



January 22, 2021

Sara Reid, Project Manager
City of Toronto, Corporate Services
Facilities Management
Metro Hall, 55 John Street
Toronto ON, M5V 3C6

Re: Designated Substance Sampling, 30 Newbridge Road, Toronto, ON

Dear Ms. Reid,

As requested, Fisher Environmental Ltd. (Fisher) has performed an assessment of the warehouse building located at 30 Newbridge Road, Toronto, Ontario (the "Site"). Fisher understands that the request to have the assessment performed is in anticipation of planned construction activities at the Site.

The purpose of the current survey was to identify Designated Substances including sampling of materials suspected to contain asbestos and lead. The assessment scope did not include the entire Site building. Rather, the assessment was limited to specific locations of concern / limited to locations where construction activities are proposed as described in emails or demonstrated on CCTV installation drawings provided to Fisher January 11 to 14, 2021. The fieldwork was conducted on January 18, 2021.

Please refer to Attachment A of this report for the laboratory analysis report of bulk asbestos samples. Site plans indicating sample locations are included with this report as Attachment B. Site photos are included with this report as Attachment C.

Asbestos-Containing Materials (ACM)

Sampling was conducted of building materials which were suspected to contain asbestos and expected to be impacted by planned construction activities. Five homogeneous (i.e. visually consistent) types of suspect building materials were observed, and representative samples were collected of each type. A total of 19 bulk samples were collected and submitted to Fisher Environmental Laboratories for Polarised Light Microscopy (PLM) analysis, as outlined in NIOSH Method 9002. The results of PLM analysis are summarized in Table 1, below.

Table 1 - Summary of Bulk Asbestos Sample Analysis (Polarised Light Microscopy)

Sample No.	Sample Location	Sample Description	Asbestos Content (% by Weight/Type)
21-5864-01 to 03	North Warehouse	Wall Board	25-50% Chrysotile
21-5864-04 to 06	Second Floor Offices	Drywall Joint Compound	None Detected and 0.5-5% Chrysotile
21-5864-07 to 09	Second Floor Offices	Ceiling Tile 3	None Detected
21-5864-10 to 12	North waiting room	Ceiling Tile 6	None Detected
21-5864-13 to 19	South waiting room/office	Drywall Joint Compound	None Detected

Ontario Regulation 278/05 ("O. Reg. 278/05") defines an "asbestos-containing" material as that with an asbestos content equal to or greater than 0.5% by weight. Laboratory analysis by PLM method determined the wall board in the north warehouse and drywall joint compound in the north office area to contain Chrysotile asbestos. All other suspected materials do not contain asbestos. No other materials suspected to contain asbestos were noted in the existing ACM inventory for the project scope area.

In addition to the sampling outlined above, the following observations were made on-Site:

- Transite rain leaders and asbestos containing parging cement were noted within the Site building, however these items are not expected to be impacted by the planned construction activities.

Based on the observations and findings outlined above, Fisher recommends that the planned CCTV construction activities do not require asbestos abatement procedures.

All other presumed and confirmed ACM at the Site were observed to be in Good condition and may be managed in place, as outlined in O. Reg. 278/05. However, if work activities affecting these materials are planned, Fisher recommends they be removed using appropriate procedures outlined in O. Reg. 278/05.

The presence of ACM should be presumed in locations not accessed during the assessment. It is possible that ACM is present at the Site that is not identified in this report. Should additional suspected ACM not outlined in this report be discovered, it should be presumed as ACM until sample analysis determines asbestos content. Due to the limited scope of work and the presence of solid building finishes (i.e. plaster or drywall walls and ceilings etc.) in many locations throughout the Site, the full extent of potential ACM may not be confirmed. Precautions should be taken when dismantling solid wall or ceiling finishes, or any other building surfaces which may conceal potential ACM. Such precautions include, but are not limited to, isolation measures and appropriate personal protective equipment.

As ACM is present in the building, an Asbestos Management Program (AMP) should be implemented for compliance with O. Reg. 278/05. Maintenance of the AMP includes reassessment of all ACM at the Site within the next 12 months.

