

ADDENDUM 02

Project:	Asbestos Removal	Addendum:	A- 02
Location:	117 7 Ave SE Drumheller Alberta	Date:	November 9, 2020

To All Bidders:

1.	<p>General This addendum shall be read in conjunction with the specifications prepared for the Town of Drumheller Request for Tender Asbestos Removal.</p> <p>1.2. Where inconsistent with the above, this addendum shall govern. This addendum forms an integral part of the Contract Documents and shall be included therein.</p> <p>1.3. No consideration shall be allowed for increases (extras) to the CONTRACT PRICE due to failure of the Contractor or Subcontractor not being familiar with this addendum.</p> <p>1.4. The Bidder shall insert in the Request for Tender Form, the number(s) of the addenda received by them during the quotation period and taken into account by them in preparing their quotation.</p>
2. Scope of the Addendum – Additional Information	
	ADDITIONAL INFORMATION
1.	<p>SPECIFICATIONS:</p> <p>Asbestos Report Attached.</p>

End of Addendum 02

ASBESTOS HAZARDOUS ASSESSMENT REPORT

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I. ASBESTOS ASSESSMENT

An Asbestos Assessment was conducted on two commercial buildings, located at 117 7th Avenue South East in Drumheller, AB to determine whether asbestos containing materials were present. The scope of the work included:

- Initial survey of the buildings for identification and collection of bulk building material samples. Completed October 21, 2020 from 11:00 am – 2:00 pm.
- Testing and analysis of all building material samples. Completed October 23, 2020 by BIOCHEM CONSULTING SERVICES located in Calgary, AB
- A second survey to determine the total area of asbestos containing material. Completed October 26, 2020 from 9:15 am – 11:30 am.

II. TESTING PROTOCOLS

The testing procedure used conforms to the NIOSH 9002 (using PLM), EPA 600/R-93/116 (using PLM), and EPA 600/R-04-004 (using PLM) Protocols for asbestos testing in accordance with the Alberta Asbestos Abatement Manual (2020).

III. ASSESSMENT RESULTS

BUILDING 'A' - MAIN BUILDING

The main office and shop are in this 6010 sq. ft. older building (1979). It showed a steel structure on a concrete foundation with steel siding exterior walls and paper wrapped, compressed straw insulation (typical) throughout. Roof is steel with one-sided paper backed pink insulation, and on the other side approximately 20% of total roof area is sprayed on insulation to the underside of steel roof sheeting. Exterior windows are modern vinyl sliders, exterior doors are fireproof metal, and exterior overhead doors are insulated and modern. All interior and exterior floors are levelled concrete slabs.

Furnaces, hot water tanks and AC units are natural gas and fairly new and modern. Heating ducts and furnace air returns are modern metal throughout with the exception of the Mezzanine.

The interior office walls showed 2" by 4" framing with pre-finished (PF) paneling (typical) and 4 mil poly on both sides of yellow R12 batt insulation. The ceiling is 2' by 4' suspended ceiling tile (typical) and flooring is linoleum with rubber based trim (typical). Janitor's room showed pre-finished panelling on ceiling and walls.

Laboratory analysis show the following results.

<u>Description</u>	<u>% Asbestos/Type</u>	<u>Location</u>
1. PF Paneling	None	Office-Interior Walls
2. PF Paneling	None	Office Interior Walls
3. PF Paneling	None	Office-Interior Walls
4. Linoleum	None	Office
5. Ceiling Tiles	None	Office
6. Rubber Base Trim	None	Office
7. Compressed Straw Insulation		
	None	Exterior Walls
8. Pink Fiberglass Insulation	None	Exterior Roof
9. Heating Duct Insulation Wrap		
	3% chrysotile	Mezzanine
10. Sprayed on Cellulose Insulation		
	40% chrysotile	Mezzanine-Underside of Metal Roofing
11. PF Paneling	None	Janitor's Room-Interior Walls
12. PF Paneling	None	Janitor's Room-Ceiling

Two bulk samples taken in the Mezzanine area contain chrysotile asbestos and are considered Hazardous Material which requires remediation by a Licenced Asbestos Remediation Contractor and in accordance with the Alberta Asbestos Abatement Manual.

