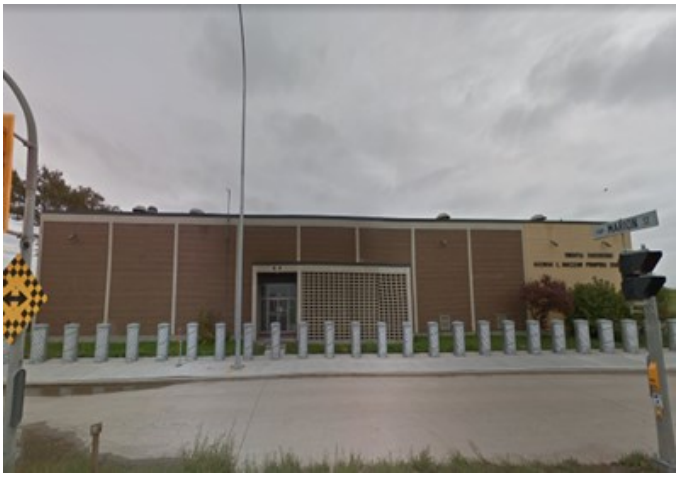
APPENDIX F

Asbestos Reports



2023 Asbestos Reassessment

G.C MacLean Pumping Station and Reservoir
875 Lagimodiere Boulevard,
Winnipeg, Manitoba

Prepared for:

City of Winnipeg Water and Waste Department
110-1199 Pacific Avenue
Winnipeg, Manitoba R3E 3S8

August 14, 2023

Pinchin File: 327243.000

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EXECUTIVE SUMMARY

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment of G.C MacLean Pumping Station and Reservoir located at 875 Lagimodiere Boulevard, Winnipeg, Manitoba. The reassessment was performed on June 13, 2023.

The objective 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 results of this assessment are not intended for construction, renovation, demolition or project tendering purposes.

SUMMARY OF FINDINGS

Asbestos-containing materials (ACM) are present as follows:

- Asbestos-containing parging cement is present as insulation on pipe system fittings throughout the building. Parging cement is friable and was jacketed with canvas. Parging cement was in GOOD condition.
- Asbestos-containing parging cement is present as duct insulation within Location No.'s 6, 7. 11, 16 and 19. The parging cement is a friable material. The parging cement was jacketed with canvas and is in GOOD condition except for 1 SF of damage rated in FAIR condition within Location No.6.
- Asbestos-containing preformed magnesia block is present as mechanical insulation within exhaust ducting within Location No.'s 18 and 19. Magnesia block is a friable material. The magnesia block is jacketed with metal and is in GOOD condition.
- Asbestos-containing transite boards are present as ceiling finish in the Main Floor Vestibule, Location No.10. Transite cement is a non-friable material which is in GOOD condition.
- Loose fill vermiculite was not observed in the assessed areas; however, demolition of masonry block walls was not performed and vermiculite may be present within these cavities.
- Asbestos-containing caulking is present on the exterior wall finish, Location No.22. Caulking is non-friable and is in GOOD condition.
- Setting compounds present on ceramic floor tiles within Location No.'s 1, 2, 3, 6 and 19 are presumed to contain asbestos. Setting compounds are potentially friable and are in GOOD condition.

SUMMARY OF RECOMMENDATIONS

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

1. The following items require immediate remedial action:
    a. Repair following Moderate Risk procedures 1 SF of damaged/exposed parging cement on Fresh Air Intake duct within the Chlorine Analyzer Room, Location No. 6.
2. Perform a re-assessment of asbestos materials on an annual basis.
3. Prior to renovations or demolition, perform a pre-construction assessment to identify any hazardous materials that may be disturbed by the work.
4. Follow appropriate safe work procedures when handling or disturbing asbestos.

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

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment at 875 Lagimodiere Boulevard, Winnipeg, Manitoba.

Pinchin performed the reassessment on June 13, 2023. The surveyor was accompanied by City of Winnipeg Water and Waste Representatives during the reassessment. The assessed area was occupied at the time of the assessment.

The objectives of the reassessment were to document the locations, quantities and conditions of previously identified asbestos containing building materials and develop corrective action plans as required. This reassessment is only to be used for the purposes of long-term management and routine maintenance. The results of this reassessment are not to be used for construction, renovation, demolition or project tendering purposes.

1.1 Scope of Assessment

The objective of the reassessment was to evaluate the condition and quantity of previously reported asbestos-containing materials (ACM) and develop corrective action plans as required.

Additional objectives included the following:

- Documentation of any asbestos abatement that was performed since the last reassessment.
- Additional sampling to delineate previously identified ACM.

Please refer to Appendix I for a detailed description of the methodology used for this assessment.

2.0 METHODOLOGY

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible materials identified in the most recent assessment. The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

As per the original scope of work, concealed locations such as ceiling spaces above solid ceilings, shafts and chases were accessed via existing access panels. Our investigation did not include demolition of drywall or plaster walls to view concealed conditions. Structural items or exterior building finishes were not removed to determine the presence of concealed materials.

For further details on the methodology including test methods, refer to Appendix I.

3.0 BACKGROUND INFORMATION

3.1 Building Description

Description Item	Details
Use	Pumping Station
Number of Floors	Single Storey with Mezzanine and Basement
Structure	Structure steel and concrete
Exterior Cladding	Masonry
HVAC	
Roof	Built-up roofing
Flooring	Concrete, ceramic tile
Interior Walls	Concrete
Ceilings	Transite, concrete

3.2 Existing Reports and Summary of Asbestos Abatement

3.2.1 Review of Previous Reports

The reassessment was based on information gathered from previous comprehensive assessment report completed by Pinchin. The original assessment report for the G.C. MacLean Pumping Station and Reservoir was dated March 6, 2007. The results of the original report and subsequent survey update reports were reviewed prior to completing the reassessment.

3.2.2 Summary of Asbestos Abatement since the Previous Assessment

Abatement work has been completed on site since the last assessment. Based on a review of the above noted abatement reports, and observations made during the reassessment, the following abatement work has been conducted, since completion of the previous report:

- Damaged/exposed parging cement rated in FAIR condition was removed from 3 rainwater leader fittings within Upper Walkway, Location No. 12.

4.0 FINDINGS

The following section summarizes the findings of the reassessment and provides a general description of the asbestos-containing materials (ACM) identified and their locations.

For details on approximate quantities, condition, friability and locations of asbestos materials; refer to the Asbestos Material Summary Report and All Data Report in Appendix IV and V.

4.1 Pipe Insulation

Asbestos-containing parging cement present on pipe fittings of pipe systems in the Chlorine Scale Room (Location No. 7), Chlorine Tonner Room (Location No. 9), Ammonia Room (Location No. 11), Upper Walkways (Location No. 12), Stairwell (Location No. 14), Pump Floor (Location No. 19), Maintenance Room (Location No. 20), and Valve Room (Location No. 21) have been maintained in GOOD condition.

4.2 Duct Insulation and Mastic

Asbestos-containing parging cement is present as duct insulation within the Chlorine Analyser Room (Location No. 6), Chlorine Scale Room (Location No. 7), Ammonia Room (Location No. 11), Fan Room (Location No. 16), and Pump Floor (Location No. 19). Parging cement is a friable material which is jacketed with canvas and is in GOOD condition except for 1 SF of damage rated in FAIR condition within Location No.6.

4.3 Mechanical Equipment Insulation

Asbestos-containing preformed magnesia block insulation is present on the generator exhaust in the Mezzanine Generator Room (Location No. 18), and Pump Floor (Location No.19). Magnesia block is a friable material which is jacketed with metal and is in GOOD condition.

4.4 Vermiculite

Loose fill vermiculite was not observed within the assessed areas; however, demolition of masonry block walls was not performed, and vermiculite may be present within these cavities. Vermiculite debris was not observed.

4.5 Asbestos Cement Products (Transite)

Asbestos-containing transite boards present as a ceiling finish in the Main Floor Vestibule (Location No. 10) are non-friable and are in GOOD condition.

4.6 Sealants, Caulking, and Putty

Asbestos-containing beige and grey caulking present on the exterior wall finish (Location No. 22) is non-friable material which is in GOOD condition.

4.7 Roofing Products

Built-up roofing materials have not been sampled and are presumed to contain asbestos. Destructive testing will be required prior to any renovation or demolition activities.

4.8 Other Building Materials

Setting compounds present on ceramic floor tiles within Location No.'s 1, 2, 3, 6 and 19 are presumed to contain asbestos. Setting compounds are potentially friable and are in GOOD condition.

4.9 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and was excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Floor levelling compound
- Elevator and lift brakes
- Electrical components
- Moulded plastic components (laboratory bench tops)
- Refractory materials and insulations in boilers, and stacks
- Insulation under metal clad boilers
- Mechanical packing, ropes and gaskets
- Adhesives and duct mastics
- Fibre-reinforced paints and coatings
- Paper products
- Soffit and fascia boards
- Fire resistant doors
- Metal clad finishes (Galbestos)
- Stucco, plaster or other cementitious parge coatings
- Vibration dampers on HVAC equipment
- Terrazzo
- Ropes and gaskets in cast-iron bell and spigot joints
- Sealants on pipe threads

5.0 RECOMMENDATIONS

5.1 General

Perform a detailed intrusive assessment prior to building renovation or demolition operations. The assessment should include; destructive testing (e.g. coring and/or removal of building finishes and components), sampling of other hazardous materials (lead, mercury, PCBs, mould, etc.), and materials not tested in this study (e.g. roofing materials, caulking, mastics).

5.2 Remedial Work

The following remedial work is recommended.

Material, Quantity & Condition	Location Name (Location #)	Recommended Procedure
Parging cement, 1 SF fair condition	Ducting within Location No.6	Repair in accordance with moderate risk procedures.

5.3 On-going Management and Maintenance

The following recommendations are made regarding on-going management and maintenance work involving the asbestos materials identified.

Perform a re-assessment of asbestos materials on an annual basis.

Remove asbestos-containing materials (ACM) prior to alteration or maintenance work if ACM may be disturbed by the work. Follow appropriate asbestos precautions for the classification of work being performed.

Update the asbestos inventory report for the building upon completion of any abatement of ACM.

6.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

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.

7.0 REFERENCES

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

Manitoba

1. Workplace Safety and Health Act W210.
2. Workplace Safety and Health Hazard Regulation (Manitoba Regulation 217/2006), under the Workplace Safety and Health Act.
3. Manitoba Regulation MR 474/88, Manitoba PCB Regulation made under The Dangerous Goods Act.
4. Guide for Asbestos Management – Safe Work Manitoba.
5. Guideline Managing Demolition Debris Containing Hazardous Materials – Environmental Enforcement and Compliance Branch – Manitoba Conservation and Climate

Federal

1. Canada Occupational Health and Safety Regulation, SOR/86-304.
2. Consolidated Transportation of Dangerous Goods Regulations, including Amendment SOR/2019-101, Transportation of Dangerous Goods Act.

APPENDIX I

Methodology

1.0 GENERAL

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible ACM identified in the most recent assessment.

The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

Materials listed as exclusions in the previous reports have remained as exclusions. Sampling, assessment or verification of excluded materials was not conducted.

Existing sampling data, where available, was reviewed and relied upon.

Where sampling was conducted, sample collection was conducted in accordance with our Standard Operating Procedures.

A separate set of samples was collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA 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 were determined by visual examination and available information on the phases of construction and prior renovations.

Samples were collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy was 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 were visually identified without sample confirmation.

The asbestos analysis was completed using a stop-positive approach. Only one result meeting the regulated criteria was 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 stopped analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material were analyzed if no asbestos is detected. In some cases, all samples were analyzed in the sample set regardless of result.

The analysis was performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

The following summarizes the criteria of asbestos definitions. If there is a conflict between federal and provincial criteria, the more stringent will apply.

Jurisdiction	Friable	Non-Friable
Manitoba	0.1%[1]	1%
Federal	1%	1%

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation. Additionally, these terms are used for materials which historically are known to not include asbestos in their manufacturing.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable).
- Condition (good, fair, poor, debris).
- Accessibility (ranking from accessible to all building users to inaccessible).
- Visibility (whether the material is obscured by other building components).
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

For a complete description of the Evaluation Criteria and Basis of Recommendations, refer to Annex A.

Template: Methodology for Asbestos Reassessment, HAZ, July 27, 2021

METHODOLOGY ANNEX A EVALUATION CRITERIA

1.0 EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS

The detailed asbestos assessment provides information regarding the location, condition, accessibility and friability of the asbestos-containing materials (ACM). In order to make recommendations for compliance with current regulations, Pinchin developed the following criteria.

2.0 EVALUATION OF CONDITION

2.1 Friable Sprayed or Trowelled Fireproofing, Thermal Insulation and Texture Finishes (Surfacing Materials)

To evaluate the condition of ACM sprayed or trowelled on fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, the following criteria are applied:

Good	Surface of material shows no significant signs of damage, deterioration or delamination. Good condition includes unencapsulated or unpainted fireproofing or texture finishes, where no or limited delamination or damage is observed, or encapsulated fireproofing or texture finishes where the encapsulant or paint has been applied after the damage or fallout occurred.
Poor	A sprayed material that shows signs of significant damage or is significantly delaminating or deteriorating. This may be limited to surface delamination or some portion of the substrate may be exposed.

In Locations where damage exists in isolated areas, both good and poor condition may be applicable. The extent of each condition will be recorded. Fair condition is not utilized in the evaluation of ACM sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes.

The evaluation of the above products above ceilings may be limited by the number of observations and by building components such as ducts or full height walls that obstruct the above ceiling observations.

2.2 Friable Mechanical or Thermal System Insulation (TSI)

To evaluate the condition of mechanical insulation on vessels, boilers, breeching, ducts, pipes, fan units, equipment etc. the following criteria are applied:

Good	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (i.e. scuffs or stains), but the jacketing is not penetrated.
Fair	Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired.

Poor	Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. Includes components where insulation may have been removed incompletely.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is often not possible to observe each foot of mechanical insulation from all angles.

2.3 Potentially Friable Materials and Miscellaneous Friable Materials

Potentially friable ACM are products that are basically non-friable while in place but have the potential to generate friable dust upon removal or if significantly disturbed without appropriate procedures. These products may become friable if damaged. Potentially friable materials include materials such as acoustic ceiling tiles and plaster. To evaluate the condition of potentially friable materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.
Fair	Showing signs of some cracking or breakage, but is not deteriorating (e.g. cracked plaster, broken but in place ceiling tile, missing tile or section of plaster etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material has deteriorated to a point it has become friable. Normally potentially friable ACM in Poor condition is not repairable and requires at least localized removal and replacement.

2.4 Non-Friable Materials

Non-friable ACM cover a wide range of products with a wide variation in their tendency to release dust or asbestos fibres to the air. Many of these materials, (particularly where the matrix is an unweathered bitumen, asphalt or tar material) do not release fibres except in very unusual circumstances or during significant disturbance (e.g. use of abrasive power tools). Others with a cementitious matrix (asbestos-cement products) can more readily release dust due to abrasion, demolition, weathering, etc. The potential for asbestos release from non-friable ACM is always lower than from friable ACM. To evaluate the condition of non-friable Materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.

Fair	Showing signs of some cracking or breakage but is not deteriorating (e.g. cracked vinyl floor tile, missing piece of tile or transite, etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material to the point at which it cannot be repaired, and it will require at least local removal. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material may have deteriorated to a point where traffic or disturbance may cause it to become friable.

2.5 Evaluation of ACM Debris

The identification of the exact location or presence of debris on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations.

The presence of fallen or dislodged ACM is noted separately from the ACM source and is referred to as Debris. Debris may be friable if from a friable ACM source or a badly deteriorated non-friable ACM source. Debris may also be non-friable (such as fallen pieces of transite sheet or mastic fittings, or broken, dislodged floor tiles).

Debris	Debris may be friable or non-friable but is always identified as debris.

2.6 Evaluation of Presumed Asbestos-Containing Material (PACM)

Presumed asbestos-containing materials (PACM), are building materials that may contain asbestos but were not sampled or analyzed due to inaccessibility or the need to perform destructive testing to obtain a reasonable sample set. Evaluation of these materials is based on the assumption that these PACM are asbestos-containing.

A list of PACM is provided in the report and they are generally not included in the detailed room by room reports. Typically, they are excluded because they are inaccessible or present in very small quantities. If PACM are evaluated, Pinchin uses the criteria that correspond with the type (and friability) of the material listed above.

3.0 EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)	Common areas of the building within reach of all building users (approximately 8 ’- 9’ from floor or standard ceiling height). Includes other areas where occupant activities may result in disturbance of material that is not normally within reach from floor level, but may be disturbed by common activities (e.g. gymnasiums, workshops, warehouses)
Access (B)	Areas of the building accessed primarily by Maintenance/Caretaking/Janitorial Staff and within reach without use of a ladder. Includes areas within reach in Boiler Rooms, Electrical Rooms, Janitors Closets, Elevator Rooms, Mechanical Rooms, etc. Includes materials within reach from fixed ladders or catwalks, mezzanines, and accessible pipe chases.
Access (C) and Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Only includes ACM that are visible to view without the removal or opening of other building components such as ceiling tiles or service access panels. Visible column on HMIS sheets will say YES.
Access (C) and not Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Includes ACM that are not visible to view and require the removal of a building component to see, such as ceilings tiles or access panels to view and access. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points. Visible column on HMIS sheets will say NO.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls or equipment etc. where demolition of the ceiling, wall or equipment etc. is required to reach the ACM. Material inaccessible due to height or location or is only accessed under unusual situations. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in Access D.

4.0 ACTION MATRIX AND DEFINITIONS

Pinchin’s evaluation of the viability of a specific asbestos control option is based on the consideration of the friability, condition, accessibility and visibility of a material. The logic used is that damaged ACM located in an area frequently accessed by all building occupants is of a higher priority than damaged ACM located in an infrequently accessed service area. The action matrix considers the potential for fibre release (primarily from friable ACM) and the possible concerns from regulatory bodies and many building occupants to all damaged ACM (including non-friable).

In any building with asbestos, many current regulations require an Asbestos Management Program be implemented. Depending on the condition and the accessibility, more active measures such as repair or removal may be recommended. The following matrix provides guidance for recommended Actions in the absence of renovation or demolition. In the event of construction or maintenance activity which will disturb ACM more aggressive control or removal will be required.

4.1 Action Matrix

The following tables outline the action decisions based on the relationship of assessed factors. Table I applies to friable ACM. Table II applies to non-friable ACM.

Table I Decision Matrix for Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 5[1]	Action 5[2]	Action 3	Action 1
(B)	Action 7	Action 6[3]	Action 3	Action 1
(C) Visible	Action 7	Action 6	Action 3	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

Table II Decision Matrix for Potentially Friable and Non-Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 7	Action 7[4]	Action 3	Action 1
(B)	Action 7	Action 7	Action 3	Action 1
(C) Visible	Action 7	Action 7	Action 4	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

4.2 Action Definitions

The following are the definitions in the Action Matrix Table presented above:

Action Definitions	
Action 1	Clean-Up of ACM Debris Restrict access that is likely to cause a disturbance of the ACM Debris and clean up ACM Debris. Utilize appropriate asbestos precautions.

[1] If friable ACM in access (A)/Good condition is not proactively removed Action 7 (Manage) is recommended.
[2] If friable ACM in access (A)/Fair condition is not proactively removed repair is recommended.
[3] If friable ACM in access (B)/Fair condition is likely to be disturbed after repair proactive removal is recommended.
[4] Action 7 is recommended for all non-friable ACM in Fair condition however some clients may wish to repair or take some action primarily for cosmetic reasons

Action Definitions	
Action 2	Precautions for Access Which may Disturb ACM Debris Use appropriate means to isolate the debris or to limit entry to the area which may disturb the material. At locations where ACM Debris can remain in place in lieu of removal or clean-up (e.g. Debris on top of ceiling tiles or behind lockable door), Utilize appropriate asbestos precautions to enter the area if this will disturb debris. The precautions will be required until the ACM Debris has been cleaned up.
Action 3	ACM Removal Remove ACM. Utilize asbestos procedures appropriate to the scope of the removal work. Until it is removed, restrict access to the material so it is not disturbed.
Action 4	Precautions for Work Which may Disturb ACM in Poor Condition. Utilize appropriate asbestos precautions if ACM may be disturbed by work on or near ACM. This does not require restricting access to the area, only control of work which may contact or disturb the ACM. Removal is the only viable option if work will disturb ACM.
Action 5	Proactive ACM Removal Remove friable ACM where the presence of friable asbestos in Good condition is not desirable. If friable ACM in Fair condition is not removed, then Repair friable ACM.
Action 6	ACM Repair Repair friable ACM in Fair condition which is not likely to be damaged again or disturbed by normal use of the area or room. Pinchin recommends proactive removal if friable ACM is likely to be damaged or disturbed during normal use of the area or room
Action 7	Asbestos Management Program with Routine Surveillance Implement an Asbestos Management Program, including routine surveillance of ACM. Reassess materials regularly (typically once per year).

