

Project #: 13916

**ASBESTOS ASSESSMENT
Corte Real Building
Memorial University of Newfoundland
St. John's, NL**

Prepared for:

**Sheila Miller
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Memorial University of Newfoundland
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Prepared by:



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August 2011

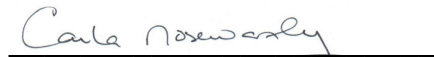
EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited conducted an Asbestos Assessment at the Corte Real Building, located at Memorial University of Newfoundland (MUN), St. John's, NL. The objective of the assessment was to determine the presence of asbestos containing materials throughout the building. It was determined that:

- Four (4) of the thirteen (13) suspect asbestos samples collected contained asbestos greater than 1%. (*Newfoundland and Labrador Regulation 111/98, Asbestos Abatement Regulations, 1998 under the Occupational Health and Safety Act.*)
- 1' x 1' vinyl floor tiles, sampled from various locations were found to contain between 2 and 3% Chrysotile asbestos.
- Vinyl sheet flooring sampled was found to contain 15% Chrysotile asbestos.
- Exterior green panels are suspected to be asbestos containing transite material (sampled from Cartier Court, sample #CR-34)

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

Thank you,



Carla Noseworthy, C.E.T.
Environmental Consultant

ALL-TECH Environmental Services Limited

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1.0 INTRODUCTION

ALL-TECH Environmental Services Limited was contracted by Sheila Miller, Director – Department of Health and Safety, Memorial University of Newfoundland (MUN), to complete an Asbestos Assessment at the Corte Real Building located at Memorial University of Newfoundland, St. John's, NL. The purpose of the assessment was to identify the presence of asbestos containing materials located throughout the building. The assessment was conducted in August 2011.

2.0 ASBESTOS ASSESSMENT

Asbestos is a general term which is used to describe a group of fibrous mineral silicates. The six major types of asbestos are; chrysotile (white asbestos), crocidolite (blue), amosite (brown), anthophyllite, tremolite and actinolite. Commercially, asbestos has been used widely in such applications as fireproofing, textiles, friction products, reinforcing materials (i.e. cement pipes, sheets) and insulation (both thermal and acoustic).

Asbestos materials can be found in one of two forms; friable or non-friable. Friable asbestos material refers to material that when dry, can be crumbled, pulverized or reduced to a powder by hand pressure thus releasing fibers into the air. This type of asbestos material is hazardous due to its potential to become airborne if damaged or disturbed. Friable asbestos building products used in the past were sprayed acoustic & fire protection insulations, ceiling/wall finishes, drywall joint compounds, mechanical insulations on pipes, tanks, boilers, vessels, etc. Non-friable building products used in the past were vinyl floor tiles, gaskets, transite panels, and transite shingles. Non-friable materials if handled improperly during removal or renovations, such as cutting transite panels with an electrical tool, can cause high fiber release. Also, non-friable asbestos products can become friable if damaged through years of aging (water damage, general deterioration of materials, etc.).

Asbestos containing materials (ACM) can be properly managed and left in place depending on their location, condition, and friability. Non-friable materials receive less attention than friable materials due to the fact that the asbestos fibers in the non-friable material are bound or held tightly together, reducing the chance of fibers becoming airborne. This makes the non-friable products safer and easier to manage.

The mere presence of asbestos in building materials is not necessarily a problem; however, inhaling asbestos fibers can cause associated health problems. The hazards of asbestos exposure are directly related to the degree to which fibers are released (become airborne). Intact and undisturbed asbestos do not pose a health risk.

2.1 Scope of Work

Representative suspect asbestos containing materials were sampled from wall finishes, various types of flooring, and exterior finishes located throughout the building.

The asbestos assessment involved a visual investigation of representative building structures, wall & ceiling finishes, and flooring for the presence of asbestos materials. If these materials were suspected to contain asbestos, a bulk sample was collected of the representative material.

