HAZARDOUS MATERIALS SURVEY AND 2025 REASSESSMENT
MONTPETIT HALL – 125 UNIVERSITY PRIVATE, OTTAWA, ON

Project No.: CCO-252985-00

Prepared for:

University of Ottawa

Prepared by:

Egis Canada Limited (Egis)

Egis Contact:

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Date:

March 20, 2026

egis

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REASSESSMENT SURVEY 2025

Egis Canada Limited **(Egis)** was retained by the University of Ottawa, to complete to a hazardous materials survey of Montpetit Hall located at 125 University Private, Ottawa, Ontario. The original survey was conducted on March 6th, 9th, and 12th, 2020. The reassessment was completed on December 10th, 2024.

The purpose of the reassessment was to evaluate the condition and quantity of previously reported asbestos-containing materials (ACM) and develop corrective action plans as required for the purposes of long-term management.

The assessment and reassessment determined the following findings and recommendations.

Summary of the Reassessment Findings:

- ACM Drywall Joint Compound (DJC) wall and ceiling finishes was observed to be in Good Condition throughout the subject building.
- ACM Plaster wall and ceiling finishes was observed to be in Good Condition throughout the subject building.
- ACM Texture Coat on ceiling was observed to be in Good Condition in select areas of the subject building.
- ACM Vinyl Floor Tiles (VFTs) were observed to be in Good Condition in select areas of the subject building.
- ACM Ceiling Tiles were observed to be in Good Condition in Room 415, 405 and 405A of the subject building.
- ACM Tar on Aluminium Pipe/Elbow Wrap was observed to be in Good Condition in select areas of the subject building.
- ACM Parging Cement Fittings/Elbows was observed to be in Good Condition in the subject building.
- ACM Caulking materials (Tan and Grey) were observed to be in Good and Fair Condition in select areas of the subject building.
- No mould or water damaged materials were observed during the site survey.

Summary of Recommendations:

- Perform a reassessment of asbestos materials on an annual basis.
- Perform a pre-construction assessment and remove all asbestos-containing materials (ACM) prior to alterations or maintenance work if ACM may be disturbed by the work.
- Follow appropriate safe work procedures when handling or disturbing asbestos.

- Sample any presumed ACM prior to alteration or maintained work if presumed ACM may be disturbed by the work.

EXECUTIVE SUMMARY

Egis Canada Limited **(Egis**) was retained by the University of Ottawa to complete a Hazardous Materials Survey of Montpetit Hall located at 125 University Private, Ottawa, Ontario. The survey was conducted on March 6th, 9th, and 12th, 2020. **The Reassessment Survey was conducted on December 10th, 2024.**

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons and mould.

Based on the assessment conducted by Egis, the following asbestos-containing materials (ACMs) were identified or suspected to be present in the building:

Table A: Summary of Asbestos-Containing Materials Identified

Material Description	Friable?	Location	Type of Asbestos
Vinyl Floor Tiles	No	Specific Areas Only	Chrysotile
Ceiling Tiles	-*	Specific Areas Only	Amosite
Plaster	Yes	Throughout Building	Chrysotile
Drywall Joint Compound	-*	Throughout Building	Chrysotile
Mechanical Pipe Insulation	Yes	Specific Areas Only	Chrysotile
Tar on Aluminium Pipe Wrap	No	Specific Areas Only	Chrysotile
Texture Coat	Yes	Specific Areas Only	Chrysotile
Caulking	No	Specific Areas Only	Chrysotile
Flexible Duct Connector	-	Specific Areas Only	Chrysotile
Concrete Block Mortar	-	Throughout Building	Suspected
Ceramic Wall/Floor Tile Grout	-	Throughout Building	Suspected
Fire Doors	-	Throughout Building	Suspected
Roofing Materials	-	Roof	Suspected

Note: Please refer to the complete report for specific details and recommendations.

* As per O. Reg. 278/05, an asbestos record must indicate whether asbestos-containing materials (ACMs) are friable or non-friable, as friability influences the required work procedures for their disturbance or removal. However, for specific materials such as asbestos-containing drywall joint compound (DJC) and ceiling tiles (CT), the regulation provides prescriptive requirements regardless of friability. Consequently, this summary uses a dash (–) to indicate that friability is not applicable to DJC and CT.

All repairs or removal of ACMs must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos-containing waste must also be handled and disposed of according

to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey should be assumed to contain asbestos until proven otherwise by analytical testing;

Sub-trades working with or in close proximity to ACMs should be informed of their presence;

Given that ACMs have been identified and will likely remain in place, an Asbestos Management Plan is required, and an ACMs inventory must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities.

Based on the assessment conducted by Egis, the following Designated Substances and Hazardous Materials were identified or suspected to be present in the building:

Table B: Summary of Designated Substances & Hazardous Materials Identified

Material Description	Location
Lead Paint	Throughout Building
Lead Acid Batteries	Specific Equipment
Mercury Liquid	Specific Equipment
Mercury Vapour	Specific Equipment
Silica	Throughout Building
Ozone Depleting Substances	Specific Equipment

Note: Please refer to the complete report for specific details and recommendations.

Designated Substances area regulated under Ontario Regulation 490/09 — Designated Substances, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to Ontario Regulation 490/09, the following guidelines must also be adhered to when conducting work activities that involve disturbance of the materials mentioned above:

- Guideline: Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour
- Guideline: Silica on Construction Projects issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Environmental Abatement Council of Canada (EACC) Lead Abatement Guidelines.

Prior to any renovations or demolition activities within the building, designated substances and hazardous materials must be decommissioned by a licensed contractor such that they are contained and not released to the environment during decommissioning as per O. Reg. 347/09- made under the Environmental Protection Act.

Any suspect building materials encountered that were not assessed as part of this survey should be assumed to contain designated substances until proven otherwise by analytical testing.

This report should be made available to contractors tendering on any renovation or Any demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

This executive summary is not to be used alone. This report should be reviewed in its entirety.

March 20, 2026

University of Ottawa
141 Louis-Pasteur Private
Ottawa, Ontario
K1N 1E3

via email: martine.bergeron@uottawa.ca

Attention: Martine Bergeron, Senior Specialist, Occupational Health and Safety

Re: Montpetit Hall - 125 University Private, Ottawa, Ontario
Hazardous Materials Survey and 2025 Reassessment
Egis Canada Limited Reference No. CCO-252985-00

1.0 INTRODUCTION

In accordance with your instructions, Egis Canada Limited (Egis) carried out a Hazardous Materials Survey of Montpetit Hall located at 125 University Private, Ottawa. The site is located at the intersection of Cumberland Street and Waller Street. The survey of the building was conducted on March 6th, 9th, and 12th, 2020. **The Reassessment Survey was conducted on December 10th, 2024.**

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons and mould.

Egis completed the following,

- Visual review of the building to identify materials which could contain Designated Substances and hazardous materials;
- Review of previously completed Hazardous Materials Survey(s) and historical building record(s); and,
- Recommendations for appropriate action where required.

2.0 PROPERTY DESCRIPTION

The subject building is a five-storey building originally constructed in 1972 and is approximately 198, 648 square feet in size. The subject building was observed to be constructed with a concrete slab floor; metal roof supported by steel trusses, beams and columns. The interior walls were gypsum wallboard, plaster and concrete block. Within the subject building, ceilings were observed to be either suspended ceiling tiles or open ceiling with an exposed concrete deck. The flooring was generally observed to be poured concrete, carpet, ceramic tiles and vinyl floor tiles.

3.0 FINDINGS & RECOMMENDATIONS

Designated Substances

3.1 Asbestos

Previous Findings

A total of one-hundred and thirty-three (133) bulk samples were previously collected during and sent to an accredited laboratory for analysis. A summary of potential asbestos-containing samples collected along with the sample location, type and friability are presented in Table 1.

The Laboratory Certificates of Analysis for asbestos are included in **Appendix C**.

Table 1:

Asbestos Laboratory Results

Sample ID	Location	Material	Type and Content	Friability
BS 1.1	Room 144	SCT (2'x4'- Pinholes with Medium Fissures)	None Detected	N/A
BS 1.2	Room 144	SCT (2'x4'- Pinholes with Medium Fissures)	None Detected	N/A
BS 1.3	Room 144	SCT (2'x4'- Pinholes with Medium Fissures)	None Detected	N/A
BS 2.1	Room 329	VFT (12"x12"- Beige with White Flakes)	None Detected	N/A
BS 2.2	Room 329	VFT (12"x12"- Beige with White Flakes)	None Detected	N/A
BS 2.3	Room 329	VFT (12"x12"- Beige with White Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 3.1	Room 500	Cardboard Insulation	None Detected	N/A
BS 3.2	Room 500	Cardboard Insulation	None Detected	N/A
		Tar Paper	None Detected	N/A
BS 3.3	Room 500	Cardboard Insulation	None Detected	N/A
		Tar Paper	None Detected	N/A
BS 4.1	Room 016	VFT (12"x12"- Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 4.2	Room 016	VFT (12″x12″- Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 4.3	Room 016	VFT (12″x12″-Red)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 5.1	Room 016	VFT (12″x12″-Grey w/ Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 5.2	Room 016	VFT (12″x12″-Grey w/ Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
		Leveler (Grey)	None Detected	N/A
BS 5.3	Room 016	Grey and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 6.1	Room 303	VFT (12″x12″-Pink with Brown and White Flakes)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 6.2	Room 303	VFT (12″x12″-Pink with Brown and White Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 6.3	Room 303	VFT (12″x12″-Pink with Brown and White)	None Detected	N/A
BS 7.1	Room 200A	VFT (12″x12″-Beige)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 7.2	Room 200A	VFT (12″x12″-Beige)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
		Mastic (Beige)	None Detected	N/A
		Leveler (Grey)	None Detected	N/A
BS 7.3	Room 200A	VFT (12″x12″-Beige)	None Detected	N/A
		Mastic/Levelling Compound (Grey/Yellow/Beige)	None Detected	N/A
BS 8.1	Room 108	SCT (2′x4′- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 8.2	Room 108	SCT (2′x4′- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 8.3	Room 108	SCT (2′x4′- Uniform Pinholes with Small Fissures)	None Detected	N/A
BS 9.1	Room 141	VFT (12″x12″- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 9.2	Room 141	VFT (12″x12″- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 9.3	Room 141	VFT (12″x12″- Light Green)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 10.1	Room 232A	SCT (2′x4′- Uniform Pinholes)	None Detected	N/A
BS 10.2	Room 232A	SCT (2′x4′- Uniform Pinholes)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 10.3	Room 232A	SCT (2'x4'- Uniform Pinholes)	None Detected	N/A
BS 11.1	Room 235	VFT (12"x12"- Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 11.2	Room 235	VFT (12"x12"- Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 11.3	Room 235	VFT (12"x12"- Beige)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 12.1	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 12.2	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 12.3	Room 140	VFT (12"x12"-Dark Green)	None Detected	N/A
BS 13.1	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 13.2	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 13.3	Room 300	VFT (12"x12"-Beige w/ Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 14.1	Room 317	VFT (12"x12"- White w/ Brown Flakes)	None Detected	N/A
BS 14.2	Room 317	VFT (12"x12"- White w/ Brown Flakes)	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A
BS 14.3	Room 317	VFT (12"x12"- White w/ Brown Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 15.1	**Room 304A**	**VFT (12"x12"- White w/ Black Dots in a Vertical Line)**	**2% Chrysotile**	**Non-Friable**
		Mastic (Black)	None Detected	N/A
BS 15.2	**Room 304A**	**VFT (12"x12"- White w/ Black Dots in a Vertical Line)**	**Stop Positive - Not Analyzed**	**Non-Friable**
		Mastic (Black)	None Detected	N/A
BS 15.3	**Room 304A**	**VFT (12"x12"- White w/ Black Dots in a Vertical Line)**	**Stop Positive - Not Analyzed**	**Non-Friable**
		Mastic (Black)	None Detected	N/A
BS 16.1	Room 205	SCT (1'x1'-Pinholes with Large Fissures)	None Detected	N/A
BS 16.2	Room N110	SCT (1'x1'-Pinholes with Large Fissures)	None Detected	N/A
BS 16.3	Room N110	SCT (1'x1'-Pinholes with Large Fissures)	None Detected	N/A
BS 17.1	Room 430	Plaster (Stipple)	None Detected	N/A
		Plaster (Drywall)	None Detected	N/A
BS 17.2	Room 431	Plaster (Base)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 17.3	Room 500	Plaster (Base)	None Detected	N/A
BS 17.4	Room 144A	Plaster (Base)	None Detected	N/A
BS 17.5	**Room 107**	**Plaster (Finish)**	**10% Chrysotile**	**Friable**
BS 17.6	**Room 400F**	**Plaster (Finish)**	**Stop Positive - Not Analyzed**	**Friable**
BS 17.7	**Room 400F**	**Plaster (Finish)**	**Stop Positive - Not Analyzed**	**Friable**
BS 18.1	Room 401D	Carpet Mastic (Yellow)	None Detected	N/A
BS 18.2	Room 401D	Carpet Mastic (Yellow)	None Detected	N/A
BS 18.3	Room 200	Carpet Mastic (Yellow)	None Detected	N/A
BS 20.1	**Room 415**	**SCT (2'x4'- Pinholes with Wavy Fissures)**	**0.5% Amosite**	**-**
BS 20.2	**Room 415**	**SCT (2'x4'- Pinholes with Wavy Fissures)**	**Stop Positive - Not Analyzed**	**-**
BS 20.3	**Room 415**	**SCT (2'x4'- Pinholes with Wavy Fissures)**	**Stop Positive - Not Analyzed**	**-**
BS 21.1	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 21.2	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 21.3	Room 432	Ceiling Texture Coat	None Detected	N/A
BS 22.1	Room 424	VFT (12'x12"- Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 22.2	Room 424	VFT (12'x12"- Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 22.3	Room 424	VFT (12'x12"- Grey with Yellow, Red, Black and White)	None Detected	N/A
BS 23.1	Room 204	VFT (12'x12"- Grey with White and Black Swirls)	None Detected	N/A
BS 23.2	Room 204	VFT (12'x12"- Grey with White and Black Swirls)	None Detected	N/A
BS 23.3	Room 204	VFT (12'x12"- Grey with White and Black Swirls)	None Detected	N/A
BS 24.1	Room 422A	VFT (12'x12"- Brown and White Mix)	None Detected	N/A
		Mastic (Beige)	None Detected	N/A
BS 24.2	Room 422A	VFT (12'x12"- Brown and White Mix)	None Detected	N/A
BS 24.3	Room 422A	VFT (12'x12"- Brown and White Mix)	None Detected	N/A
BS 25.1	Room 204	VFT (12'x12"- Green with White Swirls)	None Detected	N/A
BS 25.2	Room 204	VFT (12'x12"- Green with White Swirls)	None Detected	N/A
BS 25.3	Room 204	VFT (12'x12"- Green with White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 26.1	Room 207	VFT (12'x12"- Grey/Black, Brown Granite Pattern)	None Detected	N/A
BS 26.2	Room 207	VFT (12'x12"- Grey/Black, Brown Granite Pattern)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 26.3	Room 207	VFT (12'x12"- Grey/Black, Brown Granite Pattern)	None Detected	N/A
BS 27.1	Room 206B	VFT (12'x12"- Grey with Light and Dark Markings)	None Detected	N/A
BS 27.2	Room 206B	VFT (12'x12"- Grey with Light and Dark Markings)	None Detected	N/A
BS 27.3	Room 206B	VFT (12'x12"- Grey with Light and Dark Markings)	None Detected	N/A
BS 28.1	Room 415	VFT (12'x12"- Brown with White and Grey Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.2	Room 415	VFT (12'x12"- Brown with White and Grey Swirls)	None Detected	N/A
BS 28.3	Room 415	VFT (12'x12"- Brown with White and Grey Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 29.1	Room 201	VFT (12'x12"- Grey with Orange Markings)	None Detected	N/A
BS 29.2	Room 201	VFT (12'x12"- Grey with Orange Markings)	None Detected	N/A
BS 29.3	Room 201	VFT (12'x12"- Grey with Orange Markings)	None Detected	N/A
BS 30.1	Room 0010	Wallpaper	None Detected	N/A
BS 30.2	Room 0010	Wallpaper	None Detected	N/A
BS 30.3	Room 0010	Wallpaper	None Detected	N/A
BS 31.1	Room 405A	VFT (12'x12"- Grey with Brown Light and Dark Markings)	None Detected	N/A
BS 31.2	Room 405A	VFT (12'x12"- Grey with Brown Light and Dark Markings)	None Detected	N/A
BS 31.3	Room 405A	VFT (12'x12"- Grey with Brown Light and Dark Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 32.1	Room 225	VFT (12'x12"- Grey with Brown/White and Green)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 32.2	Room 225	VFT (12'x12"- Grey with Brown/White and Green)	None Detected	N/A
BS 32.3	Room 225	VFT (12'x12"- Grey with Brown/White and Green)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 33.1	Room 420C	VFT (12'x12"- White with Blue and Grey)	None Detected	N/A
BS 33.2	Room 420C	VFT (12'x12"- White with Blue and Grey)	None Detected	N/A
BS 33.3	Room 420C	VFT (12'x12"- White with Blue and Grey)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 34.1	Room 419A	VFT (12'x12"- Grey with Pink)	None Detected	N/A
BS 34.2	Room 419A	VFT (12'x12"- Grey with Pink)	None Detected	N/A
BS 34.3	Room 419A	VFT (12'x12"- Grey with Pink)	None Detected	N/A
BS 35.1	Room 221	VFT (12'x12"- Beige with Light Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 35.2	Room 221	VFT (12'x12"- Beige with Light Markings)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 35.3	Room 221	VFT (12'x12"- Beige with Light Markings)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 36.1	Room 207	VFT (12'x12"- Grey/Light Black)	None Detected	N/A
BS 36.2	Room 207	VFT (12'x12"- Grey/Light Black)	None Detected	N/A
		Mastic (Black/Beige)	None Detected	N/A
BS 36.3	Room 207	VFT (12'x12"- Grey/Light Black)	None Detected	N/A
		Mastic/Leveler (Grey/Yellow)	None Detected	N/A
BS 37.1	**Room 422C**	**Pipe Fitting/Elbow Parging Cement**	**55% Chrysotile**	**Friable**
BS 37.2	**Room 422C**	**Pipe Fitting/Elbow Parging Cement**	**Stop Positive - Not Analyzed**	**Friable**
BS 37.3	**Room 422C**	**Pipe Fitting/Elbow Parging Cement**	**Stop Positive - Not Analyzed**	**Friable**
BS 38.1	Room 409C	VFT (12'x12"- Brown and White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 38.2	Room 409C	VFT (12'x12"- Brown and White Swirls)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 38.3	Room 409C	VFT (12'x12"- Brown and White Swirls)	None Detected	N/A
BS 39.1	Room 415	VFT (12'x12"- Brown with Black Dots)	None Detected	N/A
BS 39.2	Room 415	VFT (12'x12"- Brown with Black Dots)	None Detected	N/A
BS 39.3	Room 415	VFT (12'x12"- Brown with Black Dots)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 40.1	**Room 0024**	**Wall Caulking (Tan)**	**6% Chrysotile**	**Non-Friable**
BS 40.2	**Room 0024**	**Wall Caulking (Tan)**	**Stop Positive - Not Analyzed**	**Non-Friable**
BS 40.3	**Room 0024**	**Wall Caulking (Tan)**	**Stop Positive - Not Analyzed**	**Non-Friable**
Project Specific (Egis, formerly MPL – Nov 26, 2019)				
SA-01A	Montpetit Overpass	Mastic (Brown), Styrofoam	None Detected	N/A
SA-01B	Montpetit Overpass	Mastic (Brown), Styrofoam	None Detected	N/A
SA-01C	Montpetit Overpass	Mastic (Brown), Styrofoam	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
SA-02A	**Montpetit Overpass**	**Mastic (Green), Styrofoam**	**1% Chrysotile**	**Non-Friable**
SA-02B	**Montpetit Overpass**	**Mastic (Green), Styrofoam**	**Stop Positive - Not Analyzed**	**Non-Friable**
SA-02C	**Montpetit Overpass**	**Mastic (Green), Styrofoam**	**Stop Positive - Not Analyzed**	**Non-Friable**
Project Specific (Egis, formerly MPL – January 9, 2020)				
SA-01A	**Mechanical Room – Next to ladder**	**Elbow – Domestic Hot Water**	**60% Chrysotile**	**Friable**
SA-01B	**Mechanical Room – Next to ladder**	**Elbow – Domestic Hot Water**	**Stop Positive - Not Analyzed**	**Friable**
SA-01C	**Mechanical Room – Next to ladder**	**Elbow – Domestic Hot Water**	**Stop Positive - Not Analyzed**	**Friable**
Project Specific (Buller Crichton Environmental Inc. – May 17, 2021) Ref. # 21-348				
AS-01 (A)	Men's Locker Room Ceiling Space	Black Tar on Fibreglass Pipe Insulation	None Detected	N/A
AS-01 (B)	Men's Locker Room Ceiling Space	Black Tar on Fibreglass Pipe Insulation	None Detected	N/A
AS-01 (C)	Men's Locker Room Ceiling Space	Black Tar on Fibreglass Pipe Insulation	None Detected	N/A
Project Specific (Buller Crichton Environmental Inc. – May 23, 2021) Ref. # 21-426				
SA-01 (A)	Room 207	Acoustic Ceiling Tile – 30cm x 30cm	None Detected	N/A
SA-01 (B)	Room 207	Acoustic Ceiling Tile – 30cm x 30cm	None Detected	N/A
SA-01 (C)	Room 207	Acoustic Ceiling Tile – 30cm x 30cm	None Detected	N/A
SA-02 (A)	Room 207	Adhesive Associated with 30cm x 30cm Acoustic Ceiling Tile	None Detected	N/A
SA-02 (B)	Room 207	Adhesive Associated with 30cm x 30cm Acoustic Ceiling Tile	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
SA-02 (C)	Room 207	Adhesive Associated with 30cm x 30cm Acoustic Ceiling Tile	None Detected	N/A

