

HAZARDOUS MATERIALS SURVEY AND 2022 REASSESSMENT SURVEY

161 LOUIS-PASTEUR PRIVATE, OTTAWA, ON



Project No.: Z1920014HZ / CCC-230252-00

Prepared for:

University of Ottawa

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McINTOSH PERRY

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REASSESSMENT SURVEY 2022

McIntosh Perry Limited (**MPL**) was retained by the University of Ottawa, to complete to a hazardous materials survey of Marchand Residence located at 161 Louis-Pasteur Private, Ottawa. The survey was conducted from August 30th to September 6th, 2019. **The reassessment was completed on July 14th, 2022.**

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 Mechanical Pipe Straight Insulation was observed to be in Good Condition in Room B08C, E02C, E07, E014, D113A, D415A.
- ACM Mechanical Pipe Elbow Insulation was observed to be in Good Condition throughout the subject building.
- ACM HVAC Duct Insulation was observed to be in Good Condition throughout the subject building.
- ACM Mechanical Gasket material was observed to be in Good Condition in Room B103
- ACM Ceiling Texture Coat was observed to be in Good condition in corridor A701.
- ACM Drywall Joint Compound was observed to be in Good Condition throughout the subject building.
- ACM Vinyl Floor Tiles was observed to be in Good Condition throughout the subject building.
- ACM Transite Fume Hood Panels were observed to be in Good Condition in Room D407A and D415B.
- ACM Caulking was observed to be in Good Condition in room A802 and B524.
- 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

McIntosh Perry Limited (**MPL**) was retained by the University of Ottawa, to complete a hazardous materials survey for Colonel By Hall building located at 161 Louis-Pasteur Private, Ottawa. The survey was conducted from August 30th to September 6th, 2019. **The reassessment was completed on July 14th, 2022.**

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 MPL, the following 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
Mechanical Pipe Insulation	Yes	Specific Areas Only	Chrysotile
Mechanical Duct Insulation	Yes	Specific Areas Only	Chrysotile
Mechanical Gasket	No	Specific Equipment	Chrysotile
Drywall Joint Compound	-	Throughout Building	Chrysotile
Ceiling Texture Finish	Yes	Specific Areas Only	Chrysotile
Vinyl Floor Tiles	No	Specific Areas Only	Chrysotile
Caulking	No	Specific Areas Only	Chrysotile
Transite	No	Specific Areas Only	Chrysotile
Fire Doors	-	Throughout Building	Suspected
Roofing Materials	-	Roof	Suspected

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

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.

Based on the assessment conducted by MPL, 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	Specific Areas Only
Lead Acid Batteries	Throughout Building
Mercury Vapour	Throughout Building
Ozone Depleted Substances	Specific Areas Only
Water Damage	Specific Areas Only

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

Designated Substances are 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 above-mentioned materials:

- 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) Mould Abatement Guidelines.

Prior to any renovations or demolition activities within 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 or hazardous materials until proven otherwise by analytical testing.

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 to subcontractors.

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

McINTOSH PERRY

November 25, 2022

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Attention: Joel Lajeunesse, Project Manager

Re: 161 Louis-Pasteur Private, Ottawa - Colonel By Hall
Hazardous Materials Survey
McIntosh Perry Limited Reference No. Z1920014HZ / CCC-230252-00

1.0 INTRODUCTION

In accordance with your instructions, McIntosh Perry Limited (MPL) carried out a Hazardous Materials Survey at Colonel By Hall building located at 161 Louis-Pasteur Private, Ottawa. The survey of the building was conducted from August 30th to September 6th, 2019. **The reassessment was completed on July 14th, 2022.**

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, visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone depleting substances (ODSs), other halocarbons and mould.

MPL completed the following,

- Visual review of the building to identify materials which could contain Designated Substances and hazardous materials;
- Bulk sampling and analysis of building materials suspected of containing asbestos (if required);
- Bulk sampling and analysis of representative paints and finishes suspected of containing lead (if required);
- 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 multi-storey engineering building constructed in 1971. 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 and concrete block. Within the subject building, ceilings were observed to be either suspended ceiling tiles, acoustic tiles, while open ceilings were observed in other areas of the building. The floors were generally concrete with the exception of select units containing vinyl floor tiles, vinyl sheet flooring and carpet.

3.0 FINDINGS & RECOMMENDATIONS

Designated Substances

3.1 Asbestos

Findings

A total of one hundred and ninety-five (195) samples were collected during the survey and sent to an independent 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.

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 A301	VFT (12"x12"- Blue)	None Detected	N/A
BS 1.2	Room A604	VFT (12"x12"- Blue)	None Detected	N/A
BS 1.3	Room A604	VFT (12"x12"- Blue)	None Detected	N/A
BS 2.1	Room B109C	SCT (Pinholes w/ Texture)	None Detected	N/A
BS 2.2	Room B109C	SCT (Pinholes w/ Texture)	None Detected	N/A
BS 2.3	Room D503	SCT (Pinholes w/ Texture)	None Detected	N/A
BS 3.1	Room B103	VFT (12"x12"-White w/ Green and Orange Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 3.2	Room B103	VFT (12"x12"-White w/ Green and Orange Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 3.3	Room B103	VFT (12"x12"-White w/ Green and Orange Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 4.1	Room B109C	SCT(Pinholes Varying Sizes)	None Detected	N/A
BS 4.2	Room B109C	SCT(Pinholes Varying Sizes)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 4.3	Room B109C	SCT(Pinholes Varying Sizes)	None Detected	N/A
BS 5.1	BS204	VFT (12"x12"- Grey w/ Black)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 5.2	BS204	VFT (12"x12"- Grey w/ Black)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 5.3	BS204	VFT (12"x12"- Grey w/ Black)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 6.1	Room B210	VFT (12"x12"-Beige w/ White, Black, Grey Spots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 6.2	Room B210	VFT (12"x12"-Beige w/ White, Black, Grey Spots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 6.3	Room B210	VFT (12"x12"-Beige w/ White, Black, Grey Spots)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 7.1	Room B406B	Firestop (Brown)	None Detected	N/A
BS 7.2	Room B406B	Firestop (Brown)	None Detected	N/A
BS 7.3	Room B406B	Firestop (Brown)	None Detected	N/A
BS 8.1	Room B522	VFT (12"x12"- Black)	None Detected	N/A
BS 8.2	Room B522	VFT (12"x12"- Black)	None Detected	N/A
BS 8.3	Room B522	VFT (12"x12"- Black)	None Detected	N/A
BS 9.1	Room B602	Mechanical Pipe Fitting Insulation (Grey)	60% Chrysotile	Friable
BS 9.2	Room B602	Mechanical Pipe Fitting Insulation (Grey)	Stop Positive	Friable
BS 9.3	Room B602	Mechanical Pipe Fitting Insulation (Grey)	Stop Positive	Friable
BS 10.1	Room B701	Acoustic Ceiling Tile (12"x12"-Pinholes White and Brown)	None Detected	N/A
BS 10.2	Room B701	Acoustic Ceiling Tile (12"x12"-Pinholes White and Brown)	None Detected	N/A
BS 10.3	Room B701	Acoustic Ceiling Tile (12"x12"-Pinholes White and Brown)	None Detected	N/A
BS 11.1	Room A24A	Concrete Block Mortar (Grey)	None Detected	N/A
BS 11.2	Room B901	Concrete Block Mortar (Grey)	None Detected	N/A
BS 11.3	Room B901	Concrete Block Mortar (Grey)	None Detected	N/A
BS 12.1	Room B524	Interior Window Caulking (Brown)	5% Chrysotile	Non-Friable
BS 12.2	Room B524	Interior Window Caulking (Brown)	Stop Positive	Non-Friable
BS 12.3	Room B524	Interior Window Caulking (Brown)	Stop Positive	Non-Friable

Sample ID	Location	Material	Type and Content	Friability
BS 13.1	Room C09	VFT (12"x12"-White w/ Green Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 13.2	Room C09	VFT (12"x12"-White w/ Green Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 13.3	Room C09	VFT (12"x12"-White w/ Green Flakes)	None Detected	N/A
BS 13.3	Room C09	Mastic (Black)	None Detected	N/A
BS 14.1	Room D05A	VFT (12"x12"-White w/ Grey Spots)	None Detected	N/A
BS 14.2	Room D05A	VFT (12"x12"-White w/ Grey Spots)	None Detected	N/A
BS 14.3	Room D05A	VFT (12"x12"-White w/ Grey Spots)	None Detected	N/A
BS 15.1	Room D014	Wall Mastic (Black)	None Detected	N/A
BS 15.2	Room D014	Wall Mastic (Black)	None Detected	N/A
BS 15.3	Room D014	Wall Mastic (Black)	None Detected	N/A
BS 16.1	Room D107	Firestop Caulking (Grey)	None Detected	N/A
BS 16.2	Room D107A	Firestop Caulking (Grey)	None Detected	N/A
BS 16.3	Room D107A	Firestop Caulking (Grey)	None Detected	N/A
BS 17.1	Room D511	VFT (12"x12" White w/ Grey Flakes)	None Detected	N/A
BS 17.2	Room D504	VFT (12"x12" White w/ Grey Flakes)	None Detected	N/A
BS 17.3	Room D504	VFT (12"x12" White w/ Grey Flakes)	None Detected	N/A
BS 18.1	Room E09	VSF (12"x12"- Grey w/ White and Dark Grey Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 18.2	Room E09	VSF (12"x12"-Grey w/ White and Dark Grey Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 18.3	Room E09	VSF (12"x12"-Grey w/ White and Dark Grey Flakes)	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 19.1	Room E018B	VFT (12"x12"-Grey)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 19.2	Room E018B	VFT (12"x12"-Grey)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 19.3	Room E018B	VFT (12"x12"-Grey)	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 20.1	Room E018B	ACT Screw on Tile (Brown)	None Detected	N/A
BS 20.2	Room E018B	ACT Screw on Tile (Brown)	None Detected	N/A
BS 20.3	Room E018B	ACT Screw on Tile (Brown)	None Detected	N/A
BS 21.1	Room E018D	Mechanical Pipe Straight Insulation (Brown w/ Black)	None Detected	N/A
BS 21.2	Room E018D	Mechanical Pipe Straight Insulation (Brown w/ Black)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 21.3	Room E018D	Mechanical Pipe Straight Insulation (Brown w/ Black)	None Detected	N/A
BS 22.1	Room E101B	Floor Mastic (Black)	None Detected	N/A
Bs 22.2	Room E101B	Floor Mastic (Black)	None Detected	N/A
BS 22.3	Room E101B	Floor Mastic (Black)	None Detected	N/A
BS 23.1	Room A321	Drywall Joint Compound (Beige)	1% Chrysotile	-
BS 23.2	Room A501	Drywall Joint Compound (Beige)	Stop Positive	-
BS 23.3	Room A601	Drywall Joint Compound (Beige)	Stop Positive	-
BS 23.4	Room A701	Drywall Joint Compound (Beige)	Stop Positive	-
BS 23.5	Room A702	Drywall Joint Compound (Beige)	Stop Positive	-
BS 23.6	Room A708B	Drywall Joint Compound (Beige)	Stop Positive	-
BS 23.7	Room A708B	Drywall Joint Compound (Beige)	Stop Positive	-
BS 24.1	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.2	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.3	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.4	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.5	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.6	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 24.7	Room C101	Ceiling Texture Coat (White)	None Detected	N/A
BS 25.1	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.2	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.3	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.4	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.5	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.6	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 25.7	Room C03	Ceiling Plaster (Grey)	None Detected	N/A
BS 26.1	Room A01	VFT 12"x12"-Yellow with Black and Brown Streaks	8% Chrysotile	Non-Friable
BS 26.2	Room A01	VFT 12"x12"-Yellow with Black and Brown Streaks	Stop Positive	Non-Friable
BS 26.3	Room A01	VFT 12"x12"-Yellow with Black and Brown Streaks	Stop Positive	Non-Friable
BS 27.1	Room A04	VFT-12"x12"-Grey with Black Dots	None Detected	N/A
		Mastic (Black/Yellow)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 27.2	Room A04	VFT-12"x12"-Grey with Black Dots	None Detected	N/A
BS 27.3	Room A04	VFT-12"x12"-Grey with Black Dots	None Detected	N/A
BS 27.3	Room A04	Mastic (Black/Yellow)	None Detected	N/A
BS 28.1	Room A04	VFT-12"x12"-Beige with Black Dots	None Detected	N/A
BS 28.2	Room A04	VFT-12"x12"-Beige with Black Dots	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 28.3	Room A04	VFT-12"x12"-Beige with Black Dots	None Detected	N/A
BS 29.1	Room A114	VFT-12"x12"-Light Grey with Grey Flakes	2% Chrysotile	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 29.2	Room A114	VFT-12"x12"-Light Grey with Grey Flakes	Stop Positive	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 29.3	Room A114	VFT-12"x12"-Light Grey with Grey Flakes	Stop Positive	Non-Friable
		Mastic (Black)	None Detected	N/A
BS 30.1	Room A114	VFT-12"x12"-Cream with Pink/Green/Grey Flakes	None Detected	N/A
BS 30.2	Room A114	VFT-12"x12"-Cream with Pink/Green/Grey Flakes	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 30.3	Room A114	VFT-12"x12"-Cream with Pink/Green/Grey Flakes	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 31.1	Room A201B	Mechanical Pipe Fitting Insulation	70% Chrysotile	Friable
BS 31.2	Room A201B	Mechanical Pipe Fitting Insulation	Stop Positive	Friable
BS 31.3	Room A201B	Mechanical Pipe Fitting Insulation	Stop Positive	Friable
BS 32.1	Room A301	VSF-Grey with Blue and Brown	None Detected	N/A
BS 32.2	Room A315	VSF-Grey with Blue and Brown	None Detected	N/A
BS 32.3	Room A315	VSF-Grey with Blue and Brown	None Detected	N/A
BS 33.1	Room A201D	Firestop (Pink)	None Detected	N/A
BS 33.2	Room A201D	Firestop (Pink)	None Detected	N/A
BS 33.3	Room A321	Firestop (Pink)	None Detected	N/A
BS 34.1	Room A201	VFT-12"x12"-White	None Detected	N/A
BS 34.2	Room A321	VFT-12"x12"-White	None Detected	N/A
		Mastic (Yellow)	None Detected	N/A
BS 34.3	Room A321	VFT-12"x12"-White	None Detected	N/A
BS 35.1	Room A201C	Firestop (Red)	None Detected	N/A
BS 35.2	Room A501C	Firestop (Red)	None Detected	N/A
BS 35.3	Room A601	Firestop (Red)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 36.1	Room A505	VFT-12"x12"- Pink	None Detected	N/A
BS 36.2	Room A505	VFT-12"x12"- Pink	None Detected	N/A
BS36.3	Room A605	VFT-12"x12"- Pink	None Detected	N/A
BS 37.1	Room A519	VFT-12"x12"-Black with White and Grey Spots	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 37.2	Room A519	VFT-12"x12"-Black with White and Grey Spots	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 37.3	Room A519	VFT-12"x12"-Black with White and Grey Spots	None Detected	N/A
		Mastic (Black)	None Detected	N/A
BS 38.1	Room A604	VFT-12"x12"-Yellow Tile with Brown and Teal Streaks	None Detected	N/A
BS 38.2	Room A604	VFT-12"x12"-Yellow Tile with Brown and Teal Streaks	None Detected	N/A
BS 38.3	Room A604	VFT-12"x12"-Yellow Tile with Brown and Teal Streaks	None Detected	N/A
BS 39.1	Room A705	Ceiling Tile (Beige)	None Detected	N/A
BS 39.2	Room A705	Ceiling Tile (Beige)	None Detected	N/A
BS 39.3	Room A705	Ceiling Tile (Beige)	None Detected	N/A
BS 40.1	Room A714	Carpet Mastic (Black)	None Detected	N/A
BS 40.2	Room A614	Carpet Mastic (Black)	None Detected	N/A
BS 40.3	Room A614	Carpet Mastic (Black)	None Detected	N/A
BS 41.1	Room A802	Door Caulking (Brown)	None Detected	N/A
BS 41.2	Room A802	Door Caulking (Brown)	None Detected	N/A
BS 41.3	Room A802	Door Caulking (Brown)	None Detected	N/A

N/A – Not Applicable

VFT – Vinyl Floor Tiles

ACT-Acoustic Ceiling Tiles

SCT-Suspended Ceiling Tiles

Stop Positive – Material considered being 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 in the subject building.

3.1.2 Mechanical Pipe Insulation

3.1.2.1 Mechanical Pipe Straight Insulation

Mechanical pipe straight insulation previously identified to **contain 60% Chrysotile asbestos** was observed in Room B08C, E02C, E07, E014, D113A, D415A. This material is considered friable and was observed to be in good condition.

Mechanical pipe straight insulation previously identified on condensate piping in Heating Plant top Colonel. This material was analyzed and was determined not to contain asbestos. Mechanical pipe straight insulation (Brown with Black) was observed and sampled in Room E018D. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.

3.1.2.2 Mechanical Piping Elbows/Fittings Insulation

Several different types of mechanical pipe elbow/fitting insulation was observed in various locations throughout the subject building as follows:

- Mechanical pipe elbows/fittings insulation previously identified to **contain 15%-65% Chrysotile asbestos** was observed in Rooms B03, B06, B08 (B, D, E), , C012 (B,C), CO13, D02, D03, D04, D05, D06, , E01, E02, E08, E09, E010, E010A, E011, E012, E012G, E013, E018, E018(B, C), E026, B109J, B110 (A,F), D108, D109B, D110, D111, D113(A,C) D114, D116, D117, E101, E102B, A201B, B203A, B205(A,B), B206, B206A, B208, D201A, D201B, D202, D205(A,B), D208, D212, D213, D215, D217, D218, D219, B302C, B302D, B305A ,B310A, C303, D301(A,B), D302, D302A, D305A, D306, D307, D308, D310, D312, D317, D318, D319, D320, B408A, D401A, D402, D403, D404, D408A, D415, D415A, D416, B504, B513, D502A, D507, D509, D515A, D516, B601, B602, C602, B701 C702 and A802 . This material is considered friable and was observed to be in good condition with the exception of select areas that were observed to be in fair to poor condition.
- Mechanical pipe fitting insulation previously identified to **contain 30% chrysotile asbestos** is known to be present in Room C03. This material is considered friable and was observed to be in good condition.
- Mechanical pipe fitting insulation previously identified to **contain 20% chrysotile asbestos** is known to be present in Room A401A. This material is considered friable and was observed to be in good condition.
- Mechanical pipe fitting insulation previously identified to **contain 65% chrysotile asbestos** is known to be present in Room D02. This material is considered friable and was observed to be in good condition.
- Mechanical pipe fitting insulation previously identified to **contain 65% chrysotile asbestos** is known to be present in Room D109B. This material is considered friable and was observed to be in poor condition.

- Mechanical pipe fitting insulation previously identified to **contain 70% chrysotile asbestos** is known to be present in 8th Floor Mechanical Room in Block A. This material is considered friable and was observed to be in good condition.
- Mechanical pipe/elbows and fitting insulation was observed and sampled in Room A201B and B602. The laboratory analytical results of samples collected indicate that this material **contain 60%-70% Chrysotile asbestos**. This material is considered to be friable and was observed in good condition.

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

HVAC duct insulation previously identified to **contain 60% Chrysotile asbestos** was observed in B016A, D05, E01, E02, E04, E05A, E07, E08, E08A, E012, E014, E018, D108, D201B, D303, D308, D310, D415, D415C, D502, D515A, and D516 in the subject building. This material is considered friable and was observed to be in good condition.

3.1.2.5 Other Mechanical Insulation

Gasket material previously identified to be present on Pump 19 in Room B103 **contains 20% Chrysotile asbestos**. This material is considered to be non-friable and was observed to be in good condition.

Flexible duct connectors were observed in Room C503. This material was visually identified as rubber and therefore not suspected of containing asbestos.