Lead-Containing Paint

Sampling was conducted of paint finishes which were suspected to contain lead and expected to be impacted by planned construction activities. Two visually distinct paint finishes were observed, and one bulk sample was collected of each type. Samples were submitted to Fisher Environmental Laboratories for analysis by ICP (Inductively Coupled Plasma) analysis, as outlined in NIOSH 7300. The results of ICP analysis are summarized in Table 2, below.

Table 2 - Summary of Lead Paint Sample Analysis

Sample No.	Sample Location	Sample Description	Lead Content (ppm and % by Weight)
21-5864-20	North Office Area	Beige Wall Paint	3,960 ppm (0.396%)
21-5864-21	South Office Area	Grey Wall Paint	<10 ppm (<0.001%)

The Ontario Ministry of Labour (MOL) has not prescribed criteria defining an analyzed sample of bulk material as “lead-containing”. Further, the MOL has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. However, except for aggressive disturbance of painted finishes, (e.g., abrasive blasting, torch cutting, or grinding), Fisher believes that a lead content below 0.1% by weight (1,000 ug/g or 1000 ppm) represents a concentration in which the lead content is not the limiting hazard for construction hygiene purposes. Elevated concentrations of lead (greater than 0.1% lead) were detected in the beige sample collected from the second-floor north office area. The beige paint was noted to generally be in good condition with a few areas of delamination.

Where any lead-containing materials may be disturbed or removed, Fisher recommends that appropriate lead abatement procedures be used. The lead abatement procedures to be used are determined by the method(s) of disturbance employed. Regular construction dust suppression techniques and worker hygiene practices are sufficient for disturbance of paint finishes determined to contain less than 0.1% lead by weight, provided that work is limited to non-aggressive operations. Refer to MOL Guideline: Lead on Construction Projects, 2011, for details of the Ministry’s health and safety guidelines regarding lead. Table 3, below, identifies these potential methods and the associated respirator required, as outlined in Ontario Ministry of Labour guidelines.

Table 3 - Classifications of Lead-Containing Operations and Required Respirator

Type 1 Operations (where concentrations of airborne lead would be expected to be < 0.05 mg/m ³)	
Activities that include; <ul style="list-style-type: none"> • Removal of lead containing coatings with chemical gel or paste and fibrous laminated cloth wrap • Removal of lead containing coatings / materials using power tool that has an effective dust collection system equipped with HEPA filter • Removal of lead containing coatings / materials using non-powered hand tools other than manual scraping or sanding 	Respirators should not be necessary if general procedures are followed and level of air is less than 0.05 mg/m ³ . However, if worker wishes to use a respirator, a half-mask particulate respirator with N-, R- or P-series filter, and 95, 99 or 100% efficiency should be provided.
Type 2a Operations (where concentrations of airborne lead would be expected to be > 0.05 to 0.50 mg/m ³)	
Activities that include; <ul style="list-style-type: none"> • Removal of lead containing coatings / materials by scraping or sanding using non-powered hand tools • Manual demolition of lead painted plaster walls / building components by striking with a sledgehammer or similar tool 	NIOSH APF = 10 Half-mask particulate respirator with N-, R- or P- series filter, and 95, 99 or 100% efficiency.
Type 2b Operations (where concentrations of airborne lead would be expected to be > 0.50 to 1.25 mg/m ³)	
Not applicable to potential renovation activities.	
Type 3a Operations (where concentrations of airborne lead would be expected to be > 1.25 to 2.50 mg/m ³)	
Activities that include; <ul style="list-style-type: none"> • Welding or high temperature cutting of lead-containing coatings or materials indoors or in a confined space. • Dry removal of lead-containing mortar using an electronic or pneumatic cutting device. • Burning of a surface containing lead • Removal of lead containing coatings / materials using power tools without an effective dust collection system equipped with HEPA filter 	NIOSH APF = 50 Full-face piece air-purifying respirator with N-, R- or P- series filter and 100% efficiency. Tight-fitting powered air-purifying respirator with high efficiency filter. Full-face piece supplied-air respirator operated in demand mode. Half-mask or full-face piece supplied air respirator operated in continuous-flow mode.

Type 3b Operations (where concentrations of airborne lead would be expected to be > 2.50 mg/m ³)	
Abrasive blasting of lead-containing coatings or materials.	NIOSH APF >=1000 Type CE abrasive-blast supplied respirator operated in a positive pressure mode with a tight-fitting half-mask face piece.

