



FINAL
Hazardous Building
Materials
Assessment

30 King Street East,
Gananoque, ON

Prepared for:

Town of Gananoque
375 William Street South, Unit 111
Gananoque, ON K7G 1T2

Attention: Howard Leaver

August 7, 2015

Pinchin File: 106893



Issued to: Town of Gananoque
Contact: Howard Leaver
Issued on: August 7, 2015
Pinchin file: 106893
Issuing Office: 1456 Centennial Drive, Suite 2,
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EXECUTIVE SUMMARY

Town of Gananoque (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of Town Hall located at 30 King Street East, Gananoque, ON. The assessment was performed on July 24, 2015.

The objective of the assessment was to identify specified hazardous building materials in preparation for a planned addition on the north elevation of the building as well as for management purposes. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed area consisted of the entire building excluding the exterior of the original portion of the building.

The building was occupied at the time of the assessment work.

SUMMARY OF FINDINGS

Asbestos: Asbestos-containing materials (ACM) were confirmed to be present as follows:

- Non-friable 12" x 12" beige vinyl floor tiles with brown streaks, containing chrysotile asbestos, are present in the third floor washroom.

Lead: Red painted wood trim in the basement and yellow painted wood trim throughout the house contained elevated concentrations lead. Lead is present in emergency light batteries and is presumed to be present in electrical components, including wiring connectors, fibre optic cable sheathing, grounding conductors, and plumbing solder

Silica: Crystalline silica is present in concrete, mortar, brick, plaster and stone in the building.

Mercury: Mercury vapour is present in fluorescent lamps throughout the building. Liquid mercury is present in thermostat ampules throughout the building.

Polychlorinated Biphenyls (PCBs): PCBs may be present in light ballasts.



SUMMARY OF RECOMMENDATIONS

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations.

1. Remove asbestos-containing materials if disturbed by renovation work.
2. Remove PCB ballasts and mercury-containing items if disturbed by renovation work.
3. Follow appropriate safe work procedures when handling or disturbing lead and silica.

Please refer to Section 4.0 of this report for detailed recommendations regarding administrative and renovation activities.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.



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1.0 INTRODUCTION AND SCOPE

Town of Gananoque (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of Town Hall, located at 30 King Street East, Gananoque, ON.

The assessment was performed by Glenn Hendry, B.Sc.(Env)., Project Manager on July 24, 2015. The surveyor was unaccompanied during the assessment. The building was occupied at the time of the assessment.

The objective of the assessment was to identify specified hazardous building materials in preparation for a planned addition on the north elevation of the building and for management purposes.

1.1 Scope of Assessment

The assessment was performed to establish the location and type of specified hazardous building materials incorporated in the structure(s) and its finishes. The assessed area consisted of all parts of the building excluding the exterior of the original portion of the building.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos
- Lead
- Silica
- Mercury

The assessment also included:

- Polychlorinated Biphenyls (PCBs)
- Mould

The following Ontario Designated Substances are not typically found in building materials in a composition/state that is hazardous and were not included in this assessment:

- Arsenic
- Acrylonitrile
- Benzene
- Coke oven emissions
- Ethylene oxide
- Isocyanates
- Vinyl chloride monomer



2.0 BACKGROUND INFORMATION

Building Description Item	Details
Building Use	Offices
Number of Floors/Levels	Three stories plus a basement
Total Area of Building (Square Feet)	5,750
Year of Construction/Significant Additions/Renovations (area assessed)	1830s with a small addition completed on the north elevation in approximately the 1980s.
Structure	Wood framing
Exterior Cladding	Brick
HVAC	Forced air furnaces and electric baseboards
Roof	Sloped asphalt shingled roof (reportedly replaced in 2005)
Flooring	Carpet, vinyl sheet flooring, vinyl floor tiles, hardwood and concrete
Interior Walls	Drywall and plaster
Ceilings	Drywall and plaster

3.0 FINDINGS

3.1 Asbestos

3.1.1 Suspect Building Materials Not Found

The following types of building materials may historically contain asbestos but were not observed in the building and are not discussed in the report findings:

- Spray-applied fireproofing or thermal insulation
- Texture finishes (acoustic/decorative)
- Vermiculite
- Acoustic ceiling tiles
- Asbestos cement products
- Firestopping

- Sealants, Caulking, and Putty

3.1.2 Thermal Systems Insulation (TSI)

3.1.2.1 Pipe Insulation

All pipes observed within the building were uninsulated.

3.1.2.2 Duct Insulation

Insulated ducts are not present.

3.1.2.3 Mechanical Equipment Insulation

Mechanical equipment is insulated with non-asbestos fiberglass



Hot water tank insulated with non-asbestos fiberglass.

3.1.3 Plaster

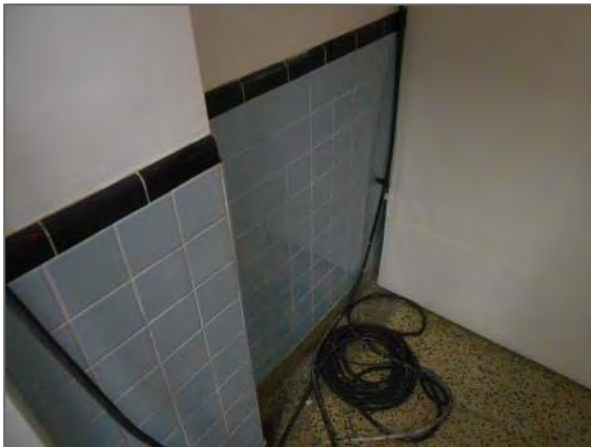
Plaster present on walls and ceilings in the building does not contain asbestos (samples 0001A-G).



Non-asbestos plaster present throughout the building.

3.1.4 Drywall Joint Compound

Drywall (gypsum board) and drywall joint compound present as a wall and ceiling finish in isolated locations throughout the building does not contain asbestos (samples 0003A-C).



Non-asbestos drywall joint compound present in isolated locations in the building.