It should be noted that asbestos containing materials such as piping straight runs & fittings may be present behind existing drywall walls, ceilings, columns, shafts, etc. Since no destructive testing was performed during this assessment, additional care should be taken during renovations/demolition to ensure that no asbestos containing materials are to be disturbed.

2.2 Methodology

A total of thirteen (13) suspect asbestos bulk samples were collected from the building. Representative suspect asbestos bulk material samples from floors, wall finishes, ceiling tiles, pipe fitting insulation, sprayed insulation, tar sealants, light fixture heat shields and exterior caulking were carefully collected and placed into labeled sealable plastic bags and transported to the EMSL Analytical Inc. in New Jersey, USA, for Polarized Light Microscopy/ Dispersion Staining (PLM/DS) analysis. The EPA test method for bulk analysis (EPA/600/R-93/116) states in paragraph 2.2.2 that *“the detection limit for visual estimation is a function of the quantity of the sample analyzed, the nature of matrix interference, sample preparation, and fiber size and distribution. Asbestos may be detected in concentrations of less than one percent by area if sufficient material is analyzed. Samples may contain fibers too small to be resolved by PLM (< 0.25 µm in diameter) so detection of those fibers by this method may not be possible.”*

2.3 Applicable Standards

The province defines Asbestos material as “material containing greater than 1% asbestos by dry weight.” Materials identified as ACM must be managed, handled and disposed of as per the Newfoundland and Labrador Regulation 111/98, *Asbestos Abatement Regulations, 1998* under the *Occupational Health and Safety Act* (O.C. 98-730).

Also, the Province of Newfoundland and Labrador have set standards for exposure to airborne asbestos fibres to as low as is reasonably achievable (ALARA) but in any case shall not exceed Threshold Limit Values (TLVs) as published by the American Conference of Governmental Industrial Hygienists (ACGIH) and are primarily used for the occupational exposure to employees and workers who from day to day come in contact with asbestos. ACGIH guidelines state the airborne asbestos limit as follows:

- Asbestos (all forms) 0.1 fibres per cubic centimetre (f/cc) as determined by air sampling following the NIOSH 7400 Asbestos and Other Fibres by Phase Contrast Microscopy.

The *Newfoundland Asbestos Abatement Regulations 111/98* requires that all employers, building owners and principal contractors follow this Regulation when handling or using asbestos in their workplace. This Regulation applies to every workplace covered under the Occupational Health and Safety Legislation where asbestos or materials containing asbestos, is likely to be handled, dealt with, disturbed or removed and includes every project, project owner, contractor, employer and employee engaged in or on the project. An owner/contractor to whom this Regulation applies shall take every reasonable precaution to ensure that every worker who is not an employee of the owner/contractor and who works in the workplace of the owner/contractor is protected and every such worker shall comply with the requirements of this Regulation.

2.4 Survey Findings

Laboratory analysis confirmed that four (4) of the thirteen (13) bulk samples collected from the building contained asbestos greater than 1%. Table 1.0 below illustrates the results of this sampling. **See Appendix II - Laboratory Asbestos Results.**

Table 1.0
Summary of Suspect Asbestos Containing Materials Tested
Corte Real Building
Memorial University of Newfoundland
St. John's, NL

Sample No.	Sample Description and Location	Asbestos Results
CA-1	1' x 1' Vinyl Floor Tile, white with brown Room CA2002	2% Chrysotile
CA-2	Plaster Room CA2002	None Detected
CA-2	Plaster Room CA2002	None Detected
CA-3	2' x 2' Ceiling Tile, small perforations Room CA2001	None Detected
CA-4	1' x 1' Vinyl Floor Tile, white with black Room CA2001	None Detected
	Mastic	None Detected
CA-5	Vinyl Sheet Flooring, Blue Room CA2011	None Detected
	Mastic	None Detected

