



**Weaver Park
Asbestos Survey Report**



City of
Saskatoon

February 2014

Prepared For: City Of Saskatoon- Infrastructure Services Department
1101 Avenue P North, Saskatoon, SK.
Attn: Brent Anderson

Prepared By: Bersch & Associates Ltd.
Project No. : B67SRE22

1.0 EXECUTIVE SUMMARY

The survey of the Weaver Park located at 515 Adelaide Street in Saskatoon, Saskatchewan entailed the inspection of all accessible suspect asbestos containing material (ACM) located throughout the facility. Materials inspected included mechanical insulating material, floor covering, wall/ ceiling board and heat shield material.

Bulk sample analysis results indicate the presence of “Chrysotile” asbestos within the Weaver Park located in Saskatoon, SK. Please refer to *Appendix I for Bulk Sample Analysis* results. The recommended actions to be implemented in reference to the ACM identified are Management. Please refer to section 5 Asbestos Abatement Discussion for definitions. It should be noted that the recommendation of “Management” as part of the asbestos action plan is based upon the premise that renovations are not scheduled throughout the area that would impact the asbestos containing material present. *Prior to any major renovation/demolition activity, a destructive investigation is recommended to identify any inaccessible ACM that is physically concealed or isolated in areas such as enclosed wall/ceiling/floor cavities and pipe chases.* Asbestos was detected in the following forms throughout the facility:

- **Transite Board** is located on the ceiling of the Furnace Room.
- **Heat Shield Material** is found within nine light fixtures throughout the facility.

The various types of accessible ACM within the facility have been clearly identified to eliminate uncertainty of asbestos content. The identification of these materials is as follows:

- The Transite Board is identified with a red “ASBESTOS” stencil signifying it is asbestos containing.

Throughout the survey of the Weaver Park the Asbestos Containing Materials were assessed and given a Priority Rating of One, Two or Three, with Priority One being the items requiring the most immediate attention. See the **Survey Spreadsheet Database** in **Appendix II** for a room-by-room account.

Bersch & Associates Ltd. implemented the use of doorjamb labels that are applied to all the doorjambs of the rooms containing asbestos within the facility. This permits anyone accessing the room to easily identify the ACM present without having to reference the written report. Legends providing explanation of the abbreviations used on door jambs were placed on the backside of all maintenance/custodial doors within the facility. Employees and contractors will use the legend as a reference to identify ACM within the areas they are working.

2.0 INTRODUCTION

Bersch & Associates Ltd. was retained by the City of Saskatoon to conduct an Asbestos Survey and Hazard Assessment of the Weaver Park located in Saskatoon, SK. The survey entailed the

inspection of all accessible areas of the facility; including crawlspaces, ceiling spaces, pipe chases, and attics. The purpose of the survey was to locate, identify and assess the condition of all Asbestos Containing Materials (ACM) located throughout the facility. This report gives a detailed account of the inspection results and our firm's recommendations on control options to be implemented to bring the facility in compliance with the Province of Saskatchewan Occupational Health and Safety Act and Regulations. Bersch & Associates Ltd. conducted the survey in February 2014. A review of this report shall be conducted with all trades that are entering the facility to perform maintenance or renovation activity. This will ensure they are familiar with the types and locations of asbestos-containing materials present and prevent any uncontrolled disturbance and/or possible exposure to asbestos.

3.0 METHODOLOGY

Bersch & Associates Ltd. conducted the survey of the Weaver Park in Saskatoon, SK in February of 2014. The primary documents for guidance and criteria in this survey were the Province of Saskatchewan "Occupational Health and Safety Act and Regulations, 1996", Province of Saskatchewan "Managing Asbestos", and the U.S. Environmental Protection Agency "Guidance for Controlling Asbestos Containing Materials in Buildings". The USEPA document identifies factors associated with the "condition" and the "potential for disturbance or erosion" of asbestos containing materials (ACM). These factors help to determine potential for exposure to ACM and were used to make a qualitative evaluation of the material. It should be noted that the recommendation of "Management" Asbestos Abatement Action is based upon the premise that renovations are not scheduled in that area that will require disturbing or violating the asbestos containing material. In the event that renovations are scheduled that impact upon the areas of asbestos containing material then pre-removal of the asbestos containing materials may be necessary.

In total, four (4) bulk samples of suspect asbestos-containing materials were collected throughout the facility. Chrysotile asbestos was identified within the samples collected. Refer to Appendix I for a copy of the Bulk Sample Analysis Report. All bulk samples collected were analyzed by Bersch & Associates Ltd. laboratory in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as <1% by volume.

