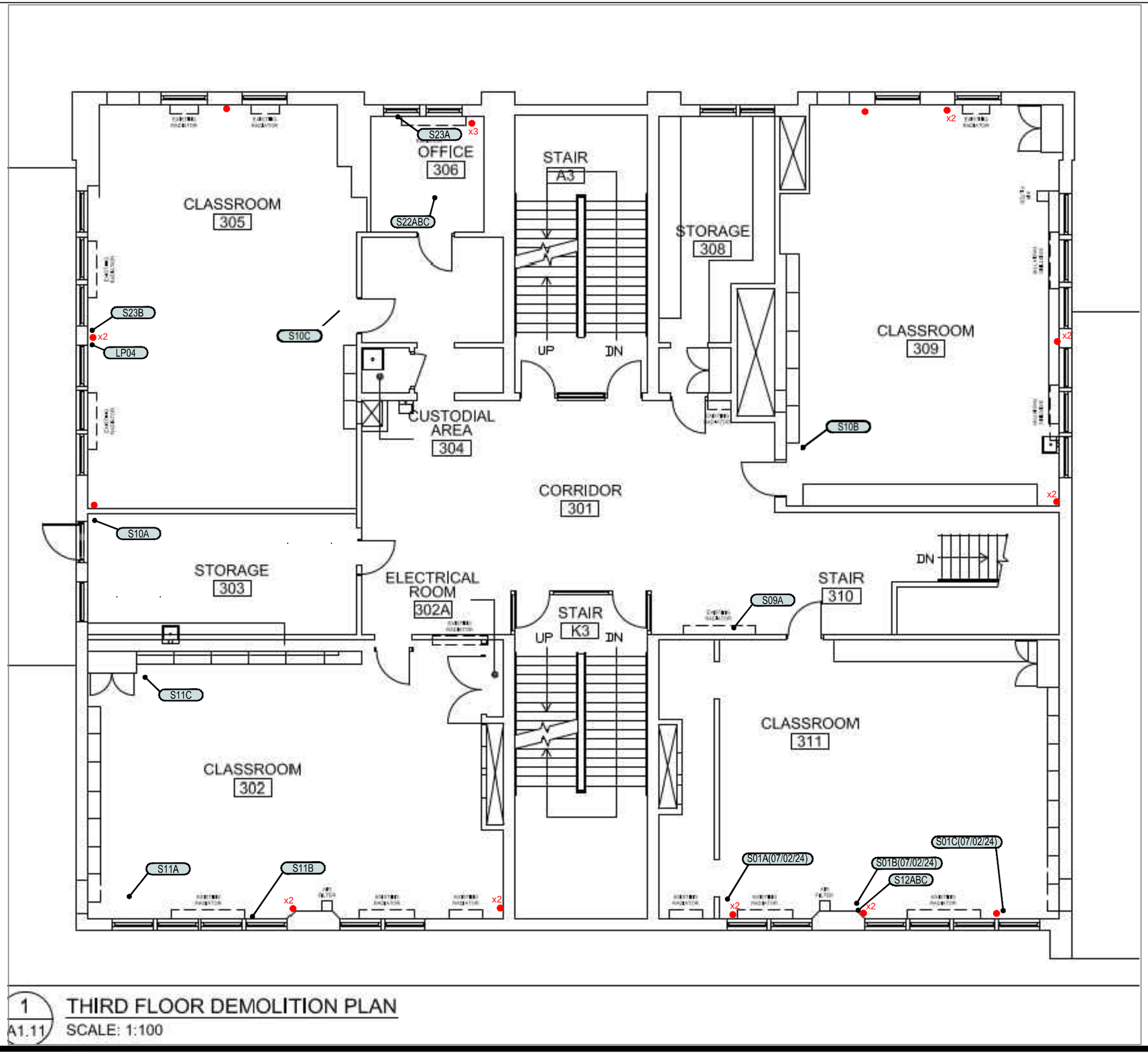
MARY HOPKINS ELEMENTARY SCHOOL

PARTIAL GROUND LEVEL

| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | MARCH 2023 |
| Baseplan By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV | Drawing No. | 1.2 |
| Scale | N.T.S. | | |