3.1.3 Heat Shield or Heat Shield Insulation

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

3.1.4 Texture Finishes

Several different types of texture finishes were observed in various locations throughout the subject building as follows:

- Ceiling texture coat (White) previously identified to **contain 5% Chrysotile asbestos** is known to be present in corridor A701. This material is considered friable and was observed to be in good condition.
- Ceiling stipple (White) previously identified and sampled from the 1st and 3rd floor elevator lobby areas. This material was analyzed and determined not to contain asbestos.
- Ceiling texture coat (White) was observed and sampled from Room C101. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.5 Plaster

Ceiling plaster was observed and sampled in Room C03. The laboratory analytical results of the samples collected indicate that this material does not contain asbestos.

3.1.6 Drywall Joint Compound

Drywall joint compound was observed and sampled in Room A321, A501, A601, A701, A702 and A708B. The laboratory analytical results of drywall joint compound samples collected from indicate that this material **contains 1% Chrysotile asbestos**. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis proves otherwise. This material was observed in good condition.

Drywall joint compound was previously observed and sampled in Room A405. This material is known to contain **3% Chrysotile asbestos**. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis proves otherwise. This material was observed in good condition.

Drywall joint compound was previously observed and sampled along the connecting walls in Rooms B103 and B103A. This material is known to contain **2% Chrysotile asbestos**. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis proves otherwise. This material was observed in good condition.

3.1.7 Ceiling Tiles

Several different types of suspended ceiling tiles were observed in various locations throughout the subject building as follows:

- Acoustic Ceiling Tile (2'x4'-Off White with Small Pinholes) was previously observed and sampled from the Block B, 5th Floor Corridor. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Large and Small Pinholes) was previously observed and sampled from the Block B, 5th Floor Corridor. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Small Pinholes with Small Indents) was previously observed and sampled from the Block B, 2nd Floor Corridor. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Textured with Small Pinholes) was previously observed and sampled from Room 109C. This material was analyzed and determined not to contain asbestos.

- Acoustic Ceiling Tile (2'x4'-Small and Medium Pinholes) was previously observed and sampled from the Block B, 5th Floor Corridor. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Small Pinholes and Medium Fissures) was previously observed and sampled from Room B111. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Small Pinholes and Random Fissures) was previously observed and sampled from Room B111. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x4'-Small Pinholes and Long Fissures) was previously observed and sampled from Room B105. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x5'-Tan with Pinholes) was previously observed and sampled from Room A417. This material was analyzed and determined not to contain asbestos.
- Acoustic Ceiling Tile (2'x5'-Tan with Pinholes) was previously observed and sampled from 4th. This material was analyzed and determined not to contain asbestos.
- Ceiling Tile (1'x1') was previously observed and sample from Room E018A. This material was analyzed and determined not to contain asbestos.
- Suspended ceiling tiles (Pinholes with Texture) were observed and sampled in Room B109C. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.
- Suspended ceiling tiles (Pinholes with Varying sizes) were observed and sampled in Room B109C. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.
- Acoustic ceiling tiles (12"x12"-Pinholes, White and Brown) were observed and sampled from Room B701. The laboratory analytical results of acoustic tile samples collected indicate that this material does not contain asbestos.
- Acoustic ceiling tiles (Brown) were observed screwed onto the ceiling in Room E018B. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.
- Suspended ceiling Tile (Beige) was observed and sampled from Room A705. The laboratory analytical results of ceiling tile samples collected indicate that this material does not contain asbestos.

3.1.8 Vinyl Floor Tiles

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

- Vinyl floor tiles (12"x12"-Beige with Grey Streaks) previously identified in Room A016 are known to **contain 2% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.
- Vinyl floor tiles (12"x12"-Grey with Black Streaks) previously identified in Room A102 are known to **contain 4% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.
- Vinyl floor tiles (12"x12"-Yellow/Beige with Black and Brown Streaks) were observed and sampled Room A01, A02, B101, D303, D312, B501, B511, B516, D501, D503, D508, D401, D402, D301, D209, D205 and B525. The laboratory analytical results of the samples collected indicate that this material contains **8% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.

Visually similar vinyl floor tiles were observed in rooms A01, A02, A07, B06, C012,, A107, A117, B108, D111, A207, A217/A221, D211, A304, A316, D309, A416, B406, A517, B515, A601, A607, A618, C601, A710, B701A and A801. This material is considered to be non-friable and was observed to be in good condition. **This material was observed to be in Fair condition in Room D111, A710 during the 2022 Reassessment Survey.**

- Vinyl floor tiles (12"x12"-Green with white streaks) previously identified to **contain 16% Chrysotile asbestos** was observed in Room, B016, E08A, B105, D303, D405A A702, A706 and A708B. This material is considered to be non-friable and was observed to be in good condition.
- Vinyl floor tiles (12"x12"-Green with White Streaks) previously identified in Rooms A202, A321, A322, A402, A502, A602 and A702 are known to **contain 2% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.
- Vinyl floor tiles (White/Grey) was previously observed and sampled in Room 205B. The laboratory analytical reports for the samples collected indicate that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"-Beige w/Flecks) was previously sampled and observed in Room A417. This material was analyzed and determined not to contain asbestos.
- Vinyl floor tiles (12"x12"-Grey w/Specks) was previously sampled and observed in 4th Floor Corridor. This material was analyzed and determined not to contain asbestos.

- Vinyl floor tiles (12"x12"-Grey w/Dark Streaks) was previously sampled and observed in Room A412. This material was analyzed and determined not to contain asbestos.
- Vinyl floor tiles (12"x12"-Grey w/Light Streaks) was previously sampled and observed in Room A412. This material was analyzed and determined not to contain asbestos.
- Vinyl floor tiles (12"x12"-Blue) were observed and sampled in Room A301. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"-White with Green and Orange Flakes) were observed and sampled in Room B103. The laboratory analytical results of the samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Grey with Black) were observed and sampled in Room B204. The laboratory analytical results of the samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Beige with White, Black, Grey Spots) were observed and sampled in Room B210. The laboratory analytical results of the samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Black) were observed and sampled in Room B522. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"-White with Green Flakes) were observed and sampled in Room C09. The laboratory analytical results of the samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-White with Grey Spots) were observed and sampled in Room D05A. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12" White with Grey Flakes) were observed and sampled in Room D511. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"-Grey) were observed and sampled in Room E018B. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material and its associated mastic (Yellow) do not contain asbestos.

- Vinyl floor tiles (12"x12"-Grey with Black Dots) were observed and sampled in Room A04. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material and its associated mastic (Yellow) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Light Grey with Grey Flakes) were observed and sampled in Room A114. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Cream with Pink, Green and Grey Flakes) were observed and sampled in Room A114. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-White) were observed and sampled in Room A201 and A321. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"-Pink) were observed and sampled in Room A505 and A605. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.
- Vinyl floor tiles (12"x12"- Black with White and Grey Spots) were observed and sampled in Room A519. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl floor tiles (12"x12"-Yellow with Brown Streaks) were observed and sampled in Room A604 and A605. The laboratory analytical results of the vinyl floor tile samples collected indicated that this material does not contain asbestos.

3.1.9 Vinyl Sheet Floor

Several different types of vinyl sheet flooring were observed and sampled within the subject building as follows:

- Vinyl sheet flooring (Grey with White and Dark Grey Flakes) were observed and sampled in Room E09. The laboratory analytical results of the samples collected indicated that this material and its associated mastic (Black) do not contain asbestos.
- Vinyl sheet flooring (Grey with Blue and Brown) were observed and sampled in Room A301. The laboratory analytical results of the samples collected indicated that this material does not contain asbestos.

3.1.10 Mortar

Concrete block mortar (Grey) was observed and sampled from Room B701. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.

3.1.11 Transite (Asbestos Cement)

Transite rainwater leaders were observed in Room E012, D415B and B602. To avoid possible damage, no bulk samples of the transite piping were collected. However, this material is known to contain asbestos. This material is considered to be non-friable and was observed in good condition.

Transite fume hood panels previously identified to **contain 15% Chrysotile asbestos** was observed in Room D407A and D415B. This material is considered non-friable and was observed to be in good condition.

3.1.12 Caulking

Several different types of caulking materials were observed in various locations throughout the subject building as follows:

- Interior window caulking (Brown) was observed and sampled from Room B524. The laboratory analytical results indicate that this material **contains 5% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.
- Door caulking (Brown) was observed and sampled from Room A802. The laboratory analytical results indicate that this material **contains 5% Chrysotile asbestos**. This material is considered non-friable and was observed to be in good condition.
- Exterior caulking (Grey) was previously observed and sampled from the exterior perimeter walls of the D-Block Mechanical Room. This material does not contain asbestos.
- Exterior caulking (White) was previously observed and sampled from the exterior perimeter walls of the D-Block Mechanical Room. This material does not contain asbestos.
- Firestop caulking (Brown) was observed and sampled from Room B406B. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.
- Firestop caulking (Grey) was observed and sampled from Room D107A. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.
- Firestop caulking (Pink) was observed and sampled from Room A201D. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.
- Firestop caulking (Red) was observed and sampled from Room A201C, A501C and A601. The laboratory analytical results from the samples collected indicate that this material does not contain asbestos.

3.1.13 Cementitious Coating

No cementitious coating finishes were observed in the subject building.

3.1.14 Mastic

Several different types of mastics were observed in various locations throughout the subject building as follows:

- Wall mastic (Black) was observed and sampled from Room D014. The laboratory analytical results indicate that this material does not contain asbestos.
- Floor mastic (Black) was observed and sampled from Room E101B. The laboratory analytical results indicate that this material does not contain asbestos.
- Carpet mastic (Black) was observed and sampled from A614 and A714. The laboratory analytical results indicate that this material does not contain asbestos.

3.1.15 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.

3.1.16 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

- Asbestos-containing materials identified to be in poor condition must be repaired/removed immediately, following 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;
- Asbestos-containing materials that have been identified to be in fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration. Depending on type of material and location, these materials should be scheduled for removal if there is potential risk of exposure to worker and/or occupants;
- 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 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; and
- 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

Findings

3.2.1 Paint Finishes

A total of twelve (12) paint samples from the subject building were collected and analyzed for lead content. Results of bulk sampling testing and previous lead sample results 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-01	Room E03	Floor	Yellow	0.0484
Pb-02	Room C003	Wall	White	0.0084
Pb-03	Room D301	Floor	Grey	0.0027
Pb-04	Room D310	Door	Dark Green	6.09
Pb-05	Room B08A	Floor	Light Blue	0.0027
Pb-06	Room A04	Wall	Purple	0.0005
Pb-07	Room E002	Floor	Grey	0.223
Pb-08	Room A706	Door	Red	1.39
Pb-09	Room D113	Stairwell	Cream	1.14
Pb-10	Room D113	Floor	Light Pink	0.0331
Pb-11	Room A104	Wall	Dark Blue	<0.0005
Pb-12	Room E018B	Wall	Brown	0.0326
Previously Identified Lead Paint Finishes				
CBY-G-LPB-110306-01	A01	Door and Door Frames	Green	0.07
CBY-1-LPB-110306-02	D113A	Wall	White	<0.02
CBY-5-LBP-011807-03	C501E (5 th Floor Elevator)	Elevator Door	Green	<0.07
CBY-5-LBP-011807-04	B519	Wall	White	<0.01
CBY-4-LBP-011807-05	C406A	Wall	Green	<0.01
CBY-4-LBP-011807-06	C401A (4 th Floor Freight Elevator)	Elevator	Beige	0.14
CBY-3-LBP-011807-07	C301 (3 rd Floor Lobby)	Heater	Green	0.10
CBY-3-LBP-011807-08	B305 (Stairwell 3B)	Hand Railing	Brown	0.30
CBY-3-LBP-011807-09	B305 (Stairwell 3B)	Door	Orange	3.90
CBY-2-LBP-011807-10	B202	Wall	Grey	<0.02

The paint finishes highlighted in blue in the above table were 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 finishes highlighted in pink in the above table are considered lead-containing paints or surface coatings with concentrations greater than 0.1% lead by weight. These paint finishes were 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 proves otherwise.

Laboratory certificate of analysis for the paint sample is also included in Appendix C.

3.2.2 Battery Packs

MPL identified lead-containing acid battery packs throughout the subject building. These battery packs were observed on walls and above exits throughout the surveyed 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, the removal of the 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. The removal of lead-based paint by scraping or sanding using non-powered hand tools is considered a Type 2 operation. The removal of 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 lead materials that are removed must follow the Ministry of Labour and Environmental Abatement Council of Ontario Lead Guidelines.

Please refer to Appendix F – Hazardous Materials Checklist for material 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 does 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 Leachate Criteria (Schedule 4) of this regulation.

3.3 Mercury

Findings

3.3.1 Thermostat Switches

MPL observed one (1) thermostats containing liquid mercury within Room D502 in the subject building.

3.3.2 Fluorescent Light Tubes

MPL identified fluorescent light fixtures throughout the surveyed area 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

MPL identified pressure gauges containing liquid mercury in Room C03B within subject building. MPL also identified suspected float switches that may contain liquid mercury in Room C03B and E024 within the subject building. They were observed in good condition.

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. Exposure to mercury 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, thermostats, and equipment must be removed and stored in a safe, secure location and/or properly disposed of in accordance with 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, demolition of masonry, etc.) to ensure that workers' exposure levels to airborne silica does 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 facilities to properly wash prior to exiting the work area.

Demolition work that is likely to impact silica-containing materials should be carried out in accordance with the requirement detailed in the Ontario Ministry of Labour document entitled "Guideline: Silica on Construction Projects", dated April 2011.

Other Hazardous Materials

3.5 Polychlorinated Biphenyls (PCBs)

Findings

3.5.1 *Light Ballasts*

The subject building is illuminated by LED and fluorescent lights. MPL assessed representative ballasts in the building, and these ballasts were identified as non-PCBs content. These light ballasts were observed to be manufactured by Phillips.

3.5.2 *Transformers*

MPL did not observe any PCBs containing electrical transformers within the subject building

Recommendations

Since no PCB-containing materials were 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. MPL observed equipment such as refrigerators, water fountains, air handling units, water coolers, freezers, etc. which contain or are suspected of containing ODSs or other halocarbons.

Recommendations

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

Under the management of a licensed contractor, equipment containing R-22 and 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

A visual assessment of the subject building was conducted to determine if any electrical components containing radioactive materials were present. MPL 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 within the surveyed area.

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. MPL did not observe any areas with obvious signs of visible mould growth.

3.9.2 Water Damage

A visual survey of the subject building was conducted to determine if any water damaged was present. MPL identified select areas throughout the subject building, where materials were affected by water damage.

Recommendations

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

Water stained/damaged building materials observed throughout the subject building should be replaced/repared as part of regular maintenance and the underlying cause of the water leakage should be identified and repaired;

Water stained/damaged mechanical pipe straights 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 to 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 **McIntosh Perry Limited (MPL)**, and the results of laboratory testing as identified herein.

It should be noted that there might be hazardous materials 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.

MPL 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 MPL, both on its own behalf and as agent on behalf of its employees and principals.

The client expressly agrees that MPL's 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 MPL's 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,

MCINTOSH PERRY LIMITED



Lauren Hamilton, B.Eng.
Project Technician
Hazardous Materials/ Environmental Health & Safety



John Tufts, B.Sc.
Project Manager
Hazardous Materials/ Environmental Health & Safety

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 A.

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 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,

- Asbestos Sampling Report-Ceiling Tiles B-Block by EHS Partnerships LTD (dated May 23, 2019, reference#04-0033-19-012);
- Pre-Construction Asbestos Containing Material Assessment, Colonel By Hall & Bioscience Retrofit by CM3 Environmental (dated February 5, 2018, reference TLW1550);
- Pre-Construction Designated Substance Survey Report, Colonel By Hall-A Block, 4th Floor by CM3 Environmental (dated January 31, 2018, reference #TLW 1729);

- Asbestos Sampling Colonel By Hall -Room L244B by CM3 Environmental (dated August 15, 2018, reference# TLW1531);
- Project Specific Designated Survey Bulkhead Removal Room 707 by CM3 Environmental (dated February 20, 2018, reference# TLW-1787);
- Asbestos Sampling Room A01 Colonel By Hall by CM3 Environmental (dated November 28, 2017, reference # TLW 1717);
- Asbestos Abatement Summary Colonel By and Bioscience Energy Retrofit by CM3 Environmental (dated November 24, 2017, reference # TLW1531);
- Project Specific Designated Substance Survey Colonel By and Bioscience Energy Retrofit by CM# Environmental (dated September 12, 2017, reference# TLW 1531);
- Asbestos Investigation and Sampling Tunnels-Heating Plant to Colonel By Hall by CM# Environmental (dated August 10, 2017, reference# TWL1420);
- Asbestos Abatement Summary Colonel By Hall-Seventh Floor Elevator Lobby by CM3 Environmental (dated July 27, 2017, reference# TLW 1279);
- Asbestos Sampling Colonel By Hall-Lobby Ceilings by CM3 Environmental (dated June 2, 2017, reference #TLW1279);
- Asbestos Sampling Colonel By Hall-Lobby Ceilings by CM3 Environmental (dated April 11, 2017, reference #TLW1279);
- Mould and Asbestos Investigation Colonel By Hall Room E012 by CM3 Environmental (dated March 10, 2017, reference# TLW1290);
- Pre-Construction Asbestos Containing Material Assessment, Fire Alarm System Renewal Colonel By Hall by CM3 Environmental (dated March 10, 2017, reference# TLW1279);
- Asbestos Sampling Memorandum 3rd Floor Wing A, Colonel By Hall by Conestoga Rovers & Associates (dated November 7, 2016, reference # 7966-F212);
- Asbestos Bulk Sampling Colonel By Hall -A-Block-7th Floor Mechanical Room by CM3 Environmental (dated September 26, 2016, reference #TLW 1160);
- Asbestos Sampling Report Colonel By Hall-Room A405 by EHS Partnerships LTD (dated February 9, 2016, reference#04-0033-16-008);
- Project Specific Designated Substance Report Update Colonel By Hall by EHS Partnerships LTD (dated November 2015, refernce#04-0033-15-039);
- Visual Inspection Report Vermiculite Insulation-C-Wing Roof Colonel By Hall by EHS Partnerships LTD (dated October 15, 2015, reference# 04-0033-15-028);
- Asbestos Abatement Project Summary, Colonel By Hall-Vermiculite Roofing by EHS Partnerships LTD (dated October 8, 2015, reference# 04-0033-15-028);
- Asbestos Sampling Report, Debris-Stairwell D of Colonel By Hall by EHS Partnerships LTD (dated September 21, 2015, reference#04-0033-15-029);
- Asbestos Abatement Project Summary, Glove-Bag Operations of ACM Pipe Insulation-Colonel By Hall by EHS Partnerships LTD (dated September 21, 2015, reference#04-0033-15-031);

- Asbestos Containing Waste Roofing Material-Colonel By Hall by EHS Partnerships LTD (dated September 14, 2015, reference# 04-0033-15-028);
- Asbestos Sampling Report Colonel By Hall, Pipe Chase D109B by EHS Partnerships (dated April 2, 2015, reference# 04-0033-15-015);
- Asbestos Sampling Report, Colonel By Hall, cooler#3, Room D-02 by EHS Partnerships (dated January 28, 2015, reference#04-0033-15-007);
- Asbestos Sampling Report room B103-Colnel By Hall by EHS Partnerships LTD (dated April 2, 2014, reference # 04-0033-14-013);
- Asbestos Abatement Project Summary Colonel By Hall- 4th and 5th Floors by EHS Partnerships LTD (dated January 27, 2014, reference#04-0033-007);
- Pre-construction Asbestos Containing Material Assessment Macdonald, Colonel By Hall and Marion by EHS Partnerships (dated August 21, 2013, reference# 04-0033-13-042);
- Project Specific Asbestos Sampling Report, Colonel By Hall-Room A401A by EHS Partnerships (dated June 10, 2013, reference# 04-0033-13-030);
- Asbestos Abatement Project Summary Colonel By Hall Rooms B103 & B103A by EHS Partnerships LTD (dated March 26, 2013, reference# 04-0033-14-13);
- Asbestos Abatement-Insulation Removal and Repairs, Room E07 by EHS Partnerships LTD (dated August 27, 2012, reference#04-0033-12-028);
- Project Specific Asbestos Sampling Report, Colonel By Hall-Room C03A by EHS Partnerships (dated February 22, 2012, reference# 04-0033-12-005);
- Asbestos Sampling-Concealed Vinyl Flooring, Colonel By 2nd Floor by EHS Partnerships (dated November 18, 2011, reference# 04-0033-11-024);
- Project Specific Asbestos Sampling Report-Room E018A by EHS Partnerships LTD (dated July 19, 2011, reference#04-0333-11-016)
- Project Specific Asbestos Sampling Room E07 Colonel By Hall by EHS Partnerships LTD (June 2, 2011, reference# 04-0033-11-009);
- Project Specific Asbestos Sampling Room 205B Colonel By Hall by EHS Partnerships LTD (dated March 29, 2011, reference #04-0033-11-001);
- Asbestos Abatement-Colonel By Hall, Room D06 by INSPEC-SOL (dated November 17, 2010, reference #T020837-G1-Task 3);
- Asbestos Sampling-Room B202, Colonel By Hall, Memorandum by Conestoga-Rovers & Associates (dated October 18, 2006, reference#7966-M135); and
- Designated Substance Substance Inventory Colonel By Hall by Conestoga Rovers & Associates (dated 2006, reference #45870(9)).