N/A – Not Applicable
VFT – Vinyl Floor Tiles
SCT – Suspended Ceiling Tiles
Stop Positive – Material considered to be asbestos-containing as per O. Reg. 278/05.

Please refer to **Appendix E** – Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable), and recommended actions.

The following building materials (if present) were investigated for asbestos content.

3.1.1 Fireproofing

No fireproofing was observed throughout the subject building.

3.1.2 Mechanical Pipe Insulation

3.1.2.1 Mechanical Pipe Straight Insulation

Mechanical pipe straight insulation (cardboard insulation) was observed and previously sampled in Room 500. The laboratory analytical results of the samples previously collected indicate that this material does not contain asbestos.

Mechanical pipe straight insulation was observed in the basement level. Egis made several incisions throughout to investigate its composition, and it was visually identified as fiberglass, and therefore not suspected of containing asbestos.

3.1.2.2 Mechanical Piping Elbows/Fittings Insulation

Parging cement pipe elbow/fitting insulation was observed throughout the subject building and sampled in Room 422C. The laboratory analytical results of the samples collected indicate that this material **contains 55% Chrysotile asbestos**. **This material was observed to have been removed during the 2022 Reassessment.**

Previously identified asbestos-containing parging cement mechanical insulation on pipe elbows/fittings were observed in Rooms 0012, 002, 003B, 002A, 007B, 007A, 009, 0012, 011, 02C, 022, 023, 024, 050, 051,213, 200, 205A, 216, 306B, 311D, 316A. This material was previously sampled was determined to **contain between 5-60% Chrysotile asbestos** and is considered to be friable. This material was observed to be in good condition during the 2025 Reassessment.

3.1.2.3 Mechanical Piping Hangers Insulation

No mechanical pipe hanger insulation was observed in the subject building.

3.1.2.4 HVAC Duct Insulation

No HVAC duct insulation was not observed in the subject building.

3.1.2.5 Other Mechanical Insulation

Previously identified tar on aluminum wrap was observed on pipe straight and fittings in Rooms 200 and 02C. This material was previously sampled was determined to **contain 5% Chrysotile asbestos** and is considered to be non-friable. This material was observed to be in good condition during the 2025 Reassessment..

3.1.3 Flexible Duct Connector

To avoid damage and compromising the integrity of the structure, no bulk samples of the flexible duct connector in Room 020C were collected. Prior to renovation/demolition, flexible duct connector should be examined and tested for asbestos content. Flexible duct connector should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.4 Heat Shield or Heat Shield Insulation

No potential asbestos-containing heat shield insulation was observed in the subject building.

3.1.5 Texture Finishes

Ceiling texture coat was observed and sampled in Room 432. The laboratory analytical results indicate that this material does not contain asbestos.

Previously identified asbestos-containing texture coat on ceiling plaster was observed in Room 107 and Room 424B This material **contains 2% Chrysotile asbestos** and is considered friable. Since texture is a homogeneous material, all areas must be treated as asbestos.

3.1.6 Plaster

Plaster was observed throughout the building and sampled in Room 430, 431, 500, 144A, 107 400F. The laboratory analytical results indicate that this material **contains 10% Chrysotile asbestos**. Since plaster is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis proves otherwise. This material is considered to be friable was observed to be in good condition.

3.1.7 Drywall Joint Compound

Previously identified asbestos-containing drywall joint compound was observed in Room 404. This material **contains 2% Chrysotile asbestos**. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional testing confirms otherwise. This material was observed in good condition.

3.1.8 Ceiling Tiles

Several different ceiling tiles were observed and previously sampled within the subject building as follows:

- Suspended ceiling tiles (2'x4' – Pinholes with Wavy Fissures) were observed and previously sampled in Room 415, 405 and 405A. The laboratory analytical results indicate that this material **contains 0.5% Amosite asbestos**. This material was observed to be in good condition.
- Suspended ceiling tiles (2'x4' – Pinholes with Medium Fissures) were observed and previously sampled in Room 144. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (2'x4' – Uniform Pinholes with Small Fissures) were observed and previously sampled in Room 108. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (2'x4' - Uniform Pinholes) were observed and previously sampled in Room 232A. The laboratory analytical results indicate that this material does not contain asbestos.
- Suspended ceiling tiles (1'x1' – Pinholes with Large Fissures) were observed and previously sampled in Rooms 205 and N110. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.

3.1.9 Vinyl Floor Tiles

Several different types of vinyl floor tiles were observed and previously sampled within the subject building as follows:

- Previously identified asbestos-containing vinyl floor tiles (12" x 12" – White with Black Dots) were observed in Room 300, 301C, 302, 304A 428 and 400. This material **contains 39% Chrysotile asbestos** and is considered to be non- friable. This material was observed to be in good condition.
- Previously identified asbestos-containing vinyl floor tiles (12" x 12" – Brown with Spots) were observed in 415A and 300D. This material **contains 10% Chrysotile asbestos** and is considered non-friable. This material was observed to be in good condition.
- Vinyl floor tiles (12" x 12" – White with Black Dots in Vertical Line) were observed and previously sampled in Room 304A. The laboratory analytical results indicate that this material **contains 2% Chrysotile asbestos**. This material is considered to be non-friable and was observed to be in good condition. The associated mastic (Black) was determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige with White Flakes) were observed and previously sampled in Room 329. The laboratory analytical results indicate that this material does not contain asbestos. The associated mastic (Black) was also determined not to contain asbestos.

- Vinyl floor tiles (12" x 12" – Red) were observed and previously sampled in Room 016. The laboratory analytical results indicate that this material does not contain asbestos. The associated mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Grey and White Flakes) were observed and previously sampled in Room 016. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) and levelling compound (Grey) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Pink with Brown and White Flakes) were observed and previously sampled in Room 303. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige) were observed and previously sampled in Room 200A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow/Beige) and levelling compound (Grey) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Light Green) were observed and previously sampled in Room 141. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige) were observed and previously sampled in Room 235. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Dark Green) were observed and previously sampled in Room 140. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" –Beige with Black Dots) were observed and previously sampled in Room 300. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –White with Brown Flakes) were observed and previously sampled in Room E317. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" –Grey with Yellow, Red, Black and White) were observed and previously sampled in Room 424. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" –Grey with White and Black Swirls) were observed and previously sampled in Room 204. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown and White Mix) were observed and previously sampled in Room 422A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Beige) was also determined not to contain asbestos.

- Vinyl floor tiles (12" x 12" – Green with White Swirls) were observed and previously sampled in Room 204. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey/Black, Brown Granite Pattern) were observed and previously sampled in Room 207. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Light and Dark Markings) were observed and previously sampled in Room 206B. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown with White and Grey Swirls) were observed and previously sampled in Room 415. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Orange Markings) were observed and previously sampled in Room 201. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Brown Light and Dark Markings) were observed and previously sampled in Room 405A. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Brown/White and Green) were observed and previously sampled in Room 225. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – White with Blue and Grey) were observed and previously sampled in Room 420C. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey with Pink) were observed and previously sampled in Room 419A. The laboratory analytical results indicate that this material does not contain asbestos.
- Vinyl floor tiles (12" x 12" – Beige with Light Markings) were observed and previously sampled in Room 221. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black) was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Grey/Light Black) were observed and previously sampled in Room 207. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Black/Beige/Yellow) and levelling compound (Grey)was also determined not to contain asbestos.
- Vinyl floor tiles (12" x 12" – Brown and White Swirls) were observed and previously sampled in Room 409C. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.

- Vinyl floor tiles (12" x 12" – Brown with Black Dots) were observed and previously sampled in Room 415. The laboratory analytical results indicate that this material does not contain asbestos. The mastic (Yellow) was also determined not to contain asbestos.

3.1.10 Vinyl Sheet Flooring

No vinyl sheet flooring was observed in the subject building.

3.1.11 Brick Mortar

No brick mortar was observed in the subject building.

3.1.12 Concrete Block Mortar

To avoid damage and compromising the integrity of the structure, no bulk samples of the concrete block mortar were collected. Prior to renovation/demolition, concrete block mortar should be examined and tested for asbestos content. Concrete block mortar should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.13 Ceramic Wall / Floor Tile Grout

To avoid damage and compromising the integrity of the structure, no bulk samples of the ceramic wall/floor tile grout were collected. Prior to renovation/demolition, ceramic wall/floor tile grout should be examined and tested for asbestos content. Ceramic wall/floor tile grout should therefore be considered to contain asbestos until bulk samples and analysis proves otherwise.

3.1.14 Mastic

Several different types of vinyl floor tiles were observed and previously sampled within the subject building as follows:

- Carpet Mastic (Yellow) was observed and previously sampled in Rooms 401D and 200. The laboratory analytical results indicate that this material does not contain asbestos.
- Soffit Styrofoam Mastic (Brown) was observed and previously sampled in the Montpetit Overpass. The laboratory analytical results indicate that this material does not contain asbestos.
- Soffit Styrofoam Mastic (Green) was observed and previously sampled in Montpetit Overpass. corridor. This material **contains 1% Chrysotile asbestos** and is considered to be non-friable. This material was removed during the 2019 abatement of soffit materials.
- Adhesive/mastic associated with 30cmx30cm ceiling tiles observed and previously sampled in Room 207. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.15 Transite (Asbestos Cement)

No transite materials were observed in the subject building.

3.1.16 Wallpaper

Wallpaper (Brown/White) was observed and previously sampled in Room 0010. The laboratory analytical results of the wallpaper samples collected from Room 0010 indicate that this material does not contain asbestos.

3.1.17 Caulking

Several different types of caulking were observed and previously sampled within the subject building as follows:

- Wall Caulking (Tan) was observed and previously sampled in Room 0024. The laboratory analytical results indicate that this material **contains 6% Chrysotile**. This material is considered to be non-friable and was observed to be in fair condition.
- Previously identified asbestos-containing caulking (Grey) was observed in the basement corridor. This material **contains 4% Chrysotile asbestos** and is considered to be non-friable. This material was observed to be in good condition.

3.1.18 Cementitious Coating

No potential asbestos-containing cementitious coating finishes were observed throughout the subject building.

3.1.19 Tar

Black tar associated with fibreglass pipe insulation was observed and previously sampled from above-ceiling in the men's locker room. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.20 Fire Doors

Fire doors were observed at various locations throughout the subject building. To avoid possible damage, no bulk samples of the internal door insulation materials were collected. Prior to removal and/or replacement, fire doors should be examined and tested for asbestos content. Fire doors should be considered to contain asbestos until bulk samples and analysis proves otherwise. All fire doors were observed to be in good condition.

3.1.21 Roofing Material

To avoid damage and compromising the integrity of roofing material, no bulk samples of the roofing materials were collected. Prior to removal and/or replacement, roofing materials should be examined and tested for asbestos content. Roofing materials should be considered to contain asbestos until bulk samples and analysis proves otherwise.

Recommendations

Materials identified to contain asbestos that are in good condition and do not pose a risk to workers or occupants can be managed in place. Prior to renovation/demolition activities that may disturb the ACMs, these materials must be removed following appropriate Type 1/2/3 asbestos abatement work procedures as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347.

Please refer to Appendix E – Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable), and recommended actions.

Prior to renovation/demolition of materials which are assumed to be asbestos-containing (suspect materials which were not sampled, i.e., roofing materials, concrete block mortar, ceramic wall/floor tile grout and fire doors), these materials must either be tested for asbestos content or removed following appropriate asbestos abatement work procedures (Type 1/2/3) as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347.

All repairs or removal of asbestos-containing materials must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos containing waste must also be handled and disposed of according to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey, should be assumed to contain asbestos until proven otherwise by analytical testing.

Sub-trades working with or in close proximity to asbestos-containing material should be informed of its presence.

Given that asbestos containing materials (ACMs) have been identified and will likely remain in place, an Asbestos Management Plan (AMP) is therefore required and an inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities.

3.2 Lead

Previous Findings

3.2.1 Paint Finishes

A total of seventeen (17) paint samples from the subject building were previously collected and analyzed for lead content. Results of bulk sampling testing are summarized in Table 2 and the laboratory certificate of analysis can be found in **Appendix C**.

Table 2:

Lead Sampling Locations and Laboratory Results

Sample I.D.	Location	Material	Colour	Lead Concentration Weight by Conc. (%)
Pb 1	Room 316	Door Paint	Orange	1.4%
Pb 2	Room 315	Wall Paint	Light Blue	<0.061%
Pb 3	Room 200	Wall Paint	Purple	<0.013%
Pb 4	Room 203	Floor Paint	Blue	<0.087
LBP-120106-01	Room 428	Base of Window Paint	Red	0.91%
LBP-120106-02	Room 400	Door Frame Paint	Blue	<0.05%
LBP-120106-03	Room 200	Wall Paint	Yellow	0.22%
LBP-120106-04	Room 221	Door Frame Paint	Green	<0.02%
LBP-120106-05	Room 024	Wall Paint	Grey	0.05%
LBP-120106-06	Room 025	Ceiling Paint	Grey	<0.01%
LBP-120106-07	Room 0023	Wall Paint	White	<0.01%
Pb-01	Squash Court 4	Wall Paint	White	<0.002
Pb-02	Squash Court 4	Door Paint	Brown	0.059%
Pb-03	Basement Corridor	Wall Paint	Beige	0.0468%
Pb-04	Basement Corridor	Stair Paint	Grey	0.0785%
Pb-05	Basement Corridor	Fire Hose Cabinet Paint	Black	0.614%
Pb-06	Basement Corridor	Floor Paint	Grey	0.0169%
Pb-01	Mechanical Room	Floor Paint	Grey	0.0570%
Pb-02	Mechanical Room	Floor Paint	Peach	0.0104%

The paint finishes highlighted in blue in the above table was determined to contain low concentrations of lead, which are less than or equal to 0.1%. These paint finishes were observed to be in good condition.