The specific samples, #9-Heating Duct Insulation Wrap (roughly 2" thick) and #10-Sprayed on Cellulose Insulation show 3% and 40% asbestos respectively. There are two sections of the insulated heating duct; 130 ft. of 10" heat duct for a total of 72 cu. ft., and 56 ft. of main ducting (12" by 16") for a total of 13 cu. ft. The sprayed on insulation covers a 64 ft. by 24 ft. area for 1536 sq. ft. and is roughly 1" thick for a total of 128 cu. ft.

Asbestos containing material was not detected in the remaining samples.

BUILDING 'B' - MAINTENANCE BUILDING

Assessment of a 6840 sq. ft. older building showed a steel frame exterior structure on a concrete foundation with steel trusses and typical insulation. Exterior walls are pre-finished steel siding with approximately R3 foil backed yellow insulation. The roof is a steel frame with pre-finished steel sheeting and foil backed R6 yellow fiberglass insulation.

Interior Office walls are 2" by 6" wood framing with ½" drywall on both sides and R20 pink fiberglass batt insulation. Some walls have pre-finished paneling and others ½" standard painted plywood. Visual inspection of heating units, hot water tanks and AC units are all natural gas and fairly new and modern, and ducting is modern tin. Hoist is all metal. No asbestos materials were noted.

Laboratory analysis show the following results.

<u>Description</u>	<u>% Asbestos/Type</u>	<u>Location</u>
1. Yellow Fiberglass Insulation	None	Exterior Walls
2. PF Paneling	None	Interior Bathroom
3. Ceiling Tile	None	Interior Bathroom
4. R4 Yellow Insulation	None	Exterior Walls
5. ½" Drywall	None	Interior Dividing Partition (both sides)
6. ½" Painted Plywood	None	Interior Walls

These bulk samples have no asbestos containing material present and, as such, are not considered Hazardous Material. Asbestos remediation is not required.