Sample No.	Sample Description and Location	Asbestos Results
CA-6	1' x 1' Vinyl Floor Tile, beige with dark brown, orange Room CA2007	3% Chrysotile
	Mastic	<1% Chrysotile
CA-7	Drywall Joint Compound Room CA2004	<1% Chrysotile
CA-8	Drywall Joint Compound Room CA1000B	None Detected
CA-9	1' x 1' Vinyl Floor Tile, brown stripes Room CA1002	None Detected
	Mastic	None Detected
	Leveler	None Detected
CA-10	1' x 1' Vinyl Floor Tile, grey Room CA1002	None Detected
	Mastic	None Detected
CA-11	1' x 1' Vinyl Floor Tile, beige with green stripe Room CA1005A	3% Chrysotile
CA-12	Vinyl Sheet Flooring, brown square Room CA1008	15% Chrysotile
	Mastic	None Detected
CA-13	Drywall Joint Compound	None Detected

Mechanical and Pipe Material

Pipe fitting insulation which could potentially contain asbestos was not observed in the building during this assessment.

It should be noted that access to the Mechanical mezzanine was not available, as the pull-down ladder from the ceiling of corridor was missing. This mechanical room may contain asbestos-containing pipe fitting and / or linear pipe insulation.

However, it should be noted that asbestos containing pipe insulation may be located behind fixed wall cavities and ceiling plenums that were inaccessible at the time of assessment. During demolition precautionary measures must be taken to avoid disturbing any potential ACM in these areas.

Acoustic and Thermal Insulating Products

No acoustic or thermal insulating products were observed in the building during this assessment.

Friable Acoustic Texture Coats and Plaster Finishes

Plaster finishes were observed in select locations throughout the building during the assessment. One (1) sample of this material was sampled and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample CA-2 in Appendix II).

Drywall joint compound (DJC) finishes were observed in select locations within the building during the assessment. Three (3) samples were collected and analyzed for asbestos content using the PLM method of detection. The samples were identified as non-asbestos containing. One sample was found to contain <1% Chrysotile asbestos. As such, in accordance with the *Newfoundland Asbestos Abatement Regulations 111/98*, it is not considered to be asbestos containing. (see sample CA-7, CA-8, CA-13 in Appendix II).

Friable Acoustic and Thermal Fireproofing Products

Friable acoustic or thermal fireproofing products were not observed in the building during this assessment.

Friable Ceiling Tiles / Ceiling Tile Adhesives

2' x 2' ceiling tiles were observed in select areas of the building during the assessment. One (1) sample of this material was collected and analyzed for asbestos content using the PLM method of detection. The sample was identified as non-asbestos containing. (see sample CA-3 in Appendix II)

Ceiling tiles observed in Room CA2000 were identified as a cardboard-based tile. (see Photograph 1, Appendix I)

Vinyl Sheet/Linoleum Flooring

Various vinyl sheet floorings which could potentially contain asbestos were identified in the building during the assessment. Two (2) samples of this flooring were sampled and analyzed for asbestos content using the PLM method of detection. Sample CA-5, collected from Room 2011, was identified as non-asbestos containing. Sample CA-12 was found to contain 15% Chrysotile asbestos. Its associated mastic was identified as non-asbestos containing. (see samples CA-5, CA-12, in Appendix II, see Photograph 2 in Appendix I)

Non-Friable Vinyl Floor Tiles/ Floor Tile Adhesives

Vinyl floor tiles which could potentially contain asbestos were identified during the assessment. Six (6) samples of 1' x 1' vinyl floor tiles were sampled and analyzed for asbestos content using the PLM method of detection. Three (3) tiles were found to contain between 2 and 3% Chrysotile asbestos. One (1) of the associated mastics was found to contain <1% Chrysotile asbestos. As such, in accordance with the *Newfoundland Asbestos Abatement Regulations 111/98*, it is not considered to be asbestos containing. (See samples CA-1, CA-4, CA-6, CA-9, CA-10, CA-11, in Appendix II, see Photographs 3 - 5, Appendix I)

Non-Friable Transite Panels, Sheeting and Shingles

Exterior green panels are suspected to be asbestos containing transite materials. Visually similar panels were sampled from Cartier Court (sample # CR-34) and were found to contain 25% Chrysotile asbestos. As such, based on the composition and similarity of the construction of these residences, it is suspected that the panels at Corte Real building are also asbestos containing.