The paint finish highlighted in pink in the above table is

considered a lead-containing paint or surface coating with concentrations greater than 0.1% lead by weight. This paint finish was observed to be in good condition.

All remaining paints tested were below the laboratory limit of detection for lead. However, all other paints throughout the subject building that are not mentioned in this report must be considered to be lead-containing unless sampling and analysis until proven otherwise.

3.2.2 Battery Packs

Egis identified lead-containing acid battery packs throughout the subject building. These battery packs were observed on walls and above exits throughout the subject building.

Lead may also be present in the following materials in the building:

- Solder used on copper domestic water lines;
- Solder used in bell fittings for cast iron pipes;
- Solder used in electrical equipment;
- Ceramic tile glaze; and
- Concrete and mortar products, etc.

Recommendations

Paints identified to contain lead that are in poor condition must be immediately repaired and/or stabilized following a minimum Type 1/2 lead abatement procedures as per OMOL "Lead on Construction Project" dated April 2011.

Paints identified to contain lead that are in fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration.

Paints identified to contain lead that are in good condition and do not pose a risk to workers or occupants can be managed in place.

Detailed worker protection protocols are outlined in the OMOL Guideline "Lead on Construction Projects" dated April 2011. Generally, removing lead-based paint with the use of a chemical gel or paste or a power tool equipped with a HEPA filter is considered a Type 1 operation. Removing lead-based paint by scraping or sanding using non-powered hand tools is considered a Type 2 operation. Removing lead-based paint using abrasive blasting or power tools without a HEPA filter is considered a Type 3 operation and requires the most stringent worker protection protocols (similar to asbestos). Furthermore, high temperature cutting or welding would also require Type 3 Operations under the Guideline for Lead on Construction Projects. If this type of work is required, it may be prudent to chemically remove the lead paint in selected locations prior to performing any high temperature cutting or welding.

All removed lead materials must follow the Ministry of Labour and Environmental Abatement Council of Canada (EACC) Lead Guidelines.

Please refer to **Appendix F** –Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions should be taken as required during major renovations and demolition projects to ensure that workers' exposure levels to airborne lead do not exceed 0.05 mg/m3. This can be achieved by:

- providing workers with proper training;

- providing the workers with respiratory protection;
- wetting the surface of the materials to prevent dust emissions; and,
- providing workers with hygiene facilities to properly wash prior to exiting the work area.

Sub-trades working with or in close proximity to lead-based paint should be informed of its presence.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347/90 as amended – made under the Environmental Protection Act. Lead waste generated may also be subject to the Leachate Criteria (Schedule 4) of this regulation.

3.3 Mercury

Findings

3.3.1 Thermostat Switches

Egis observed thermostats containing liquid mercury throughout the subject building.

3.3.2 Fluorescent Light Tubes

Egis identified fluorescent light fixtures throughout the subject building containing 2 to 4 fluorescent light tubes per fixture. Mercury is likely to be present in vapor form in the fluorescent light tubes.

3.3.3 Pressure Gauges and Float Switches

Egis did not identify any pressure gauges or float switches containing liquid mercury throughout the subject building.

Recommendations

Please refer to **Appendix F** – Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions must be taken to prevent mercury liquid/vapours from becoming airborne during building demolition. Mercury exposure is regulated under Ontario Regulation 490/09, Designated Substances - made under the Occupational Health and Safety Act." Prior to renovations to the building, all mercury-containing fluorescent light tubes must be removed and stored in a safe, secure location and/or properly disposed of under R.R.O. 1990, Regulation 347 General – Waste Management, made under the Environmental Protection Act.

3.4 Silica

Findings

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles located throughout the structures. Free crystalline silica (α-Quartz) may be a component in ceiling tiles and gypsum

board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

Recommendations

Please refer to **Appendix F** –Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions should be taken as required during major renovations and demolition projects on concrete (i.e. coring through concrete slabs, masonry demolition, etc.) to ensure that workers' exposure levels to airborne silica do not exceed 0.05 mg/m^3.

This can be achieved by:

- providing workers with proper training;
- providing the workers with respiratory protection;
- wetting the surface of the materials to prevent dust emissions; and,
- providing workers with facilities to properly wash prior to exiting the work area.

Any demolition work that is likely to impact silica-containing materials should be carried out under the requirement detailed in the Ontario Ministry of Labour document entitled "Guideline: Silica on Construction Projects," dated April 2011, and in accordance with the University of Ottawa's **Silica Exposure Control Program**, November 2020.

Other Hazardous Materials

3.5 Polychlorinated Biphenyls (PCBs)

Findings

3.5.1 Light Ballasts

The subject building is illuminated by LED and fluorescent lights. Egis assessed representative ballasts in the building, and these ballasts were identified as non-PCBs content.

3.5.2 Transformers

Egis did not observe any PCBs containing electrical transformers within the subject building. Transformers that could be assessed were observed to be dry-type.

Recommendations

Since no PCB-containing equipment was observed or suspected to be present during the site survey, no further action is required.

3.6 Ozone Depleting Substances (ODSs) and Other Halocarbon

Findings

A visual assessment for equipment potentially containing ODSs and other halocarbons was conducted. Equipment containing ODSs or other halocarbons was observed in the subject building.

Recommendations

Please refer to **Appendix F** – Hazardous Materials Checklist for equipment conditions, approximate quantities (where applicable), and recommended actions.

Under the management of a licensed contractor, equipment containing R-134a does not represent a significant threat to human health or the environment however, a licensed contractor must decommission equipment such that CFCs are contained and not released to the environment during servicing or operation.

3.7 Radioactive Materials

Findings

Egis did not observe any electrical components containing radioactive materials.

Recommendations

Since no radioactive materials were observed or suspected to be present during the site survey, no further action is required.

3.8 Underground and Above Ground Storage Tanks (USTs and ASTs)

Findings

A visual survey of the subject building was conducted to determine if any USTs and ASTs were present. No USTs and ASTs were present throughout the subject building.

Recommendations

Since no underground and/or above-ground storage tanks (USTs and ASTs) were observed or suspected to be present during the site survey, no further action is required.

3.9 Mould

Findings

3.9.1 Mould

A visual survey of the subject building was conducted to determine if any mould was present. Egis did not identify any areas with mould growth.

3.9.2 Water Damage

A visual survey of the subject building was conducted to determine if any water damaged was present. Egis did identify any areas throughout the subject building affected by water damage.

Recommendations

Please refer to **Appendix F** – Hazardous Materials Checklist for equipment conditions, approximate quantities (where applicable), and recommended actions.

Water stained/damaged materials that are also determined to contain asbestos must be replaced following appropriate asbestos abatement procedures as outlined in O.Reg. 278/05.

This report should be made available to contractors tendering on any renovation or demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report with subcontractors.

4.0 GENERAL CONSIDERATIONS AND LIMITATIONS

The information presented in this report is based on information provided by others, direct visual observation made by personnel with **Egis Canada Limited (Egis)**, and the results of laboratory testing as identified herein.

It should be noted that there might be designated substances in locations not visible during our investigation. In the event such material is encountered during demolition operations in the building, this material should be tested and dealt with accordingly.

The findings detailed in this report are based upon the information available at the time of preparation of the report. No investigative method eliminates the possibility of obtaining imprecise or incomplete information. Professional judgement was exercised in gathering and analyzing the information obtained and in the formulation of our conclusions and recommendations.

Egis does not certify or warrant the environmental status of the property nor the building on the property.

Please note that the passage of time affects the information provided in the report. Environmental conditions of a site can change. Opinions relating to the site conditions are based upon information that existed at the time that the conclusions were formulated.

The client expressly agrees that it has entered into this agreement with Egis, both on its own behalf and as agent on behalf of its employees and principals.

The client expressly agrees that Egis' employees and principals shall have no personal liability to the client in respect of a claim, whether in contract, tort and/or any other cause of action in law. Accordingly, the client expressly agrees that it will bring no proceedings and take no action in any court of law against any of Egis' employees or principals in their personal capacity.

We trust that we have detailed our findings clearly and that we have satisfactorily addressed the scope of work you require at this time. In the event you wish us to review our findings with you, or require our services further in this regard, please do not hesitate to contact our office.

Yours truly,

Egis Canada Limited

Pegah Parichehreh, M.Sc.
Project Technician
Hazardous Materials/ Environmental Health & Safety

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APPENDIX A

Regulatory Requirements

REGULATORY REQUIREMENTS

In Ontario, there is a total of eleven Designated Substances. These substances have been regulated under Ontario Regulation 490/09 — *Designated Substances*, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to the Ontario Regulation 490/09 noted above, the following were observed for this survey:

Guideline: Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour

Guideline: Silica on Construction Projects issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

The Occupational Health and Safety Act (OHSA), R.S.O. 1990, c.0.1, s.30 (1) specifies that: "Before beginning a project, the owner shall determine whether any Designated Substances are present at the project site and shall prepare a list of all Designated Substances that are present at the site.

Section 30 of The Act requires that the list of Designated Substances be provided to prospective contractors and subcontractors who may do work on a site and come into contact at the site with Designated Substances.

The Ministry of Labour has designated the following substances:

- Acrylonitrile
- Arsenic
- Asbestos
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl Chloride

Ontario Regulation 278/05 (O. Reg. 278/05), the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations, made under the Occupational Health and Safety Act (OHSA), requires owners of a building to identify Asbestos-containing Materials (ACMs) prior to potential disturbance of the materials.

In addition, an owner of a building is required to have an Asbestos Management Plan (AMP) if ACMs (friable or non-friable) are present in the building and are to remain in place. An inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities. Removal of all asbestos-containing materials is required prior to building demolition.

In addition to the Designated Substances, the building was also surveyed for the presence of other hazardous materials such as polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons, and mould.

We understand that this survey has been conducted to comply with the regulatory requirements of Ontario Regulation 278/05.

APPENDIX B

Survey Methodology & Background Information

SURVEY METHODOLOGY

For the purpose of this survey, not all Designated Substances or suspect hazardous material were sampled. Selective sampling was carried out only for substances that were suspected to be present or those deemed to have a likely source of origin in the survey areas.

Materials that were homogeneous in nature and/or similar in appearance to other materials tested were considered to be of similar composition. The likelihood of ACMs being present in inaccessible areas such as above gypsum board ceilings or behind gypsum wallboards was determined by assessing the presence of asbestos-containing systems in adjacent areas. Equipment such as boilers, motors, blowers, electrical panels, fire doors etc., were not de-energized or disassembled to examine internal components or materials. These items should be considered to contain hazardous materials until proven otherwise.

During the survey, representative samples of suspect building materials were collected and sent to AIHA accredited independent laboratory for analysis. Laboratory Certificate of Analysis are attached in **Appendix C.**

Other potential hazardous materials were identified by visual observation and/or by reviewing Material Safety Data Sheets (MSDS) and/or safety labels where available.

Investigated Areas

The survey included all accessible areas and ceiling space within 125 University Private (Montpetit Hall) as required under our scope of work. No destructive investigations were performed as part of this survey. Photographs of the areas investigated can be found in **Appendix D.**

The assessment was directed on the interior structure and finishes of the building. It did not consider current or past owner or occupant articles within the building (i.e. contents, furniture, etc.) and does not report on possible contaminants in the soil under and surrounding the building, or contents of vessels, drums, etc. that may be concealed.

Sampling and Assessment Methodologies

Sampling was conducted as part of this assessment. Results for asbestos and lead samples can be found in the Findings & Recommendation Section 3.0.

A historical review of previous designated substance survey reports and abatement reports was examined as part of this survey. Due to concerns regarding certain historical analytical results, mainly in 2008 and prior years, confirmatory re-sampling was conducted for selected materials previously identified not to contain asbestos. However, building materials previously identified to be asbestos-containing were not re-sampled. The reports are listed as follows,

- Designated Substance Inventory by Conestoga-Rovers & Associates (dated December 2007, reference # 45870(13));

- Designated Substances Survey-Weight Room & Squash Court by EHS (dated October 2015, EHS project number 04-0033-15-033);
- Project Specific Asbestos Analysis Report by EHS (dated June 22, 2011, EHS Project No.: 04-0033-11-013);
- Potential Asbestos Material Analytical Report by EHS (dated November 28, 2013, EHS Project No. 04-0033-13-065);
- Potential Asbestos Sampling Report by EHS (dated March 23, 2012, EHS Project No. 04-0033-12-011);
- Potential Asbestos Sampling Report by EHS (dated January 29, 2013, EHS Project No. 04-0033-13-003);
- Asbestos Sampling Report (dated June 22, 2015, EHS Project No. 04-0033-15-018);
- Project Specific Asbestos Sampling Report by EHS (dated October 30 , 2015, EHS Project No. 04-0033-15-035);
- Asbestos Sampling- Pipe Insulation Report by CM3 Environmental (dated July 29, 2016, CM3 Project No. TLW-1097B);
- Potential Asbestos Sampling Report by EHS (report dated January 29, 2013, EHS Project No. 04-0033-13-003);
- Asbestos Sampling- Roofing Report by CM3 (dated March 20, 2018, CM3 project number TLW-1710);
- Asbestos Abatement Inspection Report by CM3 (report dated June 6th, 2017, CM3 Project No. TLW-1136);
- Asbestos Abatement- Drywall with Asbestos Joint Compound Report by EHS (report dated November 27, 2012, EHS Project No. 04-0033-12-036);
- Asbestos Abatement- Drywall Compound and Insulation Report by EHS (report dated June 5, 2013, EHS Project No. 04-0033-13-010);
- Asbestos Abatement Project Summary Report by EHS (report dated October 23, 2013, EHS Project No. 04-0033-13-051);
- Asbestos Abatement Project Summary Report by EHS (report dated July 27, 2015, EHS Project No. 04-0033-15-022);
- Asbestos and Mould Abatement Summary Report by CM3 (dated May 19, 2017, CM3 project number TLW-1360);
- Type 1 Asbestos Abatement Specification – Montpetit Hall - 125 University Private, Ottawa, ON (dated December 11, 2019, reference # 0Z1920704HZ);
- Project Specific Hazardous Materials Survey – Montpetit Hall, 125 University Private, Ottawa, ON (dated January 9, 2020, reference # Z1920781HZ);

- Site Assessment & Bulk Sampling Report for Asbestos Analysis by Buller Crichton Environmental Inc. (dated May 17, 2021, reference # 21-348)
- Site Assessment & Bulk Sampling Report for Asbestos Analysis by Buller Crichton Environmental Inc. (dated June 23, 2021, reference # 21-426)
- Site Assessment & Bulk Sampling Report for Asbestos Analysis by Buller Crichton Environmental Inc. (dated June 23, 2021, reference # 21-426)
- Generator Replacement Abatement - Letter of Final Completion by InAIR Environmental Ltd. (dated February 8, 2022, reference # 20c005)
- Project Specific Hazardous Materials Survey – Montpetit Hall, 125 University Private, Ottawa, ON (dated November 16, 2023, reference # CCC-242667-00);
- Hazardous Materials Survey and 2023 Reassessment – Montpetit Hall, 125 University Private, Ottawa, ON (dated February 22, 2024, reference # Z2021101HZ / CCC-230252-00).

Material should be monitored closely and scheduled to be repaired, encapsulated or removed.

Note: The above evaluation criteria were also applied to other hazardous materials where applicable. Please refer to the Asbestos and Hazardous Materials Checklist in ***Appendix E & F*** *for further details.*

Asbestos

Background Information on Asbestos

Asbestos is a generic name that has been given to a group of naturally occurring fibrous minerals. In the past, asbestos was commonly used as a component in building materials such as insulation, fireproofing and acoustic or decorative panels. Although there are many types of asbestos, the three main forms of commercial importance in Ontario are chrysotile, amosite and crocidolite.

An Asbestos-Containing Material (ACM) is defined by O. Reg. 278/05 as a material that contains 0.5% or more asbestos by dry weight. ACMs are placed into two general classes, "friable" and "non-friable" ACMs. Friable ACMs are those materials that when dry can be crumbled, pulverized and reduced to powder by hand pressure. Typical friable ACMs include acoustical or decorative texture coats, fireproofing and thermal insulation. Non-friable ACMs are much more durable as they are held together by a binder such as cement, vinyl or asphalt. Typical non-friable ACMs include floor tiles, fire blankets, roofing materials and cementitious products such as wallboards, pipes or siding.

It has been recognized that hazardous situations may exist in buildings where asbestos-containing materials are found. This is especially true where asbestos fibres may become airborne as a result of material ageing, physical damage, and water damage or air movement.

In contrast, there is little reason for concern if the asbestos is in good condition, has not been damaged and is not in a location where it is likely to be disturbed.

Asbestos Survey Methodology

The asbestos survey included the identification of potential friable and non-friable asbestos-containing materials within the surveyed areas of the subject building.

The likelihood of ACMs being present in inaccessible areas such as above gypsum wallboard ceilings and walls was determined by assessing the presence of asbestos-containing materials in adjacent areas.

Fiberglass insulation was not submitted for analysis as it can be identified visually as non-asbestos material.

Building materials suspected of containing asbestos were identified and representative sampling and laboratory testing of these materials was conducted. The number of bulk material samples collected from a homogeneous area was in accordance with Table 1. O. Reg. 278/05 s. 3 (3) below. Building materials suspected of containing asbestos were collected using wetting techniques and hand sampling tools.