4.0 RECOMMENDATIONS:

Throughout the survey of the Weaver Park the Asbestos Containing Materials were assessed and given a Priority Rating of One, Two or Three, with Priority One being the items requiring the most immediate attention. As a result, no "Priority One" items were identified within the facility. Priority Ratings for all ACM identified is found in the **Asbestos Survey Database found in Appendix II** on a room-by-room account.

5.0 ASBESTOS ABATEMENT DISCUSSION

Asbestos is a known carcinogen and is listed in the Province of Saskatchewan under the Occupational Health and Safety Appendix, Part V as a Hazardous Chemical Substance and any release of asbestos fibres into the atmosphere creates a potential health hazard. Although the mechanism and epidemiology of asbestos carcinogenesis is not yet well defined, accumulating evidence suggests the significance of exposure at even very low fibre concentrations and hence human exposure should be kept to a minimum. It should be noted however that asbestos is a natural mineral and a measurable background concentration can be detected in any location sampled (inside buildings, outside buildings, urban, rural, etc.). The recommendations of the report are therefore intended to keep the potential exposure to an absolute minimum with the knowledge that a zero exposure is not possible.

Asbestos containing materials have been used in a wide variety of applications. Of particular concern, is the group of so called friable products. A friable product is one that can be crumbled or reduced to powder or smaller fragments by hand pressure. Publications from the U.S.E.P.A. as early as 1977 have indicated the potential hazard of asbestos exposure in buildings containing these friable products. The two main uses of friable asbestos products are as spray insulation (thermal, acoustic or fireproofing) on deck and/or beams or as thermal insulation on piping or mechanical equipment. A large amount of non-friable asbestos-containing materials have also been used in building construction such as asbestos cement board and asbestos containing vinyl flooring.

The mere presence of a friable asbestos containing material does not imply that there is an actual presence of elevated airborne fibre. As numerous studies have indicated, elevated asbestos fibre levels are generally found when settled dust or the actual asbestos containing material itself is disturbed by maintenance, renovation, inadvertent contact or vibration. The factors considered in the Environmental Protection Agency (USEPA) exposure assessment (condition of material, water damage, activity, movement, exposed surface area, accessibility, friability and presence in an air stream) often give some indication of the likelihood of fibre release but are not in any way definitive in determining whether a hazard exists or not. That is, even if the most friable product exists in a building, elevated fibre levels will not likely occur unless there is some disturbance by physical contact, vibration or an air stream.

There are four possible approaches to control exposure to airborne asbestos once a friable material is identified in a building. These methods briefly are as follows:

- A) **Removal** - Asbestos material is removed and disposed of by burial and replaced by non-asbestos materials.
- B) **Encapsulation** - Asbestos material is coated with a bridging or penetrating sealant.
- C) **Enclosure** - Asbestos containing materials are separated from the building environment by barriers such as suspended ceilings or cladding materials.

D) Deferred Action or Management and Custodial Control - The Province of Saskatchewan Human Resources, Labor and Employment Branch under the Occupational Health and Safety Regulations publish a document outlining "The Management of Asbestos". In the guide for compliance, an action plan is outlined for management of the asbestos materials identified and in summary is:

1. Identification, which has been accomplished by this report.
2. Development of Written Handling Procedures for maintenance personnel or often arrangements are made for a qualified contractor to conduct the necessary removal or spot maintenance prior to the regular staff conducting maintenance.
3. Asbestos Abatement Awareness and Process Training if the regular maintenance personnel are required to conduct asbestos related activities.
4. Inspection on regular basis is conducted to determine the ongoing condition of the material. Sask. Occupational Health & Safety Regulations require an "annual" inspection of all "friable" asbestos materials by a competent person.

In the event renovations or maintenance is performed within areas containing asbestos materials, written procedures must be developed to conduct the activity or prior removal if the situation warrants.

6.0 REFERENCES

- .1 Province of Saskatchewan "The Occupational Health and Safety Act and The Occupational Health and Safety Regulations" Office Consolidation, December 1996.
- .2 Province of Saskatchewan Human Resources, Labor, and Employment "The Management of Asbestos" January, 1991.
- .3 USEPA, 1985. U.S. Environmental Protection Agency, "Guidance for Controlling Asbestos-Containing Materials in Buildings". Washington, DC: Office of Toxic Substances, USEPA.
- .4 Midwest Centre for Occupational Health & Safety St. Paul's, Minnesota – Asbestos Training For Inspectors & Management Planners
- .5 McCrone Research Institute Course Hayward California " Asbestos Identification"
- .6 Environment Management and Protection Act, Saskatchewan Environment, October 2002
- .7 Hazardous Substances and waste Dangerous Goods Regulations, Saskatchewan Environment, April 1989

APPENDIX I

BULK SAMPLE ANALYSIS REPORT

BERSCH & ASSOCIATES LTD.