Other Designated Substances

During the current survey, no sampling for mercury was conducted. However, fluorescent light tubes (known to contain mercury) and mercury-containing thermostatic controls were observed throughout the Site. No other building materials or components suspected to contain mercury were noted during the building survey. No immediate recommendations are warranted with regard to mercury.

Crystalline silica is a constituent of all concrete and masonry products present at the Site. Since the cutting, grinding, or demolition of materials containing silica is anticipated at the Site, these activities should be completed in accordance with Ontario Ministry of Labour Guidelines for Silica on Construction projects. Specifically, the Guideline prescribes respiratory protection, site isolation, and the use of wetting to control dust emissions during the cutting, grinding, drilling, or demolition of silica-containing materials. Please refer to the Guideline for details concerning Silica on Construction Projects.

No other Designated Substances or other potentially hazardous building materials were identified in the proposed project scope areas. If additional suspected Designated Substances or other potentially hazardous building materials not identified in this or previous reports pertaining to the Site are discovered, work should be stopped and the material(s) in question should be sampled for determination of content.

Should you have any questions or concerns please do not hesitate to contact us.

Respectfully submitted,



Yvonne Hooegeveen, P. Eng.
Project Manager



David Fisher, P. Eng., C. Chem.
Principal

Attachments: Attachment A - Laboratory Analysis Report
Attachment B - Site Plans
Attachment C - Site Photographs

Attachment A - Laboratory Analysis Report



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M5V 3C6
Tel.: 416-392-9024
E-mail:
Attn: Sara Reid

F.E. Job #: 21-5864
Project Name: Warehouse
Project ID: FE-P 21-10889
Date Sampled: 18-Jan-2021
Date Received: 20-Jan-2021
Date Reported: 22-Jan-2021
Location: 30 Newbridge Road
Toronto, ON

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	21 Bulk Sample(s) (<i>Rush</i>)

Client Sample ID	Lab Sample ID	Sample Matrix	Fibre Type	Asbestos Content
Wall Board	21-5864-1	Board	Chrysotile	25-50%
Wall Board	21-5864-2	Board	Chrysotile	25-50%
Wall Board	21-5864-3	Board	Chrysotile	25-50%
North Office - Drywall Joint Compound	21-5864-4	Drywall Joint Compound		Not Detected
North Office - Drywall Joint Compound	21-5864-5	Drywall Joint Compound	Chrysotile	0.5-5%
North Office - Drywall Joint Compound	21-5864-6	Drywall Joint Compound		Not Detected
Ceiling Tile 3 - a	21-5864-7	Ceiling Tile		Not Detected
Ceiling Tile 3 - b	21-5864-8	Ceiling Tile		Not Detected
Ceiling Tile 3 - c	21-5864-9	Ceiling Tile		Not Detected
Ceiling Tile 6 - a	21-5864-10	Ceiling Tile		Not Detected
Ceiling Tile 6 - b	21-5864-11	Ceiling Tile		Not Detected
Ceiling Tile 6 - c	21-5864-12	Ceiling Tile		Not Detected

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	21 Bulk Sample(s) (Rush)

Client Sample ID	Lab Sample ID	Sample Matrix	Fibre Type	Asbestos Content
South Office - Drywall Joint Compound, Ceiling	21-5864-13	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Ceiling	21-5864-14	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Ceiling	21-5864-15	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Wall	21-5864-16	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Wall	21-5864-17	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Wall	21-5864-18	Drywall Joint Compound		Not Detected
South Office - Drywall Joint Compound, Wall	21-5864-19	Drywall Joint Compound		Not Detected

Fisher Environmental Laboratories (Lab ID #: 2745) is accredited by CALA (Canadian Association for Laboratory Accreditation Inc.) for asbestos analysis by PLM.

ANALYTICAL METHOD:

Asbestos has been done in accordance with normal professional standard using the following Fisher Environmental Lab Method: Asbestos by PLM (Polarized Light Microscope) F-26, Rev.2.2.

Certificate of Analysis

Analysis Requested:	Asbestos, Lead
Sample Description:	21 Bulk Sample(s) (Rush)

Client Sample ID	Lab Sample ID	Sample Matrix	Lead (ppm)	Comments
North Office - Beige Paint	21-5864-20	Paint	3960	
South Office - Grey Paint	21-5864-21	Paint	<10	

< result obtained was below RL (Reporting Limit).