IV. APPENDICIES

APPENDIX 1 - ASBESTOS CONTAINING MATERIAL IMAGES

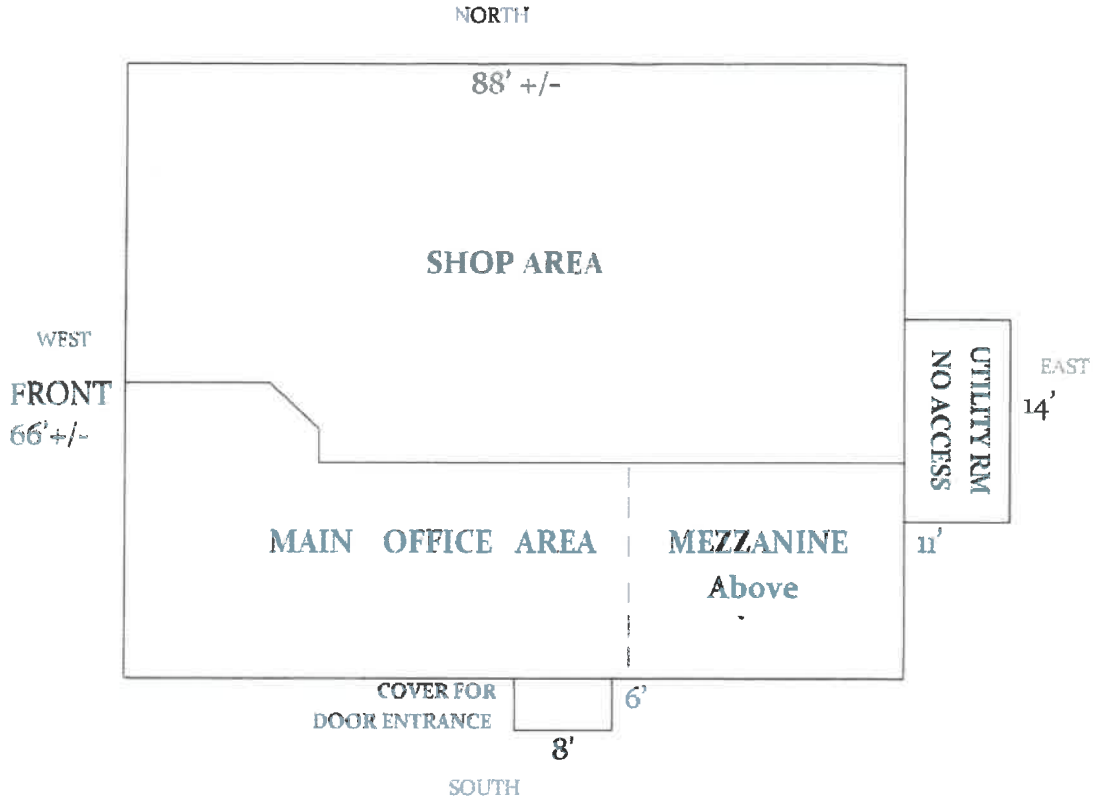
IMAGE 1 - HEATING DUCT INSULATION WRAP



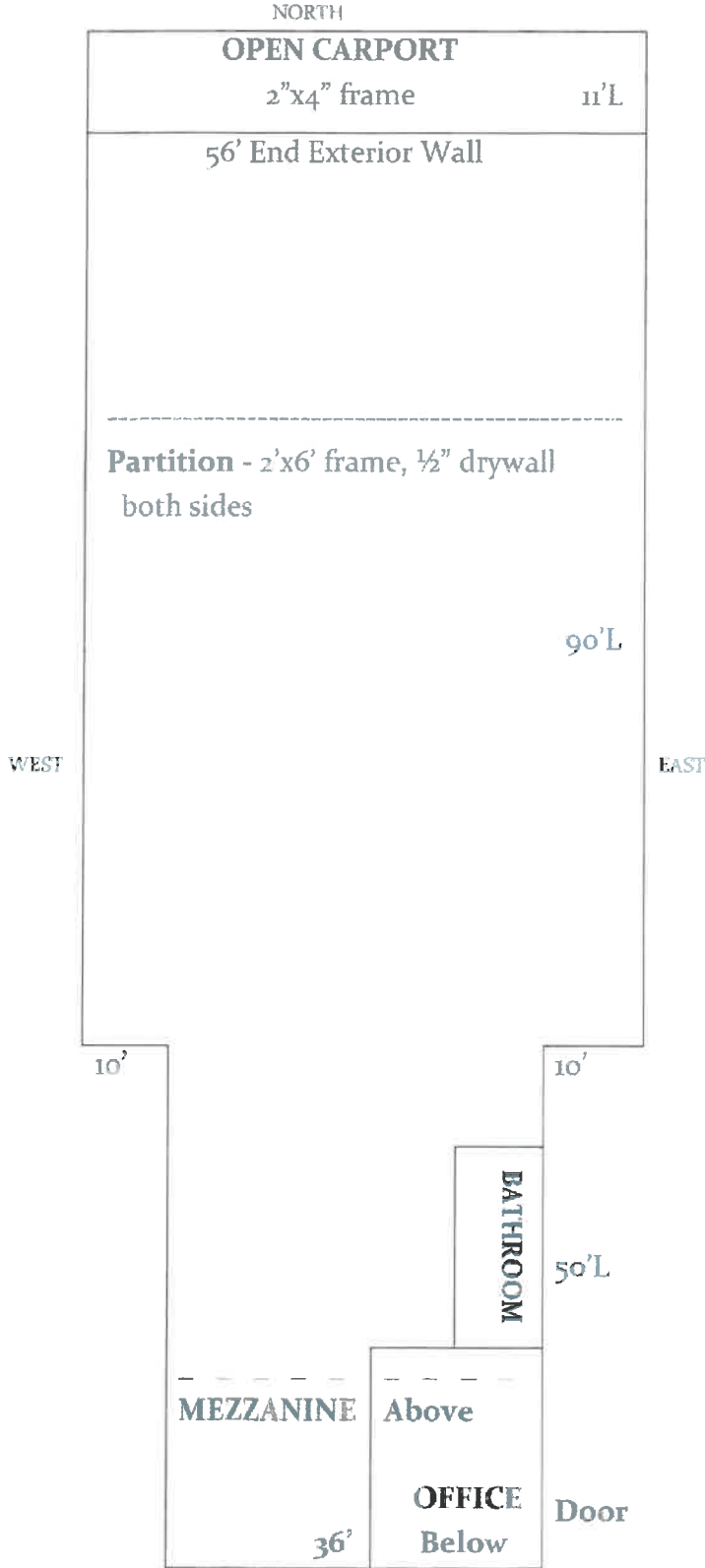
IMAGES 2 & 3 - SPRAY ON CELLULOSE INSULATION



APPENDIX 2 - SCHEMATIC OF BUILDING 'A' - MAIN BUILDING



APPENDIX 3 – SCHEMATIC OF BUILDING ‘B’ – MAINTENANCE BUILDING



APPENDIX 4 - BIOCHEM CONSULTING SERVICES LAB REPORT

Electronic file (2020.TDRU-D-26.plm) is attached. Document is 4 pages.

APPENDIX 5 – CHAIN OF CUSTODY

Electronic file (2020.TDRU-D-26.coc) is attached. Document is 2 pages.



Analytical Test Report

Test Report #: BC38067A

Revision #: 0

Issue Date: 23-Oct-20

Client: Gregg Blanchett Construction Ltd.

Code:

Contact: Gregg Blanchett

Job #: 2020.TDRU-D-26

P.O.#:

Address: 1115B 2 Avenue West

Drumheller AB

TOJ 0Y2

Internal Project #: BC38067

Sampled By: GB

Sample Location: 117 7th Avenue South East, Drumheller, AB

Sample Date: 21-Oct-20

Date Received: 22-Oct-20

Analytical	# of Pages
Bulk Asbestos	3

Total (incl. Cover) 4

Comments: None.

Approved By: _____

Michael Busse, B.Sc.
Laboratory Supervisor