Project: 52258-102 CAD: P:\53042\100\53042-100 FIGURE.DWG — Plotted By: MVanRuyven — March 1, 2023 — 2:00 pm




1 A1.11 THIRD FLOOR DEMOLITION PLAN
SCALE: 1:100

**Notes:**

ALL DRAWINGS TO BE REFERENCED WITH THE DSA REPORT. LOCATIONS AND QUANTITIES ARE APPROXIMATE.

ALL KNOWN OR SUSPECT DESIGNATED SUBSTANCES ARE NOT DEPICTED ON THIS FIGURE. REFER TO THE DSA REPORT FOR A COMPLETE LIST OF IDENTIFIED KNOWN AND SUSPECT DESIGNATED SUBSTANCES.

THIS FIGURE IS COLOUR DEPENDENT, PHOTOCOPIES MAY ALTER INTERPRETATION OF FIGURE. ALWAYS REFER TO ORIGINAL DRAWINGS AND DSA REPORT.

Designated Substances and Hazardous Materials Legend

- SM-1234 — Sample Identification
- ACM Pipe Insulation Straights
- ACM Pipe Insulation Elbows/Fittings
- Post 1990 Construction
- ACM Vinyl Floor Tile
- Fire Door

MTE
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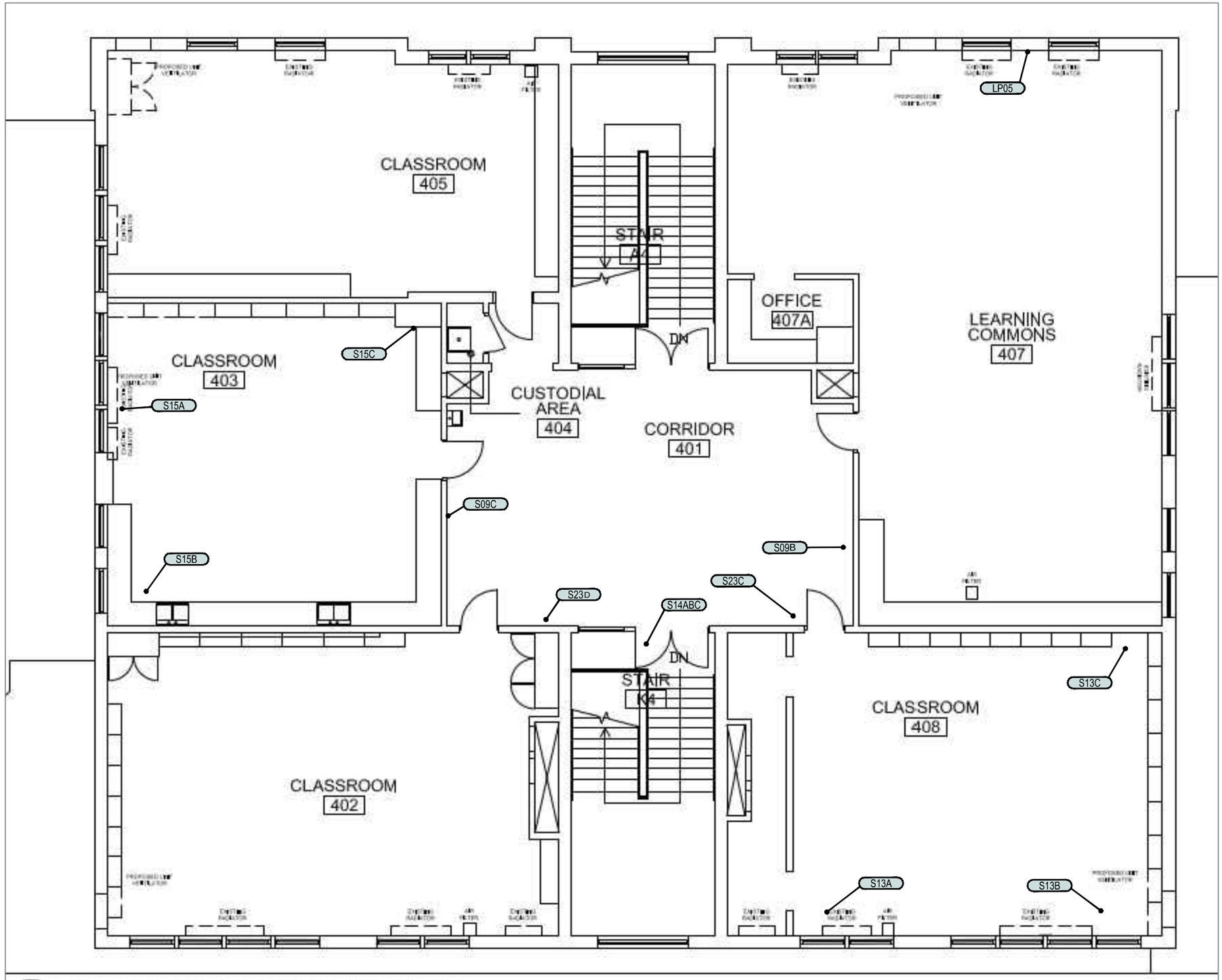
PROJECT
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

