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Client:	Pymble Ladies' College
Project Reference:	P25010061
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Report Review Date:	13/02/2030
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Hazardous Materials Report & Register

Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building

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Table Of Contents

1. INTRODUCTION

1.1 TECHNICAL INTRODUCTION AS SUPPLIED BY CLIENT

Joshua Martin has been commissioned by Pymble Ladies' College (the College) to prepare this P25010061_Pymble Ladies College Hazmat [4 buildings] 01.02.2025 [V.1] in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs) and in support of the preparation of an Environmental Impact Statement (EIS) and State Significant Development Application (SSD- 79146716) to the Department of Planning, Housing and Infrastructure (DPHI). This report has been prepared with reference to architectural plans prepared by 3XN and dated March 2025.

1.2 PLANNING SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (APPENDIX E)

Project SEAR SSD 79146716	**Section of report**
Issue and Assessment Requirements	**Documentation**
17. Waste Management	
If Buildings are proposed to be demolished or altered, provide a hazardous materials survey.	Hazardous Materials Survey

1.3 CETEC INTRODUCTION

CETEC was engaged by Pymble Ladies' College to conduct an audit of hazardous materials and develop a hazardous materials management plan for Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building.

The hazardous materials audit of Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building identified the presence of hazardous materials that may also include asbestos containing materials (ACM) therefore it is a requirement of the *Work Health and Safety Act* (the WHS Act) and the *Work Health and Safety Regulations* (the WHS Regulations) that a hazardous materials/asbestos management plan is prepared for the site.

The objective of a hazardous materials/asbestos management plan is to set out how hazardous materials that have been identified at the site will be managed. This hazardous materials management

plan (HMMP) includes:

- Current legislative requirements and references to applicable guidelines and Australian standards;
- The duties and responsibilities of the parties involved in the management of the site;
- Site specific recommendations and prioritisation for controlling asbestos and other hazardous materials related risks.
- Recommendations for safe work practices where asbestos and other hazardous materials are present

2. LEGISLATION AND STANDARDS

Legislative requirements, codes of practise and guidelines relating to the management of asbestos and other hazardous materials include but are not limited to:

- Work Health and Safety Act (2011)
- Work Health and Safety Regulation (2017)
- How to Safely Remove Asbestos – Code of Practice (SafeWork NSW 2022)
- How to Manage and Control Asbestos in The Workplace – Code of Practice (SafeWork NSW 2022)
- Workplace Exposure Standards for Airborne Contaminants (SafeWork Australia 2024)
- Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants (SafeWork Australia 2013)
- AS 4964-2004: Method for the qualitative identification of asbestos in bulk samples
- Guidance note on the membrane filter method for estimating airborne asbestos fibres, 2nd Edition [NOHSC:3003(2005)]
- Safe Work Australia Demolition Work Code of Practice (2018)
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]
- National code of Practice for the Control of Workplace Hazardous Substances [NOHSC:2007(1994)]

- AS 4361.2 Guide to lead paint management - Residential and commercial buildings (2017)
- National Standard for the Control of Inorganic Lead at Work [NOHSC:1012(1994)]
- National Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC:2015(1994)]
- National Standard for Synthetic Mineral Fibres [NOHSC:1004(1990)]
- National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1993)]
- Identification of PCB-Containing Capacitors (ANZECC 1997)
- Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995
- Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulation 2012 (No 1)
- Environmentally Hazardous Chemicals Act 1985
- Protection of the Environment Operations Act 1997

3. DUTIES AND RESPONSIBILITIES

Generally, the WHS regulations in each state and territory requires all persons who conduct a business or undertaking to ensure, so far as is reasonably practicable, that workers and other persons are not put at risk from work carried out as part of the business or undertaking. The WHS Regulations include specific obligations to manage and control asbestos and ACM at the workplace. For the purpose of this report will also consider other hazardous materials.

The Pymble Ladies' College has nominated the following people to assist with the management of hazardous materials at Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building.

Department	Name	Tasks	Contact Details
Pymble Ladies' College	PLC Facilities Management	Ensure the hazardous materials register and management plan is up to date Provide training for site staff Manage the engagement of qualified contractors for any work at the site Manage the engagement of qualified contractors for any work at the site Check that contractors have been supplied the hazmat register and management plan before starting work on the site Obtain copies of contractor documentation detailing the safe work practices (e.g., SWMS)	(T) 02 9249 0400
Expert Consultant / Competent Person	CETEC Pty Ltd Joshua Martin	Contact for advice regarding asbestos/hazardous materials risk assessment, management and removal	Ph: 02 9966 9211 M: +61 400 987 823 Joshua.martin@cetec.com.au

4. MANAGEMENT PRINCIPLES

See below for general management principle for hazardous materials. See section 5 for specific management controls of identified hazardous materials at Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building.

4.1. Asbestos

The significant health risks associated with asbestos include asbestosis, lung cancer, mesothelioma and pleural disease. In general, asbestos health risks arise if airborne asbestos fibres are inhaled. Consequently, the risk assessment of asbestos focuses on the likelihood of asbestos fibres becoming airborne and inhaled by people. Factors that influence the risk assessment include but are not limited to the type and structure of the material, the condition of the material, the location of the material and circumstances that may lead to the material being disturbed.

The decisions, and reasons for the decisions, about the management of asbestos at Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building is based on the risk assessment of asbestos or ACM identified or assumed to be present at the site. The risk assessment for all asbestos or ACM identified or assumed to be present at the site is detailed in the asbestos register. When setting priorities for managing and implementing controls precedence should be given to those materials with the highest risk according to the risk assessment. In general controls should be implemented immediately where materials have been given an extreme or high-risk rating whereas medium and low risk materials may have controls implemented over a practical period of time assuming the safety of all people present is maintained at all times.

When choosing the most appropriate control measure, the following hierarchy of controls must be considered:

- Eliminating the risk (for example, removing the asbestos)
- Substituting the risk, isolating the risk or applying engineering controls (for example, enclosing, encapsulation, sealing or using certain tools)
- Using administrative controls (for example, safe work practices)
- Using PPE.

A combination of these controls may be required in order to adequately manage and control asbestos or ACM.

4.2. Lead

The following precautions should be taken when considering working with materials containing lead (>0.1% w/w), lead contaminated dust (>150 mg/m^2) or for any works defined as a lead process in accordance with the WHS Regulation 2017:

- Inform workers of potential risks and provide training about preventing exposure to lead
- Conduct health monitoring of workers conducting work involving materials that contain lead
- Ensure lead contamination is confined to the lead process work area
  - Adopt methods that minimise the generation of lead dust and fumes
  - Conduct lead air monitoring and surface dust testing to validate controls are effective at preventing the spread of lead contamination for lead process work.
  - Occupational hygienist should review controls measures and revise as necessary.
- Clean work areas promptly and properly during and after work
- Prohibit eating, drinking, smoking and chewing gum in the lead process area
- Supply changing and washing facilities for workers
- Supply appropriate PPE as well as laundering or disposal facilities for contaminated PPE
- Notify SafeWork NSW of activities determined to be lead risk work within 7 days.

4.3. Synthetic Mineral Fibres (SMF)

Materials containing Synthetic Mineral Fibres have been identified at Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building however all identified SMF is in good condition and still required for insulation purposes, so removal is not required at this point in time. The following should be considered when working with SMF materials:

- PPE should be provided to workers and worn when SMF insulation is being handled or removed
- Dust should be suppressed by damping down with water or PVA
- Use hand tools, if possible, to reduce dust creation by power tools.

4.4. Polychlorinated Biphenyls (PCB)

Occupants and workers can be exposed to Polychlorinated Biphenyls (PCBs) when dismantling electrical capacitors and transformers or when cleaning up spills and leaks. Appropriate control measures should be implemented when handling damaged capacitors to ensure that any spillage does not contact occupants or workers and is appropriately cleaned up and disposed of.

Prior to renovations/demolition of buildings capacitors should be inspected to confirm if they are on the list of Knoxn PCB containing capacitors (Identification of PCB-Containing Capacitors (ANZECC 1997)).

PPE including gloves made of materials that are resistant to PCBs (for example polyethylene, nitrile rubber or neoprene), should be provided to workers and worn when there is any likelihood of exposure to PCBs.

PCB containing capacitors are removed and placed into impervious plastic bags, sealed and placed into metal drums which are lined with impervious plastic and sealed for disposal.

All protective clothing including gloves are to be disposed of by placing into impervious plastic bags, sealed and placed into metal drums which are lined with impervious plastic and sealed for disposal. Any other materials contaminated by PCBs are to be thoroughly washed with kerosene.

4.5. Mercury in Fluorescent Lamps

Mercury is Knoxn to be present in fluorescent tubes (including compact fluorescent light globes) Mercury is extremely toxic and exposure should be avoided where possible. The best way to prevent mercury exposure from fluorescent lamps is to avoid breaking the lamps.

Disposal of fluorescent lamps to landfill is not recommended and if possible, they should be taken to a facility that can recover the mercury contained in the lamp.

4.6. Global Warming Potential (GWP) substances

It is required that refrigerant gases deemed to be ODS are reclaimed from all parts of an air-conditioning or refrigeration system by a qualified and experienced person in such a way that prevents the gases release into the atmosphere. The person(s) conducting this work should use appropriate PPE and work methods to avoid exposure to the gas.

5. ASBESTOS & HAZARDOUS MATERIALS REGISTERS & SPECIFIC CONTROL MEASURES

Client:	Pymble Ladies' College	**Date of Inspection:**	01/02/2024
Report Reference	Pymble Ladies College: Robert Vicars, Jack Vicars, Dorothy Knox, and Isabel McKinney Harrison Building	**Register Compilation Date:**	13/02/2025
Project Reference / Job No.:	P25010061	**Register Review Date:**	13/02/2030 Or after material disturbance, renovations or demolition works

5.1. Asbestos

Sample Number	Internal / External	Primary Location	Description/ Specific Location	Material application	Material type	Quantity	Laboratory analysis result (Asbestos type)	Friability	Sealed/ Unsealed/ Enclosed	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk				Other Controls/ Comments	Photo #
													Evacuate Area / Restrict Access	Remove ACM	Enclose ACM	Encapsulate / Seal ACM		
Robert Vicars Building (RVB)																		
175814 (S1)	Internal	Door	Expansion Joint/Black Membrane in doorway near brick wall	Brown coating material	Mastic	NQ		-	-	-	-	-	-	-	-	-	-	1 - 2
175816 (S3)	External	Door	White Expansion joints external to fire safety doors	Sponge and mastic	Fibrous material	NQ		-	-	-	-	-	-	-	-	-	-	4 - 5
175817 (S4)	Internal	Window	White mastic on old cream windows (representative)	Beige mastic	Mastic	NQ		-	-	-	-	-	-	-	-	-	-	9
175819 (S6)	**Internal**	**Ceiling panels x 5**	**Above artwork walls stairs approx.**	**Ceiling panels**	**Fibreboard Cement Sheeting**	**10m2**	**Chrysotile Asbestos Detected**	**Non-Friable**	**Sealed**	**Stable**	**Disturbance such as mechanical action or renovations**	**Low**	**No**	**Yes**	**No**	**Yes**	**Encapsulate exposed areas with PVA Sealant/waterproofing membrane. Leave, Label, Maintain. Remove**	11