- 1) THIS REPORT MAY NOT BE REPRODUCED IN PART WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE LABORATORY.
- 2) ANY REMAINING SAMPLES WILL BE DISPOSED OF 30 DAYS FOLLOWING ANALYSIS. CONTACT THE LABORATORY IF ADDITIONAL SAMPLE STORAGE TIME IS REQUIRED.
- 3) ALL LABORATORY ANALYSES INCORPORATE STANDARD QC PROTOCOLS; HOWEVER, UNSIGNED TEST REPORTS ARE PRELIMINARY AND UNOFFICIAL. IF REQUIRED, PLEASE CONTACT LABORATORY SUPERVISOR FOR QC DATA REPORTS.
- 4) REPORTED TEST RESULTS RELATE ONLY TO THE SAMPLES AS RECEIVED BY THE LABORATORY.
- 5) BIO-CHEM CONSULTING SERVICES (1980) LTD. ASSUMES NO LIABILITY FOR THE USE OR INTERPRETATION OF THE TEST RESULTS.
- 6) WHERE APPLICABLE, ESTIMATION OF THE MEASUREMENT UNCERTAINTY IS AVAILABLE ON REQUEST.
- 7) THIS LABORATORY OR SUB-CONTRACTED LABORATORY IS NOT ACCREDITED FOR THE TESTS MARKED [§]

Laboratory Contact Information

#118, 339 - 50TH Avenue S.E.

Calgary, Alberta T2G 2B3

CANADA

Telephone: (403) 253-7026

Fax: (403) 253-7072

E-mail: reporting@bio-chemconsulting.com

www.bio-chemconsulting.com



Please note that laboratory privacy policy limits discussion of this report to the client listed above.
For all others, please direct questions directly to client listed.