Master Template: Methodology Annex A to Appendix I Evaluation Criteria, HAZ, January 10, 2020

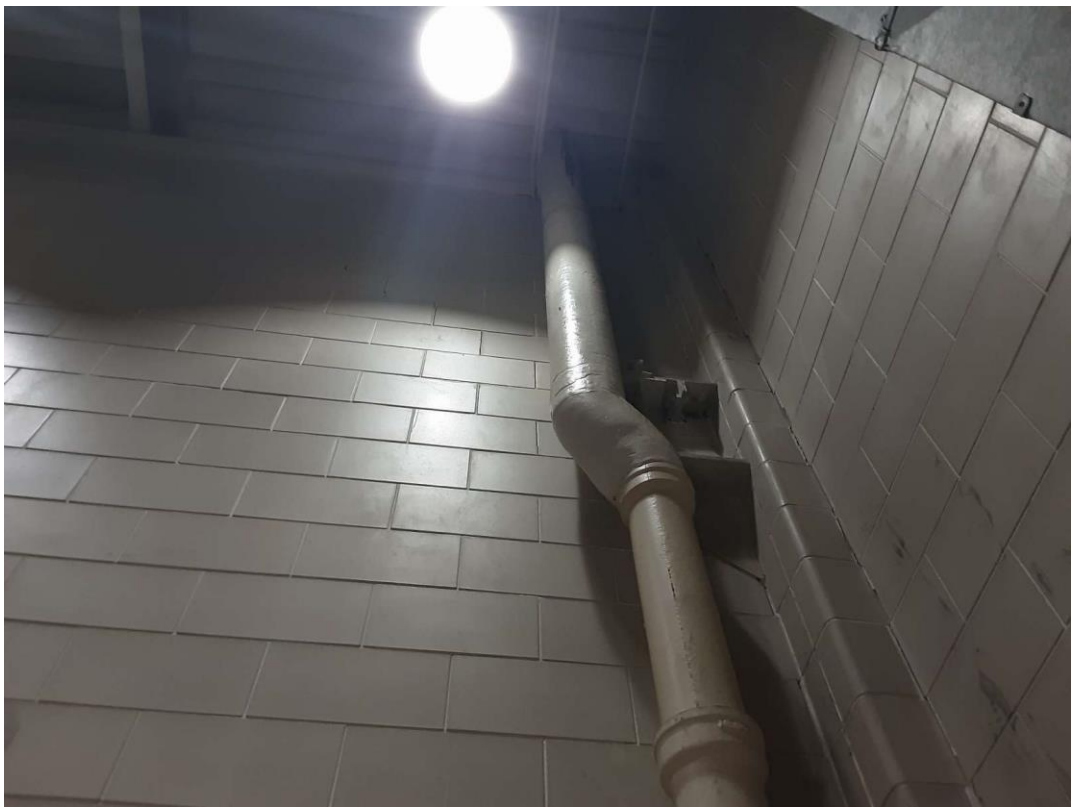
APPENDIX II

Additional Photographs

V0002 (Confirmed Asbestos), Piping, Domestic Water (Hot and Cold), Parging over Fiberglass, Pump Floor (Location #: 19)

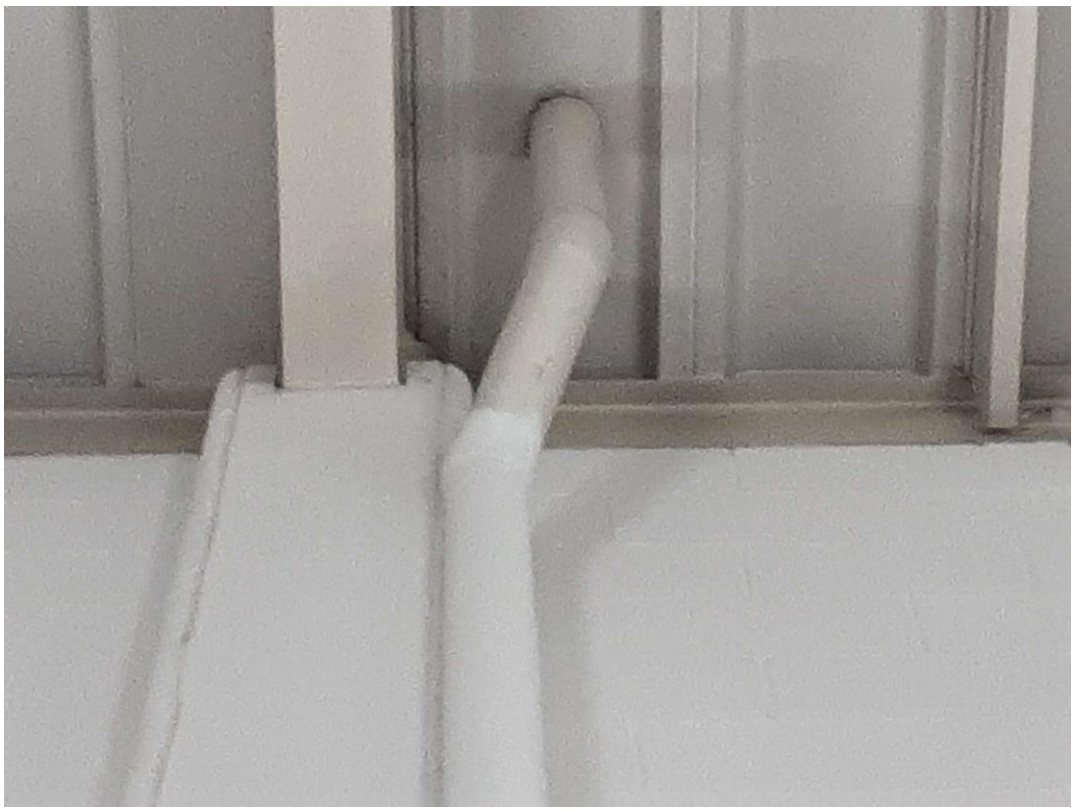
V0002 (Confirmed Asbestos), Piping, Domestic Water (Hot and Cold), Parging over Fibreglass, Maintenance Room (Location #: 20)

V0002 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass, Chlorine Scale Room (Location #: 7)

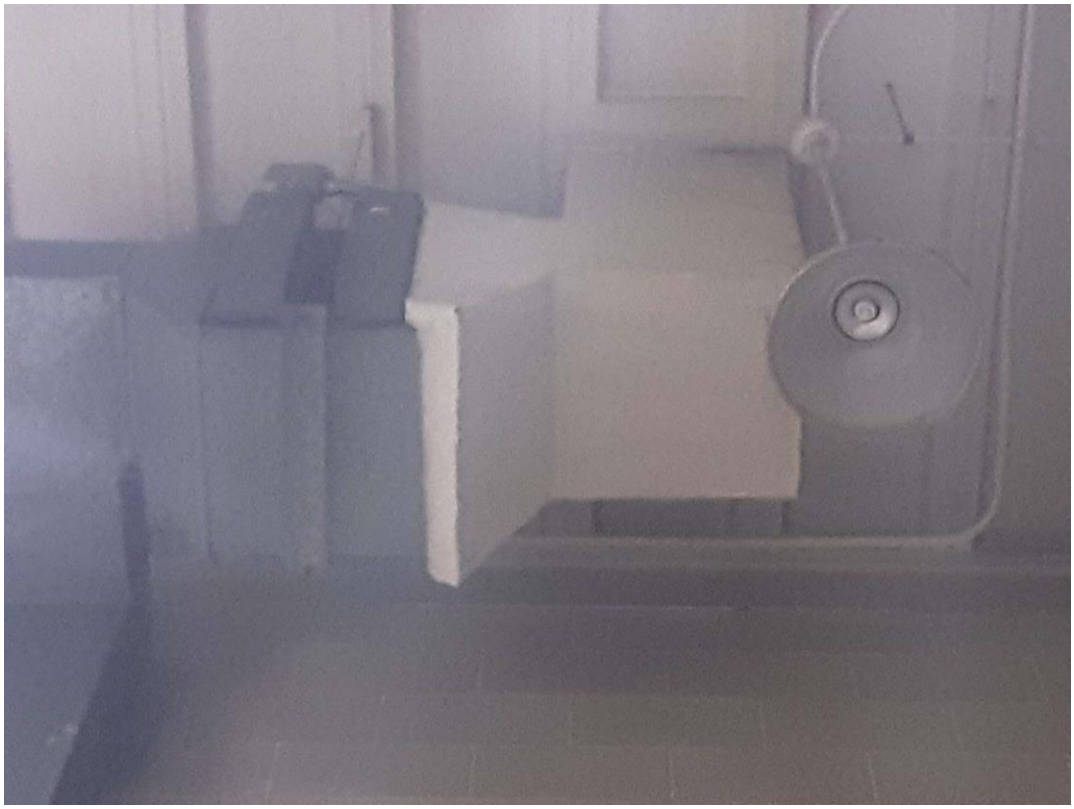


V0004 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass, Ammonia Room (Location #: 11)

V0004 (None), Piping, Domestic Water (Hot and Cold), Abated Material, North Mezzanine (Location #: 15)



V0004 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fiberglass, Chlorine Tonner Room (Location #: 9)



V0005 (Confirmed Asbestos), Duct, Fresh Air Intake, Fiberglass w/Parging, Ammonia Room (Location #: 11)

V0005 (Confirmed Asbestos), Duct, Fresh Air Intake, Fiberglass w/Parging, Fan Room (Location #: 16)

V0005 (Confirmed Asbestos), Duct, Fresh Air Intake, Fiberglass w/Parging, Chlorine Analyzer Room (Location #: 6)

S0005 (Confirmed Asbestos), Duct, Fresh Air Intake, Fiberglass w/Parging, Chlorine Scale Room (Location #: 7)

S0006 (Confirmed Asbestos), Mechanical Equipment, Generator Exhaust, Magnesia block, Generator Room (Location #: 18)

V0006 (Confirmed Asbestos), Duct, Exhaust, Magnesia block, Pump Floor (Location #: 19)

V9500 (Presumed Asbestos), Wall, All, Vermiculite/concrete block walls, Vestibule (Location #: 1)

V9500 (Presumed Asbestos), Floor, All, Mortar, Vestibule (Location #: 1)

V9500 (Presumed Asbestos), Floor, All, Mortar, Pump Floor (Location #: 19)

V9500 (Presumed Asbestos), Wall, All, Vermiculite/concrete block walls, Washroom (Location #: 3)

V9500 (Presumed Asbestos), Floor, All, Mortar, Washroom (Location #: 3)

Structure, Vestibule (Location #: 10)

APPENDIX III

Location Summary Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
1.855.PINCHIN www.pinchin.com

Client:Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Survey Date:
Last Re-Assessment: 2023-06-13
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
1	Vestibule	80	Main	A	Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.
2	Lobby	150	Main	A	Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.
3	Washroom	120	Main	A	Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.
4	Control Room	792	Main	A	Masonry walls suspect to contain vermiculite.
5	North Stairwell	200	Main	A	Masonry walls suspect to contain vermiculite
6	Chlorine Analyzer Room	300	Main	A	Damaged/exposed parging cement on 1 SF air intake - June 29, 2021 Masonry walls suspect to contain vermiculite. setting compound on ceramic tiles is presumed asbestos containing.
7	Chlorine Scale Room	300	Main	A	Masonry walls suspect to contain vermiculite.
8	Vestibule	200	Main	A	
9	Chlorine Tonner Room	1200	Main	A	Masonry walls suspect to contain vermiculite.
10	Vestibule	80	Main	A	Masonry walls suspect to contain vermiculite.
11	Ammonia Room	160	Main	A	Masonry walls suspect to contain vermiculite.
12	Upper Walkways	2200	Main	A	Exterior masonry wall at overhead door inspected for vermiculite. Wall is not insulated. Remaining masonry walls suspect to contain vermiculite. Mortar sampled S0014A-C, 0015A-C April 3, 2023
13	Stairwell	160	Main	A	Masonry walls suspect to contain vermiculite.
14	Stairwell	200	Mezzanine	A	Masonry walls suspect to contain vermiculite.
15	North Mezzanine	600	Mezzanine	A	Masonry walls suspect to contain vermiculite.
16	Fan Room	3600	Mezzanine	A	Masonry walls suspect to contain vermiculite.
17	Stairwell	160	Mezzanine	A	Masonry walls suspect to contain vermiculite.
18	Generator Room	300	Mezzanine	A	Masonry walls suspect to contain vermiculite
19	Pump Floor	5400	Lower Level	A	Masonry walls suspect to contain vermiculite. setting compound on ceramic tiles is presumed asbestos containing.
20	Maintenance Room	600	Lower Level	A	
21	Valve Room	3600	Lower Level	A	Room Not accessible June 29, 2021
22	MacLean Pump Station Building Exterior	0	NA	A	Masonry walls suspect to contain vermiculite. Roof sections needs to be tested prior to any renovation or demolition activities

APPENDIX IV

Asbestos Material Summary Report / Sample Log

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
1.855.PINCHIN www.pinchin.com

Client:Cowww **Site: 875 Lagimodiere Boulevard, Winnipeg, MB** **Building Name: MacLean Pumping Station** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V0002	Piping | Rain Water Leader, Domestic Water (hot And Cold) | Parging Over Fibreglass | Parging/ftg/dw/location 3	7,14,19,20,21	A	0	0	188	0	Chrysotile	Yes	F
Asbestos	S0003	Piping | Rain Water Leader, Domestic Water (hot And Cold) | Sweat Wrap Pipe Insulation | Sweatwrap/rwl/location 4 - 2 Phases	4,9,11,12,14,16	A	179	0	0	0	None Detected	No	
Asbestos	S0004	Piping | Rain Water Leader | Parging Over Fibreglass | Parging/ftg/rwl/location 12	9,11,12	A	0	0	9	0	Chrysotile	Yes	F
Asbestos	S0005	Duct | Fresh Air Intake | Fibreglass W/parging | Parging/fai/location 7	6,7,11,16	A	0	575	0	0	Chrysotile	Yes	F
Asbestos	S0006	Mechanical Equipment, Duct | Generator Exhaust, Exhaust | Magnesia Block | Magblock	18,19	A	64	0	0	0	Chrysotile	Yes	F
Asbestos	S0007	Other | | Ceiling Tiles (glue-on) | Glue On Tile/12x12, Location 19	19	A	0	36	0	0	None Detected	No	
Asbestos	S0008	Piping | Domestic Water (hot And Cold) | Sweat Wrap Pipe Insulation | Sweat Wrap Insulation On Straight Pipe, Domestic Water Supply, Mezzanine (location 15), Maclean Pumping Station	15	A	30	0	0	0	None Detected	No	
Asbestos	S0009	Wall | Exterior | Plaster | Stucco Plaster, Exterior Bottom Wall, Maclean Pumping Station (sample No. 0020- August 27, 2015 - 1517151_plm) (for Sample 0009b-c It Was Sample No. 0020b-c- June 30, 2016 - B131169)	22	A	0	43	0	0	None Detected	No	
Asbestos	S0010	Wall | Base | Plaster | Plaster On Concrete, Exterior Bottom Wall, Maclean Pumping Station (sample No. 0021- August 27, 2015 - 1517151_plm) (for Sample 0010b-c It Was Sample No. 0021b-c- June 30, 2016 - B131169)	22	A	0	300	0	0	None Detected	No	
Asbestos	S0011	Wall, Other | Exterior | Caulking | Caulking, Exterior Wall, Maclean Pumping Station (sample No. 0022- August 27, 2015 - 1517151_plm) (for Sample 0011b-c It Was Sample No. 0022b-c- June 30, 2016 - B131169)	22	A	0	4	0	100	Chrysotile	Yes	NF
Asbestos	S0012	Piping | Chilled Water Supply | Parging Over Fibreglass | Parging, Fitting, Chilled Water Supply, Location 16, Fan Room, Mezzanine, Maclean Pumping Station (for Sample 0012 It Was Sample No. 0038- June 30, 2016 - B131169), Maclean Pumping Station (for Sample 0012b & C It Was June 13, 2017 -	16	A	0	0	18	0	None Detected	No	

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
		B171926)									
Asbestos	S0013	Piping | Chilled Water Return | Parging Over Fibreglass | Parging, Fitting, Chilled Water Return, Location 16, Fan Room, Mezzanine, Maclean Pumping Station (for Sample 0013 It Was Sample No. 0039- June 30, 2016 - B131169), Maclean Pumping Station (for Sample 0013b & C It Was June 13, 2017 - B171926)	16	A	0	0	10	0	None Detected	No	
Asbestos	S0014 ABC	Wall | | Mortar | Off White	12	A	0	0	0	100	None Detected	No	
Asbestos	S0015 ABC	Wall | | Mortar | Of White	12	A	0	0	0	100	None Detected	No	
Asbestos	V9000	Ceiling | | Cement Product |	10	A	0	80	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9500	Floor | All | Mortar |	1,2,3,6,19	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | Fascia | Plaster |	22	A	0	300	0	0	Presumed Asbestos	Yes	PF
Asbestos	V9500	Wall | All | Vermiculite/concrete Block Walls |	1,2,3,4,5,6,7,9,11,12,13,14,16,17,18,19,22	A	0	7135	0	100	Presumed Asbestos	Yes	F
Asbestos	V0000	Mechanical Equipment | Heating Water Tank | Fibreglass |	3	A	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Piping | Domestic Water (hot And Cold), Gas Pipe Line | Not Insulated |	3,6,18	A	0	0	0	100	Non Asbestos	No	

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

APPENDIX V

HMIS Data Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

ALL DATA REPORT

PINCHIN
1.855.PINCHIN www.pinchin.com

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #1 : Vestibule
Floor: Main
Room #:
Area (sqft): 80
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI														
Duct	Not Found	NI														
Floor		Ceramic Tiles	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI														
Other	Not Found	NI														
Piping	Not Found	NI						800								
Structure	Beam, Deck	Concrete (precast)						800								
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL		A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #2 : Lobby
Floor: Main
Room #:
Area (sqft): 150
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall	All	Vermiculite/concrete block walls	ALL	N/A	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.

Client: Cowww
Location: #3 : Washroom
Survey Date: 2023-06-09

Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Floor: Main

Building Name: MacLean Pumping Station
Room #:
Area (sqft): 120
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Heating Water Tank	Fibreglass	Surface	Foil Face	B	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Heating Water Tank	Horsehair	Surface	Canvas	B	Y										
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Fibreglass	Straight	Canvas	B	Y										
Piping	Domestic Water (hot And Cold)	Not Insulated	Fitting	N/A	B	Y		100			%	V0000	Non-Asbestos		None	
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL		A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite. Setting compound on ceramic tiles is presumed asbestos containing.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #4 : Control Room
Floor: Main
Room #:
Area (sqft): 792
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct		Foil Face														
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Domestic Water (hot And Cold)	Fibreglass	Straight	Canvas	B	Y										
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	B	Y					EA	V0002	[None]	25-50%	[Abated]	
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	B	Y		12			LF	S0003	None Detected	N.D.	None	
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	N		12			LF	V0003	None Detected	N.D.	None	
Wall		Masonry	No Information	NI												
Wall	All	Vermiculite/concrete block walls	ALL	N/A	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #5 : North Stairwell
Floor: Main
Room #:
Area (sqft): 200
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall	All	Vermiculite/concrete block walls	ALL	N/A	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #6 : Chlorine Analyzer Room
Floor: Main
Room #:
Area (sqft): 300
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Fresh Air Intake	Fibreglass w/Parging	Surface	Canvas	C	Y		29	1		SF	V0005	Chrysotile	50-75%	Confirmed Asbestos	F
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Fibreglass	Straight	Canvas	B	Y										
Piping	Domestic Water (hot And Cold)	Not Insulated	Fitting	N/A	B	Y		100			%	V0000	Non-Asbestos		None	
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall	All	Vermiculite/concrete block walls	Insulation	Masonry	B	N		960			SF	V9500	Presumed Asbestos		Presumed Asbestos	F

Damaged/exposed parging cement on 1 SF air intake - June 29, 2021 Masonry walls suspect to contain vermiculite. setting compound on ceramic tiles is presumed asbestos containing.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #7 : Chlorine Scale Room
Floor: Main
Room #:
Area (sqft): 300
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Fresh Air Intake	Fibreglass w/Parging	Surface	Canvas	C	Y		30			SF	S0005	Chrysotile	50-75%	Confirmed Asbestos	F
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	B	Y		2			EA	V0002	Chrysotile	25-50%	Confirmed Asbestos	F
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry														
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		1040			SF	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww **Site: 875 Lagimodiere Boulevard, Winnipeg, MB** **Building Name: MacLean Pumping Station**
Location: #8 : Vestibule **Floor: Main** **Room #:** **Area (sqft): 200**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												

Client: Cowww **Site: 875 Lagimodiere Boulevard, Winnipeg, MB** **Building Name: MacLean Pumping Station**
Location: #9 : Chlorine Tonner Room **Floor: Main** **Room #:** **Area (sqft): 1200**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		5			EA	V0004	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		40			LF	V0003	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #10 : Vestibule
Floor: Main
Room #:
Area (sqft): 80
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Cement Product	Surface	N/A	C	Y		80			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure																
Structure	N/a	NI	No Information	NI												
Wall		Masonry	No Information	NI												

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #11 : Ammonia Room
Floor: Main
Room #:
Area (sqft): 160
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Fresh Air Intake	Fibreglass w/Parging	Surface	Canvas	C	Y		15			SF	V0005	Chrysotile	50-75%	Confirmed Asbestos	F
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		2			EA	V0004	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		10			LF	V0003	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry														
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		1160			SF	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #12 : Upper Walkways
Floor: Main
Room #:
Area (sqft): 2200
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		2			EA	S0004	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		20			LF	V0003	None Detected	N.D.	None	
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	N		4			LF	V0003	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall[1]		Mortar, Off White						100			%	S0014ABC	None Detected	N.D.	None	
Wall[2]		Mortar, Of WHite						100			%	S0015ABC	None Detected	N.D.	None	
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		3500			SF	V9500	Presumed Asbestos		Presumed Asbestos	F

Exterior masonry wall at overhead door inspected for vermiculite. Wall is not insulated. Remaining masonry walls suspect to contain vermiculite. Mortar sampled S0014A-C, 0015A-C April 3, 2023
1 - Lower 5 feet
2 - Above 5 feet (2 styles of brick present)

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #13 : Stairwell
Floor: Main
Room #:
Area (sqft): 160
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL	N/A	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Location: #14 : Stairwell
Survey Date: 2023-06-09

Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Floor: Mezzanine

Building Name: MacLean Pumping Station
Room #:
Area (sqft): 200
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	C	Y		1			EA	V0002	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		11			LF	V0003	None Detected	N.D.	None	
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		475			SF	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #15 : North Mezzanine
Floor: Mezzanine
Room #:
Area (sqft): 600
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		30			LF	S0008	None Detected	N.D.	None	
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	C	Y		3			EA	V0002	[None]	25-50%	[Abated]	
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	C	Y		3			EA	V0004	[None]	25-50%	[Abated]	
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														

Masonry walls suspect to contain vermiculite.