Sample Number	Internal / External	Primary Location	Description/ Specific Location	Material application	Material type	Quantity	Laboratory analysis result (Asbestos type)	Friability	Sealed/ Unsealed/ Enclosed	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk				Other Controls/ Comments	Photo #
													Evacuate Area / Restrict Access	Remove ACM	Enclose ACM	Encapsulate / Seal ACM		
																	prior to renovation and works that may disturb the material. Engage class B licensed Asbestos removalist [Safe Work NSW].	
175820 (S7)	Internal	Window	Internal window mastic to all grey windows (white powder) 10+ windows	Beige mastic	Mastic	NQ	-	-	-	-	-	-	-	-	-	-	-	15 - 16
175822 (S9)	Internal	Window	Steal window mastic	Grey window mastic	Mastic	NQ	-	-	-	-	-	-	-	-	-	-	-	25
175823 (S10)	Internal	Subfloor	Subfloor Manhole: Black membrane spread throughout	Black bituminous membrane	Membrane	NQ	-	-	-	-	-	-	-	-	-	-	-	32
175824 (S11)	**Internal**	**Subfloor**	**Subfloor Manhole: ACM fragments and debris**	**FCS fragments**	**Asbestos cement sheeting fragments in soil**	**5 sqm**	**Chrysotile Asbestos Detected**	**Non-Friable**	**Sealed**	**Stable**	**Disturbance such as mechanical action or renovations**	**Low**	**No**	**Yes**	**N/A**	**N/A**	**Encapsulate exposed areas with PVA Sealant/waterproofing membrane. Leave, Label, Maintain. Remove prior to renovation and works that may disturb the material. Engage class B licensed Asbestos removalist [Safe Work NSW].**	**33**

Sample Number	Internal / External	Primary Location	Description/ Specific Location	Material application	Material type	Quantity	Laboratory analysis result (Asbestos type)	Friability	Sealed/ Unsealed/ Enclosed	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk				Other Controls/ Comments	Photo #
													Evacuate Area / Restrict Access	Remove ACM	Enclose ACM	Encapsulate / Seal ACM		
175826 (S13)	**Internal**	**Subfloor**	**Subfloor Manhole: Soil under ACM fragments and debris**	**FCS fragments**	**Asbestos cement sheeting fragments in soil**	**5 sqm**	**Chrysotile Asbestos Detected**	**Non-Friable**	**Sealed**	**Stable**	**Disturbance such as mechanical action or renovations**	**Low**	**No**	**Yes**	**N/A**	**N/A**	**Encapsulate exposed areas with PVA Sealant/waterproofing membrane. Leave, Label, Maintain. Remove prior to renovation and works that may disturb the material. Engage class B licensed Asbestos removalist [Safe Work NSW].**	**35**
175832 (S19)	Internal	Room 3	Room 3: Steel window mastic	Insulation	Millboard	NQ		-	-	-	-	-	-	-	-	-	-	51
Jack Vicars Building (JVB)																		
175828 (S15)	Internal	Level 1	Expansion joints on L1 walkway Floor/concrete	Fire rating to structural steel	Mastic	NQ		-	-	-	-	-	-	-	-	-	-	39 - 40
175829 (S16)	Internal	Roof	Water proofing membrane to the roof of the Jack and Robert Vicars, which is housing the AC units	Dust & debris	Dust & debris	NQ		-	-	-	-	-	-	-	-	-	-	42
Jack Vicars Building & Robert Vicars Buildings																		

Sample Number	Internal / External	Primary Location	Description/ Specific Location	Material application	Material type	Quantity	Laboratory analysis result (Asbestos type)	Friability	Sealed/ Unsealed/ Enclosed	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk				Other Controls/ Comments	Photo #
													Evacuate Area / Restrict Access	Remove ACM	Enclose ACM	Encapsulate / Seal ACM		
175830 (S17)	Internal	Wall	JVB & RVB housing to the AC unit walls next to sample 16	Dust & debris	Dust & debris	NQ	-	-	-	-	-	-	-	-	-	-	-	43
175831 (S18)	**External**	**Balcony**	**JVB & RVB FCS ceiling panels throughout all balconies**	**Fibreboard Cement Sheeting**	**>50m2**	**Chrysotile Asbestos Detected**	**Non-Friable**	**Sealed**	**Stable**	**Disturbance such as mechanical action or renovations**	**Low**	**No**	**Yes**	**No**	**No**	**Fibreboard Cement Sheeting**	**Encapsulate exposed areas with PVA Sealant/waterproofing membrane. Leave, Label, Maintain. Remove prior to renovation and works that may disturb the material. Engage class B licensed Asbestos removalist [Safe Work NSW].**	47
Dorothy Knox Building (DNB)																		
175833 (S20)	Internal	Locker Room	Asbestos in black adhesive in locker room	Access hatch doors / covers	Inner core material	NQ	-	-	-	-	-	-	-	-	-	-	-	52 & 54
175835 (S22)	Internal	Archive Room 6	Vermiculite Ceiling	Sealant	Mastic	NQ	-	-	-	-	-	-	-	-	-	-	-	57
175836 (S23)	Internal	Archive Room 6	FCS on ground	Bituminous "Blackjack" sealant	Mastic	NQ	-	-	-	-	-	-	-	-	-	-	-	59
175837 (S24 & 25)	Internal	Ceiling	DNB Asbestos ceiling dust of Robert Vicars Building	Sealant	Mastic	NQ	-	-	-	-	-	-	-	-	-	-	-	-

Sample Number	Internal / External	Primary Location	Description/ Specific Location	Material application	Material type	Quantity	Laboratory analysis result (Asbestos type)	Friability	Sealed/ Unsealed/ Enclosed	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk				Other Controls/ Comments	Photo #
													Evacuate Area / Restrict Access	Remove ACM	Enclose ACM	Encapsulate / Seal ACM		
Isabel McKinney Harrison Building																		
No hazardous materials which appear to contain asbestos was detected in accessible and visible locations on the date of inspection.																		

5.2. Lead

Sample Number	Internal / External	Primary Location	Specific Location	Material application	Colour	Quantity (approx.)	Laboratory analysis result	Above action limit (0.1% w/w, 300 mg/kg)	Condition	Activities that may lead to further damage/ deterioration	Risk assessment	Control of Risk	Comments / Observations	Photo #
Robert Vicars Building (RVB)														
175815 (S2)	Internal	Robert Vicars Building	White brick wall and internal white paints on doors and skirting	Coating to walls	White	>100m2	<0.005 %w/w	No	-	-	Not required	-	-	3
175818 (S5)	Internal	Window	Cream flaking lead paint old cream windows (representative)	Paint	Cream	NQ	**0.34 %w/w**	**Yes**	**Poor (flaky)**	Paint removal, renovation or demolition works	**Low**	Overpaint with lead free substitute. Label maintenance and ensure the current condition of lead paint is maintained to reduce the potential risk of exposure to occupants.	. Refer section 3: Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings, AS/NZS 4361.2:2017.	8
-	External	Window	White flaking external paint	Window frame paint	White	NQ	**Suspected**	**Suspected**	**Poor (flaky)**	Paint removal, renovation or demolition works	**Low**	Overpaint with lead free substitute. Label maintenance and ensure the current condition of lead paint is maintained to reduce the potential risk of exposure to occupants.	Refer section 3: Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings, AS/NZS 4361.2:2017.	18
175821 (S8)	Internal	Door	Dark Green & Cream base layer paints to doors & frames	Paint	Dark green and cream	NQ	**0.34 %w/w**	**Yes**	**Poor (flaky)**	Paint removal, renovation or demolition works	**Low**	Overpaint with lead free substitute. Label maintenance and ensure the current condition of lead paint is maintained to reduce the potential risk of exposure to occupants.	Refer section 3: Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings, AS/NZS 4361.2:2017.	22

Sample Number	Internal / External	Primary Location	Specific Location	Material application	Colour	Quantity (approx.)	Laboratory analysis result	Above action limit (0.1% w/w, 300 mg/kg)	Condition	Activities that may lead to further damage/ deterioration	Risk assessment	Control of Risk	Comments / Observations	Photo #
175825 (S12)	Internal	Subfloor	Subfloor Manhole: lead in soil	Soil in subfloor	Under building	NQ	**210mg/kg**	**<300mg/kg**	-	-	-	-	-	-
175838 (S24 & 25)	Internal	Ceiling	DNB led dust in ceiling dust of Robert Vicars Building	Coating to bollards	Yellow	NQ	<0.005 %w/w	No	-	-	Not required	-	-	-
Jack Vicars Building														
175827 (S14)	Internal	Level 1/2	Grey lead paint to Levels 1 and 2 rail and walls and beams	Rail coating	Grey	>20m2	0.052 %w/w	No	-	-	Not required	-	-	38
Dorothy Knox Building (DNB)														
175834 (S21)	Internal	Dorothy Knox	Lead in cream paint in locker room	Cream paint systems on floor	Cream	>10m2	<0.005 %w/w	No	-	-	Not required	-	-	54

5.3. SMF / PCBs / GWP

Hazard type	Internal / External	Primary Location	Description/Specific Location	Material application	Quantity	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk	Comments	Photo #
SMF	Internal	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	Zip hot water taps	Insulation	>10	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	61
SMF	Internal	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	A/C ducting in ceiling space	Insulation	>10	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	18
SMF	Internal	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	Split cycle A/C units	Insulation	>10	Unable to access	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Post encapsulation, ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	-
SMF	External	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	External A/C units	Insulation	>10	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	27
SMF	Internal	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	Hot water heaters	Insulation	>10	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	62

Hazard type	Internal / External	Primary Location	Description/Specific Location	Material application	Quantity	Condition	Activities that may lead to further damage/ deterioration or exposure	Risk assessment	Control of risk	Comments	Photo #
SMF	Internal	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	Preformed insulation batts used in the wall cavities	Preformed insulation batts	>100	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	-
Mercury	Internal/External	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	All fluorescent light tubes	Light tubes	>50	Good	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of Mercury is maintained to reduce the potential risk of exposure to occupants.	12 & 7
ODS	External AC units	Jack Vicars Building, Robert Vicars Buildings, Dorothy Knox Building, and Isabel McKinney Harrison Building	All external AC units to buildings (Mitsubishi R410A) (Diakin inverter R32)	ODS in AC units	>25	Stable	Maintenance and renovation	**Low**	Seal / encapsulate all worn out areas with suitable controls to prevent creation of dust as soon as practicable. Appropriate PPE (fitted P2/P3 masks) should be worn by individuals conducting the removal.	Ensure current condition of SMF is maintained to reduce the potential risk of exposure to occupants.	26 - 27, 41, 60

5.4. Photos of Suspect Hazardous Materials Tested

Photo 1: RVB – Sample 1 (S1)

Photo 2: RVB - Sample 1 Location: Expansion joint/black membrane in doorway near brick wall