Table 1 - O. Reg. 278/05 s. 3(3): Minimum Asbestos Bulk Material Sample Requirements

Item	Type of Material	Size of Area of Homogeneous Material	Minimum Number of Bulk Material Samples to be Collected
1.	Surfacing material, including without limitation, material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 square metres	3
		90 or more square metres, but less than 450 square metres	5
		450 or more square metres	7
2.	Thermal insulation, except as described in item 3	any size	3
3.	Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
4.	Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), with confirmation of presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993.

All bulk samples were analysed for asbestos content by EMSL Canada Inc. (EMSL), an independent laboratory. EMSL is an independent laboratory accredited by National Institute of Standards and Technology/National Voluntary Laboratory Accreditation (NIST/NVLAP) (Lab Code #200877-0).

Vinyl floors tiles were analyzed using the phase light microscopy (PLM) method of analysis. However, given the composition of vinyl floor products, the PLM analysis method may be prone to yielding false negative analytical results. Therefore, prior to removal or replacement, vinyl floor products previously identified to be negative, should undergo additional analysis by Transmission Electron Microscopy (TEM) to confirm asbestos content, if any.

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility.

Evaluation of ACMs Based on Condition

In evaluating an ACM's condition, the following criteria were applied:

- **Good** – Material shows no signs of damage and/or is encapsulated. Asbestos-containing material could remain in place until eventual building demolition or major renovation.
- **Fair** – Material shows signs of minor damage (<5% damage) or otherwise near the end of useful life. This includes minor shrinking, cracking, delamination and/ or other damage. Material should be monitored closely and scheduled to be repaired, encapsulated or removed.
- **Poor** – Damage is greater than 5% to any ACM material and is highly recommended to be removed, repaired or encapsulated.

Note: The above evaluation criteria were also applied to other hazardous materials where applicable. Please refer to the Asbestos and Hazardous Materials Checklist in ***Appendix E & F*** *for further details.*

Lead

Background Information on Lead

Lead was a common additive in exterior and hard-wearing paint applications. Lead was used to prolong shelf life of paint and to increase its flexibility and durability to wear and weather. Acute exposure to lead by inhalation or ingestion may cause headaches, fatigue, nausea, abdominal cramps and joint pain. Chronic exposures can cause reduced haemoglobin production and reduced lifespan. It has also been known to impact the body's central and peripheral nervous systems and brain function and has been linked to learning disabilities in children.

Currently in Ontario, there is no regulatory limit that determines what concentration of lead constitutes a "lead containing material". On October 21, 2010, Health Canada, under the *Hazardous Products Act*, stated that the lead content in surface-coating materials, furniture, toys and other articles for children, should not exceed 90 mg/kg (0.009%, 90 ppm). However, this is intended for the importation or sale of products within Canada. Therefore, this is not to be misconstrued as a limit established to define a lead-containing material or a limit with respect to lead on construction projects.

The Environmental Abatement Council of Canada (EACC) has also developed the "*Lead Guideline for Construction, Renovation, Maintenance or Repair*" dated October 2014, which discusses the classification, handling, disturbance and removal of lead-containing materials. For the purpose of this guideline, paints or surface coatings containing less than or equal to 0.1% lead by weight (1000 mg/kg or 1000 ppm) are considered low-level lead paints or surface coatings. If these materials (and their respective surfaces) are disturbed in a non-aggressive manner and performed using adequate dust control procedures, then worker protection from the inhalation of lead is not required.

Furthermore, paints or surface coatings containing greater than 0.1% lead by weight are considered lead-containing paints or surface coatings. If these materials (and their respective surfaces) are disturbed, appropriate lead abatement procedures must always be followed.

Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, *Designated Substances* - made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the Guideline Lead on Construction Projects, issued in September 2004 (amended in April 2011) by the Occupational Health and Safety branch of the Ministry of Labour (Type 1-3). Similarly, the lead abatement work procedures outlined in the EACC Lead Guideline for Construction, Renovation, Maintenance or Repair (October 2014) may also be implemented (Class 1-3).

Lead is known to have been used in solder on copper plumbing fixtures, in lead conduit pipes, in lead-calcium battery plates, ammunition, and in nuclear and X-ray shielding devices. However, these materials were not sampled during this investigation but were noted where applicable.

To verify lead content in paints, representative bulk samples of paint and finishes suspected of containing lead were collected. Bulk samples were scraped down to the building base structure, with all possible layer's present, placed in sealed plastic bags and labeled; and then submitted to an independent laboratory for analysis. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was inductively coupled plasma optical emission spectrometry (ICP-OES).

Mercury

Background Information on Mercury

Mercury is known to cause poisoning in humans through the inhalation of vapours, ingestion of contaminated materials or skin absorption through direct contact with the liquid.

Precautions must be taken to prevent mercury vapours from becoming airborne during renovations or demolition of the building. Exposure to airborne mercury is regulated under the Revised O. Reg. 490/09 as amended – Regulation respecting Mercury – made under the Occupational Health and Safety Act; and under O. Reg. 558, which amended O. Reg. 347/90 (General - Waste Management), mercury is classified as a Schedule 2(b) Hazardous Waste Chemical. Its hazardous waste number is U151.

Mercury is found in products such as thermostats, temperature and pressure gauges, fluorescent lamps and batteries. Mercury in products can be released to the environment through breakage, or disposal at the end of a product's useful life. Improper disposal of these mercury products poses a health and environmental risk to everyone. In addition, the disposal of mercury-containing products can create wastes that are often classified as hazardous. Wastes that leach mercury in concentrations exceeding Ontario Regulation 347/90 (General - Waste Management) limits are also considered hazardous.

The mercury in thermostats switch contains approximately 3-4 grams of mercury in a glass ampoule, typically attached to a metal coil. Mercury-containing switches have been used in thermostats for over 40 years.

Mercury is an essential component in fluorescent lamps and HID lamps. The mercury is in a vapour form and in the phosphor coating on the lamp tube. Estimates of the mercury content contained in compact, 4 foot, and 8-foot lamps are 10 mg, 23 mg, and 46 mg respectively.

Most fluorescent lamps qualify as hazardous waste when removed from service and are therefore prohibited from disposal in the solid waste stream. Fluorescent lamps would be classified as 146T on your facility Generator Registration Report under O. Reg. 347/90 - General Waste Management, as amended by O. Reg. 558/00. Under this regulation, if the leachate results exceed 0.1 milligrams of mercury per litre for a given waste, then the facility must treat the waste as hazardous waste. Most fluorescent and HID lamps will exceed the leachate toxicity limit; therefore, these wastes must be registered and treated as hazardous waste or sent for recycling.

Silica

Background Information on Silica

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles located throughout the structures. Free crystalline silica (▪ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* - made under the Occupational Health and Safety Act.

Polychlorinated Biphenyls (PCBs)

Background Information on PCBs

Polychlorinated Biphenyls (PCBs) were commonly used as dielectric insulating fluid in electrical equipment such as transformers and capacitors, and in the fluorescent and HID lamp ballasts. The production of PCBs in the North America started in 1929 and was banned at the beginning of 1979. After 1981, no manufacturers produced fluorescent and HID lamps with PCB-containing ballasts.

PCBs are not a designated substance under the Occupational Health and Safety Act.

PCB Regulations (SOR/2008-273)

The *PCB Regulations* (the Regulations) set specific deadlines for ending the use of PCBs in concentrations at or above 50 mg/kg, eliminating all PCBs and equipment containing PCBs currently in storage and limiting the period of time PCBs can be stored before being destroyed. The Regulations also establish sound practices for the better management of the remaining PCBs in use (i.e. those with content of less than 50 mg/kg), until their eventual elimination, to prevent contamination of dielectric fluids and dispersion of PCBs in small quantities into other liquids.

Ozone Depleting Substances (ODSs) and Other Halocarbons

Background Information on ODSs

Within Ontario, the general use of ozone depleting substances (ODSs) and other halocarbons is controlled through Regulation 463/10 of the Environmental Protection Act. Production of ODSs in the form of hydro chlorofluorocarbons (HCFCs) and chlorofluorocarbons (CFCs) ceased in Canada in 1993 as a result of their ozone-depleting characteristics. Importation of CFCs into Canada ceased in 1997 and total ban was placed on their use since 2010. The use of these materials is still permitted in existing equipment, but equipment must be serviced by a licensed contractor such that CFCs are contained and not released to the environment during servicing or operation.

Radioactive Materials

There are two types of smoke detectors commonly found in building (residential, institutional, commercial, industrial, etc). Photoelectric-type smoke detectors detect smoke using an optical sensor, whereas ionization-type smoke detectors use an ionization chamber containing radioactive material. The ionization type is cheaper and is particularly common in older buildings. A typical modern detector contains about 1.0 microcurie of the radioactive element americium, a decrease from 3 microcurie in 1978. The use of sealed radioactive material sources in fire detection systems is still permitted and regulated by the Canadian Nuclear Safety Commission (CNSC) and the Canadian Nuclear Safety Act. The radioactive sources in smoke alarms are sealed and contained within a metal case inside the smoke detector and must not be damaged or tampered with.

Mould & Water Damage

Mould growth inside buildings is due to excess moisture caused by leakages, condensation or capillary movement of water into the building. Toxic moulds such as *Stachybotrys chartarum* and some species of *Aspergillus* spp. are greenish-black, wet and slimy moulds that grow on soaking wet cellulose-based materials. They are often found near water leaks or where drying is very slow and can form after flooding if insufficient cleanup and drying occurred. They will generally not occur if materials are kept dry.

MPL conducted a general visual assessment for any obvious signs of visible mould and/or water damage. Based on our visual observations, the following guidelines were used in providing our recommendations for remedial action where required:

- Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation,
- The Canadian Construction Association (CCA) Mould Guidelines for the Canadian construction industry (CCA document 82-2004)
- Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines.

Other Designated Substances

Select Designated Substances (acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, benzene, or vinyl chloride) are not expected to be present in the building in matrix or sufficient quantities to cause an exceedance of Ministry of Labour exposure guidelines. As such, no sampling was conducted for these materials.

Vinyl Chloride

Vinyl chloride (monomer) is likely to be present in stable form within poly vinyl-chloride (PVC) piping and conduits and as a component of interior finishes. Such building materials are not considered to be hazardous in their current matrix/composition.

Acrylonitrile

Acrylonitrile or ACN (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants. Acrylonitrile was not noted and would not be expected to be present in the project specific area/surveyed area/subject building.

Arsenic

Arsenic is used in metallurgy for hardening copper, lead and alloys, in pigment production, in the manufacture of certain types of glass, in insecticides, fungicides and rodenticides, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing. Arsenic or arsenic compounds were not noted and are not expected to be present in the project specific area/surveyed area/subject building.

Benzene

Benzene or benzol is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, and in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline. Benzene may be present in stable form in roofing materials, paints and adhesives located throughout the subject building. Such building materials are not considered to be hazardous in their current matrix/composition.

Coke Oven Emissions

Coke oven emission is benzene soluble fraction of total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens.

Ethylene Oxides

Ethylene oxide is a colourless gas liquefying below 12°C. It is used generally as a fumigant and sterilizing agent for medical equipment. It is used generally as a fumigant and sterilizing agent for medical equipment.

Isocyanates

Isocyanates compounds may be present in stable form in paint finishes, varnishes, and polyurethane plastics, synthetic rubbers, foams and adhesives. Such building materials are not considered to be hazardous in their current matrix/composition.

In order to reduce the potential for exposure to workers or occupants, any suspect hazardous building material(s) that are not detailed within this survey due to inaccessibility and/or are discovered during renovation/demolition activities, must be properly assessed and/or tested prior to their disturbance.

APPENDIX C

Laboratory Analytical Reports

EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
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http://www.EMSL.com / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Attn: Stefan Holik
McIntosh Perry Consulting Engineers Ltd
115 Walgreen Rd RR 3
Carp, ON K0A 1L0

Phone: (613) 836-2184
Fax:
Collected: 3/10/2020
Received: 3/25/2020
Analyzed: 4/02/2020

Proj: University of Ottawa 0Z2-021101 (MNT) (Ottawa DSS)

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 1.1 ***Lab Sample ID:*** **672000613-0001**
Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 1.2 ***Lab Sample ID:*** **672000613-0002**
Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 1.3 ***Lab Sample ID:*** **672000613-0003**
Sample Description: MNT/ACT - Pinholes with medium fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 2.1 ***Lab Sample ID:*** **672000613-0004**
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 2.2-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0005**
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 2.2-Mastic ***Lab Sample ID:*** **672000613-0005A**
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 2.3-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0006**
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

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EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 2.3-Mastic **Lab Sample ID:** **672000613-0006A**
Sample Description: MNT/VFT - Beige with white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 3.1 **Lab Sample ID:** **672000613-0007**
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Black	96.0%	4.0%	None Detected	Small amount of tar included

Client Sample ID: 3.2-Cardboard **Lab Sample ID:** **672000613-0008**
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown	96.0%	4.0%	None Detected	

Client Sample ID: 3.2-Tar Paper **Lab Sample ID:** **672000613-0008A**
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 3.3-Cardboard **Lab Sample ID:** **672000613-0009**
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown	98.0%	2.0%	None Detected	

Client Sample ID: 3.3-Tar Paper **Lab Sample ID:** **672000613-0009A**
Sample Description: MNT/Cardboard insulation

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	80.0%	20.0%	None Detected	

Client Sample ID: 4.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0010**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.1-Mastic **Lab Sample ID:** **672000613-0010A**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

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EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 4.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0011**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.2-Mastic **Lab Sample ID:** **672000613-0011A**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 4.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0012**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Red	0.0%	100.0%	None Detected	

Client Sample ID: 4.3-Mastic **Lab Sample ID:** **672000613-0012A**
Sample Description: MNT/VFT - Red

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 5.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0013**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 5.1-Mastic **Lab Sample ID:** **672000613-0013A**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 5.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0014**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 5.2-Mastic **Lab Sample ID:** **672000613-0014A**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

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EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 5.2-Leveler **Lab Sample ID:** **672000613-0014B**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	5.0%	95.0%	None Detected	

Client Sample ID: 5.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0015**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 5.3-Mastic **Lab Sample ID:** **672000613-0015A**
Sample Description: MNT/VFT - Grey with grey and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 6.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0016**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 6.1-Mastic **Lab Sample ID:** **672000613-0016A**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 6.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0017**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 6.2-Mastic **Lab Sample ID:** **672000613-0017A**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 6.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0018**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White/Pink	0.0%	100.0%	None Detected	

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Client Sample ID: 6.3-Mastic **Lab Sample ID:** **672000613-0018A**
Sample Description: MNT/VFT - Pink with brown and white flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Insufficient Material	

Client Sample ID: 7.1-Vinyl Sheet Flooring **Lab Sample ID:** **672000613-0019**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	

Client Sample ID: 7.1-Mastic **Lab Sample ID:** **672000613-0019A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow/Beige	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 7.2-Vinyl Sheet Flooring **Lab Sample ID:** **672000613-0020**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	

Client Sample ID: 7.2-Mastic **Lab Sample ID:** **672000613-0020A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 7.2-Mastic 2 **Lab Sample ID:** **672000613-0020B**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 7.2-Leveler **Lab Sample ID:** **672000613-0020C**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	5.0%	95.0%	None Detected	

Client Sample ID: 7.3-Vinyl Sheet Flooring **Lab Sample ID:** **672000613-0021**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	13.0%	87.0%	None Detected	

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Client Sample ID: 7.3-Mastic/Leveler **Lab Sample ID:** **672000613-0021A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/Yellow/Beige	20.0%	80.0%	None Detected	Inseparable layers

Client Sample ID: 8.1 **Lab Sample ID:** **672000613-0022**
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 8.2 **Lab Sample ID:** **672000613-0023**
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 8.3 **Lab Sample ID:** **672000613-0024**
Sample Description: MNT/ACT - Uniform pinholes with small fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 9.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0025**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.1-Mastic **Lab Sample ID:** **672000613-0025A**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 9.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0026**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.2-Mastic **Lab Sample ID:** **672000613-0026A**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

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Client Sample ID: 9.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0027**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 9.3-Mastic **Lab Sample ID:** **672000613-0027A**
Sample Description: MNT/VFT - Light green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 10.1 **Lab Sample ID:** **672000613-0028**
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 10.2 **Lab Sample ID:** **672000613-0029**
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 10.3 **Lab Sample ID:** **672000613-0030**
Sample Description: MNT/ACT - Uniform pinholes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	80.0%	20.0%	None Detected	

Client Sample ID: 11.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0031**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 11.1-Mastic **Lab Sample ID:** **672000613-0031A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	5.0%	95.0%	None Detected	

Client Sample ID: 11.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0032**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

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Client Sample ID: 11.2-Mastic **Lab Sample ID:** **672000613-0032A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	5.0%	95.0%	None Detected	

Client Sample ID: 11.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0033**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 11.3-Mastic **Lab Sample ID:** **672000613-0033A**
Sample Description: MNT/VFT - Beige

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 12.1 **Lab Sample ID:** **672000613-0034**
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 12.2 **Lab Sample ID:** **672000613-0035**
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 12.3 **Lab Sample ID:** **672000613-0036**
Sample Description: MNT/VFT - Dark green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 13.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0037**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.1-Mastic **Lab Sample ID:** **672000613-0037A**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

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Client Sample ID: 13.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0038**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.2-Mastic **Lab Sample ID:** **672000613-0038A**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 13.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0039**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 13.3-Mastic **Lab Sample ID:** **672000613-0039A**
Sample Description: MNT/VFT - Beige with black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 14.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0040**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 14.1-Mastic **Lab Sample ID:** **672000613-0040A**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 14.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0041**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 14.2-Mastic **Lab Sample ID:** **672000613-0041A**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Yellow	0.0%	100.0%	None Detected	Inseparable layers

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Client Sample ID: 14.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0042**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 14.3-Mastic **Lab Sample ID:** **672000613-0042A**
Sample Description: MNT/VFT - White with brown flakes