February 13, 2014

City Of Saskatoon
Infrastructure Services Department
1101 Avenue P North
Saskatoon, Sk.
S7L 7K6

ATTENTION: Brent Anderson

SUBJECT: Weaver Park Bulk Sample Analysis Report

Please find attached the laboratory results for the bulk analysis of the samples collected throughout the Weaver Park located at 515 Adelaide Street in Saskatoon, SK. The samples were analyzed in our laboratory for the identification of asbestos.

The results for the bulk samples were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client. If any questions arise on the results of the attached information please contact me at 306 222 7477. Thank you for this opportunity of service!

Sincerely,

Brad Berschiminsky
Bersch & Associates Ltd.
File: B67BLE22

Bersch & Associates Ltd.

B67BAE22

Box 3568
Humboldt, Sask. S0K 2A0

BULK SAMPLE ANALYSIS REPORT

PROJECT NO. B67.14

CLIENT: City of Saskatoon

Facility Services Branch, Saskatoon, SK.

Contact: Brent Anderson

Location: Weaver Park - 515 Adelaide Street, Saskatoon, SK.

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	22-May-13	Corridor adjacent Washroom - Heat shield material within light fixture	Chrysotile	60	WB
2	22-May-13	4 - Furnace Room - Transite board on ceiling	Chrysotile	30	WB
3	22-May-13	3 - Waiting Room - Composite flooring compound	None detected		WB
4	11-Feb-14	2 - Men's Washroom - Wall parging	None detected		WB



BULK SAMPLE PHOTOS

#1) Light Fixture Heat Shield



#2) Transite Board



APPENDIX II

ASBESTOS SURVEY DATABASE

Bersch & Associates LTD.															
			SAMPLE DATA												
Floor	Room Number	Use	SAMPLE SAMPLE REP	Sample ID	Date DD/MM/YY	Asbestos Type	% of Asbestos	Tradename ACM Product	Condition	Priority	Description of Sample Location	Asbestos Content In Area	Potential for Disturbance	Recommended Action	Comments
M	1	Women's Washroom									2 - Men's Washroom - Wall parging	No Accessible ACM			
M	2	Men's Washroom	Sample	B67-ASB.4	11-Feb-14		None	Parging Material			Corridor adjacent Washroom - Light fixture heat shield material	No Accessible ACM			
M		Corridor adjacent Washrooms	Sample	B67-ASB.1	22-May-13	Chrysotile	60%	Heat Shield Material	Good	3	3 - Waiting Room - Composite flooring compound	Heat Shield Material in Light Fixture	Low/Mod	Manage	Heat shield material is contained within one light fixture.
M	3	Waiting Room	Sample	B67-ASB.3	22-May-13		None	Composite Flooring			4 - Furnace Room - Transite board on ceiling	No Accessible ACM			
M	4	Furnace Room	Sample	B67-ASB.2	22-May-13	Chrysotile	30%	Transite Board	Good	3	Corridor adjacent Washroom - Light fixture heat shield material	Transite Board on Ceiling	Low/Mod	Manage	Heat shield material is contained within eight light fixtures. Replace the globe of one light fixture to prevent disturbance.
M	5	Dressing Rooms	Sample Rep	B67-ASB.1	22-May-13	Chrysotile	60%	Heat Shield Material	Good	2		Heat Shield Material in Light Fixture	Moderate	Manage	All attic accesses have been nailed shut and were inaccessible at time of survey.
A		Attic													