QA/QC Report

Parameter	Blank (ppm)		LCS (%)		CRM/MS (%)	
	Result	RL	Recovery	AR	Recovery	AR
Lead	<10	10	105	80-120	86	70-130

Parameter	Duplicate (%)					
	RPD	AR				
Lead	1.2	0-30				

LEGEND:

RL - Reporting Limit

LCS - Laboratory Control Sample

MS - Matrix Spike


AR - Acceptable Range

RPD - Relative Percent Difference

ANALYTICAL METHODS:

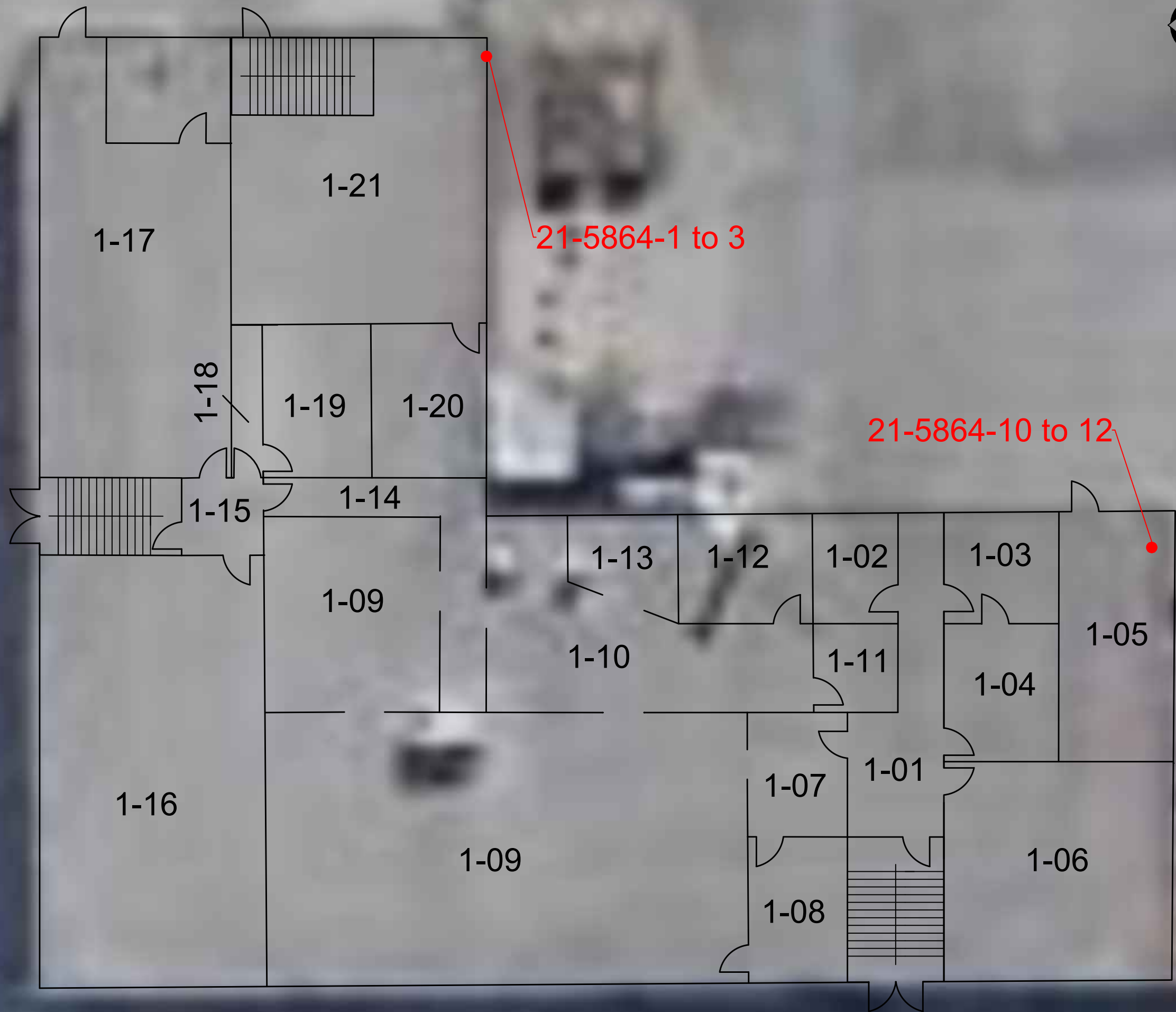
Metals (Lead) - Method # F-1, Rev. 4.5, Standard Operation Procedure for determination of Metals by the Inductively Coupled Plasma- Optical. Method used by Fisher Environmental Lab complies with the Standard Methods for the Examination of Water and Wastewater, 20th Ed 3120-B.