DRAWING
MARY HOPKINS ELEMENTARY SCHOOL

THIRD FLOOR

| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | FEBRUARY 2024 |
| Baseplan By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV/SXS | Drawing No. | 1.3 |
| Scale | N.T.S. | | |

Project: 52258-102 CAD: P:\P\53042\100\53042-100 FIGURE.DWG — Plotted By: MVanRuyven March 1, 2023 — 2:00 pm




1 / A1.12 FOURTH FLOOR DEMOLITION PLAN
SCALE: 1:100

**Notes:**

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Designated Substances and Hazardous Materials Legend

- SM-1234 — Sample Identification
- ACM Pipe Insulation Straights
- ACM Pipe Insulation Elbows/Fittings
- Post 1990 Construction
- ACM Vinyl Floor Tile
- Fire Door

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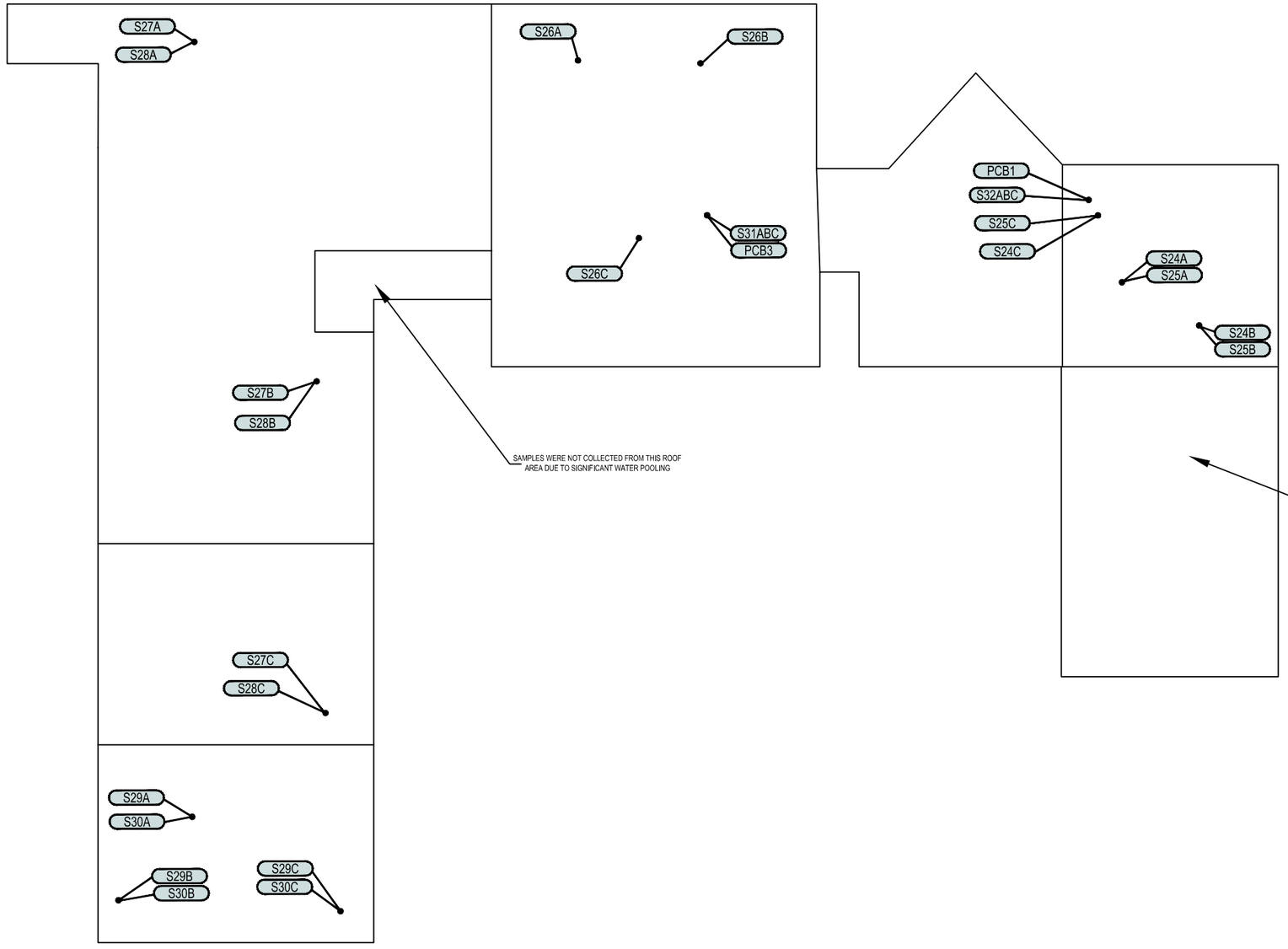
PROJECT
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

DRAWING
MARY HOPKINS ELEMENTARY SCHOOL

FOUTH FLOOR

| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | MARCH 2023 |
| Basepian By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV | Drawing No. | 1.4 |
| Scale | N.T.S. | | |

March 1, 2023 - 2:00 pm - Plotted By: MVanRuyven
CAD: P:\P\53042\100\53042-100 FIGURE.DWG
Project: 52258-102




**Notes:**

ALL DRAWINGS TO BE REFERENCED WITH THE DSA REPORT. LOCATIONS AND QUANTITIES ARE APPROXIMATE.

ALL KNOWN OR SUSPECT DESIGNATED SUBSTANCES ARE NOT DEPICTED ON THIS FIGURE. REFER TO THE DSA REPORT FOR A COMPLETE LIST OF IDENTIFIED KNOWN AND SUSPECT DESIGNATED SUBSTANCES.

THIS FIGURE IS COLOUR DEPENDENT, PHOTOCOPIES MAY ALTER INTERPRETATION OF FIGURE. ALWAYS REFER TO ORIGINAL DRAWINGS AND DSA REPORT.