Non-Friable Transite Piping

Transite piping was not observed during the assessment.

Electrical Wiring/ Lighting

No suspect asbestos containing electrical wiring or lighting components were observed in the building during the assessment.

Roofing Materials

Access to the roof was not available at the time of the assessment.

Other Materials

Window caulking, either exterior or interior, was not sampled during the assessment.

No other materials suspected of containing asbestos were observed during the assessment.

2.5 Recommendations

The assessment identified that numerous materials contained a concentration of asbestos equal to or greater than 1% by dry weight. According to regulations, the owner of any building/ residence is required to implement and maintain specific health and safety measures, therefore the following recommendations are provided:

- All materials listed in fair and/or poor condition are to be repaired or removed immediately. See APPENDIX III – Asbestos Building Survey Information for materials condition and locations.
- Ensure that prior to and during any major renovations/demolition extreme caution is implemented to make certain that asbestos containing materials are not disturbed. It should be noted that asbestos containing materials may be concealed behind fixed walls/ceiling plenums and under existing sub-floors.
- Ensure that when disturbing asbestos materials, the asbestos removal contractor follows all federal and provincial regulations in accordance to the Newfoundland and Labrador Regulation 111/98.
- Retain a copy of this report on-site for future reference of friable and non-friable asbestos products.
- Provide asbestos air monitoring and inspection during the removal of asbestos to ensure that all government guidelines and regulations are followed throughout the removal process.

3.0 DISCLAIMER

This report was prepared by ALL-TECH Environmental Services Limited for the sole benefit of our client Ms. Sheila Miller. The information in the report is based on information provided or obtained by ALL-TECH. The report is based on ALL-TECH's best judgment with the information provided at the time of the assessment. Any use and/or conclusions used by any third party, is the responsibility of that third party. ALL-TECH accepts no liability and/or damages occurred by any third party that uses information obtained in this report.

If you have any questions regarding this report, please do not hesitate to call me at (709) 754-4146.

Thank You,



Carla Noseworthy, CET
Environmental Consultant
ALL-TECH Environmental Services Limited

Reviewed by:

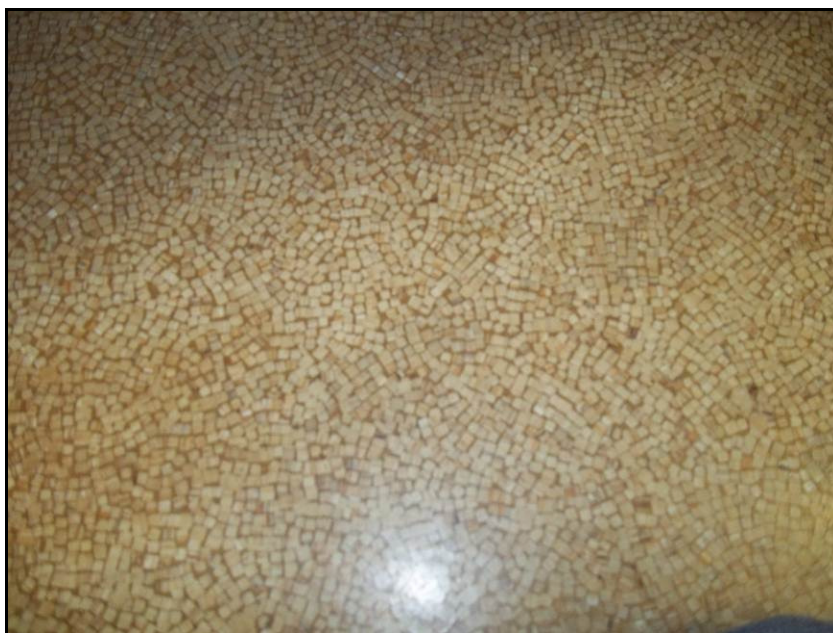


Orven Newhook, B.Sc.
Project Manager
ALL-TECH Environmental Services Limited

APPENDIX I
PHOTOGRAPHS OF ASBESTOS CONTAINING MATERIALS



Photograph 1: Ceiling tiles of Room CA2000 were visually identified as a cardboard based tile.



Photograph 2: Asbestos containing vinyl sheet flooring (sample CA-12).

Consultant: Carla Noseworthy, CET ALL-TECH Environmental	Building: Corte Real Building Memorial University of Newfoundland St. John's, NL	Date: August 22, 2011
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Photograph 3: Asbestos containing 1' x 1' vinyl floor tile (Sample CA-1).



Photograph 4: Asbestos containing 1' x 1' vinyl floor tile (Sample CA-6).

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Photograph 5: Asbestos containing 1' x 1' vinyl floor tile (Sample CA-11).

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APPENDIX II
LABORATORY ASBESTOS RESULTS

**EMSL Analytical, Inc.**

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Project: 13916- Corte Real

EMSL Proj:
Analysis Date: 6/25/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CA1 041123119-0001	- 1x1 VT White w/ Brown	White Non-Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
HA: CA2002					
CA2-Drywall 041123119-0002	- Plaster skim coat	Various Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	None Detected
HA: CA2002 Sample is not Plaster Kim Coat its Drywall/Joint Compound					
CA2-Joint Compound 041123119-0002A	- Plaster skim coat	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
HA: CA2002					
CA3 041123119-0003	- 2x2 CT small perforations	Brown/White Fibrous Heterogeneous	45% Cellulose 30% Min. Wool	25% Non-fibrous (other)	None Detected
HA: CA2001					
CA4-Floor Tile 041123119-0004	- 1x1 VT White w/ Black	Grayish Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
HA: CA2012					

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Analyst(s)

Steven Reynolds (21)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101045-6, AHA-LAP, LLC/HA AP Lab 100104, NVS PLAP 10872, NJ DGP 03036

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Analysis Date: 5/25/2011

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Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CA4-Mastic 041123119-0094A	- 1x1 VT White w/ Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA-CA2012					
CA5-Floor Tile 041123119-0095	- VSF Blue	Blue Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
HA-CA2011					
CA5-Mastic 041123119-0095A	- VSF Blue	Cream Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA-CA2011					
CA6-Floor Tile 041123119-0096	- 1x1 VT Beige w/dk Brown, Orange	Brown Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
HA-CA2007					
CA6-Mastic 041123119-0096A	- 1x1 VT Beige w/dk Brown, Orange	Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
HA-CA2007					

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Analysis Date: 5/25/2011

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using
Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CA7 041123119-0007	- DJC	Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
		HA: CA2004			
CA8 041123119-0008	- DJC	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
		HA: CA1000B			
CA9-Floor Tile 041123119-0009	- 1x1 VT Brown Stripes	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
		HA: CA10002			
CA9-Mastic 041123119-0009A	- 1x1 VT Brown Stripes	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
		HA: CA10002			
CA9-Leveler 041123119-0009B	- 1x1 VT Brown Stripes	Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
		HA: CA10002			

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CA10-Floor Tile 041123119-0010	- 1x1 Grey	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
HA: CA10002					
CA10-Mastic 041123119-0010A	- 1x1 Grey	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA: CA10002					
CA11 041123119-0011	- 1x1 Beige w/ Green Stripe	Beige Non-Fibrous Heterogeneous		97% Non-fibrous (other)	3% Chrysotile
HA: CA1005A					
CA12-Linoleum 041123119-0012	- VSF Brown Square	Beige Fibrous Heterogeneous		85% Non-fibrous (other)	15% Chrysotile
HA: CA1008					
CA12-Mastic 041123119-0012A	- VSF Brown Square	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA: CA1008					