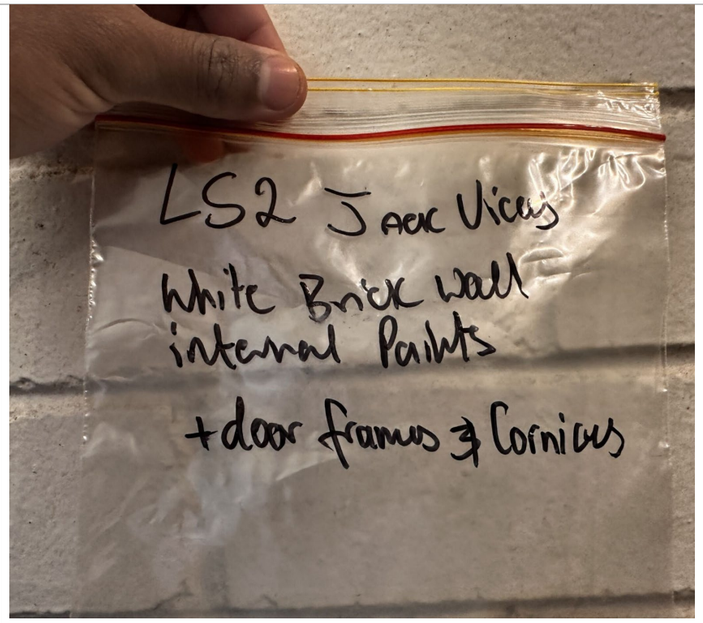


Photo 3: RVB – Sample 2 (S2): White brick wall, internal paint

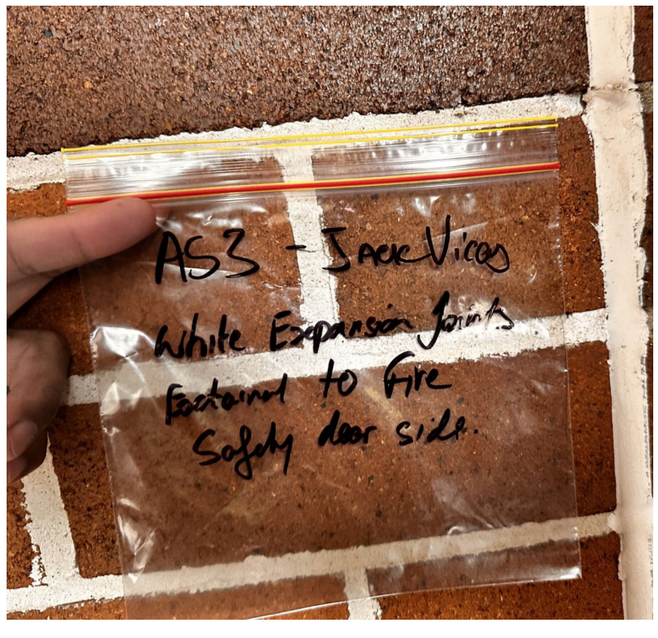


Photo 4: RVB – Sample 3 (S3)

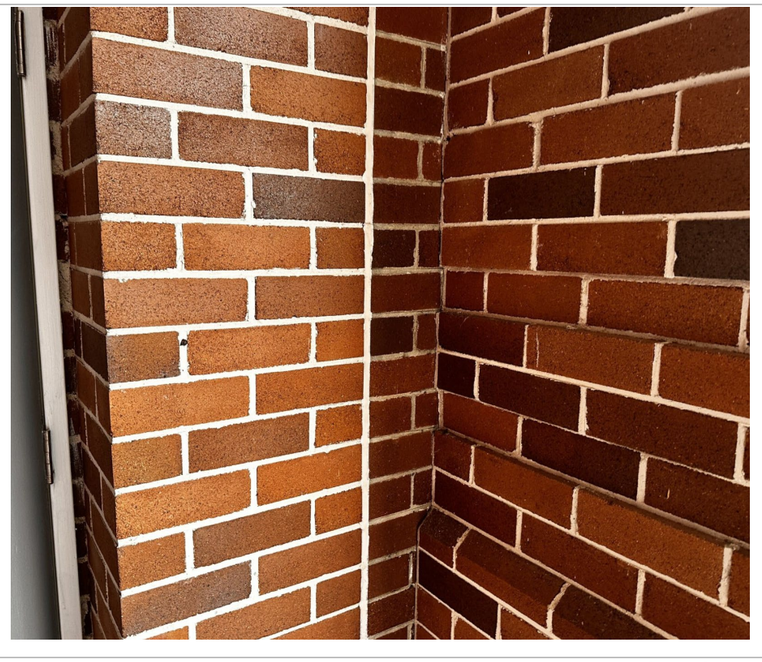


Photo 5: RVB - Sample 3 Location: White expansion joints external to fire safety doors

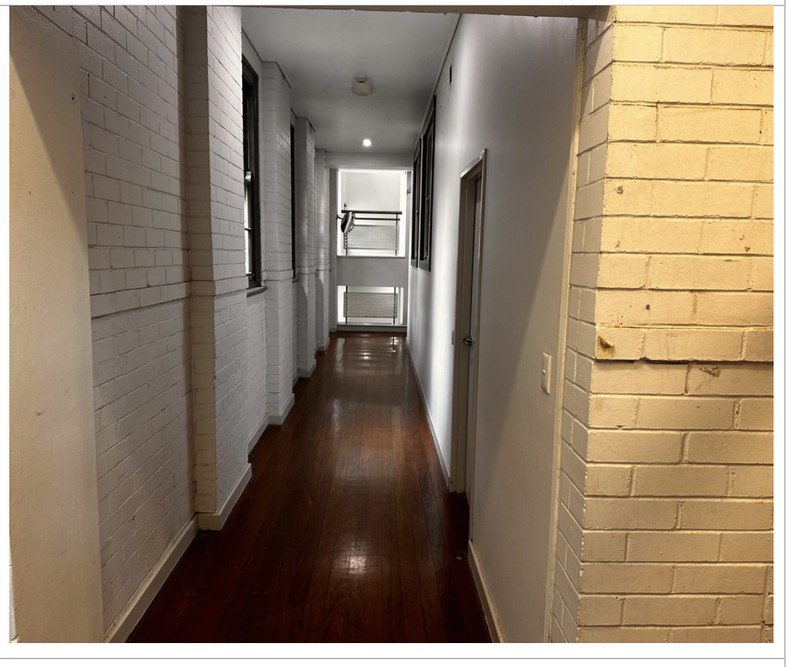


Photo 6: RVB – Internal corridor

Photo 7: RVB – Mercury in flocurescent light fixtures

Photo 8: RVB – Sample 5 (S5)

Photo 9: RVB - Sample 4 & 5 Location – Flaking paint in old cream window over door frame contains lead

Photo 10: RVB – Stairway with asbestos ceiling.

Photo 11: RVB – Sample 6 (S6): Ceiling pannels

Photo 12: RVB – Ceiling above the stairs contains asbestos.

Photo 13: RVB – Ceiling above stairs contains asbestos

Photo 14: RVB – Internal window mastic

Photo 15: RVB – mastic on window

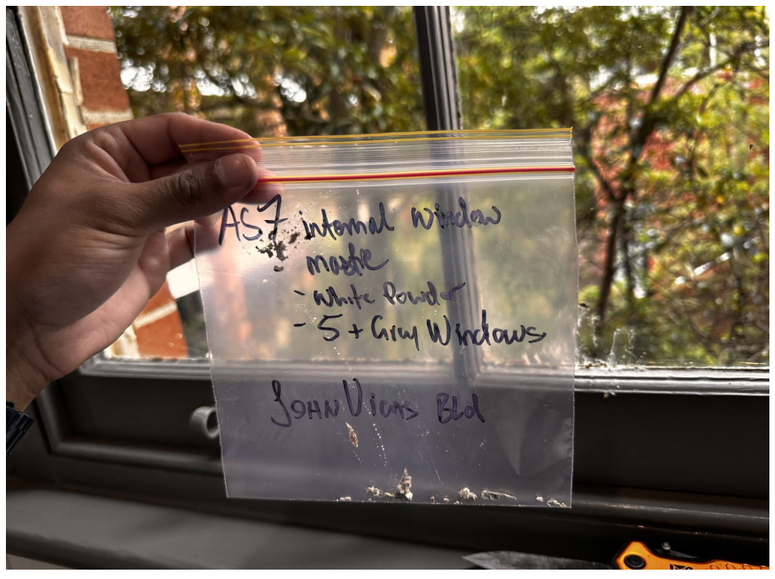


Photo 16: RVB – Sample 7 (S7): White powder

Photo 17: RVB – White mastic sample from internal window sills

Photo 18: RVB – Deterioration on external door frame may contain lead.

Photo 19: RVB – Synethic mineral fibers SMF can be found in AC Ductwork

Photo 20: RVB - Old cable sheath in risers may contain asbestos.

Photo 21: RVB – Asbestos ceiling Dust, location of samples 24 and 25

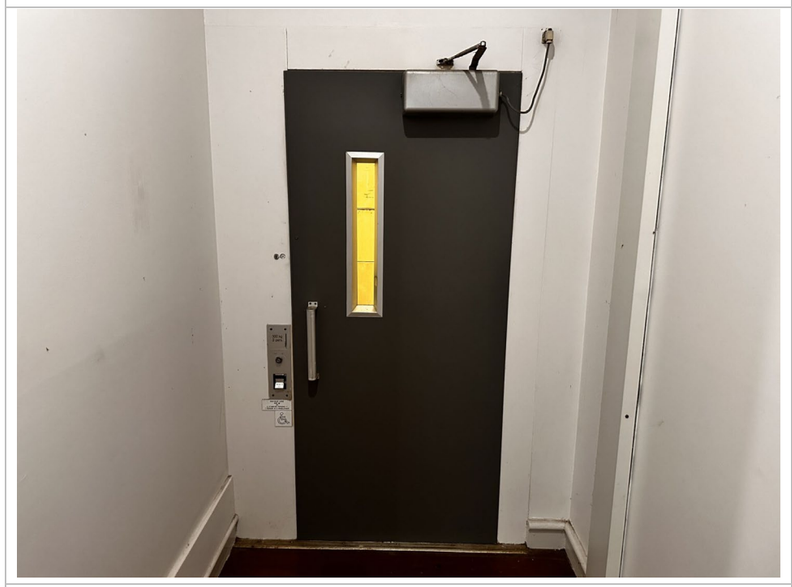


Photo 22: RVB – Dark green paint on door. Lift Door cores may contain asbestos.

