



**Asbestos Re-inspection Of**

**72 Lake Terrace,, Taupo, 3330**



Survey Carried Out By:  Chris Bond	Assisted By:
Lead Surveyor - Asbestos Department	Second Surveyor

Report Reviewed and Authorised I By Mike Sullivan	
Position:	
Project Number: 17-035894	Issue Date: 15/05/2017

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**1. EXECUTIVE SUMMARY**

**Scope, type and extent of survey**  
 Asbestos re-inspection of 72 Lake terrace, Taupo. Identified areas from survey done by 3rd party. Any areas not identified in the previous survey were not inspected.

**Areas not accessed (must be presumed to contain asbestos until proven otherwise)**

**Areas of limited access (further investigation recommended if access is required as part of any proposed maintenance or refurbishment works)**

**Summary (details of ACMs found on next page)**  
 Asbestos items re-inspected on site were fibre cement wall cladding, textured coating to walls and soffits. All items are to the original part of the building and these areas only were inspected. Fibre cement wall cladding was damaged at low level areas and should be removed by a licenced contractor. High level wall cladding was in good condition and should be re-inspect periodically and maintain the paint finish. Textured coating was generally in good condition but a few areas that require encapsulation with paint. High level soffits were viewed from ground level and the materials were in good condition with some areas of the paint flaking off, an encapsulation of these areas is recommended. To eradicate further damage and/or contamination removal of all products would eliminate all future issues. **Original survey was not carried out by Dowdell & Associated Ltd.** Regulation 12 of the Health and Safety at Work Asbestos Regulations 2016 states that 'A PCBU with management or control of a workplace must ensure that the presence and location of asbestos or ACM identified at the workplace under regulation 10 (duty to ensure asbestos identified) are clearly indicated (and in a way that complies with the requirements of any applicable safe work instrument). i.e. identified materials should be labelled or there presence indicated by another satisfactory method.

1. EXECUTIVE SUMMARY			
Area	Material / Description	Asbestos Type	Material Assessment Score
E (Externals To Original Building)	Wall cladding (Fibre cement) - 17-035894-01	Chrysotile Crocidolite	7
E (Externals To Original Building)	Wall cladding at low level (Fibre cement) - As 17-035894-01	Chrysotile Crocidolite	7
E (Externals To Original Building)	Wall cladding at high level (Fibre cement) - As 17-035894-01	Chrysotile Crocidolite	6
E (Externals To Original Building)	Wall cladding at low level to left side (Fibre cement) - As 17-035894-01	Chrysotile Crocidolite	7
E (Externals To Original Building)	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	SP Chrysotile (strongly presumed)	2
E (Externals To Original Building)	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	SP Chrysotile (strongly presumed)	2
E (Externals To Original Building)	Coating to walls on all sides of original building (Textured coating) - 17-035894-02sp	SP Chrysotile (strongly presumed)	3
E (Externals To Original Building)	Coating to walls on all sides of original building (Textured coating) - 17-035894-02sp	SP Chrysotile (strongly presumed)	3

## 2. GENERAL SITE AND SURVEY INFORMATION

Asbestos survey carried out by	Dowdell & Associates Ltd
Participating surveyors	Chris Bond
Survey commissioned by	Neville Brodie of Taupo District Council
Survey and sampling method	Surveying and sampling conducted in accordance with Work Safe New Zealand Good Practice Guidelines Conducting Asbestos Surveys
Type of survey	Re-inspection
Details of premises surveyed	Offices
Date of survey	11/05/2017
Survey Notes	
Our reference	17-035894

### Purpose, aims and objectives of survey

The purpose of the survey is to locate, as far as reasonably practicable, the presence of any asbestos containing materials (ACMs) in the premises and assess their condition. To facilitate this, representative samples from each type of suspect asbestos containing materials found are collected and analysed to confirm or refute the surveyors' judgement. If the sampled material is found to contain asbestos, other similar homogeneous materials used in the same way in the premises can be strongly presumed to contain asbestos. Less homogeneous materials require a greater number of samples, the number being sufficient for the surveyors to make an assessment of whether asbestos is or is not present.

Dowdell & Associates Ltd operates using stringent industry driven quality control procedures. Our Asbestos Identification Laboratory is IANZ accredited and as such is audited to the International Standard ISO 17025. During sampling, the surveyors must wear appropriate protective equipment where necessary. Sampling will be conducted in a manner designed to reduce damage to ACM's and subsequent fibre release. Any disposable PPE (overalls, overshoes etc.) must be disposed of as asbestos waste and double bagged for safe disposal. All tools used to obtain a sample must be cleaned prior to reuse. Surfaces on to which asbestos debris may fall must be protected with a sheet of impervious materials such as polythene. Any debris can be cleared either with a 'wet-wipe' or with a Type H vacuum cleaner. Sample points must be left clean with no debris.

### Description of areas excluded from survey (agreed prior to survey)

All Accessible areas were surveyed, see below for details of no access and limited access areas

### Inaccessible Areas

Please refer to section 6 of this report for inaccessible areas and for the reasons why.

### Variations and/or deviations from method

There were no variations or deviations from the survey method.

### 3. CAVEAT

Areas in the premises were visually inspected to determine the presence of asbestos containing materials. The locations of these materials have been logged along with the material type and where necessary, a sample taken to confirm not only the presence of, but also the type of asbestos found.

It must be noted that management survey activities only provide minor intrusion. Refurbishment or demolition surveys are needed to provide major intrusion and are the type needed prior to intrusive remedial works being undertaken or areas demolished.

Therefore management surveys will inspect fixtures/fittings but will not access within/behind such areas if significant re-fitting would be required (e.g. behind kitchen units, beneath laminate floor/fitted carpet, within ceiling voids etc.).

Live components should be considered as not being accessed for the purpose of the survey (e.g., Domestic appliances, electrical switchgear, plant, machinery, wall heaters, lift shafts etc.) and be presumed to contain asbestos.

Refurbishment or demolition surveys involve destructive inspection as necessary to gain access. This is likely to leave the surveyed area(s)/premises in a state of considerable disrepair which Dowdell & Associates Ltd will not make good unless agreed at the planning stage.

In refurbishment or demolition surveys on premises where asbestos removal may not take place for some time, any ACMs identified will still need to be managed in the interim period. This report therefore provides material assessment and initial recommendations for all asbestos containing materials identified and/or presumed in both management and refurbishment or demolition surveys.

Asbestos materials existing within areas not specifically covered by this report are therefore considered outside the scope of the survey.

It must be noted that it is not possible that survey(s) can guarantee to locate all asbestos containing materials even with 'complete' access demolition surveys, all asbestos containing materials may not be identified and this only becomes apparent during demolition itself.

It is also important to note that it is possible that there are residues of asbestos beneath any newly applied lagging, resulting from poor quality stripping methods carried out at some time in the past. It is not practicable to detect such residues without substantial disturbance to the new lagging.

This inspection report should only be used to assist in the tendering process for asbestos removal work if it is a refurbishment or demolition survey. Dowdell & Associates Limited accept no responsibility should a management survey report be used in such a way. Asbestos containing material quantities referred to in this report are estimates only and asbestos removal contractors should satisfy themselves that these are accurate before pricing any asbestos removal work.

### 4. SAMPLING & ANALYSIS TECHNIQUES

In areas on the site where there were substantial quantities of visually uniform material, then a small number of samples were taken and should be considered as being representative of the whole area.

Reference to Asbestos Insulating Board or Asbestos Cement are based upon their asbestos content and visual appearance alone.

Certain types of textured coatings and decorative plasters may contain very small quantities of asbestos. In-situ these coatings are often composed of different batches of product, or may have been repaired/patched at different times. It is therefore possible that any textured coating samples taken may not be representative of the entire coating. Trace fibres may not be visible by the optical microscopy method described in AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples. If required, we can arrange for more advanced analysis at an additional charge.

**5. RESULTS: ASBESTOS REGISTER**

The following details asbestos containing materials (ACMs) found/presumed during the survey. For the ACMs identified in this section, we have provided initial recommendations based only on site observations and material assessment parameters. Materials with a high material assessment score should be dealt with as a priority, with all other ACMs suitably managed.

SITE / AREA: 72 Lake Terrace,, Taupo, 3330

**Levels of identification:** P = Presumed, SP = Strongly Presumed, ID = Sampled, analysed & identified – Refer to material assessment algorithm (Appendix 4) for explanation of terms and coding.

**Material Assessment Scores:** 10 or more = High, 7-9 = Medium, 5-6 = low, 4 or less Very Low. **Accessibility** 'E' = Easy, 'M' = Moderate, 'D' = Difficult

Room/Area description	Floor Level	Description of product and identifier	Level of identification (P/SP/ID)	Approx. extent	Accessibility	Product type	Condition of material	Surface treatment	Asbestos type	Material assessment score	Priority assessment score	Total risk assessment score	Recommendations	Suggested re-inspection frequency (Months)	Date Removed	Date Encapsulated	Date Reinspected
E (Externals To Original Building)	E	Wall cladding (Fibre cement) - 17-035894-01	ID	approximately 50 m2	E	1	2	1	3	7			Remove by a licensed contractor at low level where damage has occurred				
E (Externals To Original Building)	E	Wall cladding at low level (Fibre cement) - As 17-035894-01	ID	approximately 50 m2	E	1	2	1	3	7			Remove by a licensed contractor at low level where damage has occurred				
E (Externals To Original Building)	E	Wall cladding at high level (Fibre cement) - As 17-035894-01	ID	approximately 50 m2	E	1	1	1	3	6			Re-inspect periodically and maintain paint finish				
E (Externals To Original Building)	E	Wall cladding at low level to left side (Fibre cement) - As 17-035894-01	ID	approximately 50 m2	E	1	2	1	3	7			Remove by a licensed contractor at low level where damage has occurred				
E (Externals To Original Building)	E	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	SP	approximately 20 m2	E	1	0	0	1	2			Encapsulate with paint and Re-inspect periodically				
E (Externals To Original Building)	E	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	SP	approximately 20 m2	E	1	0	0	1	2			Encapsulate with paint and Re-inspect periodically				
E (Externals To Original Building)	E	Coating to walls on all sides of original building (Textured coating) - 17-035894-02sp	SP	approximately 100 m2	E	1	1	0	1	3			Encapsulate damaged areas with paint and Re-inspect periodically				
E (Externals To Original Building)	E	Coating to walls on all sides of original building (Textured coating) - 17-035894-03sp	SP	approximately 1m2	E	1	1	0	1	3			Encapsulate damaged areas with paint and Re-inspect periodically				

**6. AREAS OF NO OR LIMITED ACCESS**

The following table details inaccessible areas encountered during the survey. These areas **MUST** be presumed to contain asbestos until proven otherwise.

**Room/Area Description and reason(s) why access could not be derived into this area during the surveying activities on site**

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The following table details areas of limited access encountered during the survey. These areas will require further investigation if access is required as part of any proposed maintenance or refurbishment works (Any asbestos components inspected in this area(s) are logged in Results Section A and any non-asbestos components inspected in this area(s) are logged in Results Section C)

**Room/Area Description and reason(s) why access was limited into this area during the surveying activities on site**

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**7. GENERAL CONSTRUCTION MATERIALS**

Refer samples taken in room to asbestos register.

Materials cannot be presumed to be asbestos free (i.e. contain no asbestos) unless there is strong evidence to conclude that they are highly unlikely to contain asbestos. There are obvious materials which are not asbestos, e.g. wood, glass, metal, stone etc. Reasons to conclude that a material does not contain asbestos would be:

- Non-asbestos substitute materials were specified in the original architect's/ quantity surveyor's plans or in subsequent refurbishments
- The product was very unlikely to contain asbestos or have asbestos added (e.g. wallpaper, plasterboard etc.)
- Post-1985 construction (for ACMs such as fibre-cement cladding materials, textured coatings and asbestos insulating board)
- Post-1988 construction of asbestos containing fibre-cement pipework
- Post- 2000 construction (of vinyl floor coverings).

Floor Level	0	Room ID	E	Room description	Externals To Original Building
Walls	Concrete and fibre cement	Fascia	Wood	Soffits	Fibre cement
No Access	No				
Samples Taken in Room	17-035894-01, 17-035894-01, 17-035894-01, 17-035894-01, 17-035894-01sp, 17-035894-01sp, 17-035894-02sp				

**8. CONCLUSIONS AND ACTIONS**

Room/Area where asbestos is present	Product/Item which contains asbestos	Recommended Actions	
E (Externals To Original Building)	Wall cladding (Fibre cement) - 17-035894-01	Remove by a licensed contractor at low level where damage has occurred	
E (Externals To Original Building)	Wall cladding at low level (Fibre cement) -As 17-035894-01	Remove by a licensed contractor at low level where damage has occurred	
E (Externals To Original Building)	Wall cladding at high level (Fibre cement) - As 17-035894-01	Re-inspect periodically and maintain paint finish	
E (Externals To Original Building)	Wall cladding at low level to left side (Fibre cement) - As 17-035894-01	Remove by a licensed contractor at low level where damage has occurred	
E (Externals To Original Building)	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	Encapsulate with paint and Re-inspect periodically	
E (Externals To Original Building)	Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp	Encapsulate with paint and Re-inspect periodically	
E (Externals To Original Building)	Coating to walls on all sides of original building (Textured coating) - 17-035894-02sp	Encapsulate damaged areas with paint and Re-inspect periodically	
E (Externals To Original Building)	Coating to walls on all sides of original building (Textured coating) - 17-035894-03sp	Encapsulate damaged areas with paint and Re-inspect periodically	

## 9. RISK ASSESSMENT, MANAGEMENT PLAN AND IDENTIFYING MATERIALS PRESENCE

This survey report attempts to fulfil the compliance requirements under the New Asbestos Regulations. The customer should be aware that further measures may be required, such as the performance of priority/overall risk assessment, material condition monitoring, the development of an asbestos management plan and the provision of information to those at risk. Where the report is a refurbishment/demolition survey, material risk assessments have been included in order for the customer to manage the materials in any interim periods prior to the commencement of refurbishment and or demolition project works.

Each section of this report focuses on one or two aspects; no section should be taken and read as a stand-alone document and it is imperative that each section is read in its entirety and in conjunction with each other.

Whilst the material assessment identifies the high-risk materials (i.e. those which are most likely to release airborne fibres – if disturbed), it does not in itself produce a complete plan/recommendations for remedial action. An overall risk assessment and subsequent management plan can only be formulated after taking into account the initial material assessment score and the following factors:

- The occupancy of the area
- The activities carried on in the area
- The likelihood/frequency of maintenance activities taking place in the area

The resulting management plan may include some or all of the following options:

- Priorities for undertaking asbestos remediation
- Creation/maintenance/updating of asbestos containing materials register
- Monitoring of condition of all presumed or identified asbestos containing materials
- Restriction of access to/isolation of asbestos containing materials
- Informing of the existence of asbestos containing materials
- Training of personnel likely to come into contact with the asbestos containing materials
- Definition and use of safe systems of work
- Operation of a permit to work system

A copy of the asbestos register should be provided to any worker, contractor or other persons, carrying out work that may involve a risk of exposure to asbestos, as required by regulation 12 of the new asbestos regulations. The asbestos register should also be readily available to any person or their representative, contractor or organisation that has worked at the site previously, intends to work at the site or works at the site.

Dowdell & Associates Ltd recommend that any system introduced for the management of asbestos should be in accordance with the WorkSafe code of practice for the Management and Removal of Asbestos 2016

If the building is to be demolished or refurbished Dowdell & Associates Ltd would recommend that asbestos containing materials be suitably removed or as a minimum requirement, be suitably encapsulated, labelled and included in a system of management until removed.

The removal/encapsulation/enclosure of asbestos containing materials should be carried out by a licensed asbestos removal contractor and monitored by an IANZ accredited laboratory.

If during any future demolition/refurbishment works, suspect asbestos materials are revealed then this occurrence should be brought to the attention of Dowdell & Associates Ltd for further investigation.

Regulation 12 of the Health and Safety at Work Asbestos Regulations 2016 states that 'A PCBU with management or control of a workplace must ensure that the presence and location of asbestos or ACM identified at the workplace under regulation 10 (duty to ensure asbestos identified) are clearly indicated (and in a way that complies with the requirements of any applicable safe work instrument). i.e. identified materials should be labelled or their presence indicated by another satisfactory method.

Dowdell & Associates Ltd can assist with labelling of asbestos containing materials and in the creation of an asbestos management plan. Please Contact the office for further details.

**10. APPENDIX 1 - BULK ANALYSIS**

All techniques used are based on AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples. Sampling and identification by Polarised light microscopy (PLM). All bulk sample analysis is accredited by IANZ under the international standard ISO 17025.

**Identification of asbestos fibres is based on the following procedure:**

A preliminary visual examination of the bulk sample is made using a stereo microscope at X 10- X 40 magnification to assess for fibres and fibre bundles.

Sample treatment is undertaken (if required) to release or isolate fibres.

Representative fibres are mounted in appropriate Refractive Index liquids on glass microscope slides.

The different fibrous components are identified using Polarised Light Microscopy (PLM) and dispersion staining techniques at magnification of X 100 or greater.



## BULK SAMPLE IDENTIFICATION CERTIFICATE

Job Number: 17-035894 Certificate Issue Date: 12/05/2017

Date Bulks Received: 12/05/2017  
No of Samples: 1

Sampled By: Chris Bond  
Obtained: Via In House Procedures

Date Analysed: 12/05/2017  
Analyst: , Cyrus Chao  
Method: AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples

Client: Taupo District Council  
Client Address: Private Bag 2005, Taupo 3352

Client Ref No:

Site Address: 72 Lake Terrace,, Taupo, 3330

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

CHRYCOTILE (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 analysing 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.

NOTE: This report must not be altered, or reproduced except in full.



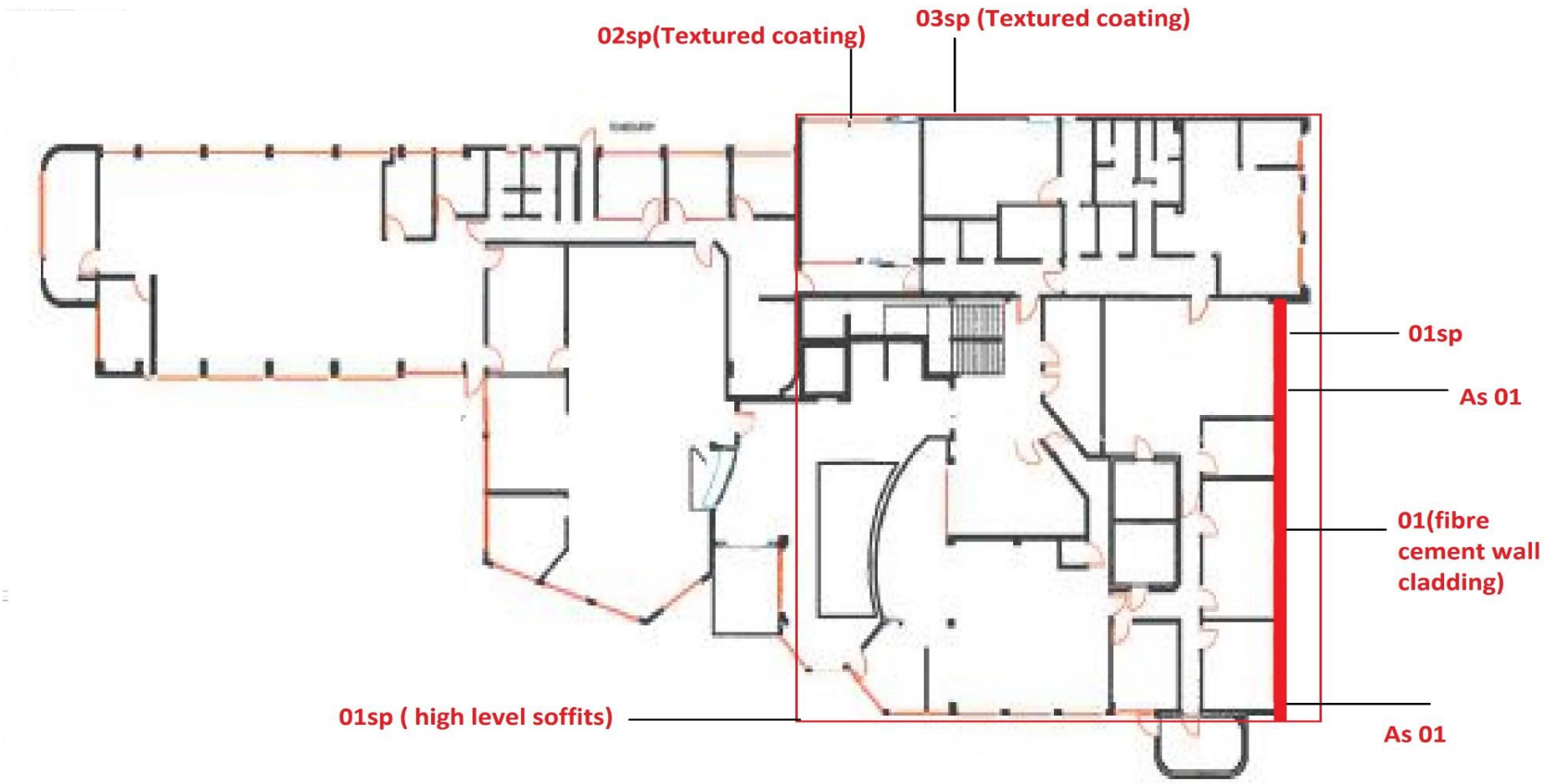
Analyst:	Name: , Cyrus Chao
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Approved By:	Name: Rob Nicholson
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### 17-035894 Results

Laboratory Reference	Sample Ref / Description	Sample Weight Analysed		Comments
131335	E (Externals To Original Building) - Wall cladding (Fibre cement) - 17-035894-01	3g		na


11. APPENDIX 2 - FLOOR PLAN(S)




- = NO ASBESTOS DETECTED
- = ASBESTOS
- = NOT ACCESSED

THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE REST OF THE REPORT



12. APPENDIX 3 - SURVEY PHOTOGRAPHS

	Room/Area: Floor E, Room E (Externals To Original Building)
	Description: Wall cladding at low level (Fibre cement) - 17-035894-01
	Sample Identifier: 17-035894-01
	Result: Chrysotile Crocidolite
	Notes:
Recommendations: Re-inspect periodically and maintain paint finish	



	Room/Area: Floor E, Room E (Externals To Original Building)
	Description: Wall cladding at low level (Fibre cement) -As 17-035894-01
	Sample Identifier: As 17-035894-01
	Result: Chrysotile Crocidolite
	Notes: Paint flaking off with exposed edges
Recommendations: Remove by a licensed contractor at low level where damage has occurred	




12. APPENDIX 3 - SURVEY PHOTOGRAPHS


 <p>A photograph showing the exterior of a building with high-level wall cladding. The building has a green roof and a balcony. A black tarp is in the foreground with a 'KEEP OUT' sign. Two flagpoles are visible against a cloudy sky.</p>	<p>Room/Area: Floor E, Room E (Externals To Original Building)</p>
<p>Description: Wall cladding at high level (Fibre cement) - As 17-035894-01</p>	
<p>Sample Identifier: As 17-035894-01</p>	
<p>Result: Chrysotile Crocidolite</p>	
<p>Notes:</p>	
<p>Recommendations: Re-inspect periodically and maintain paint finish</p>	
 <p>A close-up photograph of the corner of a building where the white wall cladding meets a blue base. There is visible damage and peeling of the cladding at the bottom corner. A concrete path and grass are visible in the foreground.</p>	<p>Room/Area: Floor E, Room E (Externals To Original Building)</p>
<p>Description: Wall cladding at low level to left side (Fibre cement) - As 17-035894-01</p>	
<p>Sample Identifier: As 17-035894-01</p>	
<p>Result: Chrysotile Crocidolite</p>	
<p>Notes:</p>	
<p>Recommendations: Remove by a licensed contractor at low level where damage has occurred</p>	

12. APPENDIX 3 - SURVEY PHOTOGRAPHS

	<p>Room/Area: Floor E, Room E (Externals To Original Building)</p> <p>Description: Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp</p> <p>Sample Identifier: 17-035894-01sp</p> <p>Result: SP Chrysotile (strongly presumed)</p> <p>Notes: Paint flaking off in various areas throughout, Previously sampled by 3rd party</p> <p>Recommendations: Encapsulate with paint and Re-inspect periodically</p>
	<p>Room/Area: Floor E, Room E (Externals To Original Building)</p> <p>Description: Soffits and eaves to all sides of original building (Fibre cement) - 17-035894-01sp</p> <p>Sample Identifier: 17-035894-01sp</p> <p>Result: SP Chrysotile (strongly presumed)</p> <p>Notes: Paint flaking off in various areas throughout, Previously sampled by 3rd party</p> <p>Recommendations: Encapsulate with paint and Re-inspect periodically</p>

12. APPENDIX 3 - SURVEY PHOTOGRAPHS

	Room/Area: Floor E, Room E (Externals To Original Building)
	Description: Coating to walls on all sides of original building (Textured coating) - 17-035894-02sp
	Sample Identifier: 17-035894-02sp
	Result: SP Chrysotile (strongly presumed)
	Notes: Previously sampled by 3rd party
	Recommendations: Encapsulate damaged areas with paint and Re-inspect periodically

	Room/Area: Floor E, Room E (Externals To Original Building)
	Description: Coating to walls on all sides of original building (Textured coating) - 17-035894-03sp
	Sample Identifier: 17-035894-03sp
	Result: SP Chrysotile (strongly presumed)
	Notes: Previously sampled by 3rd party
	Recommendations: Encapsulate damaged areas with paint and Re-inspect periodically

**13. APPENDIX 4 - MATERIAL ASSESSMENT ALGORITHM**

The Material Risk Assessment Algorithm used by the Survey team is based on that provided within the Work Safe New Zealand Good Practice Guidelines Conducting Asbestos Surveys

The Material Risk Assessment assesses the ability of an Asbestos Containing Material to release fibres into the air should it be disturbed. This Risk Assessment is usually undertaken during the course of a survey, as it is specific to the current overall condition of the material and requires no knowledge of the use of the area/building. The Material Risk Assessment will give a good initial indication to the priority for a control action, as it will immediately identify the high risk materials. However the Client/Duty Holder need to consider that a material with a high Material Risk Assessment score may not necessarily be a priority action if it is present within an area that is infrequently occupied.

Score	Product type (or debris from product)
1	Asbestos-reinforced composites: (plastics, resins, mastics, felts, vinyl tiles, semi rigid paints or decorative finishes (i.e. non spray applied textured coatings), asbestos cement etc.)
2	Asbestos insulating board, mill boards, other low density insulation boards, textiles, gaskets, ropes & woven textiles, asbestos paper, felt and spray applied textured coatings.
3	Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses & packing.

Score	Extent of damage/deterioration
0	Good condition: no visible damage
1	Low damage: a few scratches or surface marks; broken edges on boards, tiles etc.
2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.
3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.