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Analysis Date: 6/25/2011

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Polarized Light Microscopy**

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
CA13 041123119-0013	- DJC	White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

HA: CA1011

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APPENDIX III
ASBESTOS BUILDING SURVEY INFORMATION

Asbestos Bldg Survey Information -- Corte real

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
Exterior			¹ Exterior Green Panels									Suspect Transite	
CA1C01			Vinyl Floor Tile	A	X				~ 125 ft ²	CA-6	Room 2007, Floor	1' x 1' Vinyl Floor Tile, beige with dark brown, orange	3% Chrysotile
CA1000			Vinyl Floor Tile	A	X				~ 250 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000B			Vinyl Floor Tile	A	X				~ 150 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000C			Vinyl Floor Tile	A	X				~ 150 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000D			Vinyl Floor Tile	A	X				~ 150 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000E			Vinyl Floor Tile	A	X				~ 150 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000G			Vinyl Floor Tile	A	X				~ 50 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000H			Vinyl Floor Tile	A	X				~ 950 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000J			Vinyl Floor Tile	A	X				~ 500 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000K			Vinyl Floor Tile	A	X				~ 500 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA1000L			Vinyl Floor Tile	A	X				~ 550 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile

Room #	Bldg. System	Component	Material Type	Access	Conditions				Quantity	Sample No.	Sample Location	Sample Description	Result
					Good	Fair	Poor	Sprayed					
CA1002			Vinyl Floor Tile	A	X				~ 200 ft ²	CA-6		1' x 1' Vinyl Floor Tile, beige with dark brown, orange	3% Chrysotile
CA1005A			Vinyl Floor Tile	A	X				~ 50 ft ²	CA-11	Room 1005A, Floor	1' x 1' Vinyl Floor Tile, beige with green stripe	3% Chrysotile
CA1008			Vinyl Sheet Flooring	A	X				~ 50 ft ²	CA-12	Room 1008, Floor	Brown Square design	3% Chrysotile
CA1009			Vinyl Sheet Flooring	A	X				~ 50 ft ²	CA-12		Brown Square design	3% Chrysotile
CA1010			Vinyl Floor Tile	A	X				~ 100 ft ²	CA-6		1' x 1' Vinyl Floor Tile, beige with dark brown, orange	3% Chrysotile
CA1011			Vinyl Floor Tile	A	X				~ 100 ft ²	CA-6		1' x 1' Vinyl Floor Tile, beige with dark brown, orange	3% Chrysotile
CA2002			Vinyl Floor Tile	A	X				~ 120 ft ²	CA-1	Room 2002, Floor	1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile
CA2007			Vinyl Floor Tile	A	X				~ 120 ft ²	CA-6	Room 2007, Floor	1' x 1' Vinyl Floor Tile, beige with dark brown, orange	3% Chrysotile
CA2009			Vinyl Floor Tile	A	X				~ 450 ft ²	CA-1		1' x 1' Vinyl Floor Tile, beige with brown	2% Chrysotile

No Access was available to the following rooms: CA1001, CA1003, CA1005, CA1007, CA2000A, CA3000 (mechanical mezzanine)