3.1.5 Vinyl Sheet Flooring

Vinyl sheet flooring is present as follows:

Pattern, Colour	Paper Backing (Yes/No)	Locations	Sample Number	Asbestos Type
Squares, white and brown	Yes	Basement furnace room	0002A-C	None Detected

Pattern, Colour	Paper Backing (Yes/No)	Locations	Sample Number	Asbestos Type
Squares, white	Yes	Basement, women's washroom	0004A-C	None Detected



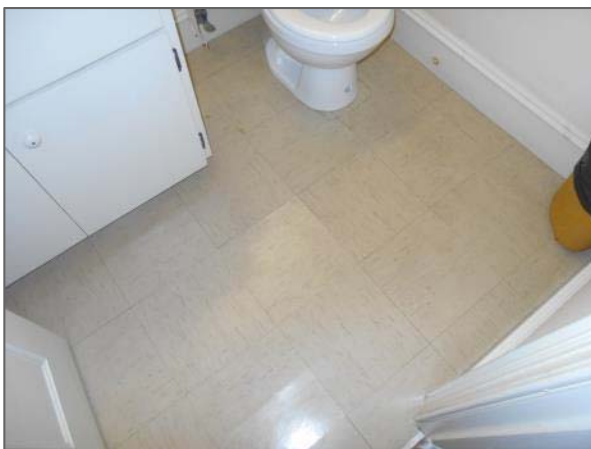
Non-asbestos vinyl sheet flooring present in the basement furnace room.



Non-asbestos vinyl sheet flooring present in the basement women's washroom.

3.1.6 Vinyl Floor Tile and Mastic

Non-friable 12" x 12" beige vinyl floor tiles with brown streaks, present in the third floor washroom contain chrysotile asbestos (Samples 0005A-C.) The vinyl floor tiles are in good condition.



Asbestos-containing vinyl floor tiles present in the third floor washroom.



3.1.7 Other Building Materials

Roofing materials and exterior windows were reported to have been replaced in 2005. Based on the date of installation, these materials will not contain asbestos. Sampling was not performed.

3.1.8 Presumed Asbestos Materials

A number of materials which might contain asbestos were not sampled during our assessment due to limitations in scope and methodology. Where present, these materials must be presumed to be an asbestos material and are best sampled during project planning and preparation of contract documents for their removal. Materials presumed to contain asbestos include:

- concrete floor levelling compound
- decorative plaster cornices
- vinyl floor tile mastic

3.2 Lead

3.2.1 Paints and Surface Coatings

A total of five paint samples were collected from interior painted finishes. The following table summarizes the analytical results for paints sampled and their locations.

Sample Number	Colour, Substrate Description	Locations	Lead (ug/g)
P1	White, concrete	Basement corridor	772
P2	Grey, concrete	Basement floor	117
P3	Off-white, drywall	Basement storage room	<20
P4	Red, wood trim	Basement trim	15,700
P5	Yellow, wood trim	First floor	5,940

All paints containing elevated levels of lead were found to be in good condition and not flaking, peeling or delaminating.



Yellow painted wood trim containing elevated concentrations of lead (>1,000 ug/g).

3.2.2 *Lead Products and Applications*

Lead-containing batteries are present in emergency lighting in the building.

3.2.3 *Presumed Lead Materials*

Lead may be present in a number of materials which were not assessed and/or sampled. The following materials, where found, should be considered to contain lead.

- electrical components, including wiring connectors, fibre optic cable sheathing, grounding conductors, and plumbing solder



Presumed lead-containing solder present on pipes in the building.

3.3 Silica

Crystalline silica is a presumed component of the following building materials where present in the building:

- poured or pre-cast concrete
- masonry and mortar
- stone (granite, slate)
- plaster

3.4 Mercury

3.4.1 Lamps

Mercury vapour is present in fluorescent lamps.

3.4.2 Mercury-Containing Devices

Mercury is present as a liquid in thermostats.



Mercury containing thermostat present in the building.

3.5 Polychlorinated Biphenyls

3.5.1 Caulking

Based on the date of the window replacement (2005), exterior caulking will not contain PCBs. Sampling was not performed.



3.5.2 Lighting Ballasts

The building has not been comprehensively re-lamped with new energy efficient light ballasts and lamps, and as such, a percentage of light ballasts will be pre-1980 and contain PCBs.

3.5.3 Transformers

Transformers were not found during the survey.

3.6 Mould

Visible mould growth was not found in the assessed area.

4.0 RECOMMENDATIONS

4.1 General

1. Investigate any items excluded from the scope of work of this report. Ideally this investigation will be performed as part of the development of the specifications, or at a minimum immediately prior to commencing renovations when the areas are no longer occupied.
2. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.

4.2 Building Renovation Work

The following recommendations are made regarding renovation involving the hazardous materials identified.

4.2.1 Asbestos

Remove all asbestos-containing materials (ACM) prior to renovation, alteration, maintenance or demolition work or if ACM may be disturbed by the work.

If the identified ACM will not be removed prior to commencement of the work, disturbance of ACM must follow the appropriate asbestos precautions for the classification of work being performed.

4.2.1.1 Vinyl Floor Tiles

If vinyl floor tiles must be removed as a result of planned renovation, etc., use Type 1 procedures as outlined within Ontario Regulation 278/05 if the work is done using wet methods and using hand-held non-powered tools.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.



4.2.2 *Lead*

Construction disturbance of lead in paint and coatings (or other materials) may result in over-exposure to lead dust or fumes. The need for work procedures, engineering controls and personal protective equipment will need to be assessed on a project-by-project basis and must comply with provincial standards or guidelines.

Lead-painted items may be a hazardous waste. Test lead-painted materials for leachable lead prior to disposal.

Lead-containing items should be recycled when taken out of service.

4.2.3 *Silica*

Construction disturbance of silica-containing products may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with provincial standards or guidelines.

4.2.4 *Mercury*

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent light tubes and thermostats when taken out of service. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

4.2.5 *PCBs*

When light fixtures are removed, examine light ballasts for PCB content. If ballasts are not clearly labelled as "non-PCB", or are suspected to contain PCBs; package and ship ballasts for destruction at a federally permitted facility.

5.0 **LIMITATIONS**

The work performed by Pinchin was conducted in accordance with generally accepted engineering or scientific practices current in this geographical area at the time the work was performed. No warranty is either expressed or implied by furnishing written reports or findings. The Client acknowledges that subsurface and concealed conditions may vary from those encountered or inspected. Pinchin can only comment on the environmental conditions observed on the date(s) the survey is performed. The work is limited to those materials or areas of concern identified by the Client or outlined in our proposal. Other areas of concern may exist but were not investigated within the scope of this assignment.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to, ownership of



any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issue, regulatory statutes are subject to interpretation and these interpretations may change over time. Pinchin accepts no responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The liability of Pinchin or our officers, directors, shareholders or staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Pinchin will not be responsible for any consequential or indirect damages. Pinchin will only be liable for damages resulting from the negligence of Pinchin. Pinchin will not be liable for any losses or damage if the Client has failed, within a period of two years following the date upon which the claim is discovered (Claim Period), to commence legal proceedings against Pinchin to recover such losses or damage unless the laws of the jurisdiction which governs the Claim Period which is applicable to such claim provides that the applicable Claim Period is greater than two years and cannot be abridged by the contract between the Client and Pinchin, in which case the Claim Period shall be deemed to be extended by the shortest additional period which results in this provision being legally enforceable.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

6.0 REFERENCES

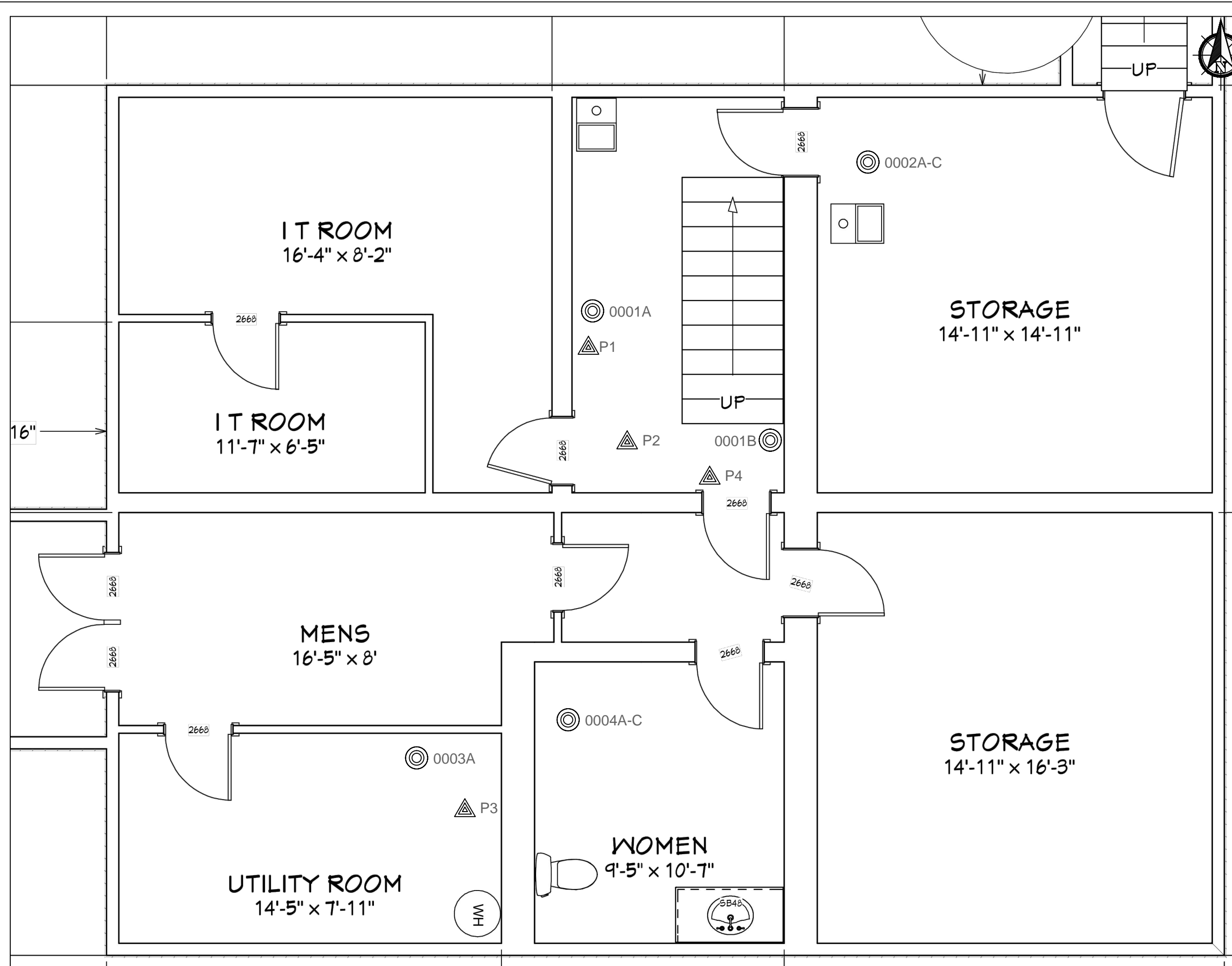
The following legislation and documents were referenced in completing the assessment and this report:

1. Asbestos on Construction Projects and in Buildings and Repair Operations, Ontario Regulation 278/05.
2. Designated Substances, Ontario Regulation 490/09.
3. Section 30 of the Occupational Health and Safety Act.
4. Lead on Construction Projects, Ministry of Labour Guidance Document.
5. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.
6. Silica on Construction Projects, Ministry of Labour Guidance Document.
7. Alert – Mould in Workplace Buildings, Ontario Ministry of Labour.

106893 Town of Gananoque 30 King Street East Hazardous Building Materials Report.docx

Template: Master Report for Hazardous Materials Assessment Report (Pre-Construction), Haz, July 3, 2015

APPENDIX I
Drawings



- LEGEND:
- ASBESTOS BULK SAMPLE
 - LEAD BULK SAMPLE
 - ASBESTOS CONTAINING VINYL FLOOR TILES
 - INSPECTION CUT

CLIENT: TOWN OF GANANOQUE
 375 WILLIAM STREET SOUTH, UNIT 111
 GANANOQUE, ONTARIO

LOCATION: 30 KING STREET EAST
 GANANOQUE, ONTARIO

TITLE: HAZARDOUS BUILDING MATERIALS
 ASSESSMENT
 TOWN HALL - BASEMENT

DATE: 2015/08/07	PROJECT # : 106893
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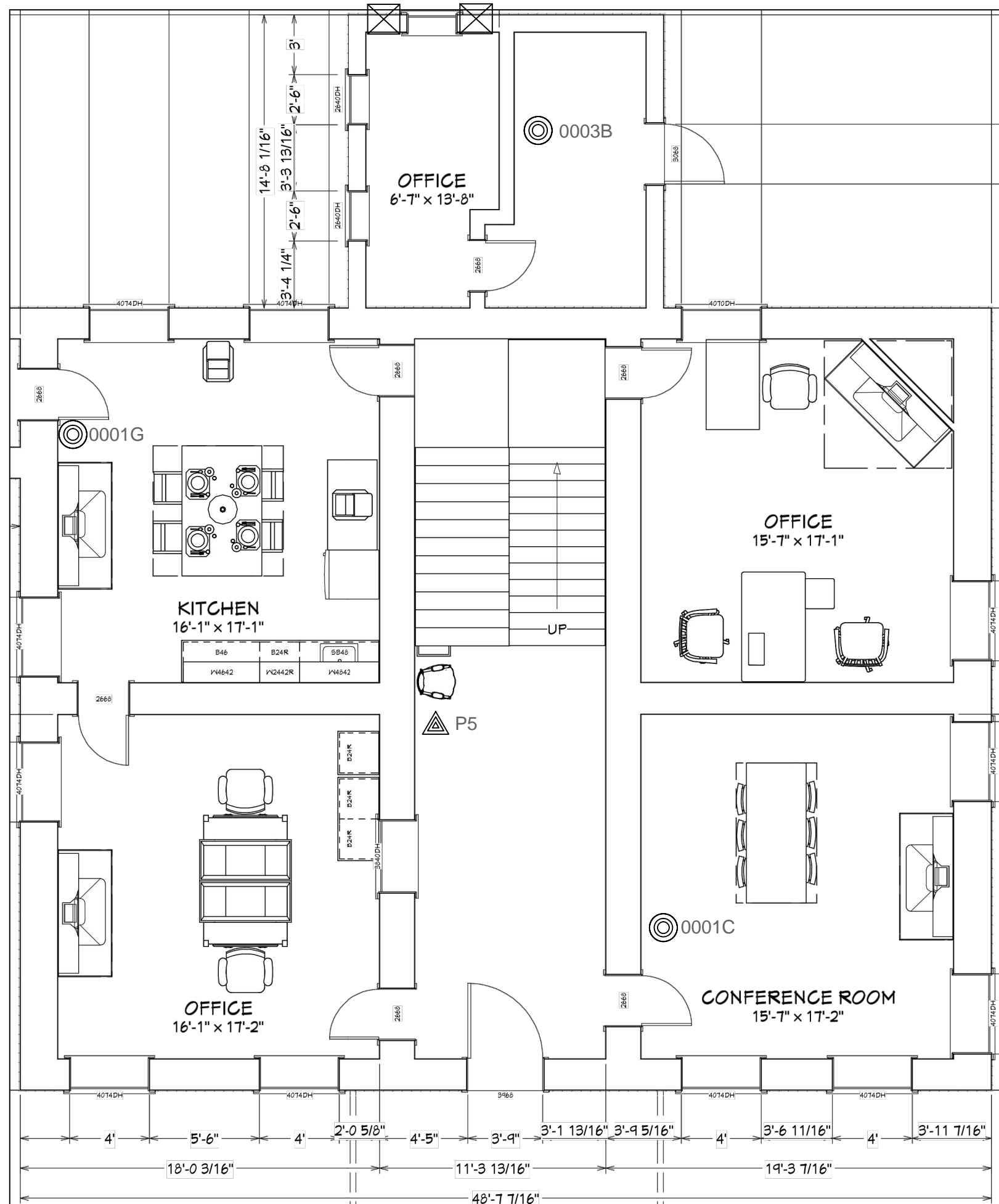
CHECKED BY: M.H.	
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SCALE: NTS	
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LEGEND:

-  ASBESTOS BULK SAMPLE
-  LEAD BULK SAMPLE
-  ASBESTOS CONTAINING VINYL FLOOR TILES
-  INSPECTION CUT



CLIENT: TOWN OF GANANOQUE
 375 WILLIAM STREET SOUTH, UNIT 111
 GANANOQUE, ONTARIO

LOCATION: 30 KING STREET EAST
 GANANOQUE, ONTARIO

TITLE: HAZARDOUS BUILDING MATERIALS
 ASSESSMENT
 TOWN HALL - FIRST FLOOR

DATE: 2015/08/07	PROJECT # : 106893
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CHECKED BY: M.H.	2 OF 4
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SCALE: NTS	
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LEGEND:

-  ASBESTOS BULK SAMPLE
-  LEAD BULK SAMPLE
-  ASBESTOS CONTAINING VINYL FLOOR TILES
-  INSPECTION CUT

CLIENT: TOWN OF GANANOQUE
375 WILLIAM STREET SOUTH, UNIT 111
GANANOQUE, ONTARIO

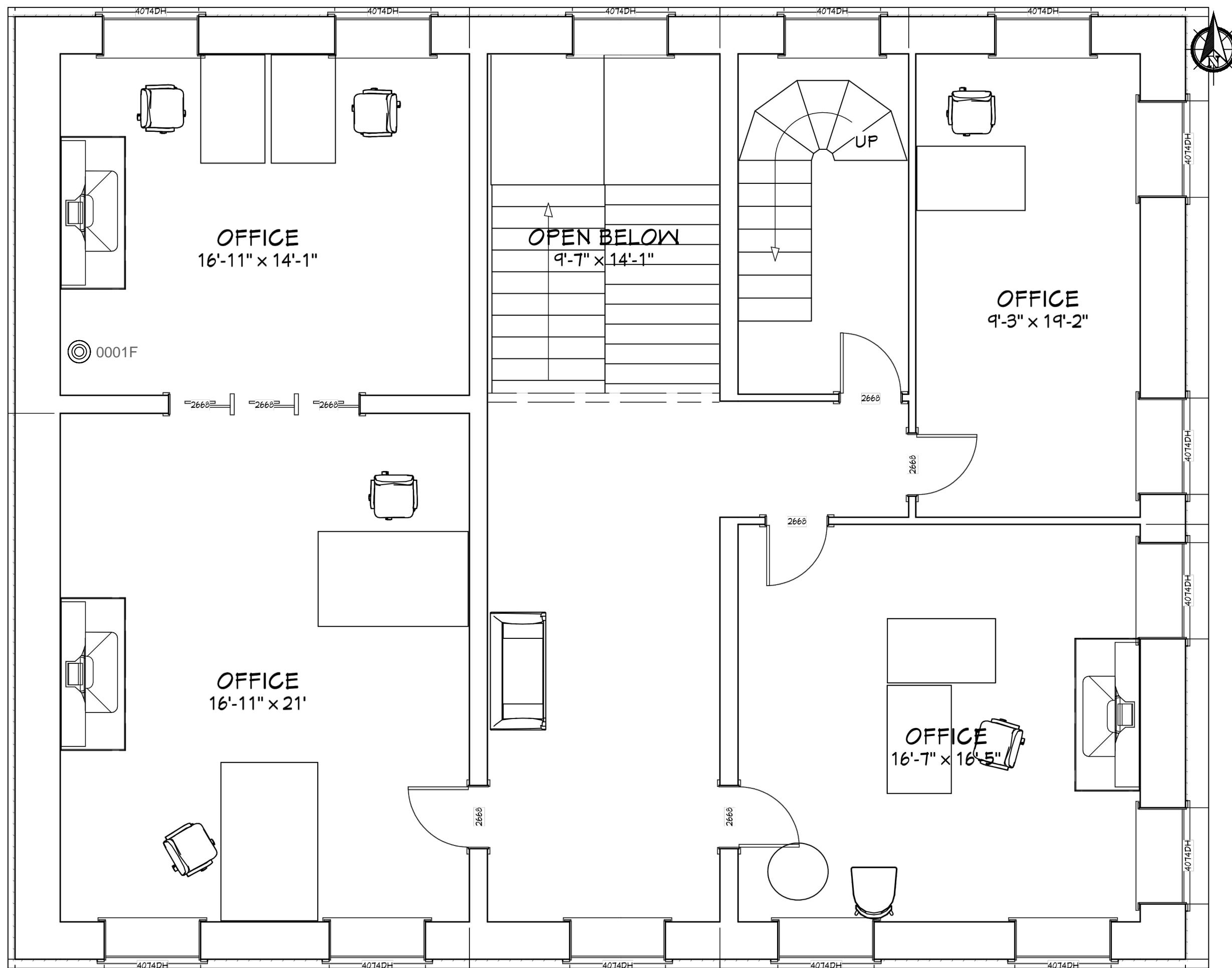
LOCATION: 30 KING STREET EAST
GANANOQUE, ONTARIO

TITLE: HAZARDOUS BUILDING MATERIALS
ASSESSMENT
TOWN HALL - SECOND FLOOR

DATE: 2015/08/07	PROJECT # : 106893
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DRAWN BY: G.H.	DRAWING: 3 OF 4
CHECKED BY: M.H.	

SCALE: NTS





LEGEND:

- ◎ ASBESTOS BULK SAMPLE
- ▲ LEAD BULK SAMPLE
- ASBESTOS CONTAINING VINYL FLOOR TILES
- ⊠ INSPECTION CUT

CLIENT:
TOWN OF GANANOQUE
375 WILLIAM STREET SOUTH, UNIT 111
GANANOQUE, ONTARIO

LOCATION:
30 KING STREET EAST
GANANOQUE, ONTARIO

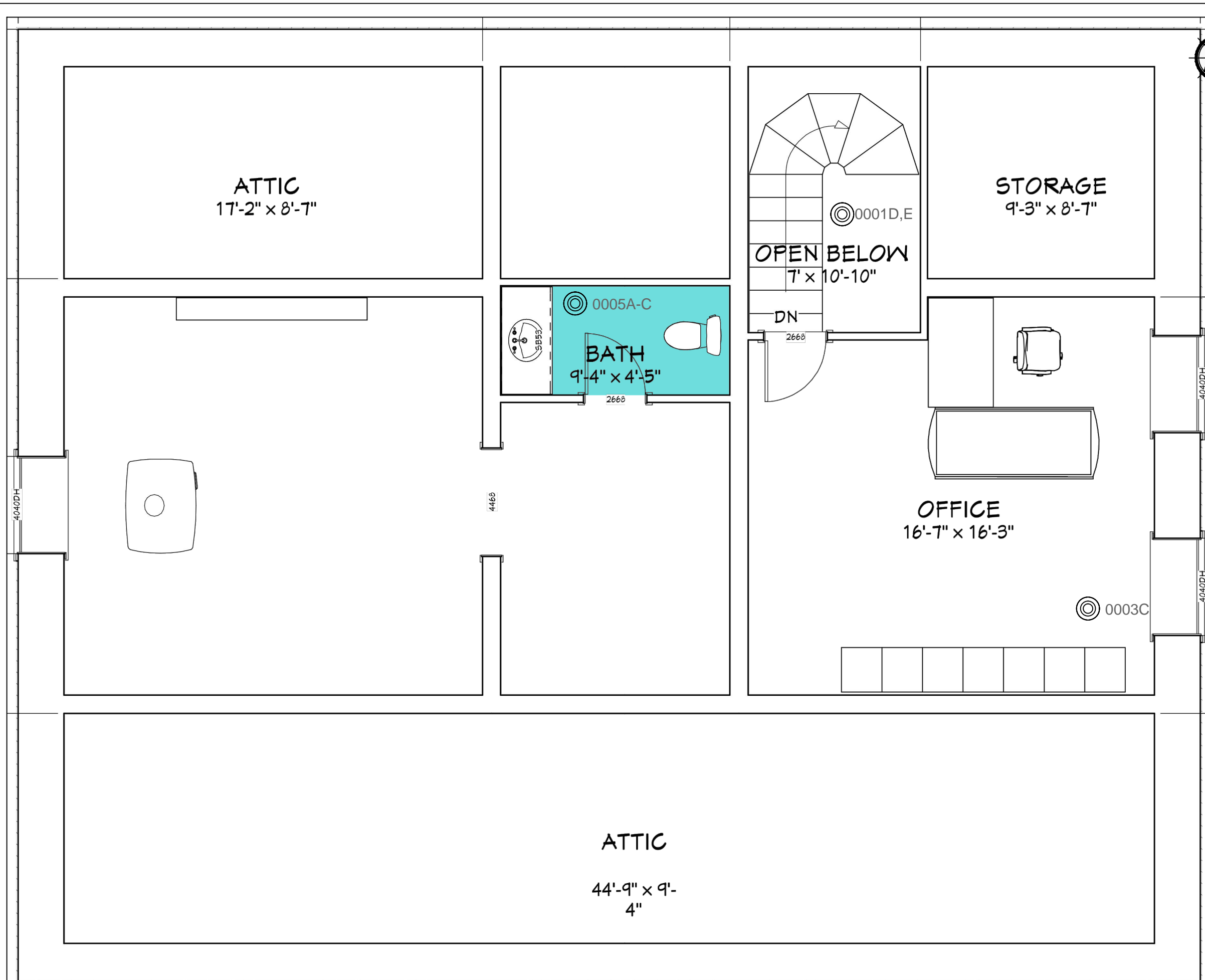
TITLE:
HAZARDOUS BUILDING MATERIALS
ASSESSMENT
TOWN HALL - THIRD FLOOR

DATE: 2015/08/07	PROJECT # : 106893
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CHECKED BY: M.H.

SCALE: NTS



APPENDIX II-A
Asbestos Analytical Certificates



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
135 Ontario Street, Unit 1
Kingston ON K7L 0A5

Attn: Glenn Hendry
Sarah Young

Lab Order ID: 1514604
Analysis ID: 1514604_PLM
Date Received: 7/28/2015
Date Reported: 7/31/2015

Project: Town of Ganqnowue, Town Hall, 30 King Street East, Ganaogue, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0001A	Plaster, Basement Hallway	None Detected		100% Other	Tan Non Fibrous Homogeneous
1514604PLM_1	single layer				Dissolved
0001B	Plaster, Basement Hallway	None Detected		100% Other	Tan Non Fibrous Homogeneous
1514604PLM_2	single layer				Dissolved
0001C - A	Plaster, First Floor, Front Meeting Room	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_3	skim				Dissolved
0001C - B	Plaster, First Floor, Front Meeting Room	None Detected		100% Other	Gray Non Fibrous Homogeneous
1514604PLM_20	plaster				Dissolved
0001D - A	Plaster, Third Floor Stairwell	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_4	skim				Dissolved
0001D - B	Plaster, Third Floor Stairwell	None Detected		100% Other	Tan Non Fibrous Homogeneous
1514604PLM_21	plaster				Dissolved
0001E - A	Plaster, Third Floor Stairwell	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_5	skim				Dissolved
0001E - B	Plaster, Third Floor Stairwell	None Detected		100% Other	Gray Non Fibrous Homogeneous
1514604PLM_22	plaster				Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Philip Szabo (23)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
135 Ontario Street, Unit 1
Kingston ON K7L 0A5

Attn: Glenn Hendry
Sarah Young

Lab Order ID: 1514604
Analysis ID: 1514604_PLM
Date Received: 7/28/2015
Date Reported: 7/31/2015

Project: Town of Ganqnowue, Town Hall, 30 King Street East, Ganaogue, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0001F	Plaster, Second Floor Office	None Detected		100% Other	Tan Non Fibrous Homogeneous
1514604PLM_6	single layer				Dissolved
0001G - A	Plaster, First Floor Office	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_7	skim				Dissolved
0001G - B	Plaster, First Floor Office	None Detected		100% Other	Gray Non Fibrous Homogeneous
1514604PLM_23	plaster				Dissolved
0002A	Vinyl Sheet Floor, White and brown squares, basement furnace room	None Detected	60% Cellulose 10% Fiber Glass	30% Other	White Fibrous Homogeneous
1514604PLM_8					Dissolved
0002B	Vinyl Sheet Floor, White and brown squares, basement furnace room	None Detected	60% Cellulose 10% Fiber Glass	30% Other	White Fibrous Homogeneous
1514604PLM_9					Dissolved
0002C	Vinyl Sheet Floor, White and brown squares, basement furnace room	None Detected	60% Cellulose 10% Fiber Glass	30% Other	White Fibrous Homogeneous
1514604PLM_10					Dissolved
0003A	Drywall joint compound, Basement Storage Room adjacent to the men's washroo	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_11					Dissolved
0003B	Drywall joint compound, First Floor, rear exit	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_12					Dissolved

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Philip Szabo (23)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and 600/M4-82-020



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
135 Ontario Street, Unit 1
Kingston ON K7L 0A5

Attn: Glenn Hendry
Sarah Young

Lab Order ID: 1514604
Analysis ID: 1514604_PLM
Date Received: 7/28/2015
Date Reported: 7/31/2015

Project: Town of Ganqnowue, Town Hall, 30 King Street East, Ganaogue, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0003C	Drywall joint compound, Third Floor Office	None Detected		100% Other	White Non Fibrous Homogeneous
1514604PLM_13					Dissolved
0004A	Vinyl sheet flooring, white squares, basement women's washroom	None Detected	70% Cellulose	30% Other	White Fibrous Homogeneous
1514604PLM_14					Dissolved
0004B	Vinyl sheet flooring, white squares, basement women's washroom	None Detected	70% Cellulose	30% Other	White Fibrous Homogeneous
1514604PLM_15					Dissolved
0004C	Vinyl sheet flooring, white squares, basement women's washroom	None Detected	70% Cellulose	30% Other	White Fibrous Homogeneous
1514604PLM_16					Dissolved
0005A	Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	2% Chrysotile		98% Other	Beige Non Fibrous Homogeneous
1514604PLM_17					Dissolved
0005B	Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	Not Analyzed			
1514604PLM_18					
0005C	Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	Not Analyzed			
1514604PLM_19					

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Philip Szabo (23)

Analyst

Approved Signatory

1514604

Client:	Pinchin Ltd.
Contact:	Glenn Hendry 135 Ontario Street, Unit# 1 Kingston, ON K7L 0A5
Address:	135 Ontario Street, Unit# 1 Kingston, ON K7L 0A5
Phone:	613-541-1013
Fax:	
Email:	ghendry@pinchin.com svyoung@Pinchin.com
Project:	Town of Gananoque, Town Hall, 30 King Street East, Gananoque, ON
Client Notes:	
P.O. #.	106893
Date Submitted:	July 27th 2015
Analysis:	PLM - Stop Positive
TurnAroundTime:	4 days


***Instructions:**
Use Column "B" for your contact info

To See an Example Click the
bottom Example Tab.

Enter samples between "<<" and ">>"

**Begin Samples with a "<<" above the first sample
and end with a ">>" below the last sample.
Only Enter your data on the first sheet "Sheet1"**

Note: Data 1 and Data 2 are optional
fields that do not show up on the official
report, however they will be included
in the electronic data returned to you
to facilitate your reintegration of the report data.

Invoice to:	
Contact name here	
Email address here	
	
Scientific Analytical Institute 4604 Dundas Dr. Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: lab@sailab.com	

Sample Number	Data 1 (Lab use only)	Sample Description	Data 2 (Lab use only)
---------------	-----------------------	--------------------	-----------------------

<<			
0001A		Plaster, Basement Hallway	
0001B		Plaster, Basement Hallway	
0001C		Plaster, First Floor, Front Meeting Room	
0001D		Plaster, Third Floor Stairwell	
0001E		Plaster, Third Floor Stairwell	
0001F		Plaster, Second Floor Office	
0001G		Plaster, First Floor Office	
0002A		Vinyl Sheet Floor, White and brown squares, basement furnace room	
0002B		Vinyl Sheet Floor, White and brown squares, basement furnace room	
0002C		Vinyl Sheet Floor, White and brown squares, basement furnace room	
0003A		Drywall joint compound, Basement Storage Room adjacent to the men's washroom	
0003B		Drywall joint compound, First Floor, rear exit	
0003C		Drywall joint compound, Third Floor Office	
0004A		Vinyl sheet flooring, white squares, basement women's washroom	
0004B		Vinyl sheet flooring, white squares, basement women's washroom	
0004C		Vinyl sheet flooring, white squares, basement women's washroom	
0005A		Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	
0005B		Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	
0005C		Vinyl Floor Tiles, 12 x 12 Beige with brown streaks, third floor washroom	
>>			

Accepted

Rejected



1514604

TRANSMITTAL

TO: Scientific Analytical Institute
4604 Dundas Drive
Greensboro, NC
27407

ATTENTION: Analytical Lab
Phone Number: (336) 292-3888

COPIES TO:

FROM: L. Butler

PINCHIN FILE: 107249/106989/106893

CLIENT FILE:

DATE: JUL 27 2015

SENT BY: COURIER:

Same Day Courier

Next Day Priority: 9 am 10 am 12 pm 5 pm Ground

PICKED UP: by

ITEM NO.	COPIES	DESCRIPTION
1		106893-KGN PLM
2, 3, 4		106987, 106989, 107249-miss PLM
5		107249-miss Lead
6		M04-26750-260-264 (6121600)-MTL TEM
7		J04-25169-3 (6121281)-Jongquiere TEM

REMARKS:

SIGNATURE

APPENDIX II-B
Lead Analytical Certificates

Certificate of Analysis

Pinchin Ltd. (Kingston)

135 Ontario Street, Unit 1
Kingston, ON K7L 0A5

Attn: Glenn Hendry

Client PO: Town Hall

Project: 106893

Custody: 102725

Report Date: 31-Jul-2015

Order Date: 24-Jul-2015

Order #: 1530421

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

Parcel ID	Client ID
1530421-01	P1- White- Concrete
1530421-02	P2- Grey- Concrete- Basement
1530421-03	P3- Off-white- Drywall- Basement
1530421-04	P4- Red- Wood trim- Basement
1530421-05	P5- Yellow- Wood trim- First floor

Approved By:



Mark Foto, M.Sc.
Lab Supervisor

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

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-OES	based on MOE E3470, ICP-OES	30-Jul-15	30-Jul-15

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.

Sample Results

Lead				Matrix: Paint
				Sample Date: 24-Jul-15
Parcel ID	Client ID	Units	MDL	Result
1530421-01	P1- White- Concrete	ug/g	20	772
1530421-02	P2- Grey- Concrete- Basement	ug/g	20	117
1530421-03	P3- Off-white- Drywall- Basement	ug/g	20	<20
1530421-04	P4- Red- Wood trim- Basement	ug/g	20	15700
1530421-05	P5- Yellow- Wood trim- First floor	ug/g	20	5940

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	ND	20	ug/g						
Matrix Duplicate									
Lead	2210	20	ug/g	2160			2.2	30	
Matrix Spike									
Lead	1350		ug/L	1080	108	70-130			

Client Name: <u>Pinchin.</u>	Project Reference: <u>106893</u>	TAT: <input checked="" type="checkbox"/> Regular [] 3 Day
Contact Name: <u>Glenn</u>	Quote # <u>Town Hall</u>	[] 2 Day [] 1 Day
Address: <u>1456 Centennial Drive, Kingston</u>	PO #	Date Required: _____
Telephone: <u>613-541-1013</u>	Email Address: <u>ghendry@pinchin.com</u>	

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

Paracel Order Number: <u>1530421</u>		Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Lead
Sample ID/Location Name					Date	Time								
1	<u>P1-Concrete White-Concrete</u>	<u>P</u>		<u>1</u>	<u>July 24</u>	<u>AM</u>								<u>X</u>
2	<u>P2-Grey-Concrete-Basement</u>													<u>X</u>
3	<u>P3-Off-white-Drywall-Basement</u>													<u>X</u>
4	<u>P4-Red-Woodtrim-Basement</u>													<u>X</u>
5	<u>P5-Yellow Woodtrim-1st Floor</u>													<u>X</u>
6														
7														
8														
9														
10														

Comments: cc: Sarah Young to results. Method of Delivery: Pickup

Relinquished By (Sign): <u>[Signature]</u>	Received by (Driver/Donor): <u>[Signature]</u>	Received at Lab: <u>Angelique Ruzindana</u>	Verified By: <u>[Signature]</u>
Relinquished By (Print): <u>Glenn Hendry</u>	Date/Time: <u>July 24/15 1:58</u>	Date/Time: <u>July 25, 2015 @ 10:55</u>	Date/Time: <u>July 25, 15</u>
Date/Time: <u>July 24/15</u>	Temperature: _____ °C	Temperature: <u>14</u> °C	pH Verified [] By: _____

APPENDIX III
Methodology



1.0 GENERAL

Pinchin conducts a room-by-room survey (rooms, corridors, service areas, exterior, etc.) to identify the hazardous building materials as defined by the scope.

Information regarding the location and condition of hazardous building materials encountered and visually estimated quantities are recorded.

1.1 Limitations on Scope

The assessment excludes the following:

- Owner or occupant articles (e.g. stored items, furniture, appliances, etc.);
- Underground materials or equipment (e.g. vessels, drums, underground storage tanks, pipes, etc.);
- Building envelope, structural components, inaccessible or concealed materials or other items where sampling may cause consequential damage to the property.
- Energized systems (e.g. internal boiler components, elevators, mechanical or electrical components);
- Controlled products (e.g. stored chemicals, operational or process-related substances); and
- Materials not typically associated with construction (e.g. settled dust, spills, residual contamination from prior spills, etc.).

In occupied facilities, Pinchin only undertakes non-intrusive testing. Concealed spaces such as those above solid ceilings and within shafts and pipe chases are accessed via existing access panels only. Pinchin does not conduct demolition of walls, solid ceilings, structural items, interior finishes or exterior building finishes, to determine the presence of concealed materials.

1.2 Asbestos

Pinchin conducts an inspection for the presence of friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.



A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA¹ as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials are determined by visual examination, available information on the phases of the construction and prior renovations.

Pinchin collects samples at a rate that is in compliance with Table 1 of O.Reg. 278/05.

The sampling strategy is also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start/finish date of construction and associated usage of ACM.

In some cases, manufactured products such as asbestos cement pipe are visually identified without sample confirmation.

Pinchin conducts limited demolition of masonry block walls (core holes) to investigate for loose fill insulation.

Flooring mastic/adhesive and leveling compounds are only sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

Pinchin submits the bulk samples to a NVLAP² accredited laboratory for analysis. The analysis is performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

The asbestos analysis is completed using a stop positive approach. Only one result of greater than the regulated criteria (0.5%) is required to determine that a material is asbestos-containing, but all samples must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material are analyzed if no asbestos is detected. In some cases, all samples are analyzed in the sample set regardless of result. Where building materials are described in the report as non-asbestos, or described as containing no asbestos, this is subject to the limitations of the analytical method used, and should be understood to mean no asbestos was detected.

¹ Environmental Protection Agency

² National Voluntary Laboratory Accreditation Program



Asbestos materials are evaluated in order to make recommendations regarding remedial work. This includes friability, condition and efficiency and practicality of the work.

1.3 Lead

Pinchin collects samples of distinctive paint finishes and surface coatings present in more than a limited application, where removal of the paint is possible. Pinchin collects samples by scraping the painted finish to include base and covering applications.

Analysis for lead in paints or surface coatings is performed in accordance with MOE Test Method E3470; Lead, by Inductively Coupled Plasma, Optical Emission Spectrometry. The analysis is completed at a CALA³ accredited laboratory.

The Ontario Ministry of Labour (MOL) has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. However, except for very aggressive disturbance of painted finishes, (e.g., abrasive blasting, torch cutting or grinding), Pinchin believes that 0.1% (1,000 ug/g) lead in paint represents a de minimus concentration of lead in paint for construction hygiene purposes, that is a concentration below which the lead content is not the limiting hazard in any disturbance of leaded paint.

Lead building products (e.g. batteries, lead sheeting, flashing) are identified by visual observation only.

1.4 Silica

Pinchin identifies building materials suspected of containing crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) by knowledge of current and historic applications and visual inspection only.

Pinchin does not perform sampling of these materials for laboratory analysis of crystalline silica content.

1.5 Mercury

Building materials/products/equipment (e.g. thermostats, barometers, pressure gauges, light tubes), suspected to contain mercury are identified by visually inspection only. Dismantling of equipment suspected of containing mercury is not performed. Sampling is not performed.

³ Canadian Association for Laboratory Accreditation Inc., formerly CAEAL (Canadian Association for Environmental Analytical Laboratories).



1.6 Polychlorinated Biphenyls

Pinchin determines the potential for light ballast to contain PCBs based on the age of the building. The information is compared to known ban dates of PCBs and Environment Canada publications.

Pinchin decides to sample exterior caulking or sealants for PCBs based on the date of construction or installation. Caulking installed after 1985 is presumed to be free of PCBs and hence not sampled. If sampled, analysis for PCBs is performed using an ASTM⁴ test method appropriate to the sample matrix at an accredited laboratory.

1.7 Visible Mould

Pinchin identifies the presence of mould if visibly present in a significant quantity on exposed building surfaces. If any mould growth is concealed within wall cavities it is not addressed in this assessment.

⁴ American Society for Testing and Materials