CERTIFICATE OF ANALYSIS
Bulk Asbestos Report (NIOSH 9002; EPA 600/R-93/116; EPA 600/R-04/004)

B.C. Report No. : BC38067A Rev. 0
Sub-Contracted: No
Client Job No.: 2020.TDRU-D-26

Date Analyzed: 23-Oct-20
Page Issue Date: 23-Oct-20

Sample #	Sample Description	Layer		Asbestos		Non-Asbestos Components			
		No.	%	Fibers	%	Fibers	%	Non-Fibers	(%)
BUILDING "A"									
1	A. Interior PF Paneling (Typical)	1	100	N/D		Cellulose	80	Other	20
2	B. Interior PF Paneling (Typical)	1	100	N/D		Cellulose	80	Other	20
3	C. Interior PF Paneling (Typical)	1	100	N/D		Cellulose	85	Other	15
4	D. Office Linoleum (Typical)	1	100	N/D				Inorganic Organic	35 65
5	E. Finished 2x4 Suspended Ceiling Tile (Typical)	1	100	N/D				Inorganic Organic	73 27
6	F. Rubber Base Trim (Typical)	1	100	N/D				Inorganic Organic	50 50
7	1. Exterior Walls Insulation (2 Sided Compressed Straw)	1	100	N/D		Cellulose	90	Other	10
8	2. Exterior Roof Insulation (Paper Backed Pink Fiberglass)	1	100	N/D		MMVF	90	Other	10

Comments:

None.

Glossary:

+: Sample contains asbestos. Estimated concentration is below 1% detection limit of analytical method (<0.01% for Vermiculite samples)
 N/D: Indicates that No Asbestos Fibers Detected in the specified layer(s).
 ASM: Acid Soluble Material (including, but not limited to: Calcite, Dolomite, Gypsum, Magnesite, Hydromagnesite, Anhydrite and Bassanite)
 DE: Diatomaceous Earth
 MICA: Micaceous Material (Talc, Vermiculite, Muscovite, and/or Biotite)
 MMVF: Man-made Vitreous Fibers (Glass Wool, Mineral/Slag Wool, Ceramic Fibers)
 NPAF: Natural Plant/Animal Fiber (Cotton, Silk, Hemp, Flax, Wool, etc.)
 Other: Non-Fibrous materials which were not identified during analysis. May also refer to mixtures of materials which were not identified.
 SYNT: Synthetic Organic Polymer (Fiber, Sheet, Resin)



CERTIFICATE OF ANALYSIS

Bulk Asbestos Report (NIOSH 9002; EPA 600/R-93/116; EPA 600/R-04/004)

B.C. Report No. : BC38067A Rev. 0
Sub-Contracted: No
Client Job No.: 2020.TDRU-D-26

Date Analyzed: 23-Oct-20
Page Issue Date: 23-Oct-20

Sample #	Sample Description	Layer		Asbestos		Non-Asbestos Components			
		No.	%	Fibers	%	Fibers	%	Non-Fibers	(%)
9	3. Heating Duct Insulation Wrap	1	100	Chrysotile	3	MMVF	85	Other	12
10	4. Sprayed On Cellulose Insulation	1	100	Chrysotile	40	MMVF	50	Other	10
11	5. Interior Wall PF Insulation	1	100	N/D				Inorganic Organic	2 98
12	6. Finished Ceiling PF Paneling	1	100	N/D		Cellulose	80	Other	20

BUILDING "B"

13	1. Foil-backed R3 Yellow Fiberglass Insulation	1	100	N/D		MMVF	90	Other	10
14	2. Interior Bathroom PF Paneling	1	100	N/D				Inorganic Organic	4 96
15	3. Interior Bathroom Ceiling Tile	1	100	N/D		Cellulose	90	Other	10
16	4. Exterior Wall Foil-backed R4 Yellow Insulation	1	100	N/D		MMVF	90	Other	10

Comments:

None.

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B.C. Report No. : BC38067A Rev. 0
Sub-Contracted: No
Client Job No.: 2020.TDRU-D-26

Date Analyzed: 23-Oct-20
Page Issue Date: 23-Oct-20

Sample #	Sample Description	Layer		Asbestos		Non-Asbestos Components			
		No.	%	Fibers	%	Fibers	%	Non-Fibers	(%)
17	5. Interior Dividing Partition 1/2" Drywall (Both Sides)	1	100	N/D				Other	100
18	6. Interior Wall 1/2" Painted Spruce Plywood	1	100	N/D		Cellulose	90	Other	10

Comments:

None.

Glossary:

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