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	Less than 90 square metres	3
		90 or more square metres, but less than 450 square metres	5

	otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	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 Paracel Laboratories Ltd., an independent laboratory. Paracel is a fully accredited facility for asbestos analysis and is accredited under National Voluntary Laboratory Accreditation (NVLAP Lab Codes 200812-0 and 200863-0). Paracel is accredited for asbestos bulk analysis in PLM in Ottawa and Mississauga, respectively. For the Scope of Accreditation under the (CALA) Membership Number 1262, Paracel is accredited for asbestos in air samples by PCM.

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 was 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 was 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 Ontario (EACO) 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 EACO 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 thermostat 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 (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.

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 hydrochlorofluorocarbons (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 Ontario (EACO) 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

Certificate of Analysis

McIntosh Perry Limited (Concord)

6240 Hwy 7, Suite 200
Woodbridge, ON L4H 0R2
Attn: Diana Banakh

Client PO:
Project: Z1920014HZ (Colonel By Hall)
Custody:

Report Date: 26-Nov-2019
Order Date: 18-Nov-2019

Order #: 1947182

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

Parcel ID	Client ID
1947182-01	BS1.1 VFT Blue - A301
1947182-02	BS1.2 VFT Blue - A604
1947182-03	BS1.3 VFT Blue - A604
1947182-04	BS2.1 SCT Pinholes with Texture - B109C
1947182-05	BS2.2 SCT Pinholes with Texture - B109C
1947182-06	BS2.3 SCT Pinholes with Texture - D503
1947182-07.1	BS3.1 VFT White with Green and Orange Flakes - B103
1947182-07.2	BS3.1 VFT White with Green and Orange Flakes - B103
1947182-08.1	BS3.2 VFT White with Green and Orange Flakes - B103
1947182-08.2	BS3.2 VFT White with Green and Orange Flakes - B103
1947182-09.1	BS3.3 VFT White with Green and Orange Flakes - B103
1947182-09.2	BS3.3 VFT White with Green and Orange Flakes - B103
1947182-10	BS4.1 SCT Pinholes Varying Sizes - B109C
1947182-11	BS4.2 SCT Pinholes Varying Sizes - B109C
1947182-12	BS4.3 SCT Pinholes Varying Sizes - B109C
1947182-13.1	BS5.1 VFT Grey with Black - B204
1947182-13.2	BS5.1 VFT Grey with Black - B204
1947182-14.1	BS5.2 VFT Grey with Black - B204
1947182-14.2	BS5.2 VFT Grey with Black - B204
1947182-15.1	BS5.3 VFT Grey with Black - B204
1947182-15.2	BS5.3 VFT Grey with Black - B204
1947182-16.1	BS6.1 VFT Beige with White / Black / Grey Spots - B210
1947182-16.2	BS6.1 VFT Beige with White / Black / Grey Spots - B210
1947182-17	BS6.2 VFT Beige with White / Black / Grey Spots - B210
1947182-18	BS6.3 VFT Beige with White / Black / Grey Spots - B210
1947182-19	BS7.1 Firestop Caulking Brown - B406B

Approved By:



Emma Diaz
Senior Analyst

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Certificate of Analysis

Report Date: 26-Nov-2019

Client: **McIntosh Perry Limited (Concord)**

Order Date: 18-Nov-2019

Client PO:

Project Description: **Z1920014HZ (Colonel By Hall)**

1947182-20	BS7.2 Firestop Caulking Brown - B406B
1947182-21	BS7.3 Firestop Caulking Brown - B406B
1947182-22	BS8.1 VFT Black - B522
1947182-23	BS8.2 VFT Black - B522
1947182-24	BS8.3 VFT Black - B522
1947182-25	BS9.1 Cement Insulation - B602
1947182-26	BS9.2 Cement Insulation - B602
1947182-27	BS9.3 Cement Insulation - B602
1947182-28	BS10.1 Acoustic Tile - B701
1947182-29	BS10.2 Acoustic Tile - B701
1947182-30	BS10.3 Acoustic Tile - B701
1947182-31	BS11.1 Concrete Block Mortar - A24A
1947182-32	BS11.2 Concrete Block Mortar - B901
1947182-33	BS11.3 Concrete Block Mortar - B901
1947182-34	BS12.1 Interior Window Caulking B824
1947182-35	BS12.2 Interior Window Caulking B524
1947182-36	BS12.3 Interior Window Caulking B524
1947182-37.1	BS13.1 VFT White with Green Flakes - C09
1947182-37.2	BS13.1 VFT White with Green Flakes - C09
1947182-38.1	BS13.2 VFT White with Green Flakes - C09
1947182-38.2	BS13.2 VFT White with Green Flakes - C09
1947182-39.1	BS13.3 VFT White with Green Flakes - C09
1947182-39.2	BS13.3 VFT White with Green Flakes - C09
1947182-40	BS14.1 VFT White with Grey Spots - D05A
1947182-41	BS14.2 VFT White with Grey Spots - D05A
1947182-42	BS14.3 VFT White with Grey Spots - D05A
1947182-43	BS15.1 Wall Mastic - D014
1947182-44	BS15.2 Wall Mastic - D014
1947182-45	BS15.3 Wall Mastic - D014
1947182-46	BS16.1 Pipe Caulking - D107
1947182-47	BS16.2 Pipe Caulking - D107A
1947182-48	BS16.3 Pipe Caulking - D107A
1947182-49.1	BS17.1 VFT White with Grey Flakes - D511
1947182-49.2	BS17.1 VFT White with Grey Flakes - D511
1947182-50.1	BS17.2 VFT White with Grey Flakes - D504
1947182-50.2	BS17.2 VFT White with Grey Flakes - D504
1947182-51.1	BS17.3 VFT White with Grey Flakes - D504
1947182-51.2	BS17.3 VFT White with Grey Flakes - D504
1947182-52.1	BS18.1 VSF Grey with White and Dark Grey Flakes - E09
1947182-52.2	BS18.1 VSF Grey with White and Dark Grey Flakes - E09
1947182-53.1	BS18.2 VSF Grey with White and Dark Grey Flakes - E09
1947182-53.2	BS18.2 VSF Grey with White and Dark Grey Flakes - E09
1947182-54.1	BS18.3 VSF Grey with White and Dark Grey Flakes - E09
1947182-54.2	BS18.3 VSF Grey with White and Dark Grey Flakes - E09

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Client: **McIntosh Perry Limited (Concord)**

Order Date: 18-Nov-2019

Client PO:

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1947182-55.1	BS19.1 VFT Grey - E018B
1947182-55.2	BS19.1 VFT Grey - E018B
1947182-56.1	BS19.2 VFT Grey - E018B
1947182-56.2	BS19.2 VFT Grey - E018B
1947182-57.1	BS19.3 VFT Grey - E018B
1947182-57.2	BS19.3 VFT Grey - E018B
1947182-58	BS20.1 SCT Screw on Acoustic Tile - E018B
1947182-59	BS20.2 SCT Screw on Acoustic Tile - E018B
1947182-60	BS20.3 SCT Screw on Acoustic Tile - E018B
1947182-61	BS21.1 Pipe Straight Insulation - E018D
1947182-62	BS21.2 Pipe Straight Insulation - E018D
1947182-63	BS21.3 Pipe Straight Insulation - E018D
1947182-64	BS22.1 Floor Mastic - E101B
1947182-65	BS22.2 Floor Mastic - E101B
1947182-66	BS22.3 Floor Mastic - E101B
1947182-67	BS23.1 VFT Yellow and Beige - L046
1947182-68	BS23.2 VFT Yellow and Beige - L046
1947182-69.1	BS23.3 VFT Yellow and Beige - L062
1947182-69.2	BS23.3 VFT Yellow and Beige - L062
1947182-70	BS24.1 VFT Beige with White / Orange / Brown - L054
1947182-71	BS24.2 VFT Beige with White / Orange / Brown - L054
1947182-72	BS24.3 VFT Beige with White / Orange / Brown - L054
1947182-73.1	BS25.1 VFT White with Blue and Pink - L058
1947182-73.2	BS25.1 VFT White with Blue and Pink - L058
1947182-74.1	BS25.2 VFT White with Blue and Pink - L058
1947182-74.2	BS25.2 VFT White with Blue and Pink - L058
1947182-75.1	BS25.3 VFT White with Blue and Pink - L058
1947182-75.2	BS25.3 VFT White with Blue and Pink - L058
1947182-80	BS26.1 VFT Sandy Brown - L070
1947182-81	BS26.2 VFT Sandy Brown - L070
1947182-82	BS26.3 VFT Sandy Brown - L070
1947182-83	BS27.1 Drywall - A321
1947182-84	BS27.2 Drywall - A501
1947182-85	BS27.3 Drywall - A601
1947182-86	BS27.4 Drywall - A701
1947182-87	BS27.5 Drywall - A702
1947182-88	BS27.6 Drywall - A708B
1947182-89	BS27.7 Drywall - A708B
1947182-90	BS27.8 Drywall - L040
1947182-91	BS27.9 Drywall - L040
1947182-92	BS27.10 Drywall - L064
1947182-93	BS27.11 Drywall - L072
1947182-94	BS27.12 Drywall - L072A
1947182-95	BS27.13 Drywall - L072A

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Client: **McIntosh Perry Limited (Concord)**

Order Date: 18-Nov-2019

Client PO:

Project Description: **Z1920014HZ (Colonel By Hall)**

1947182-96	BS27.14 Drywall - L054
1947182-97	BS28.1 Ceiling Texture Coat - C101
1947182-98	BS28.2 Ceiling Texture Coat - C101
1947182-99	BS28.3 Ceiling Texture Coat - C101
1947182-AA	BS28.4 Ceiling Texture Coat - C101
1947182-AB	BS28.5 Ceiling Texture Coat - C101
1947182-AC	BS28.6 Ceiling Texture Coat - C101
1947182-AD	BS28.7 Ceiling Texture Coat - C101
1947182-AE	BS29.1 Ceiling Plaster - C03
1947182-AF	BS29.2 Ceiling Plaster - C03
1947182-AG	BS29.3 Ceiling Plaster - C03
1947182-AH	BS29.4 Ceiling Plaster - C03
1947182-AI	BS29.5 Ceiling Plaster - C03
1947182-AJ	BS29.6 Ceiling Plaster - C03
1947182-AK	BS29.7 Ceiling Plaster - C03
1947182-AL	BS30.1 VFT Yellow with Black and Brown Streaks - A01
1947182-AM	BS30.2 VFT Yellow with Black and Brown Streaks - A01
1947182-AN	BS30.3 VFT Yellow with Black and Brown Streaks - A01
1947182-AO.1	BS31.1 VFT Grey with Black Dots - A04
1947182-AO.2	BS31.1 VFT Grey with Black Dots - A04
1947182-AP	BS31.2 VFT Grey with Black Dots - A04
1947182-AQ.1	BS31.3 VFT Grey with Black Dots - A04
1947182-AQ.2	BS31.3 VFT Grey with Black Dots - A04
1947182-AR	BS32.1 VFT Beige with Black Dots - A04
1947182-AS.1	BS32.2 VFT Beige with Black Dots - A04
1947182-AS.2	BS32.2 VFT Beige with Black Dots - A04
1947182-AT	BS32.3 VFT Beige with Black Dots - A04
1947182-AU.1	BS33.1 VFT Light Grey with Grey Flakes - A114
1947182-AU.2	BS33.1 VFT Light Grey with Grey Flakes - A114
1947182-AV.1	BS33.2 VFT Light Grey with Grey Flakes - A114
1947182-AV.2	BS33.2 VFT Light Grey with Grey Flakes - A114
1947182-AW.1	BS33.3 VFT Light Grey with Grey Flakes - A114
1947182-AW.2	BS33.3 VFT Light Grey with Grey Flakes - A114
1947182-AX	BS34.1 VFT Cream with Pink/Green/Grey Flakes - A114
1947182-AY.1	BS34.2 VFT Cream with Pink/Green/Grey Flakes - A114
1947182-AY.2	BS34.2 VFT Cream with Pink/Green/Grey Flakes - A114
1947182-AZ.1	BS34.3 VFT Cream with Pink/Green/Grey Flakes - A114
1947182-AZ.2	BS34.3 VFT Cream with Pink/Green/Grey Flakes - A114
1947182-BA	BS35.1 Pipe Fitting Insulation - A201B
1947182-BB	BS35.2 Pipe Fitting Insulation - A201B
1947182-BC	BS35.3 Pipe Fitting Insulation - A201B
1947182-BD	BS36.1 VSF Grey with Blue and Brown - A301
1947182-BE	BS36.2 VSF Grey with Blue and Brown - A315
1947182-BF	BS36.3 VSF Grey with Blue and Brown - A315

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Client: **McIntosh Perry Limited (Concord)**

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1947182-BG	BS37.1 Firestop Pink - A201D
1947182-BH	BS37.2 Firestop Pink - A201D
1947182-BI	BS37.3 Firestop Pink - A321
1947182-BJ	BS38.1 VFT White - A201
1947182-BK.1	BS38.2 VFT White - A321
1947182-BK.2	BS38.2 VFT White - A321
1947182-BL	BS38.3 VFT White - A501
1947182-BM	BS39.1 Firestop Red - A201C
1947182-BN	BS39.2 Firestop Red - A501C
1947182-BO	BS39.3 Firestop Red - A601
1947182-BP	BS40.1 VFT Pink - A505
1947182-BQ	BS40.2 VFT Pink - A505
1947182-BR	BS40.3 VFT Pink - A605
1947182-BS.1	BS41.1 VFT Black with White and Grey Spots - A519
1947182-BS.2	BS41.1 VFT Black with White and Grey Spots - A519
1947182-BT.1	BS41.2 VFT Black with White and Grey Spots - A519
1947182-BT.2	BS41.2 VFT Black with White and Grey Spots - A519
1947182-BU.1	BS41.3 VFT Black with White and Grey Spots - A519
1947182-BU.2	BS41.3 VFT Black with White and Grey Spots - A519
1947182-BV	BS42.1 VFT Yellow Tile with Brown and Tile Streaks - A604
1947182-BW	BS42.2 VFT Yellow Tile with Brown and Tile Streaks - A604
1947182-BX	BS42.3 VFT Yellow Tile with Brown and Tile Streaks - A604
1947182-BY	BS43.1 Ceiling Tile - A705
1947182-BZ	BS43.2 Ceiling Tile - A705
1947182-CA	BS43.3 Ceiling Tile - A601
1947182-CB	BS44.1 Carpet Mastic - A714
1947182-CC	BS44.2 Carpet Mastic - A614
1947182-CD	BS44.3 Carpet Mastic - A614
1947182-CE	BS45.1 Door Caulking - A802
1947182-CF	BS45.2 Door Caulking - A802
1947182-CG	BS45.3 Door Caulking - A802

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Report Date: 26-Nov-2019
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Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-01	30-Aug-19	Blue	Vinyl Floor Tile	No	Client ID: BS1.1 VFT Blue - A301 Non-Fibers	100
1947182-02	30-Aug-19	Blue	Vinyl Floor Tile	No	Client ID: BS1.2 VFT Blue - A604 Non-Fibers	100
1947182-03	30-Aug-19	Blue	Vinyl Floor Tile	No	Client ID: BS1.3 VFT Blue - A604 Non-Fibers	100
1947182-04	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS2.1 SCT Pinholes with Texture - B109C Cellulose MMVF Non-Fibers	40 30 30
1947182-05	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS2.2 SCT Pinholes with Texture - B109C Cellulose MMVF Non-Fibers	40 30 30
1947182-06	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS2.3 SCT Pinholes with Texture - D503 Cellulose MMVF Non-Fibers	20 60 20
1947182-07.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS3.1 VFT White with Green and Orange Flakes - B103 Non-Fibers	100
1947182-07.2	30-Aug-19	Black	Mastic	No	Client ID: BS3.1 VFT White with Green and Orange Flakes - B103 Non-Fibers	100
1947182-08.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS3.2 VFT White with Green and Orange Flakes - B103 Non-Fibers	100
1947182-08.2	30-Aug-19	Black	Mastic	No	Client ID: BS3.2 VFT White with Green and Orange Flakes - B103 Non-Fibers	100

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 Client: McIntosh Perry Limited (Concord)
 Client PO:

Report Date: 26-Nov-2019
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 Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-09.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS3.3 VFT White with Green and Orange Flakes - B103 Non-Fibers	100
1947182-09.2	30-Aug-19	Black	Mastic	No	Client ID: BS3.3 VFT White with Green and Orange Flakes - B103 Non-Fibers	100
1947182-10	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS4.1 SCT Pinholes Varying Sizes - B109C Cellulose MMVF Non-Fibers	40 30 30
1947182-11	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS4.2 SCT Pinholes Varying Sizes - B109C Cellulose MMVF Non-Fibers	40 30 30
1947182-12	30-Aug-19	Grey	Ceiling Tile	No	Client ID: BS4.3 SCT Pinholes Varying Sizes - B109C Cellulose MMVF Non-Fibers	40 30 30
1947182-13.1	30-Aug-19	Grey/Black	Vinyl Floor Tile	Yes	Client ID: BS5.1 VFT Grey with Black - B204 Chrysotile Non-Fibers	5 95
1947182-13.2	30-Aug-19	Black	Mastic	No	Client ID: BS5.1 VFT Grey with Black - B204 Non-Fibers	100
1947182-14.1	30-Aug-19				Client ID: BS5.2 VFT Grey with Black - B204 not analyzed	
1947182-14.2	30-Aug-19	Black	Mastic	No	Client ID: BS5.2 VFT Grey with Black - B204 Non-Fibers	100

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-15.1	30-Aug-19				Client ID: BS5.3 VFT Grey with Black - B204 not analyzed	
1947182-15.2	30-Aug-19	Black	Mastic	No	Client ID: BS5.3 VFT Grey with Black - B204 Non-Fibers	100
1947182-16.1	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS6.1 VFT Beige with White / Black / Grey Spots - B210 Non-Fibers	100
1947182-16.2	30-Aug-19	Black	Mastic	No	Client ID: BS6.1 VFT Beige with White / Black / Grey Spots - B210 Cellulose Non-Fibers	10 90
1947182-17	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS6.2 VFT Beige with White / Black / Grey Spots - B210 Non-Fibers	100
1947182-18	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS6.3 VFT Beige with White / Black / Grey Spots - B210 Non-Fibers	100
1947182-19	30-Aug-19	Brown	Caulking	No	Client ID: BS7.1 Firestop Caulking Brown - B406B Cellulose Non-Fibers	5 95
1947182-20	30-Aug-19	Brown	Caulking	No	Client ID: BS7.2 Firestop Caulking Brown - B406B Cellulose Non-Fibers	5 95
1947182-21	30-Aug-19	Brown	Caulking	No	Client ID: BS7.3 Firestop Caulking Brown - B406B Cellulose Non-Fibers	5 95
1947182-22	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS8.1 VFT Black - B522 Non-Fibers	100