Designated Substances and Hazardous Materials Legend

SM-1234 Sample Identification

MTE

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CLIENT
HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

PROJECT
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

DRAWING
MARY HOPKINS ELEMENTARY SCHOOL

ROOF LEVEL

| | | | |
|---|---|---|---|
| Project Manager | G. OAKES | Date | MARCH 2023 |
| Baseplan By | CLIENT | Project No. | 53042-100 |
| Figure By | MJV | Drawing No. | 1.5 |
| Scale | N.T.S. | | |

Project: 52258-102 CAD: P:\P\53042\100\53042-100 FIGURE.DWG
March 1, 2023 - 2:00 pm - Plotted By: MVanRuyven

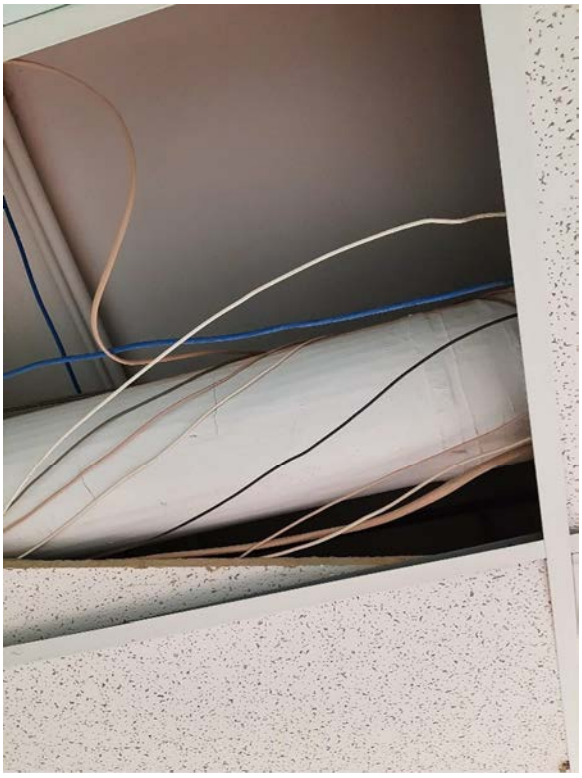
# Appendix D

# Photographic Log

**Photograph No. 1 – The Vinyl Floor tile in classrroms 218 and 215 is asbestos-containing. The associated mastic is non-asbestos.**

**Photograph No. 2 – Aircell pipe insulation on pipe straights throughout the boiler room and adjacent mechanical rooms is asbestos-containing. The parging on pipe fittings is also asbestos-containing.**

**Photograph No. 3 – Fire doors were observed in the boiler room and are suspected to contain asbestos insulation.**



**Photograph No. 4 – Asbestos-containing aircell pipe insulation was observed on pipe straights in the basement above ceilings throughout. Associated parging on pipe fittings also contains asbestos.**

**Photograph No. 5 – The beige paint on interior walls is lead-containing.**

**Photograph No. 6 – The grey paint on walls in classrooms is lead-containing.**

**Photograph No. 7– The white paint on the foundation is lead-based. The brown paint on exterior doors and windows is Lead-based. The exterior brick mortar was sampled and does not contain asbestos.**


**Photograph No. 8 – Window mounted air conditioning units were found throughout the building in classrooms and are suspected to contain ozone depleting substances.**

**Photograph No. 9– The boiler is suspected to contain asbestos components such as gaskets.**


**Photograph No. 10– Suspect lead solder on copper piping was observed in the boiler room.**

**Photograph No. 10– The drywall ceiling in the Gymnasium does not contain asbestos.**

**Photograph No. 11– Roof mounted air handling units were observed and are suspected to contain ozone depleting substances.**

**Photograph No. 12– Mercury contain fluorescent light tubes were observed throughout the interior. Associated light ballasts could not be de-energized and accessed; therefore, they are suspected to contain PCBs.**

**Photograph No. 14– 1'x1' small pinhole and large pinole ceiling tiles above the drop ceiling in Room 205 were sampled and do not contain asbestos. These same tiles are present at various locations throughout the ground floor.**

**Photograph No. 13– 2'x4' medium fissure random pinhole ceiling tile was sampled in room 205 and does not contain asbestos.**

**Photograph No. 15– Mastic was sampled above the drop ceiling in room 215 and does not contain asbestos.**

**Photograph No. 16– The mastic behind the classroom chalkboards was sampled and is asbestos-containing.**