ASBESTOS SURVEYS & MONITORING NZ LTD

ASBESTOS DEMOLITION SURVEY

65 Crawford Street, Dunedin

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KEY INFORMATION

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Project Number	39948
Site Audit Date	8 February 2018
Asbestos Survey Report Issue Date	20 February 2018
Document Administration	
Version Number *(refer to Version Records section for history)*	1
Version Date	20 February 2018

SURVEY TYPE

WorkSafe, in their October 2016 "Good Practice guidelines" for **CONDUCTING ASBESTOS SURVEYS** note there are three types of Asbestos Surveys that can be carried out on a building:

- Management Survey
- Refurbishment Survey
- Demolition Survey

Management Survey

This type of Survey is to help a PCBU to identify and manage Asbestos within their work place. It will indicate the location of asbestos materials, provide a risk assessment and can be used to develop an Asbestos Management plan. It is a non intrusive survey and should not be used for Demolition or Refurbishment.

Refurbishment Survey

This type of Survey is to help a PCBU to identify and manage Asbestos within their work place if refurbishment of the building is being under taken. This type of Survey can be an add on to a Management Survey. It will be intrusive in the area of refurbishment only and may not include the complete building/ site. It will indicate the location of asbestos materials, provide a risk assessment and can be used to develop an Asbestos Management plan and /or an Asbestos removal control Plan (ARCP) for the planned Refurbishment work.

Demolition Survey

This type of survey is to help a PCBU to identify and manage Asbestos within their work place when demolition of the building is planned. This type of Survey can be an add on to a Management Survey if one has already been completed. Demolition Surveys are a fully intrusive inspection of all areas of the building, including all walls, floor lining, sub floors, wall cavities, roofs and ceiling spaces . It will indicate location of asbestos materials, provide a risk assessment and can be used to develop an Asbestos Management plan and or an Asbestos removal control Plan (ARCP) for the building Demolition .

EXECUTIVE SUMMARY

Asbestos Surveys & Monitoring NZ Ltd (ASM NZ Ltd) were engaged by the Dunedin City Council to conduct an Asbestos Demolition Survey of 65 Crawford Street, Dunedin.

The scope of work was to identify asbestos containing materials (ACM) present across site. The results of this asbestos survey are outlined below.

Was possible soil contamination included in the scope: No

Based on observations and sampling, the following asbestos containing materials were identified onsite,

- *Cement Board at Back Fire Exit*
- *Millboard/ Cement Board Wall lining Behind Stage.*

Based on initial swab testing report carried out by Salmac Insulation the following areas were identified as being contaminated with Asbestos containing dust,

- *Back of stage/ utility areas.*

Based on observations some products have the potential to contain ACM and should be treated as such until proven otherwise. These items were not tested as the products were either inaccessible or sampling would be considered too intrusive. These products include, but are not limited to the following;

- *Switchboards/Older style electrical wiring*
- *Hot Water Cylinders*

This report has been prepared by ASM NZ Ltd on the specific instruction of the Dunedin City Council. Any use or reliance by any other party without the instruction of ASM NZ Ltd will be at their own risk.

Asbestos Consultancy/Reporting is not generally covered by indemnity insurance and therefore ASM NZ Ltd's liability for this type of work will be limited to the amount of the related invoice in preparing this Survey report.

Based on industry experience and current available information all reasonable actions have been taken to identify ACM products to the level of this type of Survey. Although ASM NZ Ltd offers no guarantee that all asbestos has been identified.

ASBESTOS ANALYSIS RESULTS SUMMARY

Samples taken from site were analyzed by Dowdell & Associates Ltd, who are an IANZ accredited laboratory.

We have taken 23 samples across the site, results of the analysis are summarized below.

4 samples confirmed positive for Asbestos
19 samples confirmed negative for Asbestos

ASBESTOS REGISTER

No	Location	Sampled Material	Lab Ref.	Result
1	Switchboard Room	Vinyl	159136	No Asbestos Detected
2	Ground Floor - Ladies Bathroom	Vinyl	159137	No Asbestos Detected
3	Above Kitchen	Low Density Cement Board	159138	Chrysotile (white asbestos)
4	South Wall	Plaster Coating	159139	No Asbestos Detected
5	Behind Stage	Millboard	159140	Chrysotile (white asbestos)
6	Stage	Plaster Board	159141	No Asbestos Detected
7	East Wall	Plaster Coating	159142	No Asbestos Detected
8	East Fire Exit	Cement Board	159143	Chrysotile (white asbestos), Amosite (brown asbestos)
9	Roof	Textile	159144	No Asbestos Detected
10	North Wall	Plaster Coating	159145	No Asbestos Detected
11	Ground Floor Toilet	Vinyl	159146	No Asbestos Detected
12	Shower	Floor Coating	159147	No Asbestos Detected
13	Below Stage	Debris	159148	No Asbestos Detected
14	Mezzanine	Plaster Detailing	159149	No Asbestos Detected
15	Upstairs Kitchen	Vinyl	159150	No Asbestos Detected
16	West Wall	Plaster Coating	159151	No Asbestos Detected
17	Ceiling	Plaster	159152	No Asbestos Detected
18	Stage	Ceiling Tile	159153	No Asbestos Detected
19	Upper Ceiling Space - Above Back of Stage	Cement Board	159154	Chrysotile (white asbestos)
20	Front Entry	Cement Board	159155	No Asbestos Detected
21	Front Entry	Cement Wall Cladding	159156	No Asbestos Detected
22	Front Entry	Fascia	159157	No Asbestos Detected
23	Front Entry	Roughcast	159158	No Asbestos Detected

AUDIT REPORT NOTES

The Ministry of Business, Innovation and Employment has proposed under the new Health & Safety at Work (Asbestos) Regulation 2016, that people in control of a work place (PCBU) under take or engage a suitably qualified person to under take an Asbestos building Survey. The Survey is to be kept in the workplace so all staff and contractors can access it and be aware of its contents.

This Asbestos Survey / register will form the first part of an Asbestos Management Plan. This register, although current at the time of the audit, will need to be reviewed regularly. Timeframes for reviewing the register can be found in your Asbestos Management Plan.

The importance of this register is to ensure that any individual carrying out maintenance and or other work are aware of and do not inadvertently disturb and expose themselves or others to Asbestos Containing Materials.

This site Survey was carried out following Worksafe New Zealand's "Conducting Asbestos Surveys"- Good Practice Guidelines 2016.

Areas that we have considered inaccessible include but are not limited to the following areas. (underground or buried services, inaccessible ceiling or floor spaces, interior working on heating and ventilation systems). If suspicious materials are discovered onsite that are not included in this report they should be treated as asbestos until confirmed otherwise.

The following materials, if observed on site, should be treated as asbestos until testing proves otherwise. If materials listed below are discovered anywhere other than the locations recorded in this report then asbestos should be presumed to be present until testing proves otherwise.

- Switchboards
- Older woven wire casings
- Pipe Insulation– other than fiberglass and rubber
- Cement boards—if not listed in this report
- Flange gaskets
- Internal workings of older heaters and ventilation systems
- Brake linings, insulation and other internal components of older machinery

ASBESTOS CONTAINING DUST.

As per the preliminary asbestos identification survey carried out by Salmac Insulation , the following areas were found to contain asbestos containing dust (ACD).

- Top of sound control booth.
- Utilities wing north of stage.
- Space above chillers/kitchen.

No ACD was detected in swabs taken from the gallery ceiling space, the stage front and below access hatches.

Areas throughout the large open backstage area are highly likely to have further ACD contamination. The source of this contamination is most likely the friable millboard & cement board linings running from floor to roof behind the stage. This material is in a poor condition, with some areas showing significant damage.

Broken asbestos board debris were also observed in the Northwest corner of the upper mezzanine, as well as the access way to the upper roof space, these areas are likely to be a hotspot for ACD contamination also.

These upper backstage areas should be restricted, anyone entering these areas should be equipped with correct PPE and RPE and carry out proper decontamination procedures when exiting, all disposable PPE should be disposed of as contaminated waste.

All surfaces, materials and contents in these areas should be treated as contaminated until proven otherwise.

ASM NZ have undertaken no further swab testing.

Historical Asbestos Removal

Has asbestos been removed or thought to be removed prior to building survey?	Unknown
Have historical asbestos removal records been reviewed?	No

Changes to Asbestos regulations over time have led to safer and more efficient asbestos removal techniques. The use of technology such as swab testing, and respirable fibre count analysis (air testing) as well as technical advances in abatement equipment mean a higher standard is set and a more thorough clean can be achieved under the current guidelines.

Current day asbestos removal equipment such as negative pressure fan units (NPU), H class vacuum cleaners, decontamination units combined with the requirement of regular integrity testing means the quality of asbestos removal work undertaken today is a lot higher than historical ACM removal.

Asbestos removal work undertaken historically may have been carried out using methods which would not meet todays standards. This leaves the possibility of residual contamination being present in areas where asbestos removal was once carried out.

This can include, but is not limited to the following;

- Pipe lagging residue left on pipes with new insulation installed over top
- Asbestos roofing or cladding removed but fibres left embedded in timber trusses or framing
- Asbestos materials left in soil in subfloor spaces, gardens or elsewhere
- Contamination of wall or ceiling insulation such as pink batts
- Vinyl backings or adhesives left stuck to floors with new floor coverings laid over top

If removal is known to have been undertaken in this building care should be taken in the affected areas. Disturbance of materials in these areas should be avoided until testing has been carried out to confirm the presence or absence of residual asbestos.

ASBESTOS INFORMATION

Asbestos" refers to a group of naturally occurring minerals that have been mined around the world for years. It was once used extensively industrially and in construction due to its strength, insulating characteristics and resistance to fire.

Over time asbestos was linked to a number of serious respiratory diseases and cancers in workers handling the products and people who were exposed to airborne fibre contamination.

Asbestos Health Risks

Exposure to asbestos has been proven to cause illnesses such as; Mesothelioma, Asbestosis and lung cancers.

Based on information supplied from WorkSafe NZ, 170 people died of Asbestos related illness in 2013 and that number has been steadily increasing since 1999.

Currently exposure to asbestos is the single largest cause of work related disease mortality in New Zealand

Asbestos Imports

Importation of asbestos containing products into New Zealand has been prohibited since October 2016. Asbestos is currently still mined around the world (1 million Ton mined in 2014) and manufactured in to 1,000s of different products. Up until October 2016 these products had the potential to make their way into New Zealand.

WorkSafe NZ uses the following construction dates as a guideline to determine a buildings likelihood of containing asbestos

CONSTRUCTED BEFORE MID 1980'S

-Very likely to contain Asbestos materials

CONSTRUCTED BETWEEN 1980-1990

-Likely to contain Asbestos materials

CONSTRUCTED AFTER 1990

- Unlikely to contain Asbestos materials

RISK CALCULATOR

This asbestos risk calculator has been developed by ASM NZ Ltd to aide in the assessment of risk associated with all ACM materials. The higher the score the higher the risk associated with the ACM. This calculator is not definitive and is only used as a guide.

FACTORS	DESCRIPTION	SCORE
Asbestos Type	Chrysotile *(white asbestos)*	0
	Amosite/Crocidolite *(brown/blue asbestos)*	2
Location	Exterior	0
	Interior	2
Accessibility	Low *(usually inaccessible or unlikely to be disturbed)*	0
	Medium *(occasionally likely to be disturbed)*	2
	High *(easily/routinely disturbed)*	3
Friability	Non-Friable	1
	Friable	3
Condition	Low Damage *(no visible damage)*	0
	Medium Damage *(few scratches/marks, broken edges, weathering etc.)*	2
	High Damage *(Significant breakage and areas of damage revealing loose asbestos fibres, visible debris, degradation etc.)*	3
Coating	Painted/Sealed *(e.g. sprays, vinyl floor tiles, composite materials)*	0
	Unpainted/Unsealed *(e.g. raw materials)*	2

Total risk assessment score = sum of above factors

Risk Score	**1 - 5**	Low Risk
	6 - 9	Medium Risk
	10 - 15	High Risk

RISK STATEMENT

Low Risk	No imminent risk of fibre release Should be monitored over time to look for changes in the risk
Medium Risk	Potential of a fibre release with minimal disturbance A change in any of the calculation factors could result in a possible health & safety risk to occupants Material should be monitored and addressed in the near future
High Risk	Potential of a high fibre release Represents a possible health and safety risk to occupants Corrective actions required immediately

ASBESTOS SAMPLE DETAILS

Item Number	001
Sample Date	8 February 2018
Location	Switchboard Room
Material Type	Vinyl
Area (m²)	9m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159136
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	A composite sample of this red vinyl was taken from areas on the ground floor– No Asbestos was detected.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	002
Sample Date	8 February 2018
Location	Ground Floor Ladies Bathroom
Material Type	Vinyl
Area (m^2)	12m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159137
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	This vinyl is also present in the ground floor bar, a composite sample of this vinyl was tested.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	003
Sample Date	8 February 2018
Location	Above Kitchen
Material Type	Low Density Cement Board
Area (m²)	350+ *
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159138
Result	**Positive for Asbestos**

Material Assessment		
Asbestos Type	**Chrysotile (White)**	0
Location	Interior	2
Accessibility	Medium	2
Friability	Non-Friable	1
Condition	High Damage	3
Surface Treatment	Unsealed	2
Product Risk Score *(Total of Material Assessment Scores)*		**10**
High Risk (10-15)		

Main Photo

Detailed Photo

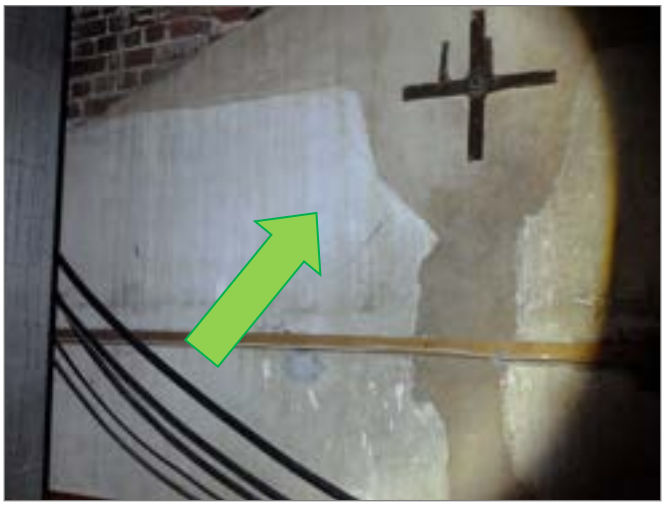
Comments	Cement board sample taken from roof space above ground floor kitchen/ bar. (Left Photo) Right photo is the other side of wall (back of stage) * The entire wall behind stage is a mixture of low density cement board and a softer asbestos board.
Recommendations	This cement board is a High risk and action should be taken to remove this material. The back of stage area should be restricted until this hazard has been removed. Removal of this material must be undertaken by an A Class removalist with an ARCP in place.

ASBESTOS SAMPLE DETAILS

Item Number	004
Sample Date	8 February 2018
Location	South Wall
Material Type	Plaster Coating
Area (m²)	-
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159139
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo



Detailed Photo

Comments	Plaster skim coat over brick wall.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	005
Sample Date	8 February 2018
Location	Behind Stage
Material Type	Millboard
Area (m^2)	350*
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159140
Result	**Positive for Asbestos**

Material Assessment		
Asbestos Type	**Chrysotile (White)**	0
Location	Interior	2
Accessibility	Medium	2
Friability	Friable	3
Condition	High Damage	3
Surface Treatment	Unpainted/ Unsealed	2
Product Risk Score *(Total of Material Assessment Scores)*		**12**
High Risk (10-15)		

Main Photo

Detailed Photo

Comments	*The entire wall behind the stage is a mixture of low density cement board and softer mill-board material.
Recommendations	This cladding is a high risk and action should be taken to remove this material. The back of stage areas should be restricted until this hazard is removed. Removal of this material should be undertaken by an A Class removalist with an ARCP in place.

ASBESTOS SAMPLE DETAILS

Item Number	006
Sample Date	8 February 2018
Location	Stage
Material Type	Plaster Detailing
Area (m²)	20
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159141
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	007
Sample Date	8 February 2018
Location	East Wall
Material Type	Plaster Coating
Area (m²)	40
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159142
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	008
Sample Date	8 February 2018
Location	East Fire Exit
Material Type	Cement Sheet
Area (m^2)	10
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159143
Result	**Positive for Asbestos**

Material Assessment		
Asbestos Type	**Chrysotile (White), Amosite (Brown)**	2
Location	Interior	2
Accessibility	Medium	2
Friability	Non-Friable	1
Condition	Medium Damage	2
Surface Treatment	Painted / Sealed	0
Product Risk Score *(Total of Material Assessment Scores)*		**9**
Medium Risk (6-9)		

Main Photo

Detailed Photo

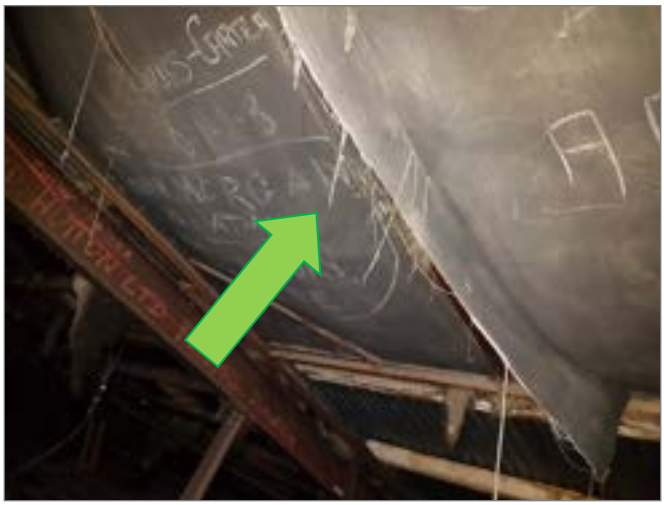
Comments	
Recommendations	This cement board is a medium risk material and should be removed prior to any work which may interfere with it. This removal should be undertaken by an A or B class removalist with an ARCP in place.

ASBESTOS SAMPLE DETAILS

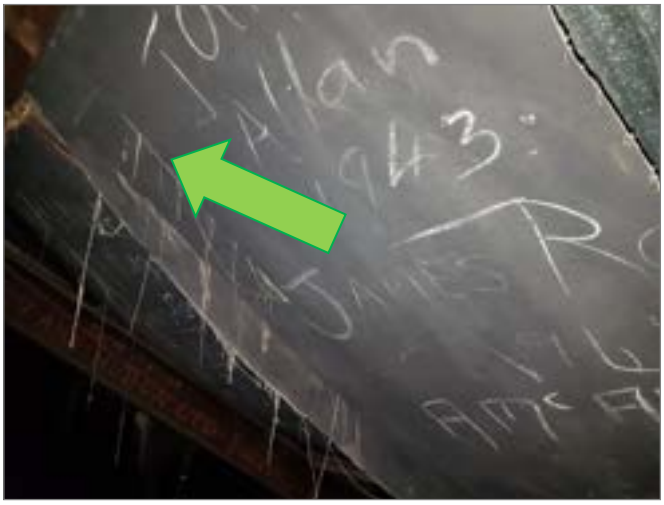
Item Number	009
Sample Date	8 February 2018
Location	Underside of Roof
Material Type	Textile
Area (m²)	
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159144
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo



Detailed Photo



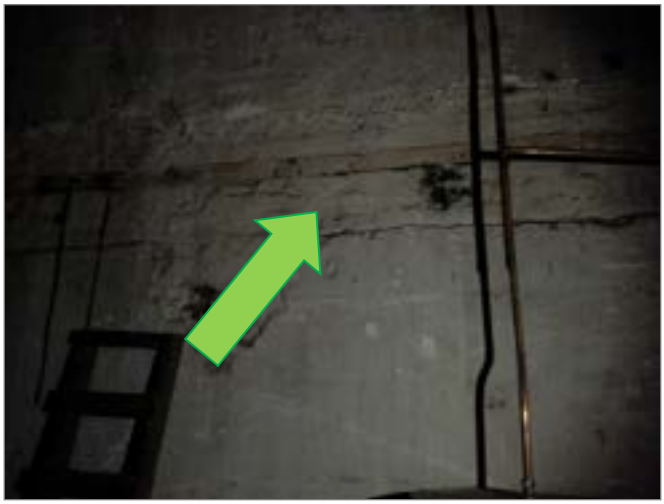
Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	010
Sample Date	8 February 2018
Location	North Wall
Material Type	Plaster Coating
Area (m²)	50m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159145
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo



Detailed Photo

Comments	Plaster skim coat over brick.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	011
Sample Date	8 February 2018
Location	Ground Floor Toilet
Material Type	Vinyl
Area (m²)	5m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159146
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	012
Sample Date	8 February 2018
Location	Shower
Material Type	Floor Coating
Area (m²)	1m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159147
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	013
Sample Date	8 February 2018
Location	Below Stage
Material Type	Debris
Area (m²)	-
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159148
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	014
Sample Date	8 February 2018
Location	Gallery
Material Type	Plaster Detailing
Area (m²)	
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159149
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

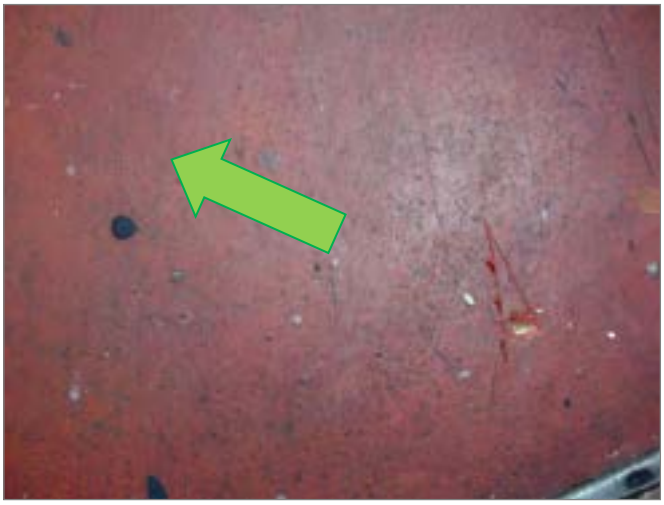
ASBESTOS SAMPLE DETAILS

Item Number	015
Sample Date	8 February 2018
Location	Gallery Kitchen
Material Type	Vinyl
Area (m²)	15m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159150
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo



Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	016
Sample Date	8 February 2018
Location	Main Ceiling West Wall
Material Type	Plaster Cladding
Area (m²)	80m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159151
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

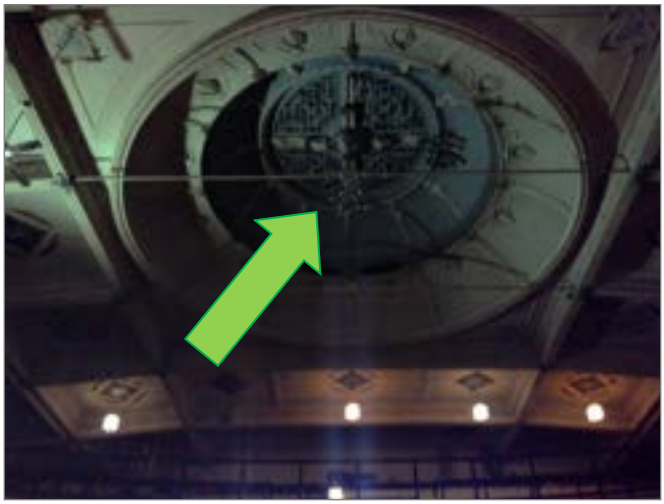
Comments	Plaster skim coat over bricks.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	017
Sample Date	8 February 2018
Location	Ceiling
Material Type	Plaster
Area (m²)	400
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159152
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo



Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	018
Sample Date	8 February 2018
Location	Stage
Material Type	Ceiling Tile
Area (m²)	200m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159153
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	019
Sample Date	8 February 2018
Location	Upper Ceiling Space Above Back of Stage
Material Type	Cement Board
Area (m²)	350m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159154
Result	**Positive for Asbestos**

Material Assessment		
Asbestos Type	**Chrysotile (White)**	0
Location	Interior	2
Accessibility	Medium	2
Friability	Friable	3
Condition	High Damage	3
Surface Treatment	Unpainted, Unsealed	2
Product Risk Score *(Total of Material Assessment Scores)*		**12**
High Risk (10-15)		

Main Photo

Detailed Photo

Comments	Entire wall behind stage is a mixture of cement board and millboard materials. Exact quantities of each are unknown. Very top section appears to be mainly cement board. Highly damaged cement board was observed at the bottom of ladder up to this ceiling space.
Recommendations	This material is considered a high risk and action should be taken to remove this cladding. The behind stage/ roof space areas should be restricted until this material is removed. Removal should be undertaken by an A Class removalist with an ARCP in place.

ASBESTOS SAMPLE DETAILS

Item Number	020
Sample Date	8 February 2018
Location	Front Entry– Soffit
Material Type	Cement Board
Area (m²)	40m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159155
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	Underside of entrance way.
Recommendations	No Action required

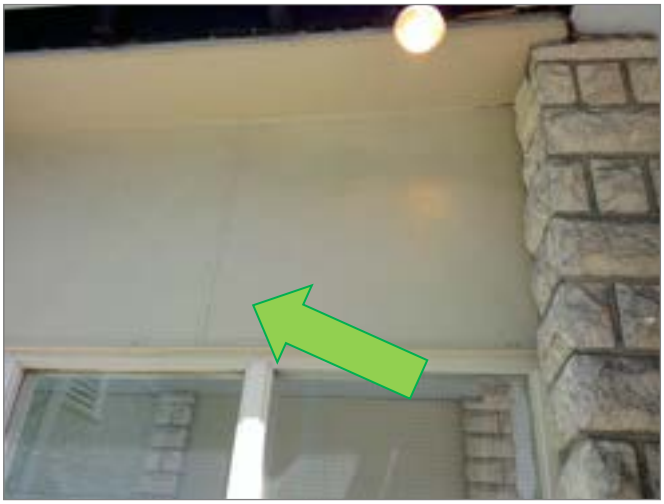
ASBESTOS SAMPLE DETAILS

Item Number	021
Sample Date	8 February 2018
Location	Front Entry
Material Type	Cement Wall Cladding
Area (m²)	10m
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159156
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo



Comments	Cement cladding above windows.
Recommendations	No Action Required

ASBESTOS SAMPLE DETAILS

Item Number	022
Sample Date	8 February 2018
Location	Front Entry
Material Type	Fascia
Area	35 lm
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159157
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	
Recommendations	No Action Required

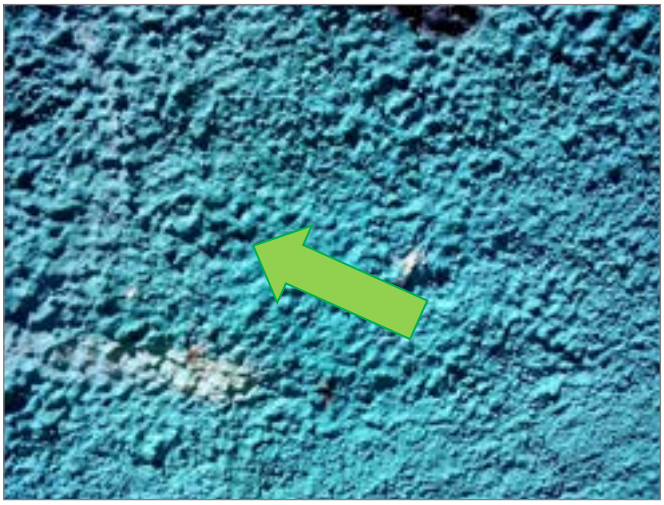
ASBESTOS SAMPLE DETAILS

Item Number	023
Sample Date	8 February 2018
Location	Front Entry
Material Type	Roughcast
Area (m²)	350
Sampling Method	Bulk
Sample Number *(Laboratory Reference)*	159158
Result	**No Asbestos Detected**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo



Comments	
Recommendations	No Action Required.

ASBESTOS SAMPLE DETAILS

Item Number	024
Sample Date	8 February 2018
Location	North West corner Back stage Mezzanine
Material Type	Debris
Area (m²)	-
Sampling Method	No Sample Taken
Sample Number *(Laboratory Reference)*	N/A
Result	**Presumed Asbestos**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Detailed Photo

Comments	A pile of debris found in the north-west corner of the backstage mezzanine. Asbestos claddings were observed amongst the debris, the surrounding area is highly likely to be contaminated.
Recommendations	This should be removed and disposed of as contaminated waste

ASBESTOS SAMPLE DETAILS

Item Number	025
Sample Date	8 February 2018
Location	Basement Cavity access cover
Material Type	Cement Board
Area (m²)	1
Sampling Method	No Sample Taken
Sample Number *(Laboratory Reference)*	N/A
Result	**Presumed Asbestos**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Comments	This cement board panel is highly likely to contain asbestos. No sample taken as testing costs would outweigh cost of removal.
Recommendations	This panel should be treated as an asbestos material. It should be removed and disposed of as asbestos waste.

ASBESTOS SAMPLE DETAILS

Item Number	026
Sample Date	8 February 2018
Location	Above stage
Material Type	Debris
Area (m²)	-
Sampling Method	No Sample Taken
Sample Number *(Laboratory Reference)*	N/A
Result	**Presumed Asbestos**

Material Assessment		
Asbestos Type	N/A	
Location	N/A	
Accessibility	N/A	
Friability	N/A	
Condition	N/A	
Surface Treatment	N/A	
Product Risk Score *(Total of Material Assessment Scores)*		

Main Photo

Comments	This broken asbestos board is found above the stage at the base of the ladder to the upper ceiling space.
Recommendations	This material should be removed and the surrounding area cleaned up.

LAB RESULTS

DOWDELL ASSOCIATES LTD
OCCUPATIONAL HEALTH ANALYSTS CONSULTANTS
4 Cain Rd, Penrose, PO Box 112-017 Auckland 1642, Phone (09) 5260-246. Fax (09) 5795-389.

BULK SAMPLE IDENTIFICATION CERTIFICATE

Job Number:	18-044972	Certificate Issue Date:	13-Feb-18
Date Samples Received:	13/02/2018		
No of Samples:	23		
Sampled By:	Client		
Obtained:	Submitted by client		
Date Analysed:	13/02/2018		
Analyst:	Tong Tong Yu, Adam Ngawati		
Method:	AS 4964 (2004) Method for the Qualitative Identification of Asbestos in Bulk Sample		
Client:	Asbestos Surveys & Monitoring NZ Ltd		
Client Address:	91 Annan Street, Invercargill, 9810		
Client Ref No:	73		
Contact:	Birney Lindsay		
Site Address:	Sammys Bar - 65 Crawford Street, Dunedin		

We examined the following sample(s) using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including Dispersion Staining Techniques. The result(s) in this certificate relate(s) to the sample(s) as received.
GLOSSARY
CHRYSOTILE (WHITE ASBESTOS) - CROCIDOLITE (BLUE ASBESTOS) - AMOSITE (BROWN ASBESTOS) - TREMOLITE, ANTHOPHYLLITE & ACTINOLITE (LESS COMMON ASBESTOS FIBRE TYPES) - SMF (SYNTHETIC MINERAL FIBRE)

Where non-asbestos fibres and the product type are listed, this is to help in the interpretation of results and are the opinion of the analyst only. Where the sampling is not conducted by Dowdell & Associates Ltd, the information indicated is that supplied by the client. Dowdell & Associates Ltd cannot be held responsible for sampling errors where the sample is taken by others. In analyzing non-homogeneous Bulk Materials and Soils for the presence of Asbestos, inherent difficulties arise while using the 'standard' Stereomicroscopic / Polarised Light Microscope method in determining differences between those samples considered as containing 'No Asbestos', those containing 'Trace' asbestos and those samples considered as having asbestos present but in very low concentrations. 'Trace' Asbestos is defined in the 'AS 4964 (2004) – Method for the Qualitative Identification of Asbestos in Bulk Materials', which is the most current of methods available for this type of analysis. Dowdell & Associates Ltd, while making every effort to minimise such difficulties, takes no responsibility for the misidentification of such samples and the subsequent actions taken by the client as a result of such analyses. A in-house subsampling method based on Western Australia guidelines is used for soil samples recieved above 150 grams.
NOTE: This report must not be altered, or reproduced except in full.

IANZ ACCREDITED LABORATORY ACCREDITATION Nº: 586

Analyst:	Name: Tong Tong Yu, Adam Ngawati
Approved By:	KTP: Laura Sands

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18-044972 Results

Laboratory Reference	Site Location / Client Description	Sample size as received	Result			
			Sample Material type	Sample Weight Analysed	Analysis	Comments
159136	1. Switchboard room	8g	Vinyl	As received	No Asbestos detected	n/a
159137	2. Ground floor ladies bathroom	6g	Vinyl	As received	No Asbestos detected	n/a
159138	3. Above kitchen - Low density	5g	Cement	As received	Chrysotile (White Asbestos)	n/a
159139	4. Above kitchen	5g	Textured coating	As received	No Asbestos detected	n/a
159140	5. Behind stage	5g	Millboard	As received	Chrysotile (White Asbestos)	n/a
159141	6. Stage	2g	Plaster	As received	No Asbestos detected	n/a
159142	7. East wall	3g	Plaster	As received	No Asbestos detected	n/a
159143	8. East fire exit	5g	Cement	As received	Chrysotile (White Asbestos) Amosite (Brown Asbestos)	n/a
159144	9. Roof	2g	Other	As received	No Asbestos detected	n/a
159145	10. North wall	2g	Textured coating	As received	No Asbestos detected	n/a
159146	11. Ground floor toilet	2g	Vinyl	As received	No Asbestos detected	n/a
159147	12. Shower	4g	Vinyl	As received	No Asbestos detected	Synthetic mineral fibres present
159148	13. Below stage	2g	Plaster Debris	As received	No Asbestos detected	n/a
159149	14. Mezzanine	6g	Other Plaster	As received	No Asbestos detected	n/a
159150	15. Upstairs kitchen	6g	Vinyl	As received	No Asbestos detected	n/a

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DOWDELL & ASSOCIATES LTD

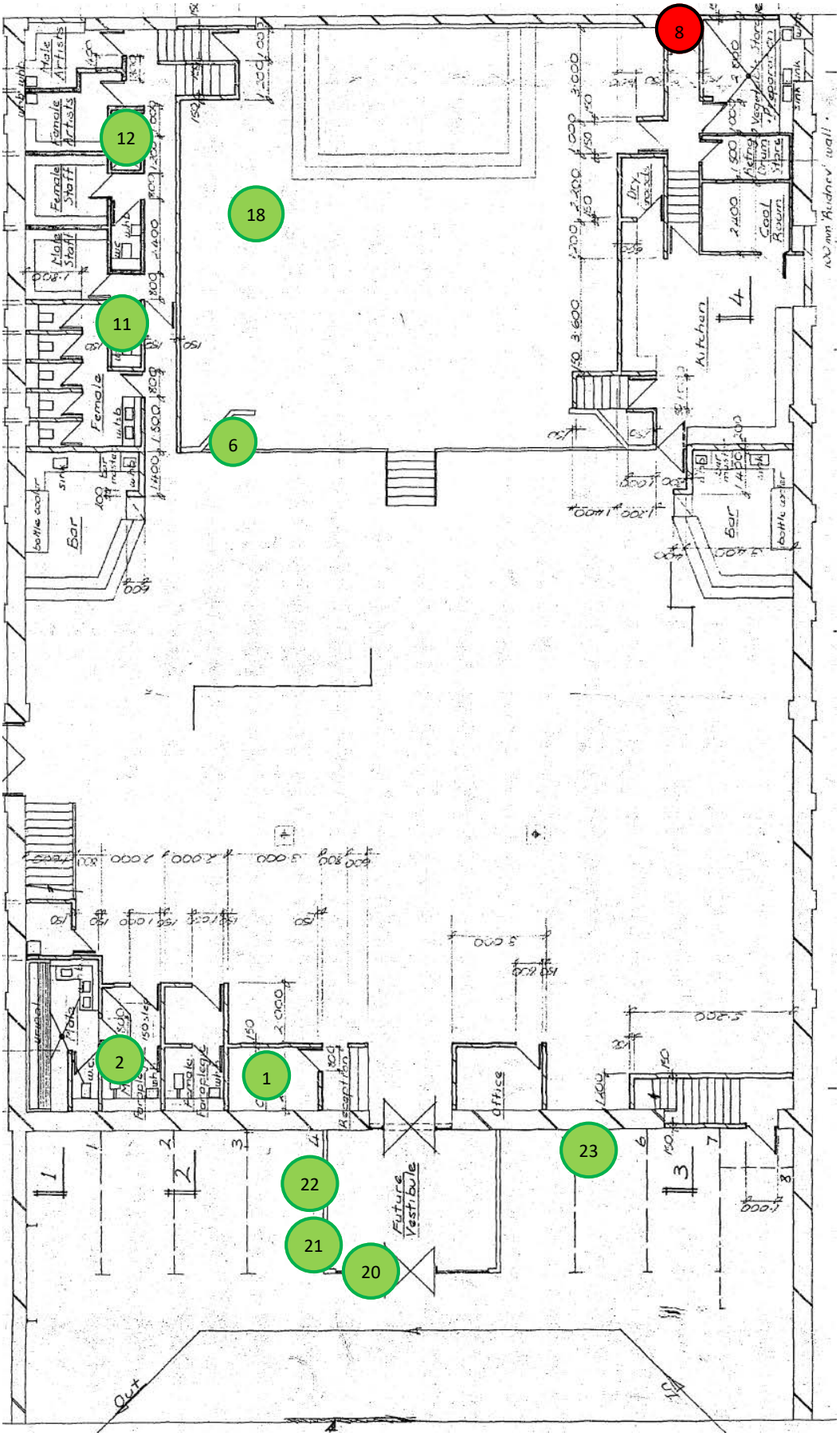
18-044972 Results

Laboratory Reference	Site Location / Client Description	Sample size as received	Result			
			Sample Material type	Sample Weight Analysed	Analysis	Comments
159151	16. West wall	8g	Textured coating Plaster	As received	No Asbestos detected	n/a
159152	17. Ceiling	4g	Plaster	As received	No Asbestos detected	n/a
159153	18. Stage	6g	Plaster	As received	No Asbestos detected	n/a
159154	19. Upper ceiling	6g	Cement	As received	Chrysotile (White Asbestos)	n/a
159155	20. Front entry	5g	Cement	As received	No Asbestos detected	Organic fibres present
159156	21. Front entry - Cladding	5g	Cement	As received	No Asbestos detected	Organic fibres present
159157	22. Front entry - Fascia	5g	Cement	As received	No Asbestos detected	Organic fibres present
159158	23. Front entry - Roughcast	5g	Other	As received	No Asbestos detected	n/a

SAMPLE LOCATION MAP– Ground Floor

(Sample location map to be used as guide only– refer to sample details for more information)

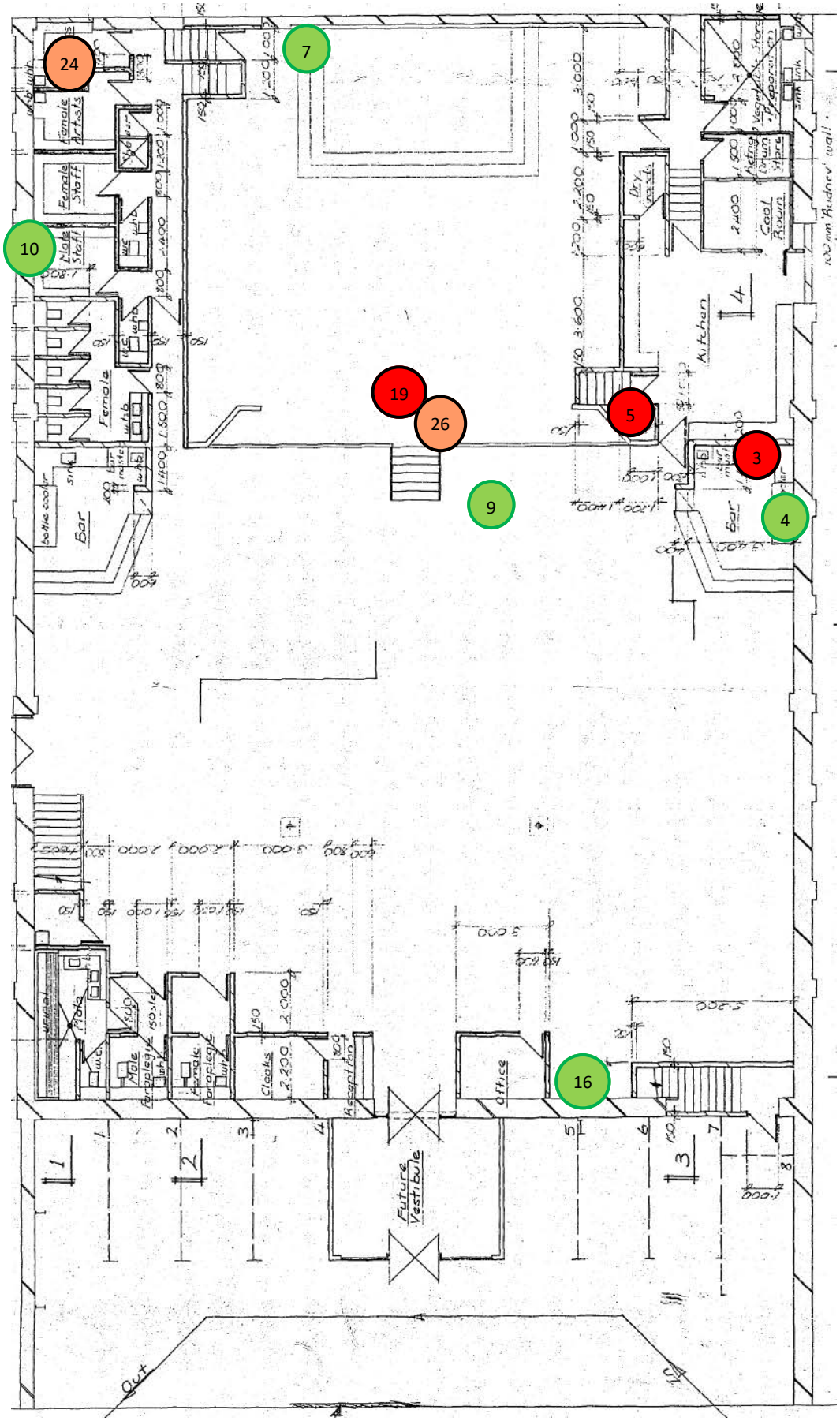
Negative Sample Positive Sample Presumed Asbestos



