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HAZMAT Survey Report

Prepared for	Ben Matarranz ADCO Constructions Pty Ltd
Site	Admin Building and Adjacent Complex Buildings Bowral Hospital 97-103 Bowral St, Bowral NSW 2576
Prepared by	Jeffrey Yu Principal Environmental Consultant & Occupational Hygienist CEnvP (#1516) Licensed Asbestos Assessor (#001366) PhD (EnvEng), PhD (MediChem)
Date of field work	01/12/2021
Reference No.	JDRYU060_V1_HAZMAT

07 December 2021

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Abbreviations

AC	Asbestos Cement
ACD	Asbestos Contaminated Dust or Debris
ACM	Asbestos-Containing Material
AMP	Asbestos Management Plan
ANZECC	Australian and New Zealand Environment and Conservation Council
ARCP	Asbestos Removal Control Plan
ASET	Australian Safer Environment and Technology
EDB	Electrical Distribution Board
FC	Fibre Cement
LARC	Licenced Asbestos Removal Contractor
HMMP	Hazardous Materials Management Plan
NATA	National Association of Testing Authorities
PCB	Polychlorinated Biphenyl
SMF	Synthetic Mineral Fibre
TWA	Time Weighted Average
XRD	X-Ray Diffraction
LOR	Limit of Reporting
NATA	National Association of Testing Authorities, Australia
NEPC	National Environment Protection Council
NSW EPA	Environment Protection Authority of New South Wales
NSW OEH	Office of Environment and Heritage of New South Wales
NEPM	National Environment Protection Measure
OCP	Organochlorine Pesticide
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PPE	Personal Protective Equipment
QA	Quality Assurance
QC	Quality Control
RAP	Remedial Action Plan
DRYU	Dr Upsilon Environments Pty Ltd

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Executive Summary

Summary of Findings

This HAZMAT Survey was undertaken to identify and update the register information at the subfloor of Yeomans Building undergoing fitouts within Admin Building and Adjacent Complex Buildings after minor asbestos works in the middle section of subfloor of Yeomans Building ("**the Site**"). This survey was conducted to comply with current Work Health and Safety Regulation 2017, to ensure that an Asbestos Register for property risk management be updated after asbestos removal.

The Asbestos Survey of the Site was carried out by Dr Upsilon Environments Pty Ltd ("**DRYU**") consultant Jeffrey Yu on 1st December, 2021.

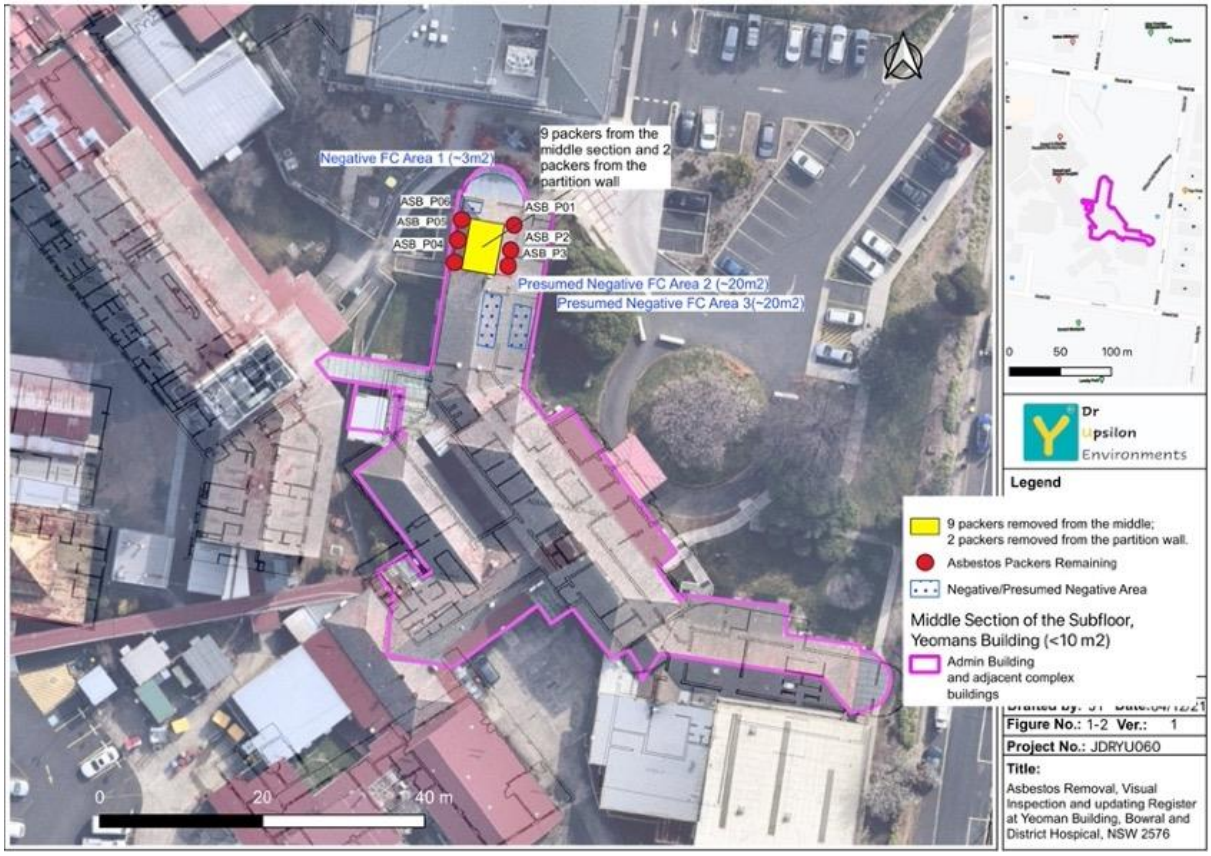

Figure 1 Admin Building Complex Site Layout

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Areas Not Accessed

Table 1 Inaccessible Areas

Area/Item	Not Accessed	Comments
Building facade fixing brackets	All	
Height restricted areas of site and ceiling where safe lifting platforms were not provided	All	
Inaccessible culverts and floor trenches or tunnels	All	
Waterproof membranes	All	
Within air conditioning re-heat boxes	N/A	
Within electrical switchboard cupboard or backing	All	
Gaskets, mastics & sealants to pipework, ductwork, mechanical equipment & construction/expansion joints	All	
Within internal walls partitioning	All	
Inaccessible ceiling spaces	All	
Under carpeted floor coverings	All	
Wall cavities	All	

It is possible that asbestos-containing materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. It is noted that asbestos-containing material may be contained within or behind those areas identified in the above table. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

These recommendations should be followed whenever any asbestos containing material is identified, irrespective of the level of risk.

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Summary Recommendations

The Following recommendations are made by DRYU in regard to the Hazardous materials Identified onsite, in accordance with the WHS Regulations (2017) and SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019):

Asbestos

- Record the following information in the site's asbestos register:
  - details of the type, condition, accessibility and location of all asbestos-containing material at the site;
  - measures taken control the asbestos-containing material;
  - details of any risk assessment carried out prior to these measures being taken;
  - records of any other work done on the asbestos-containing material;
  - records of any communication and/or consultation relation to asbestos-containing material at the site.
- Ensure a copy of the asbestos is on site, kept up to date and made readily accessible to the employees, contractors, subcontractors, persons removing asbestos-containing material, persons engaged to do work that may disturb asbestos- containing material and any other person who may be exposed to the asbestos-containing material.
- Review the asbestos register and risk assessments every 5 years, or earlier if:
  - a risk assessment indicates the need for reassessment;
  - there is evidence any risk assessment is no longer valid;
  - there is evidence that any control measures are ineffective;
  - changes to work practices and systems of work are introduced;
  - there is a change to the condition of the asbestos-containing material; or
  - any asbestos-containing material has been disturbed, removed, enclosed or sealed
  - a visual inspection should be undertaken as part of any review of asbestos register. Risk assessments should be undertaken in by a competent person, such as an asbestos containing material specialist.
- Develop and maintain an asbestos management plan that contains the following information:
  - the asbestos register;
  - details of any maintenance or service work on asbestos-containing material;
  - mechanisms for providing the employees, contractors, subcontractors, persons removing asbestos-containing material, persons engaged to do work that may disturb asbestos-containing material and any other person who may be exposed to the asbestos-containing material with the asbestos register;
  - decisions about management options (ie to maintain the asbestos-containing material or replace it) and reasons for those decisions;
  - a timetable for action, including priorities, dates for risk assessment review, etc;
  - monitoring arrangements;
  - responsibilities of all persons involved;
  - training arrangements;
  - procedure for reviewing and updating the asbestos management pan and asbestos register; and
  - safe work methods.
  - The asbestos management plan should be reviewed whenever the asbestos register is reviewed.
- Provide Asbestos Awareness training to staff and site personnel in accordance with the requirements SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019) Part 6.3.

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- Consult with staff and health and safety representatives on the findings of this risk assessment and this report must be made available upon request, in accordance with the requirements of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019). Part 3.3.
- Areas highlighted as areas of 'no access' should be presumed to contain asbestos containing material. Appropriate management planning should be implemented in order to control access to and maintenance activities in these areas, until such a time as they can be inspected and the presence or absence of asbestos containing material can be confirmed.
- Ensure all asbestos-containing materials remaining in-situ are labelled appropriately to warn of the dangers of disturbing these materials, in accordance with the requirements of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019) *Part 2.5.*
- Should any personnel come across any suspected asbestos or hazardous materials, work should cease immediately in the affected areas until further sampling and investigation is performed.
- Areas highlighted in the Areas Not Accessed section as areas of 'no access' should be presumed to contain hazardous materials. Appropriate management planning should be implemented in order to control access to and maintenance activities in these areas, until such a time as they can be inspected, and the presence or absence of hazardous materials can be confirmed.
- Non-friable asbestos was detected within the garage walls, south-western bedroom, house shower, house external walls and eaves. Disturbance to these area is to be restricted and signs placed at all access points. Removal of the Asbestos Contamination is carried out by a Class B Licensed Asbestos Removal Contractor ("**LARC**").
- Asbestos materials should be removed prior to the commencement of any renovation or demolition works that may cause their disturbance. It is recommended that any materials listed in this report as potentially containing asbestos that were not sampled at the time of the survey are sampled prior to any refurbishment works that require their removal or disturbance.
- The asbestos containing materials and potential asbestos containing materials were in good and stable condition. While they are maintained in this condition and remain undisturbed, they do not pose a measurable asbestos related health risk to the users of the site.
-

Synthetic Mineral Fibre Materials (SMF)

- Significant quantities of loose synthetic mineral fibre containing materials or insulation in the ceiling cavity and in the wall cavities are present throughout the house ceiling space. These SMF materials are in a poor or fair condition. These SMF materials do not pose a significant health risk to the occupants in the building if not disturbed. Restrict access to ceiling space to keep SMF insulation in a sealed and undisturbed condition.
- Synthetic Mineral Fibre (SMF) materials should be removed under controlled conditions prior to demolition /refurbishment works, in accordance with the requirements of
  - Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].
  - National Standard for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:1004 (1990)]
  - National Code of Practice for the Safe Use of Synthetic Mineral Fibres [National Occupational Health and Safety Commission:2006 (1990)]

Lead Based Paint and Lead in Dust

Lead based paints were out of the scope of work.

All work associated with the inspection and reporting of Lead should be generally undertaken in accordance with the following legislation, guidelines and standards.

- Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings, Australian Standard AS4361.2, 2017
- Guide to Lead Paint Management - Part 2: Residential and Commercial Buildings, Australian Standard AS4361.2, 1998

In accordance with the Australian Standard AS4361.2, 2017 "Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings". A lead in paint concentration greater than 0.1% w/w is considered to be lead based paint.

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Lead in Dust should be generally undertaken in accordance with the following with the following legislation, guidelines and standards.

- National Environment Protection Council, The National Environment Protection (Assessment of Site Contamination) Measure 1999 (the ASC **NEPM**).

NEPM threshold value for Lead in soils is 300 mg/Kg (Residential A), 1200 mg/Kg (Residential B), 600 mg/Kg (Recreational and 1500 mg/Kg (Commercial/Industrial D), respectively.

Polychlorinated Biphenyls (PCBs)
PCBs were out of the scope of work.
The major use of PCBs in the electrical industry has been inside transformers and capacitors. Transformers may include relatively small transformers inside electrical mains/fuse cabinets. Capacitors containing PCBs were installed in different types of fluorescent light fittings during the 1950s, 60s and 70s.

PCBs inspection and reporting follows the guidelines:

- Identification of PCB-Containing Capacitors, Australian and New Zealand Environment and Conservation Council (ANZECC), 1997

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1 Introduction

Dr Upsilon Environments Pty Ltd ("**DRYU**") was engaged by ADCO Constructions Pty Limited (**ADCO, "the Client"**) to update a hazardous materials survey report of Yeomans Building undergoing fitouts within Admin Building and Adjacent Complex Buildings after minor asbestos works in the middle section of subfloor of Yeomans Building ("**the Site**") were completed at Bowral Hospital at 97-103 Bowral St, Bowral NSW.

The Yeomans Building site layout is shown in Figure 1 and Figure 2.

Yeomans Buildings were still undergoing fitouts during the inspection on 1st December, 2021.

A previous Environmental Monitoring Services Hazardous Materials Survey Report and Register (Report Ref No.: EMS174665), a Douglas Partners Pre-demolition Hazardous Building Materials Report (Report Ref No.: 89199.01R.002.Rev0) and a Canlink HAZMAT Survey report (Ref. No.: CLG048_HMSR_Admin Building and Adjacent Complex Buildings_Rev.01, dated on 10 July 2021) were provided for reference.

As part of the redevelopment works of Bowral Hospital, it is understood that Yeomans Building of Bowral Hospital is to be maintained and renovated. The ongoing fitout works in the basement/subfloor could potentially disturb asbestos packers, therefore, an Unexpected Finds Protocol was implemented to identify suspected packers on piers in the middle section of subfloor at Yeomans Building. Following the Asbestos ID report (Ref. No.: JDRYU058_Asbestos ID Report_Yeomans Building, Bowral Hospital_29112021, dated on 29 November 2021), minor bonded asbestos removal works (< 10 m^2) were conducted to replace the accessible eleven (11) asbestos packers, while suspected Asbestos Packers stuck between timber beams and brick walls were maintained in their original state. Subsequent visual clearance inspection (JDRYU060_L1_Clearance Certificate_Yeomans Building, Bowral Hospital, NSW_02122021, dated on 02 December 2021) confirmed that the 11 asbestos pier packers were replaced with new FC sheeting and metal covers.

1.1 Objectives

The objective of the HAZAMT register was to record the presence, quantity and condition of any hazardous materials within the middle section of subfloor at Yeomans Building the buildings and then update the HAZMAT register for the subfloor at Yeomans Building, while all other structures within the Admin Building and Adjacent Complex were out of scope of this work.

The HAZMAT report was prepared in accordance with the requirements of:

- Work Health and Safety Act (2011);
- Work Health and Safety Regulation (2017);
- How to Safely Remove Asbestos Code of Practice, Safe Work Australia, (2020) (SWA 2020a);
- How to Manage and Control Asbestos in the Workplace Code of Practice, Safe Work Australia (2020) (SWA 2020b);
- Australian Standard 4361.2 (1998) Guide to Lead Paint Management - Part 2: Residential and Commercial Buildings (AS4361.2-1998);
- Australian Standard 4361.2 (2017) Guide to Hazardous Paint Management - Part 2: Lead Paint in Residential, Public and Commercial Buildings (AS4361.2-2017);

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- National Occupational Health and Safety Commission's National Standard for Synthetic Mineral Fibres, [NOHSC:1004(1990)];
- National Occupational Health and Safety Commission's National Code of Practice for the Safe Use of Synthetic Mineral Fibres, [NOHSC:2006(1990)]; and
- Australian and New Zealand Environment Conservation Council's Identification of PCB containing Capacitors: An information booklet for Electricians and Electrical Contractors, (ANZECC 1997).

1.2 Scope of Work

The surrounding structures around the middle section and northern end of the subfloor at Yeomans Building on the site were inspected for the following hazardous materials:

- Asbestos containing material (ACM).

2 Survey Methodology

2.1 General Methodology

An inspection of the building(s) was performed to establish the typical locations and applications in which Hazardous Building Materials have been used, for the purpose of preparing a qualitative risk assessment. For the purpose of this assessment, hazardous building materials include:

- Asbestos containing materials.

The scope of the survey was limited to a visual inspection of the accessible and representative construction materials, finishing materials and building services, and the collection of materials suspected of containing the hazardous materials listed above. Representative samples of suspected hazardous materials were collected where it was possible to do so without substantially damaging the decorative finishes, waterproofing membranes, equipment etc. No destructive sampling or damage to the existing finishes or services was performed to obtain samples or gain access to otherwise inaccessible areas. Equipment not associated with the building fabric and operational services was not included in the survey.

Due to the destructive nature of the sampling process, it is not possible to collect samples of all materials. Where it is not possible to collect a sample of material, the inspector has used his professional experience to make a judgement on the status of the material or the areas concerned. Where the inspector presumes or suspects the material may contain asbestos this has been recorded in the survey report and these materials should be treated as a hazardous material. If work is to be performed on these materials, they should first be analysed to confirm their status.

Any changes to the status of a hazardous material item previously identified was noted during the reinspection and the details of any remedial works carried out since the previous inspection were recorded.

2.2 Material Sample Identification

Any representative samples of materials suspected of containing asbestos collected were analysed for the presence of asbestos in a NATA accredited laboratory. This method is based on:

- Australian Standard "AS4964-2004 Method for the qualitative identification of asbestos in bulk samples"; and

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- Health and Safety Executive – UK, "Asbestos: The analysts' guide for sampling, analysis and clearance procedures, Appendix 2: Asbestos in bulk materials: Sampling and identification by polarised light microscopy (PLM), Publication No. HSG248".

The samples were examined by stereo microscopy. Fibrous materials identified under stereo microscopy were extracted and analysed by Polarised Light Microscopy supplemented with Dispersion Staining. The reporting limit of the method is 0.1g/kg.

Asbestos Types and Common Name:
Chrysotile - White Asbestos
Amosite - Brown Asbestos
Crocidolite - Blue Asbestos

The identified or suspected samples were listed within the Asbestos Register (Appendix 1 – Asbestos Register).

2.3 Asbestos Risk Assessment

To assess the health risk posed by the presence of asbestos-containing material, all relevant factors must be considered. These factors include:

- Evidence of physical damage;
- Evidence of water damage;
- Proximity of air plenums and direct air stream;
- Friability of asbestos material;
- Requirement for access for building operations;
- Requirement for access for maintenance operations;
- Likelihood of disturbance of the asbestos material;
- Accessibility;
- Exposed surface areas; and
- Environmental conditions

These aspects are in turn judged upon: (i) potential for fibre generation, and, (ii) the potential for exposure.

Condition

The condition of the asbestos products identified during the survey is usually reported as being good, fair or poor.

- Good: - refers to asbestos materials, which have not been damaged or have not deteriorated.
- Fair: - refers to the asbestos material having suffered minor cracking or de-surfacing.
- Poor: - describes asbestos materials which have been damaged, or their condition has deteriorated over time.

Friability

The friability of asbestos products describes the ease of which the material can be crumbled, and hence to release fibres.

- Friable asbestos: - (e.g. limpet beam insulation, pipe lagging) can be easily crumbled and is more hazardous than non-friable asbestos products.
- Non-Friable asbestos: - commonly known as bonded asbestos, is typically comprised of asbestos fibres tightly bound in a stable non-asbestos matrix. Examples of non-friable asbestos products include asbestos cement materials (sheeting, pipes etc), asbestos containing vinyl floor tiles and electrical backing boards.

Accessibility/Disturbance Potential

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Asbestos products can be classified as having low, medium or high accessibility/disturbance potential.

- Low accessibility describes asbestos products that cannot be easily disturbed, such as materials in building voids, set ceilings, etc.
- Medium accessibility describes asbestos products that are visible but normal access is impeded, such as materials behind cladding material or are present in a ceiling space or are height restricted
- High accessibility asbestos products can be easily accessed or damaged due to their close proximity to personnel, e.g. asbestos cement walls or down pipes.

Risk Status

The risk factors described above are used to rank the health risk posed by the presence of asbestos-containing materials.

- A low risk ranking describes asbestos materials that pose a low health risk to personnel, employees and the general public providing they stay in a stable condition, for example asbestos materials that are in good condition and have low accessibility.
- A medium risk ranking applies to materials that pose an increased risk to people in the area.
- Asbestos materials that possess a high-risk ranking pose a high health risk to personnel or the public in the area of the material. Materials with a high-risk ranking will also possess a Priority 1 recommendation to manage the asbestos and reduce the risk.

The following priority rating system is adopted to assist in the programming and budgeting of the control of asbestos risk identified at the site.

Asbestos Risk Assessment Matrix

The potential health risks posed by ACM in premises are due to a number of risk factors including:

Accessibility of the material	Condition of the material
Friability of the material	Location of the material

The methodology used in our risk assessment is based on the Australian Standard AS4360-2004 Risk Management. The hazard levels for this assessment have been assessed according to the information provided in Table 2.

Table 2 Asbestos Risk Assessment – Hazard Levels

Risk Factor / Description			Hazard Level
ASBESTOS TYPE	Bonded or Non-Friable	Materials that contain asbestos in a bonded matrix (may consist of Portland cement or various resin/ binders and cannot be crushed by hand when dry).	2
	Friable	ACM which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.	3
CONDITION	Good	No sign of damage or deterioration.	1
	Fair	Only mild damage or deterioration.	2
	Poor	Severe damage or deterioration.	3
LOCATION	Low	Totally enclosed behind a false ceiling or wall, sealed or painted.	1

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Risk Factor / Description			Hazard Level
	Moderate	Partially protected by encapsulation or enclosure.	2
	High	No encapsulation or enclosure.	3
AIRBORNE POTENTIAL	Low	No exposure to air movement.	1
	Moderate	Exposed to natural ventilation.	2
	High	Exposed to forced ventilation or within an air plenum (i.e. intakes/vents, air conditioners, fans).	3
EXPOSURE	Low	Activities undertaken in the area are not likely to result in further damage or deterioration of the material.	1
	Moderate	Activities undertaken in the area may result in further damage or deterioration of the material.	2
	High	Activities undertaken in the area are likely to result in further damage or deterioration of the material.	3

The multiplication of the hazard level from the asbestos type and each risk factor can be then used to determine the recommended health risk/action priority rating as provided in Table 3.

Table 3 Asbestos Risk Assessment – Recommended Health Risk/Action Priority Rating

Rating		Definition
Health Risk	Negligible	Products or Bonded ACM that pose negligible health risk to employees and the general public, such as painted cement sheeting, vinyl floor tiles etc. They consist of materials that currently are in an undamaged, stable, non-friable condition within a low accessible area. The ACM does not present a health risk unless disturbed by intrusive work such as drilling, cutting, breaking or sanding. Control must be implemented to protect these materials from damage including ACM identified by warning signs. Reassessment of the priority rating will be required if any planned maintenance, refurbishment or demolition works impact on their condition. If damage, maintenance work should be carried out to stabilise and repair the damaged area.
Hazard Level	0 - 3	
Action Priority	P4	
Health Risk	Low	Products or materials that pose little health risk to employees and the general public. They consist of ACM that currently are in a stable, non-friable condition and have a low accessibility. These materials should be identified and warning signs erected. The material does not present a health risk unless disturbed by intrusive work such as drilling, cutting, breaking or sanding. Where planned maintenance, refurbishment or demolition works will disturb these materials, removal by a licensed asbestos removal contractor is required.
Hazard Level	4 – 19	
Action Priority	P3	

Rating		Definition
Health Risk	Moderate	Products or materials that pose a health risk to employees and the public in their current state. They consist of ACM that are mildly damaged, moderately friable and accessible. Removal or encapsulation and regular monitoring are recommended for these materials. Where planned maintenance, refurbishment or demolition works will disturb these materials, removal by a licensed asbestos removal contractor is required.
Hazard Level	20 – 49	
Action Priority	P2	
Health Risk	High	Products or materials that pose an immediate or elevated risk to employees or the public in their current state. They consist of materials that are readily accessible, in poor friable condition. Immediate actions should be taken for these materials to be removed by a licensed asbestos removal contractor is required.
Hazard Level	> 50	
Action Priority	P1	

2.4 Lead Based Paint

Australian Standard AS4361.2 (2017) Guide to Hazardous Paint Management - Part 2: Lead Paint in Residential, Public and Commercial Buildings defines lead paints as those in which the lead content (calculated as lead metal) is in excess of 0.1%w/w) of the dry film. Canlink took representative lead based paint films in the field, where possible and delivered to a NATA accredited laboratory for analysis using inductively coupled plasma optical emission spectrometry (ICP-OES).

2.5 Lead Containing Dust

Representative samples of accumulated or settled dust from accessible areas were collected and delivered to a NATA accredited laboratory for analysis via ICP-OES. A conservative assessment criterion was adopted for this investigation given the potential for human exposure and the readily disturbed and uncontained nature of accumulated or settled dust.
Concentrations of lead within accumulated or settled dust were compared against the health investigation level (HIL) for residential sites with garden/accessible soil of 300 mg/kg as outlined in National Environment Protection Measure (NEPC 2013) guidelines.

2.6 Polychlorinated Biphenyls

Old fluorescent light fittings and other appliances which may contain capacitors containing PCB dielectric oil are identified by inspection and evaluation with the consultant's experience of similar light fittings and appliances. Alternatively, where possible and when it was safe to do so, a representative light fitting was opened to reveal the capacitor and the make and model recorded to be compared against the ANZECC (1997) list of PCB containing capacitors.

2.7 Synthetic Mineral Fibres

SMF containing materials were either sampled as per the asbestos methodology or assumed to contain SMF from the consultant's experience of similar materials.

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3 Site Description

The HAZMAT survey was conducted on 1st December 2021 by Jeffrey Yu (LAA001366), an experienced Hazardous Materials surveyors and SafeWork NSW Licensed Asbestos Assessor.

At the time of inspection, the site was still in fitout progress at the time of inspection, however, the inspection was undertaken only minimal staff were present.

Photographs taken during the HAZMAT survey were presented in Appendix 1 – Asbestos Register. The type, location, friability, accessibility, and approximate quantities of identified and suspected hazardous materials are provided in the Hazardous Materials Register in Appendix 1 – Asbestos Register. A summary of the observations made during the survey is included in Appendix 2 – HAZAMT Summary.

Certain areas of the building(s) were inaccessible at the time of the inspection. This included areas/materials that were inaccessible due to being “live electrical” or “moving parts” equipment. Table 1 listed those areas/materials that were inaccessible.

Materials other than asbestos, lead and PCBs are generally outside the scope of this investigation as identification can require specialised analysis/inspection techniques.
Settled dust is generally not sampled or commented on unless specified. Settled dust may contain hazardous materials, particularly if it is/was once in the vicinity of hazardous materials (such as asbestos containing materials or lead paint). It may also contain hazards originating from outside the building (such as lead from petrol combustion).

4 Asbestos Management Requirements

Asbestos is the fibrous form of mineral silicates belonging to the serpentine and amphibole groups with the most common types being crocidolite (blue asbestos), amosite (brown or grey asbestos) and chrysotile (white asbestos).

Asbestos is a hazardous material that poses a risk to health by inhalation if the asbestos fibres become airborne and people are exposed to these airborne fibres. Exposure to asbestos fibres is known to cause mesothelioma, asbestosis and lung cancer.

Asbestos and asbestos-containing materials were used extensively in Australian buildings and structures, plant and equipment and in ships, trains and motor vehicles during the 1950s, 1960s and 1970s, and some uses, including some friction materials and gaskets, were only discontinued on 31 December 2003.

Asbestos materials in a bonded form do not present an immediate health risk if they remain undisturbed and in good condition. It is the inhalation of fibres from friable forms of asbestos, or dusts generated by disturbing bonded materials, that may lead to the risk of asbestos-related disease.

Asbestos Management Plan (AMP)
An AMP (including an asbestos register) should be developed for the site as per Part 4.1 of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in

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Workplaces (2019). Recommendation section of this report for details of what should be included in the AMP.

Updates to Register, AMP and Risk Assessments
The asbestos register and the AMP should be reviewed (via visual inspection by a competent person) and updated at least every 5 years for non-friable ACM and every 12 months for friable ACM where a risk assessment indicates the need for a reassessment or if any ACMs have been removed or updated as per Parts 3.2 and 4.2 of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019).

Risk assessments should be reviewed regularly, particularly when there is evidence that the risk assessment is no longer valid, control measures are shown to be ineffective or there is a significant change planned for the workplace or work practices or procedures relevant to the risk assessment; or there is a change in ACM condition or ACMs have since been enclosed, encapsulated or removed.

Labelling
All confirmed or presumed ACMs (or their enclosures) should be labelled to identify the material as *asbestos-containing* or *presumed asbestos-containing* and to warn that the items should not be disturbed as per Part 2.5 of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019).

Training
Staff and site personnel must be provided with *Asbestos Awareness* training in accordance with Part 6.3 of SafeWork NSW, Code of Practice for How to Manage and Control of Asbestos in Workplaces (2019).

Training should inform staff how to work safely alongside asbestos by instructing them of:

- The health risks associated with asbestos.
- Their roles and responsibilities under the AMP.
- Procedures for managing asbestos on-site.
- The correct use of control measures and safe work methods to minimise the risks from asbestos. Training records must be kept.

Refurbishment / Demolition Requirements
This audit is limited by the Scope of Works and Methodology outlined within this report.

Generally, a new audit or revised audit is required prior to any planned refurbishment, alteration, demotion or upgrade works that may disturb ACMs at the site in accordance with *Australia Standard AS 2601: The Demolition of Structures*

Removal of Asbestos Materials
If the asbestos management plan calls for the removal of asbestos, the Work Health and Safety Regulation 2017 (NSW) requires that this be done in accordance with *SafeWork NSW, Code of Practice: How to Safely Remove Asbestos (2019).*

Ensure that a risk assessment is performed by a competent person prior to the asbestos removal and that the asbestos removalist considers this risk assessment when developing their asbestos removal control plan.

Asbestos removal licences are required for non-friable and friable asbestos removal work. Friable asbestos removal work also requires a WorkCover permit.

Consultation and Communication related to Asbestos Removal
When asbestos-containing materials are to be removed, there must be full consultation, information sharing and involvement by everyone in the workplace at each step of the asbestos-containing material removal process and records should be kept.

Provision of Information to the Asbestos Removalist
Before any removal work commences, the asbestos removalist must be provided with a copy of the asbestos register and work specifications for the asbestos-containing materials removal.

Air Monitoring
Air monitoring may need to be performed when asbestos-containing materials are being removed to ensure control measures are effective. Air monitoring is required for all indoor removals of friable asbestos-containing materials and for all outdoor removals of friable asbestos-containing materials where there might be a risk to other people.

The need for air monitoring should be determined by a competent person who is independent from the person responsible for the removal work.

If air monitoring is required, the competent person shall develop a documented air-monitoring program, which includes the requirements for clearance monitoring.

Asbestos removal must not commence until the air monitoring has commenced.

The results of air monitoring shall be provided to all relevant parties as soon as possible.

In accordance with Section 261 of the Work Health & Safety Regulations (2017), any air monitoring must be analysed in a NATA-Accredited laboratory in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC: 3003 (2005)].

Clearance to Reoccupy an Asbestos Work Area
Before clearance is granted for an asbestos work area to be re-occupied, there must be a thorough clearance inspection. The clearance inspection must be conducted by a competent person who is independent from the person responsible for the removal work.

Following the final clearance inspection, a clearance certificate must be issued by this competent person.

Any protective barriers between the asbestos work area and public areas must remain intact until completion of all asbestos removal work and successful completion of the clearance inspection.

Disposal of Asbestos Waste
The handling and storage of asbestos waste at a worksite is regulated solely by SafeWork NSW. The storage at any location other than worksites, transport and disposal of asbestos waste are regulated by the NSW Department of Environment, Climate Change and Water (DECCW).

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At the asbestos removal site, asbestos waste must be collected and disposed of in an asbestos waste bag, a drum, a bin or asbestos waste skip. If the asbestos waste cannot be disposed of immediately, it should be stored in a solid waste drum, bin or skip, sealed, and secured at the completion of each day's work.

All asbestos waste must be removed from the workplace by a competent person. When transported, bonded asbestos must be securely packaged at all times and friable asbestos must be kept in sealed containers. All asbestos waste must be transported in a covered, leak-proof vehicle.

The asbestos waste may only be disposed of at a landfill site licensed by the DECCW to accept asbestos waste. This landfill site must receive prior notification by the asbestos remover of the intention to dispose of asbestos waste at this site. The landfill site must issue a certificate of disposal and the asbestos remover must provide the Facilities Manager with a copy of this certificate. It is the Facilities Manager's responsibility to ensure a copy of the certificate of disposal is placed within the relevant site's asbestos register.

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5 Statement of Limitations

This report has been prepared in accordance with the agreement between the client and Dr Upsilon Environments Pty Ltd (DRYU). Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of the client and any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments is provided by DRYU.

This report relates only to the identification of asbestos-containing materials used in the construction of the building and does not include the identification of dangerous goods or hazardous substances in the form of chemicals used, stored or manufactured within the building or plant.

The following should also be noted:

While the survey has attempted to locate the asbestos-containing materials within the site it should be noted that the review was a visual inspection and a limited sampling program was conducted and/or the analysis results of the previous report were used. Representative samples of suspect asbestos materials were collected for analysis. Other asbestos materials of similar appearance are assumed to have a similar content.

Not all suspected asbestos materials were sampled. Only those asbestos materials that were physically accessible could be located and identified. Therefore, it is possible that asbestos materials, which may be concealed within inaccessible areas/voids, may not have been located during the audit. Such inaccessible areas fall into a number of categories.

- Locations behind locked doors.
- In set ceilings or wall cavities.
- Those areas accessible only by dismantling equipment or performing minor localised demolition works.
- Service shafts, ducts etc., concealed within the building structure.
- Energised services, gas, electrical, pressurised vessel and chemical lines
- Voids or internal areas of machinery, plant, equipment, air conditioning ducts etc.
- Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during major demolition works.
- Height restricted areas.
- Areas deemed unsafe or hazardous at time of audit

In addition to areas that were not accessible, the possible presence of asbestos containing materials may not have been assessed because it was not considered practicable as:

- It would require unnecessary dismantling of equipment; and/or
- It was considered disruptive to the normal operations of the building; and/or
- It may have caused unnecessary damage to equipment, furnishings or surfaces; and/or
- The asbestos containing material was not considered to represent a significant exposure risk; and/or
- The time taken to determine the presence of the asbestos containing material was considered prohibitive.

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Only minor destructive auditing and sampling techniques were employed to gain access to those areas documented in the register. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos containing material has been detected.

During the course of normal site works care should be exercised when entering any previously inaccessible areas or areas mentioned above and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. Therefore, during any refurbishment or demolition works, further investigations and assessment may be required should any suspect material be observed in previously inaccessible areas or areas not fully inspected previously, i.e. carpeted floors.

This report is not intended to be used for the purposes of tendering, programming of works, refurbishment works, or demolition works unless used in conjunction with a specification detailing the extent of the works. To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.

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Appendix 1 – Asbestos Register

Hazardous Materials Register
Admin Building With Pathology and Yeomans at 97-103 Bowral St, Bowral NSW 2576

Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Building Description	Built in 1930s with brick walls, metal and tile roof. The site was still functional, operational. All machineray, all services and all other facilities were still operational or in usage as usual at the time of this inspection. Previous registers (Douglas Partners Report: 89199.01 and EMS Report: EMS174665) were made available for reference amost at the completion of the inspection on June 25th, 2021. Limited destructive sampling taken to minimise the disturbance. Canlink takes no responsibility and no liability to manage or dispose any debris during normal surverying activities. Yeomans Building was underwent fit-outs at the time of clearance inspection on 1st December, 2021. After the removel of 9 packers from the middle sectoin of the subfoor and 2 packers from the partition wall, 11 new packers were replaced with FC sheeting ones. Anotehr 2 packers at the far norhtern end of the Yeomans Building were put into FC sheeting packers and metal covers on 1st December, 2021.																	
Exterior																		
Admin Building, Yeoman, Pathology	Exterior	Wall claddings, throughout, 200m2	Asbestos	FC sheeting	Similar to 7	Presumed negative		1	Non-Friable	NA	NA	NA	NA	NA	NA		Height Restriction. Limited Access for sampling at Sample 7.	
Admin Building,	Exterior	Admin building, exterior, Level 1, northern elevation, Front Verandah rooms, wall claddings	Asbestos	FC sheeting	7	NAD		2	Non-Friable	NA	NA	NA	NA	NA	NA		Confined space; inspection required during demoltion as previous removal in stages could/may not be completed in some inaccessible/non-practical areas (only feasible during structure damage demolition). Most of pipes were sealed with black plastic foams.	
Admin Building	Interior and Exterior	Admin Building, to Milton park Link; To Quit Room- exterior and interior - wall claddings and ceiling	Asbestos	FC sheeting	15	NAD		3	Non-Friable	NA	NA	NA	NA	NA	NA	Y	Greencap Asbestos Sticker should be removed.	

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									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building	Exterior	Admin Building, Southern elevation, adjacent to Kitchen, verandah, ceiling, 60m2	Asbestos	FC sheeting	23	NAD		4	Non-Friable	NA	NA	NA	NA	NA	NA			
Admin Building	Interior	Admin Building, Northwestern elevation, intill panels, eaves, ceilings, 40m2	Asbestos	FC Sheeting	24	NAD		5	Non-Friable	NA	NA	NA	NA	NA	NA			
Admin Building	Interior	Admin Building, Quiet Room, exterior, external cladding, 40m2	Asbestos	FC sheeting	25	NAD		6	Non-Friable	NA	NA	NA	NA	NA	NA			
Admin Building	Exterior	Admin Building, Parent Lounge Room, Low Manhole Entry - Isolated Eave, 4m2	Asbestos	FC sheeting	Similar to 26	Presumed negative		7	Non-Friable	NA	NA	NA	NA	NA	NA		Confined space, no access, high restrictions (over 3m); Inspection required.	

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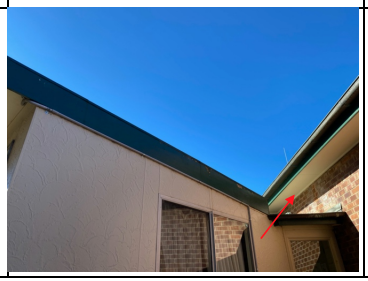
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building	Interior	Admin Building, Quiet Room, exterior, eaves, throughout	Asbestos	FC sheeting	26	NAD		8	Non-Friable	NA	NA	NA	NA	NA	NA		NO access; Live. Inspection required duing demolition.	
	No PCB containing capacitors were identified to the exterior of the building at the time of the survey. All live, sealed or encapsulated, or inaccessible capacitors containing or suspected as containing PCB should be inspected prior to demolition.																	
Interior																		
Admin Building	Interior	Admin building, exterior, Level 1, northern elevation, Front Verandah rooms, wall claddings	Asbestos	FC sheeting	7	NAD		9	Non-Friable	NA	NA	NA	NA	NA	NA			
Yeoman Ward	Interior	Yeoman Ward, ceiling space, Aircon duct, insulation, throughout - adjacent to Admin Building Ceiling Western Entry Gate	Asbestos	Insulation	10	NAD, SMF		10	Friable	NA	NA	NA	NA	NA	NA		Confined space, two or three layers of ceilings with duct throughout and encapuslated. Inspection required prior to demolition.	

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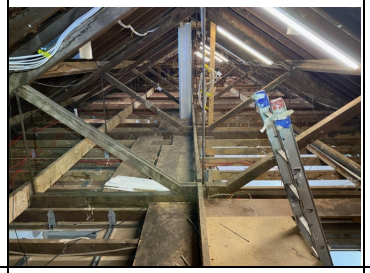
Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Yeoman Ward	Interior	Yeoman Ward, northern section of ceiling space, ceililng tiles,around 200m2	Asbestos	NIL	NIL	NIL		11	NA	NA	NA	NA	NA	NA	NA		Most of tiles in the northern sectioni of the ceiling space were removed.	
Yeoman Ward	Interior	9 Yeoman Ward, ceiling space, asbestos in dust	Asbestos	Settled Dust	9	NAD; SMF		12	Friable	NA	NA	NA	NA	NA	NA		Only one piece sighted. Most of the suspened tiles were removed. Visually Insulation and Dust in Ceiling Cavity were almost removed. There some uncertainties of asbestos debris in ceiling cavities (~80m2) adjacent to Admin Building Western Entry Gate have two or three layers of ceilings (confined space, no access)	
Yeoman Ward	Interior	11 Yeoman Ward, ceiling space, minor asbestos debris, pipe lagging	Asbestos	Lagging Debris	11	Positive		13	Friable	3	1	3	1	27	P2 / Moderate		Only one piece sighted. Most of the suspened tiles were removed. Visually most of Insulation and Dust in Ceiling Cavity were removed. There are uncertainties of asbestos debris in ceiling space (~80m2) adjacent to Admin Building Western Entry Gate have two or three layers of ceilings (confined space, no access). Class A Removalist.	

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Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building and Pathology Building	Interior	Admin Building and Pathology Building, Level 1, ceiling space, Asbestos in dust	Asbestos	FC sheeting	13	NAD; SMF		14	Friable	NA	NA	NA	NA	NA	NA		Ceiling cavities were ocvered with insulation; inspection required prior to demolition. Presumed to be hidden service risers containing asbestos and contamination, under SMF insulation	
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room, Lift shaft	Asbestos	Pad	-	Presumed Positive		15	Non-Friable	1	1	1	1	2	P4 / Negligible		Energized, encapsulated. Inspectoin required prior to demoltion.	
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room, disused board	Asbestos	Mastic like material	-	Presumed Positive		16	Non-Friable	1	1	1	1	2	P4 / Negligible		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building, Pathology Building	Exterior	Admin Building and Pathology Building, ceiling space, ceiling cavity, insulation and pipe lagging	Asbestos	FC sheeting	5	NAD; SMF		17	Friable	NA	NA	NA	NA	NA	NA		Ceiling cavities were ocvered with insulation; inspection required prior to demolition. Presumed to be hidden service risers containing asbestos and contamination, under SMF insulation	

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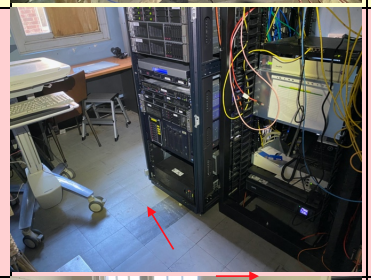
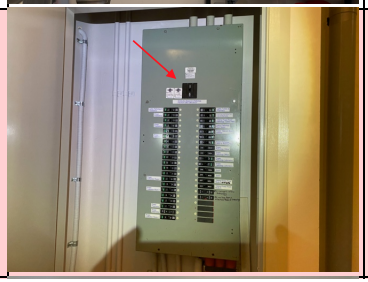
Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Pathology	Interior	Pathology Building, ceiling space, ceiling cavity, insulation around the Water Tank like strucutre	Asbestos	FC sheeting	Similar to 5	Presumed Negative		18	Non-Friable	NA	NA	NA	NA	NA	NA		Ceiling cavities were ocvered with insulation; inspection required prior to demolition. Presumed to be hidden service risers containing asbestos and contamination, under SMF insulation	
Pathology	Exterior	Pathology Building, ceiling space, ceiling cavity, insulation and Duct	Asbestos	Membrane	Similar to 5	Presumed Negative		19	Friable	NA	NA	NA	NA	NA	NA		Ceiling cavities were ocvered with insulation; inspection required prior to demolition. Presumed to be hidden service risers containing asbestos and contamination, under SMF insulation	
Admin Building	Interior	Admin Building, Ground floor, IT room, flooring, vinyl tiles, 12m2	Asbestos	Vinyl tiles	17	Positive		20	Non-Friable	1	1	1	1	2	P4 / Negligible		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building	Interior	Admin Building, Ground floor, Pharmacy,entry room and office room, blue vinyl tiles, 20m2	Asbestos	Vinyl tiles	19	Positive		21	Non-Friable	1	1	1	1	2	P4 / Negligible		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	

Hazardous Materials Register
Admin Building With Pathology and Yeomans at 97-103 Bowral St, Bowral NSW 2576

Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Asbestos Risk Assessment							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building	Interior	Admin Building, Ground floor, Pharmacy, back two rooms, blue vinyl tiles under carpet and grey tiles under table, 16 m2	Asbestos	Vinyl tiles	19	Positive		22	Non-Friable	1	1	1	1	2	P4 / Negligible		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building	Interior	Admin Building, Kitchen, Fire door core, insulation, poor	Asbestos	Insulation	20	NAD; SMF		23	Friable	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building	Interior	Admin Building, Kitchen, Ground floor, Cutlery Storeroom, infill panel, 4m2	Asbestos	Sprayed Insulation	21	NAD		24	Non-Friable	NA	NA	NA	NA	NA	NA			
Admin Building / Pathology	Interior	Electrical distribution board - 1 unit	Asbestos	Backing	-	Presumed Positive		25	Non-Friable	1	1	1	1	2	P4 / Negligible		Energized, encapsulated.	

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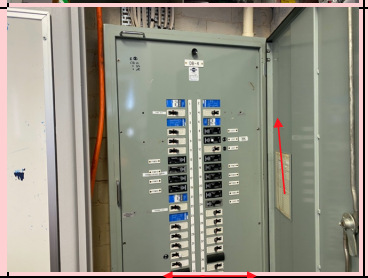
Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building / Pathology	Interior	Pathology, Store room, internal walls throughout, 30 m2	Asbestos	FC sheeting	22	NAD; SMF		26	Friable	NA	NA	NA	NA	NA	NA		Insultation suspected. Confined space. Throughout all levels, most rooms. Inspection required prior to demolition.	
Admin Building / Pathology	Interior	Pathology, Testing Storage Room, Air Con diffuser	Mould	Mould	-	-		27	Non-Friable	NA	NA	NA	NA	NA	NA		Visually black mould contamination.	
Admin Building	Interior	Electrical distribution board - 1 unit	Asbestos	Backing	-	Presumed Positive		28	Non-Friable	1	1	1	1	2	P4 / Negligible		Energized, encapsulated. Inspection required prior to demolition.	
Adming Building	Interior	Kitchen, Compressor Plant Room	Asbestos	Mastic like material	NIL	Presumed positive		29	Non-Friable	NA	NA	NA	NA	NA	NA		Electrical Hazards	

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Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Asbestos Risk Assessment							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building, Yeoman, Pathology	Interior	Admin building, subfloor - pipes throughout, entry through southern verandah, floor hole, adjacent to Kitchen	Asbestos	soil surfaces, pipes, gaskets	-	Presumed negative		30	NA	NA	NA	NA	NA	NA	NA		Confined space; on-site inspection for all subfloors (Admin, Pathology, Yeoman Ward) recommended prior to demolition.	
Admin Building	Interior	34 Admin building, subfloor, soil with debris	Asbestos	Debris	34	Negative		31	Friable	NA	NA	NA	NA	NA	NA		Confined space; on-site inspection for all subfloors (Admin, Pathology, Yeoman Ward) recommended prior to demolition.	
Admin Building / Pathology	Interior	Admin building, subfloor, Pipe lagging debris on ground and brickwork	Asbestos	Debris	Refere to EMS 16 3906	Positive		32	Friable	3	1	3	1	27	P2 / Moderate		Confined space; on-site inspection for all subfloors (Admin, Pathology, Yeoman Ward) recommended prior to demolition. Access through Quiet Room manholes were locked and isolated. Class A Removalist.	
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - 9 packers	Asbestos	FC sheeting	-	Negative		33	Non-Friable	-	-	-	-		NA	N	New FC sheeting packers with metal cover were used to replace the 9 asbestos packers	Replaced on 1st December, 2021.

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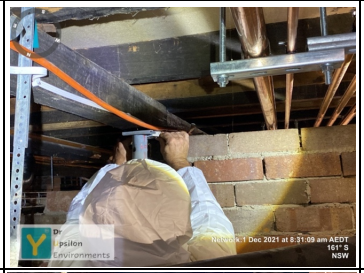
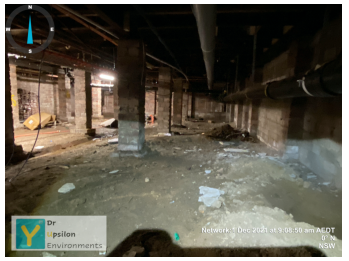
Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - Partition Wall - 2 packers; Far north end - 2 piers	Asbestos	FC sheeting	-	Negative		34	Non-Friable	-	-	-	-		NA	N	New FC sheeting packers with metal cover were used to replace the 2 asbestos packers. 2 new FC packers with metial were added to the far northern end piers.	Replaced on 1st December, 2021.
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - north-eastern corner	Asbestos	FC debris	-	Negative		35	-	-	-	-		NA	NA	N	Big visible FC fragments were removed. Source from ground floor FC addtion.	Removed visible big pieces.
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - north-eastern corner	Asbestos	FC debris	-	Negative		36	-	-	-	-	-	-	NA	N	Big visible FC fragments were removed. Source from ground floor FC drilling.	Removed big visible pieces.
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - Presumed Negative FC Area 2 (20m2)	Asbestos	FC debris	-	Presumed Negative		37	-	-	-	-	-	-	NA	N	Source from ground floor FC drilling.	

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Building Level / Floor	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - Presumed Negative FC Area 3 - (~20m2)	Asbestos	FC debris	-	Presumed Negative		38	-	-	-	-	-	-	NA	N	Source from ground floor FC drilling.	
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - western wall - packers (~3 units)	Asbestos	FC sheeting fragment	-	Presumed Positive		39	Non-Friable	1	1	1	1	2	P4 / Negligible	N	Removal prior to demolition	
Yeomans Builidng	Interior	Subfloor, Northern Middle Section - western partition wall - packers (~3 units)	Asbestos	FC sheeting fragment	-	Presumed Positive		40	Non-Friable	1	1	1	1	2	P4 / Negligible	N	Removal prior to demolition	
Admin Building, Yeoman, Pathology	No PCB containing capacitors were identified to the interior of the building except subfloor at the time of the survey. All capacitors containing or suspected containing PCB at all live or confined space or inaccessible areas/locations should be inspected prior to demolition.																	

Hazardous Materials Register
Services/Facilities Building Complex adjacent to Admin Building at 97-103 Bowral St, Bowral NSW 2576

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Asbestos Risk Assessment							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Building Description	Several services buildings or facilities adjacent to Admin Building were inspected. Compressor room, library, store rooms, and sheds are mainly brick structure or metal sheeting..																	
Exterior																		
Complex Buildings	Interior	Complex Buildings, Library, Storeage Room, ceilings, throughout, 60 m2	Asbestos	FC sheeting	27	NAD		33	Non-Friable	NA	NA	NA	NA	NA	NA			
Maintenance Buildings	Interior	Maintenance, eaves, throughout, 200m2.	Asbestos	FC sheeting	30	NAD		34	Non-Friable	NA	NA	NA	NA	NA	NA			
	No SMF materials were identified to the exterior of the building at the time of the survey																	
	No PCB containing capacitors were identified to the exterior of the building at the time of the survey																	
Interior																		
Laundry Building	Interior	28 Laundry, ceiling and partition walls, 100m2	Asbestos	FC sheeting	28	NAD		35	Non-Friable	NA	NA	NA	NA	NA	NA			
Supply	Interior	Supply, Wall infill panels and ceiling, 30m2	Asbestos	FC sheeting	29	NAD		36	Non-Friable	NA	NA	NA	NA	NA	NA			

Hazardous Materials Register
Services/Facilities Building Complex adjacent to Admin Building at 97-103 Bowral St, Bowral NSW 2576

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	*Asbestos Risk Assessment*							Labelled	Comments/ Condition	Action Taken
									Asbestos Type	Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Maintenance Building	Interior	Maintenance, Toilet Partition wall and ceiling, 20m2	Asbestos	FC sheeting	31	Negative		37	Non-Friable	NA	NA	NA	NA	NA	NA			
Paediatrics Secondary Archive Storage Room, opposite to Plant Room, Kitchen, Admin Building	Interior	Paediatrics Secondary Archive Storage room, pipe lagging, 8m	Asbestos	Lagging	33	NAD; SMF		38	Friable	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
	No PCB containing capacitors were identified to the interior of the building at the time of the survey. All capacitors containing or suspected containing PCB at all live or confined space or inaccessible areas/locations should be inspected prior to demolition.																	

Hazardous Materials Register - Lead in Paint and Dust
Services/Facilities Building Complex adjacent to Admin Building at 97-103 Bowral St, Bowral NSW 2576

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Quantification	HAZMAT Risk Assessment						Labelled	Comments/ Condition	Action Taken
										Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Building Description	Complex Buildings/Facilities adjacent to Admin Buildings were inspected. Air compressor, Swithch room, Generator room, Flam Liq. Store, and Plant room are mainly brick structure.																	
Exterior and Interior																		
Admin Building	Exterior and Interior	Admin, L1, Bowral Meeting room, Windows, creamy paint	Pb	Lead in paint	1	Positive		35	0.37%w/w	NA	NA	NA	NA	NA	NA		Meeting Room windows at the back of the building	
Admin Building	Exterior and Interior	Admin, L1, Bowral Meeting room, Window frames, under creamy paint, yellow paint	Pb	Lead in paint	-	Presumed Positive		36	-	NA	NA	NA	NA	NA	NA		Meeting Room windows at the back of the building. Presumed positve as it is hard to separate different layers of paint.	
Admin Building and Pathology Building	Interior	Admin Building and Pathology Building,, ceiling space, Asbestos in dust	Pb	Lead in dust	8	Negative		37	300mg/Kg	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building and Pathology Building	Interior	Admin Building and Pathology, Ceiling space, Lead in dust	Pb	Lead in dust	12	Negative		38	260mg/Kg	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	

Hazardous Materials Register - Lead in Paint and Dust
Services/Facilities Building Complex adjacent to Admin Building at 97-103 Bowral St, Bowral NSW 2576

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Quantification	HAZMAT Risk Assessment						Labelled	Comments/ Condition	Action Taken
										Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building and Pathology Building	Interior	Admin Building, Finance and Corporate Room, Skirt, Lead in creamy paint	Pb	Lead in paint	6	Positive		39	0.91%	NA	NA	NA	NA	NA	NA		Maintenance required.	
Admin Building	Interior	Admin Building, Lounge – Parent Lounge, Door Frame, Multilayer paints	Pb	Paints	16	Negative		40	<0.001%	NA	NA	NA	NA	NA	NA			
Complex Buildings - Nitrous Oxide	Interior	Maintenance and all buildings, paint, green, throughout	Pb	Lead in paint	32	Negative		41	0.099% w/w	NA	NA	NA	NA	NA	NA		Peeling green paints from Nitrous Oxide gutter; assuming that green paints throughout in all Complex Buildings adjacent to Admin Building have Lead in paint amost equal to 0.1% w/w. Duplicate sampling requried if suspected.	
Admin Building	Interior	Admin Building, Ground floor, Skirting, throughout, creamy paint	Pb	Creamy Paint	18	Negative		42	0.08%	NA	NA	NA	NA	NA	NA			

Hazardous Materials Register - Lead in Paint and Dust
Services/Facilities Building Complex adjacent to Admin Building at 97-103 Bowral St, Bowral NSW 2576

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photos	Photo No.	Quantification	HAZMAT Risk Assessment						Labelled	Comments/ Condition	Action Taken
										Condition	Location	Airborne Potential	Exposure	Hazard Level	Health Risk/Action Priority Level			
Admin Building	Interior	Admin Building, roof, under tiles, several pieces	Pb	Lead sheeting	-	Positive		43	10	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room walls, water proof sheeting	Pb	Lead sheeting	-	Positive		44	16	NA	NA	NA	NA	NA	NA		Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition	

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Appendix 2 – HAZAMT Summary

Building	Location Description	Material Location	Type of Material	Hazard Type	Sample No.	Sample Result	Photo No.	Health Risk/Action Priority Level	Comments/ Condition
Yeoman Ward	Interior	11 Yeoman Ward, ceiling space, minor asbestos debris, pipe lagging	Asbestos	Lagging Debris	11	Positive	13	P2 / Moderate	Only one piece sighted. Most of the suspened tiles were removed. Visually most of Insulation and Dust in Ceiling Cavity were removed. There are uncertainties of asbestos debris in ceiling space (~80m2) adjacent to Admin Building Western Entry Gate have two or three layers of ceilings (confined space, no access).
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room, Lift shaft	Asbestos	Pad	-	Presumed Positive	15	P4 / Negligible	Energized, encapsulated. Inspectoin required prior to demoltion.
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room, disused board	Asbestos	Mastic like material	-	Presumed Positive	16	P4 / Negligible	Removal prior to demolition
Admin Building	Interior	Admin Building, Ground floor, IT room, flooring, vinyl tiles, 12m2	Asbestos	Vinyl tiles	17	Positive	20	P4 / Negligible	Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition
Admin Building	Interior	Admin Building, Ground floor, Pharmacy,entry room and office room, blue vinyl tiles, 20m2	Asbestos	Vinyl tiles	19	Positive	21	P4 / Negligible	Removal and disposal prior to demolition
Admin Building	Interior	Admin Building, Ground floor, Pharmacy, back two rooms, blue vinyl tiles under carpet and grey tiles under table, 16 m2	Asbestos	Vinyl tiles	19	Positive	22	P4 / Negligible	Removal and disposal according to local guidelines prior to demolition
Admin Building / Pathology	Interior	Electrical distribution board - 1 unit	Asbestos	Backing	-	Presumed Positive	25	P4 / Negligible	Energized, encapsulated.
Admin Building / Pathology	Interior	Pathology, Testing Storage Room, Air Con diffuser	Mould	Mould	-	-	27	NA	Visually black mould contamination. Maintenance required.
Admin Building	Interior	Electrical distribution board - 1 unit	Asbestos	Backing	-	Presumed Positive	28	P4 / Negligible	Energized, encapsulated. Inspection required prior to demolition.
Admin Building / Pathology	Interior	Admin building, subfloor, Pipe lagging debris on ground and brickwork	Asbestos	Debris	Refere to EMS 16 3906	Positive	32	P2 / Moderate	Confined space; on-site inspection for all subfloors (Admin, Pathology, Yeoman Ward) recommended prior to demolition. Access through Quiet Room manholes were locked and isolated. Class A Removalist.
Admin Building	Exterior and Interior	Admin, L1, Bowral Meeting room, Windows, creamy paint	Pb	Lead in paint	1	Positive	35	NA	Meeting Room windows at the back of the building
Admin Building	Exterior and Interior	Admin, L1, Bowral Meeting room, Window frames, under creamy paint, yellow paint	Pb	Lead in paint	-	Presumed Positive	36	NA	Meeting Room windows at the back of the building. Presumed positve as it is hard to separate different layers of paint.
Admin Building and Pathology Building	Interior	Admin Building and Pathology Building, ceiling space, Asbestos in dust	Pb	Lead in dust	8	Negative	37	NA	Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition
Admin Building and Pathology Building	Interior	Admin Building and Pathology, Ceiling space, Lead in dust	Pb	Lead in dust	12	Negative	38	NA	Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition
Admin Building and Pathology Building	Interior	Admin Building, Finance and Corporate Room, Skirt, Lead in creamy paint	Pb	Lead in paint	6	Positive	39	NA	Maintenance required.
Complex Buildings - Nitrous Oxide	Interior	Maintenance and all buildings, paint, green, throughout	Pb	Lead in paint	32	Negative	41	NA	Peeling green paints from Nitrous Oxide gutter; assuming that green paints throughout in all Complex Buildings adjacent to Admin Building have Lead in paint amost equal to 0.1% w/w. Duplicate sampling requried if suspected.
Admin Building	Interior	Admin Building, roof, under tiles, several pieces	Pb	Lead sheeting	-	Positive	43	NA	Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition
Admin Building	Interior	Admin Building, Level 1, ceiling space, Lift Room walls, water proof sheeting	Pb	Lead sheeting	-	Positive	44	NA	Removal and disposal accoriding to NOHSC 2006 and local guidelines prior to demolition

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Appendix 3 – Asbestos Removal Map

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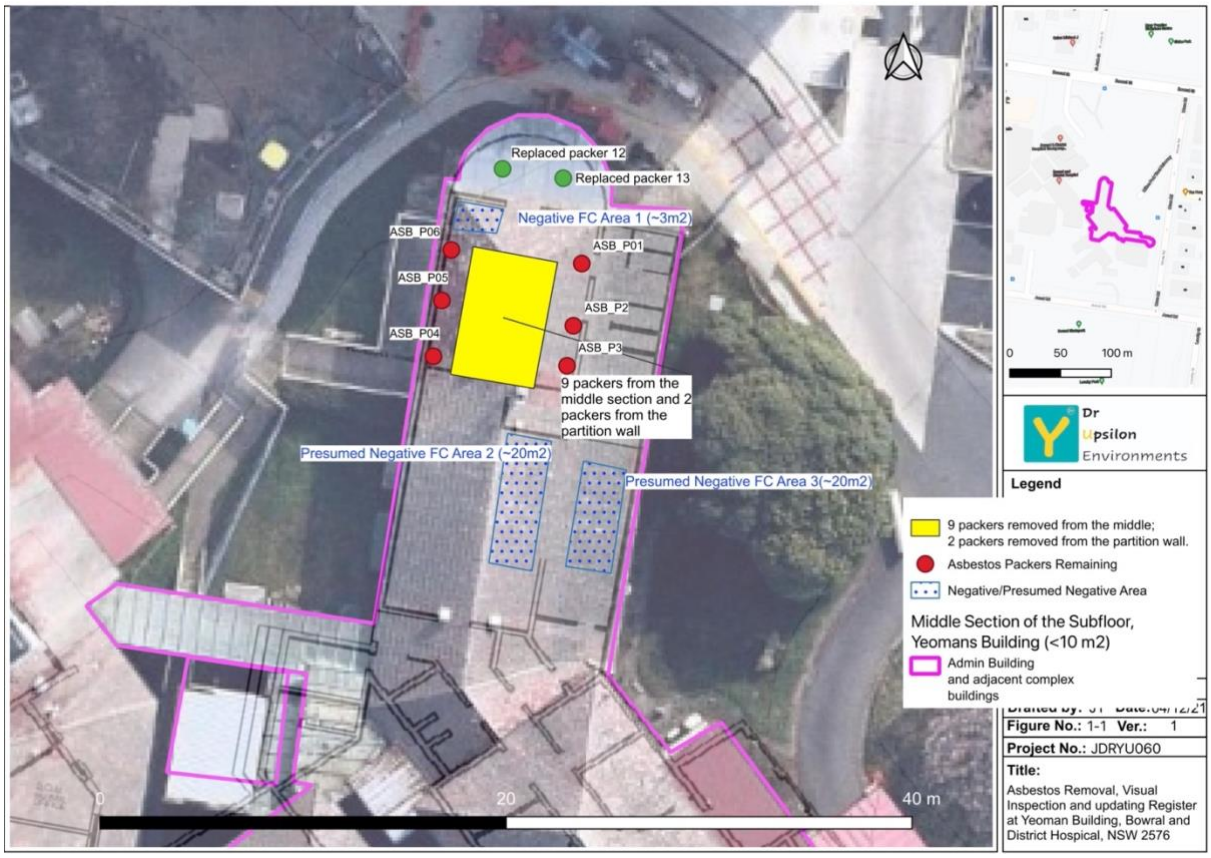

Figure 2 Asbestos Removal Area and Site Layout

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