APPENDIX III

FLOOR PLANS



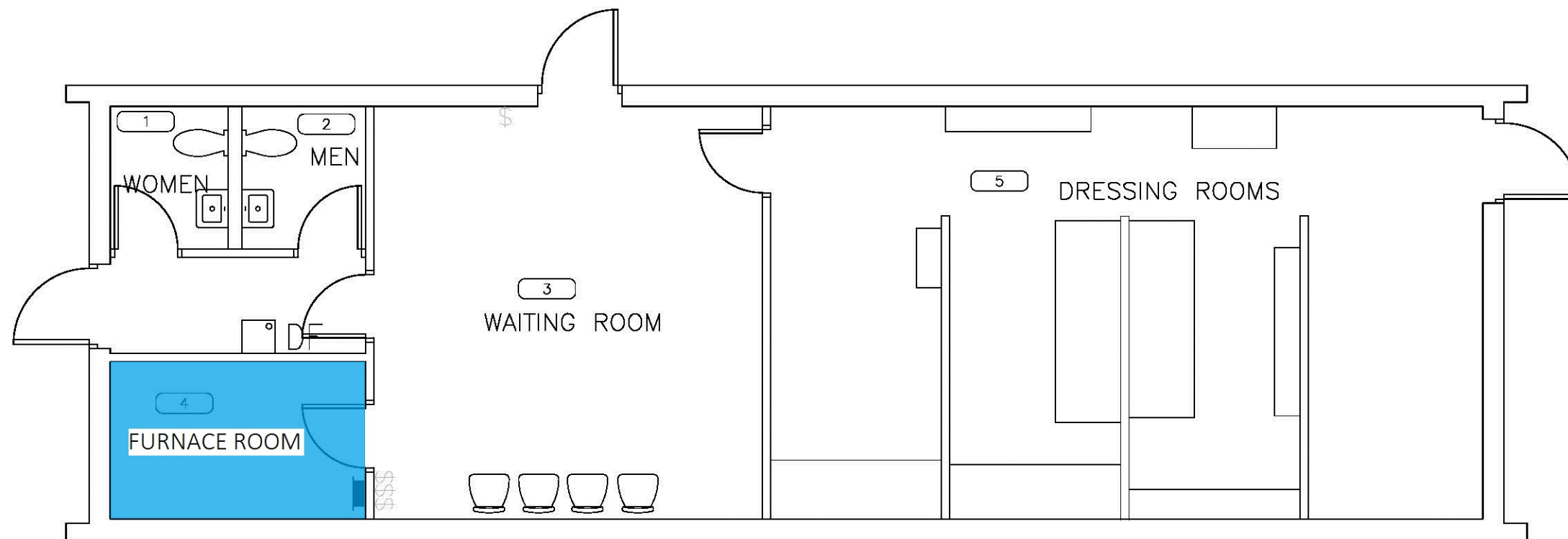
City of
Saskatoon

Infrastructure Services
Department

Facilities Branch
306-975-3300

NOTE:
THESE DRAWINGS HAVE BEEN PREPARED
BASED ON INFORMATION PROVIDED BY
OTHERS. THE CITY HAS TAKEN STEPS
TO VERIFY THE ACCURACY AND/OR
COMPLETENESS OF THIS INFORMATION
BUT SHALL NOT BE RESPONSIBLE FOR
ANY ERRORS OR OMISSIONS THAT
MAY BE INCORPORATED AS A RESULT
OF ERRONEOUS INFORMATION PROVIDED
BY OTHERS THAT WAS NOT ABLE TO BE
VISUALLY CONFIRMED.

GENERAL NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES
2. DRAWINGS ARE NOT TO BE SCALED.
3. ALL DRAWINGS TO BE READ IN CON-
JUNCTION WITH THE SPECIFICATIONS
UNLESS OTHERWISE NOTED.
4. VERIFY SITE CONDITIONS, DIMENSIONS
AND LOCATION OF ALL UTILITIES PRIOR
TO THE START OF CONSTRUCTION.
5. REPORT ALL DISCREPANCIES TO THE
CONSULTANT.



KEY

Asbestos Board

REV ISSUED FOR DATE

DESIGNED BY: DRAWN BY: MSB CHECKED BY: REQUESTED BY:

SCALE: 1:75 DATE: 13/05/2010

SHEET NAME
Main Floor
Floor Plan

PROJECT TITLE
762
Weaver Pk
Soccer Bldg

PROJECT NO. SHEET
REV. NO.

BERSCH & ASSOCIATES LTD.

December 19th, 2016

City of Saskatoon
Facilities & Fleet Division
1101 Avenue P North
Saskatoon, SK.
S7L 7K6

ATTENTION: Hazel Fernandez

SUBJECT: Site Activity / Clearance Report – Weaver Park Rec Unit

On December 14th, 2016, Kevin Olexson with Hub City Contracting was on site to remove nine (9) asbestos heat shields and the subsequent light fixtures from within the Weaver Park Rec Unit.

Mitch Webber of Bersch & Associates Ltd. was on site near the completion of the removal to observe work procedures implemented and to verify that all the asbestos heat shields had been removed from within Weaver Park Rec Unit. The heat shield removal was completed at 14:30 hr without incident. Inspection concluded that no asbestos containing heat shield materials remains within the facility. It should be noted that fibre glass insulation is present above the wood ceiling that surrounds the light fixture electrical junction boxes. Bersch & Associates Ltd confirms that the Weaver Park Rec Unit remains suitable for occupancy by staff and patron.

If any questions arise with the information provided, please contact our office. Thank you for this opportunity of service!

Sincerely,



Brad Berschiminsky
Bersch & Associates Ltd.

File No. – B67ARL19F