Photo 23: RVB – Steel window mastic

Photo 24: RVB – Window mastic

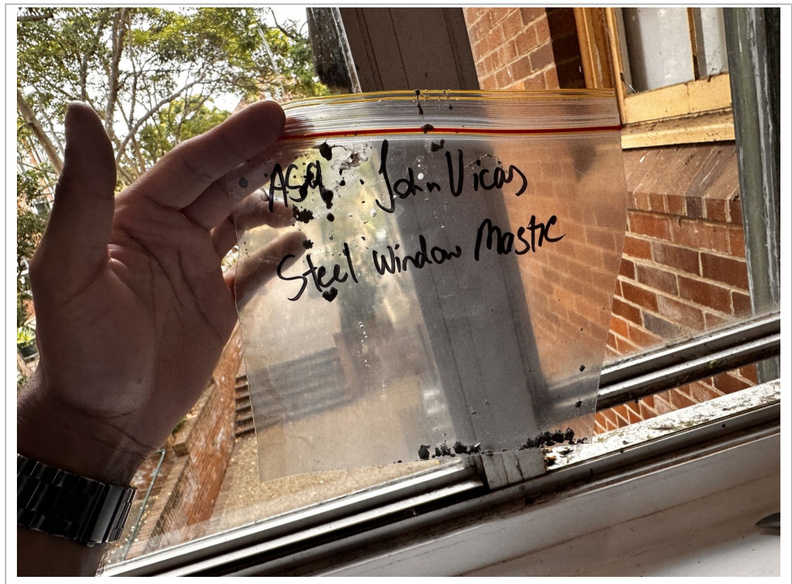


Photo 25: RVB – Sample 9 (S9): Sample of dust accumulation on steel window

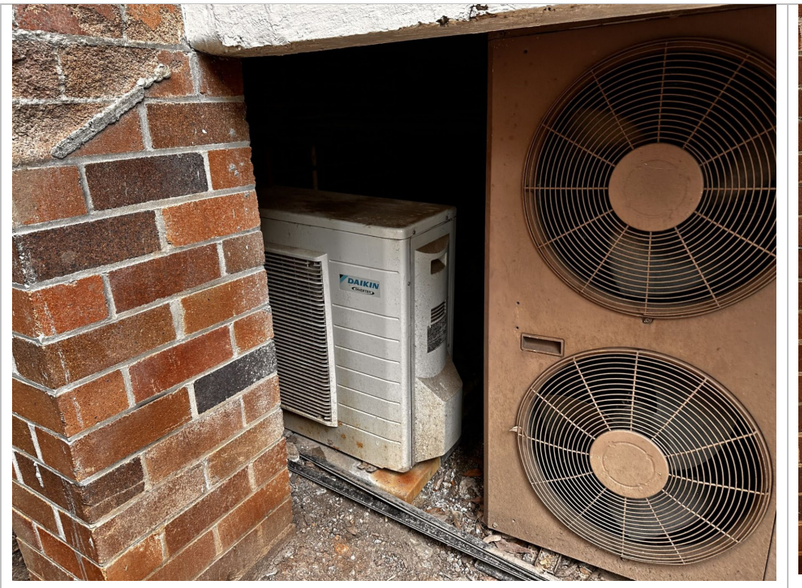


Photo 26: RVB – Ozone-depleting substances & SMF in AC units

Photo 27: RVB – AC units contain SMF as well as ozone depleting subtances.

Photo 28: RVB – Entrance to Manhole

Photo 29: RVB - Subfloor of manhole; ACM fragments and debris contain asbestos.

Photo 30: RVB - Subfloor of manhole.

Photo 31: RVB - Subhole of manhole with black membrane spread throughout

Photo 32: RVB – Sample 10 (S10): Black membrane sample

Photo 33: RVB – Sample 11 (S11): Sample of debris and ACM

Photo 34: RVB – Internal of manhole contains asbestos debris.

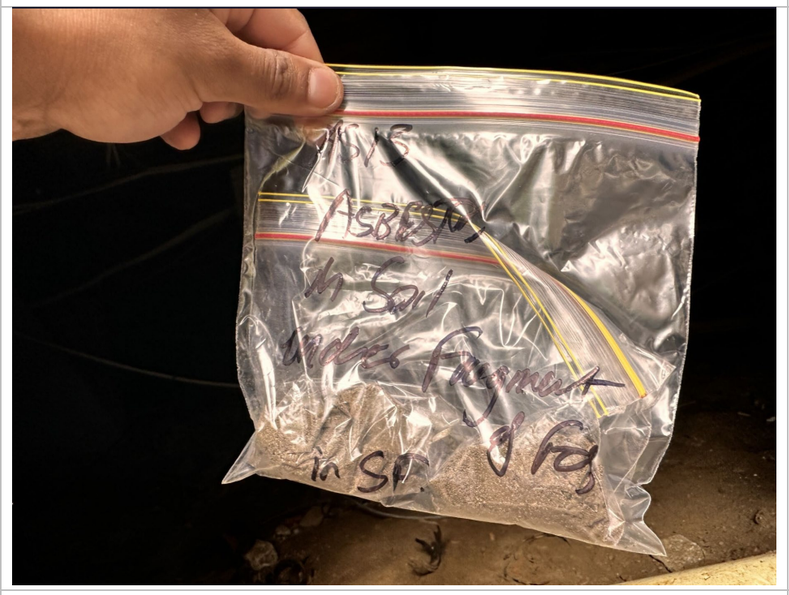


Photo 35: RVB –Sample 13 (S13): Samples of possible asbestos in soil

Photo 36: Jack Vicars Building

Photo 37: JVB – Grey lead paint to levels 1 and 2 rails, walls and beams

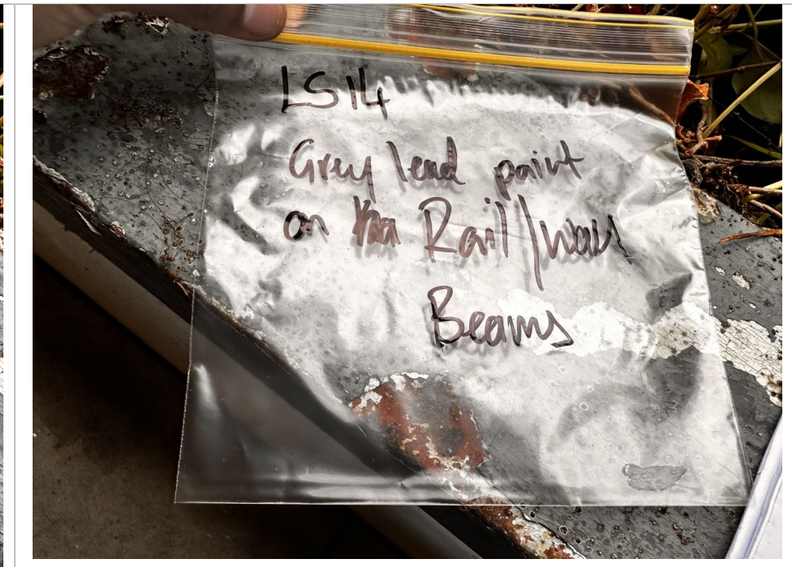


Photo 38: JVB – Sample 14 (S14): Sample of lead grey paint

Photo 39: JVB – Expansion joint on level 1 floor

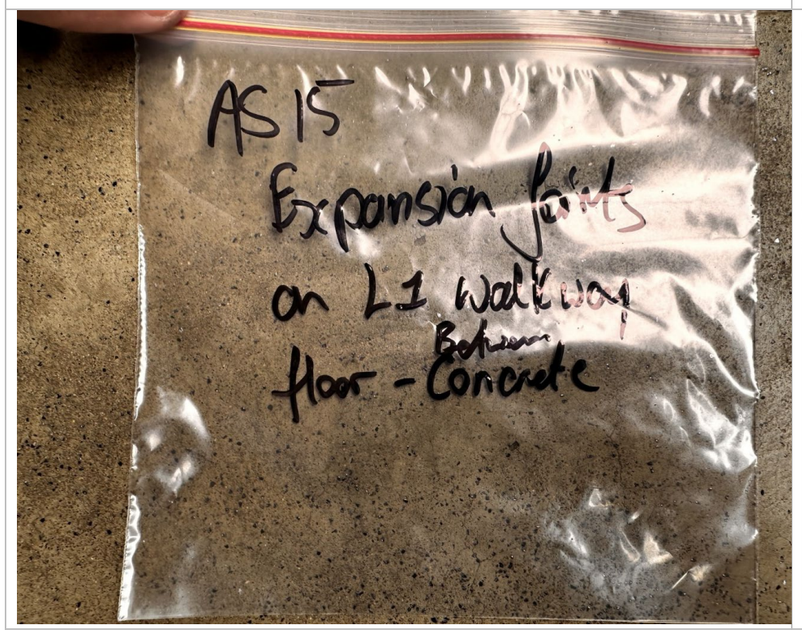


Photo 40: JVB – Sample 15 (S15): Sample of concrete expansion joints

Photo 41: JVB – Roof of JVB/RVB building with AC units

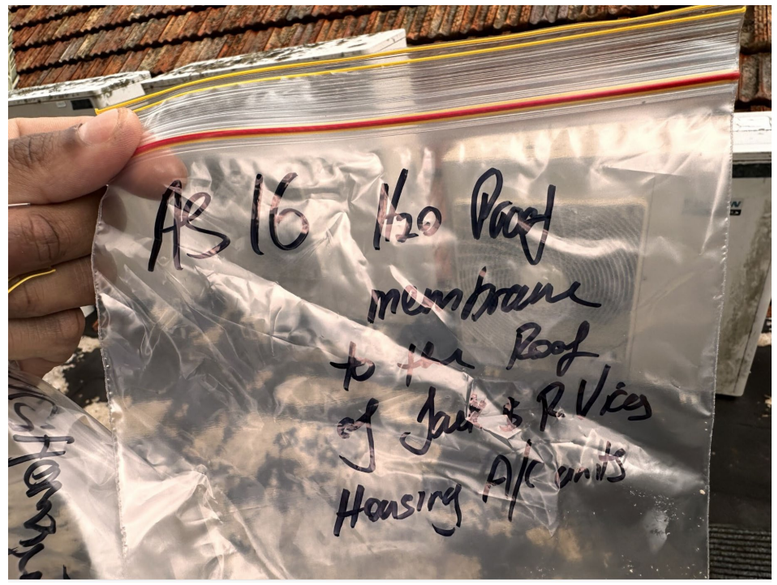


Photo 42: JVB – Sample 16 (S16): Sample of waterproof membrane on roof containing AC units

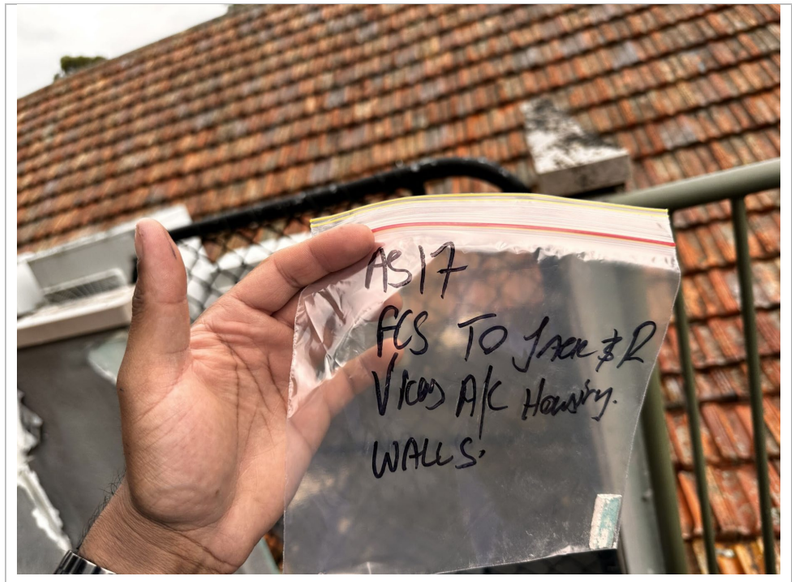


Photo 43: JVB and RVB – Sample 17 (S17): Housing to the AC unit walls

Photo 44: JVB and RVB awning contians asbestos.

Photo 45: JVB and RVB balcony ceiling contain asbestos.

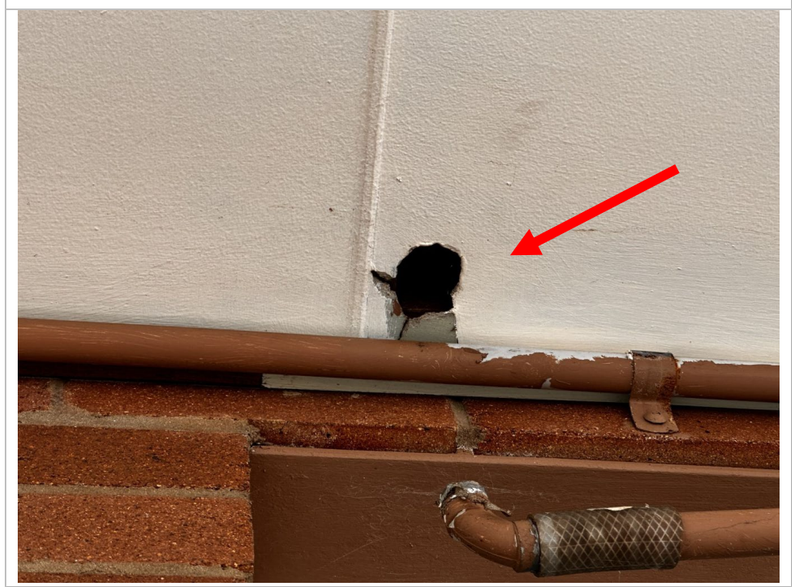


Photo 46: JVB and RVB ceiling contains asbestos and is exposed.

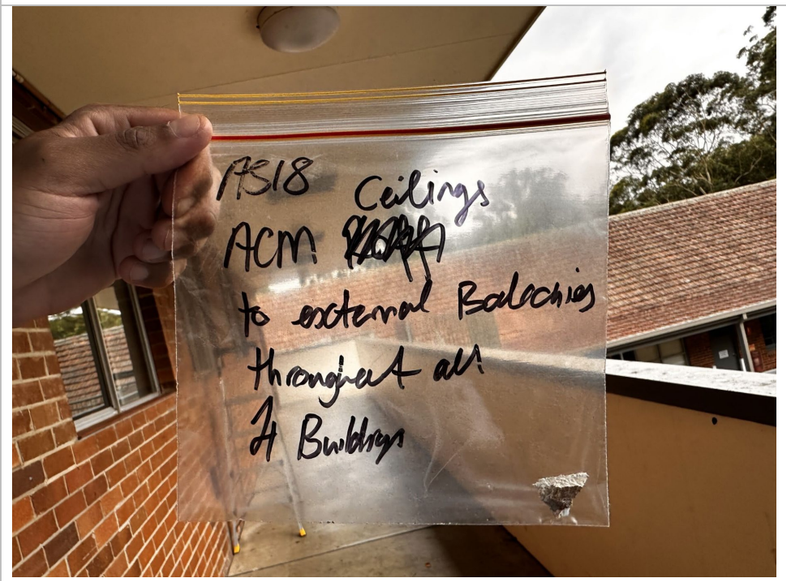


Photo 47: JVB and RVB – Sample 18 (S18): Sample of ceiling panels throughout balconies

Photo 48: JVB and RVB ceiling contains asbestos and is exposed.

Photo 49: RVB - External steel window mastic

Photo 50: RVB – Mastic on window frame

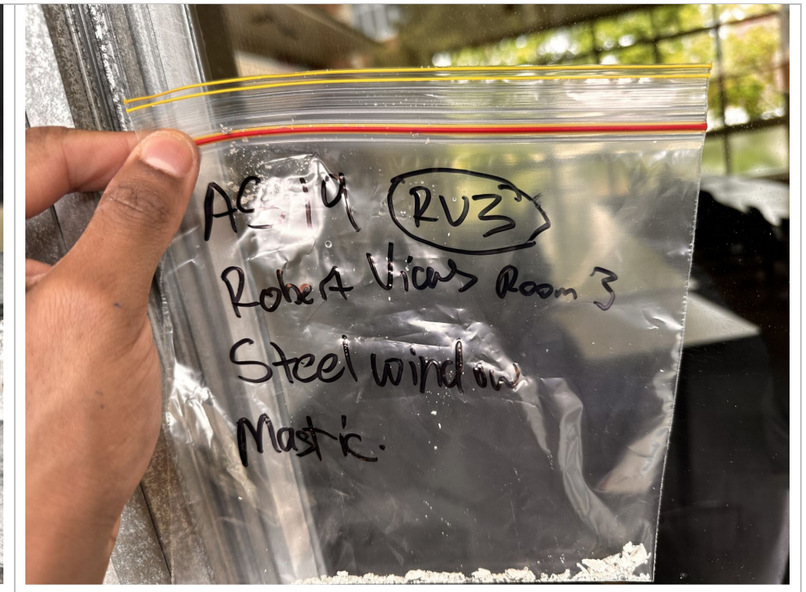


Photo 51: RVB – Sample 19 (S19): Sample from steel window frame

Photo 52: Locker room of Dorothy Knox Building (DKB), loactions of samples 20 and 21 Floor paint.

Photo 53: DKB.

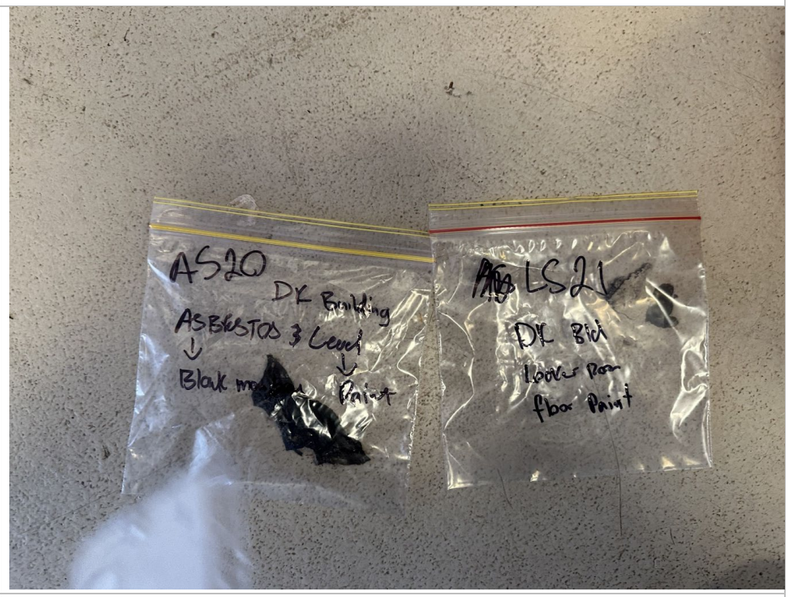


Photo 54: DKB - Samples 20 (asbestos in black adhesive) and sample 21 (Lead in cream paint)

Photo 55: DKB – Archive room 6

Photo 56: DKB – Archive room ceiling lights may contain mercury.

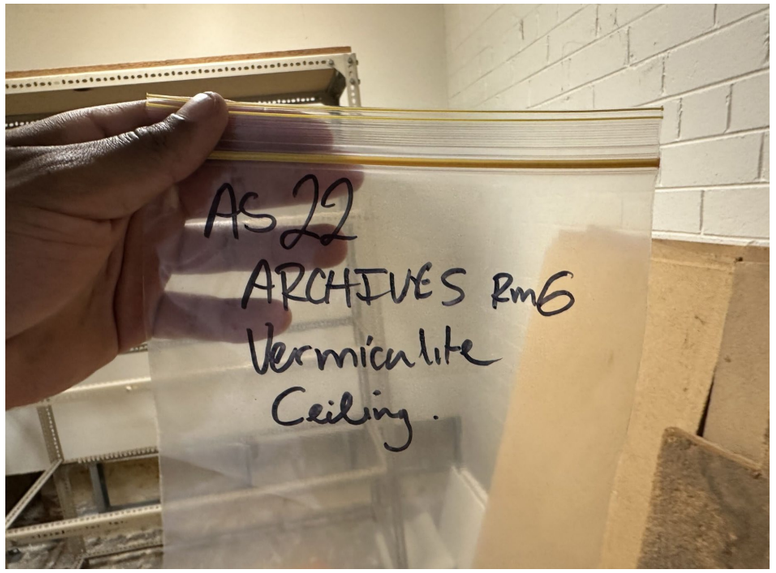


Photo 57: DKB – Sample 22 (S22): Sample of vermiculite ceiling

Photo 58: DKB – Fireboard cement sheeting on ground

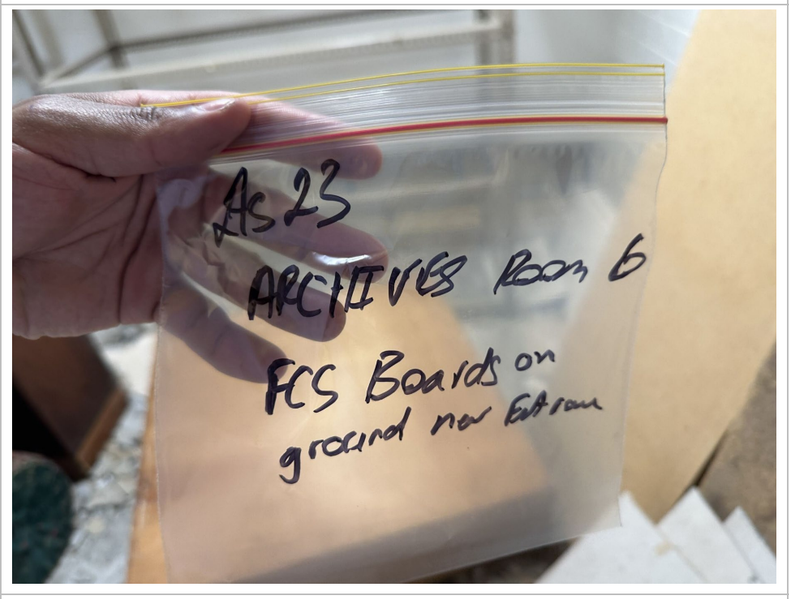


Photo 59: DKB – Sample 23 (S23): Sample of FCS floorboards

Photo 60: AC units on exterior of Isabel McKinney Harrison Building

	
Photo 61: JVB Zip Hot Water Taps contain SMF in boilers.	***Photo 62: RVB Hot Water Heaters contain SMF.***

SITE PLANS SUPPLIED BY THE CLIENT

GENERAL

1. Gate 1 – Main Gates (John Marden Gates)
2. Gate 2
3. Gate 3 – Deliveries (Roland Love Gates)
4. Main Reception – Isabel McKinney Harrison Building (IH)
5. Chapel
6. Uniform Shop
7. Healthcare Centre
8. Facilities Management
9. David Macfaclane Centre (DMC)
10. Professional Services (John Reid Building)
11. Sufferance Pathway
12. Grey House Walk
13. Archie's Café
14. Jacaranda Café
15. Staff Parking
16. Centenary Carpark
17. Grey House Precinct (GHP) – Under construction
18. Print Room

BOARDING

19. Boarding Administration (in Conde Library)
20. John Hammond House
21. Goodlet House
22. Lang House
23. Marden House
24. Avonmoore
25. Boarder's Dining Room

JUNIOR SCHOOL

26. Junior School Adminstration (Hedgehog House)
27. Kindergarten to Year 2
28. Year 3
29. Year 4
30. Year 5
31. Year 6
32. Treehouse Classrooms
33. Kindergarten to Year 2 Pick-up / Drop-off
34. Year 3 to Year 6 Pick-up / Drop-off
35. OSHC Centre and Junior School Library
36. Riverbed

SECONDARY SCHOOL

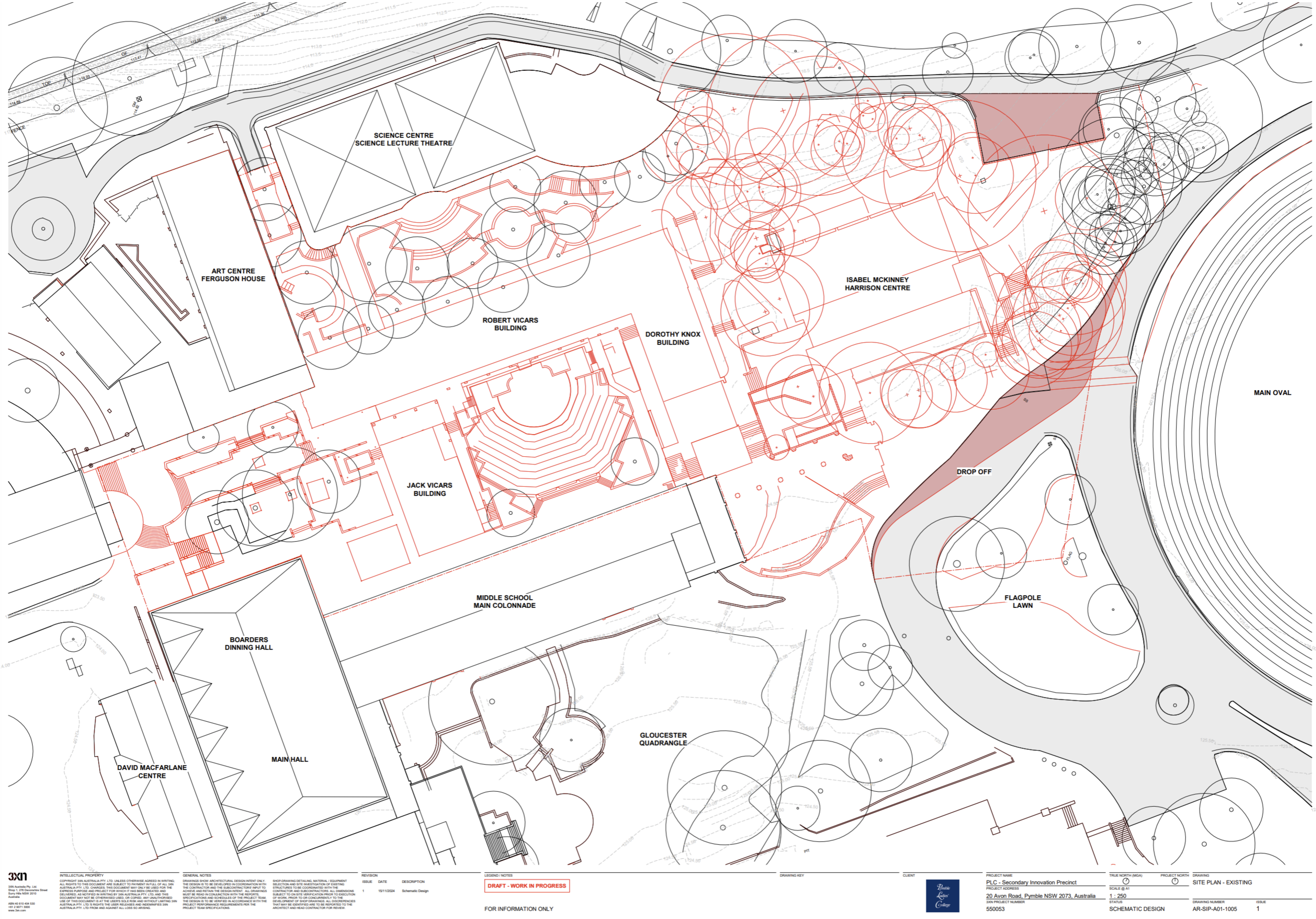
37. Gillian Moore Centre for Performing Arts (GMCPA)
38. David Blackwell Music Centre
39. Middle School (under Chapel)
40. Main Hall
41. Middle Colonnade
42. Upper School Hub (Lower Colonnade)
43. DK (Dorothy Knox) Building
44. RV (Robert Vicars) Building
45. JV (John Vicars) Building
46. Science Building
47. Arts Centre (Ferguson House)
48. Technology and Applied Studies Centre (TAS)
49. The Hub – IT Centre
50. Conde Library
51. Senior School Centre (Kate Mason Building)
52. Jobson Lecture Theatre
53. First Nations Office (Dorothy Knox Sitting Room)
54. Lang Bespoke Modular Classroom
55. Goodlet Bespoke Modular Classroom

SPORTS AND OUTDOOR

56. Jeanette Buckham Centre for Physical Education
57. Braith Williams Aquatic and Fitness Centre
58. Mollie Dive Field
59. Sporting Courts
60. Main Oval
61. James Kelso Field
62. Liane Tooth Field
63. Agricultural Plot
64. Gloucester Lawn
65. Marden Lawn
66. Lang Lawn
67. Goodlet Lawn
68. Flagpole Lawn

PUBLIC TRANSPORT

68. Pymble Train Station


SCIENCE CENTRE
SCIENCE LECTURE THEATRE
ART CENTRE
FERGUSON HOUSE
ROBERT VICARS BUILDING
DOROTHY KNOX BUILDING
ISABEL MCKINNEY HARRISON CENTRE
MAIN OVAL
JACK VICARS BUILDING
DROP OFF
MIDDLE SCHOOL MAIN COLONNADE
FLAGPOLE LAWN
BOARDERS DINNING HALL
GLOUCESTER QUADRANGLE
DAVID MACFARLANE CENTRE
MAIN HALL
3XN
3XN Australia Pty. Ltd.
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Australia
ABN 40 610 404 530
+61 2 9071 3000
www.3xn.com
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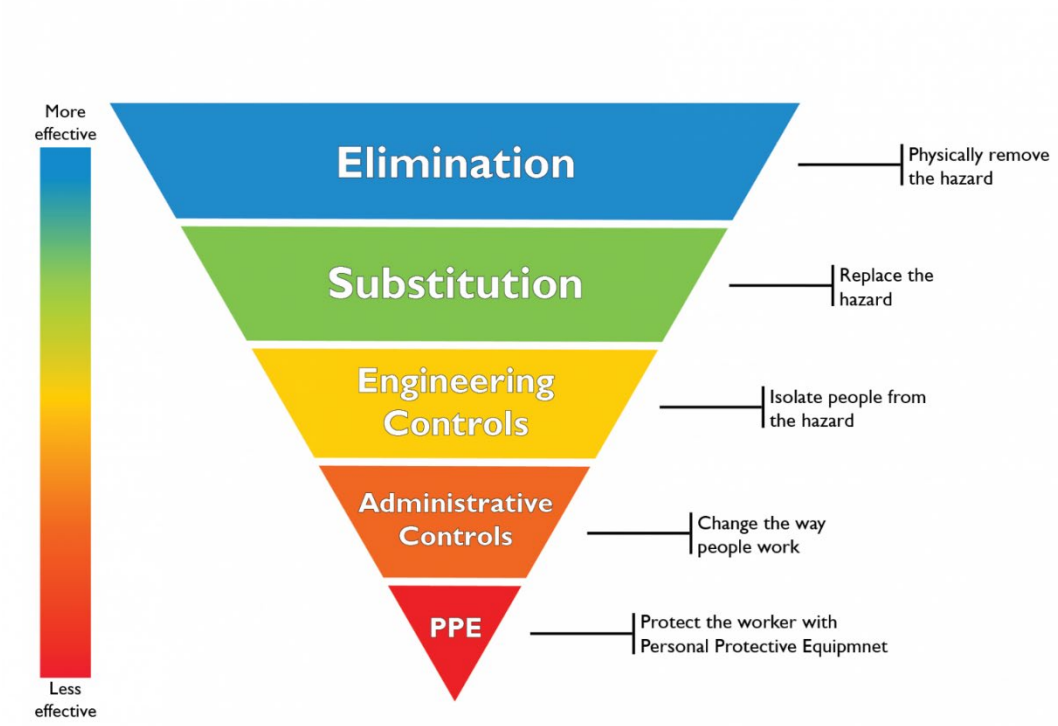
SHOP-DRAWING DETAILING, MATERIAL / EQUIPMENT SELECTION AND SITE INVESTIGATION OF EXISTING STRUCTURES TO BE COORDINATED WITH THE CONTRACTOR AND SUBCONTRACTORS. ALL DIMENSIONS SUBJECT TO ON SITE VERIFICATION PRIOR TO EXECUTION OF WORK, PRIOR TO OR CONCURRENTLY TO THE DEVELOPMENT OF SHOP DRAWINGS. ALL DISCREPENCIES THAT MAY BE IDENTIFIED ARE TO BE REPORTED TO THE ARCHITECT AND HEAD CONTRACTOR FOR REVIEW.
REVISION
ISSUE DATE DESCRIPTION
1 15/11/2024 Schematic Design
LEGEND / NOTES
DRAFT - WORK IN PROGRESS
FOR INFORMATION ONLY
DRAWING KEY
CLIENT
PROJECT NAME
PLC - Secondary Innovation Precinct
PROJECT ADDRESS
20 Avon Road, Pymble NSW 2073, Australia
3XN PROJECT NUMBER
550053
TRUE NORTH (MGA)
PROJECT NORTH
SCALE @ A1
1 : 250
STATUS
SCHEMATIC DESIGN
DRAWING
SITE PLAN - EXISTING
DRAWING NUMBER
AR-SIP-A01-1005
ISSUE
1

6 Recommendations and Conclusions

Hazardous materials were detected as part of this hazardous materials survey and report. Exposure to the hazardous materials in situ are unlikely in their current state and are on average low risk to the staff and students. However, during demolition or renovation works appropriate controls applicable to the hazard should be taken in accordance with the hierarchy of controls **(Figure 1.)** to minimise any risk of exposure.

Figure 1. The Hierarchy of Controls.



6.1 Asbestos

All asbestos detected in accessible areas within the scope of this survey was deemed as non-friable. There is no immediate risk to staff and students and Safe Work NSW Class B licenced asbestos removalists are required to remove >10m2 of asbestos from the site. Due to the non-destructive nature of the survey, the cores of the fire doors and lift doors were not sampled and should be presumed to contain asbestos if they were installed prior to 2004. During renovation and demolition this material should be sampled by a licenced asbestos assessor for the presence of asbestos to minimise any risk of exposure.

6Interim controls

Interim controls to minimise any potential asbestos exposure is to encapsulate the section of the awning on the JVB and RVB level 1 awning that has exposed asbestos fibres present, refer to **images 46 & 48.** Finally, the subfloor has asbestos debris, this area should be restricted to access by protected personnel only (using dust suppression, and appropriate PPE such as P2 fit tested respirator, coveralls, gloves, etc.) until removal is facilitated.

Lead

Lead paint was detected on the cream windows and the dark green doors on the RVB. These areas should be Overpainted with a lead-free substitute. Label maintenance and ensure the current condition of lead paint is maintained to reduce the potential risk of exposure to staff and students. Refer section 3: Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings, AS/NZS 4361.2:2017.

SMF, ODS, and Mercury

SMF is present in the Zip hot water taps, hot water heaters, the ducting of the AC system and potentially in the insulation in the ceiling spaces (no access). This is predominantly a hazard to workers demolishing the building as SMF insulation in an inhalation hazard. To minimise risks of exposure, appropriate dust suppression system, enclosures, barriers, extraction ventilation, worker training and awareness, and fit tested P2/P3 respirators should be worn during works which may create respirable fibres.

Mercury is assumed to be present in the fluorescent light tubes, do not break the tubes and ingest or allow skin contact. Implement controls in accordance with the hierarchy of controls.

No Ozone depleting substances found on site, the in the AC systems contain global warming potential, which is are R410A. R410A is a R-22/152a/124 Mixture, which contains R-22 Chlorodifluoromethane, and R-124 which contains 1-Chloro-1,2,2,2-tetrafluoroethane which are in the family of HydroChloroFluoroCarbon, in addition to R152a which contains 1,1-Difluoroethane which is in the family of HydroFluoroCarbons.

APPENDIX A: RECOMMENDATIONS FOR REMOVING HAZARDOUS MATERIALS

A.1 Asbestos

If demolition is to take place at the above property, all asbestos that is likely to be disturbed by the demolition must be identified and, so far as is reasonably practicable, be removed before the demolition is started.

General requirements for conducting asbestos removal work are as follows:

- Asbestos should be removed in accordance with the WHS Regulation 2017 and How to Safely Remove Asbestos: Code of Practice (WorkSafe 2020).
- The planning, removal methodology, control measures, monitoring requirements and clearance procedures for the removal of asbestos must be determined in consultation with an occupational hygienist and documented in the Asbestos Removal Control Plan prior to commencing removal.
- An asbestos removal control plan should include as a minimum.
  - The method proposed to be used to remove the asbestos.
  - The approximate quantity and kind of asbestos to be removed.
  - The equipment proposed to be used to remove the asbestos, including any personal protective equipment.
  - Details of the proposed air monitoring and clearance procedures
  - Transportation and waste disposal requirements
- The person(s) removing asbestos must be a holder of an A classes asbestos removal license for friable asbestos and a B class asbestos removal license for non-friable asbestos.
- The person conducting air monitoring and clearance for asbestos removal must be a Licensed Asbestos Assessor (LAA) for friable asbestos or suitably qualified for non-friable asbestos.
- SafeWork NSW must be notified at least 5 days prior to any licensed asbestos removal.

A.2 Lead

The following precautions should be taken when demolishing materials containing lead (>0.1% w/w), lead contaminated dust (>150 mg/m^2) or for any works defined as a lead process in accordance with the WHS Regulation 2017:

- Inform workers of potential risks and provide training about preventing exposure to lead.
- Conduct health monitoring of workers conducting work involving materials that contain lead.
- Ensure lead contamination is confined to the lead process work area.
    - Adopt methods that minimise the generation of lead dust and fumes.
    - Conduct lead air monitoring and surface dust testing to validate controls are effective at preventing the spread of lead contamination for lead process work.
    - Occupational hygienist should review controls measures and revise, as necessary.
- Clean work areas promptly and properly during and after work.
- Prohibit eating, drinking, smoking, and chewing gum in the lead process area.
- Supply changing and washing facilities for workers.
- Supply appropriate PPE as well as laundering or disposal facilities for contaminated PPE.
- Notify SafeWork NSW of activities determined to be lead risk work within 7 days.

A.3 Synthetic Mineral Fibres (SMF)

Materials containing Synthetic Mineral Fibres may be removed during general demolition works. The precautions which should be taken when demolishing materials containing SMF include:

- PPE should be provided to workers and worn when insulation is being handled or removed.
- Dust should be suppressed by damping down with water or PVA.

A.4 Polychlorinated Biphenyls (PCB)

Workers can be exposed to Polychlorinated Biphenyls (PCBs) when dismantling electrical capacitors and transformers or when cleaning up spills and leaks. Appropriate control measures should be implemented when handling damaged capacitors to ensure that any spillage does not contact workers and is appropriately cleaned up and disposed of.

Prior to demolition of buildings capacitors should be inspected to confirm if they are on the list of Knoxn PCB-containing capacitors (Identification of PCB-Containing Capacitors (ANZECC 1997)).

PPE including gloves made of materials that are resistant to PCBs (for example polyethylene, nitrile rubber or neoprene), should be provided to workers and worn when there is any likelihood of exposure to PCBs.

A.5 Mercury in Fluorescent Lamps

Mercury is Knoxn to be present in fluorescent tubes (including compact fluorescent light globes) Mercury is extremely toxic and exposure should be avoided where possible. The best way to prevent mercury exposure from fluorescent lamps is to avoid breaking the lamps.

Disposal of fluorescent lamps to landfill is not recommended and if possible, they should be taken to a facility that can recover the mercury contained in the lamp.

A.6 Ozone Depleting Substances (ODS)

It is required that refrigerant gases deemed to be ODS are reclaimed from all parts of an air-conditioning or refrigeration system by a qualified and experienced person in such a way that prevents the gases release into the atmosphere. The person(s) conducting this work should use appropriate PPE and work methods to avoid exposure to the gas.

A.7 Storage and Disposal of Waste

Storage and disposal of hazardous materials waste and contaminated PPE must be conducted as follows:

- All waste must be contained (sealed) in suitable containers, waste bags or wrapped with 200 µm plastic.

- All waste must be labelled in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- All waste must be removed from the site as soon as practicable however if waste must be stored on-site it must be stored in a secure area in an environmentally friendly manner.
- All waste must be transported in an appropriately licensed and registered vehicle. Preferably one that is covered and leak-proof.
- All waste must be disposed of at a waste facility that can lawfully receive this waste.

APPENDIX B: UNEXPECTED FINDS PROCEDURE

In the event that a suspected asbestos containing material that is not documented in this report is discovered at the site the following procedure should be applied:

- Stop work and vacate the area where the potential asbestos has been found.
- Consult a competent person to assess the risk and test the material.
- Restrict access to the area and install barricades and signage.

Remove the asbestos materials or implement controls to make safe before continuing other works.

APPENDIX C: LABORATORY CERTIFICATE

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 371951

Client Details	
Client	Cetec Pty Ltd
Attention	Joshua Martin
Address	2/27 Normanby Rd, Clayton North, VIC, 3168

Sample Details	
Your Reference	**F25010061**
Number of Samples	18 Material, 5 Paint, 1 Soil, 1 Dust
Date samples received	04/02/2025
Date completed instructions received	04/02/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details	
Date results requested by	11/02/2025
Date of Issue	11/02/2025

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Asbestos Approved By
Analysed by Asbestos Approved Analyst: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Giovanni Agosti, Group Technical Manager
Lucy Zhu, Asbestos Supervisor

Authorised By
Nancy Zhang, Laboratory Manager

Client Reference: F25010061

Asbestos ID - soils		
Our Reference		371951-13
Your Reference	UNITS	175826
Date Sampled		01/02/2025
Type of sample		Material
Date analysed	-	07/02/2025
Sample mass tested	g	101.47g
Sample Description	-	Brown fine-grained soil & rocks
Asbestos ID in soil	-	Chrysotile asbestos detected Organic fibres detected
Asbestos comments	-	YES
Trace Analysis	-	No asbestos detected

Client Reference: F25010061

Lead in soil		
Our Reference		371951-12
Your Reference	UNITS	175825
Date Sampled		01/02/2025
Type of sample		Soil
Date prepared	-	05/02/2025
Date analysed	-	05/02/2025
Lead	mg/kg	74

Client Reference: F25010061

Moisture		
Our Reference		371951-12
Your Reference	UNITS	175825
Date Sampled		01/02/2025
Type of sample		Soil
Date prepared	-	05/02/2025
Date analysed	-	06/02/2025
Moisture	%	9.7

Client Reference: F25010061

Lead in Paint						
Our Reference		371951-2	371951-5	371951-8	371951-14	371951-21
Your Reference	UNITS	175815	175818	175821	175827	175834
Date Sampled		16/01/2025	01/02/2025	01/02/2025	01/02/2025	01/02/2025
Type of sample		Material	Paint	Paint	Paint	Paint
Date prepared	-	06/02/2025	06/02/2025	06/02/2025	06/02/2025	06/02/2025
Date analysed	-	06/02/2025	06/02/2025	06/02/2025	06/02/2025	06/02/2025
Lead in paint	%w/w	<0.005	3.3	0.32	0.052	<0.005

Client Reference: F25010061

Lead (dust)		
Our Reference		371951-25
Your Reference	UNITS	175838
Date Sampled		01/02/2025
Type of sample		Dust
Date prepared	-	10/02/2025
Date analysed	-	10/02/2025
Lead	mg/kg	210

Client Reference: F25010061

Asbestos ID - materials						
Our Reference		371951-1	371951-3	371951-4	371951-6	371951-7
Your Reference	UNITS	175814	175816	175817	175819	175820
Date Sampled		16/01/2025	16/01/2025	01/02/2025	01/02/2025	01/02/2025
Type of sample		Material	Paint	Material	Material	Material
Date analysed	-	07/02/2025	07/02/2025	07/02/2025	07/02/2025	07/02/2025
Mass / Dimension of Sample	-	20x12x3mm	50x25x10mm	25x10x5mm	15x10x1mm	30x10x1mm
Sample Description	-	Brown coating material	Yellow sponge & white mastic	Beige hardened mastic	Grey fibre cement material	Beige mastic debris
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	No asbestos detected Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	[NT]	No asbestos detected
SMF		No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected

Asbestos ID - materials						
Our Reference		371951-9	371951-10	371951-11	371951-15	371951-16
Your Reference	UNITS	175822	175823	175824	175828	175829
Date Sampled		01/02/2025	01/02/2025	01/02/2025	01/02/2025	01/02/2025
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	07/02/2025	07/02/2025	07/02/2025	07/02/2025	07/02/2025
Mass / Dimension of Sample	-	20x20x1mm	140x35x3mm	25x15x5mm	25x20x6mm	10x10x1mm
Sample Description	-	Grey mastic debris	Black bituminous membrane	Grey fibre cement material	Grey rubbery mastic	Black bitumen & fibrous material
Asbestos ID in materials	-	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	Chrysotile asbestos detected	No asbestos detected	No asbestos detected Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	[NT]	No asbestos detected	No asbestos detected
SMF		No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected

Client Reference: F25010061

Asbestos ID - materials						
Our Reference		371951-17	371951-18	371951-19	371951-20	371951-22
Your Reference	UNITS	175830	175831	175832	175833	175835
Date Sampled		01/02/2025	01/02/2025	01/02/2025	01/02/2025	01/02/2025
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	07/02/2025	07/02/2025	07/02/2025	07/02/2025	07/02/2025
Mass / Dimension of Sample	-	30x13x2mm	20x15x5mm	20x15x1mm	90x35x1mm	35x30x1mm
Sample Description	-	Beige fibre cement material	Grey fibre cement material	Beige mastic debris	Black bitumen & paint	Beige mica vermiculite
Asbestos ID in materials	-	No asbestos detected Organic fibres detected	Chrysotile asbestos detected Amosite asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Trace Analysis	-	No asbestos detected	[NT]	No asbestos detected	No asbestos detected	No asbestos detected
SMF		No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected	No Synthetic mineral fibres detected

Asbestos ID - materials			
Our Reference		371951-23	371951-24
Your Reference	UNITS	175836	175837
Date Sampled		01/02/2025	01/02/2025
Type of sample		Material	Material
Date analysed	-	07/02/2025	07/02/2025
Mass / Dimension of Sample	-	20x12x5mm	<5g
Sample Description	-	Beige fibre cement material	Brown fibrous dust & debris
Asbestos ID in materials	-	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
SMF		No Synthetic mineral fibres detected	No Synthetic mineral fibres detected

Client Reference: F25010061

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-005	Estimation of Airborne Synthetic Mineral Fibres by the Membrane Filter Method. Dust particles collected and filters examined in accordance with NOHSC:3006 (1989) Guidance Note on the Membrane Filter Method for Estimating Airborne Synthetic Mineral Fibres and Envirolab in-house method ASB-05. The microscope constant for Carl Zeiss Axio Lab.A1 (Sydney Laboratory) calculated using 25mm filter is 50738. The microscope constant for Olympus BX41 (Perth Laboratory) calculated using 25mm filter is 46981. These constants are to be used to calculate fibres/mL concentration for asbestos fibre air monitoring filters. If less than 10 fibres/100 graticule areas is observed, the figure of 10 fibres/100 graticule areas is the minimum that can be used to calculate airborne fibre concentration as per NOHSC: 3006(1989) Note - air volume measurements are not covered by Envirolab's NATA accreditation.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES. Total Phosphate determined stochiometrically from Phosphorus (assumed to be present as Phosphate).
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

Client Reference: F25010061

QUALITY CONTROL: Lead in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-13	[NT]
Date prepared	-			05/02/2025	[NT]	[NT]	[NT]	[NT]	05/02/2025	[NT]
Date analysed	-			05/02/2025	[NT]	[NT]	[NT]	[NT]	05/02/2025	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]

Client Reference: F25010061

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			06/02/2025	[NT]	[NT]	[NT]	[NT]	06/02/2025	[NT]
Date analysed	-			06/02/2025	[NT]	[NT]	[NT]	[NT]	06/02/2025	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	[NT]	[NT]	[NT]	[NT]	88	[NT]

Client Reference: F25010061

QUALITY CONTROL: Lead (dust)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			10/02/2025	[NT]	[NT]	[NT]	[NT]	10/02/2025	[NT]
Date analysed	-			10/02/2025	[NT]	[NT]	[NT]	[NT]	10/02/2025	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]

Client Reference: F25010061

Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Client Reference: F25010061

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Client Reference: F25010061

Report Comments

Sample 371951-13; Chrysotile asbestos identified embedded in several fragments of fibre cement weighing 9.4982g, it is estimated to be 14.04g/kg in 101.47g of soil (i.e. > reporting limit for the method of 0.1g/kg).

APPENDIX D. INDUSTRY SPECIFIC SEARS SCHOOLS SSD-79146716 (PAGES 1 AND 7)

Planning Secretary's Environmental Assessment Requirements

Schools

NSW GOVERNMENT

Development details

Application number	SSD-79146716
Project name	Pymble Ladies' College Senior Innovation Precinct
Location	20 Avon Road Pymble within Ku-ring-gai
Applicant	PYMBLE LADIES' COLLEGE
Date of issue	16/01/2025

Content and guidance

Any Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and the *State Significant Development Guidelines*.

Relevant policies and guidelines can be found at https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines.

Key issues and documentation

Issue and Assessment Requirements	Documentation
1. Statutory Context • Address all relevant legislation, environmental planning instruments (EPIs) (including drafts), plans, policies, guidelines and planning circulars. • Identify compliance with applicable development standards and provide a detailed justification for any non-compliances. • Provide an explanation of how the development as described in the EIS is consistent with the development as was described in the request for SEARs (including any components that were not SSD) and provide a justification for any differences. • Address the requirements of any approvals applying to the site, including any concept approval, any endorsed or draft master plan, precinct plan or any recommendation from a Gateway determination. • Provide an accurate summary of the detailed assessment of the impacts of the project and integrate the findings and recommendations of technical reports into the justification and evaluation of the project as a whole.	• Address in EIS
2. Estimated Development Cost and Employment	• EDC Report

17. Waste Management • Identify, quantify and classify the likely waste streams to be generated during construction and operation. • Provide the measures to be implemented to manage, reuse, recycle and safely dispose of waste in accordance with any council waste management requirements. • Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site. • If buildings are proposed to be demolished or altered, provide a hazardous materials survey.	• Waste Management Plan • Hazardous Material Survey
18. Aboriginal Cultural Heritage • Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts to any Aboriginal cultural heritage sites or values associated with the site.	• Aboriginal Cultural Heritage Assessment Report
19. Environmental Heritage • Where there is potential for direct or indirect impacts on the heritage significance of environmental heritage, provide a Statement of Heritage Impact and Archaeological Assessment (if potential impacts to archaeological resources are identified), prepared in accordance with the relevant guidelines, which assesses any impacts and outlines measures to ensure they are minimised and mitigated.	• Statement of Heritage Impact • Archaeological Assessment
20. Social Impact • Provide a Social Impact Assessment that: ○ is prepared in accordance with the *Social Impact Assessment Guidelines for State Significant Projects*. ○ is targeted and proportionate to the project's context and likely impacts.	• Social Impact Assessment
21. Infrastructure Requirements and Utilities • In consultation with relevant service providers: ○ assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. ○ identify any infrastructure required on-site and off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained. ○ provide an infrastructure delivery and staging plan, including a description	• Infrastructure Delivery, Management and Staging Plan

APPENDIX E. DESCRIPTION OF THE SITE AND LOCALITY

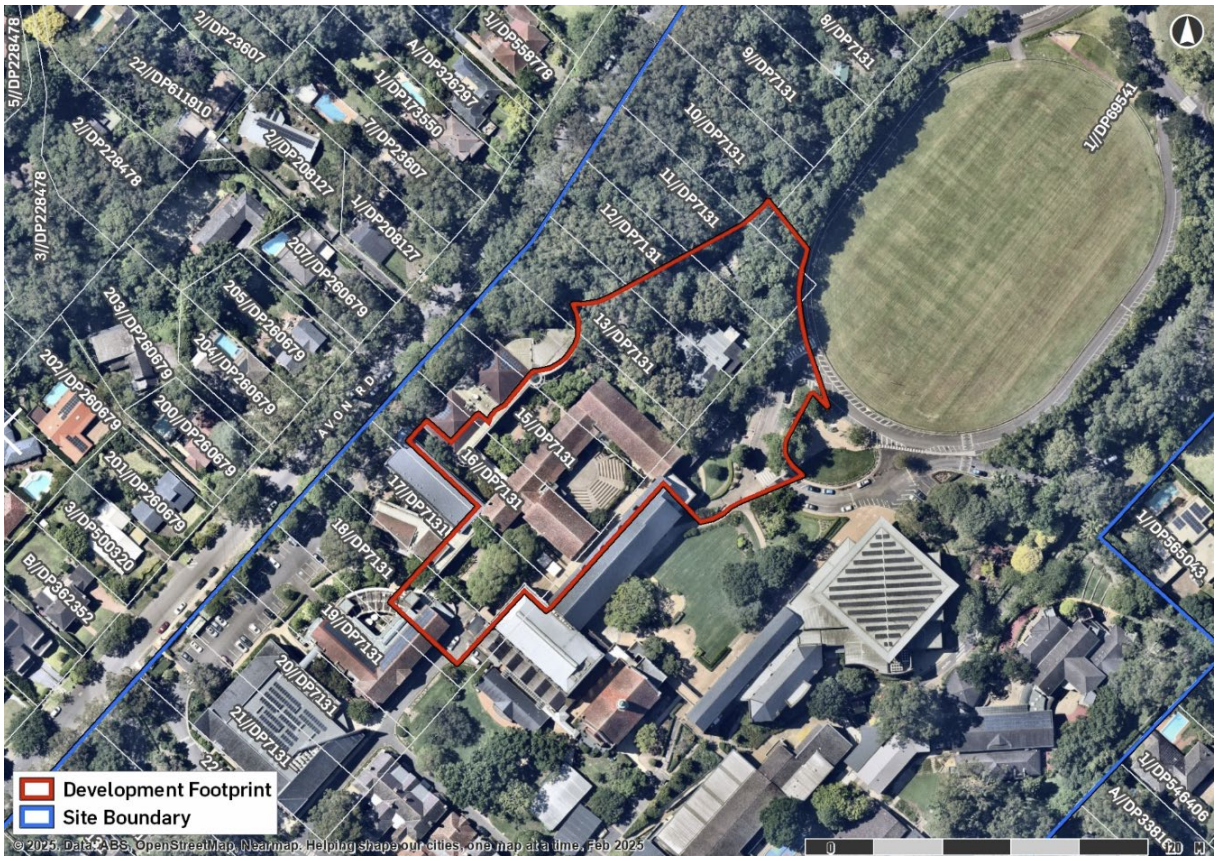
The following information was provided by the client.

The site is located at 20 Avon Road, Pymble, within the Ku-Ring-Gai Local Government Area (LGA). The site comprises multiple parcels of land and is legally described as:

- Lot 1 Deposited Plan 69541
- Lots 11- 17 Deposited Plan 7131

The site and proposed work areas are identified in the figures below.

Source: Urbis



Source: 3XN

Key features of the site are as follows:

- The site accommodates the existing Pymble Ladies' College which accommodates Kindergarten to Year 12 students.
- Vehicular access to the College is provided via separate ingress and egress driveways on the northern and western sections of Avon Road.
- Pedestrian access is provided through multiple gates along Avon Road.
- The project area that is subject to this SSDA is located at the entrance to the College west of the oval.
- The project area slopes down from south to north with a fall from RL 124.50 at the southern corner to RL 116 at the north west corner.

Key features of the locality:

The development context surrounding the site is a leafy suburban environment, predominantly made up of detached residential properties set within expansive gardens and along avenues lined with mature trees.

Recent developments of moderate-scale residential apartment buildings occur closer to the railway corridor. Two storey commercial establishments are located near to Pymble train station, specifically along the Pacific Highway and on the northern flank of the railway line.

- The site is located approximately 19km north west of the Sydney Central Business District.
- The College is situated approximately 200m from Pymble train station, situated on Pacific Highway and Pymble town centre.

The immediately surrounding locality is described as follows:

- North: Avon Road and Pacific Highway (approximately 400m).
- East: Residential uses, accommodating a mixture of dwelling houses and residential flat buildings.
- South: Avondale Golf Course.

- West: Avon Road, beyond which is a residential area characterised by detached dwelling houses.

Disclaimer

CETEC has taken all reasonable care to ensure that the information contained in this report is accurate. The report is based on data and information collected by CETEC personnel during location visits and information accepted in good faith from various personnel associated with this work. However, no warranty or representation can be given that the information and materials contained in it are complete or free from errors or inaccuracies.

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