Pinchin File: 234838.404 May 1, 2023

PART 1 GENERAL

1.1 Instructions to Bidders

.1 An optional site walkthrough will be scheduled by the City of Winnipeg. Date and Time to be determined.

1.2 Site Conditions

- .1 Mould growth is present on the underside of the wood roof deck throughout the ice surface area of the arena at location identified on the attached Drawing.
- .2 Asbestos containing materials are not expected to be impacted by the planned remediation work, however, for reference, a copy of the City of Winnipeg Asbestos Inventory is attached.
- .3 Upper portions of the exterior arena wall surfaces feature an acoustic insulation that cannot be used to fashion materials used for isolation. Strapping materials will be required to affix materials to the ceiling.
- .4 The following work will be performed by the City of Winnipeg prior to the remediation:
 - .1 Lock-out / tag-out of the lighting above the rink surface area;
 - .2 Lock-out / tag-out of the dehumidifier above the rink surface area;
 - .3 Provision of the required electrical panelling;
 - .4 Removal of the hanging banners through-out the arena;
 - .5 Removal of abandoned HVAC ducting present of the Ceiling / Roof Deck and
 - .6 Removal of the netting around the Arena.
- .5 Ceiling / Underside of Roof Finishes: Tongue and groove (unconfirmed species) wood finish.

1.3 Requirements

- .1 Supply all labour, supervision, materials, equipment, lifts, scaffolding, and services deemed necessary for the proper completion of the Work as indicated.
- .2 The successful bidder will maintain the responsibility of securing the arena at the end of each work shift. Isolation efforts required will need to be constructed so as to keep the integrity of the security systems in place.
- .3 All work is to be completed in accordance with all applicable guidelines and statutes within the provincial Occupational Health and Safety (OHS) Legislation.
- .4 Successful bidder will take on the full responsibilities of Prime Contractor as described in provincial OHS Legislation.

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Pinchin File: 234838.404 May 1, 2023

- .5 Perform remediation following Manitoba Workplace Safety & Health (MWSH) Level III mould precautions.
- .6 Unless otherwise noted, thorough cleaning and decontamination to remove residual spores from all underlying building materials and substrates is required in all areas of work.
- .7 All work in this document involving electrical, mechanical, etc. work shall be performed by skilled tradesmen regularly engaged in the work in question and under the direct supervision of a currently qualified journeyman.
- .8 At the completion of work, all waste materials shall be removed from site and detailed cleaning of all work areas shall be conducted to a high standard of cleanliness.

1.4 Outline of Work

- .1 Isolate the Arena / Ice Surface area from the remainder of the building via the supply of required hoarding walls, polyethylene sheeting, strapping, tape seals, etc.
- .2 Construct a two-stage decontamination chamber at the entrance to the ice surface area of the arena.
- .3 Construct a two-stage decontamination chamber at the entrance to the Basement area for use of the facilities.
- .4 Supply a minimum of eight (8) HEPA equipped negative air discharge cabinets. Cabinets are to be operated through to completion of work and are to be distributed evenly throughout the area of work. Additional cabinets may be required to ensure proper air exchange and specified levels of negative pressure.

.5 Remediation:

- .1 Refer to Drawing No. MR1 for the extent and location of any mould growth.
- .2 Perform the following work while adhering to Manitoba Workplace Safety & Health (MWSH) High Risk (Level III) mould precautions:
 - .1 The removal of established mould growth from the underside of the existing roof deck (including any corresponding beams, joists, purlins, etc.) via abrasive media or high-pressure water blasting shall commence in a select test area as determined by the City of Winnipeg to ensure that that the desired level of cleaning has been achieved.
 - .2 Blast pressures shall be adjusted to achieve desired level of cleaning without causing unnecessary damage to the corresponding wood finishes.
 - .3 Removal of established mould growth from the remainder of the underside of the existing roof deck (including any corresponding beams, joists, purlins, etc.) via abrasive media or high-pressure water blasting.

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Pinchin File: 234838.404 May 1, 2023

- .4 Remove mounting clamps along beams/purlins to allow for cleaning between conduit and wood materials. Temporarily support conduit to ensure no tension/stress is added to junction boxes/lighting. Refasten conduit as required.
- .5 Pre-cleaning (HEPA vacuuming and / or damp wiping) of surfaces throughout all areas of work following the initial blasting operations but prior to the installation of any post-remediation encapsulant.
- .6 Prior to the installation of any post-remediation encapsulant, ensure the surfaces of the underside of the wood roof deck are dry (<17% moisture content). Supply any necessary dehumidification / air fans required to lower ambient drying time.
- .7 Supply and installation of a surface coating of Fosters Sheer Defense 40-51 Mould Resistant Clear Coat to the underside of the roof deck (including any corresponding beams, joists, purlins, etc.) throughout the Arena / Ice Surface area of the building. Protect adjoining surfaces and equipment for any overspray, etc.
- .8 Final clean-up (HEPA vacuuming and/or damp wiping) of surfaces throughout the Arena / Ice Surface area of the building following the application of the above noted encapsulant.
- .9 Final clean-up and dismantlement of the work enclosure following written receipt of the required Post-Remediation Environmental Clearances.

1.5 Inspection and Air Monitoring

- .1 From commencement of work until completion of clean-up operations, the Mould Remediation Consultant will be present periodically on site both inside and outside the Mould Work Area.
- .2 The following Milestone Inspections will take place, at the Owner's cost:
 - .1 Milestone Inspection A Clean Site Preparation
 - .1 Inspection of the Mould Work Area to confirm the status of require site preparations and set-up prior to start of any contaminated work.
 - .2 Milestone Inspection B Test Section Inspection
 - .1 Inspection of the test section along-side the City of Winnipeg to ensure the desired level of cleanliness has been achieved.
 - .3 Milestone Inspection C Post-Remediation Visual Inspection
 - .1 Inspection of the Mould Work Area after removal of mould contaminated materials but prior to the application of any encapsulants.

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Scope of Work Rev 2

Pinchin File: 234838.404 May 1, 2023

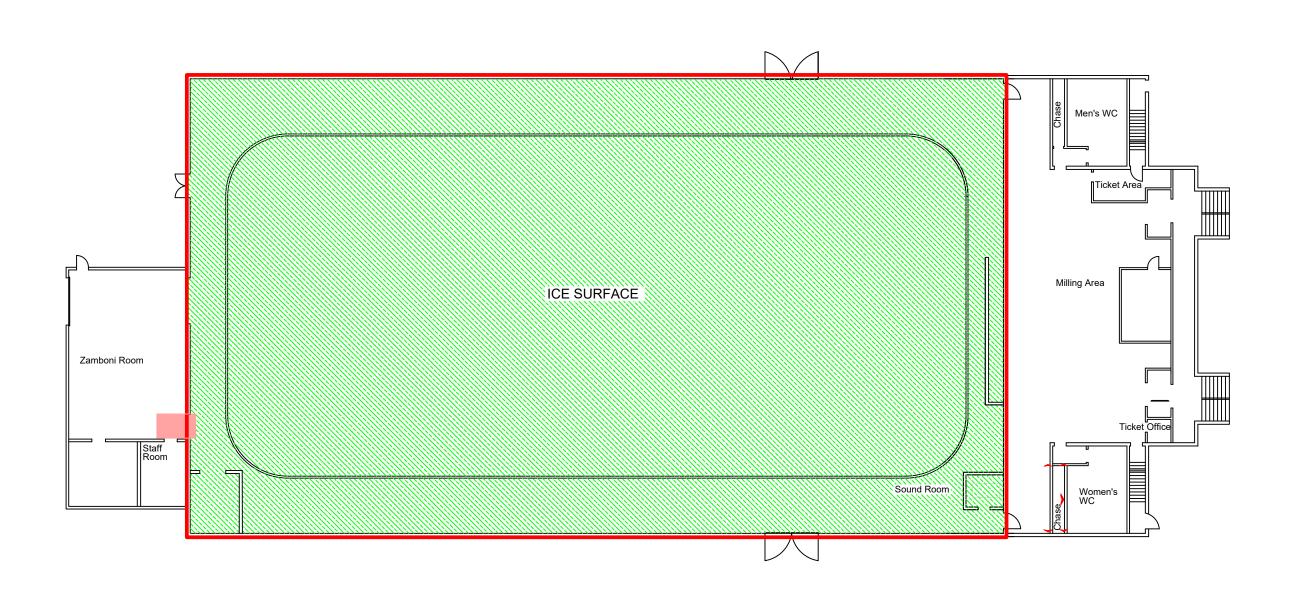
- .4 Milestone Inspection D Pre-Encapsulant Moisture Reading
 - .1 Inspection and testing of the roof deck to ensure the moisture content of the wood is below 17 % moisture content and is ready for the application of any encapsulants.
- .5 Milestone Inspection E Post-Encapsulant Visual Inspection
 - .1 Inspection of the Mould Work Area after the application of the specified encapsulant but prior to the collection of any post-remediation air clearances.
- .6 Milestone Inspection F Post-Remediation Environmental Clearances
 - Spore trap air samples will be collected from within the Mould Work Area, the adjacent occupied area and outdoors. Results of the Work Area samples will be compared to samples collected in reference area and outdoors. If the samples from the Work Area are not qualitatively and quantitatively similar to the reference areas, the Contractor shall:
 - .1 Maintain Mould Work Area isolation.
 - .2 Re-clean entire Mould Work Area.
 - .3 Repeat above measures until visually inspected and air monitoring results are at a level equal to that specified.
- .3 Notify the Mould Remediation Consultant at least 24 hours prior to each Milestone Inspection.
- .4 Do not proceed with the next phase of work until written approval of each Milestone is received.
- .5 In addition to the Milestone Inspections, inspection of the Mould Work Area will be performed to confirm the Mould Remediation Contractor's compliance with the requirements of the contract documents and governing authorities. Any deviations from these requirements that have not been approved in writing may result in a stoppage of work, at no additional cost to the Client.
- .6 The Mould Remediation Consultant is empowered by the Client to enforce the guidelines set for this Work and this specification. Any work required to correct any deviation from these documents will be at no cost to the Client.

End of Section

J:\234000s\0234838.000 COW,2019AnnualServices,HAZ,Consult\0234838.404 COW,Century Arena,Mould Consult\Deliverables\234838.404, Scope of Work Mould Remediation, 1377 Clarence Ave, Winnipeg, MB CoW, May 1, 2023 Rev2.docx

Generic Scope of Work Mould Remediation, IEQ, March 18, 2019

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KEYNOTES:

1. WASHROOM IS LOCATED IN THE BASEMENT AREA. NO ACCESS IS ALLOWED TO THE SOUTH SIDE OF THE ARENA. SECONDARY AIRLOCK WILL NEED TO BE ESTABLISHED FOR ENTRY AND EXIT TO THE BASEMENT



<u>LEGEND</u>

DEPICTS AREA AT UNDERSIDE OF ROOF DECK REQUIRING CLEANING VIA MEDIA BLASTING OR HIGH-PRESSURE WATER BLASTING TO REMOVAL VISIBLE TRACE OF MICROBIAL GROWTH; THEN ENCAPSULATE WITH FOSTERS SHEER DEFENSE 40-51 MOULD RESISTANT CLEAR COAT

AREA OF CONTRACT

APPROXIMATE LOCATION OF MAIN AIRLOCK TO BE CONSTRUCTED

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.

BASE PLAN PROVIDED BY CLIENT.



PROJECT NAM

MOULD REMEDIATION JOB NO. 2022-102

CLIENT NAM

CITY OF WINNIPEG

PROJECT LOCATION:

CENTURY ARENA 1377 CLARENCE AVENUE WINNIPEG, MANITOBA

FIGURE NAI

MR1

PROJECT NUMBER:	SCALE:
234838.404	NOT TO SCALE
DRAWN BY:	REVIEWED BY:
JCV	AAH
DATE:	FIGURE NUMBER:
APR 2023	1 OF 1

ASBESTOS INVENTORY CONTROL



Assets and Project Management Department Municipal Accommodations Division 4th Floor - 185 King Street • Winnipeg, MB • R3B 1J1

Building Name:	Century Indoor Arena	Inspection Date:	March 1, 2022
Building Code:	AR-02	Inspected By:	Ryan Matthews & Will Deller
Building Address:	1377 Clarence Avenue	Construction Date:	1967

		Drawing	Material	Testing	Lab	Date	Test	Est.
Material Location	Material Description	Label	Condition	Status	Report #	M/Y	%	%

NOTES:

- 1. Asbestos inspections and inventory updates are conducted annually.
- 2. There may be asbestos containing materials present that were not located during asbestos inspections.
- 3. Floor tile and sheet flooring installed before 1990 may contain asbestos and must be treated as an asbestos containing material.
- 4. Vermiculite insulation may contain pockets of asbestos. All vermiculite insulation must be treated as an asbestos containing material.

DRYWALL COMPOUND THROUGHOUT MAY

5. For asbestos related inquiries, call Central Control at 986-2382

AR-02

	CONTAIN ASBESTOS							
Zamboni Garage & Staff Rm	Pipe Fitting Insulation	PF	Good	TESTED	87400	Jun/10	85	
	Exterior Block Walls Randomly Inspected & Appear To Be Empty (Do Not Contain Vermiculite Insulation)							
Ice Shed								
Northwest Boiler/ Storage Room	Pipe Fitting Insulation - Inside Wall	PF	Good	TESTED	87400	Jun/10	70	
	Pipe Fitting Insulation	PF	Removed/19					70
	Tank Insulation	TI	Good	TESTED	87400	Jun/10	80	
	Drywall Compound - Ceiling	DC	Removed/19	TESTED	177519	Oct/'16	3	
Northwest Corner Above Storage Room	Encapsulated Abandoned Water Tank	TI	Removed'20					
	Pipe Fitting (By Overhead Door)	PF	Good					
	Hardboard on Floor (Cleaned/ Painted in 2020)	HB	Good					
Staff Room	Drywall Compound	DC	Good					3
Exterior Block Walls	Contain Vermiculite Insulation (Which May Contain Asbestos)	VE	Good					
Sound Room	Black 12 x 12 Floor Tile			TESTED	132102	Sept'13	0	
Ice Shed perimeter walls	Spray-on Insulation - white/brown			TESTED	119645	Nov/'12	0	
East and West walls	Spray-on Insulation (6 samples)		Good	TESTED	193355	Oct/'17	0	

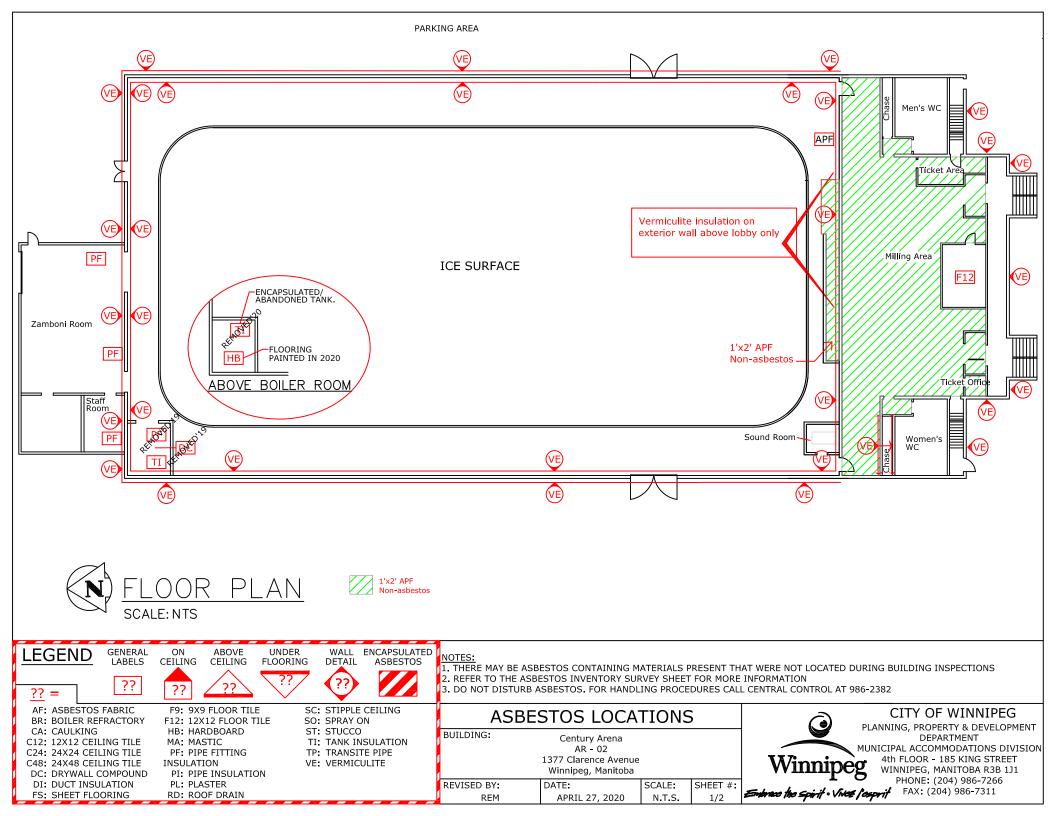
		Drawing	Material	Testing	Lab	Date	Test	Est.
Material Location	Material Description	Label	Condition	Status	Report #	M/Y	%	%
East Bleachers	Asbestos Heat Foil on Lighting (Under Bleachers)		Good	TESTED		Mar/'01	60	
Ice Shed (near top of ramp)	Asphalt Plank Floor (1' x 4' Planks)	APF		TESTED	132466	Sept'13	3	
Ice Shed Ramp	Asphalt Plank Floor (1' x 2' planks)							0
Ice Shed Bench Area	Asphalt Plank Floor (1' x 2' planks)			TESTED	119309	Nov/'12	0	
Block Wall Between Ice Shed & Lobby	Contains Vermiculite Insulation Above Lobby Ceiling	VE	Good					
Main Floor/Lobby/ WRms								
Men' Washroom Storage/ Pipe Chase	Pipe Fitting Insulation	PF	Removed					
Block Walls of Pipe Chase by Women's Washroom	Contain Vermiculite Insulation (Which May Contain Asbestos)	VE	Good					
Exterior Block Walls	Contains Vermiculite Insulation (Which May Contain Asbestos)							
Women's Washroom	Black Plank Floor (1' x 2' planks)		Good	TESTED	119309	Oct/'12	0	
Basement								
Block Wall Between Boiler Room & Corridor	Contains Vermiculite Insulation (Which May Contain Asbestos)	VE	Good					
Block Wall Between Boiler Room	Contains Vermiculite Insulation (Which May Contain							
& Refs Room	Asbestos)	VE	Good					
Block Wall Between Ramp & Both	Contains Vermiculite Insulation (Which May Contain	\/⊏	0					
Dressing Room Hallways	Asbestos)	VE	Good					
Furnace Room	Pipe Fitting Insulation	PF	Removed					
West Crawlspace	Pipe Fitting Insulation (Close to Entrance Only)	PF	Good					
West Corridor	Pipe Fitting Insulation	PF	Removed4/14					85
West Ramp and S.West corner	Asphalt Plank Floor - 1'x4' planks	APF	Good	TESTED	120093	Nov'12	3	
Main Floor to Basement ramp	Asphalt Plank Floor (1' x 2' planks)							0
Dressing Room #2	Pipe Fitting Insulation	PF	Removed4/14	TESTED	87400	Jun/10	85	
	Pipe Insulation	PI	Good	TESTED	102276	Jul/'11	0	
Dressing Room #1 & #2 Pipe Chase Behind Urinals	Pipe Fitting Insulation	PF	Removed	TESTED	87400	Jun/10	85	
Dressing Room #4	Pipe Fitting Insulation	PF	Removed4/14					85
	Pipe Fitting Insulation	PF	Good	TESTED	177773	Nov/'16	0	