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Report Date: 26-Nov-2019
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Asbestos, PLM Visual Estimation **MDL - 0.5%**

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-23	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS8.2 VFT Black - B522 Non-Fibers	100
1947182-24	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS8.3 VFT Black - B522 Non-Fibers	100
1947182-25	30-Aug-19	Grey	Cemet Insulation	Yes	Client ID: BS9.1 Cement Insulation - B602 Chrysotile Non-Fibers Other fibers	60 35 5
1947182-26	30-Aug-19				Client ID: BS9.2 Cement Insulation - B602 not analyzed	
1947182-27	30-Aug-19				Client ID: BS9.3 Cement Insulation - B602 not analyzed	
1947182-28	30-Aug-19	White/Brown	Ceiling Tile	No	Client ID: BS10.1 Acoustic Tile - B701 Cellulose Non-Fibers	90 10
1947182-29	30-Aug-19	White/Brown	Ceiling Tile	No	Client ID: BS10.2 Acoustic Tile - B701 Cellulose Non-Fibers	90 10
1947182-30	30-Aug-19	White/Brown	Ceiling Tile	No	Client ID: BS10.3 Acoustic Tile - B701 Cellulose Non-Fibers	90 10
1947182-31	30-Aug-19	Grey	Mortar	No	Client ID: BS11.1 Concrete Block Mortar - A24A Non-Fibers	100
1947182-32	30-Aug-19	Grey	Mortar	No	Client ID: BS11.2 Concrete Block Mortar - B901 Non-Fibers	100

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Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-33	30-Aug-19	Grey	Mortar	No	Client ID: BS11.3 Concrete Block Mortar - B901	
					Non-Fibers	100
1947182-34	30-Aug-19	Brown	Caulking	Yes	Client ID: BS12.1 Interior Window Caulking B824	
					Chrysotile	5
					Non-Fibers	95
1947182-35	30-Aug-19				Client ID: BS12.2 Interior Window Caulking B524	
					not analyzed	
1947182-36	30-Aug-19				Client ID: BS12.3 Interior Window Caulking B524	
					not analyzed	
1947182-37.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS13.1 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-37.2	30-Aug-19	Black	Mastic	No	Client ID: BS13.1 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-38.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS13.2 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-38.2	30-Aug-19	Black	Mastic	No	Client ID: BS13.2 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-39.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS13.3 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-39.2	30-Aug-19	Black	Mastic	No	Client ID: BS13.3 VFT White with Green Flakes - C09	
					Non-Fibers	100
1947182-40	30-Aug-19	White/Grey	Vinyl Floor Tile	No	Client ID: BS14.1 VFT White with Grey Spots - D05A	
					Non-Fibers	100
1947182-41	30-Aug-19	White/Grey	Vinyl Floor Tile	No	Client ID: BS14.2 VFT White with Grey Spots - D05A	
					Non-Fibers	100

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Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-42	30-Aug-19	White/Grey	Vinyl Floor Tile	No	Client ID: BS14.3 VFT White with Grey Spots - D05A Non-Fibers	100
1947182-43	30-Aug-19	Black	Mastic	No	Client ID: BS15.1 Wall Mastic - D014 Non-Fibers	100
1947182-44	30-Aug-19	Black	Mastic	No	Client ID: BS15.2 Wall Mastic - D014 Non-Fibers	100
1947182-45	30-Aug-19	Black	Mastic	No	Client ID: BS15.3 Wall Mastic - D014 Non-Fibers	100
1947182-46	30-Aug-19	Grey	Caulking	No	Client ID: BS16.1 Pipe Caulking - D107 Non-Fibers	100
1947182-47	30-Aug-19	Grey	Caulking	No	Client ID: BS16.2 Pipe Caulking - D107A Non-Fibers	100
1947182-48	30-Aug-19	Grey	Caulking	No	Client ID: BS16.3 Pipe Caulking - D107A Non-Fibers	100
1947182-49.1	30-Aug-19	White/Grey	Vinyl Floor Tile	No	Client ID: BS17.1 VFT White with Grey Flakes - D511 Non-Fibers	100
1947182-49.2	30-Aug-19	Black	Mastic	No	Client ID: BS17.1 VFT White with Grey Flakes - D511 Non-Fibers	100
1947182-50.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS17.2 VFT White with Grey Flakes - D504 Non-Fibers	100
1947182-50.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS17.2 VFT White with Grey Flakes - D504 Non-Fibers	100
1947182-51.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS17.3 VFT White with Grey Flakes - D504 Non-Fibers	100

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Client: McIntosh Perry Limited (Concord)

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Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-51.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS17.3 VFT White with Grey Flakes - D504 Non-Fibers	100
1947182-52.1	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS18.1 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-52.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS18.1 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-53.1	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS18.2 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-53.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS18.2 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-54.1	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS18.3 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-54.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS18.3 VSF Grey with White and Dark Grey Flakes - E09 Non-Fibers	100
1947182-55.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS19.1 VFT Grey - E018B Non-Fibers	100
1947182-55.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS19.1 VFT Grey - E018B Non-Fibers	100
1947182-56.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS19.2 VFT Grey - E018B Non-Fibers	100
1947182-56.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS19.2 VFT Grey - E018B Non-Fibers	100
1947182-57.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS19.3 VFT Grey - E018B Non-Fibers	100

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Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-57.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS19.3 VFT Grey - E018B	
					Non-Fibers	100
1947182-58	30-Aug-19	Brown	Ceiling Tile	No	Client ID: BS20.1 SCT Screw on Acoustic Tile - E018B	
					Cellulose	95
					Non-Fibers	5
1947182-59	30-Aug-19	Brown	Ceiling Tile	No	Client ID: BS20.2 SCT Screw on Acoustic Tile - E018B	
					Cellulose	95
					Non-Fibers	5
1947182-60	30-Aug-19	Brown	Ceiling Tile	No	Client ID: BS20.3 SCT Screw on Acoustic Tile - E018B	
					Cellulose	95
					Non-Fibers	5
1947182-61	30-Aug-19	Brown/Black	Insulation	No	Client ID: BS21.1 Pipe Straight Insulation - E018D	
					Cellulose	70
					Non-Fibers	30
1947182-62	30-Aug-19	Brown/Black	Insulation	No	Client ID: BS21.2 Pipe Straight Insulation - E018D	
					Cellulose	70
					Non-Fibers	30
1947182-63	30-Aug-19	Brown/Black	Insulation	No	Client ID: BS21.3 Pipe Straight Insulation - E018D	
					Cellulose	70
					Non-Fibers	30
1947182-64	30-Aug-19	Black	Mastic	No	Client ID: BS22.1 Floor Mastic - E101B	
					Non-Fibers	100
1947182-65	30-Aug-19	Black	Mastic	No	Client ID: BS22.2 Floor Mastic - E101B	
					Non-Fibers	100
1947182-66	30-Aug-19	Black	Mastic	No	Client ID: BS22.3 Floor Mastic - E101B	
					Non-Fibers	100

Certificate of Analysis
 Client: **McIntosh Perry Limited (Concord)**
 Client PO:

Report Date: 26-Nov-2019
 Order Date: 18-Nov-2019
 Project Description: **Z1920014HZ (Colonel By Hall)**

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-67	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS23.1 VFT Yellow and Beige - L046 Non-Fibers	100
1947182-68	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS23.2 VFT Yellow and Beige - L046 Non-Fibers	100
1947182-69.1	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS23.3 VFT Yellow and Beige - L062 Non-Fibers	100
1947182-69.2	30-Aug-19	Black	Mastic	No	Client ID: BS23.3 VFT Yellow and Beige - L062 Non-Fibers	100
1947182-70	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS24.1 VFT Beige with White / Orange / Brown - L054 Non-Fibers	100
1947182-71	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS24.2 VFT Beige with White / Orange / Brown - L054 Non-Fibers	100
1947182-72	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS24.3 VFT Beige with White / Orange / Brown - L054 Non-Fibers	100
1947182-73.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS25.1 VFT White with Blue and Pink - L058 Non-Fibers	100
1947182-73.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS25.1 VFT White with Blue and Pink - L058 Non-Fibers	100
1947182-74.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS25.2 VFT White with Blue and Pink - L058 Non-Fibers	100
1947182-74.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS25.2 VFT White with Blue and Pink - L058 Non-Fibers	100
1947182-75.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS25.3 VFT White with Blue and Pink - L058 Non-Fibers	100

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-75.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS25.3 VFT White with Blue and Pink - L058	
					Non-Fibers	100
1947182-80	30-Aug-19	Sandy	Vinyl Floor Tile	No	Client ID: BS26.1 VFT Sandy Brown - L070	
					Non-Fibers	100
1947182-81	30-Aug-19	Sandy	Vinyl Floor Tile	No	Client ID: BS26.2 VFT Sandy Brown - L070	
					Non-Fibers	100
1947182-82	30-Aug-19	Sandy	Vinyl Floor Tile	No	Client ID: BS26.3 VFT Sandy Brown - L070	
					Non-Fibers	100
1947182-83	30-Aug-19	Beige	Drywall Joint Compound	Yes	Client ID: BS27.1 Drywall - A321	
					Chrysotile	1
					Non-Fibers	99
1947182-84	30-Aug-19				Client ID: BS27.2 Drywall - A501	
					not analyzed	
1947182-85	30-Aug-19				Client ID: BS27.3 Drywall - A601	
					not analyzed	
1947182-86	30-Aug-19				Client ID: BS27.4 Drywall - A701	
					not analyzed	
1947182-87	30-Aug-19				Client ID: BS27.5 Drywall - A702	
					not analyzed	
1947182-88	30-Aug-19				Client ID: BS27.6 Drywall - A708B	
					not analyzed	
1947182-89	30-Aug-19				Client ID: BS27.7 Drywall - A708B	
					not analyzed	
1947182-90	30-Aug-19				Client ID: BS27.8 Drywall - L040	
					not analyzed	

Certificate of Analysis
 Client: McIntosh Perry Limited (Concord)
 Client PO:

Report Date: 26-Nov-2019
 Order Date: 18-Nov-2019
 Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-91	30-Aug-19				Client ID: BS27.9 Drywall - L040 not analyzed	
1947182-92	30-Aug-19				Client ID: BS27.10 Drywall - L064 not analyzed	
1947182-93	30-Aug-19				Client ID: BS27.11 Drywall - L072 not analyzed	
1947182-94	30-Aug-19				Client ID: BS27.12 Drywall - L072A not analyzed	
1947182-95	30-Aug-19				Client ID: BS27.13 Drywall - L072A not analyzed	
1947182-96	30-Aug-19				Client ID: BS27.14 Drywall - L054 not analyzed	
1947182-97	30-Aug-19	White	Texture Coat	No	Client ID: BS28.1 Ceiling Texture Coat - C101 Non-Fibers	100
1947182-98	30-Aug-19	White	Texture Coat	No	Client ID: BS28.2 Ceiling Texture Coat - C101 Non-Fibers	100
1947182-99	30-Aug-19	White	Texture Coat	No	Client ID: BS28.3 Ceiling Texture Coat - C101 Non-Fibers	100
1947182-AA	30-Aug-19	White	Texture Coat	No	Client ID: BS28.4 Ceiling Texture Coat - C101 Non-Fibers	100
1947182-AB	30-Aug-19	White	Texture Coat	No	Client ID: BS28.5 Ceiling Texture Coat - C101 Non-Fibers	100
1947182-AC	30-Aug-19	White	Texture Coat	No	Client ID: BS28.6 Ceiling Texture Coat - C101 Non-Fibers	100

Certificate of Analysis
 Client: McIntosh Perry Limited (Concord)
 Client PO:

Report Date: 26-Nov-2019
 Order Date: 18-Nov-2019
 Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-AD	30-Aug-19	White	Texture Coat	No	Client ID: BS28.7 Ceiling Texture Coat - C101	
					Non-Fibers	100
1947182-AE	30-Aug-19	Grey	Plaster	No	Client ID: BS29.1 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AF	30-Aug-19	Grey	Plaster	No	Client ID: BS29.2 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AG	30-Aug-19	Grey	Plaster	No	Client ID: BS29.3 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AH	30-Aug-19	Grey	Plaster	No	Client ID: BS29.4 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AI	30-Aug-19	Grey	Plaster	No	Client ID: BS29.5 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AJ	30-Aug-19	Grey	Plaster	No	Client ID: BS29.6 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AK	30-Aug-19	Grey	Plaster	No	Client ID: BS29.7 Ceiling Plaster - C03	
					Non-Fibers	100
1947182-AL	30-Aug-19	Yellow	Vinyl Floor Tile	Yes	Client ID: BS30.1 VFT Yellow with Black and Brown Streaks - A01	
					Chrysotile	8
					Non-Fibers	92
1947182-AM	30-Aug-19				Client ID: BS30.2 VFT Yellow with Black and Brown Streaks - A01	
					not analyzed	
1947182-AN	30-Aug-19				Client ID: BS30.3 VFT Yellow with Black and Brown Streaks - A01	
					not analyzed	
1947182-AO.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS31.1 VFT Grey with Black Dots - A04	
					Non-Fibers	100

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-AO.2	30-Aug-19	Black/Yellow	Mastic	No	Client ID: BS31.1 VFT Grey with Black Dots - A04	
					Non-Fibers	100
1947182-AP	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS31.2 VFT Grey with Black Dots - A04	
					Non-Fibers	100
1947182-AQ.1	30-Aug-19	Grey	Vinyl Floor Tile	No	Client ID: BS31.3 VFT Grey with Black Dots - A04	
					Non-Fibers	100
1947182-AQ.2	30-Aug-19	Black/Yellow	Mastic	No	Client ID: BS31.3 VFT Grey with Black Dots - A04	
					Non-Fibers	100
1947182-AR	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS32.1 VFT Beige with Black Dots - A04	
					Non-Fibers	100
1947182-AS.1	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS32.2 VFT Beige with Black Dots - A04	
					Non-Fibers	100
1947182-AS.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS32.2 VFT Beige with Black Dots - A04	
					Non-Fibers	100
1947182-AT	30-Aug-19	Beige	Vinyl Floor Tile	No	Client ID: BS32.3 VFT Beige with Black Dots - A04	
					Non-Fibers	100
1947182-AU.1	30-Aug-19	Grey	Vinyl Floor Tile	Yes	Client ID: BS33.1 VFT Light Grey with Grey Flakes - A114	
					Chrysotile	2
					Non-Fibers	98
1947182-AU.2	30-Aug-19	Black	Mastic	No	Client ID: BS33.1 VFT Light Grey with Grey Flakes - A114	
					Non-Fibers	100
1947182-AV.1	30-Aug-19				Client ID: BS33.2 VFT Light Grey with Grey Flakes - A114	
					not analyzed	
1947182-AV.2	30-Aug-19	Black	Mastic	No	Client ID: BS33.2 VFT Light Grey with Grey Flakes - A114	
					Non-Fibers	100

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-AW.1	30-Aug-19				Client ID: BS33.3 VFT Light Grey with Grey Flakes - A114 not analyzed	
1947182-AW.2	30-Aug-19	Black	Mastic	No	Client ID: BS33.3 VFT Light Grey with Grey Flakes - A114 Non-Fibers	100
1947182-AX	30-Aug-19	Cream	Vinyl Floor Tile	No	Client ID: BS34.1 VFT Cream with Pink/Green/Grey Flakes - A114 Non-Fibers	100
1947182-AY.1	30-Aug-19	Cream	Vinyl Floor Tile	No	Client ID: BS34.2 VFT Cream with Pink/Green/Grey Flakes - A114 Non-Fibers	100
1947182-AY.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS34.2 VFT Cream with Pink/Green/Grey Flakes - A114 Non-Fibers	100
1947182-AZ.1	30-Aug-19	Cream	Vinyl Floor Tile	No	Client ID: BS34.3 VFT Cream with Pink/Green/Grey Flakes - A114 Non-Fibers	100
1947182-AZ.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS34.3 VFT Cream with Pink/Green/Grey Flakes - A114 Non-Fibers	100
1947182-BA	30-Aug-19	Grey	Pipe Fitting Insulation	Yes	Client ID: BS35.1 Pipe Fitting Insulation - A201B Chrysotile Non-Fibers	70 30
1947182-BB	30-Aug-19				Client ID: BS35.2 Pipe Fitting Insulation - A201B not analyzed	
1947182-BC	30-Aug-19				Client ID: BS35.3 Pipe Fitting Insulation - A201B not analyzed	
1947182-BD	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS36.1 VSF Grey with Blue and Brown - A301 Cellulose Non-Fibers	10 90

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-BE	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS36.2 VSF Grey with Blue and Brown - A315	
					Cellulose	10
					Non-Fibers	90
1947182-BF	30-Aug-19	Grey	Vinyl Sheet Flooring	No	Client ID: BS36.3 VSF Grey with Blue and Brown - A315	
					Cellulose	10
					Non-Fibers	90
1947182-BG	30-Aug-19	Pink	Firestop	No	Client ID: BS37.1 Firestop Pink - A201D	
					MMVF	10
					Non-Fibers	90
1947182-BH	30-Aug-19	Pink	Firestop	No	Client ID: BS37.2 Firestop Pink - A201D	
					MMVF	10
					Non-Fibers	90
1947182-BI	30-Aug-19	Pink	Firestop	No	Client ID: BS37.3 Firestop Pink - A321	
					MMVF	10
					Non-Fibers	90
1947182-BJ	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS38.1 VFT White - A201	
					Non-Fibers	100
1947182-BK.1	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS38.2 VFT White - A321	
					Non-Fibers	100
1947182-BK.2	30-Aug-19	Yellow	Mastic	No	Client ID: BS38.2 VFT White - A321	
					Non-Fibers	100
1947182-BL	30-Aug-19	White	Vinyl Floor Tile	No	Client ID: BS38.3 VFT White - A501	
					Non-Fibers	100
1947182-BM	30-Aug-19	Red	Firestop	No	Client ID: BS39.1 Firestop Red - A201C	
					Non-Fibers	100

Certificate of Analysis
 Client: **McIntosh Perry Limited (Concord)**
 Client PO:

Report Date: 26-Nov-2019
 Order Date: 18-Nov-2019
 Project Description: **Z1920014HZ (Colonel By Hall)**

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-BN	30-Aug-19	Red	Firestop	No	Client ID: BS39.2 Firestop Red - A501C	
					MMVF	10
					Non-Fibers	90
1947182-BO	30-Aug-19	Red	Firestop	No	Client ID: BS39.3 Firestop Red - A601	
					Non-Fibers	100
1947182-BP	30-Aug-19	Pink	Vinyl Floor Tile	No	Client ID: BS40.1 VFT Pink - A505	
					Non-Fibers	100
1947182-BQ	30-Aug-19	Pink	Vinyl Floor Tile	No	Client ID: BS40.2 VFT Pink - A505	
					Non-Fibers	100
1947182-BR	30-Aug-19	Pink	Vinyl Floor Tile	No	Client ID: BS40.3 VFT Pink - A605	
					Non-Fibers	100
1947182-BS.1	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS41.1 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BS.2	30-Aug-19	Black	Mastic	No	Client ID: BS41.1 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BT.1	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS41.2 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BT.2	30-Aug-19	Black	Mastic	No	Client ID: BS41.2 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BU.1	30-Aug-19	Black	Vinyl Floor Tile	No	Client ID: BS41.3 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BU.2	30-Aug-19	Black	Mastic	No	Client ID: BS41.3 VFT Black with White and Grey Spots - A519	
					Non-Fibers	100
1947182-BV	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS42.1 VFT Yellow Tile with Brown and Tile Streaks - A604	
					Non-Fibers	100

Certificate of Analysis

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Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-BW	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS42.2 VFT Yellow Tile with Brown and Tile Streaks - A604	
					Non-Fibers	100
1947182-BX	30-Aug-19	Yellow	Vinyl Floor Tile	No	Client ID: BS42.3 VFT Yellow Tile with Brown and Tile Streaks - A604	
					Non-Fibers	100
1947182-BY	30-Aug-19	Beige	Ceiling Tile	No	Client ID: BS43.1 Ceiling Tile - A705	
					Cellulose	40
					MMVF	30
					Non-Fibers	25
					Other fibers	5
1947182-BZ	30-Aug-19	Beige	Ceiling Tile	No	Client ID: BS43.2 Ceiling Tile - A705	
					Cellulose	40
					MMVF	30
					Non-Fibers	25
					Other fibers	5
1947182-CA	30-Aug-19	Beige	Ceiling Tile	No	Client ID: BS43.3 Ceiling Tile - A601	
					Cellulose	20
					MMVF	50
					Non-Fibers	30
1947182-CB	30-Aug-19	Black	Mastic	No	Client ID: BS44.1 Carpet Mastic - A714	
					Non-Fibers	100
1947182-CC	30-Aug-19	Black	Mastic	No	Client ID: BS44.2 Carpet Mastic - A614	
					Non-Fibers	100
1947182-CD	30-Aug-19	Black	Mastic	No	Client ID: BS44.3 Carpet Mastic - A614	
					Non-Fibers	100
1947182-CE	30-Aug-19	Brown	Caulking	Yes	Client ID: BS45.1 Door Caulking - A802	
					Chrysotile	5
					Non-Fibers	95

Certificate of Analysis

Report Date: 26-Nov-2019

Client: McIntosh Perry Limited (Concord)

Order Date: 18-Nov-2019

Client PO:

Project Description: Z1920014HZ (Colonel By Hall)

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

Parcel ID	Sample Date	Colour	Description	Asbestos Detected	Material Identification	% Content
1947182-CF	30-Aug-19				Client ID: BS45.2 Door Caulking - A802 not analyzed	
1947182-CG	30-Aug-19				Client ID: BS45.3 Door Caulking - A802 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	NVLAP Lab Code *	Analysis Date
Asbestos, PLM Visual Estimation	by EPA 600/R-93/116	1 - Mississauga	200863-0	23-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.