Authorized by: _____


 Roger Lin, Ph. D., C. Chem.
 Laboratory Manager



Attachment B - Site Plans



Legend



Asbestos Sample Locations

Figure 1

LOCATION:
30 Newbridge Road
Etobicoke, Ontario

BUILDING NAME:
Warehouse

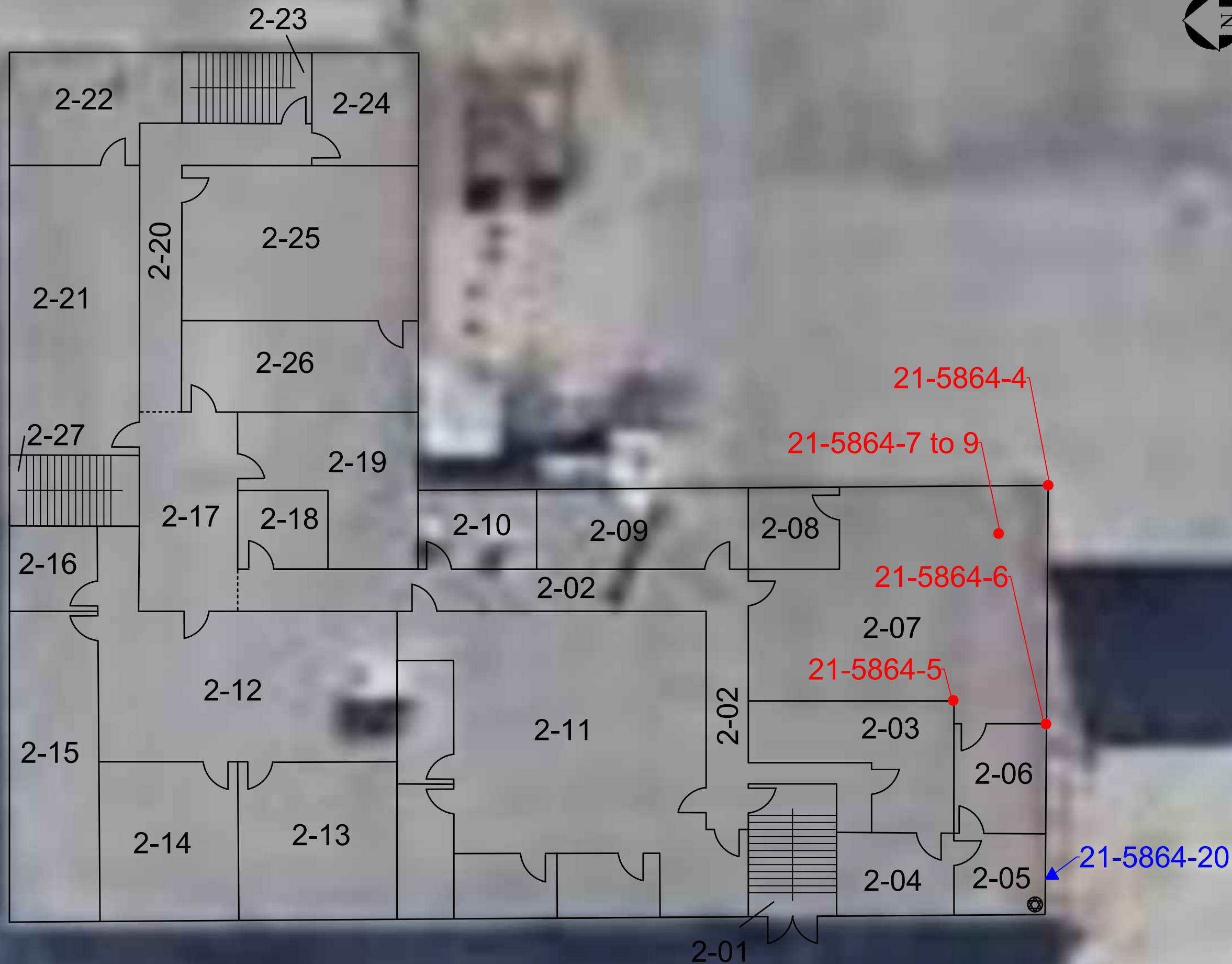
First Floor Plan
Asbestos Sample Locations