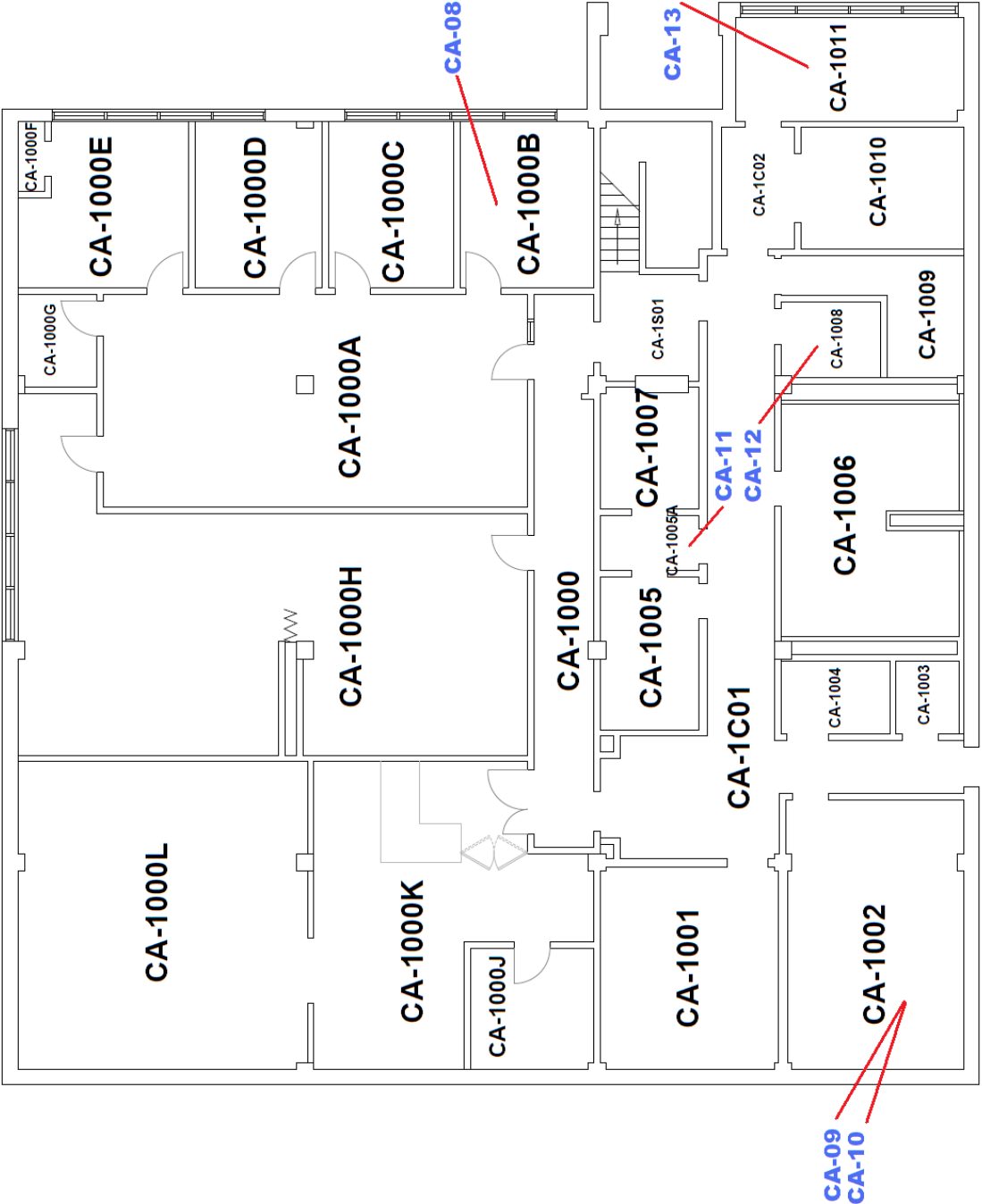
Access: **A** - Areas within reach from the floor. **B** - Frequently entered maintenance areas floor level. **C** - exposed / concealed above 8 ft, crawl space, etc. **D** - Inaccessible

¹Suspect asbestos containing transite. Visually similar material sampled at Cartier Court (sample #CR34)

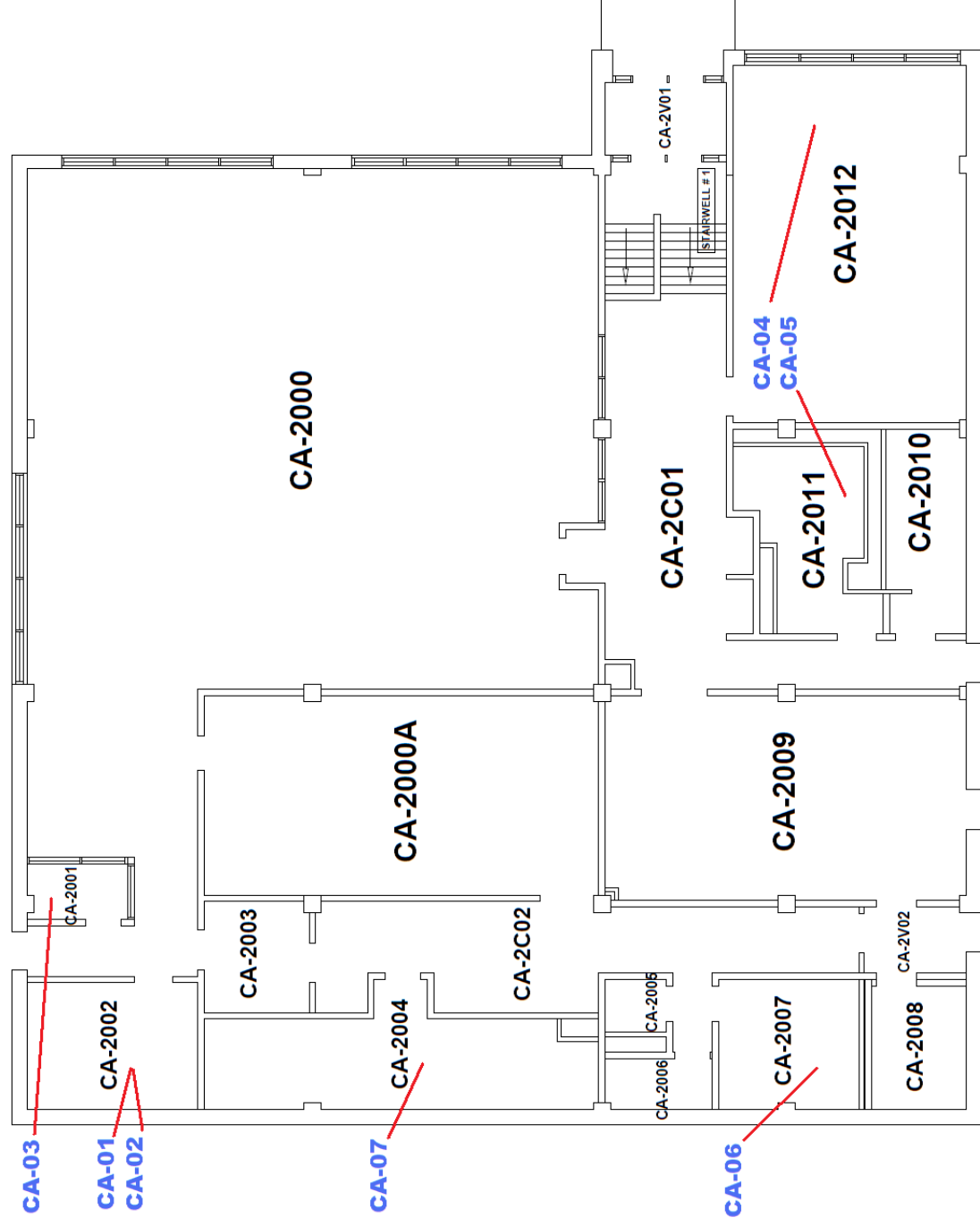
APPENDIX IV
FLOOR PLANS SHOWING SAMPLING LOCATIONS

CORTE REAL BUILDING

LEVEL - 1



LEVEL - 2



**CORTE REAL -
MEZZANINE LEVEL**