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

Work Order Revisions | Comments

None



Parcel ID: 1947182



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

Chain of Custody
(Lab Use Only)

Client Name: McIntosh Perry	Project Reference: Z1920014HZ (Colonel By Hall)	Turnaround Time: <input type="checkbox"/> Immediate <input type="checkbox"/> 1 Day <input type="checkbox"/> 4 Hour <input type="checkbox"/> 2 Day <input type="checkbox"/> 8 Hour <input checked="" type="checkbox"/> Regular <i>6 days</i> Date Required:
Contact Name: Diana Banakh	Quote #: 19-651	
Address: 6240 Highway 7, Suite 200, Concord, Ontario L4K 2A3	PO #:	
Telephone: 905-856-5200	Email Address: d.banakh@mcintoshperry.com	

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

Parcel Order Number: 1947182		Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk		Positive Stop?
Sample ID	Identify Distinct Building Materials to Be Analyzed						
BS1.1-1.3	VFT Blue - A301, A604, A604	August 30th, 2019	N/A	PLM			X
BS2.1-2.3	SCT Pinholes with Texture - B109C, B109C, D503	August 30th, 2019	N/A	PLM			X
BS3.1-3.3	VFT White with green and orange flakes - B103, B103, B103	August 30th, 2019	N/A	PLM			X
BS4.1-4.3	SCT Pinholes varying sizes - B109C, B109C, B109C	August 30th, 2019	N/A	PLM			X
BS5.1-5.3	VFT Grey with black - B204, B204, B204	August 30th, 2019	N/A	PLM			X
BS6.1-6.3	VFT Beige with white / black / grey spots - B210, B210, B210	August 30th, 2019	N/A	PLM			X
BS7.1-7.3	Firestop caulking brown - B406B, B406B, B406B	August 30th, 2019	N/A	PLM			X
BS8.1-8.3	VFT black - B522, B522, B522	August 30th, 2019	N/A	PLM			X
BS9.1-9.3	Cement insulation - B602, B602, B602	August 30th, 2019	N/A	PLM			X
BS10.1-10.3	Acoustic tile - B701, B701, B701	August 30th, 2019	N/A	PLM			X
BS11.1-11.3	Concrete block mortar - A24A, B901, B901	August 30th, 2019	N/A	PLM			X
BS12.1-12.3	Interior window caulking - B824, B524, B524	August 30th, 2019	N/A	PLM			X
BS13.1-13.3	VFT white with green flakes - C09, C09, C09	August 30th, 2019	N/A	PLM			X
BS14.1-14.3	VFT white with grey spots - D05A, D05A, D05A	August 30th, 2019	N/A	PLM			X
BS15.1-15.3	Wall mastic - D014, D014, D014	August 30th, 2019	N/A	PLM			X
BS16.1-16.3	Pipe caulking - D107, D107A, D107A	August 30th, 2019	N/A	PLM			X
BS17.1-17.3	VFT white with grey flakes - D511, D504, D504	August 30th, 2019	N/A	PLM			X
BS18.1-18.3	VSF grey with white and dark grey flakes - E09, E09, E09	August 30th, 2019	N/A	PLM			X
BS19.1-19.3	VFT grey - E018B, E018B, E018B	August 30th, 2019	N/A	PLM			X
BS20.1-20.3	SCT screw on acoustic tile - E018B, E018B, E018B	August 30th, 2019	N/A	PLM			X

Chain of Custody (Asbestos) - Rev. 2.0 Nov. 2017



BS21.1-21.3	Pipe straight insulation - E018D, E018D, E018D	August 30th, 2019	N/A	PLM		x
BS22.1-22.3	Floor mastic - E101B, E101B, E101B	August 30th, 2019	N/A	PLM		x
BS23.1-23.3	VFT yellow and beige - L046, L046, L062	August 30th, 2019	N/A	PLM		x
BS24.1-24.3	VFT beige with white / orange / brown - L054, L054, L054	August 30th, 2019	N/A	PLM		x
BS25.1-25.7	VFT white with blue and pink - L058, L058, L058	August 30th, 2019	N/A	PLM		x
BS26.1-26.3	VFT Sandy brown - L070, L070, L070	August 30th, 2019	N/A	PLM		x
BS27.1-27.14	Drywall - A321, A501, A601, A701, A702, A708B, A708B, L040, L040, L064, L072, L072	August 30th, 2019	N/A	PLM		x
BS28.1-28.7	Ceiling texture coat - C101, C101, C101, C101, C101, C101, C101	August 30th, 2019	N/A	PLM		x
BS29.1-29.7	Ceiling plaster - C03, C03, C03, C03, C03, C03, C03	August 30th, 2019	N/A	PLM		x
BS30.1-30.3	VFT yellow with black and brown streaks - A01, A01, A01	August 30th, 2019	N/A	PLM		x
BS31.1-31.3	VFT grey with black dots - A04, A04, A04	August 30th, 2019	N/A	PLM		x
BS32.1-32.3	VFT beige with black dots - A04, A04, A04	August 30th, 2019	N/A	PLM		x
BS33.1-33.3	VFT light grey with grey flakes - A114, A114, B114	August 30th, 2019	N/A	PLM		x
BS34.1-34.3	VFT cream with pink/green/grey flakes - A114, A114, A114	August 30th, 2019	N/A	PLM		x
BS35.1-35.3	Pipe fitting insulation - A201B, A201B, A201B	August 30th, 2019	N/A	PLM		x
BS36.1-36.3	VSF grey with blue and brown - A301, A315, A315	August 30th, 2019	N/A	PLM		x
BS37.1-37.3	Firestop pink - A201D, A201D, A321	August 30th, 2019	N/A	PLM		x
BS38.1-38.3	VFT white - A201, A321, A501	August 30th, 2019	N/A	PLM		x
BS39.1-39.3	Firestop red - A201C, A501C, A601	August 30th, 2019	N/A	PLM		x
BS40.1-40.3	VFT pink - A505, A505, A605	August 30th, 2019	N/A	PLM		x
BS41.1-41.3	VFT black with white and grey spots - A519, A519, A519	August 30th, 2019	N/A	PLM		x
BS42.1-42.3	VFT yellow tile with brown and tile streaks - A604, A604, A604	August 30th, 2019	N/A	PLM		x
BS43.1-43.3	Ceiling tile - A705, A705, A601	August 30th, 2019	N/A	PLM		x
BS44.1-44.3	Carpet mastic - A714, A614, A614	August 30th, 2019	N/A	PLM		x
BS45.1-45.3	Door caulking - A802, A802, A802	August 30th, 2019	N/A	PLM		x

* If left blank, Parcel will analyze all materials identified during analysis ** If left blank, Parcel will analyze all materials as individual samples (at additional cost) per EPA 600/R-93/116

Comments: 233 samples Method of Delivery: United.

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Diana Banakh		Date/Time: Nov 18/2019 16:35	Date/Time: Nov 19/2019

12:37

Certificate of Analysis

McIntosh Perry Limited (Concord)

6240 Hwy 7, Suite 200
Woodbridge, ON L4H 0R2
Attn: Diana Banakh

Client PO:
Project: Z1920014HZ (Colonel by Hall)
Custody:

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

Order #: 1947118

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

Parcel ID	Client ID
1947118-01	Pb.1
1947118-02	Pb.2
1947118-03	Pb.3
1947118-04	Pb.4
1947118-05	Pb.5
1947118-06	Pb.6
1947118-07	Pb.7
1947118-08	Pb.8
1947118-09	Pb.9
1947118-10	Pb.10
1947118-11	Pb.11
1947118-12	Pb.12

Approved By:



Milan Ralitsch, PhD
Senior Technical Manager

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

Certificate of Analysis
Client: **McIntosh Perry Limited (Concord)**
Client PO:

Report Date: 21-Nov-2019

Order Date: 18-Nov-2019

Project Description: **Z1920014HZ (Colonel by Hall)**

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	21-Nov-19	21-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 Limited (Concord)
 Client PO:

Report Date: 21-Nov-2019
 Order Date: 18-Nov-2019
 Project Description: Z1920014HZ (Colonel by Hall)

Sample Results

Lead		Matrix: Paint Sample Date: 06-Sep-19		
Paracel ID	Client ID	Units	MDL	Result
1947118-01	Pb.1	% by Wt.	0.0005	0.0484
1947118-02	Pb.2	% by Wt.	0.0005	0.0084
1947118-03	Pb.3	% by Wt.	0.0005	0.0027
1947118-04	Pb.4	% by Wt.	0.0005	6.09
1947118-05	Pb.5	% by Wt.	0.0005	0.0027
1947118-06	Pb.6	% by Wt.	0.0005	<0.0005
1947118-07	Pb.7	% by Wt.	0.0005	0.223
1947118-08	Pb.8	% by Wt.	0.0005	1.39
1947118-09	Pb.9	% by Wt.	0.0005	1.14
1947118-10	Pb.10	% by Wt.	0.0005	0.0331
1947118-11	Pb.11	% by Wt.	0.0005	<0.0005
1947118-12	Pb.12	% by Wt.	0.0005	0.0326

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	ND	0.0005	% by Wt.						
Matrix Duplicate									
Lead	ND	0.0005	% by Wt.	ND			0.0	50	
Matrix Spike									
Lead	0.122	0.0005	% by Wt.	ND	97.7	70-130			



Client Name: McIntosh Perry	Project Reference: Z1920014HZ (Colonel by Hall)	Turnaround Time: <input type="checkbox"/> 1 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input checked="" type="checkbox"/> Regular Date Required: _____
Contact Name: Diana Banakh	Quote #: 19-651	
Address: 6420 Highway 7, Suite 200, Woodbridge Ontario L4H 4G3	PO #	
Telephone: 905-856-5200	Email Address: d.banakh@mcintoshperry.com	

Criteria: O. Reg. 153/04 (As Amended) Table ___ RSC Filing O. Reg. 558/00 PWQO CCME SUB (Storm) SUB (Sanitary) Municipality: _____ Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)				Required Analyses																
Sample ID/Location Name		Matrix	Air Volume	# of Containers	Sample Taken		Lead in Paint													
					Date	Time														
1	Pb.1	P			1 eptember 6th,201		X													
2	Pb.2	P			1 eptember 6th,201		X													
3	Pb.3	P			1 eptember 6th,201		X													
4	Pb.4	P			1 eptember 6th,201		X													
5	Pb.5	P			1 eptember 6th,201		X													
6	Pb.6	P			1 eptember 6th,201		X													
7	Pb.7	P			1 eptember 6th,201		X													
8	Pb.8	P			1 eptember 6th,201		X													
9	Pb.9	P			1 eptember 6th,201		X													
10	Pb.10	P			1 eptember 6th,201		X													
11	Pb.11	P			1 eptember 6th,201		X													
12	Pb.12	P			1 eptember 6th,201		X													

Comments: 12 samples Method of Delivery: United.

Relinquished By (Sign):	Received by Driver/Depot: <u>Anthony O...</u>	Received at Lab: <u>Allyssa CB</u>	Verified By: <u>[Signature]</u>
Relinquished By (Print): Diana Banakh	Date/Time: <u>Nov 18/2019 10:35</u>	Date/Time: <u>11/19/19 8:45</u>	Date/Time: <u>Nov 19/19 16:52</u>

APPENDIX D
Site Photographs



Photo 1: View of asbestos-containing parging cement on fitting observed to be in fair condition underneath the sink in D320.



Photo 2: View of asbestos-containing parging cement on fittings observed to be in poor condition in Room C012B.

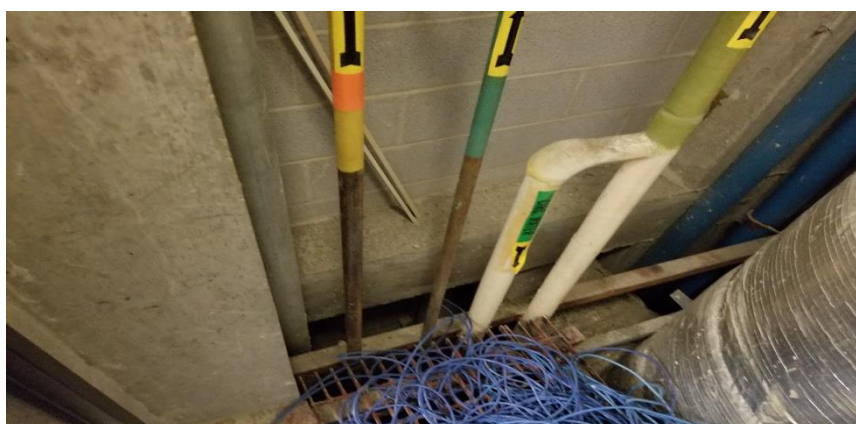


Photo 3: View of asbestos-containing parging cement on pipe fittings observed to be in good condition in Room B408A.

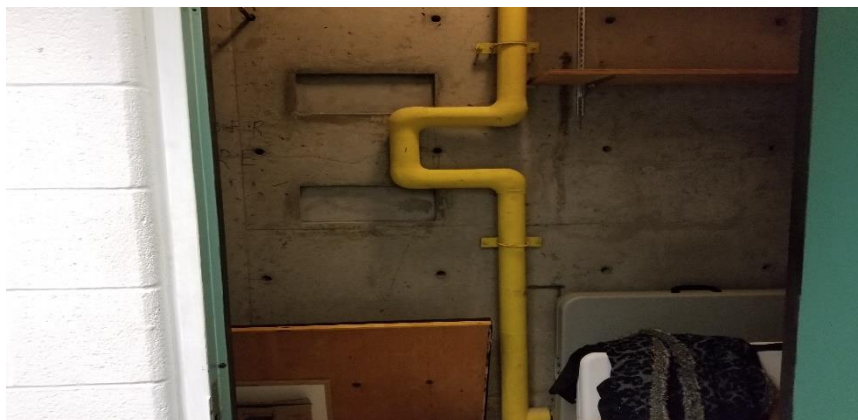


Photo 4: View of asbestos-containing parging cement on pipe fittings observed to be in good condition in Room B305A.



Photo 5: View of asbestos-containing duct insulation observed to be in good condition in Room D320.

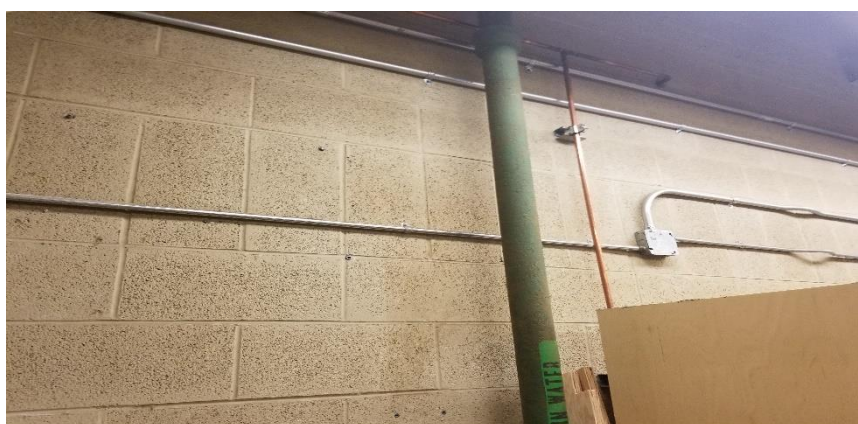


Photo 6: View of asbestos-containing transite pipe observed to be in good condition in E012.



Photo 7: View of mould/water damaged mechanical pipe straights observed in E101.



Photo 8: View of poor condition presumed asbestos ceiling texture finish observed in the Hallways outside of A502.



Photo 9: View of fair condition ACM Vinyl Floor Tile (12"x12"-White with Grey Flakes) observed in Location A710.



Photo 10: View of non-asbestos ceiling tiles: Pinholes with texture (left) and Pinholes with varying sizes (right) observed in B109C.



Photo 11: View of non-asbestos containing flexible duct connector observed in Room C503.



Photo 12: View of non-asbestos containing vinyl floor tiles (12"x12"-White with Grey Flakes) observed in Room D511.



Photo 13: View of non-asbestos containing vinyl floor tiles (12"x12"-Grey) observed in Room E018B.



Photo 14: View of non-asbestos screwed on ceiling tiles observed in Room E018B.