Client: Cowww
Location: #16 : Fan Room
Survey Date: 2023-06-09

Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Floor: Mezzanine

Building Name: MacLean Pumping Station
Room #:
Last Re-Assessment: 2023-06-13

Area (sqft): 3600

ASBESTOS																	
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Fresh Air Intake	Fibreglass w/Parging	Surface	Canvas	C	Y		500			SF	V0005	Chrysotile	50-75%	Confirmed Asbestos	F
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment		Not Insulated	No Information	NI												
Mechanical Equipment		Not Insulated	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Exchanger	Not Insulated	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Chilled Water Return	Parging over Fibreglass		Canvas	B	Y		8	2		EA	S0013	None Detected	N.D.	None	
Piping	Chilled Water Supply	Parging over Fibreglass		Canvas	B	Y		15	3		EA	S0012	None Detected	N.D.	None	
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		70			LF	V0003	None Detected	N.D.	None	
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	C	Y					EA	V0002	[None]	25-50%	[Abated]	
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	Surface	Preformed Block	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Location: #17 : Stairwell
Survey Date: 2023-06-09

Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Floor: Mezzanine

Building Name: MacLean Pumping Station
Room #:
Last Re-Assessment: 2023-06-13

Area (sqft): 160

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	C	Y					EA	V0002	[None]	25-50%	[Abated]	
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL	Preformed Block	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite.

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #18 : Generator Room
Floor: Mezzanine
Room #:
Area (sqft): 300
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Generator Exhaust	Magnesia block	System		C	Y		40			LF	S0006	Amosite	5-10%	Confirmed Asbestos	F
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Abated Material	Fitting	Canvas	C	Y					EA	V0002	[None]	25-50%	[Abated]	
Piping	Gas Pipe Line	Not Insulated	Fitting	N/A	C	Y		100			%	V0000	Non-Asbestos		None	
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL	Preformed Block	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite

Client: Cowww
Location: #19 : Pump Floor
Survey Date: 2023-06-09

Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Floor: Lower Level

Building Name: MacLean Pumping Station
Room #:
Last Re-Assessment: 2023-06-13

Area (sqft): 5400

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Exhaust	Magnesia block	System		C	Y		24			LF	V0006	[Asbestos]	5-10%	[Asbestos]	F
Floor		Concrete (poured)	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Other		Ceiling tiles (glue-on)	Surface	N/A	B	Y		36			SF	S0007	None Detected	N.D.	None	
Piping		Abated Material	Fitting	Canvas	B	Y					EA	V0002	[None]	25-50%	[Abated]	
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	C	Y		35			EA	V0002	Chrysotile	25-50%	Confirmed Asbestos	F
Structure	Beam, Deck	Concrete (precast)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall	All	Vermiculite/concrete block walls	ALL	Preformed Block	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain vermiculite. setting compound on ceramic tiles is presumed asbestos containing.

Client: Cowww **Site: 875 Lagimodiere Boulevard, Winnipeg, MB** **Building Name: MacLean Pumping Station**
Location: #20 : Maintenance Room **Floor: Lower Level** **Room #:** **Area (sqft): 600**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	C	Y		10			EA	V0002	Chrysotile	25-50%	Confirmed Asbestos	F
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww **Site: 875 Lagimodiere Boulevard, Winnipeg, MB** **Building Name: MacLean Pumping Station**
Location: #21 : Valve Room **Floor: Lower Level** **Room #:** **Area (sqft): 3600**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	C	Y		140			EA	V0002	Chrysotile	25-50%	Confirmed Asbestos	F
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Room Not accessible June 29, 2021

Client: Cowww
Site: 875 Lagimodiere Boulevard, Winnipeg, MB
Building Name: MacLean Pumping Station
Location: #22 : MacLean Pump Station Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other[1]		Caulking						4			SF	V0011	Chrysotile	1-5%	Confirmed Asbestos	NF
Wall		Clay Tile (block)	Exterior		A	Y		100			%					
Wall		Masonry														
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	Base	Plaster	Base		A	Y		300			SF	S0010	None Detected	N.D.	None	
Wall	Exterior	Plaster	Base		A	Y		43			SF	S0009	None Detected	N.D.	None	
Wall	Exterior	Caulking			A	Y		100			%	S0011	Chrysotile	1-5%	Confirmed Asbestos	NF
Wall	Fascia	Plaster	Exterior		A	Y		300			SF	V9500	[None]		[None]	

Masonry walls suspect to contain vermiculite. Roof sections needs to be tested prior to any renovation or demolition activities
1 - Debris present on ground North East side of building

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

2023 Asbestos Reassessment

McPhillips Street
Pumping Station
360 McPhillips Street,
Winnipeg, Manitoba

Prepared for:

City of Winnipeg Water and Waste Department
110-1199 Pacific Avenue
Winnipeg, Manitoba R3E 3S8

August 22, 2023

Pinchin File: 327243.000

Issued to:	**City of Winnipeg Water and Waste Department**
Issued on:	**August 22, 2023**
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Issuing Office:	**Winnipeg, MB**

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EXECUTIVE SUMMARY

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment of McPhillips Street Pumping Station located at 360 McPhillips Street, Winnipeg, Manitoba. The reassessment was performed on June 13, 2023.

The objective 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 results of this assessment are not intended for construction, renovation, demolition or project tendering purposes. The following buildings have been previously confirmed to contain asbestos therefore were included in our assessment:

• Chlorine Building	• Pump Building
• Garage Building	• Storage Shed Building
• Old Pump Building	

SUMMARY OF FINDINGS

Asbestos-containing materials (ACM) are present as follows:

- Parging cement, containing asbestos is present on pipe fittings within the Pump Building, Chlorine Building, and Old Pump Building. Parging cement is friable and is in good condition except for minor amounts of damage rated in poor condition.
- Sweat wrap containing asbestos is present on straight sections of the rainwater leader pipes throughout Pump Building A and Chlorine Building. Sweat wrap is non-friable and is in good condition.
- Asbestos-containing magnesia block is present as insulation on exhaust ducting within the Pump Building, Location No.1. Magnesia block is a friable material. Is jacketed with metal and is in good condition.
- Asbestos-containing ceiling tiles are present in the Shop of the Old Pump Building (Location No. 22). The acoustic ceiling tiles are potentially friable and remain concealed above the metal ceiling tiles.
- Asbestos-containing transite cement boards are present throughout the Old Pump Building. Transite cement is non-friable and is in good condition.
- Asbestos-containing black tar mastic is present on the exterior lower wall finish of the Pump and Chlorine Buildings. Tar mastic is non-friable and is in good condition.

- Asbestos-containing 12” x 12” beige vinyl floor tiles are present within the Pump Building, Electrical Room, Location No.6. Vinyl floor tiles are non-friable and are in good condition.
- Drywall (gypsum board) and joint compound suspect to contain asbestos is present in the Old Pump Building and Garage; Drywall joint compound is potentially friable and is in good condition.
- Loose fill vermiculite has been confirmed present within the Old Pump Building and is presumed present throughout the Storage Shed, Garage, and Chlorine Buildings. The Pump Building does not contain vermiculite. 5 SF of vermiculite debris was present on the floor within the Electrical Room Location 30 of the Old Pump Building.
- Setting compounds on ceramic tile finishes within the Pump Building are presumed to contain asbestos. Setting compounds are potentially friable and are in good condition.

SUMMARY OF RECOMMENDATIONS

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

1. The following items require immediate remedial action:
    a. Remove following Moderate Risk procedures vermiculite debris from the floor within the Electrical Room Location No. 30 of the Old Pump Building.
    b. Remove following Moderate Risk Glovebag procedures damaged/exposed parging cement on 1 domestic water fitting rated in poor condition within the Old Pump Building, Furnace Room Location No.21.
2. Perform a re-assessment of asbestos materials on an annual basis.
3. Prior to renovations or demolition, perform a pre-construction assessment to identify any hazardous materials that may be disturbed by the work.
4. Follow appropriate safe work procedures when handling or disturbing asbestos.

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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APPENDICES

1.0 INTRODUCTION AND SCOPE

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment at 360 McPhillips Street, Winnipeg, Manitoba.

Pinchin performed the reassessment on June 13, 2023. The surveyor was accompanied by City of Winnipeg Water and Waste Representatives during the reassessment. The assessed area was occupied at the time of the assessment.

The objectives of the reassessment were to document the locations, quantities and conditions of previously identified asbestos containing building materials and develop corrective action plans as required. This reassessment is only to be used for the purposes of long-term management and routine maintenance. The results of this reassessment are not to be used for construction, renovation, demolition or project tendering purposes. The following buildings have been previously confirmed to contain asbestos therefore were included in our assessment:

• Chlorine Building	• Pump Building; and
• Garage Building	• Storage Shed Building.
• Old Pump Building	

1.1 Scope of Assessment

The objective of the reassessment was to evaluate the condition and quantity of previously reported asbestos-containing materials (ACM), and develop corrective action plans as required.

Additional objectives included the following:

- Documentation of any asbestos abatement that was performed since the last reassessment.

Please refer to Appendix I for a detailed description of the methodology used for this assessment.

2.0 METHODOLOGY

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible materials identified in the most recent assessment. The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

As per the original scope of work, concealed locations such as ceiling spaces above solid ceilings, shafts and chases were accessed via existing access panels. Our investigation did not include demolition of drywall or plaster walls to view concealed conditions. Structural items or exterior building finishes were not removed to determine the presence of concealed materials.

For further details on the methodology including test methods, refer to Appendix I.

3.0 BACKGROUND INFORMATION

3.1 Building Description

Description Item	Details
Use	City of Winnipeg Water and Waste
Structure	Structure steel and concrete
Exterior Cladding	Masonry
HVAC	Furnace, Forced Air, Boiler
Roof	Not Accessed
Flooring	Vinyl floor tiles, exposed concrete, ceramic tiles
Interior Walls	Masonry, Drywall, Ceramic tiles, transite cement
Ceilings	Transite cement and acoustic ceiling tiles

3.2 Existing Reports and Summary of Asbestos Abatement

3.2.1 Review of Previous Reports

The reassessment was based on information gathered from the original comprehensive assessment report completed by Pinchin. The original assessment report for the McPhillips Pumping Station was dated March 6, 2007. The results of the original report and subsequent survey update reports were reviewed prior to completing the reassessment.

3.2.2 Summary of Asbestos Abatement since the Previous Assessment

Based on a review of the above noted abatement reports, and observations made during the reassessment, asbestos abatement has not been conducted since the last assessment.

4.0 FINDINGS

The following section summarizes the findings of the reassessment and provides a general description of the asbestos-containing materials (ACM) identified and their locations.

For details on approximate quantities, condition, friability and locations of asbestos materials; refer to the Asbestos Material Summary Report and All Data Report in Appendix IV and V.

4.1 Pipe Insulation

Parging cement, containing asbestos is present on pipe fittings of the City Water Supply, Rainwater Leader, Domestic Water, Chilled Water and Heating Water pipe systems within the Pump Building, Chlorine Building, and Old Pump Building. Parging cement is a friable material which was jacketed with canvas. The parging cement was in good condition except for minor amounts rated in fair and poor condition.

Sweatwrap (brown layered paper) containing asbestos in the tar paper layer, is present on straight sections of the City Water Supply, Rainwater leader pipes in the Pump Building and Chlorine Building (Location Nos. 1, 2, 4, 7, 8, 9, and 11). Since the asbestos is present in the tar paper layer only it is a non-friable material. The Sweatwrap was jacketed with canvas and is in good condition.

The following damage was noted during the 2023 update:

Location	Quantity and Condition of Damage
Old Pump Building, Furnace Room (Location No. 21).	1 fitting insulated with parging cement rated in POOR condition on the domestic water system.

4.2 Duct Insulation

Preformed block insulation containing chrysotile and amosite asbestos is present on the generator exhaust duct in the Basement Pump Building (Location No. 1). The preformed block insulation is a friable material which was jacketed with metal and is in GOOD condition.

4.3 Vermiculite

Loose fill vermiculite has been confirmed present within the Old Pump Building within Location No.'s 30 and 31 and is presumed present within the remainder of the building and throughout the Storage Shed, Garage, and Chlorine Buildings. Vermiculite is a friable material. Vermiculite debris was observed present on the floor of the Electrical Room, Location No.30 Old Pump Building.

4.4 Acoustic Ceiling Tiles

Asbestos-containing ceiling tiles located above the metal ceiling tiles in the Old Pump Building - Shop (Location No. 22) remain present and are not accessible.

4.5 Drywall Joint Compound

Drywall (gypsum board) and joint compound suspect to contain asbestos is present in the Old Pump Building and Garage. Drywall joint compound is potentially friable and is in GOOD condition.

4.6 Asbestos Cement Products (Transite)

Asbestos-containing transite boards are present as ceiling and wall finishes in the Old Pump Building Washroom, Dispatch, and Vestibule (Location Nos. 13, 16, and 17). Transite is a non-friable material that has been maintained in GOOD condition.

4.7 Vinyl Floor Tiles

Vinyl floor tiles present within the Pump Building Electrical Room, Location No.6 are non-friable and in GOOD condition.

4.8 Sealants, Caulking, and Putty

Asbestos-containing black tar mastic is applied as a sealant on the exterior lower wall finish of the Pump Building (Location No. 42) and Chlorine Building (Location No. 43). Mastic is a non-friable material which is in GOOD condition.

4.9 Roofing Products

No visual inspection or sampling was conducted at this location. Destructive testing will be required prior to any renovation or demolition activities.

4.10 Other Building Materials

Setting compounds on ceramic tile finishes within the Pump Building are presumed to contain asbestos. Setting compounds are potentially friable and are in GOOD condition.

4.11 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and was excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Roofing felts and tar, mastics;
- Floor levelling compound;
- Ceramic tile setting compound;
- Elevator and lift brakes;
- Electrical components;
- Moulded plastic components (laboratory bench tops);
- Refractory materials and insulations in boilers, and stacks;
- Insulation under metal clad boilers;
- Mechanical packing, ropes and gaskets;

- Vermiculite;
- Adhesives and duct mastics;
- Caulking and putties;
- Fibre-reinforced paints and coatings;
- Paper products;
- Soffit and fascia boards;
- Fire resistant doors;
- Metal clad finishes (Galbestos);
- Stucco, plaster or other cementitious parge coatings;
- Vibration dampers on HVAC equipment;
- Terrazzo;
- Ropes and gaskets in cast-iron bell and spigot joints; and
- Sealants on pipe threads.

5.0 RECOMMENDATIONS

5.1 General

Perform a detailed intrusive assessment prior to building renovation or demolition operations. The assessment should include; destructive testing (e.g. coring and/or removal of building finishes and components), sampling of other hazardous materials (lead, mercury, PCBs, mould, etc.), and materials not tested in this study (e.g. roofing materials, caulking, mastics).

5.2 Remedial Work

The following remedial work is recommended.

Material, Quantity & Condition	Location Name (Location #)	Recommended Procedure
Vermiculite, 5 SF debris	Old Pump Building Electrical Room, Location No.30	Remove in accordance with Moderate Risk Procedures
Parging cement, Pipe insulation 1 fitting in POOR condition	Pump Building Furnace Room, Location No.21	Remove in accordance with Moderate Risk Glovebag Procedures

5.3 On-going Management and Maintenance

The following recommendations are made regarding on-going management and maintenance work involving the asbestos materials identified.

Perform a re-assessment of asbestos materials on an annual basis.

Remove asbestos-containing materials (ACM) prior to alteration or maintenance work if ACM may be disturbed by the work. Follow appropriate asbestos precautions for the classification of work being performed.

Update the asbestos inventory report for the building upon completion of any abatement of ACM.

6.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

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.

7.0 REFERENCES

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

Manitoba

1. Workplace Safety and Health Act W210.
2. Workplace Safety and Health Hazard Regulation (Manitoba Regulation 217/2006), under the Workplace Safety and Health Act.
3. Manitoba Regulation MR 474/88, Manitoba PCB Regulation made under The Dangerous Goods Act.
4. Guide for Asbestos Management – Safe Work Manitoba.
5. Guideline Managing Demolition Debris Containing Hazardous Materials – Environmental Enforcement and Compliance Branch – Manitoba Conservation and Climate

Federal

1. Canada Occupational Health and Safety Regulation, SOR/86-304.
2. Consolidated Transportation of Dangerous Goods Regulations, including Amendment SOR/2019-101, Transportation of Dangerous Goods Act.

APPENDIX I

Methodology

1.0 GENERAL

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible ACM identified in the most recent assessment.

The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

Materials listed as exclusions in the previous reports have remained as exclusions. Sampling, assessment or verification of excluded materials was not conducted.

Existing sampling data, where available, was reviewed and relied upon.

Where sampling was conducted, sample collection was conducted in accordance with our Standard Operating Procedures.

A separate set of samples was collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA 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 were determined by visual examination and available information on the phases of construction and prior renovations.

Samples were collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy was 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 were visually identified without sample confirmation.

The asbestos analysis was completed using a stop-positive approach. Only one result meeting the regulated criteria was 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 stopped analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material were analyzed if no asbestos is detected. In some cases, all samples were analyzed in the sample set regardless of result.

The analysis was performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

The following summarizes the criteria of asbestos definitions. If there is a conflict between federal and provincial criteria, the more stringent will apply:

Jurisdiction	Friable	Non-Friable
Manitoba	0.1%[1]	1%
Federal	1%	1%

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation. Additionally, these terms are used for materials which historically are known to not include asbestos in their manufacturing.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable).
- Condition (good, fair, poor, debris).
- Accessibility (ranking from accessible to all building users to inaccessible).
- Visibility (whether the material is obscured by other building components).
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

For a complete description of the Evaluation Criteria and Basis of Recommendations, refer to Annex A.

Template: Methodology for Asbestos Reassessment, HAZ, July 27, 2021

METHODOLOGY ANNEX A EVALUATION CRITERIA

1.0 EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS

The detailed asbestos assessment provides information regarding the location, condition, accessibility and friability of the asbestos-containing materials (ACM). In order to make recommendations for compliance with current regulations, Pinchin developed the following criteria.

2.0 EVALUATION OF CONDITION

2.1 Friable Sprayed or Trowelled Fireproofing, Thermal Insulation and Texture Finishes (Surfacing Materials)

To evaluate the condition of ACM sprayed or trowelled on fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, the following criteria are applied:

Good	Surface of material shows no significant signs of damage, deterioration or delamination. Good condition includes unencapsulated or unpainted fireproofing or texture finishes, where no or limited delamination or damage is observed, or encapsulated fireproofing or texture finishes where the encapsulant or paint has been applied after the damage or fallout occurred.
Poor	A sprayed material that shows signs of significant damage or is significantly delaminating or deteriorating. This may be limited to surface delamination or some portion of the substrate may be exposed.