SAMPLE LOCATION MAP– Back of Stage/ Roof spaces

(Sample location map to be used as guide only– refer to sample details for more information)

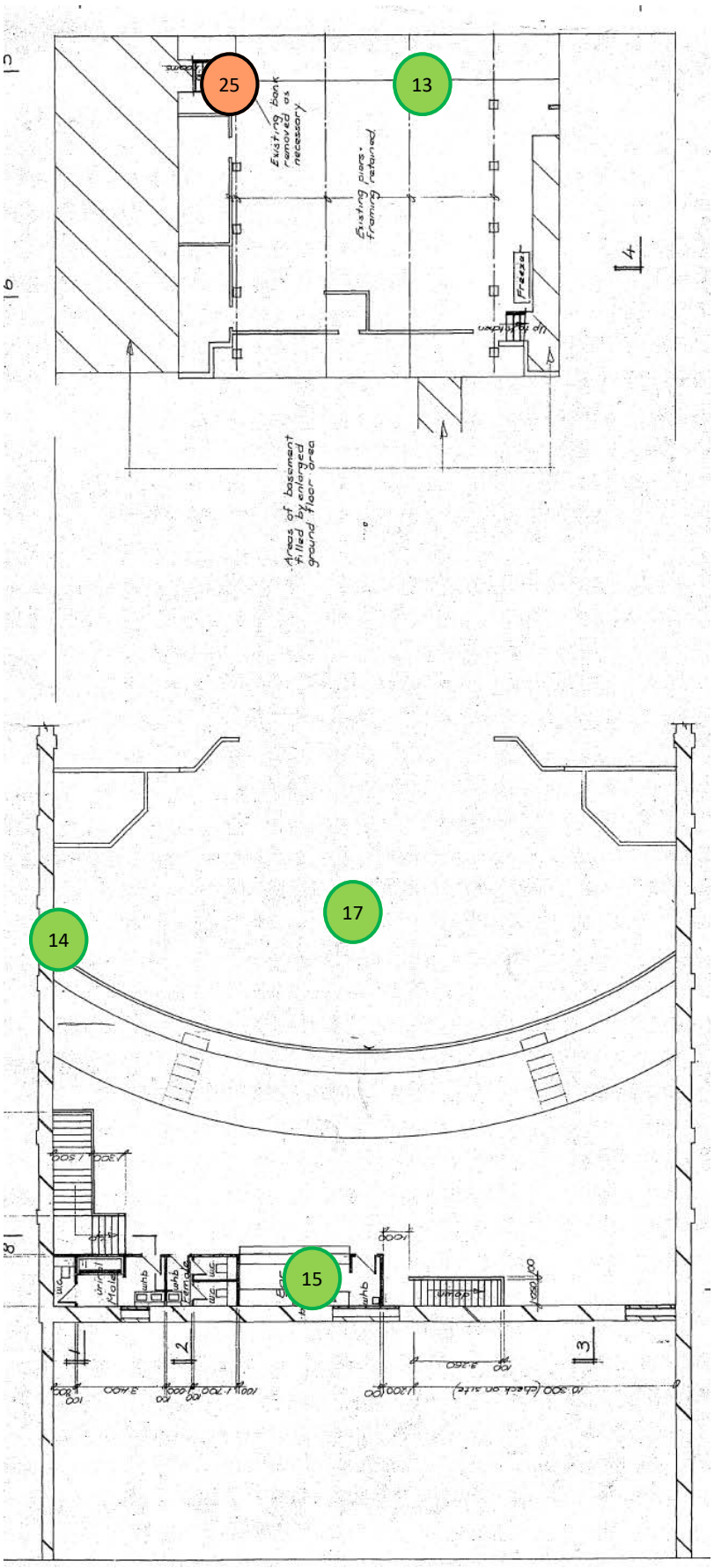
Negative Sample Positive Sample Presumed Asbestos



SAMPLE LOCATION MAP—Basement/ Gallery

(Sample location map to be used as guide only– refer to sample details for more information)

Negative Sample Positive Sample Presumed Asbestos



VERSION RECORDS

Version Number	Name of Reviewer	Date of Review	Changes made to identified asbestos or ACM information contained in this plan	Signature
1.0	B Lindsay	20/02/2018		BL

Glossary

Term	Definition
ACM	Asbestos Containing Material – any material or item which contains asbestos
Amosite	A commonly used asbestos mineral referred to as Brown Asbestos
ARCP	(Asbestos Removal Control Plan) the document used to record the method and controls used for an asbestos removal project
Asbestos	A Group of naturally occurring silicate minerals with thin fibrous crystals. The three common asbestos types are Chrysotile, Amosite and Crocidolite
Asbestosis	An Asbestos related disease. A scarring of the lung lining due to long term asbestos exposure
Asbestos Surveyor	Person carrying out the survey, holding appropriate surveying qualifications and experience
Asbestos Management Survey	A survey used to identify asbestos materials during normal occupation of the building to ensure existing asbestos materials are being managed
Asbestos Refurbishment & Demolition Survey	An intrusive and destructive survey carried out prior to demolition or refurbishment works to identify all asbestos materials onsite
ASM NZ LTD	Asbestos Surveys & Monitoring NZ LTD
Asbestos regulations	The Health & Safety at Work (Asbestos) Regulations 2016
Asbestos Management Plan	A Document required by all PCBU's with known or presumed asbestos in the workplace, detailing the controls put in place to safely manage asbestos materials
Chrysotile	A commonly used asbestos mineral referred to as White Asbestos
Crocidolite	A commonly used asbestos mineral referred to as Blue Asbestos
Friable	A material in a powder form or able to be crumbled or reduced to a powder by hand
IANZ	International Accreditation New Zealand – the accreditation body of the Testing Laboratory Registration Council in NZ
Licensed Asbestos Removalist	A PCBU holding a Class A or Class B asbestos removal license
Mesothelioma	An Asbestos Related Disease – a cancer or tumour formed on the lung lining
Non-Friable	A material in a bonded state – unable to be reduced to a powder by hand
PCBU	A Person Conducting a Business or Undertaking
Respirable Fibre	Any asbestos fibre with a length less than 5 micron and width less than 3 micron and