Score	Surface treatment
0	Composite materials containing asbestos: reinforced plastics, resins and vinyl tiles.
1	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated), asbestos cement sheets etc.
2	Unsealed AIB, or encapsulated lagging and sprays.
3	Unsealed lagging and sprays.

Score	Asbestos type
NAD	No asbestiforms detected in sample
1	Chrysotile
2	Amphibole asbestos excluding Crocidolite
3	Crocidolite

Initial risk assessment score	Potential to release fibres
10 or More	High
7-9	Medium
5-6	Low
4 or Less	Very Low

**14. APPENDIX 5 - WORKING WITH ASBESTOS CONTAINING MATERIALS**

This short summary is intended to provide an overview of legal requirements and is not comprehensive. The relevant statutes, statutory instruments and official publications should be consulted as necessary.

**Legislation**

The Control of Asbestos Related issues within New Zealand is currently under the Health & Safety at Work(Asbestos) Regulations 2016

**Further practical information is provided in the Code of Practice for the Management & Removal of Asbestos, April 2016**

In addition to the Regulations, further specific criteria are outlined in the above mentioned Code of Practice.

**Report Status**

This report endeavours to cover the requirements of the current in particular with the incorporation of an Asbestos Register and the referred Management Controls within the Conclusions & Actions Sections.

**General Recommendations**

1) Any staff involved with building and plant maintenance on site, need to become familiar with the Asbestos Register. A copy of the register and the plans marking identified asbestos should be made available to any external contractors that are doing work in any of the buildings containing asbestos. It might be advisable to have contractors sign that they have read and become familiar with the register and will follow the recommendations within or any other procedures that are deemed necessary in regards to asbestos handling.

2) As per the WorkSafe code of practice for the Management and Removal of Asbestos 2016, should analysis of materials confirm the presence of asbestos, depending on the condition, a visual assessment will be required by a person competent to do this on at least an annual basis. Where the asbestos is in good condition and is unlikely to be disturbed, visual assessments at three yearly intervals may be adequate [MBIE]. During future assessments, this register should be updated to reflect any changes.

**14. APPENDIX 5 - WORKING WITH ASBESTOS CONTAINING MATERIALS****Recommendations (specific to asbestos cement)**

- 1) Drilling or cutting of these materials should be avoided where possible. If unavoidable, only hand tools or tools with suitable dust extraction should be employed. High pressure water-blasting should never be employed on asbestos cement products.
- 2) If drilling/cutting, respiratory protection must be worn (P2 half masks or better), as well as disposable overalls or regular overalls that can be immediately laundered.
- 3) If drilling/cutting, good hygiene practices need to be employed including wetting down local areas. Any drill turnings/debris should be placed in labelled bags and disposed of as asbestos waste.
- 4) If whole sheets need to be removed, they should be removed as intact as possible (please see the Asbestos Guidelines for removal/disposal options and procedures).

Procedures for work on bonded materials do not necessarily require full enclosure, but this must be fully justified in the written assessment and plan of work which should be prepared before the work starts.

**Waste Disposal**

Most materials which contain asbestos are classified as 'hazardous'. This includes lower risk ACMs such as asbestos cement and asbestos vinyl floor tiles. All asbestos containing materials must be disposed of in designated registered asbestos receiving sites. Local councils and/or WorkSafe NZ will have a list of such sites, or reference to such organisations that can uplift asbestos materials and transport them to the receiving sites.

**Using Non-licensed Contractors for Work with Low Risk Materials (NLW)**

It is currently permissible to use non-licensed contractors, such as general builders or demolition contractors, to work on low risk ACMs as long as the material is less than 10 m<sup>2</sup> (cumulatively over the whole course of the removal project for the site) of non-friable asbestos or ACM. Dowdell & Associates Ltd would normally advise against this approach as non-specialists may not be familiar with statutory requirements (such as exposure assessments and waste consignment forms), they may not have specialist equipment required to undertake the work or have the correct training.

It is also important that adequate insurances are in place for work with asbestos. Specific asbestos related insurance is generally not held by non-licensed companies, and a client would risk financial loss should a claim arise against the contractor.