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0043**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White/Black	0.0%	98.0%	**2% Chrysotile**	

Client Sample ID: 15.1-Mastic **Lab Sample ID:** **672000613-0043A**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0044**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 15.2-Mastic **Lab Sample ID:** **672000613-0044A**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 15.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0045**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 15.3-Mastic **Lab Sample ID:** **672000613-0045A**
Sample Description: MNT/VFT - White with black dots in line

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

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Client Sample ID: 16.1 ***Lab Sample ID:*** **672000613-0046**
Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 16.2 ***Lab Sample ID:*** **672000613-0047**
Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 16.3 ***Lab Sample ID:*** **672000613-0048**
Sample Description: MNT/1x1 SCT - Pinholes with large fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	85.0%	15.0%	None Detected	

Client Sample ID: 17.1-Stipple ***Lab Sample ID:*** **672000613-0049**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 17.1-Drywall ***Lab Sample ID:*** **672000613-0049A**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	20.0%	80.0%	None Detected	

Client Sample ID: 17.2 ***Lab Sample ID:*** **672000613-0050**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	15.0%	85.0%	None Detected	

Client Sample ID: 17.3 ***Lab Sample ID:*** **672000613-0051**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	10.0%	90.0%	None Detected	

Client Sample ID: 17.4 ***Lab Sample ID:*** **672000613-0052**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	5.0%	95.0%	None Detected	

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Client Sample ID: 17.5 ***Lab Sample ID:*** **672000613-0053**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White	0.0%	90.0%	**10% Chrysotile**	

Client Sample ID: 17.6 ***Lab Sample ID:*** **672000613-0054**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020			Positive Stop (Not Analyzed)		

Client Sample ID: 17.7 ***Lab Sample ID:*** **672000613-0055**
Sample Description: MNT/Plaster

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020			Positive Stop (Not Analyzed)		

Client Sample ID: 18.1-Mastic ***Lab Sample ID:*** **672000613-0056**
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 18.1-Plaster ***Lab Sample ID:*** **672000613-0056A**
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 18.2 ***Lab Sample ID:*** **672000613-0057**
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 18.3 ***Lab Sample ID:*** **672000613-0058**
Sample Description: MNT/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 19.1-Vinyl Sheet Flooring ***Lab Sample ID:*** **672000613-0063**
Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	40.0%	60.0%	None Detected	

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Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 19.1-Mastic **Lab Sample ID:** **672000613-0063A**
Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 19.2 **Lab Sample ID:** **672000613-0064**
Sample Description: MNT/VSF - Rectangular, grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	40.0%	60.0%	None Detected	

Client Sample ID: 20.1 **Lab Sample ID:** **672000613-0066**
Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	80.0%	20.0%	**<1% Amosite**	
400 PLM Pt Ct	4/01/2020	Gray	0.00%	99.50%	**0.50% Amosite**	

Client Sample ID: 20.2 **Lab Sample ID:** **672000613-0067**
Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 20.3 **Lab Sample ID:** **672000613-0068**
Sample Description: MNT/SCT - Some pinholes with wavy fissures

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 21.1 **Lab Sample ID:** **672000613-0069**
Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 21.2 **Lab Sample ID:** **672000613-0070**
Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White	0.0%	100.0%	None Detected	

Client Sample ID: 21.3 **Lab Sample ID:** **672000613-0071**
Sample Description: MNT/Popcorn ceiling texture

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	White	0.0%	100.0%	None Detected	

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Client Sample ID: 22.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0072**
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Black/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 22.1-Mastic **Lab Sample ID:** **672000613-0072A**
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 22.2 **Lab Sample ID:** **672000613-0073**
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Red/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 22.3 **Lab Sample ID:** **672000613-0074**
Sample Description: MNT/VFT - Grey with yellow, red, black, and white

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Red/Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 23.1 **Lab Sample ID:** **672000613-0075**
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 23.2 **Lab Sample ID:** **672000613-0076**
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 23.3 **Lab Sample ID:** **672000613-0077**
Sample Description: MNT/VFT - Grey with white and black swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/White/Black	0.0%	100.0%	None Detected	

Client Sample ID: 24.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0078**
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

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Client Sample ID: 24.1-Mastic **Lab Sample ID:** **672000613-0078A**
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 24.2 **Lab Sample ID:** **672000613-0079**
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 24.3 **Lab Sample ID:** **672000613-0080**
Sample Description: MNT/VFT - Brown and white mix

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 25.1 **Lab Sample ID:** **672000613-0081**
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.2 **Lab Sample ID:** **672000613-0082**
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0083**
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 25.3-Mastic **Lab Sample ID:** **672000613-0083A**
Sample Description: MNT/VFT - Green with white swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 26.1 **Lab Sample ID:** **672000613-0084**
Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	

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Client Sample ID: 26.2 ***Lab Sample ID:*** **672000613-0085**
Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 26.3 ***Lab Sample ID:*** **672000613-0086**
Sample Description: MNT/VFT - Grey/black/brown granite pattern

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 27.1 ***Lab Sample ID:*** **672000613-0087**
Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27.2 ***Lab Sample ID:*** **672000613-0088**
Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27.3 ***Lab Sample ID:*** **672000613-0089**
Sample Description: MNT/VFT - Grey with light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 28.1-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0090**
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 28.1-Mastic ***Lab Sample ID:*** **672000613-0090A**
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 28.2 ***Lab Sample ID:*** **672000613-0091**
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	

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Client Sample ID: 28.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0092**
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/White	0.0%	100.0%	None Detected	

Client Sample ID: 28.3-Mastic **Lab Sample ID:** **672000613-0092A**
Sample Description: MNT/VFT - Brown with white and grey swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 29.1 **Lab Sample ID:** **672000613-0093**
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 29.2 **Lab Sample ID:** **672000613-0094**
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 29.3 **Lab Sample ID:** **672000613-0095**
Sample Description: MNT/VFT - Grey with orange markings

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/Orange	40.0%	60.0%	None Detected	

Client Sample ID: 30.1 **Lab Sample ID:** **672000613-0096**
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown	95.0%	5.0%	None Detected	

Client Sample ID: 30.2 **Lab Sample ID:** **672000613-0097**
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/White	95.0%	5.0%	None Detected	

Client Sample ID: 30.3 **Lab Sample ID:** **672000613-0098**
Sample Description: MNT/Wallpaper

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White	95.0%	5.0%	None Detected	

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Client Sample ID: 31.1 ***Lab Sample ID:*** **672000613-0099**
Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.2-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0100**
Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.2-Mastic ***Lab Sample ID:*** **672000613-0100A**
Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 31.3-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0101**
Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/Gray	0.0%	100.0%	None Detected	

Client Sample ID: 31.3-Mastic ***Lab Sample ID:*** **672000613-0101A**
Sample Description: MNT/VFT - Grey with brown and light and dark marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 32.1-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0102**
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/White/Green	0.0%	100.0%	None Detected	

Client Sample ID: 32.1-Mastic ***Lab Sample ID:*** **672000613-0102A**
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 32.2 ***Lab Sample ID:*** **672000613-0103**
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Brown/Gray/Green	0.0%	100.0%	None Detected	

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Client Sample ID: 32.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0104**
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/Gray/Green	0.0%	100.0%	None Detected	

Client Sample ID: 32.3-Mastic **Lab Sample ID:** **672000613-0104A**
Sample Description: MNT/VFT - Grey with brown/white and green

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 33.1 **Lab Sample ID:** **672000613-0105**
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.2 **Lab Sample ID:** **672000613-0106**
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0107**
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/White/Blue	0.0%	100.0%	None Detected	

Client Sample ID: 33.3-Mastic **Lab Sample ID:** **672000613-0107A**
Sample Description: MNT/VFT - White with blue and grey

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 34.1 **Lab Sample ID:** **672000613-0110**
Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 34.2 **Lab Sample ID:** **672000613-0111**
Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Gray/Pink	0.0%	100.0%	None Detected	

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Client Sample ID: 34.3 ***Lab Sample ID:*** **672000613-0112**
Sample Description: MNT/VFT - Grey with pink

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/Pink	0.0%	100.0%	None Detected	

Client Sample ID: 35.1-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0113**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.1-Mastic ***Lab Sample ID:*** **672000613-0113A**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 35.2-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0114**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.2-Mastic ***Lab Sample ID:*** **672000613-0114A**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020				Insufficient Material	

Client Sample ID: 35.3-Vinyl Floor Tile ***Lab Sample ID:*** **672000613-0115**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 35.3-Mastic ***Lab Sample ID:*** **672000613-0115A**
Sample Description: MNT/VFT - Beige with light marks

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Black	0.0%	100.0%	None Detected	

Client Sample ID: 36.1 ***Lab Sample ID:*** **672000613-0116**
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Green	0.0%	100.0%	None Detected	

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Client Sample ID: 36.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0117**
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Green	0.0%	100.0%	None Detected	

Client Sample ID: 36.2-Mastic **Lab Sample ID:** **672000613-0117A**
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/01/2020	Black/Beige	0.0%	100.0%	None Detected	Inseparable layers

Client Sample ID: 36.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0118**
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/Black	0.0%	100.0%	None Detected	

Client Sample ID: 36.3-Mastic/Leveler **Lab Sample ID:** **672000613-0118A**
Sample Description: MNT/VFT - Green/light black

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray/Yellow	5.0%	95.0%	None Detected	Inseparable layers

Client Sample ID: 37.1 **Lab Sample ID:** **672000613-0119**
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Gray	0.0%	45.0%	**55% Chrysotile**	

Client Sample ID: 37.2 **Lab Sample ID:** **672000613-0120**
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 37.3 **Lab Sample ID:** **672000613-0121**
Sample Description: MNT/Parging

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 38.1-Vinyl Floor Tile **Lab Sample ID:** **672000613-0122**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	

EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
http://www.EMSL.com / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 38.1-Mastic **Lab Sample ID:** **672000613-0122A**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38.2-Vinyl Floor Tile **Lab Sample ID:** **672000613-0123**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 38.2-Mastic **Lab Sample ID:** **672000613-0123A**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 38.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0124**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/White	0.0%	100.0%	None Detected	

Client Sample ID: 38.3-Mastic **Lab Sample ID:** **672000613-0124A**
Sample Description: MNT/VFT - White + brown swirls

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Insufficient Material	

Client Sample ID: 39.1 **Lab Sample ID:** **672000613-0125**
Sample Description: MNT/VFT- Brownn w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	

Client Sample ID: 39.2 **Lab Sample ID:** **672000613-0126**
Sample Description: MNT/VFT- Brownn w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	

Client Sample ID: 39.3-Vinyl Floor Tile **Lab Sample ID:** **672000613-0127**
Sample Description: MNT/VFT- Brownn w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Brown/Black	0.0%	100.0%	None Detected	

EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6
Phone/Fax: (343) 882-6076 / (343) 882-6077
http://www.EMSL.com / ottawalab@EMSL.com

EMSL Canada Order 672000613
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 39.3-Mastic ***Lab Sample ID:*** **672000613-0127A**

Sample Description: MNT/VFT- Brownn w/ black dots

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 40.1 ***Lab Sample ID:*** **672000613-0128**

Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020	Tan	0.0%	94.0%	**6% Chrysotile**	

Client Sample ID: 40.2 ***Lab Sample ID:*** **672000613-0129**

Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Client Sample ID: 40.3 ***Lab Sample ID:*** **672000613-0130**

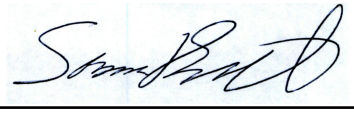
Sample Description: MNT/Wall caulking

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos	Comment
PLM	4/02/2020				Positive Stop (Not Analyzed)	

Analyst(s):

Ewa Krupinska PLM (105)
400 PLM Pt Ct (1)
Simon Parent PLM (58)

Reviewed and approved by:



Simon Parent, Laboratory Manager
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP of any agency or the U.S. Government

Samples analyzed by EMSL Canada Inc. Ottawa, ON

Report amended: 04/02/202012:48:29 Replaces initial report from: 04/02/202012:09:00 Reason Code: Data Entry-Results Changed

EMSL Canada Inc.
2756 Slough Street, Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com torontolab@emsl.com

EMSL Canada Or	552003642
CustomerID:	55CTCS25B
CustomerPO:	0Z2-021101
ProjectID:	

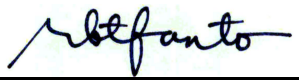
Attn: **John Tufts**
McIntosh Perry Consulting Engineers Ltd
115 Walgreen Rd RR 3
Carp, ON K0A 1L0

Phone: (613) 836-2184
Fax:
Received: 03/30/20 11:10 PM
Collected: 3/10/2020

Project: **UofIO Ottawa DSS**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
PB1	3/10/2020	3/31/2020	0.0417 g	0.048 % wt	1.4 % wt
552003642-0001	Site: Orange paint				
PB2	3/10/2020	3/31/2020	0.0326 g	0.061 % wt	<0.061 % wt
552003642-0002	Site: Light blue paint Insufficient sample to reach reporting limit.				
PB3	3/10/2020	3/31/2020	0.1512 g	0.013 % wt	<0.013 % wt
552003642-0003	Site: Purple paint Insufficient sample to reach reporting limit.				
PB4	3/10/2020	3/31/2020	0.0230 g	0.087 % wt	<0.087 % wt
552003642-0004	Site: Blue floor paint Insufficient sample to reach reporting limit.				



Rowena Fanto, Lead Supervisor
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the results, it will be noted on the reoprt. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 04/06/2020 09:22:04

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Certificate of Analysis

McIntosh Perry Consulting Eng. (Carp)

115 Walgreen Rd.
Carp, ON K0A 1L0
Attn: John Tufts

Client PO: MNT Pipe Relining
Project: PFX201806
Custody:

Report Date: 21-Nov-2019
Order Date: 18-Nov-2019

Order #: 1947087

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

Paracel ID	Client ID
1947087-01	SA-01A
1947087-02	SA-01B
1947087-03	SA-01C

Approved By:

Emma Diaz

Senior Analyst

PARACEL LABORATORIES LTD.

Order #: 1947087

Certificate of Analysis

Report Date: 21-Nov-2019

Client: McIntosh Perry Consulting Eng. (Carp)

Order Date: 18-Nov-2019

Client PO: MNT Pipe Relining

Project Description: PFX201806

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

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947087-01	15-Nov-19	Grey	Elbow DHW	**Yes**	**Client ID: SA-01A**	
					Chrysotile	60
					Cellulose	5
					MMVF	5
					Non-Fibers	30
1947087-02	15-Nov-19				**Client ID: SA-01B**	
					not analyzed	
1947087-03	15-Nov-19				**Client ID: SA-01C**	
					not analyzed	

* 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	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	3 - Calgary	20-Nov-19

Calgary Lab: 1423 45 Ave NE, Unit F Calgary, AB, T2E 2P3

Work Order Revisions | Comments

None

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Paracel ID: 1947087

Chain of Custody
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Page 1 of 1.

Client Name: McIntosh Perry Ltd.	Project Reference: MNT Pipe Relining	**Turnaround Time:**	
Contact Name: John Tufts	Quote #: 19-651 McIntosh Perry Asbestos and Lead	☐ Immediate	☐ 1 Day
Address: 115 Walgreen Road, RR3 Carp, ON K0A 1L0	PO #: PCK-201806	☐ 4 Hour	☐ 2 Day
	Email Address: j.tufts@mcintoshperry.com	☐ 8 Hour	☐ 3 Day
Telephone: 6138362184			☒ Regular
		Date Required: Nov. 22/19	

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: 1947087

	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	SA-01A	Nov.15		PLM	ELBOW - ~~(Duct)~~ DHW	☒
2	SA-01B	"		"	ELBOW - DHW	☒
3	SA-01C	"		"	ELBOW - DHW	☒
4						☐
5						☐
6	Pb-01	Nov.15		LEAD	GREY PAINT - FLOOR	☐
7	Pb-02	"		"	PEACH PAINT - FLOOR	☐
8						☐
9						☐
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: Walkin.

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print): J. Tufts			
Date/Time: Nov.18/19 12:55	Date/Time:	Date/Time: Nov18/19	Date/Time: 11/18/19 3:14 pm

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Certificate of Analysis

McIntosh Perry Consulting Eng. (Carp)

115 Walgreen Rd.
Carp, ON K0A 1L0
Attn: John Tufts

Client PO: PEX-201806
Project: MNT Pipe Relining
Custody:

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019

Order #: 1947102

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

Paracel ID	Client ID
1947102-01	Pb-01
1947102-02	Pb-02

Approved By:

Dale Robertson, BSc
Laboratory Director

Certificate of Analysis
Client: McIntosh Perry Consulting Eng. (Carp)
Client PO: PEX-201806

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019
Project Description: MNT Pipe Relining

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-OES	based on MOE E3470, ICP-OES	21-Nov-19	22-Nov-19

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
Client: McIntosh Perry Consulting Eng. (Carp)
Client PO: PEX-201806

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019
Project Description: MNT Pipe Relining

Sample Results

Lead

Matrix: Paint
Sample Date: 15-Nov-19

Paracel ID	Client ID	Units	MDL	Result
1947102-01	Pb-01	% by Wt.	0.0020	0.0570
1947102-02	Pb-02	% by Wt.	0.0020	0.0104

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	**ND**	**0.0020**	**% by Wt.**						
Matrix Duplicate									
Lead	**ND**	**0.0020**	**% by Wt.**	**ND**			**0.0**	**30**	
Matrix Spike									
Lead	242		ug/L	3.7	95.3	70-130			

PARACE LABORATORIES

Paracel ID: 1947102

Head Office
300-2319 St. Laurent Blvd.
Ottawa, Ontario K1G 4J8
1-800-749-1947
paracel@paracellabs.com

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Page 1 of 1.