CLIENT: City of Toronto

PROJECT NUMBER: FE-P 21-10889 **DATE:** January 2021 **DRW BY:** ZA

CAD FILE: FIG1 **SCALE:** Not to Scale **CHK BY:** YH





Legend

- Asbestos Sample Locations
- ▲ Lead Sample Locations

Figure 2

LOCATION:
30 Newbridge Road
Etobicoke, Ontario

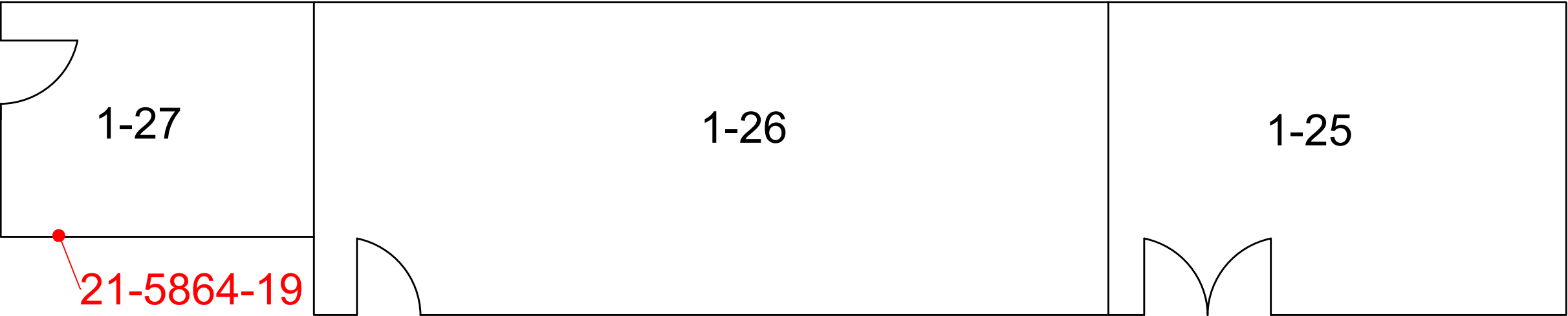
BUILDING NAME:
Warehouse

Second Floor Plan
Asbestos and Lead Sample Locations

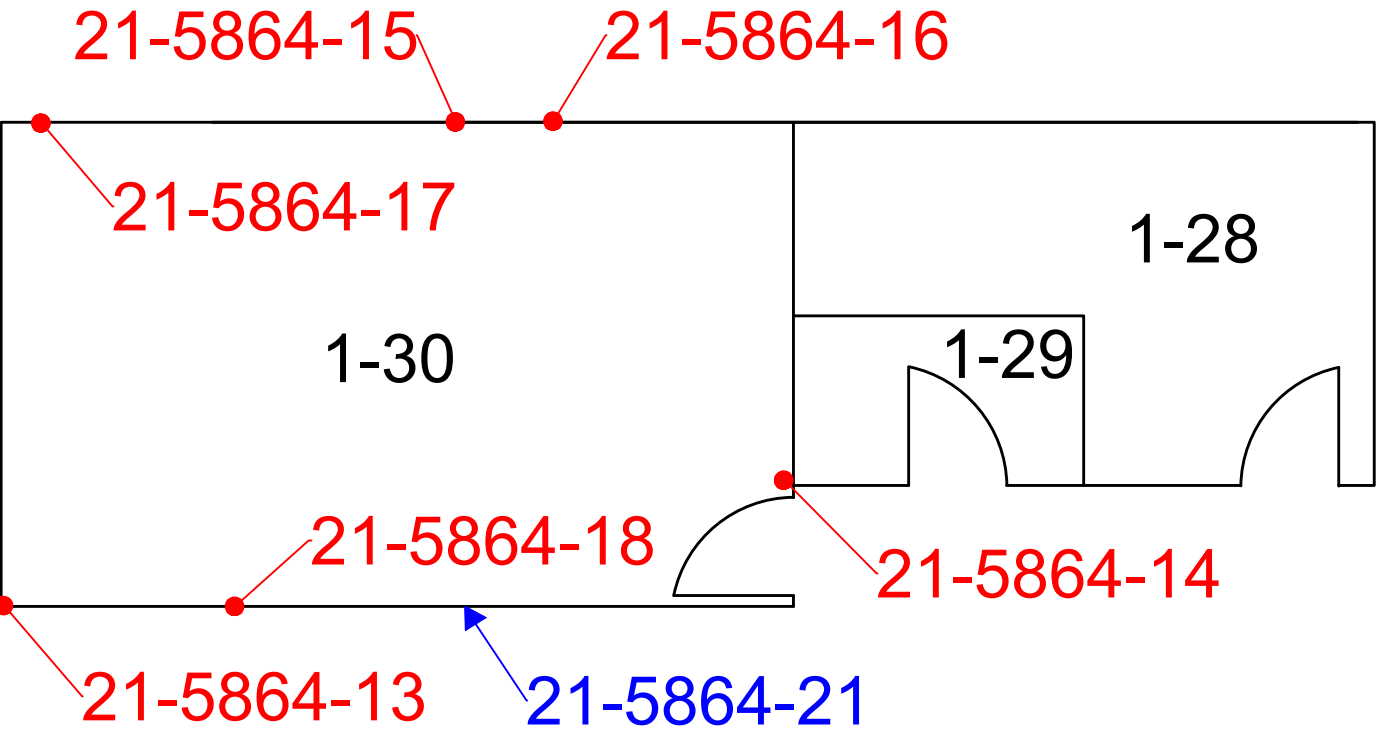
CLIENT: City of Toronto		
PROJECT NUMBER: FE-P 21-10889	DATE: January 2021	DRW BY: ZA
CAD FILE: FIG2	SCALE: Not to Scale	CHK BY: YH