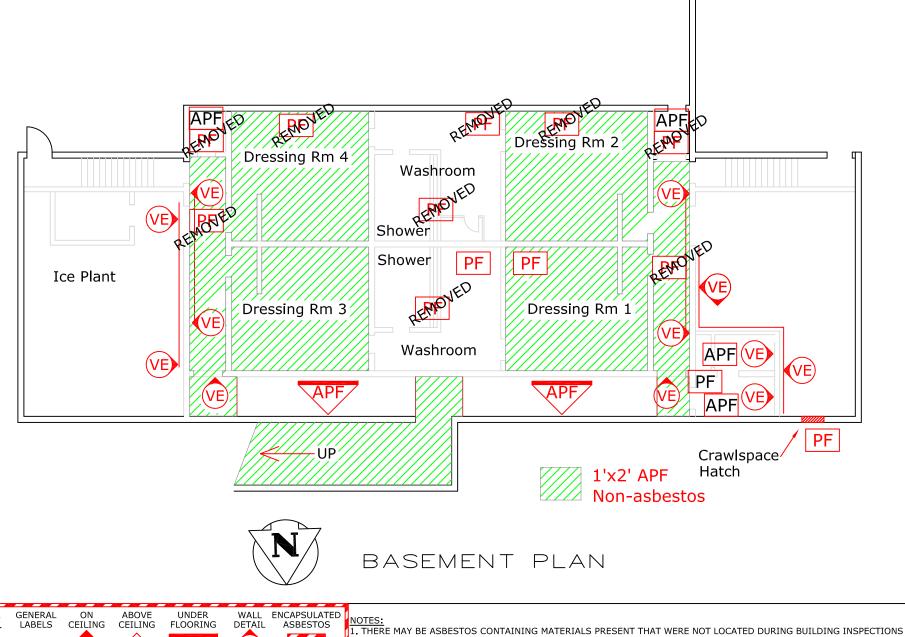
		Drawing	Material	Testing	Lab	Date	Test	Est.
Material Location	Material Description	Label	Condition	Status	Report #	M/Y	%	%
East Corridor	Pipe Fitting Insulation	PF	Removed4/14					
East Ramp and S.East Corner	Asphalt Plank Floor - 1'x4' planks	APF	Good					3
Dressing Room #3	Pipe Insulation	PI		TESTED	102034	Jul/'11	0	
All Dressing Rooms	Asphalt Plank Floor - 1' x 2' planks							0
Dressing Room #1 & #3 Washroom	Pipe Fitting Insulation	PF	Good	TESTED	102276	Jul/'11	0	
Dressing Room #1	Pipe Fitting Insulation (confirm if removed)	PF	Good					
East Crawlspace	Vermiculite Insulation (North End Only)							
Plant Room	Pipe Fitting Insulation	PF	Removed/10	TESTED	87593	Jul/'10	0	
	Pipe Fitting Insulation	PF	Removed/10	TESTED	102034	Jul/'11	0	
Exterior								
Construction Joint East Wall	Grout	GR	Good	TESTED	236340	Apr/'20	0	

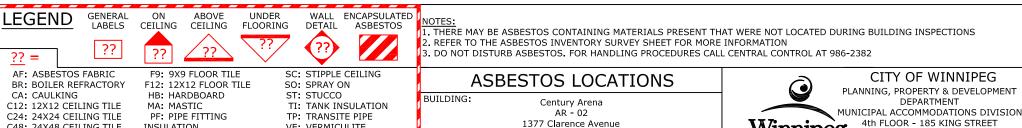
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AR-02







REVISED BY:

REM

Winnipeg, Manitoba

September 28, 2017

SCALE:

N.T.S.

SHEET #:

2/2

DATE:

WINNIPEG, MANITOBA R3B 1J1

PHONE: (204) 986-7266

FAX: (204) 986-7311

VE: VERMICULITE

C48: 24X48 CEILING TILE

DI: DUCT INSULATION

FS: SHEET FLOORING

DC: DRYWALL COMPOUND

INSULATION

PL: PLASTER

RD: ROOF DRAIN

PI: PIPE INSULATION