Client Name: McIntosh Perry Ltd.	Project Reference: MNT Pipe Relining
Contact Name: John Tufts	Quote #: 19-651 McIntosh Perry Asbestos and Lead
Address: 115 Walgreen Road, RR3 Carp, ON K0A 1L0	PO #: PCX-201806
	Email Address: j.tufts@mcintoshperry.com
Telephone: 6138362184	

Turnaround Time:

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

Date Required: Nov 22/19

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: 1947102

	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	SA-01A	Nov 15		PLM	ELBOW - ~~PAINT~~ DHW	☒
2	SA-01B	"		"	ELBOW - DHW	☒
3	SA-01C	"		"	ELBOW - DHW	☒
4						☐
5						☐
6	Pb-01	Nov 15		LEAD	GREY PAINT - Floor	☐
7	Pb-02	"		"	PEACH PAINT - Floor	☐
8						☐
9						☐
10						☐
11						☐
12						☐

-2 Black Bag-

* 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: Walk.

Relinquished By (Sign):	Received at Depot:	Received at Lab: Jumeeporn Dolmai	Verified By:
Relinquished By (Print): Scott Tufts			
Date/Time: Nov 18/19 12:55	Date/Time:	Date/Time: Nov 19, 2019 03.85	Date/Time: 18 Nov 19 16:17

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Certificate of Analysis

Buller Crichton Environmental Inc.

1 Raymond Street Suite 102
Ottawa, ON K1R 1A2
Attn: Derek Stashick

Client PO: 21-426
Project: 21-426
Custody:

Report Date: 23-Jun-2021
Order Date: 21-Jun-2021

Order #: 2126108

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

Paracel ID	Client ID
2126108-01	SA-01 A
2126108-02	SA-01 B
2126108-03	SA-01 C
2126108-04	SA-02 A
2126108-05	SA-02 B
2126108-06	SA-02 C

Approved By:

Emma Diaz

Senior Analyst

PARACEL LABORATORIES LTD.

Order #: 2126108

Certificate of Analysis

Client: Buller Crichton Environmental Inc.

Client PO: 21-426

Report Date: 23-Jun-2021

Order Date: 21-Jun-2021

Project Description: 21-426

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

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2126108-01	16-Jun-21	Grey	Acoustic Tile	No	**Client ID: SA-01 A**	
					Cellulose	30
					MMVF	40
					Non-Fibers	30
2126108-02	16-Jun-21	Grey	Acoustic Tile	No	**Client ID: SA-01 B**	
					Cellulose	30
					MMVF	40
					Non-Fibers	30
2126108-03	16-Jun-21	Grey	Acoustic Tile	No	**Client ID: SA-01 C**	
					Cellulose	30
					MMVF	40
					Non-Fibers	30
2126108-04	16-Jun-21	Brown	Adhesive	No	**Client ID: SA-02 A**	
					Non-Fibers	100
2126108-05	16-Jun-21	Brown	Adhesive	No	**Client ID: SA-02 B**	
					Non-Fibers	100
2126108-06	16-Jun-21	Brown	Adhesive	No	**Client ID: SA-02 C**	
					Non-Fibers	100

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

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation *	Analysis Date
Asbestos, PLM Visual Estimation	AppE to SubE of 40CFR Part753 and EPA/600/R-93/116	2 - Ottawa West	CALA 1262	23-Jun-21

* Reference to the NVLAP term does not permit the user of this report to claim product certification , approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Ottawa West Lab: 25 Northside Rd, Unit C Nepean, Ontario K2H 8S1

Certificate of Analysis

Client: Buller Crichton Environmental Inc.

Client PO: 21-426

Report Date: 23-Jun-2021

Order Date: 21-Jun-2021

Project Description: 21-426

Work Order Revisions | Comments

None

2126108

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Page 1 of .

Client Name: BCE	Project Reference: 21-426	**Turnaround Time:**
Contact Name: Derek	Quote #: 21-042	☐ Immediate ☐ 1 Day ☐ 4 Hour ☑ 2 Day ☐ 8 Hour ☐ 3 Day ☐ Regular
Address: 1 Raymond Street - Suite 102, Ottawa, ON	PO #:	
	Email Address: derek @bullercrichton.ca @bullercrichton.ca	Date Required: _____
Telephone: 613-729-5291		

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: 2126108				Asbestos - Bulk	
Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1 SA-01A-C	Jun 16		PLM	ACT	☒
2 SA-02A-C	↓		↓	Adhesive	☒
3					☐
4					☐
5					☐
6					☐
7					☐
8					☐
9					☐
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: Walkin

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Derek Starbek			
Date/Time: June 20, 2021	Date/Time:	Date/Time: 06/22/21 3:25pm	Date/Time: June 22/21 8:42

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Certificate of Analysis

Buller Crichton Environmental Inc.

1 Raymond Street Suite 102
Ottawa, ON K1R 1A2
Attn: Erin Schonbacher

Client PO: 21-348
Project: 21-348
Custody:

Report Date: 12-May-2021
Order Date: 11-May-2021

Order #: 2120232

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

Paracel ID	Client ID
2120232-01	SA-01 A
2120232-02	SA-01 B
2120232-03	SA-01 C

Approved By:

Emma Diaz

Senior Analyst

PARACEL LABORATORIES LTD.

Order #: 2120232

Certificate of Analysis

Client: Buller Crichton Environmental Inc.

Client PO: 21-348

Report Date: 12-May-2021

Order Date: 11-May-2021

Project Description: 21-348

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

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
2120232-01	11-May-21	Black	Tar	No	**Client ID: SA-01 A** [AS-PRE]	
					MMVF	5
					Non-Fibers	95
2120232-02	11-May-21	Black	Tar	No	**Client ID: SA-01 B** [AS-PRE]	
					MMVF	5
					Non-Fibers	95
2120232-03	11-May-21	Black	Tar	No	**Client ID: SA-01 C** [AS-PRE]	
					MMVF	5
					Non-Fibers	95

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

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation	*	Analysis Date
Asbestos, PLM Visual Estimation	AppE to SubE of 40CFR Part753 and EPA/600/R-93/116	2 - Ottawa West	CALA 1262		12-May-21

* Reference to the NVLAP term does not permit the user of this report to claim product certification , approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Ottawa West Lab: 25 Northside Rd, Unit C Nepean, Ontario K2H 8S1

Qualifier Notes

Sample Qualifiers :

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

Work Order Revisions | Comments

None

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Certificate of Analysis

McIntosh Perry Consulting Eng. (Carp)

115 Walgreen Rd.
Carp, ON K0A 1L0
Attn: John Tufts

Client PO: MNT-Soffit
Project: ZO-1920704-HZ
Custody: 41915

Report Date: 26-Nov-2019
Order Date: 26-Nov-2019

Order #: 1948165

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

Paracel ID	Client ID
1948165-01	SA-01A
1948165-02	SA-01B
1948165-03	SA-01C
1948165-04	SA-01A
1948165-05	SA-01B
1948165-06	SA-01C
1948165-07	SA-02A
1948165-08	SA-02B
1948165-09	SA-02C
1948165-10	SA-02A
1948165-11	SA-02B
1948165-12	SA-02C

Approved By:

Emma Diaz

Senior Analyst

PARACEL LABORATORIES LTD.

Order #: 1948165

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Consulting Eng. (Carp)

Order Date: 26-Nov-2019

Client PO: MNT-Soffit

Project Description: ZO-1920704-HZ

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

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1948165-01	26-Nov-19	Brown	Mastic	**Yes**	**Client ID: SA-01A**	
					Chrysotile	1
					Non-Fibers	99
1948165-02	26-Nov-19				**Client ID: SA-01B**	
					not analyzed	
1948165-03	26-Nov-19				**Client ID: SA-01C**	
					not analyzed	
1948165-04	26-Nov-19	White	Styrofoam	No	**Client ID: SA-01A**	
					Non-Fibers	100
1948165-05	26-Nov-19	White	Styrofoam	No	**Client ID: SA-01B**	
					Non-Fibers	100
1948165-06	26-Nov-19	White	Styrofoam	No	**Client ID: SA-01C**	
					Non-Fibers	100
1948165-07	26-Nov-19	Green	Mastic	**Yes**	**Client ID: SA-02A**	
					Chrysotile	1
					Non-Fibers	99
1948165-08	26-Nov-19				**Client ID: SA-02B**	
					not analyzed	
1948165-09	26-Nov-19				**Client ID: SA-02C**	
					not analyzed	
1948165-10	26-Nov-19	Blue	Styrofoam	No	**Client ID: SA-02A**	
					Non-Fibers	100
1948165-11	26-Nov-19	Blue	Styrofoam	No	**Client ID: SA-02B**	
					Non-Fibers	100

PARACEL LABORATORIES LTD.

Order #: 1948165

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Consulting Eng. (Carp)

Order Date: 26-Nov-2019

Client PO: MNT-Soffit

Project Description: ZO-1920704-HZ

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

Paracel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1948165-12	26-Nov-19	Blue	Styrofoam	No	**Client ID: SA-02C**	
					Non-Fibers	100

** Analytes in bold indicate asbestos mineral content.

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	NVLAP Lab Code *	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	2 - Ottawa West Lab	200812-0	26-Nov-19

* Reference to the NVLAP term does not permit the user of this report to claim product certification , approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Ottawa West Lab: 25 Northside Rd, Unit C Nepean, Ontario K2H 8S1

Work Order Revisions | Comments

None

PARACEL LABORATORIES LTD.

Paracel ID: 1948165

l Office
2319 St. Laurent Blvd.
wa, Ontario K1G 4J8
800-749-1947
racel@paracellabs.com

Chain of Custody
(Lab Use Only)
Nº 41915

Page 1 of 1

Client Name: John Tufts
Contact Name: Mcintosh Perry
Address: 115 Walgreen Rd., RR#3 Carp, ON K0A 1L0
Telephone: 613 714 4657

Project Reference: MNT SOFFIT
Quote #: 19-651
PO #: 021-1920704-HZ
Email Address: j.tufts@mcintoshperry.com

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

Date Required: _____

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: 1948165

	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	SA-01A	Nov 26		PLM	MASTIC (BROWN), STYROFOAM	☒
2	B	↓		↓	↓	☒
3	C					☒
4	SA-02A				MASTIC (GREEN), STYROFOAM	☒
5	B					☒
6	C					☒
7						☐
8						☐
9						☐
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: Walk in

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print): J. TUFTS			
Date/Time: Nov. 26/ 11:10	Date/Time:	Date/Time: Nov 26/19 11:16	Date/Time: Nov 26/19 11:37

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Certificate of Analysis

McIntosh Perry Consulting Eng. (Carp)

115 Walgreen Rd.
Carp, ON K0A 1L0
Attn: John Tufts

Client PO: PEX-201806
Project: MNT Pipe Relining
Custody:

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019

Order #: 1947102

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

Paracel ID	Client ID
1947102-01	Pb-01
1947102-02	Pb-02

Approved By:

Dale Robertson, BSc
Laboratory Director

Certificate of Analysis
Client: McIntosh Perry Consulting Eng. (Carp)
Client PO: PEX-201806

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019
Project Description: MNT Pipe Relining

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-OES	based on MOE E3470, ICP-OES	21-Nov-19	22-Nov-19

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
Client: McIntosh Perry Consulting Eng. (Carp)
Client PO: PEX-201806

Report Date: 22-Nov-2019
Order Date: 18-Nov-2019
Project Description: MNT Pipe Relining

Sample Results

Lead

Matrix: Paint
Sample Date: 15-Nov-19

Paracel ID	Client ID	Units	MDL	Result
1947102-01	Pb-01	% by Wt.	0.0020	0.0570
1947102-02	Pb-02	% by Wt.	0.0020	0.0104

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	**ND**	**0.0020**	**% by Wt.**						
Matrix Duplicate									
Lead	**ND**	**0.0020**	**% by Wt.**	**ND**			**0.0**	**30**	
Matrix Spike									
Lead	242		ug/L	3.7	95.3	70-130			

PARACE LABORATORIES

Paracel ID: 1947102

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paracel@paracellabs.com

Chain of Custody
(Lab Use Only)

Page 1 of 1.

Client Name: McIntosh Perry Ltd.	Project Reference: MNT Pipe Relining
Contact Name: John Tufts	Quote #: 19-651 McIntosh Perry Asbestos and Lead
Address: 115 Walgreen Road, RR3 Carp, ON K0A 1L0	PO #: PCX-201806
	Email Address: j.tufts@mcintoshperry.com
Telephone: 6138362184	

Turnaround Time:

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

Date Required: Nov 22/19

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: 1947102

	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	SA-01A	Nov 15		PLM	ELBOW - ~~PAINT~~ DHW	☒
2	SA-01B	"		"	ELBOW - DHW	☒
3	SA-01C	"		"	ELBOW - DHW	☒
4						☐
5						☐
6	Pb-01	Nov 15		LEAD	GREY PAINT - Floor	☐
7	Pb-02	"		"	PEACH PAINT - Floor	☐
8						☐
9						☐
10						☐
11						☐
12						☐

-2 Black Bag-

* 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: Walk.

Relinquished By (Sign):	Received at Depot:	Received at Lab: Jumeeporn Dolmai	Verified By:
Relinquished By (Print): Scott Tufts			
Date/Time: Nov 18/19 12:55	Date/Time:	Date/Time: Nov 19, 2019 03.85	Date/Time: 18 Nov 19 16:17

APPENDIX D

Site Photographs

Photo 1: View of asbestos-containing pipe fitting insulation observed in Room 306B.

Photo 2: View of asbestos-containing vinyl floor tiles observed in Room 428.

Photo 3: Typical view of asbestos-containing drywall observed throughout the subject building.

Photo 4: View of asbestos-containing suspended ceiling tiles observed in Room 415.

Photo 5: View of asbestos-containing wall caulking (tan) observed in Room 0024 observed to be in fair condition.

Photo 6: View of flexible duct connector observed in Room 020C suspected to contain asbestos.

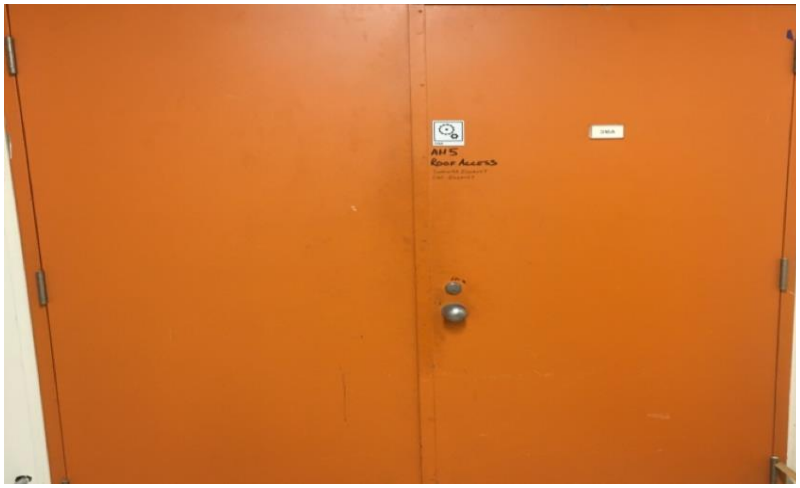


Photo 7: View of orange lead-containing paint observed on the door of Room 316.

Photo 8: View of lead containing beige paint observed to be in poor condition in Room 023A.

Photo 9: View of typical finishes observed within the subject building.

Photo 10: View of typical finishes observed within the subject building.

Photo 11: View of ceramic floor tiles grout observed throughout the subject building suspect to contain asbestos.

Photo 12: Typical view ODS containing water fountains observed throughout the subject building.