South Office Area



South Washroom



Legend

- Asbestos Sample Locations
- Lead Sample Locations

Figure3

LOCATION: 30 Newbridge Road
Etobicoke, Ontario

BUILDING NAME: Warehouse

Main Floor Plan Asbestos and Lead Sample Locations		
CLIENT: City of Toronto		
PROJECT NUMBER: FE-P 21-10889	DATE: January 2021	DRW BY: ZA
CAD FILE: FIG3	SCALE: Not to Scale	CHK BY: YH



Attachment C - Site Photographs

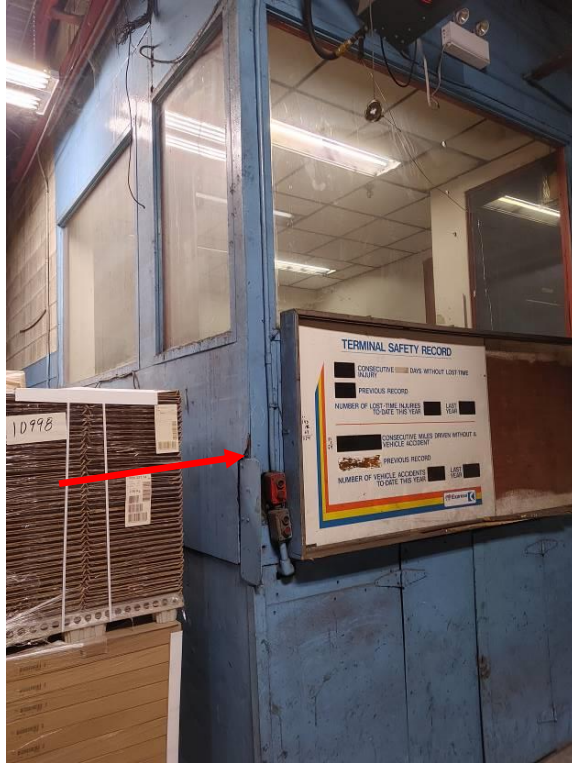


Photo 1 - Asbestos-Containing Wall Board found in the north warehouse.



Photo 2 – Close up view of the Asbestos-Containing Wall Board.