APPENDIX E

Asbestos-Containing Materials Checklists

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Room A01	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	150	SF	Manage in Place	
0	Room A02	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	150	SF	Manage in Place	
0	Room A016	Vinyl Floor Tiles (12"x12"-Beige with Grey Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low				
0	Room B03	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Easy	Low	1	C	Manage in Place	
0	Room B06	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Easy	Low	6	C	Manage in Place	
0	Room B08	Vinyl Floor Tiles (12"x12"-Green with White Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low				
0	Room B08B	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	70	C	Manage in Place	
0	Room B08C	Mechanical Pipe Straight Insulation	Confirmed	Friable	Good Condition	Difficult	Low	100	LF	Manage in Place	
0	Room B08D	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	4	C	Manage in Place	
0	Room B08E	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	6	C	Manage in Place	
0	Room B013	Mechanical Gasket Material	Confirmed	Non-Friable	Good Condition	Difficult	Low				
0	Room B016	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	25	C	Manage in Place	
0	Room B016A	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	14	SF	Manage in Place	
0	Room C03	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low				
0	Room C012B	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Poor Condition	Moderate	Low	4	C	Remove Following Type 2 (Glovebag) Abatement Procedures	
0	Room C012B	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	8	C	Manage in Place	
0	Room C012C	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	6	C	Manage in Place	

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Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Room C013	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	30	C	Manage in Place	
0	Room D02	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	29	C	Manage in Place	
0	Room D03	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	4	C	Manage in Place	
0	Room D04	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	3	C	Manage in Place	
0	Room D05	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	60	LF	Manage in Place	
0	Room D05	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	35	C	Manage in Place	
0	Room D06	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	45	C	Manage in Place	
0	Room D07	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	7	C	Manage in Place	
0	Room E01	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	50	C	Manage in Place	
0	Room E01	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	16	LF	Manage in Place	
0	Room E02	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	18	C	Manage in Place	
0	Room E02C	Mechanical Pipe Straight Insulation	Confirmed	Friable	Good Condition	Moderate	Low	7	LF	Manage in Place	
0	Room E02	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	70	LF	Manage in Place	
0	Room E04	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	65	LF	Manage in Place	
0	Room E05A	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	14	LF	Manage in Place	
0	Room E07	Mechanical Pipe Straight Insulation	Confirmed	Friable	Good Condition	Difficult	Low	30	LF	Manage in Place	
0	Room E07	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	65	LF	Manage in Place	
0	Room E07	Suspended Ceiling Tile (White)	Confirmed	-	Good Condition	Difficult	Low				
0	Room E08	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	8	C	Manage in Place	
0	Room E08	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	150	LF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Room E08A	Mechanical Duct Insulation	Confirmed	Friable	Good Condition	Difficult	Low	3	LF	Manage in Place	
0	Room B016	Vinyl Floor Tiles(12"x12"-Green with White Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	70	SF	Manage in Place	
0	Room E08A	Vinyl Floor Tiles(12"x12"-Green with White Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Moderate	10	SF	Manage in Place	
0	Room E09	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Difficult	Low	4	C	Manage in Place	
0	Room E010	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	40	C	Manage in Place	
0	Room E010A	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	6	C	Manage in Place	
0	Room E011	Mechanical Pipe fittings/Elbows Insulation	Confirmed	Friable	Good Condition	Moderate	Low	1	C	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Room A07	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	35	SF	Manage in Place	
0	Hallway outside Room A502	Texture Finish	Suspected	Friable	Poor Condition	N/A	Low	6	LF	Repair or Remove Following Type 1/2 Abatement Procedures	Sample material before completing repairs
0	Room B06	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	65	SF	Manage in Place	
0	Room C01A	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	33	SF	Manage in Place	
0	Room D08	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	100	SF	Manage in Place	
1	Room A107	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	44	SF	Manage in Place	
1	Room A117	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	55	SF	Manage in Place	
1	Room B101	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	350	SF	Manage in Place	
1	Room B108	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	86	SF	Manage in Place	
1	Room C102	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	43	SF	Manage in Place	
1	Room D111	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
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Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
	Room D501	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room D503	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room D508	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room B401	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room D402	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room D301	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	Room D209	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
	RoomD205	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	90	SF	Manage in Place	
2	Room A207	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	48	SF	Manage in Place	
2	Room A217	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	40	SF	Manage in Place	
2	Room A221 (Stairwell)	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	40	SF	Manage in Place	
2	Room D211	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	84	SF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
3	Room A304	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	50	SF	Manage in Place	
3	Room A316	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	50	SF	Manage in Place	
3	Room D303	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	30	SF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
3	Room D309	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	95	SF	Manage in Place	
3	Room D312	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	50	SF	Manage in Place	
4	Room A416	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	54	SF	Manage in Place	
4	Room B406	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	82	SF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
4	Room D414	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	92	SF	Manage in Place	
5	Room A517	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	54	SF	Manage in Place	
5	Room B501	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	400	SF	Manage in Place	
5	Room B511	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	775	SF	Manage in Place	
5	Room B515	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	82	SF	Manage in Place	
5	Room B516	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	710	SF	Manage in Place	
5	Room B525	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	302	SF	Manage in Place	
6	Room A607	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	54	SF	Manage in Place	
6	Room B601	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	86	SF	Manage in Place	

Colonel By Hall-161 Louis-Pasteur Private, Ottawa, Ontario
 Hazardous Materials Survey and 2022 Reassessment
 Appendix E - Asbestos Containing Materials Checklist

Z1920014HZ / CCC-230252-00

Floor/Level	Location	Type of ACM	Asbestos Confirmed/Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
6	Room C601	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	114	SF	Manage in Place	
7	Room A706	Vinyl Floor Tiles (12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	100	SF	Manage in Place	
7	Room A706	Vinyl Floor Tiles (12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Fair Condition	Easy	Low	1	SF	Repair or Remove Following Type 1 Abatement Procedures	
7	Room A710	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	132	SF	Manage in Place	
7	Room A710	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Fair Condition	Easy	Low	1	SF	Repair or Remove Following Type 1 Abatement Procedures	
7	Room B701A	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	65	SF	Manage in Place	
8	Room A801	Vinyl Floor Tiles(12"x12"-Yellow/Beige with Black and Brown Streaks)	Confirmed	Non-Friable	Good Condition	Easy	Low	60	SF	Manage in Place	

APPENDIX F
Hazardous Containing Materials Checklists

Floor/Level	Location	Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
00	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
00	Room C003	Lead	Paint	White	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
00	Room E002	Lead	Paint	Grey	Good Condition	N/A	4000	SF	Confirmed	Manage In Place	
00	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
00	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
0	Room A04	Lead	Paint	Purple	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
0	Room B08A	Lead	Paint	Light Blue	Good Condition	N/A	980	SF	Confirmed	Manage In Place	
0	Room Room E03	Lead	Paint	Yellow	Good Condition	N/A	4000	SF	Confirmed	Manage In Place	
0	Room E018D	Lead	Paint	Brown	Good Condition	N/A	1905	SF	Confirmed	Manage In Place	
0	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
0	Room C03B	Mercury	Pressure Gauges and Float Switches	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
0	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
0	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
0	Room A01	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	Vending Machine
0	Room E018D	Ozone Depleting Substances (ODS)	Air Handling Unit	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
0	Room E022	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Coldmatic	1	C	Confirmed	Manage In Place	
0	Room E024	Ozone Depleting Substances (ODS)	Air Handling Unit	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
1	Room D113	Lead	Paint	Light Pink	Good Condition	N/A	1,000	-	Confirmed	Manage In Place	
1	Room D113	Lead	Paint	Cream	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	Stairwell
1	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
1	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
1	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
1	Room D101A	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
1	Room D104	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
1	Room E101	Mould/ Water Damage	Mechanical Pipe Straights	N/A	Poor Condition	N/A	10	LF	Confirmed	Should be replaced as part of regular maintenance	*Asbestos-containing mechanical pipe
2	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
2	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
2	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
2	Room D202A	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	4	C	Confirmed	Manage In Place	
2	Room D206	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
2	Room D208	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	2	C	Confirmed	Manage In Place	
3	Room A321	Mould/ Water Damage	Ceiling Tiles	N/A	Poor Condition	N/A	3	C	Confirmed	Should be replaced as part of regular maintenance	
3	Room D301	Lead	Paint	Gray	Good Condition	N/A	614	SF	Confirmed	Manage In Place	

Floor/Level	Location	Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
3	Room D310	Lead	Paint	Dark Green	Good Condition	N/A	24	SF	Confirmed	Manage In Place	
3	Throughout Level	Lead	Battery Pack	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place	
3	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place	
3	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
3	Room A301	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
3	Room D321	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Various	3	C	Confirmed	Manage in Place	
4	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
4	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	Throughout	N/A	Confirmed	Manage in Place	
4	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	Throughout	N/A	Confirmed	Manage in Place	
4	Room D406	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Various	3	C	Confirmed	Manage in Place	
4	Room D412	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Kelvinator	1	C	Confirmed	Manage In Place	
4	Room D415	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
4	Room D416	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Various	3	C	Confirmed	Manage In Place	
5	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
5	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
5	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
5	Room D502	Mercury	Thermostat	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
5	Room D510	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
5	Room D511	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	Various	2	C	Confirmed	Manage In Place	
6	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
6	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
6	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
	Hallway outside Room A502	Water Damage	Non-Acm Texture Finish	N/A	Poor Condition	N/A	6	LF	Confirmed	Repair as part of regular Maintenance	
6	Room A601	Ozone Depleting Substances (ODS)	Refrigerator/Freezer/Mini-Fridge/Water Cooler	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	
7	A706	Lead	Paint	Red	Good Condition	N/A	24	SF	Confirmed	Manage In Place	
7	Throughout Level	Lead	Battery Pack	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
7	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	Various	-	-	Confirmed	Manage In Place	
7	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage In Place	
8	Throughout Level	Lead	Battery Pack	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
8	Room A802	Mercury	Thermostat	N/A	Good Condition	N/A	1	C	Confirmed	Manage In Place	

Floor/Level	Location	Type	Component	Colour	Condition	Manufacturer	Quantity #	Unit	Suspected/ Confirmed	Recommended Action	Comments
8	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
8	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
9	Throughout Level	Lead	Battery Pack	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
9	Throughout Level	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	
9	Throughout Level	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	Throughout	-	Confirmed	Manage In Place	

APPENDIX G

Site Sampling & Location Plans

REV DATE	DESCRIPTION	BY



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Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
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			off/de

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- ▲ Asbestos Bulk Sample
- Lead Paint Sample

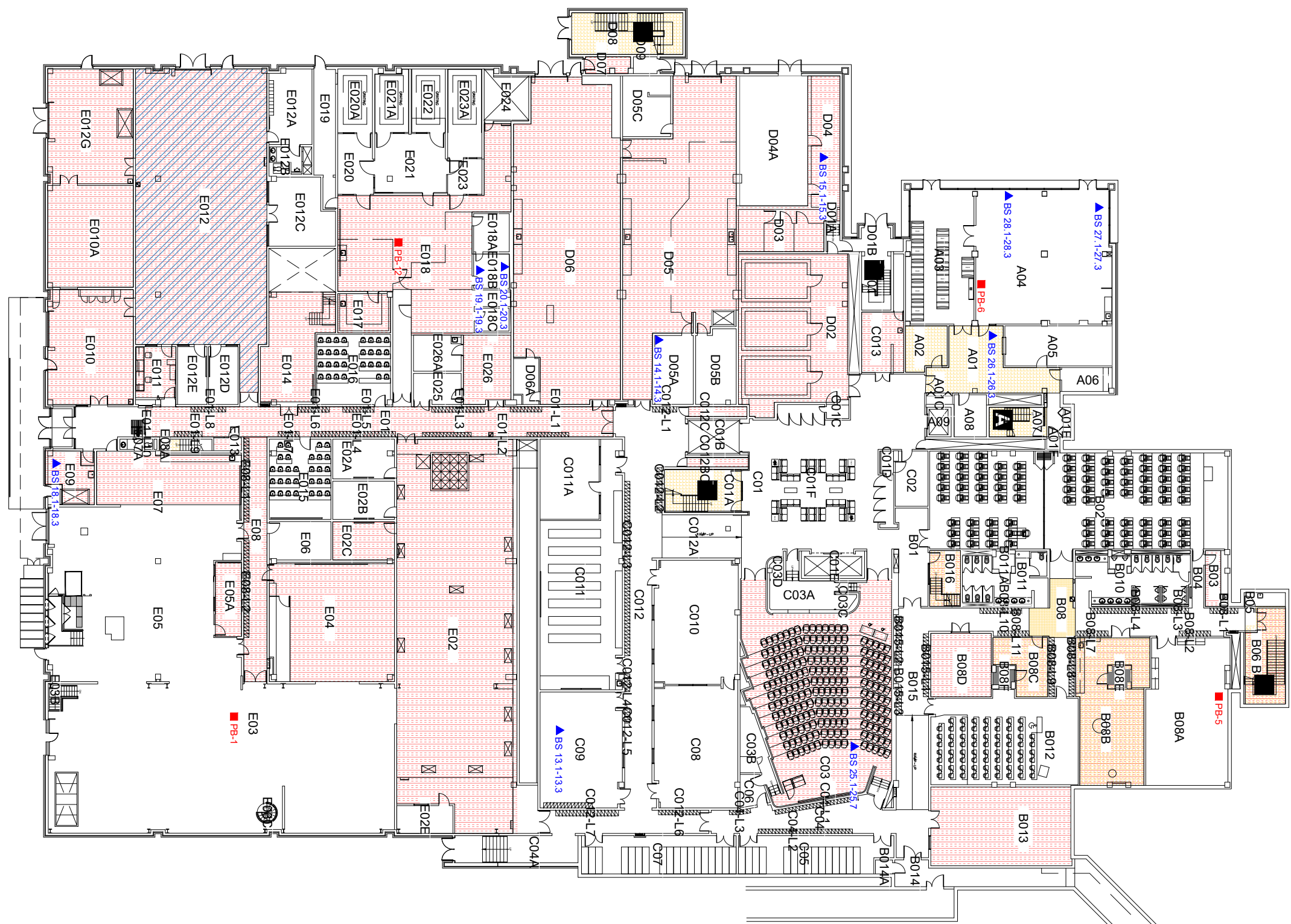
Notes:

Drywall will ACM joint compound is present throughout

- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

B. BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:
▲ Asbestos Bulk Sample
■ Lead Paint Sample

Notes:
Drywall will ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl floor Tile (VFT)
- ACM Texture Coat
- ACM Mechanical Insulation
- ACM Transite
- ACM Plaster
- ACM Window Caulking
- Gasket
- Caulking

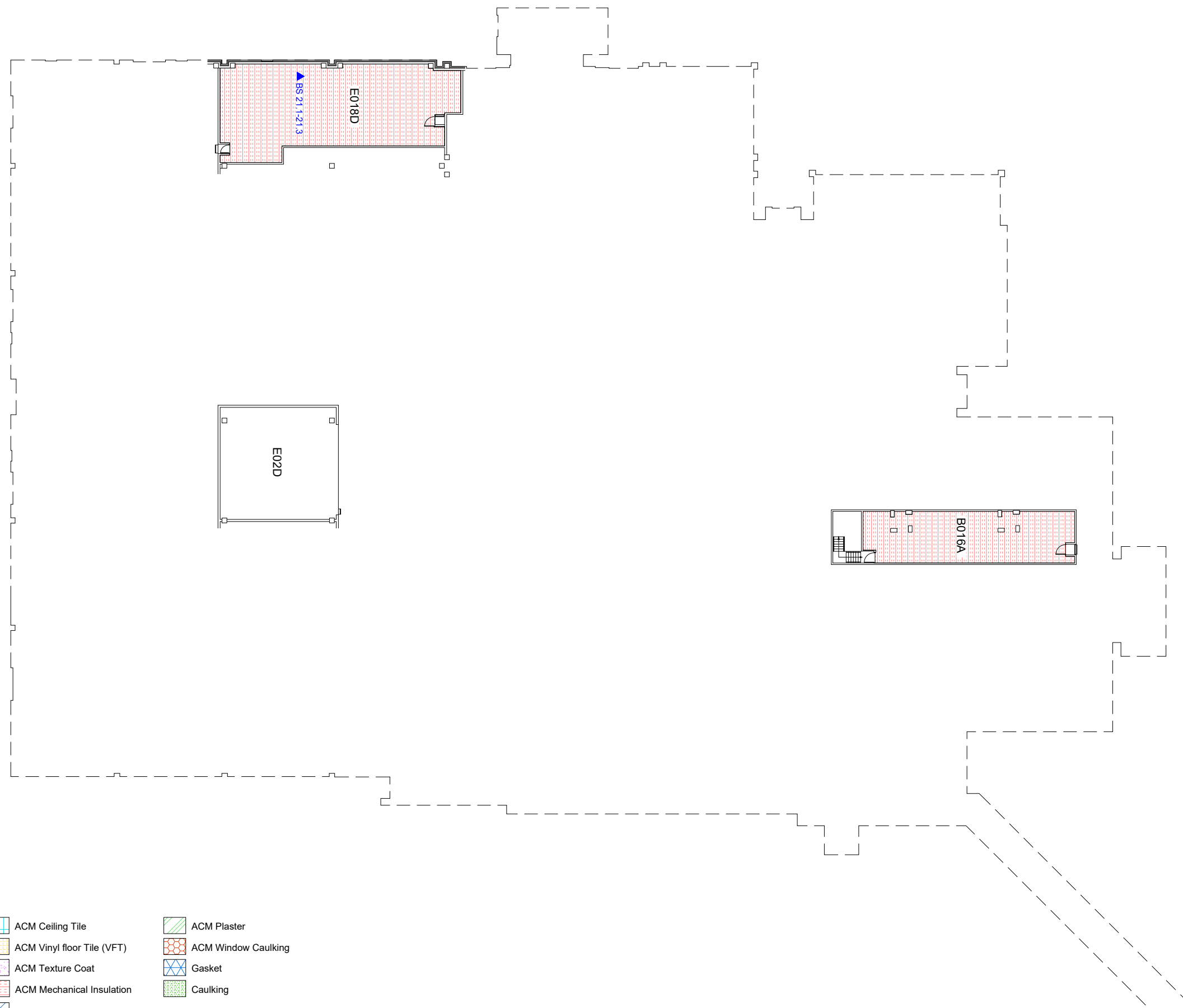
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BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl floor Tile (VFT)
- ACM Texture Coat
- ACM Mechanical Insulation
- ACM Transite
- ACM Plaster
- ACM Window Caulking
- Gasket
- Caulking

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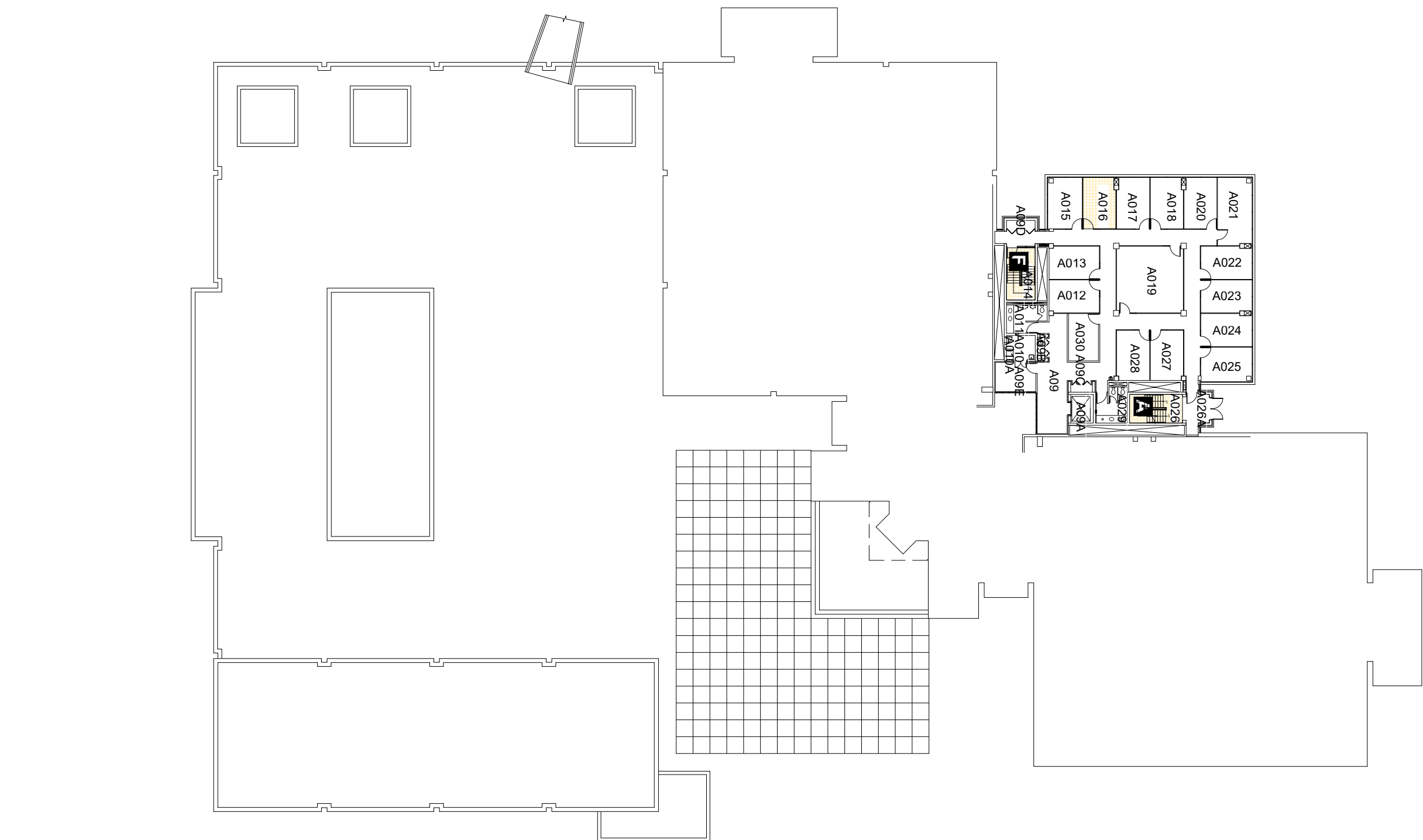
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Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
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Échelle/Scale:		Revision:	
1:400	1	06/09/2015	A-0.25
		Feuille/Sheet:	
		of/de	