In Locations where damage exists in isolated areas, both good and poor condition may be applicable. The extent of each condition will be recorded. Fair condition is not utilized in the evaluation of ACM sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes.

The evaluation of the above products above ceilings may be limited by the number of observations and by building components such as ducts or full height walls that obstruct the above ceiling observations.

2.2 Friable Mechanical or Thermal System Insulation (TSI)

To evaluate the condition of mechanical insulation on vessels, boilers, breeching, ducts, pipes, fan units, equipment etc. the following criteria are applied:

Good	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (i.e. scuffs or stains), but the jacketing is not penetrated.
Fair	Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired.

Poor	Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. Includes components where insulation may have been removed incompletely.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is often not possible to observe each foot of mechanical insulation from all angles.

2.3 Potentially Friable Materials and Miscellaneous Friable Materials

Potentially friable ACM are products that are basically non-friable while in place but have the potential to generate friable dust upon removal or if significantly disturbed without appropriate procedures. These products may become friable if damaged. Potentially friable materials include materials such as acoustic ceiling tiles and plaster. To evaluate the condition of potentially friable materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.
Fair	Showing signs of some cracking or breakage, but is not deteriorating (e.g. cracked plaster, broken but in place ceiling tile, missing tile or section of plaster etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material has deteriorated to a point it has become friable. Normally potentially friable ACM in Poor condition is not repairable and requires at least localized removal and replacement.

2.4 Non-Friable Materials

Non-friable ACM cover a wide range of products with a wide variation in their tendency to release dust or asbestos fibres to the air. Many of these materials, (particularly where the matrix is an unweathered bitumen, asphalt or tar material) do not release fibres except in very unusual circumstances or during significant disturbance (e.g. use of abrasive power tools). Others with a cementitious matrix (asbestos-cement products) can more readily release dust due to abrasion, demolition, weathering, etc. The potential for asbestos release from non-friable ACM is always lower than from friable ACM. To evaluate the condition of non-friable Materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.

Fair	Showing signs of some cracking or breakage but is not deteriorating (e.g. cracked vinyl floor tile, missing piece of tile or transite, etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material to the point at which it cannot be repaired, and it will require at least local removal. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material may have deteriorated to a point where traffic or disturbance may cause it to become friable.

2.5 Evaluation of ACM Debris

The identification of the exact location or presence of debris on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations.

The presence of fallen or dislodged ACM is noted separately from the ACM source and is referred to as Debris. Debris may be friable if from a friable ACM source or a badly deteriorated non-friable ACM source. Debris may also be non-friable (such as fallen pieces of transite sheet or mastic fittings, or broken, dislodged floor tiles).

Debris	Debris may be friable or non-friable but is always identified as debris.

2.6 Evaluation of Presumed Asbestos-Containing Material (PACM)

Presumed asbestos-containing materials (PACM), are building materials that may contain asbestos but were not sampled or analyzed due to inaccessibility or the need to perform destructive testing to obtain a reasonable sample set. Evaluation of these materials is based on the assumption that these PACM are asbestos-containing.

A list of PACM is provided in the report and they are generally not included in the detailed room by room reports. Typically, they are excluded because they are inaccessible or present in very small quantities. If PACM are evaluated, Pinchin uses the criteria that correspond with the type (and friability) of the material listed above.

3.0 EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)	Common areas of the building within reach of all building users (approximately 8 ’- 9’ from floor or standard ceiling height). Includes other areas where occupant activities may result in disturbance of material that is not normally within reach from floor level, but may be disturbed by common activities (e.g. gymnasiums, workshops, warehouses)
Access (B)	Areas of the building accessed primarily by Maintenance/Caretaking/Janitorial Staff and within reach without use of a ladder. Includes areas within reach in Boiler Rooms, Electrical Rooms, Janitors Closets, Elevator Rooms, Mechanical Rooms, etc. Includes materials within reach from fixed ladders or catwalks, mezzanines, and accessible pipe chases.
Access (C) and Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Only includes ACM that are visible to view without the removal or opening of other building components such as ceiling tiles or service access panels. Visible column on HMIS sheets will say YES.
Access (C) and not Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Includes ACM that are not visible to view and require the removal of a building component to see, such as ceilings tiles or access panels to view and access. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points. Visible column on HMIS sheets will say NO.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls or equipment etc. where demolition of the ceiling, wall or equipment etc. is required to reach the ACM. Material inaccessible due to height or location or is only accessed under unusual situations. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in Access D.

4.0 ACTION MATRIX AND DEFINITIONS

Pinchin’s evaluation of the viability of a specific asbestos control option is based on the consideration of the friability, condition, accessibility and visibility of a material. The logic used is that damaged ACM located in an area frequently accessed by all building occupants is of a higher priority than damaged ACM located in an infrequently accessed service area. The action matrix considers the potential for fibre release (primarily from friable ACM) and the possible concerns from regulatory bodies and many building occupants to all damaged ACM (including non-friable).

In any building with asbestos, many current regulations require an Asbestos Management Program be implemented. Depending on the condition and the accessibility, more active measures such as repair or removal may be recommended. The following matrix provides guidance for recommended Actions in the absence of renovation or demolition. In the event of construction or maintenance activity which will disturb ACM more aggressive control or removal will be required.

4.1 Action Matrix

The following tables outline the action decisions based on the relationship of assessed factors. Table I applies to friable ACM. Table II applies to non-friable ACM.

Table I Decision Matrix for Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 5[1]	Action 5[2]	Action 3	Action 1
(B)	Action 7	Action 6[3]	Action 3	Action 1
(C) Visible	Action 7	Action 6	Action 3	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

Table II Decision Matrix for Potentially Friable and Non-Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 7	Action 7[4]	Action 3	Action 1
(B)	Action 7	Action 7	Action 3	Action 1
(C) Visible	Action 7	Action 7	Action 4	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

4.2 Action Definitions

The following are the definitions in the Action Matrix Table presented above:

Action Definitions	
Action 1	Clean-Up of ACM Debris Restrict access that is likely to cause a disturbance of the ACM Debris and clean up ACM Debris. Utilize appropriate asbestos precautions.

[1] If friable ACM in access (A)/Good condition is not proactively removed Action 7 (Manage) is recommended.
[2] If friable ACM in access (A)/Fair condition is not proactively removed repair is recommended.
[3] If friable ACM in access (B)/Fair condition is likely to be disturbed after repair proactive removal is recommended.
[4] Action 7 is recommended for all non-friable ACM in Fair condition however some clients may wish to repair or take some action primarily for cosmetic reasons

Action Definitions	
Action 2	Precautions for Access Which may Disturb ACM Debris Use appropriate means to isolate the debris or to limit entry to the area which may disturb the material. At locations where ACM Debris can remain in place in lieu of removal or clean-up (e.g. Debris on top of ceiling tiles or behind lockable door), Utilize appropriate asbestos precautions to enter the area if this will disturb debris. The precautions will be required until the ACM Debris has been cleaned up.
Action 3	ACM Removal Remove ACM. Utilize asbestos procedures appropriate to the scope of the removal work. Until it is removed, restrict access to the material so it is not disturbed.
Action 4	Precautions for Work Which may Disturb ACM in Poor Condition. Utilize appropriate asbestos precautions if ACM may be disturbed by work on or near ACM. This does not require restricting access to the area, only control of work which may contact or disturb the ACM. Removal is the only viable option if work will disturb ACM.
Action 5	Proactive ACM Removal Remove friable ACM where the presence of friable asbestos in Good condition is not desirable. If friable ACM in Fair condition is not removed, then Repair friable ACM.
Action 6	ACM Repair Repair friable ACM in Fair condition which is not likely to be damaged again or disturbed by normal use of the area or room. Pinchin recommends proactive removal if friable ACM is likely to be damaged or disturbed during normal use of the area or room
Action 7	Asbestos Management Program with Routine Surveillance Implement an Asbestos Management Program, including routine surveillance of ACM. Reassess materials regularly (typically once per year).

Master Template: Methodology Annex A to Appendix I Evaluation Criteria, HAZ, January 10, 2020

APPENDIX II

Additional Photographs

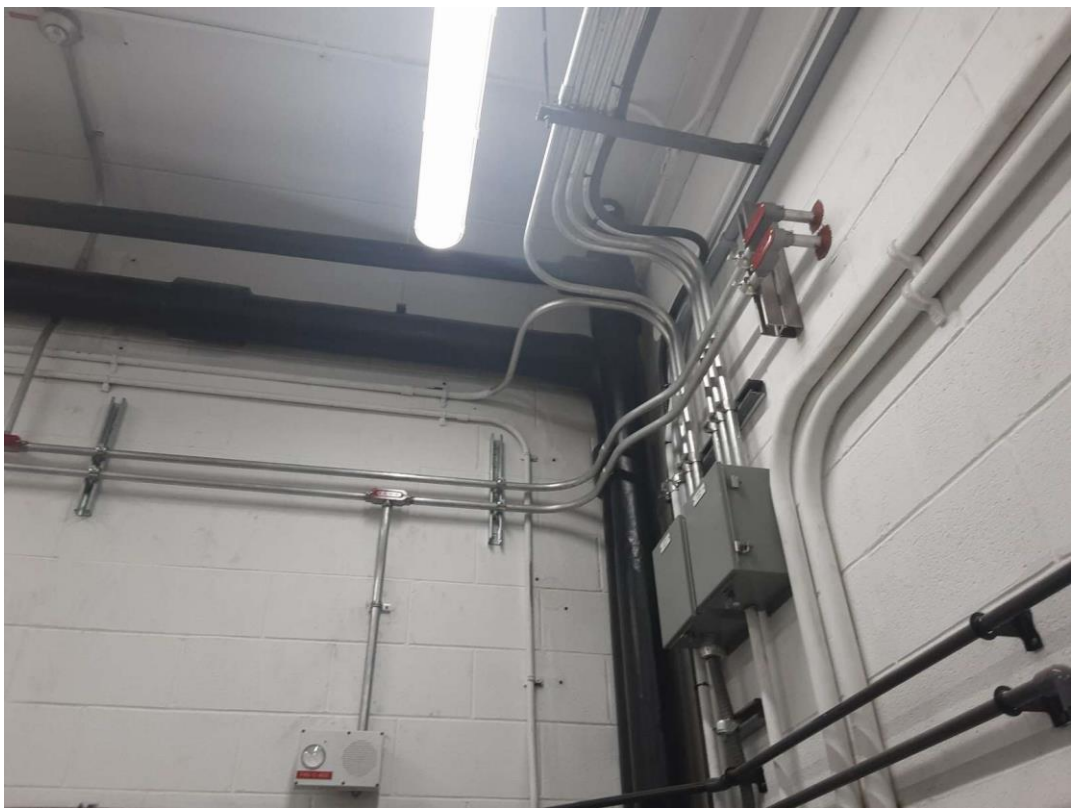
V0001 (Confirmed Asbestos), Piping, Rain Water Leader,
Chlorine Building - Stairwell (Location #: 11)

V0001 (Confirmed Asbestos), Piping, Rain Water Leader,
Chlorine Building - Chlorine Tonner Room (Location #: 8)

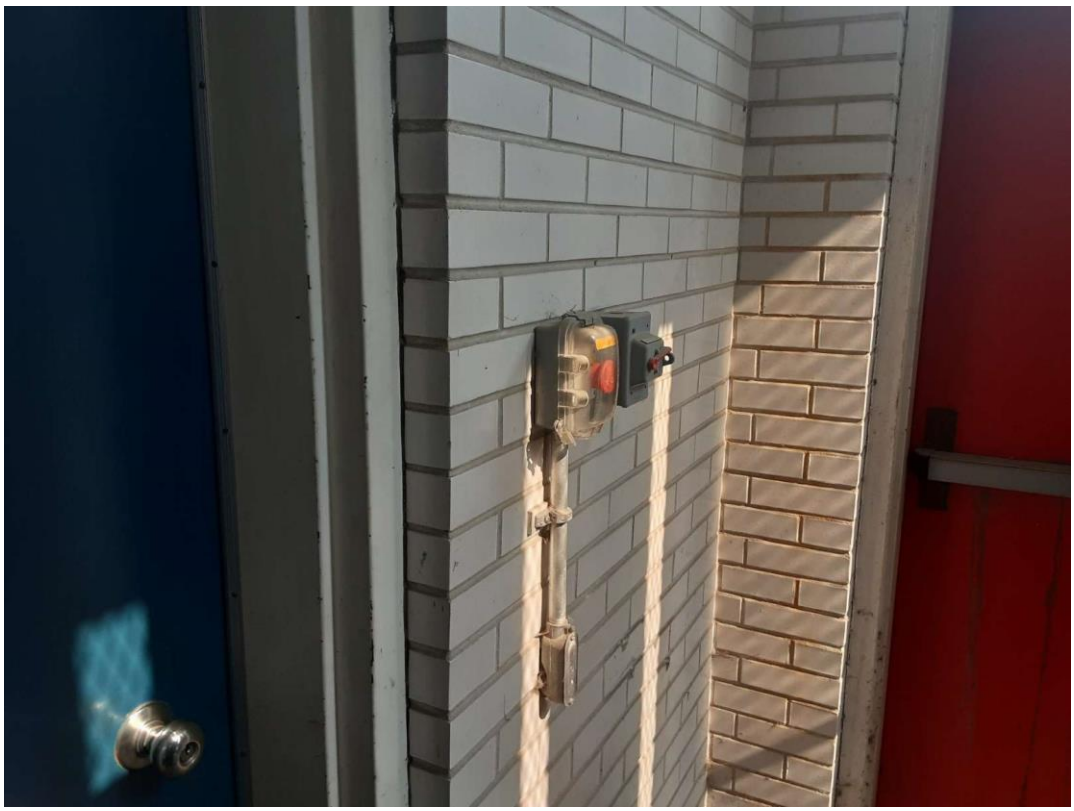
V0001 (Confirmed Asbestos), Piping, Rain Water Leader,
Chlorine Building - Chlorinator Room (Location #: 9)

V0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass,
Chlorine Building - Stairwell (Location #: 11)

V0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass,
Chlorine Building - Chlorine Tonner Room (Location #: 8)



S0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass,
Chlorine Building - Chlorinator Room (Location #: 9)



V9500 (Presumed Asbestos), Wall, Vermiculite,
Chlorine Building - Vestibule (Location #: 10)

V0004 (Confirmed Asbestos), Damaged Piping, Domestic Water (Hot and Cold), Parging over Fibreglass, Old Pump Building - Furnace Room (Location #: 21)

S0025 (Confirmed Asbestos), Wall, Vermiculite/concrete block walls, Old Pump Building - Electrical Room (Location #: 30)

V9000 (Confirmed Asbestos), Wall, Cement Product,
Old Pump Building - Dispatch (Location #: 13)

V9000 (Confirmed Asbestos), Wall, Cement Product,
Old Pump Building - Washroom (Location #: 16)

V9000 (Confirmed Asbestos), Ceiling, Cement Product,
Old Pump Building - Washroom (Location #: 16)

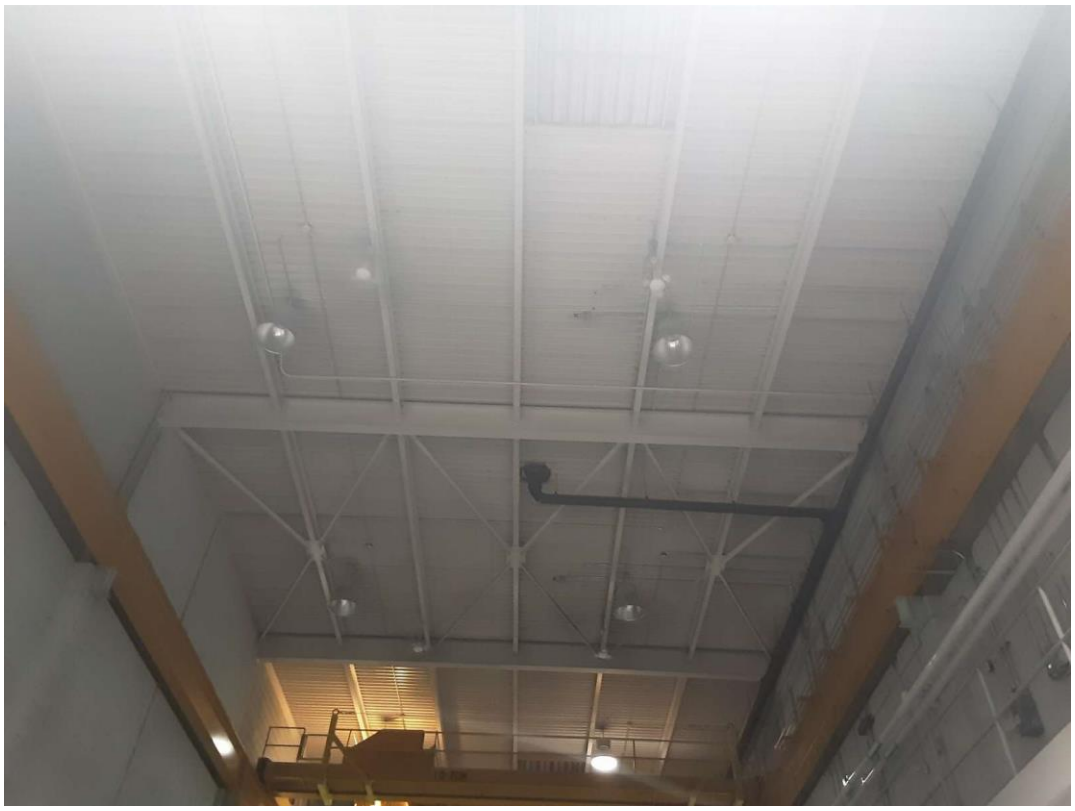
V9500 (Presumed Asbestos), Wall, All, Mortar,
Old Pump Building - Washroom (Location #: 28)

V9500 (Presumed Asbestos), Wall, All, Mortar,
Old Pump Building - Locker Room (Location #: 29) setting compound

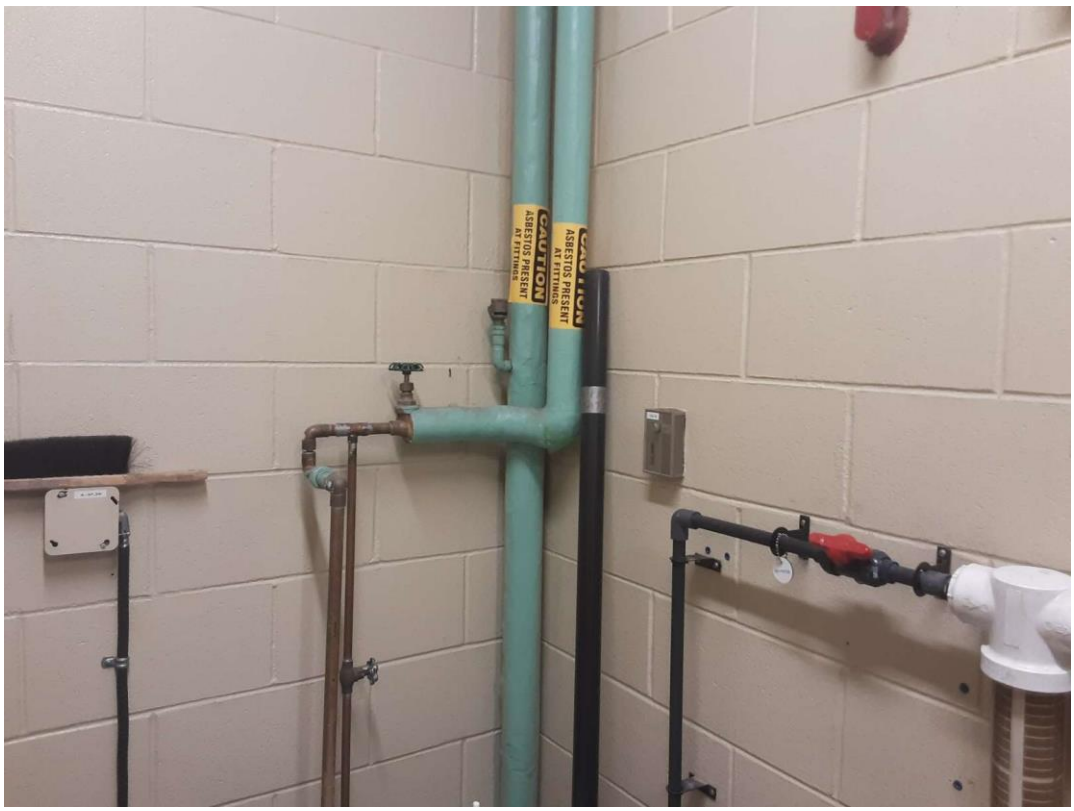
S0001 (Confirmed Asbestos), Piping, Rain Water Leader, Pump Building - Basement (Location #: 1)

S0003 (Confirmed Asbestos), Duct, Generator Exhaust, Magnesia block, Pump Building - Basement (Location #: 1)

V0004 (Confirmed Asbestos), Piping, Chilled Water Return, Parging Cement, Pump Building - Basement (Location #: 1)



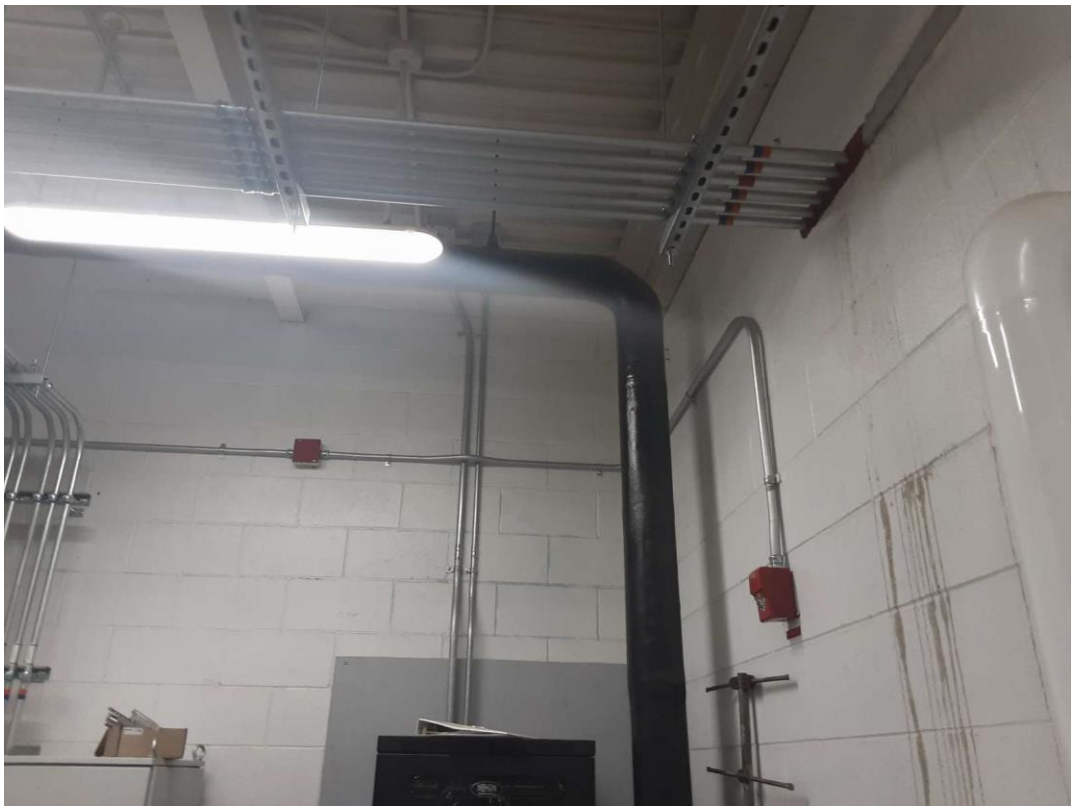
V0004 (Confirmed Asbestos), Piping, Rain Water Leader, Parging Cement, Pump Building - Basement (Location #: 1)



V0006 (Confirmed Asbestos), Piping, Heating Water Return, Parging over Fibreglass, Pump Building - Chlorine Analyzer Room (Location #: 2)

V0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass, Pump Building - Chlorine Analyzer Room (Location #: 2)

V0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging over Fibreglass, Pump Building - Vestibule/Stairwell (Location #: 4)



V0007 (Confirmed Asbestos), Piping, Rain Water Leader, Parging Cement, Pump Building - Filter Room (Location #: 7)

APPENDIX III

Location Summary Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
1.855.PINCHIN www.pinchin.com

Client:Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Chlorine Building (Bldg. B)
Survey Date:
Last Re-Assessment: 2023-06-19
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
8	Chlorine Building - Chlorine Tonner Room	1200	Main-Chlorine Building	A	There was no vermiculite insulation found inside masonry block walls. Mortar on masonry walls is not asbestos containing.
9	Chlorine Building - Chlorinator Room	300	Main-Chlorine Building	A	There was no vermiculite insulation found inside masonry block walls. Mortar on masonry walls is not asbestos containing.
10	Chlorine Building - Vestibule	40	Main-Chlorine Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Mortar on masonry walls is not asbestos containing.
11	Chlorine Building - Stairwell	160	Main-Chlorine Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Mortar on masonry walls is not asbestos containing.
43	Chlorine Building Exterior	0	NA	A	2019 - Confirmed No vermiculite in hollow core walls. Roof sections needs to be tested prior to any renovation or demolition activities. Mortar on masonry walls is not asbestos containing.

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
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Client:Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Garage (Bldg. F)
Survey Date:
Last Re-Assessment: 2023-06-19
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
12	Garage - Garage	960	Main-Garage	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
44	Garage Building Exterior	0	NA	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Roof sections needs to be tested prior to any renovation

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
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Client:Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Storage Shed (Bldg. E)
Survey Date:
Last Re-Assessment: 2023-06-13
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
40	Storage Shed - Storage Shed	300	Main-Storage Shed	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
45	Storage Building Exterior	0	NA	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Roof sections needs to be tested prior to any renovation or demolition activities.

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
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Client:Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Survey Date:
Last Re-Assessment: 2023-06-13
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
13	Old Pump Building - Dispatch	1050	Second-Old Pump Building	A	
14	Old Pump Building - Office	108	Second-Old Pump Building	A	
15	Old Pump Building - Office	108	Second-Old Pump Building	A	Drywall joint compound of the drywall sections needs to be tested prior to any renovation or demolition works
16	Old Pump Building - Washroom	85	Second-Old Pump Building	A	
17	Old Pump Building - Vestibule	35	Second-Old Pump Building	A	
18	Old Pump Building - Stairwell	70	Second-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
19	Old Pump Building - Storage	120	Third-Old Pump Building	A	
20	Old Pump Building - Hallway	70	Main-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
21	Old Pump Building - Furnace Room	105	Main-Old Pump Building	A	Rain Water Leader Pipe is present at the back of the duct Masonry walls suspect to contain asbestos containing vermiculite insulation. Damage DW fittings present June 2017 and still present 2022
22	Old Pump Building - Shop	1835	Main-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
23	Old Pump Building - Office	140	Main-Old Pump Building	A	
24	Old Pump Building - Office	160	Main-Old Pump Building	A	
25	Old Pump Building - Office	170	Main-Old Pump Building	A	
26	Old Pump Building - Office	154	Main-Old Pump Building	A	
27	Old Pump Building - Tool Crib	240	Main-Old Pump Building	A	Location Demolished now part of location 22
28	Old Pump Building - Washroom	132	Main-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Setting compound on ceramic wall tiles is presumed asbestos containing.
29	Old Pump Building - Locker Room	425	Main-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation. Setting compound on ceramic tiles presumed asbestos
30	Old Pump Building - Electrical Room	200	Main-Old Pump Building	A	Masonry walls contain asbestos containing vermiculite insulation.
31	Old Pump Building - Generator Room	600	Main-Old Pump Building	A	Masonry walls contain asbestos containing vermiculite insulation.
32	Old Pump Building - NE Corner Storage Room	100	Basement-Old Pump Building	A	
33	Old Pump Building - Basement	1650	Basement-Old Pump Building	A	
34	Old Pump Building - Storage	200	Basement-	A	

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
	Room		Old Pump Building		
35	Old Pump Building - Record Storage Vault	150	Basement-Old Pump Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation.
36	Old Pump Building - Crawlspace	800	Basement-Old Pump Building	A	
37	Old PUmp Building - Hallway	450	Basement-Old Pump Building	A	
38	Old Pump Building - Sump Pit Area	80	Basement-Old Pump Building	A	
39	Old Pump Building - Sump Room	300	Basement-Old Pump Building	A	
41	Old Pump Building Exterior	0	NA	A	Roof sections needs to be tested prior to any renovation or demolition activities.

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
1.855.PINCHIN www.pinchin.com

Client:Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Survey Date:
Last Re-Assessment: 2023-06-19
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
1	Pump Building - Basement	9000	Basement-Pump Building	A	Setting compound on ceramic tiles is found not to contain asbestos.
2	Pump Building - Chlorine Analyzer Room	225	Main-Pump Building	A	There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos
3	Pump Building - Washroom	75	Main-Pump Building	A	There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos
4	Pump Building - Vestibule/Stairwell	450	Main-Pump Building	A	2019 - Confirmed no vermiculite in hollow core walls Mortar on Masonry walls confirmed non-asbestos
5	Pump Building - Control Room	350	Main-Pump Building	A	No vermiculite insulation found inside masonry walls October 9, 2019 Mortar on Masonry walls confirmed non-asbestos
6	Pump Building - Electrical Room	400	Main-Pump Building	A	2019 - Masonry walls confirmed - no vermiculite insulation. Mortar on Masonry walls confirmed non-asbestos
7	Pump Building - Filter Room	250	Main-Pump Building	A	There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos
42	Pump Building Exterior	0	NA	A	2019 - Confirmed No vermiculite in hollow core walls Roof sections needs to be tested prior to any renovation or demolition activities. July 2020 Exterior Stucco Does not contain asbestos 275519

APPENDIX IV

Asbestos Material Summary Report / Sample Log

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
1.855.PINCHIN www.pinchin.com

Client:Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Chlorine Building (Bldg. B)** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V0001	Piping | Rain Water Leader | | Sweatwrap/fai/gen/loc 1	8,9,11	A	93	0	0	0	Chrysotile	Yes	NF
Asbestos	S0007	Piping | Rain Water Leader | Parging Over Fibreglass | Parging/ftg/rwl/loc 9	8,9,11	A	0	0	15	0	Chrysotile	Yes	F
Asbestos	V0015	Wall | Exterior | Plaster | Plaster On Concrete, Exterior Wall Foundation, Pump Bldg (sample No. 0034 - August 28, 2015 - 1517151_plm) (for Sample 0015b-c It Was Sample No. 0034b-c- June 30, 2016 - B131169)	43	A	0	0	0	100	None Detected	No	
Asbestos	S0019	Wall | All | Mortar | Plaster/gout On Masonry Block Walls (loc. 8 & 9), Chlorine Tonner Room And Chlorinator Room, Chlorine Bldg. (jan. 15, 2020 - Lab. Ref. B224881)	8,9,10,11,43	A	0	0	0	100	None Detected	No	
Asbestos	V9500	Other | Roof | Roofing Material |	43	A	0	0	0	0	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Vermiculite |	10,11	A	0	0	0	100	Presumed Asbestos	Yes	F
Asbestos	V0000	Wall | | Vermiculite |	8,9	A	0	0	0	100	Non Asbestos	No	

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
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Client:Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Garage (Bldg. F)** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0018	Wall | Exterior | Plaster | Plaster On Concrete, Exterior Wall Foundation, Garage Bldg (sample No. 0037 - August 28, 2015 - 1517151_plm) (for Sample 0018b-c It Was Sample No. 0037b-c- June 30, 2016 - B131169)	44	A	0	0	0	100	None Detected	No	
Asbestos	V9500	Wall | Roof | Roofing Material |	44	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Vermiculite |	12	A	0	0	0	100	Presumed Asbestos	Yes	F
Asbestos	V9500	Wall | | Vermiculite/concrete Block Walls |	44	A	0	0	0	100	Presumed Asbestos	Yes	F

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
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Client:Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Storage Shed (Bldg. E)** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V0018	Wall | Exterior | Plaster | Plaster On Concrete, Exterior Wall Foundation, Garage Bldg (sample No. 0037 - August 28, 2015 - 1517151_plm) (for Sample 0018b-c It Was Sample No. 0037b-c- June 30, 2016 - B131169)	45	A	0	0	0	100	None Detected	No	
Asbestos	V9500	Other | Roof | Roofing Material |	45	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Vermiculite/concrete Block Walls |	40,45	A	0	0	0	100	Presumed Asbestos	Yes	F

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

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Client:Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Pump Building (Bldg. A)** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0001	Piping | Rain Water Leader | | Sweatwrap / Fai / Gen / Loc 1	1,2,4,7	A	228	0	0	0	Chrysotile	Yes	NF, F
Asbestos	S0002	Piping | Domestic Water (hot And Cold) | Sweat Wrap Pipe Insulation | Sweatwrap / Dw / Loc 1	1	A	0	0	0	800	None Detected	No	
Asbestos	S0003	Duct | Generator Exhaust | Magnesia Block | Magblock / Gene / Loc 1	1	A	145	0	0	0	Chrysotile	Yes	F
Asbestos	V0004	Piping | Chilled Water Return, Rain Water Leader | Parging Cement | Parging / Ftg / Dw / Loc 1	1	A	0	0	9	0	Chrysotile	Yes	F
Asbestos	S0005	Piping | City Water/service Water | Parging Over Fibreglass | Parging / Ftg / Fai / Gen / Loc 1	1	A	0	0	8	0	Chrysotile	Yes	F
Asbestos	S0006	Piping | Heating Water Supply, Heating Water Return | Parging Over Fibreglass | Parging / Ftg / Hws / Loc 2	2	A	0	0	12	0	Chrysotile	Yes	F
Asbestos	V0007	Piping | Rain Water Leader | Parging Cement | Parging / Ftg / Rwl / Loc 9	2,4,7	A	0	0	9	0	Chrysotile	Yes	F
Asbestos	S0012	Floor | All | Vinyl Floor Tile And Mastic | Vinyl Floor Tiles (grey With Black Stripes) (homogenous, Beige, Consolidated Rubbery) (homogenous, Yellow, Soft, Sticky Material On Back), Control Room-pump Bldg, Loc No. 05, Mcphilips Pumping Station	5	A	0	0	0	100	None Detected	No	
Asbestos	S0014	Wall | Exterior | Plaster | Stucco Plaster, Exterior Wall, Pump Bldg (sample No. 0033 - August 28, 2015 - 1517151_plm) (for Sample 0014b-c It Was Sample No. 0033b-c- June 30, 2016 - B131169)	42	A	0	422	0	0	None Detected	No	
Asbestos	S0015	Wall | Exterior | Plaster | Plaster On Concrete, Exterior Wall Foundation, Pump Bldg (sample No. 0034- August 28, 2015 - 1517151_plm) (for Sample 0015b-c It Was Sample No. 0034b-c- June 30, 2016 - B131169)	42	A	0	360	0	0	None Detected	No	
Asbestos	S0016	Wall | Exterior | Tar | Black Tar, Exterior Wall, Pump Bldg (sample No. 0035 - August 28, 2015) 1517151_plm	42	A	0	0	0	100	Chrysotile	Yes	NF
Asbestos	S0019	Wall | All | Mortar | Grout/cement Mortar/plaster On Block Walls, Control Room (loc. 5) And Electrical Room (loc. 6), Pump Bldg. (october 23, 2019 - Lab Ref. B220159)	5,6	A	0	0	0	100	None Detected	No	
Asbestos	S0020	Wall | All | Mortar | Thin Set Back Of Blue Tile, Vestibule/stairwell (loc. 4), Pump Bldg. (october 23, 2019 - Lab Ref. B220159)	4	A	0	0	0	100	None Detected	No	

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0021	Floor | All | Adhesive/mastic | Adhesive Mastic And Terrazo Tile (loc. 2 & 3), Chlorine Room And Washroom, Pump Bldg. (jan. 15, 2020 - Lab. Ref. B224880	2,3	A	0	0	0	100	None Detected	No	
Asbestos	S0022	Floor | All | Plaster | Plaster/grout On Terrazo Tile (loc. 2 & 3), Chlorine Room And Washroom, Pump Bldg. (jan. 15, 2020 - Lab. Ref. B224880	2,3	A	0	0	0	100	None Detected	No	
Asbestos	S0023	Wall | All | Mortar | Plaster/grout On Cinder Block Walls (loc. 2, 3 & 7), Chlorine Room, Washroom And Filter Room, Pump Bldg. (jan. 15, 2020 - Lab. Ref. B224880	2,3,7	A	0	0	0	100	None Detected	No	
Asbestos	S0025	Floor | All | Mortar | Plaster/grout On Ceramic Tile (loc. 1), Pump Floor, Pump Bldg. (jan. 15, 2020 - Lab. Ref. B224880	1	A	0	0	0	100	None Detected	No	
Asbestos	V9500	Other | Built Up Roofing | Roofing Material |	42	A	0	0	0	0	Presumed Asbestos	Yes	NF
Asbestos	V0000	Floor | All | Adhesive/mastic |	4	A	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Floor | All | Plaster |	4	A	0	0	0	100	Non Asbestos	No	
Asbestos	V0000	Piping | Chilled Water Return, Chilled Water Supply | Fibreglass |	1,7	A	14	0	2	0	Non Asbestos	No	
Asbestos	V0000	Wall | | Mortar |	4	A	0	0	0	0	Non Asbestos	No	
Asbestos	V0000	Wall | All | Plaster |	42	A	0	0	0	100	Non Asbestos	No	

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
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Client:Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)** **Survey Date:**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V0002	Piping | Domestic Water (hot And Cold) | Sweat Wrap Pipe Insulation | Sweatwrap / Dw / Loc 1	21,36,39	A	70	0	0	0	None Detected	No	
Asbestos	V0004	Piping | Domestic Water (hot And Cold) | Parging Over Fibreglass | Parging / Ftg / Dw / Loc 1	21,36,39	A	0	0	17	0	Chrysotile	Yes	F, NF
Asbestos	S0008	Ceiling | | Ceiling Tiles (lay-in) | Ceiling Tile / At-1 / 24 X 48 Lay In / Loc 13	13,14,15	A	0	1266	0	0	None Detected	No	
Asbestos	V0009	Ceiling | | Ceiling Tiles (glue-on) | Ceiling Tile / At-2 / 12 X 12 Glued On / Loc 18	17,18,20	A	0	175	0	0	None Detected	No	
Asbestos	S0010	Wall | | Plaster | Plaster Wall / Shop / Old Pump Building / Loc 22	22	A	0	0	0	100	None Detected	No	
Asbestos	S0011	Ceiling | All | Ceiling Tiles (lay-in) | Ceiling Tile / Shop / Old Pump Building / Loc 22 Note: From Proj. No. 64431/s-0001/lab Ref:b78109/dated Jan. 27, 2011	22	A	0	0	0	100	Chrysotile	Yes	PF
Asbestos	S0017	Wall | | Plaster | Plaster On Concrete, Exterior Wall, Old Pump Bldg (sample No. 0036 - August 28, 2015 - 1517151_plm) (for Sample 0017b-c It Was Sample No. 0036b-c- June 30, 2016 - B131169)	41	A	0	300	0	0	None Detected	No	
Asbestos	S0019	Floor | All | Terrazzo | Terrazo Floor, Electrical Room And Shop Floor (loc. 30 & 22), Old Pump Bldg.(jan. 15, 2020 - B224882)	22,30	A	0	0	0	100	None Detected	No	
Asbestos	S0020	Wall | | Drywall And Joint Compound | Drywall Joint Cpd. On Walls, Electrical Room And Generator Room(loc. 30 & 31), Old Pump Bldg. (jan. 15, 2020 - B224882)	30,31	A	0	0	0	100	None Detected	No	
Asbestos	S0021	Wall | All | Plaster | Plaster/grout On Masonry Block Walls, Electrical Room And Generator Room(loc. 30 & 31), Old Pump Bldg.(jan. 15, 2020 - B224882)	30,31	A	0	0	0	100	None Detected	No	
Asbestos	S0023	Wall | All | Mortar | Plaster/grout On Ceramic Clay Tile On Walls, Electrical Room And Generator Room(loc. 30 & 31), Old Pump Bldg. (jan. 15, 2020 - B224882)	30	A	0	0	0	100	None Detected	No	
Asbestos	S0024	Wall | All | Plaster | Plaster/grout On Quarry Tiles On Walls, Generator Room And Shop Floor(loc. 31 & 22), Old Pump Bldg.(jan. 15, 2020 - B224882)	22,31	A	0	0	0	100	None Detected	No	
Asbestos	S0025	Wall | | Vermiculite/concrete Block Walls | Vermiculite Insulation In Masonry Block Walls, Electrical Room And Generator Room(loc. 30 & 31), Old Pump Bldg.(jan. 15, 2020 - B224883)	30,31	A	0	5	0	100	Libby Amphibole Detected	Yes	F

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	V9000	Ceiling | | Cement Product |	16	A	0	128	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9000	Wall | | Cement Product |	13,16,17	A	0	914	0	0	Confirmed Asbestos	Yes	NF
Asbestos	V9500	Ceiling | | Drywall And Joint Compound |	13,14,15	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Other | Built Up Roofing | Roofing Material |	41	A	0	0	0	0	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Drywall And Joint Compound |	13,14,15,28,29	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | All | Mortar |	28,29	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Vermiculite |	18,20,22,27,28,35	A	0	0	0	100	Presumed Asbestos	Yes	F
Asbestos	V9500	Wall | | Vermiculite/concrete Block Walls |	21,29	A	0	0	0	100	Presumed Asbestos	Yes	F
Asbestos	V0000	Floor | | Vinyl Sheet Flooring |	13,14,15,16,17,24,25,31	A	0	2316	0	0	Non Asbestos	No	

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

APPENDIX V

HMIS Data Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

ALL DATA REPORT

PINCHIN
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Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Garage (Bldg. F)
Location: #12 : Garage - Garage
Floor: Main-Garage
Room #:
Area (sqft): 960
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Drywall (no compound)														
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Joist	Wood	No Information	NI												
Wall		Masonry	No Information	Drywall (no compound)	B	N										
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall		Drywall (no compound)														

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Garage (Bldg. F)
Location: #44 : Garage Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	Exterior	Plaster	Base	Paint	A	Y		100			%	S0018	None Detected	N.D.	None	
Wall	Exterior	Masonry	Surface	Paint	A	Y										
Wall	Roof	Roofing material	Surface		C	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF

Masonry walls suspect to contain asbestos containing vermiculite insulation. Roof sections needs to be tested prior to any renovation

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

ALL DATA REPORT

PINCHIN
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Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #1 : Pump Building - Basement
Floor: Basement-Pump Building
Room #:
Area (sqft): 9000
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																	
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	N/A	No Information	NI												
Duct	Generator Exhaust	Magnesia block	System	Metal	C	Y		145			LF	S0003	Chrysotile	25-50%	Confirmed Asbestos	F
Floor		Ceramic Tiles	No Information	NI												
Floor[1]	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	S0025	None Detected	N.D.	None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Chilled Water Return	Fibreglass	Straight	Canvas	C	Y						V0000	Non-Asbestos		None	
Piping	Chilled Water Return	Parging Cement	Fitting	Canvas	C	Y		5			EA	V0004	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Chilled Water Supply	Fibreglass	Straight	Canvas	C	Y						V0000	Non-Asbestos		None	
Piping	City Water/service Water	Parging over Fibreglass	Fitting	Canvas	C	Y		8			EA	S0005	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		800			%	S0002	None Detected	N.D.	None	
Piping	Rain Water Leader		Straight	Canvas	C	Y		40			LF	S0001	Chrysotile	50-75%	Confirmed Asbestos	
Piping	Rain Water Leader	Parging Cement	Fitting	Canvas	C	Y		4			EA	V0004	Chrysotile	10-25%	Confirmed Asbestos	F
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Setting compound on ceramic tiles is found not to contain asbestos.
1 - setting compound

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #2 : Pump Building - Chlorine Analyzer Room
Floor: Main-Pump Building
Room #:
Area (sqft): 225
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor	All	Plaster	Surface	Ceramic Tiles	A	Y		100			%	S0022	None Detected	N.D.	None	
Floor	All	Adhesive/mastic	Surface	Ceramic Tiles	A	N		100			%	S0021	None Detected	N.D.	None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Heating Water Return	Fibreglass	Straight	Canvas	C	Y										
Piping	Heating Water Return	Parging over Fibreglass	Fitting	Canvas	C	Y		6			EA	V0006	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Heating Water Supply	Fibreglass	Straight	Canvas	C	Y			3							
Piping	Heating Water Supply	Parging over Fibreglass	Fitting	Canvas	C	Y		6			EA	S0006	Chrysotile	25-50%	Confirmed Asbestos	F
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		2			EA	V0007	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	Y		16			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	F
Structure	Beam, Deck	Metal	No Information	NI												
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0023	None Detected	N.D.	None	

There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #3 : Pump Building - Washroom
Floor: Main-Pump Building
Room #:
Area (sqft): 75
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI								IN				
Floor		Ceramic Tiles	No Information	NI												
Floor	All	Plaster	Surface	Ceramic Tiles	A	Y		100			%	S0022	None Detected	N.D.	None	
Floor	All	Adhesive/mastic	Surface	Ceramic Tiles	A	N		100			%	S0021	None Detected	N.D.	None	
Mechanical Equipment	Not Found	NI	No Information	NI								IN				
Other	Not Found	NI	No Information	NI								IN				
Piping	Not Found	NI	No Information	NI								IN				
Structure	Beam, Deck	Metal	No Information	NI												
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0023	None Detected	N.D.	None	

There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Pump Building (Bldg. A)**
Location: #4 : Pump Building - Vestibule/Stairwell **Floor: Main-Pump Building** **Room #:** **Area (sqft): 450**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor[1]	All	Plaster	Surface	Ceramic Tiles	A	Y		100			%	V0000	Non-Asbestos		None	
Floor[2]	All	Adhesive/mastic	Surface	Ceramic Tiles	A	N		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		3			EA	V0007	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweat Wrap pipe insulation	Straight	Canvas	C	N		150			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	F
Structure	Beam, Deck	Metal	No Information	NI												
Wall[3]		Mortar	No Information	Masonry								V0000	Non-Asbestos		None	
Wall	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	S0020	None Detected	N.D.	None	

2019 - Confirmed no vermiculite in hollow core walls Mortar on Masonry walls confirmed non-asbestos
1 - Determined to be non-asbestos by representative sampling in other locations
2 - Determined to be non-asbestos by representative sampling in other locations
3 - Drilled hollow cor - no vermiculite present

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #5 : Pump Building - Control Room
Floor: Main-Pump Building
Room #:
Area (sqft): 350
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor	All	Vinyl Floor Tile and Mastic	Not Applicable	N/A	B	Y		100			%	S0012	None Detected	N.D.	None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	All	Not Insulated	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	No Information	NI												
Wall	All	Mortar	Surface	Preformed Block	A	Y		100			%	S0019	None Detected	N.D.	None	

No vermiculite insulation found inside masonry walls October 9, 2019 Mortar on Masonry walls confirmed non-asbestos

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #6 : Pump Building - Electrical Room
Floor: Main-Pump Building
Room #:
Area (sqft): 400
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall[1]		Masonry	No Information									0000	Non-Asbestos			
Wall	All	Mortar	Surface	Preformed Block	A	Y		100			%	S0019	None Detected	N.D.	None	

2019 - Masonry walls confirmed - no vermiculite insulation. Mortar on Masonry walls confirmed non-asbestos
1 - Drilled test holes, no vermiculite present

Client: Cowww
Location: #7 : Pump Building - Filter Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Pump Building

Building Name: Pump Building (Bldg. A)
Room #:
Last Re-Assessment: 2023-06-19

Area (sqft): 250

ASBESTOS																	
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Concrete (poured)	No Information	Paint		Y										
Ceiling		Concrete (poured)														
Ceiling		Metal	No Information	Paint												
Duct	Not Found	NI														
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Floor		Concrete (poured)														
Mechanical Equipment	Air Handling Unit	Fibreglass		Canvas	B	Y										
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	Fibreglass	B	Y										
Mechanical Equipment	Motor	Not Insulated														
Other	Not Found	NI	No Information	NI												
Piping	Chilled Water Return	Fibreglass	Straight	Canvas	B	Y		7			LF	V0000	Non-Asbestos		None	
Piping	Chilled Water Return	Fibreglass	Fitting	Canvas	B	Y		1			EA	V0000	Non-Asbestos		None	
Piping	Chilled Water Return	Fibreglass	Straight	Canvas	B	Y										
Piping	Chilled Water Return	Abated Material	Fitting	Canvas	B	Y					EA	V0004	[None]	10-25%	[Abated]	
Piping	Chilled Water Supply	Fibreglass	Straight	Canvas	B	Y		7			LF	V0000	Non-Asbestos		None	
Piping	Chilled Water Supply	Fibreglass	Fitting	Canvas	B	Y		1			EA	V0000	Non-Asbestos		None	
Piping	Chilled Water Supply	Fibreglass	Straight	Canvas	B	Y										
Piping	Chilled Water Supply	Abated Material	Fitting	Canvas	B	Y					EA	V0004	[None]	10-25%	[Abated]	
Piping	Not Found	NI	No Information	NI												
Piping	Rain Water Leader	Parging Cement	Fitting	Canvas	C	Y		4			EA	V0007	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Rain Water Leader	Sweatwrap	Straight	Canvas	C	Y		22			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	F
Structure		Steel														
Structure	Beam, Deck	Metal	No Information	Paint												
Wall		Concrete (poured)														
Wall		Masonry														

ASBESTOS															
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Wall		Ceramic Tiles														
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0023	None Detected	N.D.	None	

There was no vermiculite insulation found inside masonry block walls. Mortar on Masonry walls confirmed non-asbestos

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Pump Building (Bldg. A)
Location: #42 : Pump Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other	Built Up Roofing	Roofing material										V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Masonry		Clay Tile (block)	B	N										
Wall	All	Plaster	Surface	Quarry tile	A	Y		100			%	V0000	Non-Asbestos		None	
Wall	Exterior	Clay Tile (block)	Surface	N/A	A	Y										
Wall	Exterior	Plaster	Surface	Paint	A	Y		420		2	SF	S0014	None Detected	N.D.	None	
Wall	Exterior	Plaster	Base	N/A	A	Y		360			SF	S0015	None Detected	N.D.	None	
Wall	Exterior	Tar			A	Y		100			%	S0016	Chrysotile	5-10%	Confirmed Asbestos	NF

2019 - Confirmed No vermiculite in hollow core walls Roof sections needs to be tested prior to any renovation or demolition activities. July 2020 Exterior Stucco Does not contain asbestos 275519

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

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Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Storage Shed (Bldg. E)
Location: #40 : Storage Shed - Storage Shed
Floor: Main-Storage Shed
Room #:
Area (sqft): 300
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Drywall (no compound)														
Duct	Exhaust	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Joist	Wood	No Information	NI												
Wall		Masonry	No Information	Drywall (no compound)	B	N										
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall		Drywall (no compound)														

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Storage Shed (Bldg. E)
Location: #45 : Storage Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other	Roof	Roofing material	Surface		C	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	Exterior	Plaster	Base	Paint	A	Y		100			%	V0018	None Detected	N.D.	None	
Wall	Exterior	Masonry	Surface	Paint	A	Y										

Masonry walls suspect to contain asbestos containing vermiculite insulation. Roof sections needs to be tested prior to any renovation or demolition activities.

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

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Client: Cowww
Location: #8 : Chlorine Building - Chlorine Tonner Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Chlorine Building

Building Name: Chlorine Building (Bldg. B)
Room #:
Last Re-Assessment: 2023-06-19

Area (sqft): 1200

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader		Straight	Canvas	C	Y		40			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		6			EA	V0007	Chrysotile	10-25%	Confirmed Asbestos	F
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI				1230			SF					
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V0000	Non-Asbestos		None	
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0019	None Detected	N.D.	None	

There was no vermiculite insulation found inside masonry block walls. Mortar on masonry walls is not asbestos containing.

Client: Cowww
Location: #9 : Chlorine Building - Chlorinator Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Chlorine Building

Building Name: Chlorine Building (Bldg. B)
Room #:
Last Re-Assessment: 2023-06-19

Area (sqft): 300

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader		Straight	Canvas	C	Y		45			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		6			EA	S0007	Chrysotile	10-25%	Confirmed Asbestos	F
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI				600			SF					
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V0000	Non-Asbestos		None	
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0019	None Detected	N.D.	None	

There was no vermiculite insulation found inside masonry block walls. Mortar on masonry walls is not asbestos containing.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Chlorine Building (Bldg. B)
Location: #10 : Chlorine Building - Vestibule
Floor: Main-Chlorine Building
Room #:
Area (sqft): 40
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	V0019	None Detected	N.D.	None	

Masonry walls suspect to contain asbestos containing vermiculite insulation. Mortar on masonry walls is not asbestos containing.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Chlorine Building (Bldg. B)
Location: #11 : Chlorine Building - Stairwell
Floor: Main-Chlorine Building
Room #:
Area (sqft): 160
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Rain Water Leader		Straight	Canvas	C	Y		8			LF	V0001	Chrysotile	50-75%	Confirmed Asbestos	
Piping	Rain Water Leader	Parging over Fibreglass	Fitting	Canvas	C	Y		3			EA	V0007	Chrysotile	10-25%	Confirmed Asbestos	F
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	V0019	None Detected	N.D.	None	

Masonry walls suspect to contain asbestos containing vermiculite insulation. Mortar on masonry walls is not asbestos containing.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Chlorine Building (Bldg. B)
Location: #43 : Chlorine Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-19

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other	Roof	Roofing material										V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Masonry		Clay Tile (block)	B	N										
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	V0019	None Detected	N.D.	None	
Wall	Exterior	Clay Tile (block)	Surface	N/A	A	Y										
Wall	Exterior	Plaster	Base	N/A	A	Y		100			%	V0015	None Detected	N.D.	None	

2019 - Confirmed No vermiculite in hollow core walls. Roof sections needs to be tested prior to any renovation or demolition activities. Mortar on masonry walls is not asbestos containing.

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

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Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #13 : Old Pump Building - Dispatch
Floor: Second-Old Pump Building
Room #:
Area (sqft): 1050
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling Tiles (lay-in)	Surface	N/A	C	Y		1050			SF	S0008	None Detected	N.D.	None	
Ceiling		Drywall and joint compound			C			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		1050			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Accessible	NI	No Information	NI												
Wall		Drywall and joint compound			A			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Masonry														
Wall		Cement Product	Surface		A	Y		450			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #14 : Old Pump Building - Office
Floor: Second-Old Pump Building
Room #:
Area (sqft): 108
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling Tiles (lay-in)	Surface	N/A	C	Y		108			SF	V0008	None Detected	N.D.	None	
Ceiling		Drywall and joint compound			C			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		108			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Accessible	NI	No Information	NI												
Wall		Drywall and joint compound			A			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #15 : Old Pump Building - Office
Floor: Second-Old Pump Building
Room #:
Area (sqft): 108
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling Tiles (lay-in)	Surface	N/A	C	Y		108			SF	V0008	None Detected	N.D.	None	
Ceiling		Drywall and joint compound			C			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		108			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Accessible	NI	No Information	NI												
Wall		Drywall and joint compound			A			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF

Drywall joint compound of the drywall sections needs to be tested prior to any renovation or demolition works

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #16 : Old Pump Building - Washroom
Floor: Second-Old Pump Building
Room #:
Area (sqft): 85
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Cement Product	Surface		A	Y		128			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		85			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Accessible	NI	No Information	NI												
Wall		Cement Product	Surface		A	Y		352			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #17 : Old Pump Building - Vestibule
Floor: Second-Old Pump Building
Room #:
Area (sqft): 35
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling tiles (glue-on)	Surface	N/A	C	Y		35			SF	V0009	None Detected	N.D.	None	
Duct	Not Found	NI	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		35			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Wood														
Wall		Cement Product	Surface		A	Y		112			SF	V9000	Confirmed Asbestos		Confirmed Asbestos	NF

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #18 : Old Pump Building - Stairwell
Floor: Second-Old Pump Building
Room #:
Area (sqft): 70
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling tiles (glue-on)	Surface	N/A	C	Y		70			SF	V0009	None Detected	N.D.	None	
Duct	Not Found	NI	No Information	NI												
Floor	All	Terrazzo	Surface		A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #19 : Old Pump Building - Storage **Floor: Third-Old Pump Building** **Room #:** **Area (sqft): 120**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #20 : Old Pump Building - Hallway **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 70**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling tiles (glue-on)	Surface	N/A	C	Y		70			SF	V0009	None Detected	N.D.	None	
Duct	Not Found	NI	No Information	NI												
Floor	All	Terrazzo	Surface		A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Wood	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww
Location: #21 : Old Pump Building - Furnace Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 105
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Fresh Air Intake	Not Insulated	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	B	Y		4	2	1	EA	V0004	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	B	Y		20			LF	V0002	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Masonry														
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Rain Water Leader Pipe is present at the back of the duct Masonry walls suspect to contain asbestos containing vermiculite insulation. Damage DW fittings present June 2017 and still present 2022

Client: Cowww
Location: #22 : Old Pump Building - Shop
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Last Re-Assessment: 2023-06-13

Area (sqft): 1835

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Metal	No Information	NI												
Ceiling	All	Ceiling Tiles (lay-in)	No Information	Metal	C	N		100			%	S0011	Chrysotile	>75%	Confirmed Asbestos	PF
Duct	Supply Air	Not Insulated	No Information	NI												
Floor	All	Terrazzo	Surface	N/A	A	Y		100			%	S0019	[None]		[None]	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Accessible	NI	No Information	NI												
Wall		Plaster	Surface	N/A	A	Y		100			%	S0010	None Detected	N.D.	None	
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0024	None Detected	N.D.	None	

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #23 : Old Pump Building - Office **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 140**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	Surface	Carpet	A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Found	NI	No Information	NI												
Wall		Wood	No Information	NI												

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #24 : Old Pump Building - Office **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 160**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	Carpet	A	N		160			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Found	NI	No Information	NI												
Wall		Wood	No Information	NI												

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #25 : Old Pump Building - Office **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 170**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		170			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Found	NI	No Information	NI												
Wall		Wood	No Information	NI												

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #26 : Old Pump Building - Office **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 154**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	Surface		A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Found	NI	No Information	NI												
Wall		Wood	No Information	NI												

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #27 : Old Pump Building - Tool Crib
Floor: Main-Old Pump Building
Room #:
Area (sqft): 240
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor	All	Terrazzo	Surface		A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Joist	Wood	No Information	NI												
Wall		Wood	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Location Demolished now part of location 22

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #28 : Old Pump Building - Washroom
Floor: Main-Old Pump Building
Room #:
Area (sqft): 132
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Supply Air	Drywall (no compound)														
Floor	All	Terrazzo	ALL		A	Y										
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Drywall and joint compound			A			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF

Masonry walls suspect to contain asbestos containing vermiculite insulation. Setting compound on ceramic wall tiles is presumed asbestos containing.

Client: Cowww **Site: 360 McPhillips Ave., Winnipeg, MB** **Building Name: Old Pump Building (Bldg. D)**
Location: #29 : Old Pump Building - Locker Room **Floor: Main-Old Pump Building** **Room #:** **Area (sqft): 425**
Survey Date: 2023-06-09 **Last Re-Assessment: 2023-06-13**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Exhaust	Not Insulated	No Information	NI												
Floor	All	Terrazzo	Surface		A	Y										
Mechanical Equipment	Fan Unit	Not Insulated	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Drywall and joint compound			A			100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F
Wall[1]	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF

Masonry walls suspect to contain asbestos containing vermiculite insulation. Setting compound on ceramic tiles presumed asbestos
1 - setting compound

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #30 : Old Pump Building - Electrical Room
Floor: Main-Old Pump Building
Room #:
Area (sqft): 200
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct		NI	No Information	NI												
Floor	All	Terrazzo	Surface	N/A	A	Y		100			%	S0019	[None]		[None]	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Drywall and joint compound			A			100			%	S0020	None Detected	N.D.	None	
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N				5	SF	S0025	Libby Amphibole Detected	>75%	Confirmed Asbestos	F
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	S0025	Libby Amphibole Detected	>75%	Confirmed Asbestos	F
Wall	All	Mortar	Surface	Masonry	A	Y		100			%	S0021	None Detected	N.D.	None	
Wall	All	Mortar	Surface	Ceramic Tiles	A	Y		100			%	S0023	None Detected	N.D.	None	

Masonry walls contain asbestos containing vermiculite insulation.

Client: Cowww
Location: #31 : Old Pump Building - Generator Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Main-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Last Re-Assessment: 2023-06-13

Area (sqft): 600

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Exhaust	Not Insulated	No Information	NI												
Duct	Fresh Air Intake	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		600			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite/concrete block walls	Insulation	Masonry	B	N		100			%	S0025	Libby Amphibole Detected	>75%	Confirmed Asbestos	F
Wall		Drywall (no compound)			A			100			%	S0020	None Detected	N.D.	None	
Wall	All	Plaster	Surface	Preformed Block	A	Y		100			%	S0021	None Detected	N.D.	None	
Wall	All	Plaster	Surface	Quarry tile	A	Y		100			%	S0024	None Detected	N.D.	None	

Masonry walls contain asbestos containing vermiculite insulation.

Client: Cowww
Location: #32 : Old Pump Building - NE Corner Storage Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 100
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Location: #33 : Old Pump Building - Basement
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 1650
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Location: #34 : Old Pump Building - Storage Room
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 200
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Not Found	NI	No Information	NI												
Wall		Wood	No Information	NI												

Client: Cowww
Location: #35 : Old Pump Building - Record Storage Vault
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 150
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain asbestos containing vermiculite insulation.

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #36 : Old Pump Building - Crawlspace
Floor: Basement-Old Pump Building
Room #:
Area (sqft): 800
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Dirt														
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Parging over Fibreglass	Fitting	Canvas	D	Y		5			EA	V0004	Chrysotile	10-25%	Confirmed Asbestos	F
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	D	Y		20			LF	V0002	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Location: #37 : Old PUmp Building - Hallway
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 450
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Location: #38 : Old Pump Building - Sump Pit Area
Survey Date: 2023-06-09

Site: 360 McPhillips Ave., Winnipeg, MB
Floor: Basement-Old Pump Building

Building Name: Old Pump Building (Bldg. D)
Room #:
Area (sqft): 80
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #39 : Old Pump Building - Sump Room
Floor: Basement-Old Pump Building
Room #:
Area (sqft): 300
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Domestic Water (hot And Cold)	Rubber Foam on Metal	Fitting	Canvas	B	Y		5			EA	V0004	Chrysotile	10-25%	Confirmed Asbestos	NF
Piping	Domestic Water (hot And Cold)	Sweat Wrap pipe insulation	Straight	Canvas	B	Y		30			LF	V0002	None Detected	N.D.	None	
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: Cowww
Site: 360 McPhillips Ave., Winnipeg, MB
Building Name: Old Pump Building (Bldg. D)
Location: #41 : Old Pump Building Exterior
Floor: NA
Room #:
Area (sqft): 0
Survey Date: 2023-06-09
Last Re-Assessment: 2023-06-13

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Other	Built Up Roofing	Roofing material										V9500	Presumed Asbestos		Presumed Asbestos	NF
Wall		Clay Tile (block)	Surface	N/A	A	Y		100			%					
Wall		Plaster	Base	N/A	A	Y		300			SF	S0017	None Detected	N.D.	None	
Wall		Masonry		Clay Tile (block)	B	N		100			%					
Wall		Masonry														

Roof sections needs to be tested prior to any renovation or demolition activities.

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.

2023 Asbestos Reassessment

W.D. Hurst Pumping Station e
60 Hurst Way Winnipeg,
Manitoba

Prepared for:

City of Winnipeg Water and Waste Department
110-1199 Pacific Avenue
Winnipeg, Manitoba R3E 3S8

August 16, 2023

Pinchin File: 327243.000

Issued to:	**City of Winnipeg Water and Waste Department**
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EXECUTIVE SUMMARY

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment of W.D. Hurst Pumping Station e located at 60 Hurst Way Winnipeg, Manitoba. The reassessment was performed on June 12, 2023.

The objective 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 results of this assessment are not intended for construction, renovation, demolition or project tendering purposes.

SUMMARY OF FINDINGS

Asbestos-containing materials (ACM) are present as follows:

- Mag Block present on exhaust ducting within Pump Floor Location No.10 is presumed to contain asbestos. Mag Block is jacketed with metal and is in GOOD condition.
- Asbestos-containing transite boards present as wall finish in the Landing/Loading Area (Location No. 5), and Pump Room (Location No. 10) are non-friable and are in GOOD condition.
- Asbestos-containing caulking present as a sealant on exterior walls is non-friable and is in GOOD condition.
- Loose fill vermiculite is suspect to be present within hollow core wall cavities of Location No.'s 17 and 18. Debris was not present.
- Setting compound/adhesive on the back of ceramic tile wall finish within Location No.10 was confirmed to contain asbestos, is non-friable and is in good condition.
- Setting compound on the back of ceramic tiles throughout the remainder of the building is presumed to contain asbestos. It is potentially friable and is in GOOD condition.

SUMMARY OF RECOMMENDATIONS

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

1. Perform a re-assessment of asbestos materials on an annual basis.
2. Prior to renovations or demolition, perform a pre-construction assessment to identify any hazardous materials that may be disturbed by the work.
3. Follow appropriate safe work procedures when handling or disturbing asbestos.

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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APPENDICES

1.0 INTRODUCTION AND SCOPE

City of Winnipeg Water and Waste Department (Client) retained Pinchin Ltd. (Pinchin) to conduct an asbestos building materials reassessment of W.D Hurst Pumping Station located at 60 Hurst Way Winnipeg, Manitoba.

Pinchin performed the reassessment on June 12, 2023. The surveyor was accompanied by City of Winnipeg Water and Waste Representatives during the reassessment. The assessed area was occupied at the time of the assessment.

The objectives of the reassessment were to document the locations, quantities and conditions of previously identified asbestos containing building materials and develop corrective action plans as required. This reassessment is only to be used for the purposes of long-term management and routine maintenance. The results of this reassessment are not to be used for construction, renovation, demolition or project tendering purposes.

1.1 Scope of Assessment

The objective of the reassessment was to evaluate the condition and quantity of previously reported asbestos-containing materials (ACM), and develop corrective action plans as required.

Additional objectives included the following:

- Documentation of any asbestos abatement that was performed since the last reassessment.
- Additional sampling to delineate previously identified ACM.

Please refer to Appendix II for a detailed description of the methodology used for this assessment.

2.0 METHODOLOGY

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible materials identified in the most recent assessment. The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

As per the original scope of work, concealed locations such as ceiling spaces above solid ceilings, shafts and chases were accessed via existing access panels. Our investigation did not include demolition of drywall or plaster walls to view concealed conditions. Structural items or exterior building finishes were not removed to determine the presence of concealed materials.

For further details on the methodology including test methods, refer to Appendix I.

3.0 BACKGROUND INFORMATION

3.1 Building Description

Description Item	Details
Use	Pumping Station
Number of Floors	The building is 1 storey plus 2 levels below grade.
Structure	Structure steel and concrete
Exterior Cladding	Masonry
Roof	Built Up Roofing
Flooring	Concrete, ceramic tile
Interior Walls	Transite cement, masonry, concrete, Drywall
Ceilings	Acoustic ceiling tiles, transite cement, drywall

3.2 Existing Reports and Summary of Asbestos Abatement

3.2.1 Review of Previous Reports

The reassessment was based on information gathered from previous comprehensive assessment reports completed by Pinchin. The original assessment report was completed in 2007. The results of the original report and subsequent survey update reports were reviewed prior to completing the reassessment.

3.2.2 Summary of Asbestos Abatement since the Previous Assessment

Based on a review of the last re-assessment report and observations made during the reassessment, asbestos abatement has not been conducted since the last assessment.

4.0 FINDINGS

The following section summarizes the findings of the reassessment and provides a general description of the asbestos-containing materials (ACM) identified and their locations.

For details on approximate quantities, condition, friability and locations of asbestos materials; refer to the Asbestos Material Summary Report and All Data Report in Appendix IV and V.

4.1 Mechanical Equipment Insulation

One sample of Mag Block present on mechanical exhaust (30 LF) within Pump Floor Location No.10 was previously sampled and determined to be non-asbestos. Two additional samples are required to rule out the presence of asbestos. In the absence of additional sampling the Mag Block is presumed to contain asbestos. Mag Block is jacketed with metal and is in GOOD condition.

4.2 Vermiculite

As reported by client walls have been previously assessed and do not contain vermiculite within the Main Building, Northwest Building, and Drain Pump Building Location No.'s 1-16 and 19.

Loose fill vermiculite debris was not observed within the North Reservoir Building or B Pit Building (Location No.'s 17 and 18) however; demolition of masonry block walls has not been performed and vermiculite may be present within these cavities. Loose fill vermiculite was not observed within the cavities.

4.3 Asbestos Cement Products (Transite)

Asbestos-containing transite cement wall finish is present within Location No's 5 and 10. Approximately 166 SF of transite cement is present. Transite cement is non-friable and is in GOOD condition.

4.4 Sealants, Caulking, and Putty

Asbestos-containing grey caulking is present on exterior wall finish of the Main Building (Location No. 19). Caulking is a non-friable material which is in GOOD condition.

4.5 Roofing Products

Built up roofing materials on Location 19. Hurst Pumping Station were replaced during the 2021 renovation therefore are not suspect to contain asbestos.

Built up roofing materials present on the North Reservoir Building Location No.17 have not been sampled therefore are suspect to contain asbestos.

4.6 Other Building Materials

Setting compound on the back of ceramic tile floor finish within Location No.10 were determined to be non-asbestos by analysis of Samples 0015A-C.

Setting compounds on ceramic tile wall finish within Location No,10 were confirmed to contain asbestos in an adhesive finish. The adhesive is non-friable and is concealed behind the tiles.

Setting compound on the back of ceramic tiles throughout the remainder of the building is presumed to contain asbestos. It is potentially friable and is in GOOD condition.

4.7 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and was excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

- Roofing felts and tar, mastics
- Floor levelling compound
- Elevator and lift brakes
- Electrical components
- Moulded plastic components (laboratory bench tops)
- Refractory materials and insulations in boilers and stacks
- Insulation under metal clad boilers
- Mechanical packing, ropes and gaskets
- Vermiculite
- Adhesives and duct mastics
- Caulking and putties
- Fibre-reinforced paints and coatings
- Paper products
- Soffit and fascia boards
- Fire resistant doors
- Metal clad finishes (Galbestos)
- Stucco, plaster or other cementitious parge coatings
- Vibration dampers on HVAC equipment
- Terrazzo
- Ropes and gaskets in cast-iron bell and spigot joints
- Sealants on pipe threads

5.0 RECOMMENDATIONS

5.1 General

Perform a detailed intrusive assessment prior to building renovation or demolition operations. The assessment should include; destructive testing (e.g. coring and/or removal of building finishes and components), sampling of other hazardous materials (lead, mercury, PCBs, mould, etc.), and materials not tested in this study (e.g. roofing materials, caulking, mastics).

5.2 On-going Management and Maintenance

The following recommendations are made regarding on-going management and maintenance work involving the asbestos materials identified.

Perform a re-assessment of asbestos materials on an annual basis.

Remove asbestos-containing materials (ACM) prior to alteration or maintenance work if ACM may be disturbed by the work. Follow appropriate asbestos precautions for the classification of work being performed.

Update the asbestos inventory report for the building upon completion of any abatement of ACM.

6.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

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.

7.0 REFERENCES

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

Manitoba

1. Workplace Safety and Health Act W210.
2. Workplace Safety and Health Hazard Regulation (Manitoba Regulation 217/2006), under the Workplace Safety and Health Act.
3. Manitoba Regulation MR 474/88, Manitoba PCB Regulation made under The Dangerous Goods Act.
4. Guide for Asbestos Management – Safe Work Manitoba.
5. Guideline Managing Demolition Debris Containing Hazardous Materials – Environmental Enforcement and Compliance Branch – Manitoba Conservation and Climate

Federal

1. Canada Occupational Health and Safety Regulation, SOR/86-304.
2. Consolidated Transportation of Dangerous Goods Regulations, including Amendment SOR/2019-101, Transportation of Dangerous Goods Act.

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Template: Master Report for Asbestos Reassessment, HAZ, March 2, 2023

APPENDIX I

Methodology

1.0 GENERAL

Pinchin conducted an inspection of previously identified asbestos-containing materials (ACM) to evaluate the current condition of all accessible ACM identified in the most recent assessment.

The surveyor made reference to any existing assessment or abatement reports (as provided by the Client).

Materials listed as exclusions in the previous reports have remained as exclusions. Sampling, assessment or verification of excluded materials was not conducted.

Existing sampling data, where available, was reviewed and relied upon.

Where sampling was conducted, sample collection was conducted in accordance with our Standard Operating Procedures.

A separate set of samples was collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA 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 were determined by visual examination and available information on the phases of construction and prior renovations.

Samples were collected at a rate that is in compliance with the requirements of local regulations and guidelines. The sampling strategy was 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 were visually identified without sample confirmation.

The asbestos analysis was completed using a stop-positive approach. Only one result meeting the regulated criteria was 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 stopped analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material were analyzed if no asbestos is detected. In some cases, all samples were analyzed in the sample set regardless of result.

The analysis was performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

The following summarizes the criteria of asbestos definitions. If there is a conflict between federal and provincial criteria, the more stringent will apply.

Jurisdiction	Friable	Non-Friable
Manitoba	0.1%[1]	1%
Federal	1%	1%

Where building materials are described in the report as “non-asbestos” or “does not contain asbestos”, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an asbestos-containing material in the applicable regulation. Additionally, these terms are used for materials which historically are known to not include asbestos in their manufacturing.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable).
- Condition (good, fair, poor, debris).
- Accessibility (ranking from accessible to all building users to inaccessible).
- Visibility (whether the material is obscured by other building components).
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

For a complete description of the Evaluation Criteria and Basis of Recommendations, refer to Annex A.

Template: Methodology for Asbestos Reassessment, HAZ, July 27, 2021

METHODOLOGY ANNEX A EVALUATION CRITERIA

1.0 EVALUATION CRITERIA AND BASIS OF RECOMMENDATIONS

The detailed asbestos assessment provides information regarding the location, condition, accessibility and friability of the asbestos-containing materials (ACM). In order to make recommendations for compliance with current regulations, Pinchin developed the following criteria.

2.0 EVALUATION OF CONDITION

2.1 Friable Sprayed or Trowelled Fireproofing, Thermal Insulation and Texture Finishes (Surfacing Materials)

To evaluate the condition of ACM sprayed or trowelled on fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes, the following criteria are applied:

Good	Surface of material shows no significant signs of damage, deterioration or delamination. Good condition includes unencapsulated or unpainted fireproofing or texture finishes, where no or limited delamination or damage is observed, or encapsulated fireproofing or texture finishes where the encapsulant or paint has been applied after the damage or fallout occurred.
Poor	A sprayed material that shows signs of significant damage or is significantly delaminating or deteriorating. This may be limited to surface delamination or some portion of the substrate may be exposed.

In Locations where damage exists in isolated areas, both good and poor condition may be applicable. The extent of each condition will be recorded. Fair condition is not utilized in the evaluation of ACM sprayed or trowelled fireproofing, sprayed or trowelled thermal insulation (non-mechanical), or texture, decorative or acoustic finishes.

The evaluation of the above products above ceilings may be limited by the number of observations and by building components such as ducts or full height walls that obstruct the above ceiling observations.

2.2 Friable Mechanical or Thermal System Insulation (TSI)

To evaluate the condition of mechanical insulation on vessels, boilers, breeching, ducts, pipes, fan units, equipment etc. the following criteria are applied:

Good	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor damage (i.e. scuffs or stains), but the jacketing is not penetrated.
Fair	Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges from minor to none. Damage can be repaired.

Poor	Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired. Includes components where insulation may have been removed incompletely.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is often not possible to observe each foot of mechanical insulation from all angles.

2.3 Potentially Friable Materials and Miscellaneous Friable Materials

Potentially friable ACM are products that are basically non-friable while in place but have the potential to generate friable dust upon removal or if significantly disturbed without appropriate procedures. These products may become friable if damaged. Potentially friable materials include materials such as acoustic ceiling tiles and plaster. To evaluate the condition of potentially friable materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.
Fair	Showing signs of some cracking or breakage, but is not deteriorating (e.g. cracked plaster, broken but in place ceiling tile, missing tile or section of plaster etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material has deteriorated to a point it has become friable. Normally potentially friable ACM in Poor condition is not repairable and requires at least localized removal and replacement.

2.4 Non-Friable Materials

Non-friable ACM cover a wide range of products with a wide variation in their tendency to release dust or asbestos fibres to the air. Many of these materials, (particularly where the matrix is an unweathered bitumen, asphalt or tar material) do not release fibres except in very unusual circumstances or during significant disturbance (e.g. use of abrasive power tools). Others with a cementitious matrix (asbestos-cement products) can more readily release dust due to abrasion, demolition, weathering, etc. The potential for asbestos release from non-friable ACM is always lower than from friable ACM. To evaluate the condition of non-friable Materials, the following criteria are applied:

Good	No significant damage or deterioration. Still serving its intended use as a building material or finish.

Fair	Showing signs of some cracking or breakage but is not deteriorating (e.g. cracked vinyl floor tile, missing piece of tile or transite, etc.). The condition is such that it is still serving its intended use as a building material or finish but may require repair for mainly cosmetic purposes.
Poor	Significant deterioration or breaking apart of the material to the point at which it cannot be repaired, and it will require at least local removal. Material has deteriorated to the point it is not serving its intended use as building material or finish. Material may have deteriorated to a point where traffic or disturbance may cause it to become friable.

2.5 Evaluation of ACM Debris

The identification of the exact location or presence of debris on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations.

The presence of fallen or dislodged ACM is noted separately from the ACM source and is referred to as Debris. Debris may be friable if from a friable ACM source or a badly deteriorated non-friable ACM source. Debris may also be non-friable (such as fallen pieces of transite sheet or mastic fittings, or broken, dislodged floor tiles).

Debris	Debris may be friable or non-friable but is always identified as debris.

2.6 Evaluation of Presumed Asbestos-Containing Material (PACM)

Presumed asbestos-containing materials (PACM), are building materials that may contain asbestos but were not sampled or analyzed due to inaccessibility or the need to perform destructive testing to obtain a reasonable sample set. Evaluation of these materials is based on the assumption that these PACM are asbestos-containing.

A list of PACM is provided in the report and they are generally not included in the detailed room by room reports. Typically, they are excluded because they are inaccessible or present in very small quantities. If PACM are evaluated, Pinchin uses the criteria that correspond with the type (and friability) of the material listed above.

3.0 EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

Access (A)	Common areas of the building within reach of all building users (approximately 8 ’- 9’ from floor or standard ceiling height). Includes other areas where occupant activities may result in disturbance of material that is not normally within reach from floor level, but may be disturbed by common activities (e.g. gymnasiums, workshops, warehouses)
Access (B)	Areas of the building accessed primarily by Maintenance/Caretaking/Janitorial Staff and within reach without use of a ladder. Includes areas within reach in Boiler Rooms, Electrical Rooms, Janitors Closets, Elevator Rooms, Mechanical Rooms, etc. Includes materials within reach from fixed ladders or catwalks, mezzanines, and accessible pipe chases.
Access (C) and Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Only includes ACM that are visible to view without the removal or opening of other building components such as ceiling tiles or service access panels. Visible column on HMIS sheets will say YES.
Access (C) and not Visible	Areas of the building above 8' - 9’ where use of a ladder or scaffold is required to reach the ACM. Includes ACM that are not visible to view and require the removal of a building component to see, such as ceilings tiles or access panels to view and access. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points. Visible column on HMIS sheets will say NO.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls or equipment etc. where demolition of the ceiling, wall or equipment etc. is required to reach the ACM. Material inaccessible due to height or location or is only accessed under unusual situations. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in Access D.

4.0 ACTION MATRIX AND DEFINITIONS

Pinchin’s evaluation of the viability of a specific asbestos control option is based on the consideration of the friability, condition, accessibility and visibility of a material. The logic used is that damaged ACM located in an area frequently accessed by all building occupants is of a higher priority than damaged ACM located in an infrequently accessed service area. The action matrix considers the potential for fibre release (primarily from friable ACM) and the possible concerns from regulatory bodies and many building occupants to all damaged ACM (including non-friable).

In any building with asbestos, many current regulations require an Asbestos Management Program be implemented. Depending on the condition and the accessibility, more active measures such as repair or removal may be recommended. The following matrix provides guidance for recommended Actions in the absence of renovation or demolition. In the event of construction or maintenance activity which will disturb ACM more aggressive control or removal will be required.

4.1 Action Matrix

The following tables outline the action decisions based on the relationship of assessed factors. Table I applies to friable ACM. Table II applies to non-friable ACM.

Table I Decision Matrix for Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 5[1]	Action 5[2]	Action 3	Action 1
(B)	Action 7	Action 6[3]	Action 3	Action 1
(C) Visible	Action 7	Action 6	Action 3	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

Table II Decision Matrix for Potentially Friable and Non-Friable ACM

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 7	Action 7[4]	Action 3	Action 1
(B)	Action 7	Action 7	Action 3	Action 1
(C) Visible	Action 7	Action 7	Action 4	Action 2
(C) Not Visible	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7

4.2 Action Definitions

The following are the definitions in the Action Matrix Table presented above:

Action Definitions	
Action 1	Clean-Up of ACM Debris Restrict access that is likely to cause a disturbance of the ACM Debris and clean up ACM Debris. Utilize appropriate asbestos precautions.

[1] If friable ACM in access (A)/Good condition is not proactively removed Action 7 (Manage) is recommended.
[2] If friable ACM in access (A)/Fair condition is not proactively removed repair is recommended.
[3] If friable ACM in access (B)/Fair condition is likely to be disturbed after repair proactive removal is recommended.
[4] Action 7 is recommended for all non-friable ACM in Fair condition however some clients may wish to repair or take some action primarily for cosmetic reasons

Action Definitions	
Action 2	Precautions for Access Which may Disturb ACM Debris Use appropriate means to isolate the debris or to limit entry to the area which may disturb the material. At locations where ACM Debris can remain in place in lieu of removal or clean-up (e.g. Debris on top of ceiling tiles or behind lockable door), Utilize appropriate asbestos precautions to enter the area if this will disturb debris. The precautions will be required until the ACM Debris has been cleaned up.
Action 3	ACM Removal Remove ACM. Utilize asbestos procedures appropriate to the scope of the removal work. Until it is removed, restrict access to the material so it is not disturbed.
Action 4	Precautions for Work Which may Disturb ACM in Poor Condition. Utilize appropriate asbestos precautions if ACM may be disturbed by work on or near ACM. This does not require restricting access to the area, only control of work which may contact or disturb the ACM. Removal is the only viable option if work will disturb ACM.
Action 5	Proactive ACM Removal Remove friable ACM where the presence of friable asbestos in Good condition is not desirable. If friable ACM in Fair condition is not removed, then Repair friable ACM.
Action 6	ACM Repair Repair friable ACM in Fair condition which is not likely to be damaged again or disturbed by normal use of the area or room. Pinchin recommends proactive removal if friable ACM is likely to be damaged or disturbed during normal use of the area or room
Action 7	Asbestos Management Program with Routine Surveillance Implement an Asbestos Management Program, including routine surveillance of ACM. Reassess materials regularly (typically once per year).

Master Template: Methodology Annex A to Appendix I Evaluation Criteria, HAZ, January 10, 2020

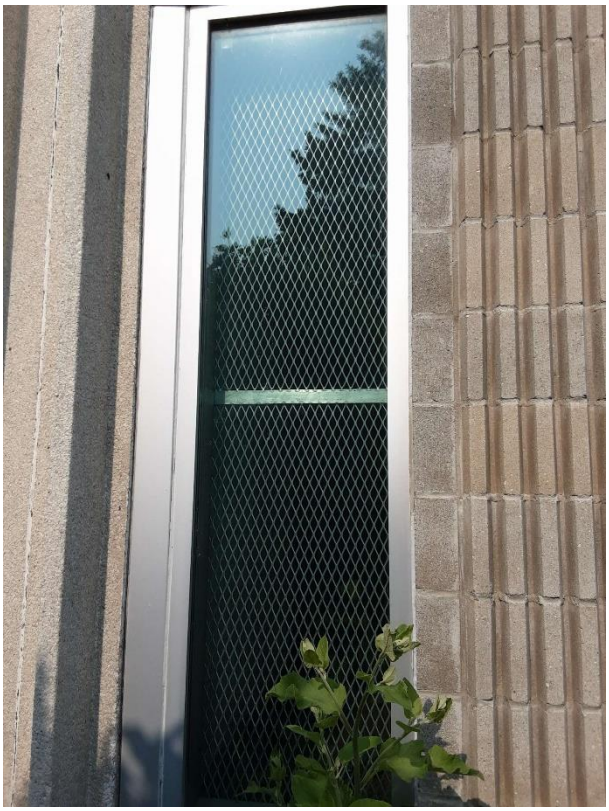
APPENDIX II

Additional Photographs

S0003 (Confirmed Asbestos), Mechanical Equipment, Generator Exhaust, Magnesia block, Main Building - Pump Room (Location #: 10)

V0006 (Confirmed Asbestos), Wall, Cement Product, Main Building - Pump Room (Location #: 10)

V0006 (Confirmed Asbestos), Wall, Cement Product, Main Building - Landing/Loading Area (Location #: 5)



S0010 (Confirmed Asbestos), Wall, Window Liner, Caulking, Hurst Pump Station Main Building Exterior (Location #: 19)

V9500 (Presumed Asbestos), Floor, All, Mortar, Main Building - Vestibule (Location #: 1)
Setting compound

V9500 (Presumed Asbestos), Wall, Ceramic Tiles, Main Building - Pump Room (Location #: 10)

V9500 (Presumed Asbestos), Floor, All, Mortar, Main Building - Pump Room (Location #: 10)
Setting compound

V9500 (Presumed Asbestos), Wall, Vermiculite, B Pit Building (Location #: 18)

V9500 (Presumed Asbestos), Floor, All, Mortar, Main Building - Walkway (Location #: 4)

APPENDIX III

Location Summary Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

LOCATIONS LIST

PINCHIN
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Client:Cowww
Site: , , MB
Building Name: W.D. Hurst Pumping Station
Survey Date:
Last Re-Assessment: 2023-06-19
Building Phases: A:

Location No.	Name or Description	Area ft²	Floor No.	Bldg. Phase	Notes
1	Main Building - Vestibule	96	Main-Main Building	A	Floor setting compound is presumed asbestos containing. KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
2	Main Building - Office	308	Main-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
3	Main Building - Electrical Room	1080	Main-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
4	Main Building - Walkway	1500	Main-Main Building	A	Setting compound on ceramic tiles is presumed to contain asbestos KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
5	Main Building - Landing/Loading Area	750	Main-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
6	Main Building - Walkway	120	Main-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
7	Main Building - Stairwell	375	Main-Main Building	A	
8	Main Building - Chrlorine Room	400	Main-Main Building	A	KGS group determined there was no vermiculite inside hollow core block walls as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non acm.
9	Main Building - Chlorine Tonner Room	2200	Main-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
10	Main Building - Pump Room	7700	Basement-Main Building	A	Magnesia Block on generator exhaust duct is presumed asbestos containing KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
11	Main Building - Custodian Closet	32	Basement-Main Building	A	Ceramic tile setting compound is presumed asbestos containing. KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
12	Main Building - Washroom	32	Basement-Main Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
13	Main Building - Crawlspace	2200	Basement-Main Building	A	
14	Main Building - Sub Basement	7700	Sub Basement-Main Building	A	
15	Northwest Building - Northwest Building	300	Main-Northwest Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM. Roof sections needs to be tested prior to any renovation or demolition activities.
16	Drain Pump Building	225	Main-Drain Pump Building	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM Roof sections needs to be tested prior to any renovation or demolition activities.
17	North Resevoir Building	300	Main-North Resevoir Building	A	Roof sections needs to be tested prior to any renovation or demolition activities. Vermiculite suspect to be present.
18	B Pit Building	150	Main-B Pit Building	A	Masonry walls suspect to contain asbestos containing vermiculite insulation Roof sections needs to be tested prior to any renovation or demolition activities.
19	Hurst Pump Station Main Building Exterior	0	NA	A	KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar and roofing materials were replaced in 2021.

APPENDIX IV

Asbestos Material Summary Report / Sample Log

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

PINCHIN
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Client:City of Winnipeg Water and Waste Dept **Site: , , MB** **Building Name: W.D. Hurst Pumping Station** **Survey Date: 2006-05-03**

HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0001	Ceiling | | Ceiling Tiles (lay-in) | Acoustic Tile/at-1/24x48/location 2	1,2	A	0	404	0	0	None Detected	No	
Asbestos	S0002	Other | | Ceiling Tiles (glue-on) | Glue On Tile/12 X 12/location 10	10	A	0	70	0	0	None Detected	No	
Asbestos	S0003	Mechanical Equipment, Duct | Generator Exhaust | Magnesia Block | Magblock/gene/location 10	5,10	A	70	0	0	0	None Detected	No	
Asbestos	V0006	Wall | | Cement Product | Transite Ceiling Panel - Pump Area	5,10	A	0	166	0	0	Chrysotile	Yes	NF
Asbestos	S0007	Wall | | Adhesive/mastic | Black Adhesive On Cork, Loc. 4, Walkway, Main Flr. Main Bldg. (black, Non Fibrous, Heterogenous)	4	A	0	0	0	0	None Detected	No	
Asbestos	V0008	Wall | | Adhesive/mastic | Black Adhesive On Cork, Loc. 5, Landing/loading Area, Main Flr. Main Bldg. (black, Non Fibrous, Heterogenous)	5	A	0	0	0	0	None Detected	No	
Asbestos	S0010	Wall | Window Liner | Caulking | Caulking, Exterior Wall, Hurst Pumping Station (sample No. 0027 - August 27, 2015 - 1517151_plm) (for Sample 0010b-c It Was Sample No. 0027b-c- June 30, 2016 - B131169)	19	A	0	0	0	100	Chrysotile	Yes	NF
Asbestos	S0011	Wall | Exterior | Plaster | Plaster With Wire Mesh, Exterior Wall Foundation, Hurst Pumping Station (sample No. 0028 - August 27, 2015 - 1517151_plm) (for Sample 0011b-c It Was Sample No. 0028b-c- June 30, 2016 - B131169)	19	A	0	100	0	0	None Detected	No	
Asbestos	S0012	Wall | Exterior | Plaster | Plaster On Concrete, Exterior Wall Foundation, Hurst Pumping Station (sample No. 0029 - August 27, 2015 - 1517151_plm) (for Sample 0012b-c It Was Sample No. 0029b-c- June 30, 2016 - B131169)	19	A	0	24	0	0	None Detected	No	
Asbestos	S0013	Wall | Description Pending | Plaster | Cemented Small Stones, Exterior Wall, Hurst Pumping Station (sample No. 0030 - August 27, 2015 - 1517151_plm) (for Sample 0013b-c It Was Sample No. 0030b-c- June 30, 2016 - B131169)	19	A	0	244	0	0	None Detected	No	
Asbestos	S0014	Other | All | Plaster | Grout From Floor Tiles, Location 5, Landing Loading Area, Main Bldg., W.d. Hurst Pumping Station B215313 Aug 2019	5	A	0	0	0	100	None Detected	No	

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

HAZARDOUS MATERIALS SUMMARY / SAMPLE LOG

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HAZMAT	Sample No	System/Component/Material/Sample Description	Locations	Bldg. Phase	LF	SF	EA	%	Type	Positive	Friability
Asbestos	S0015 ABC	Floor | All | Adhesive/mastic |	10	A	0	1000	0	100	None Detected	No	
Asbestos	S0016 ABC	Wall | | Adhesive/mastic | South Wall	10	A	0	1000	0	100	Chrysotile	Yes	NF
Asbestos	V9500	Floor | All | Mortar |	1,4,6,11,12	A	0	0	0	100	Presumed Asbestos	Yes	NF
Asbestos	V9500	Wall | | Vermiculite |	17,18	A	0	0	0	100	Presumed Asbestos	Yes	F
Asbestos	V0000	Floor | | Metal |	10	A	0	0	0	0	Non Asbestos	No	
Asbestos	V0000	Floor | | Vinyl Sheet Flooring |	2	A	0	308	0	0	Non Asbestos	No	
Asbestos	V0000	Mechanical Equipment | Heating Water Tank | Fibreglass |	10	A	0	0	0	100	Non Asbestos	No	

Legend:

Sample number	
S####	Asbestos sample collected
L####	Paint sample collected
P####	PCB sample collected
M####	Mould sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non Hazardous Material
V9000	Material is visually identified as Hazardous Material
V9500	Material is presumed to be Hazardous Material
[Loc. No.]	Abated Material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

NF	Non Friable material.
F	Friable material
PF	Potentially Friable material

APPENDIX V

HMIS Data Report

HMIS
HAZARDOUS MATERIALS INVENTORY SYSTEM

ALL DATA REPORT

PINCHIN
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Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #1 : Main Building - Vestibule **Floor: Main-Main Building** **Room #:** **Area (sqft): 96**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		N/A	Surface	N/A	C	Y		96			SF	V0001	None Detected	N.D.	None	
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor[1]	All	Mortar	Surface	Ceramic Tiles	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	N/A	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI				800								
Structure	Steel Truss	Metal	No Information	NI				800								
Wall		Masonry	No Information	NI												

Floor setting compound is presumed asbestos containing. KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.
1 - Setting compound

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #2 : Main Building - Office **Floor: Main-Main Building** **Room #:** **Area (sqft): 308**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Ceiling Tiles (lay-in)	Surface	N/A	C	Y		308			SF	S0001	None Detected	N.D.	None	
Duct	Return Air	Not Insulated	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Vinyl Sheet Flooring	Surface	N/A	A	Y		308			SF	V0000	Non-Asbestos		None	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Steel Truss	Metal	No Information	NI												
Wall		Masonry	No Information	NI												

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #3 : Main Building - Electrical Room **Floor: Main-Main Building** **Room #:** **Area (sqft): 1080**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Air Handling Unit	Not Insulated	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Steel Truss	Metal	No Information	NI												
Wall		Masonry	No Information	NI												

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #4 : Main Building - Walkway **Floor: Main-Main Building** **Room #:** **Area (sqft): 1500**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found				C	Y										
Duct	Exhaust	Not Insulated	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping	Rain Water Leader	Fibreglass	Straight	N/A	C	Y										
Piping	Rain Water Leader	Fibreglass	Fitting	N/A	C	Y										
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	Surface	Cork	B	Y										
Wall		Adhesive/mastic	Surface	Cork	B	N						S0007	[None]		[None]	

Setting compound on ceramic tiles is presumed to contain asbestos KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #5 : Main Building - Landing/Loading Area **Floor: Main-Main Building** **Room #:** **Area (sqft): 750**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found				C	Y					SF					
Duct	Generator Exhaust	Mortar	No Information	NI	C	Y		40			LF	V0003	None Detected	N.D.	None	
Duct	Generator Exhaust	Mortar	No Information	NI	C	Y					LF	V0003	None Detected	N.D.	None	
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	All	Plaster	Surface	Ceramic Tiles	A	Y		100			%	S0014	None Detected	N.D.	None	
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	Surface	Cork	B	Y										
Wall		Cement Product	Surface		C	Y		150			SF	V0006	Chrysotile	25-50%	Confirmed Asbestos	NF
Wall		Adhesive/mastic	Surface	Cork	B	N						V0008	[None]		[None]	

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #6 : Main Building - Walkway **Floor: Main-Main Building** **Room #:** **Area (sqft): 120**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found		Surface		C	Y										
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor	All	Mortar	Surface	Ceramic Tiles	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	Surface	Cork	B	Y										

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #7 : Main Building - Stairwell **Floor: Main-Main Building** **Room #:** **Area (sqft): 375**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping	Not Found	NI	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Metal	No Information	NI												

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #8 : Main Building - Chrlorine Room **Floor: Main-Main Building** **Room #:** **Area (sqft): 400**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	No Information	NI												

KGS group determined there was no vermiculite inside hollow core block walls as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non acm.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #9 : Main Building - Chlorine Tonner Room **Floor: Main-Main Building** **Room #:** **Area (sqft): 2200**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Wall		Masonry	No Information	NI												

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #10 : Main Building - Pump Room **Floor: Basement-Main Building** **Room #:** **Area (sqft): 7700**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found															
Floor		Concrete (poured)	No Information	NI												
Floor		Metal	No Information	NI								00000	Non-Asbestos		None	
Floor[1]	All	Adhesive/mastic	Surface	Ceramic Tiles	A	Y		1200			SF	S0015ABC	None Detected	N.D.	None	
Mechanical Equipment	Generator Exhaust	Magnesia block	System		C	Y		30			LF	S0003	[Asbestos]	N.D.	[Asbestos]	F
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Generator Unit	Not Insulated	No Information	NI												
Mechanical Equipment	Heating Water Tank	Fibreglass	Surface	Foil Face	B	Y		100			%	V0000	Non-Asbestos		None	
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Other		Ceiling tiles (glue-on)	Surface	N/A	B	Y		70			SF	S0002	None Detected	N.D.	None	
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Metal	No Information	NI												
Structure	Deck	Concrete (poured)	No Information	NI												
Wall		Masonry	Surface	Cork	B	Y										
Wall		Cement Product	Surface		B	Y		16			SF	V0006	Chrysotile	25-50%	Confirmed Asbestos	NF
Wall[2]		Adhesive/mastic, South wall	Surface	Ceramic Tiles	A	Y		400			%	S0016ABC	Chrysotile	1-5%	Confirmed Asbestos	NF

Magnesia Block on generator exhaust duct is presumed asbestos containing KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was also sampled and determined to be non ACM.

1 - Setting compound - 6"brown tiles

2 - 6" tan tiles

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #11 : Main Building - Custodian Closet **Floor: Basement-Main Building** **Room #:** **Area (sqft): 32**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found															
Duct	Not Found	NI	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor[1]	All	Mortar	Surface	Ceramic Tiles	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	Surface	Cork	C	Y										
Wall		Masonry	No Information	NI												

Ceramic tile setting compound is presumed asbestos containing. KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
1 - Setting compound

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #12 : Main Building - Washroom **Floor: Basement-Main Building** **Room #:** **Area (sqft): 32**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found															
Duct	Supply Air	Not Insulated	No Information	NI												
Floor		Ceramic Tiles	No Information	NI												
Floor[1]	All	Mortar	Surface	Ceramic Tiles	A	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	NF
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	Surface	Cork	C	Y										
Wall		Ceramic Tiles	No Information	NI												

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM.
1 - Setting compound

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #13 : Main Building - Crawlspace **Floor: Basement-Main Building** **Room #:** **Area (sqft): 2200**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Dirt	No Information	NI											[None]	
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #14 : Main Building - Sub Basement **Floor: Sub Basement-Main Building** **Room #:** **Area (sqft): 7700**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Beam, Deck	Concrete (poured)	No Information	NI												
Wall		Concrete (poured)	No Information	NI												

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #15 : Northwest Building - Northwest Building **Floor: Main-Northwest Building** **Room #:** **Area (sqft): 300**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	Surface	Wood	B	Y										

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM. Roof sections needs to be tested prior to any renovation or demolition activities.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #16 : Drain Pump Building **Floor: Main-Drain Pump Building** **Room #:** **Area (sqft): 225**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling		Wood	No Information	NI												
Duct	Fresh Air Intake	Not Insulated	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Pump	Not Insulated	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	N/a	NI	No Information	NI												
Wall		Masonry	Surface	Wood	B	Y										

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar was sampled and determined to be non ACM Roof sections needs to be tested prior to any renovation or demolition activities.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #17 : North Resevoir Building **Floor: Main-North Resevoir Building** **Room #:** **Area (sqft): 300**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Electrical Panel	Not Insulated	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	No Information	NI												
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Roof sections needs to be tested prior to any renovation or demolition activities. Vermiculite suspect to be present.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #18 : B Pit Building **Floor: Main-B Pit Building** **Room #:** **Area (sqft): 150**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Ceiling	Not Found	NI	No Information	NI												
Duct	Not Found	NI	No Information	NI												
Floor		Concrete (poured)	No Information	NI												
Mechanical Equipment	Not Found	NI	No Information	NI												
Other	Not Found	NI	No Information	NI												
Piping		Not Insulated	No Information	NI												
Structure	Deck	Concrete (precast)	No Information	NI												
Wall		Masonry	Surface	Wood	B	Y										
Wall		Vermiculite	Insulation	Masonry	B	N		100			%	V9500	Presumed Asbestos		Presumed Asbestos	F

Masonry walls suspect to contain asbestos containing vermiculite insulation Roof sections needs to be tested prior to any renovation or demolition activities.

Client: City of Winnipeg Water and Waste Dept **Site: W.D. Hurst Pumping Station** **Building Name: W.D. Hurst Pumping Station**
Location: #19 : Hurst Pump Station Main Building Exterior **Floor: NA** **Room #:** **Area (sqft): 0**
Survey Date: 2006-05-03 **Last Re-Assessment: 2023-06-19**

ASBESTOS																
System	Component	Material	Item	Covering	A*	V*	AP*	Good	Fair	Poor	Unit	Sample	Asbestos Type	Amount	Hazard	Friable
Wall	Exterior	Plaster		N/A	A	Y		100			SF	S0011	None Detected	N.D.	None	
Wall	Exterior	Plaster	Base	N/A	A	Y		16		8	SF	S0012	None Detected	N.D.	None	
Wall	Exterior	Masonry		Plaster	B	N		100			%					
Wall	Description Pending	Plaster	Exterior	N/A	A	Y		242		2	SF	S0013	None Detected	N.D.	None	
Wall	Window Liner	Caulking	Exterior		A	Y		100			%	S0010	Chrysotile	0.1-1%	Confirmed Asbestos	NF

KGS Group determined the walls do not contain vermiculite as per their report dated October 29, 2019. Brick mortar and roofing materials were replaced in 2021.

Legend:

Sample number	
S####	Asbestos sample collected
V####	Material visually similar to numbered sample collected
V0000	Known non-asbestos material
V9000	Visually identified as an asbestos material
V9500	Material is presumed to be an asbestos material

Units	
SF	Square feet
LF	Linear feet
EA	Each
%	Percentage

Other	
A	Access
V	Visible
AP	Air Plenum
F	Friable material
NF	Non Friable material
PF	Potentially Friable material

Access	
A	Accessible to all building occupants
B	Accessible to maintenance and operations staff without a ladder
C	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas
D	Not normally accessible

Condition	
Good	No visible damage or deterioration
Fair	Minor, repairable damage, cracking, delamination or deterioration
Poor	Irreparable damage or deterioration with exposed and missing material

Visible	
Y	The material is visible when standing on the floor of the room, without the removal or opening of other building components (e.g. ceiling tiles or access panels).
N	The material is not visible to view when standing on the floor of the room and requires the removal of a building component (e.g. ceilings tiles or access panels) to view and access. Includes rarely entered crawlspaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

Air Plenum	
Yes or No	The material is in a return air plenum or in a direct airstream or there is evidence of air erosion (e.g. duct for heating or cooling blowing directly on or across an ACM). This field is only completed where Air Plenum consideration is required by regulation.

Colour Coding	
	The material is known to contain regulated concentrations of asbestos; either by analytical results or visible identification (use of the V9000 code).
	The material is presumed to contain asbestos; based on visual appearances; typically a material known to historically contain asbestos; however, not sampled due to limited access or the destructive nature of the sampling.