APPENDIX E

Asbestos-Containing Materials Checklists

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Presence	Friable/Non-Friable	Condition	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
00	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
00	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
00	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
00	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
00	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-*	Good	Easy	Low	-	-	Manage in Place	
00	Room	007A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	5	C	Manage in Place	
00	Room	009	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	8	C	Manage in Place	
00	Room	0024	Caulking	Wall	Confirmed	Non-Friable	Fair	Moderate	Low	-	-	Monitor Condition of Material. Consider Removal or Repair.	
00	Corridor	-	Caulking	Wall	Confirmed	Non-Friable	Good	Moderate	Low	50	LF	Manage in Place	
00	Room	0012	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	1	C	Manage in Place	
00	Room	002	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	65	C	Manage in Place	
00	Room	003B	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	12	C	Manage in Place	
00	Room	002A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	10	C	Manage in Place	
00	Room	007B	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	12	C	Manage in Place	
0	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
0	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Presence	Friable/Non-Friable	Condition	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
0	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
0	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
0	Room	02C	Pipe Elbows/fittings	Tar (Black)	Confirmed	Non-Friable	Good	Moderate	Low	8	C	Manage in Place	
0	Room	050	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	2	C	Manage in Place	
0	Room	051	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	2	C	Manage in Place	
0	Room	011	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	20	C	Manage in Place	
0	Room	011A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	12	C	Manage in Place	
0	Room	020C	Flexible Duct Connector	-	Suspected	-	Good	Easy	Low	4	C	Manage in Place	
0	Room	022	Pipe Elbows/fittings	Parging Cement	Suspected	Friable	Good	Difficult	Low	6	C	Manage in Place	
0	Room	023	Pipe Elbows/fittings	Parging Cement	Suspected	Friable	Good	Difficult	Low	7	C	Manage in Place	
0	Room	024	Pipe Elbows/fittings	Parging Cement	Suspected	Friable	Good	Difficult	Low	6	C	Manage in Place	
1	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
1	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
1	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
1	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-		Manage in Place	

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Presence	Friable/Non-Friable	Condition	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
1	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
1	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
1	Room	107	Texture Coat	Ceiling	Confirmed	Friable	Good	Easy	Low	1420	SF	Manage in Place	
2	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
2	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
2	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
2	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
2	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
2	Room	200	Mechanical Pipe Straight Insulation	Tar (Black)	Confirmed	Non-Friable	Good	Easy	Low	5	LF	Manage in Place	
2	Room	213	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	1	-	Manage in Place	
2	Room	216	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Moderate	Low	2	C	Manage in Place	
3	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
3	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
3	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
3	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
3	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
3	Room	300D	12" x 12" Vinyl Floor Tile	Brown with Spots	Confirmed	Non-Friable	Good	Easy	Low	800	SF	Manage in Place	
3	Room	300	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good	Easy	Low	1000	SF	Manage in Place	

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Presence	Friable/Non-Friable	Condition	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
3	Room	301C	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good	Easy	Low	285	SF	Manage in Place	
3	Room	302	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good	Easy	Low	430	SF	Manage in Place	
3	Room	304A	12" x 12" Vinyl Floor Tile	White with Black Dots in Verticle Line	Confirmed	Non-Friable	Good	Easy	Low	275	SF	Manage in Place	
3	Room	311D	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Easy	Low	3	C	Manage in Place	
3	Room	316A	Pipe Elbows/fittings	Parging Cement	Confirmed	Friable	Good	Easy	Low	27	C	Manage in Place	
4	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
4	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
4	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
4	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
4	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
4	Room	400	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good	Easy	Low	1025	SF	Manage in Place	
4	Room	405	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good	Easy	Low	150	SF	Manage in Place	
4	Room	405A	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good	Easy	Low	100	SF	Manage in Place	
4	Room	415	2' x 4' Suspended Ceiling Tile	Pinholes with Wavy Fissures	Confirmed	-	Good	Easy	Low	220	SF	Manage in Place	
4	Room	415A	12" x 12" Vinyl Floor Tile	Brown with Spots	Confirmed	Non-Friable	Good	Easy	Low	100	SF	Manage in Place	

Floor/Level	Room	ID	Type of ACM	Description	Asbestos Presence	Friable/Non-Friable	Condition	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
4	Room	428	12" x 12" Vinyl Floor Tile	White with Black Dots	Confirmed	Non-Friable	Good	Easy	Low	350	SF	Manage in Place	
5	Throughout Level	-	Concrete Block Mortar	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
5	Throughout Level	-	Ceramic Floor Tile Grout	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
5	Throughout Level	-	Fire Doors	-	Suspected	-	Good	Easy	Low	-	-	Manage in Place	
5	Throughout Level	-	Drywall Joint Compound	Wall and Ceiling	Confirmed	-	Good	Easy	Low	-	-	Manage in Place	
5	Throughout Level	-	Plaster	Wall and Ceiling	Confirmed	Friable	Good	Easy	Low	-	-	Manage in Place	
5	Roof Level	-	Roofing Materials	-	Suspected	-	Good	Easy	Low	-		Manage in Place	

Note: * As per O. Reg. 278/05, an asbestos record must indicate whether asbestos-containing materials (ACMs) are friable or non-friable, as friability influences the required work procedures for their disturbance or removal. However, for specific materials such as asbestos- containing drywall joint compound (DJC) and ceiling tiles (CT), the regulation provides prescriptive requirements regardless of friability. Consequently, this summary uses a dash (–) to indicate that friability is not applicable to DJC and CT.

Unit Legend

Unit Abbreviation	Description
SF	Square Feet
LF	Long Feet
N/A	Not Applicable
SM	Square Meter
LM	Long Meter
C	Count (quantity)

APPENDIX F

Hazardous Containing Materials Checklists

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
0	Room	024	Lead	Wall Paint	Grey	Good	-	-	-	Confirmed	Manage in Place	
0	Squash Court	04	Lead	Door Frame Paint	Brown	Good	-	-	-	Confirmed	Manage in Place	
0	Corridor	-	Lead	Wall Paint	Beige	Good	-	-	-	Confirmed	Manage in Place	
0	Corridor	-	Lead	Stair Paint	Grey	Good	-	-	-	Confirmed	Manage in Place	
0	Corridor	-	Lead	Cabinet Paint	Black	Good	-	-	-	Confirmed	Manage in Place	
0	Corridor	-	Lead	Floor Paint	Grey	Good	-	-	-	Confirmed	Manage in Place	
0	Room	02	Ozone Depleting Substances (ODS)	Vending Machine	N/A	Good	Gatorade	-	-	Confirmed	Manage in Place	R134a
0	Room	02	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	-	-	Confirmed	Manage in Place	R134a
0	Room	019A	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	-	-	Confirmed	Manage in Place	R134a
0	Room	020	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	-	-	Confirmed	Manage in Place	R134a

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
0	Room	023A	Ozone Depleting Substances (ODS)	Vending Machine	N/A	Good	True	-	-	Confirmed	Manage in Place	R134a
0	Room	045	Ozone Depleting Substances (ODS)	Ice Making Machine	N/A	Good	Manitowac	-	-	Confirmed	Manage in Place	R134a
0	Room	047	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	1	C	Confirmed	Manage in Place	R134a
0	Room	020	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
1	Room	114	Mercury	Thermostat	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
1	Room	115	Mercury	Thermostat	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
1	Room	116	Mercury	Thermostat	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
1	Room	108	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
2	Room	200	Lead	Wall Paint	Yellow	Good	-	-	-	Confirmed	Manage in Place	
2	Room	200D	Mercury	Thermostat	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
2	Room	216	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
2	Room	213	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	Galaxy	1	C	Confirmed	Manage in Place	R134a
2	Room	221	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
2	Room	221	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
3	Room	316	Lead	Door Frame Paint	Orange	Good	-	-	-	Confirmed	Manage in Place	
3	Room	304A	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
3	Room	306	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	Thermo Fisher	3	C	Confirmed	Manage in Place	R134a, R404a, R290
3	Room	309	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	Kenmore	1	C	Confirmed	Manage in Place	R134a
3	Room	325	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant

Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
3	Room	301C	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	1	C	Confirmed	Manage in Place	R134a
3	Room	304a	Ozone Depleting Substances (ODS)	Drinking Water Fountain	N/A	Good	Elkay	1	C	Confirmed	Manage in Place	R134a
3	Room	306	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
3	Room	307	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
4	Room	428	Lead	Window Paint	Red	Good	-	-	-	Confirmed	Manage in Place	
4	Room	400E	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
4	Room	424	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
4	Room	401	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant

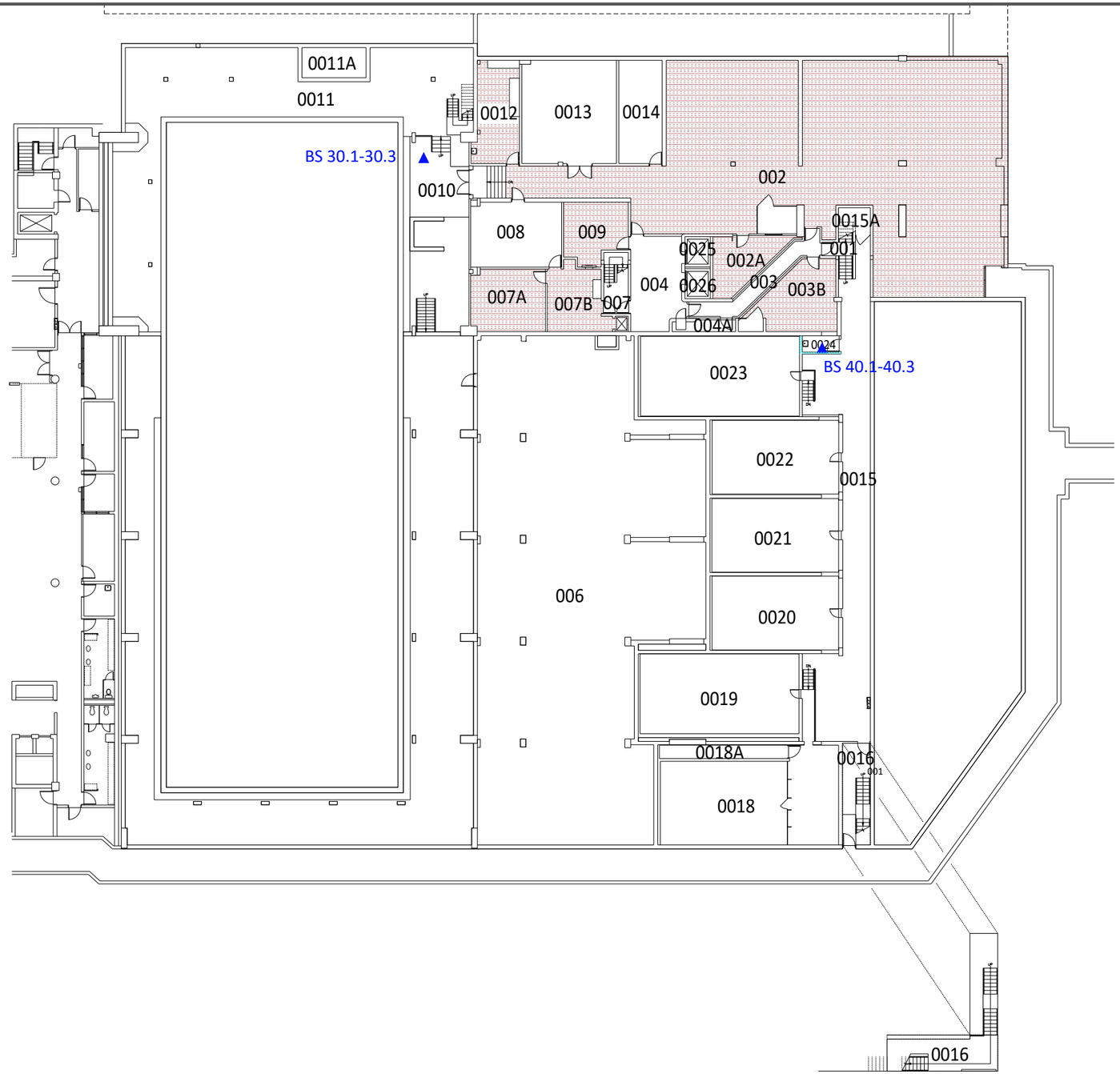
Floor/Level	Room	ID	DS Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
0	Room	019	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
0	Room	015	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
00	Room	007B	Ozone Depleting Substances (ODS)	Refrigerator	N/A	Good	N/A	1	C	Confirmed	Manage in Place	Unknown Refrigerant
Throughout Building	-	-	Lead	Battery Pack	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
Throughout Building	-	-	Mercury	Fluorescent Light Tubes	N/A	Good	N/A	-	-	Confirmed	Manage in Place	
Throughout Building	-	-	Silica	Concrete, Mortar, Etc.	N/A	Good	N/A	-	-	Confirmed	Manage in Place	

Unit Legend

Unit Abbreviation	Description
SF	Square Feet
LF	Long Feet
N/A	Not Applicable
SM	Square Meter
LM	Long Meter
C	Count (quantity)

APPENDIX G

Site Sampling & Location Plans



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THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
ACM plaster and drywall with ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl Floor Tile (VFT)
- ACM Caulking & Mastic
- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

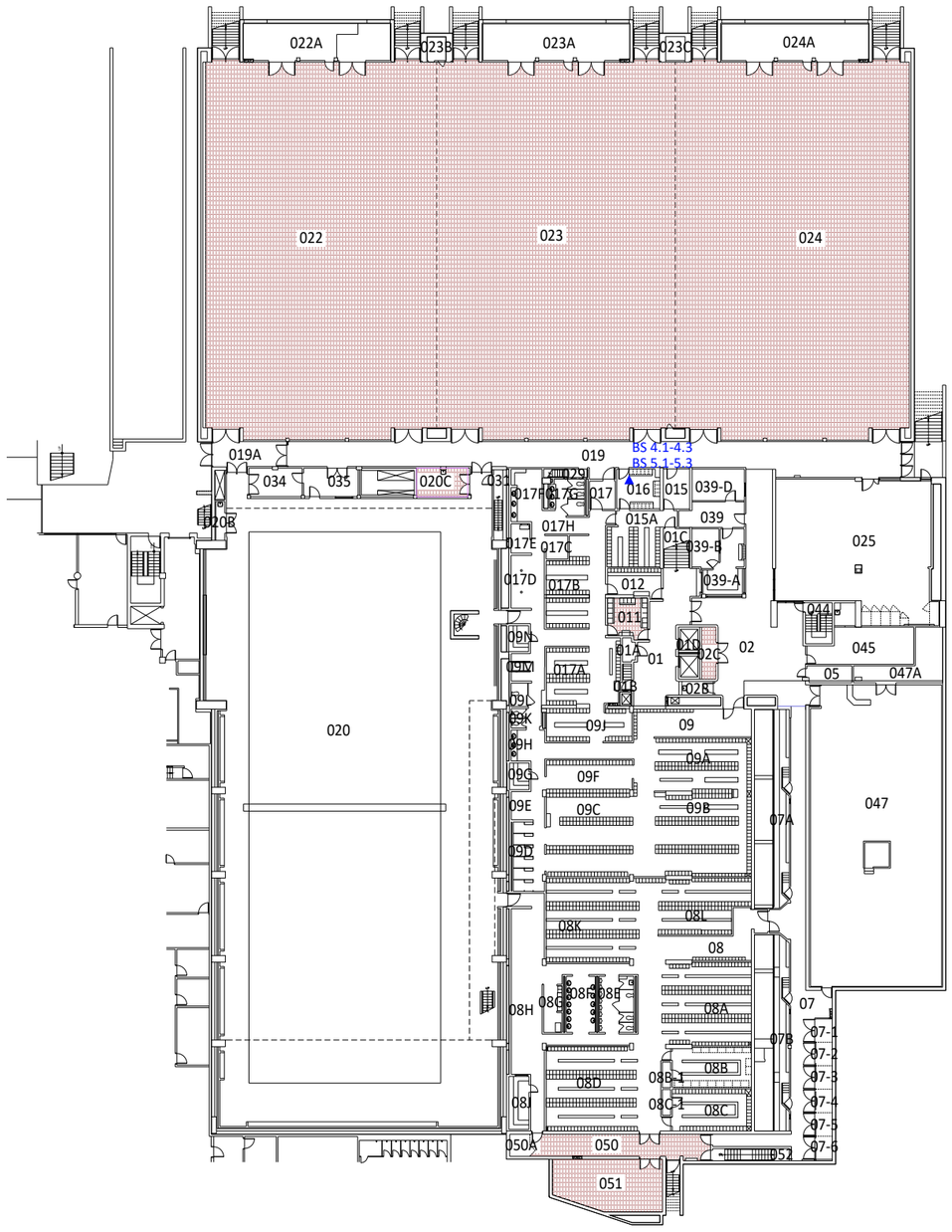
PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 00
SAMPLE LOCATION

SCALE: 1:100
DATE: JUNE 15, 2020
DRAWN: D.B
CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-00
REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

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- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 0
SAMPLE LOCATION

SCALE: 1:150

DATE: JUNE 15, 2020

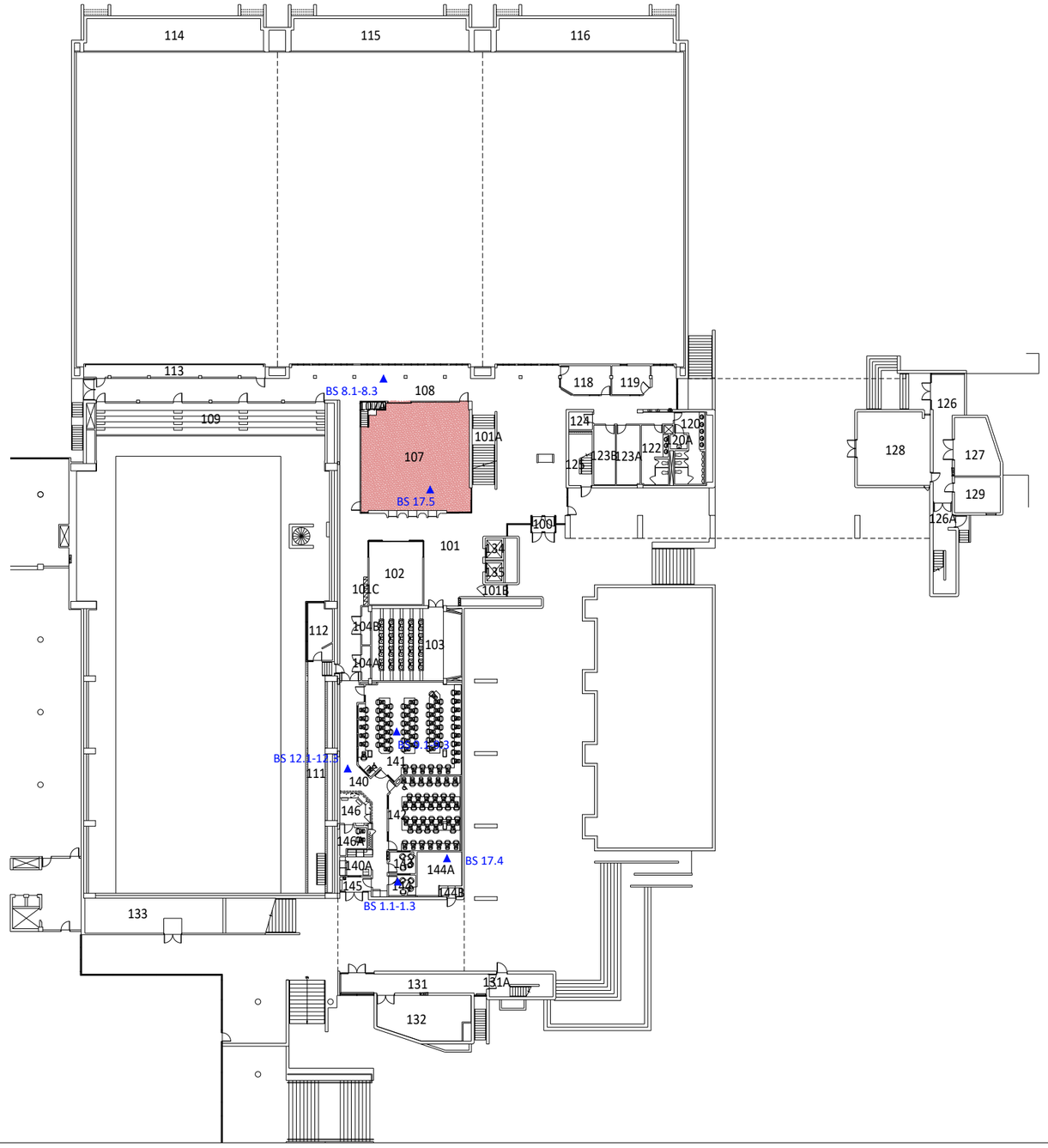
DRAWN: D.B

CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-0

REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
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- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 1
SAMPLE LOCATION