B. BUILDING COMBINED



REV DATE	DESCRIPTION	BY

Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | |
|----------------------------|---------------------|
| ACM Ceiling Tile | ACM Plaster |
| ACM Vinyl floor Tile (VFT) | ACM Window Caulking |
| ACM Texture Coat | Gasket |
| ACM Mechanical Insulation | Caulking |
| ACM Transite | |

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Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
Édifice/Bldg	060	Niveau/Level:	0.5
Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-0.5
			of/de

B. BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample
- ACM Ceiling Tile
- ACM Vinyl floor Tile (VFT)
- ACM Texture Coat
- ACM Mechanical Insulation
- ACM Transite
- ACM Plaster
- ACM Window Caulking
- Gasket
- Caulking

Notes:
Drywall will ACM joint compound is present throughout

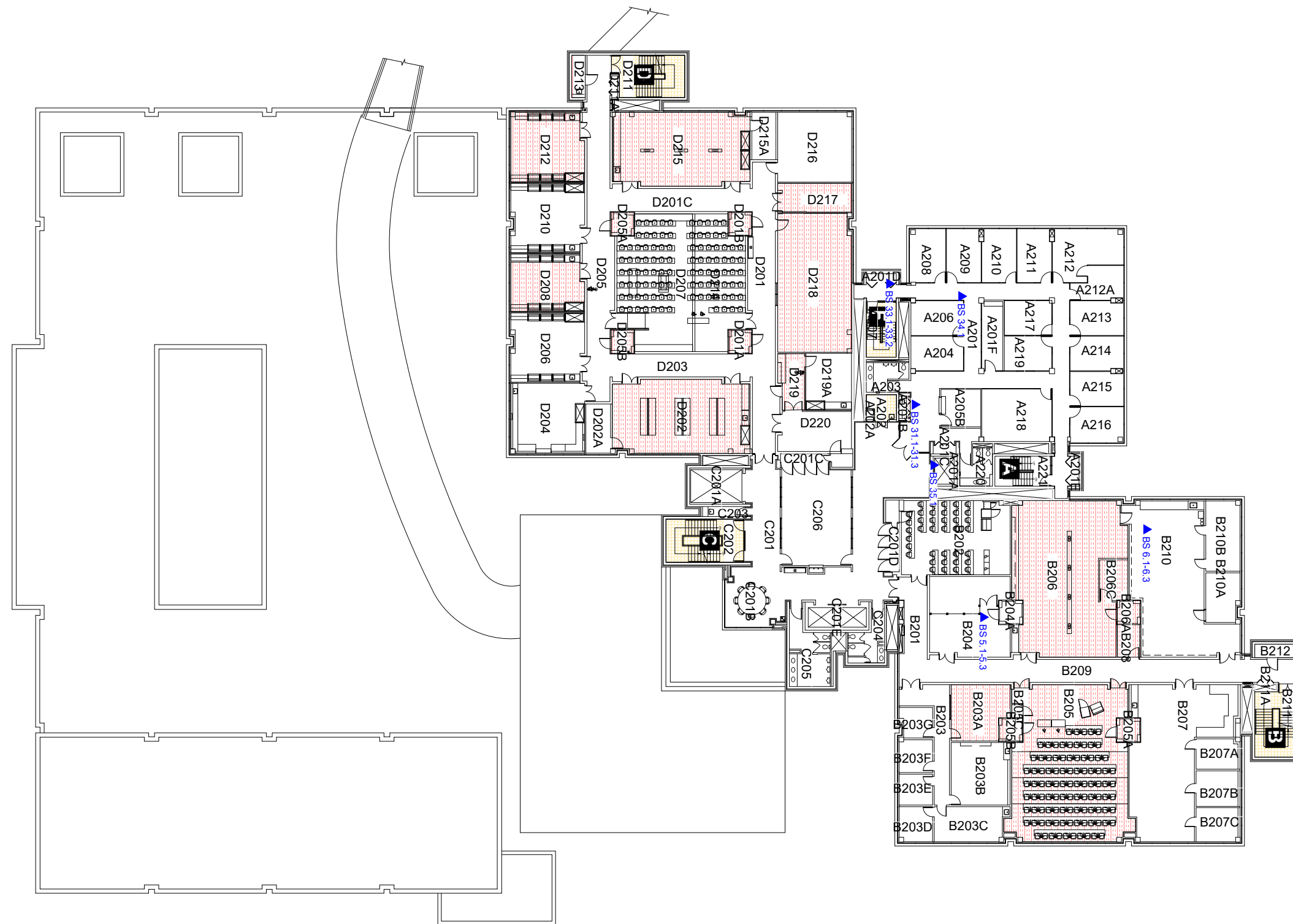
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Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
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Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-1 of/de

B. BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

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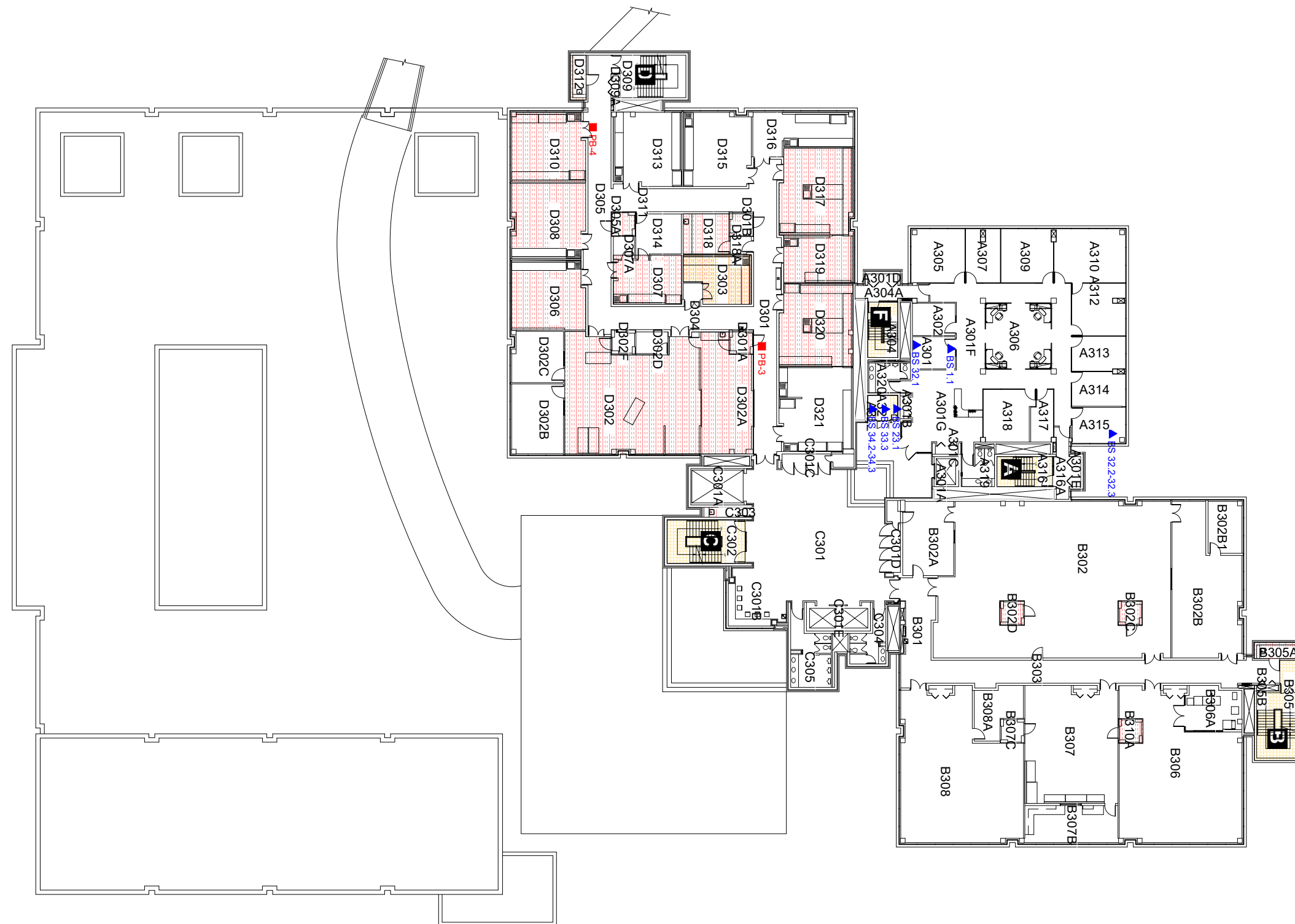
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Dessin / Drawing:
**SITE PLAN &
SAMPLE LOCATIONS**

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	Feuille/Sheet: A-2 of/de

B BUILDING COMBINED

REV DATE	DESCRIPTION	BY



- Legend:**
- ▲ Asbestos Bulk Sample
 - Lead Paint Sample
- Notes:**
Drywall will ACM joint compound is present throughout
- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

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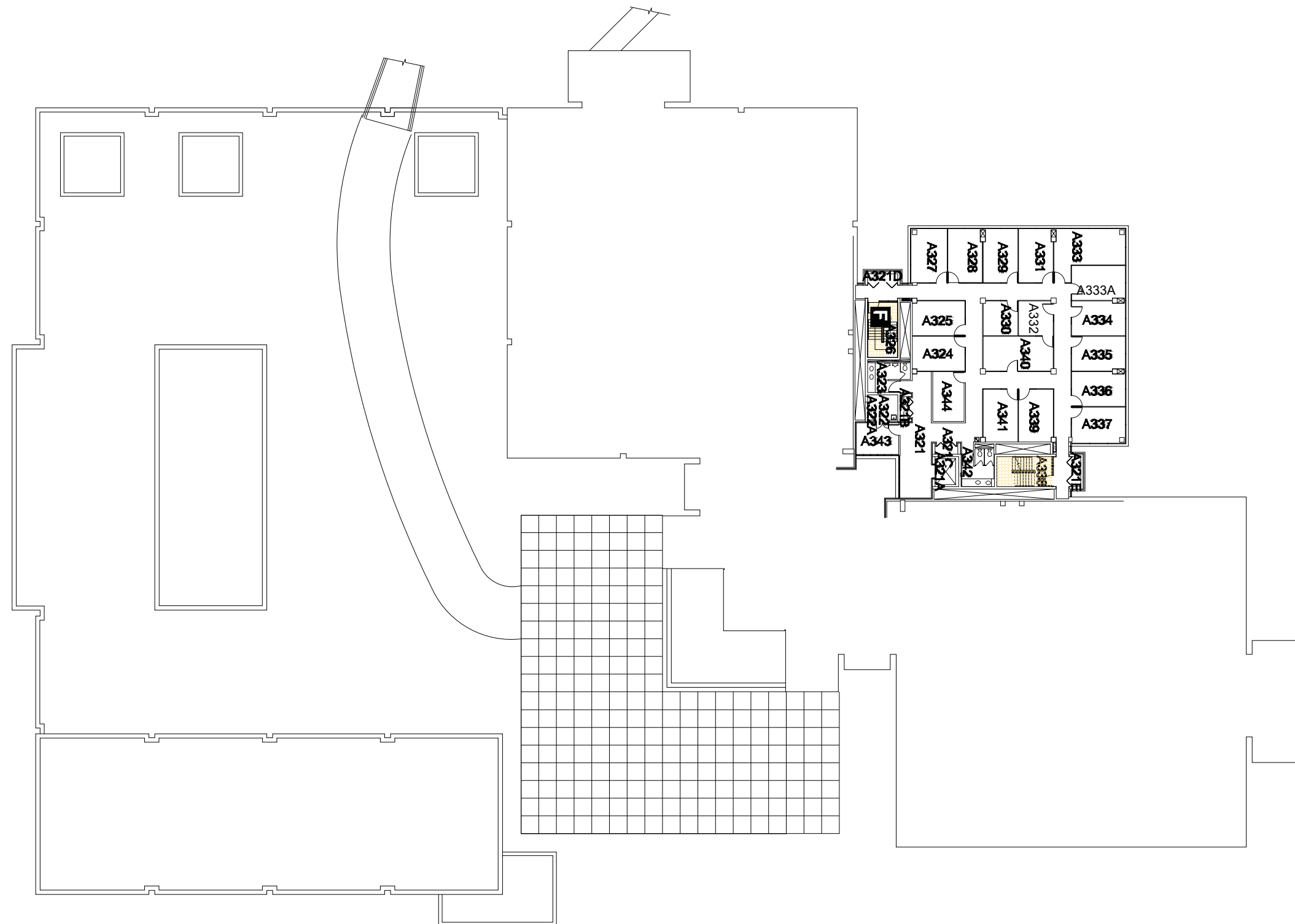
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Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
Édifice/Bldg	060	Niveau/Level:	3
Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-3 of/de

BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

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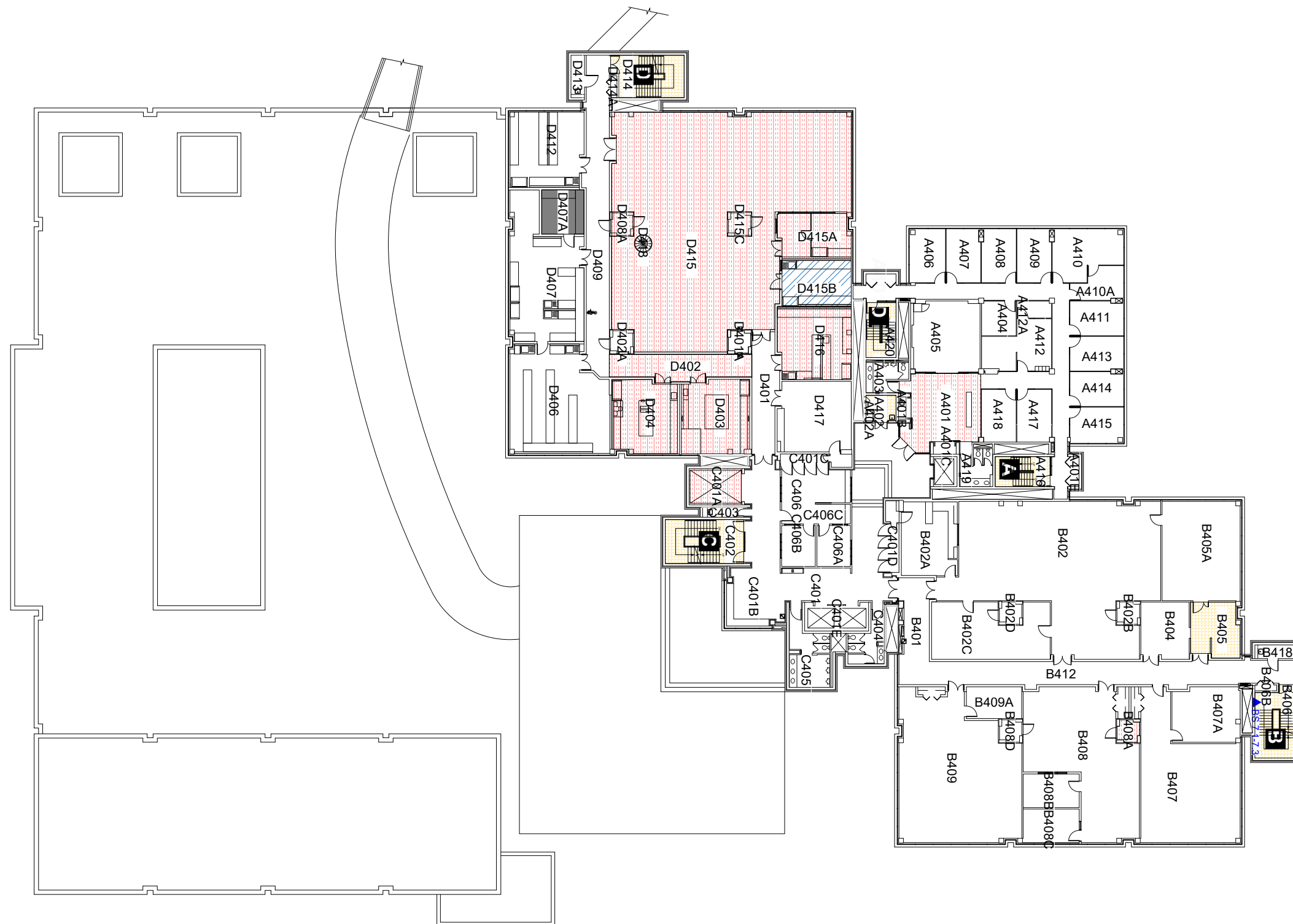
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Dessin / Drawing:
**SITE PLAN &
SAMPLE LOCATIONS**

Édifice/Bldg --- 060 ---	Niveau/Level: --- 3.5 ---
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	Feuille/Sheet: A-3.5 of/de

B. BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl floor Tile (VFT)
- ACM Texture Coat
- ACM Mechanical Insulation
- ACM Transite
- ACM Plaster
- ACM Window Caulking
- Gasket
- Caulking

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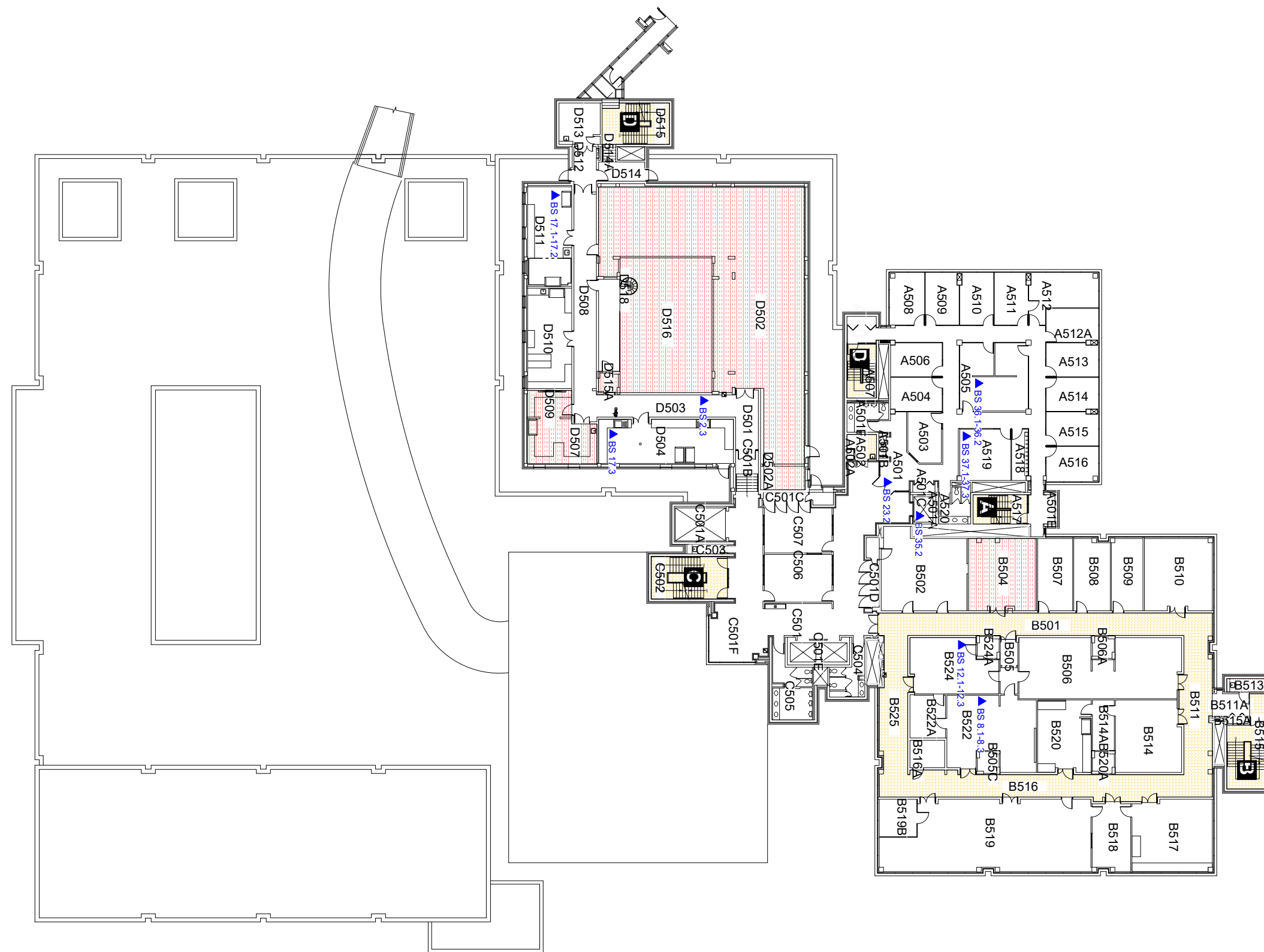
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Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-4 of/de

BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

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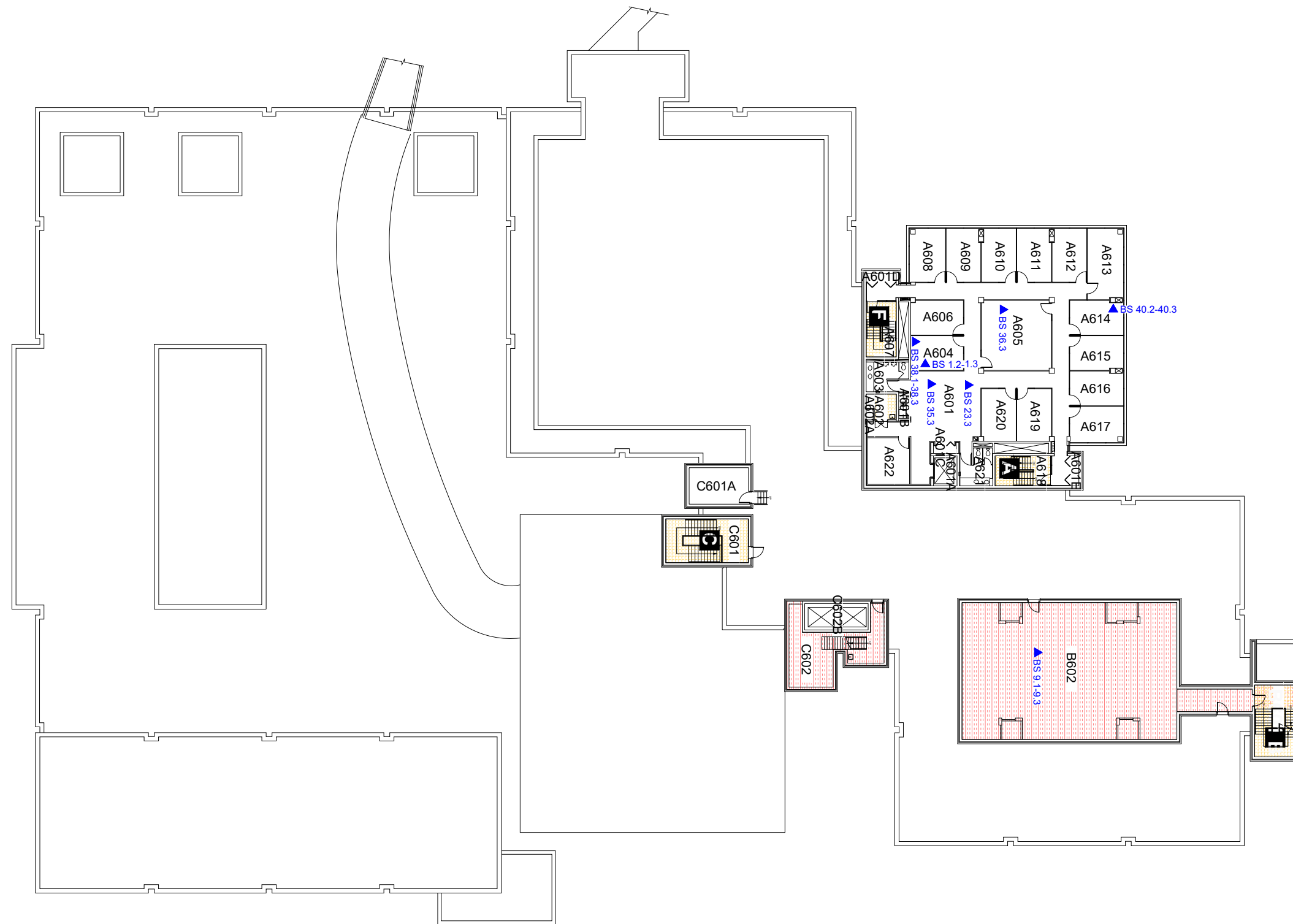
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Édifice/Bldg	060	Niveau/Level:	5
Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-5 of/de

BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- ACM Ceiling Tile
- ACM Vinyl floor Tile (VFT)
- ACM Texture Coat
- ACM Mechanical Insulation
- ACM Transite
- ACM Plaster
- ACM Window Caulking
- Gasket
- Caulking

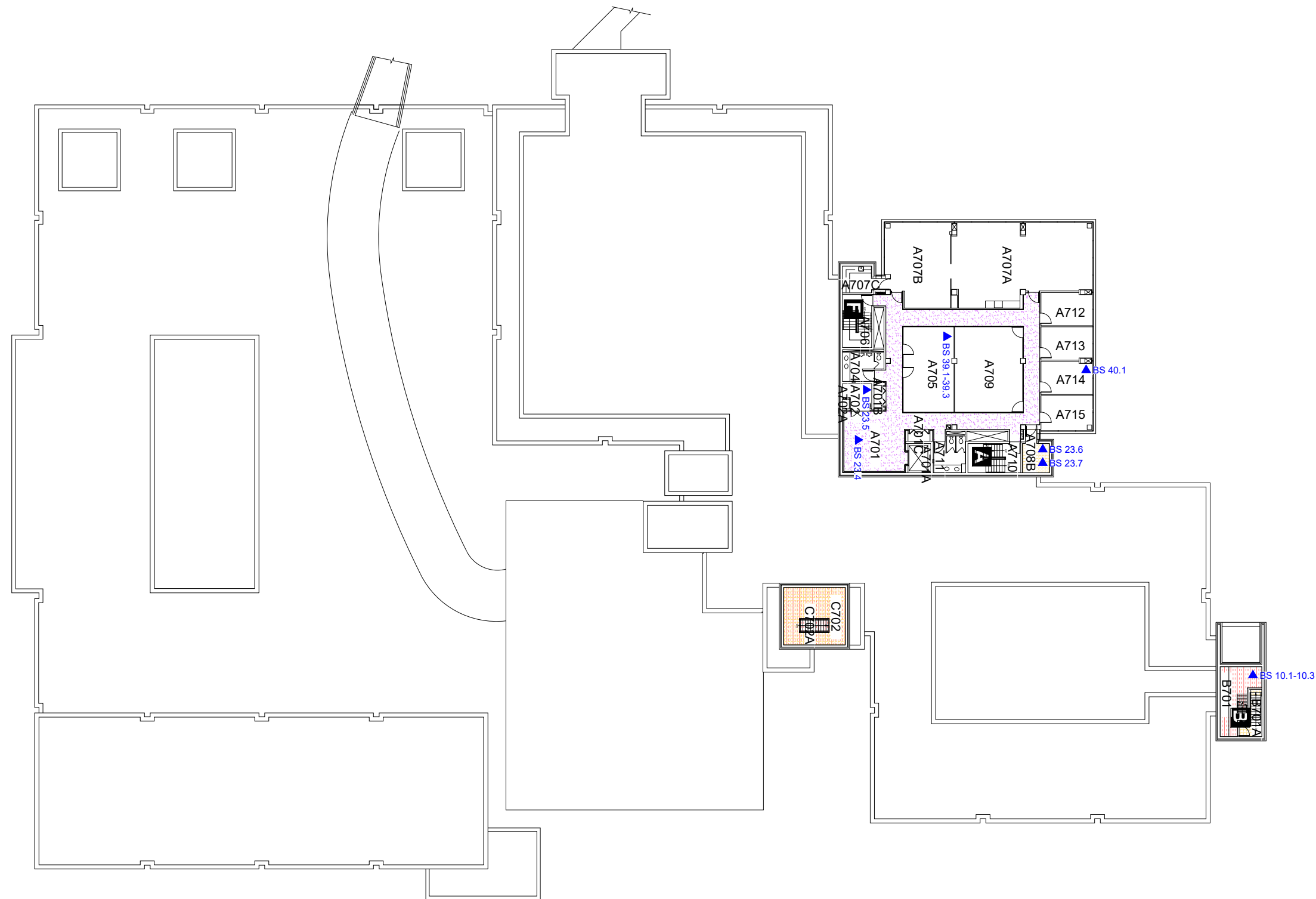
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 Toll Free: 1.888.348.8991
 www.mcintoshperry.com

COLONEL BY HALL
 161 LOUIS-PASTEUR

Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
Édifice/Bldg	060	Niveau/Level:	6
Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-6 of/de

BUILDING COMBINED

REV DATE	DESCRIPTION	BY



Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | | | |
|--|----------------------------|--|---------------------|
| | ACM Ceiling Tile | | ACM Plaster |
| | ACM Vinyl floor Tile (VFT) | | ACM Window Caulking |
| | ACM Texture Coat | | Gasket |
| | ACM Mechanical Insulation | | Caulking |
| | ACM Transite | | |

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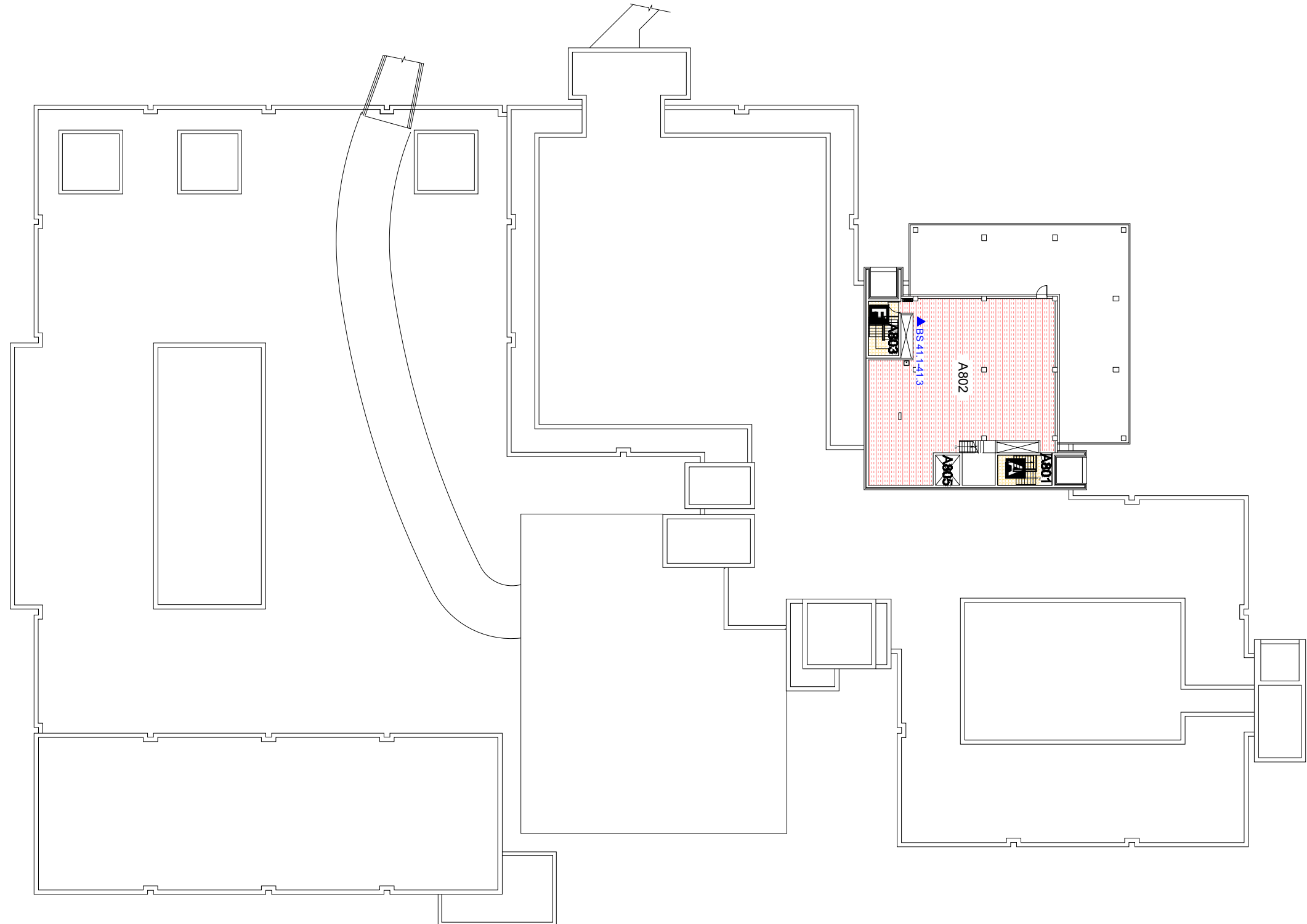
COLONEL BY HALL

161 LOUIS-PASTEUR

Dessin / Drawing:
**SITE PLAN &
SAMPLE LOCATIONS**

Édifice/Bldg --- 060 ---	Niveau/Level: --- 7 ---
Échelle/Scale: 1:400	Revison: 1
Feuille/Sheet: A-7 of/de	08/09/2015

B BUILDING COMBINED



REV DATE	DESCRIPTION	BY

Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | |
|----------------------------|---------------------|
| ACM Ceiling Tile | ACM Plaster |
| ACM Vinyl floor Tile (VFT) | ACM Window Caulking |
| ACM Texture Coat | Gasket |
| ACM Mechanical Insulation | Caulking |
| ACM Transite | |

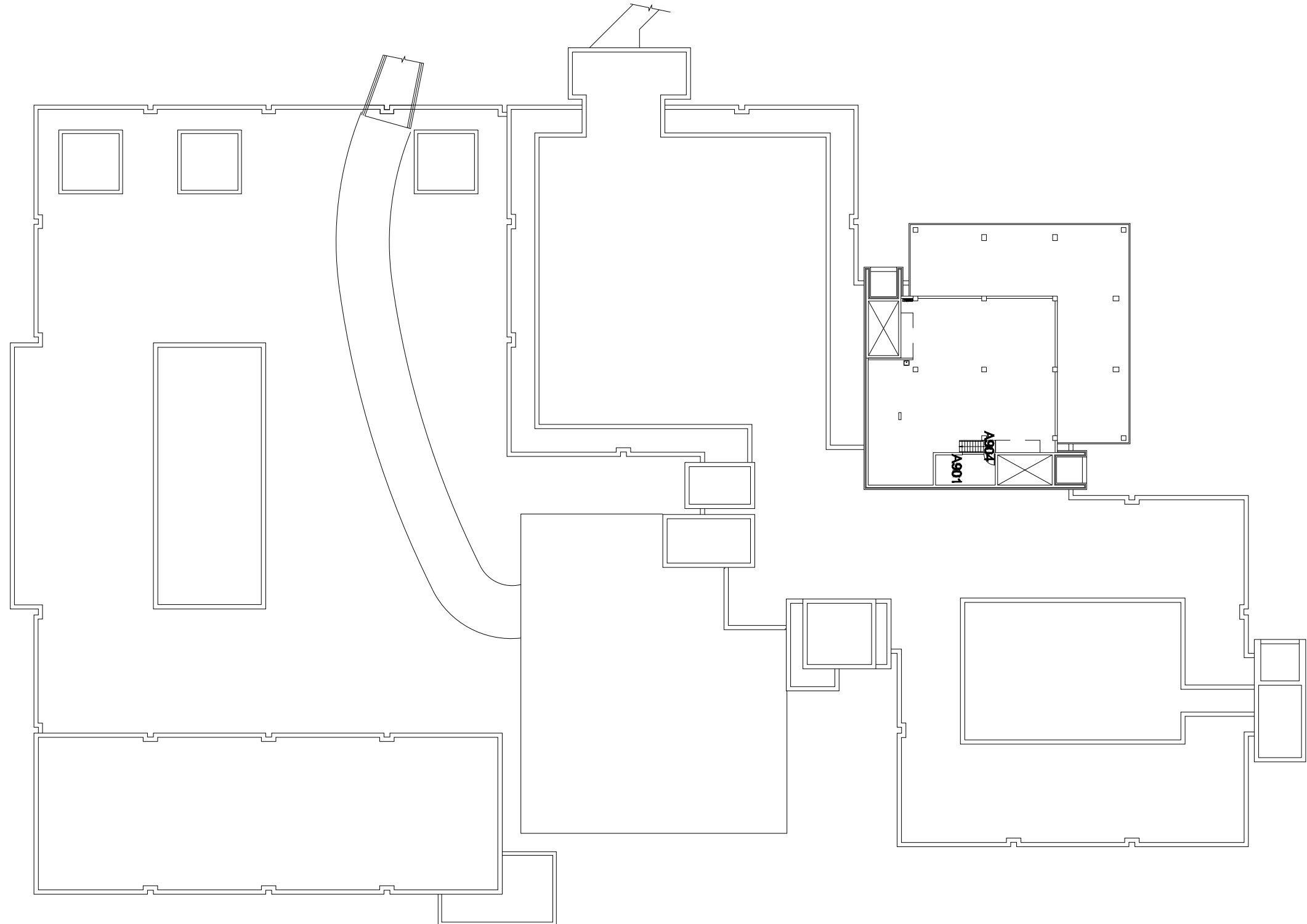
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Dessin / Drawing: SITE PLAN & SAMPLE LOCATIONS	
Édifice/Bldg --- 060 ---	Niveau/Level: 8 ---
Échelle/Scale: 1:400	Revison: 1
	Feuille/Sheet: A-8 of/de

B BUILDING COMBINED



REV DATE	DESCRIPTION	BY

Legend:

- ▲ Asbestos Bulk Sample
- Lead Paint Sample

Notes:

Drywall will ACM joint compound is present throughout

- | | |
|----------------------------|---------------------|
| ACM Ceiling Tile | ACM Plaster |
| ACM Vinyl floor Tile (VFT) | ACM Window Caulking |
| ACM Texture Coat | Gasket |
| ACM Mechanical Insulation | Caulking |
| ACM Transite | |

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 161 LOUIS-PASTEUR

Dessin / Drawing:		SITE PLAN & SAMPLE LOCATIONS	
Édifice/Bldg	060	Niveau/Level:	9
Échelle/Scale:	1:400	Revision:	1
		Feuille/Sheet:	A-9 of/de

B. BUILDING COMBINED