SCALE: 1:150

DATE: JUNE 15, 2020

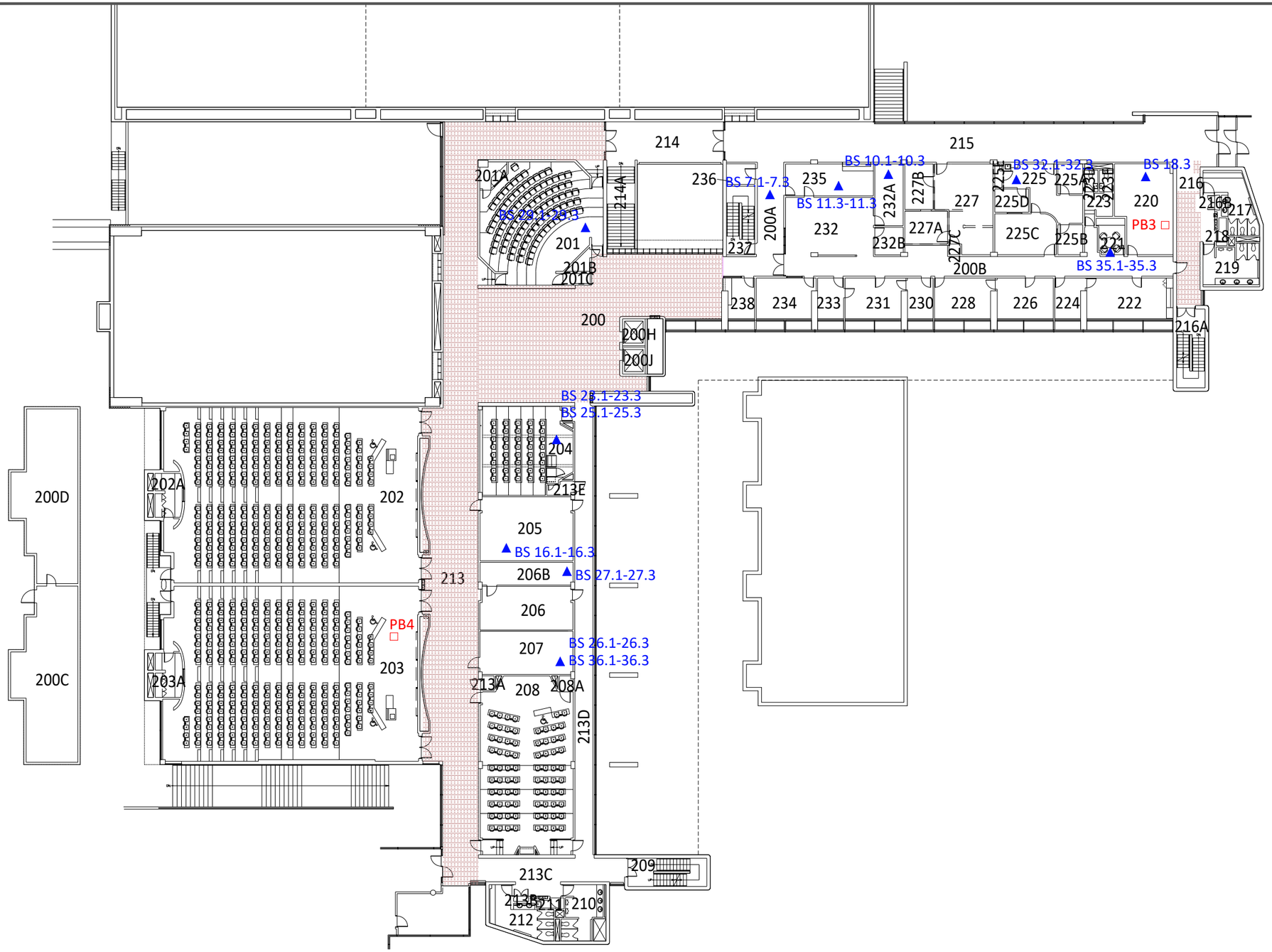
DRAWN: D.B

CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-1

REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
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- ACM Vinyl Floor Tile (VFT)
- ACM Caulking & Mastic
- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

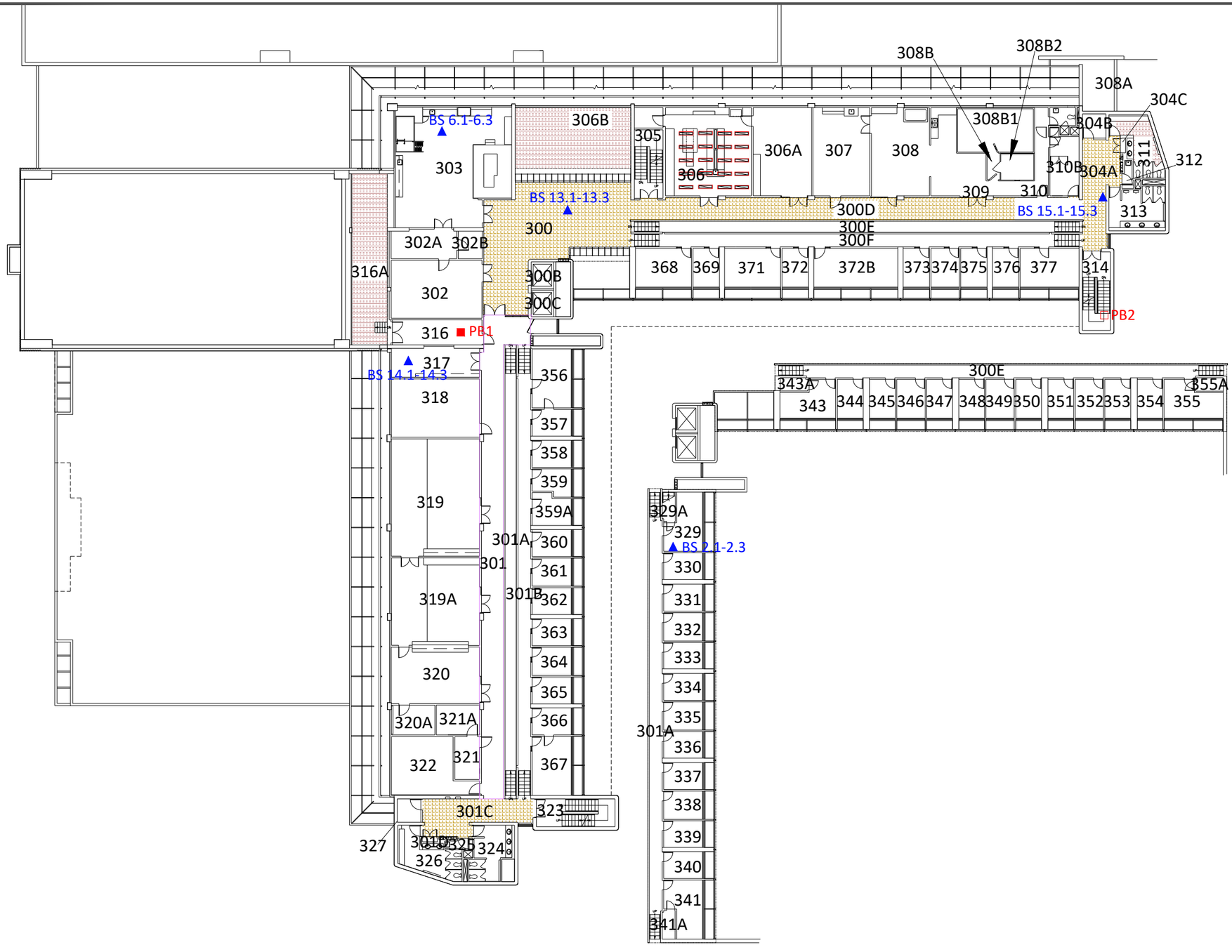
PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 2
SAMPLE LOCATION

SCALE: 1:100
DATE: JUNE 15, 2020
DRAWN: D.B
CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-2
REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
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- ACM Caulking & Mastic
- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 3
SAMPLE LOCATION

SCALE: 1:100

DATE: JUNE 15, 2020

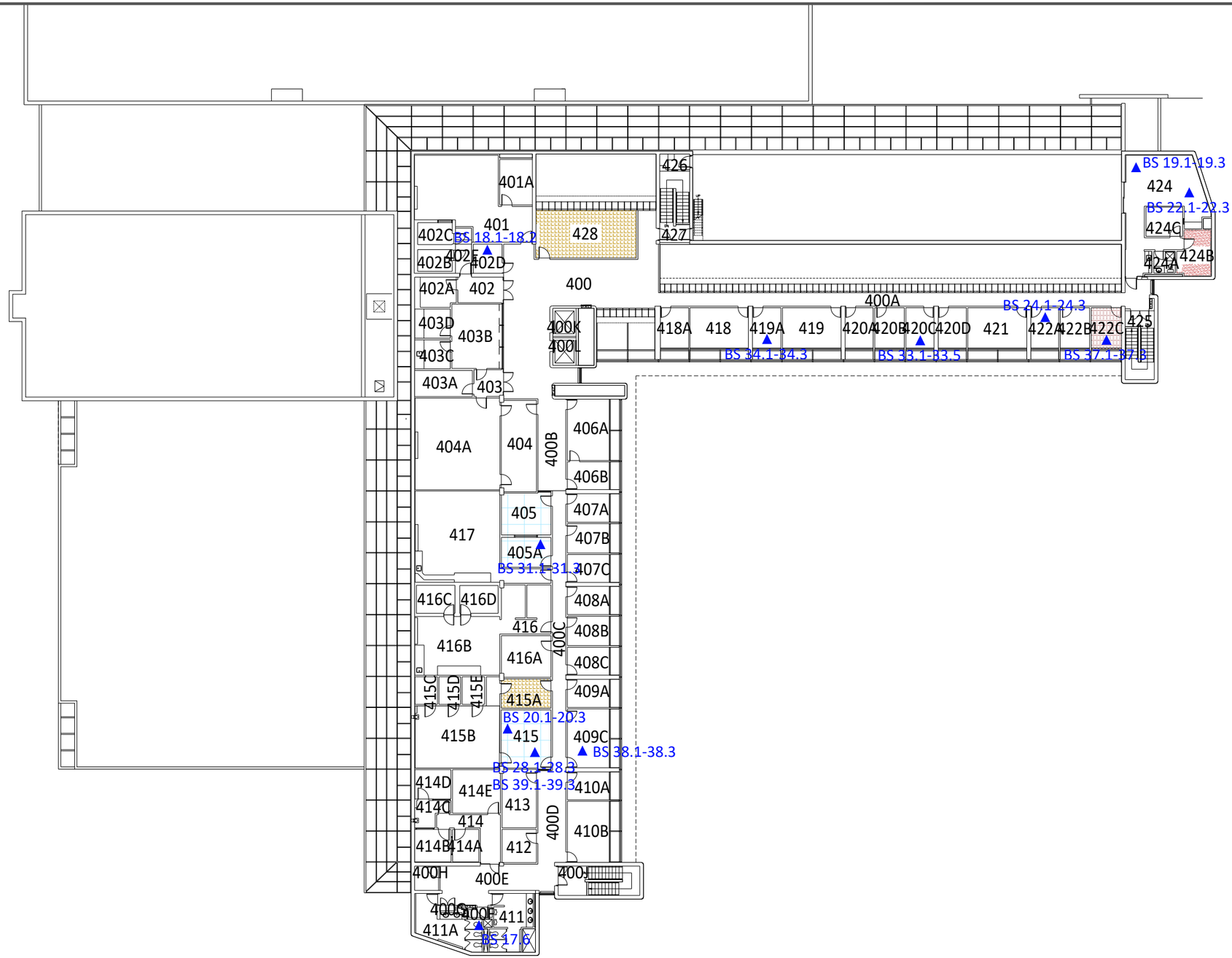
DRAWN: D.B

CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-3

REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
ACM plaster and drywall with ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl Floor Tile (VFT)
- ACM Caulking & Mastic
- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

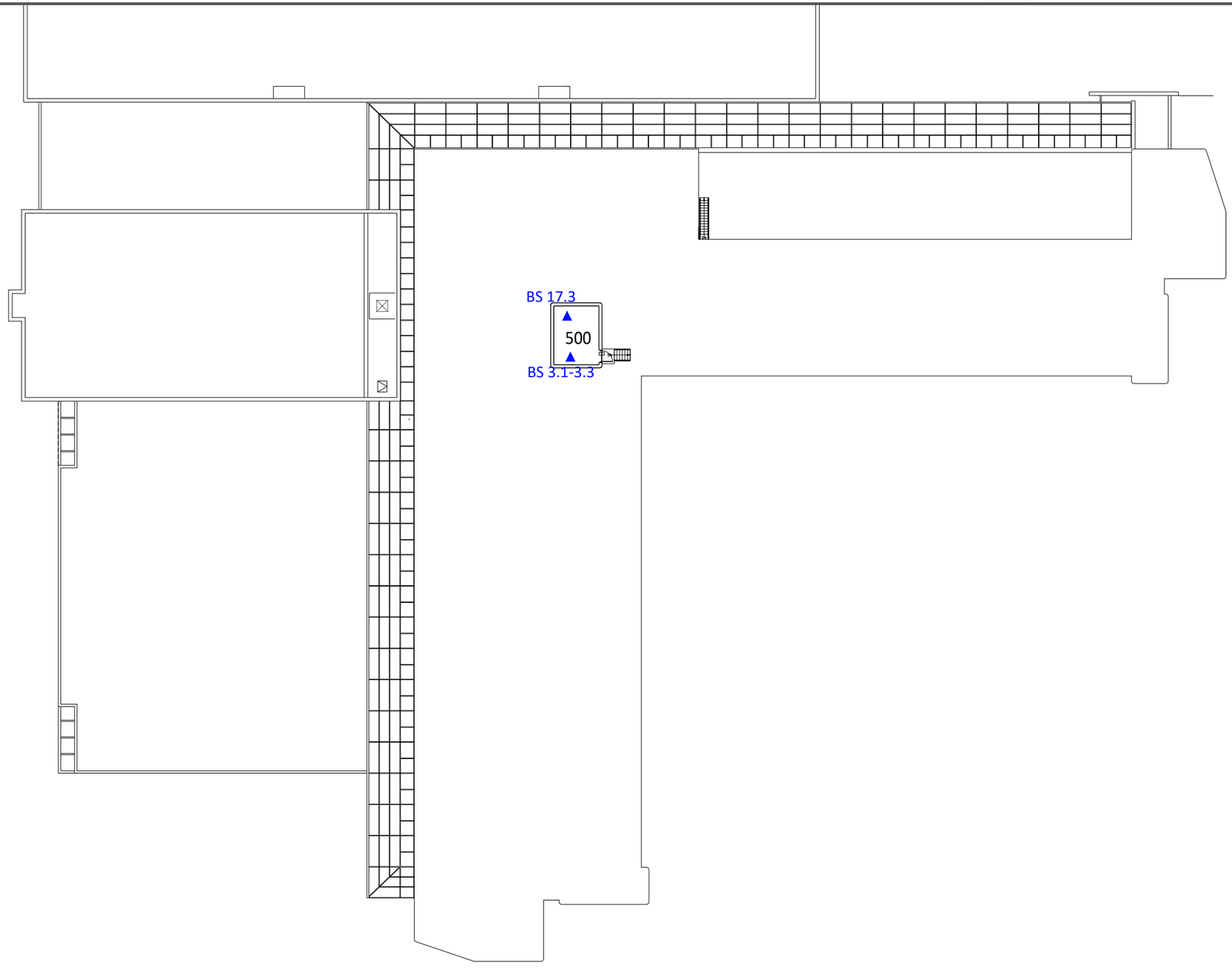
PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 4
SAMPLE LOCATION

SCALE: 1:100
DATE: JUNE 15, 2020
DRAWN: D.B
CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-4
REV.:



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Legend:

- ▲ Asbestos Bulk Sample
- □ Lead Paint Sample <LOD
- ■ Lead Paint Sample >LOD

Note:
ACM plaster and drywall with ACM joint compound is present throughout

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- ACM Caulking & Mastic
- ACM Pipe Insulation
- ACM Texture Coat

CLIENT: UNIVERSITY OF OTTAWA

PROJECT: HAZARDOUS MATERIALS SURVEY
125 UNIVERSITY, OTTAWA, ON

TITLE: MASTER DRAWING
LEVEL 5
SAMPLE LOCATION

SCALE: 1:100

DATE: JUNE 15, 2020

DRAWN: D.B

CHECKED: M.M.

REV. NO.	DESCRIPTION	DATE	BY	APPD.

DRAWING NUMBER: A-5

REV.: