REPORT TO

NSW DEPARTMENT OF EDUCATION

ON

CONSTRUCTION PHASE ASBESTOS MANAGEMENT PLAN (AMP)

FOR

PARRAMATTA EAST PUBLIC SCHOOL (PEPS) UPGRADE

AT

30-32 BRABYN STREET, NORTH PARRAMATTA, NSW

Date: 28 February 2025
Ref: E35073BR2rpt2.Rev6-AMP

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Attachments

Abbreviations

Asbestos Containing Material	**ACM**
Asbestos Fines/Fibrous Asbestos	**AF/FA**
Asbestos Management Plan	**AMP**
Asbestos Removal Control Plan	**ARCP**
Detailed Site Investigation	**DSI**
Environment Protection Authority	**EPA**
Fibre Cement Fragment	**FCF**
High Efficiency Particulate Air	**HEPA**
JK Geotechnics	**JKG**
Licenced Asbestos Assessor	**LAA**
Map Grid of Australia	**MGA**
National Association of Testing Authorities	**NATA**
National Occupational Health and Safety Commission	**NOHSC**
Personal Protective Equipment	**PPE**
Person Conducting Business or Undertaking	**PCBU**
Protection of the Environment Operations	**POEO**
Preliminary Site Investigation	**PSI**
Remediation Action Plan	**RAP**
Review of Environmental Factors	**REF**
Site Assessment Criteria	**SAC**
Safe Work Method Statement	**SWMS**
Work Health and Safety	**WHS**
Work Health and Safety Plan	**WHSP**

Units

Metres	**m**
Metres Below Ground Level	**mBGL**
Milligrams per Kilogram	**mg/kg**
Micron	**µm**
Percentage	**%**
Percentage weight for weight	**%w/w**

1 INTRODUCTION

NSW Department of Education ('the client') commissioned JK Geotechnics (JKG) to prepare a Construction Phase Asbestos Management Plan (AMP) for the Parramatta East Public School (PEPS) upgrade (the proposal) at 30-32 Brabyn Street, North Parramatta, NSW. The works are proposed by the NSW Department of Education to meet the growth in educational demand in Collet Park precinct, and the broader North Parramatta area.

This report has been prepared to outline the procedures/mitigation measures to be implemented in order to effectively manage the asbestos containing material (ACM)-impacted fill/soil and surface ACM at the project area during the construction phase activities (including any associated early works, should these occur) that involve disturbance of soil. This AMP is not intended to be used for the day-to-day management of asbestos at the wider site during the typical school operations and is not be used in relation to any asbestos materials associated with the buildings or structures on site.

JKG note that a site-specific AMP (SSAMP) for the day-to-day management of asbestos in grounds was prepared for the site by WSP in 2024[1]. JKE has requested the client to engage WSP to amend the SSAMP to include mitigation measures associated with the management of friable asbestos encountered in the south section of the wider site.

This AMP is required under the Work Health and Safety Regulation 2017 (NSW)[2] and has been developed specifically to outline the necessary requirements for the management of asbestos in or on soil during the remediation or disturbance of the project area during construction. This includes management requirements for handling, removal, transportation and disposal procedures, any temporary stockpiling and for clearance inspections. The AMP should be read in conjunction with the Remediation Action Plan (RAP)[3] prepared by JKG.

The AMP has been prepared generally in accordance with the requirements of SafeWork NSW and reflects the known conditions relating to asbestos in or on soil within the project area. The AMP is not an asbestos removal control plan (ARCP) and is not a long-term Environmental Management Plan (EMP) for the on-going management of the site following completion of remediation/construction.

1.1 Summary of the Activity

The activity comprises upgrades to PEPS to provide replacement teaching facilities in place of the existing temporary and permanent facilities that are no longer fit for purpose, involving the following works:

- Site preparation and required earthworks;
- Demolition of existing buildings C, D, E and F and associated structures including adjacent ramps and walkways;
- Construction of the following:

[1] WSP, (2024). *Parramatta East Public School Asbestos in Grounds Management Plan* (Project No. PS212906-131, Revision 3, dated 30 September 2024)

[2] NSW Government, (2017). *Work Health and Safety Regulation 2017 (NSW).* (referred to as WHS Regulation 2017)

[3] JKG, (2025). *Report to NSW Department of Education on Remediation Action Plan for Parramatta East Public School (PEPS) Upgrade, Brabyn Street, North Parramatta, NSW*. (Ref: E35073BR2rpt3.Rev3-RAP)

- A new 3-storey school building (referred to as Block R) including teaching spaces, library/administration, and staff/student amenities;
- Upgrade of soft and hard landscape and playground areas;
- A new at-grade parking area;
- Formalised waste area, with access being retained from Gaggin Street;
- Public Domain Works with upgrades to pedestrian access south of the school, and new kiss and ride zone on Albert Street East;
- Entrance and School logo signage along the Northern Albert Street East frontage of Block R;

- Refurbishment works to existing buildings;
- Removal of trees and retention where possible; and
- Installation and augmentation of services and infrastructure as required.

Refer to the Review of Environmental Factors (REF) prepared by Ethos Urban for a full description of works.

1.2 Site Description

The wider site is located at Brabyn Street within the City of Parramatta Local Government Area. Parramatta East Public School is located in the suburb of North Parramatta, within the City of Parramatta Local Government Area (LGA). The wider site is approximately 1.5km north-east of the Parramatta CBD, and 24km west of the Sydney CBD.

The wider site currently comprises a single lot to make up PEPS, referred to as Lot 100, DP1312418, and is owned by the Minister for Education and Early Learning.

The wider site has an area of approximately 1.782Ha, is of an irregular shape, and is bounded by Brabyn Street to the west, Albert Street East to the north, and Gaggin Street/Webb Street to the East. The project area is contained within the site and represents where the proposed works will be undertaken, with an area of approximately 1.492Ha. An aerial image of the site is shown at Figure 1-1 below.

Figure 1-1: Site Aerial

Source: Nearmap, Ethos Urban

1.3 Significance of Environmental Impacts

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed activity, it is determined that:

- The extent and nature of potential impacts are moderate and could have significant impact on the locality, community and/or the environment; and
- Potential impacts can be appropriately mitigated and managed to ensure that there is minimal impact on the locality, community and/or the environment.

1.4 Objectives

The aim of the AMP is to outline the procedures to be implemented in order to effectively manage the ACM-impacted fill/soil and surface ACM in accordance with relevant Codes of Practice and Work Health and Safety (WHS) legislation. The objectives of the AMP are to:

- Outline the extent of asbestos-impacted fill at the wider site and within the project area;
- Outlined the potential of asbestos-impacted fill as outlined in the JKG RAP;
- Identify the safe work procedures to undertake works in such a way as to minimise potential health effects to site workers/contractors and adjacent land users; and
- Document procedures for asbestos waste handling and transport.

1.5 Scope of Work

The scope of work included review of the existing JKG reports, and preparation of the AMP which provides:

- Details of roles and responsibilities;
- Methodologies for protecting workers during excavation works and construction/excavation works, including personal protective equipment (PPE), decontamination and surface clearance requirements; and
- Procedures and protocols to manage the asbestos related risks, minimise potential asbestos exposure risks to personnel/workers involved in the remediation and construction works, safe handling of asbestos containing materials and minimisation of potential asbestos exposure risks to the public in the immediate vicinity of the project area.

The scope of work was undertaken with reference to the WHS Regulation 2017 and the Safe Work Australia Codes of Practice: How to Manage and Control Asbestos in the Workplace (2020)[4]; and How to Safely Remove Asbestos (2020)[5]. Other guidelines and legislation/regulations have been referenced throughout the AMP where applicable.

[4] Safe Work Australia (2020). *Code of Practice How to Manage and Control Asbestos in the Workplace*. (referred to as CoP How to Manage and Control Asbestos in the Workplace) (July 2020)
[5] Safe Work Australia (2020). *Code of Practice How to Safely Remove Asbestos*. (referred to as CoP How to Safely Remove Asbestos) (July 2020)

2 SITE INFORMATION

2.1 Site Identification

Table 2-1: Site Identification

Site Address:	Parramatta East Public School, 30-32 Brabyn Street, North Parramatta, NSW
Lot & Deposited Plan:	Part of Lot 100 in 1312418
Current Land Use:	Educational establishment
Proposed Land Use:	Educational establishment
Local Government Area (LGA):	City of Parramatta
Current Zoning:	R3: Medium Density Residential
Project Area (Ha) (approx.):	1.492
Geographical Location (decimal degrees) (approx. NW corner of Project Area):	Latitude: -33.805186 Longitude: 151.01721
Site Plans:	Appendix A

2.2 Background Information Relevant to this AMP

JKG previously completed a Preliminary Site Investigation (PSI)[6] and Detailed Site Investigation (DSI)[7] for the wider school property including the project area. The PSI included a review of historical information and a site inspection. The DSI included a review of historical information presented in the PSI, soil sampling from 30 locations (BH1 to BH5, BH7 and BH101 to BH124) and groundwater sampling from three groundwater monitoring wells (MW1, MW3 and MW6). The sample locations are shown on Figure 3 in Appendix A.

During the walkover inspection for the PSI, a fibre cement fragment (FCF) suspected to be asbestos containing material (ACM) was observed on the site and collected for analysis. The FCF (FCF1) was subsequently analysed with the soil samples collected during the DSI, and was confirmed to contain asbestos.

The DSI identified asbestos in bonded/non-friable as asbestos containing material (ACM) and asbestos fines/fibrous asbestos (AF/FA) (considered to be friable asbestos) in the fill soils in several locations, total recoverable hydrocarbons (TRH) F2 fraction fill soils in one location, and polycyclic aromatic hydrocarbons (PAHs) in fill soils in another location, at concentrations above the human health-based site assessment criteria (SAC). The FCF/ACM and AF/FA were identified in the surficial fill soils and at the surface within the southern portions of the wider property, as shown on Figure 3 attached in Appendix A.

[6] JKG, (2022a). *Report to School Infrastructure NSW on Preliminary (Stage 1) Site Contamination Investigation for Proposed School Development at Parramatta East Public School, Parramatta, NSW*. (Ref: E35073Brpt) (referred to as JKG PSI)

[7] JKG, (2022b). *Report to School Infrastructure NSW on Detailed (Stage 2) Site Contamination Investigation for Proposed School Development at Parramatta East Public School, Parramatta, NSW*. (Ref: E35073Brpt3) (referred to as JKG 2022 DSI)

The DSI was subsequently revised to update the findings in the context of the updated development details and boundaries (referred to as Revised DSI[8]). Based on the results of the DSI, JKG were of the opinion there is potential for additional asbestos-related finds to be encountered within the boundaries of the project area and recommended an AMP be prepared by a LAA to outline the strategy to mitigate the potential risks to human health posed by asbestos in and on soils.

JKG has also been advised by the client that emu-picks of visible FCF/ACM from the wider site surface have been undertaken several times and subsequent clearance certificates issued between 2016 and 2024.

Reference should also be made to RAP for additional mitigation measures pertaining to site remediation.

[8] JKG, (2025a). *Report to NSW Department of Education on Revised Detailed Site Contamination Investigation for Parramatta East Public School (PEPS) Upgrade at Brabyn Street, North Parramatta, NSW*. (Ref: E35073BR2rpt.Rev3)

3 ASBESTOS CONTAMINATION INFORMATION

3.1 Asbestos Extent

Based on the limited information known in regards to the extent of in-situ asbestos impacted fill/soil, this AMP has assumed a conservative scenario where all fill/soil, in the project area is considered to contain asbestos and will need to be managed accordingly during works. The management of any new areas outside of the current project area must be undertaken in accordance with the SSAMP.

There is potential for asbestos to occur beneath the existing buildings so there are data gaps in these areas as outlined in the RAP. Sampling also occurred from boreholes which does limit the field screening process and amount of spoil that is assessed for the presence of ACM. The RAP includes recommendations for undertaking a Data Gap investigation (DGI) to confirm the extent of ACM.

3.2 Exposure Pathways and Risk

The exposure pathway for asbestos is via inhalation of airborne asbestos fibres. Exposure to asbestos fibres poses a potential risk to human health.

The asbestos impacts are associated with both bonded and friable asbestos within the fill/soil as shown on the attached figures. The potential for release and transport of asbestos fibres via disturbance of fill/soil containing asbestos will increase during the proposed development works. The human receptors most at risk of asbestos fibre release during the fill/soil disturbance activities include construction workers during the development, intrusive maintenance workers and site users (including primary school aged children, staff, the general public, and workers), and nearby off-site land users, including those in residual land use areas.

Asbestos fibres can range in size from 0.1 to 10 microns (µm) (one tenth the size of a grain of sand) and are a potent particulate respiratory hazard. The small fibres gain relatively easy access to the lung airways and air sacs. Damage to the respiratory tract generally tends to be time/dose dependent. An individual exposed to high doses of asbestos for long periods of time will have an increased risk of developing asbestos related diseases. In addition, the effects of asbestos related diseases are usually not detectable for 1 to 30 years after the initial exposure. This is called the latency period, and is a distinguishing feature of asbestos related diseases.

4 APPLICATION OF THE AMP AND RESPONSIBILITIES

4.1 Application of the AMP

This AMP shall apply from the commencement of any works associated with the proposed upgrades which expose or disturb the asbestos impacted soils. The AMP is not intended to be a long-term EMP and as such it will cease to apply on completion of the construction.

Where necessary, a long-term EMP will need to be prepared post-construction. Further details in this regard are included in the RAP. JKE also note the presence of the SSAMP for the management of asbestos within the wider school property.

4.2 Principal Contractor

The Principal Contractor, is foreseen to be the party responsible for the day-to-day implementation of this AMP and shall fulfil the responsibilities of the 'Principal Contractor' (Person Conducting a Business or Undertaking [PCBU]), as defined by SafeWork. It is noted that the Principal Contractor may appoint appropriately qualified subcontractors or sub-consultants to assist in fulfilling the requirements or the procedures outlined in this AMP. The Principal Contractor may appoint a Site Manager to be responsible for site activities.

In addition to the implementation of the AMP it will be the Principal Contractor's responsibility to:

- Obtain specific, related approvals as necessary to implement the earthworks, including for example, permits for removal of asbestos, SafeWork notification, etc. (if required);
- Take reasonable steps so that all site works and other related activities are undertaken in accordance with this AMP;
- Maintain all site records related to the implementation of the AMP;
- Take reasonable steps so sufficient information is provided to engage or direct all required parties, including sub-contractors, to implement the requirements of the AMP other than those that are the direct responsibility of the Principal Contractor;
- Manage the implementation of any recommendation made by those parties in relation to work undertaken in accordance with the AMP;
- Inform, where required, the relevant regulatory authorities of any non-conformances with the procedures and requirements of the AMP in accordance with the procedures outlined in this document;
- Retain records of any contingency actions;
- Review the AMP records on completion of the project for completeness and update the records as necessary;
- Recommend any modification to general documentation that would further improve the intended outcomes of this AMP; and
- Immediately notify the client in the event of an unexpected find.

4.3 Licensed Asbestos Removalist / Asbestos Contractor

4.4 Asbestos Contractor

The Asbestos Contractor will be responsible for undertaking all licensed asbestos removal work involving any ACM or asbestos-impacted soils. The Asbestos Contractor must hold a Class A (friable) asbestos removal licence issued by SafeWork NSW.

Engagement of Class A licensed asbestos removal contractor is required due to the identification of friable asbestos at the site. The Asbestos Contractor can be the same entity as the Principal Contractor. The Asbestos Contractor's responsibilities include:

- Preparation of a site-specific ARCP prior to any asbestos removal works being completed;
- Ensuring compliance with relevant legislation and the conditions of this AMP and ARCP;
- Handling and management of ACM or asbestos-impacted fill at the site in accordance with relevant legislation;
- Undertaking asbestos air-fibre monitoring via designated asbestos sub-contractor or Licensed Asbestos Assessor (LAA);
- Taking reasonable steps so appropriate environmental and safety controls outlined in this AMP are maintained for the duration of the works; and
- Assisting the Principal Contractor and all subcontractors, where required, in complying with relevant legislation and the procedures outlined in this AMP.

4.5 Licensed Asbestos Assessor

The LAA is to provide advice on WHS issues for asbestos-related works. The LAA is to be independent of the Asbestos Contractor and will hold an NSW Asbestos Assessor Licence. The LAA will be responsible for:

- Undertaking asbestos clearance inspections (as required);
- Undertaking asbestos sampling and assessment (as required);
- Notifying their client with the results of any assessments in a timely manner;
- Providing advice and recommendations arising from monitoring and/or inspections (if engaged to do so by the client);
- Examining and providing comment on WHS documentation with respect asbestos assessment, management and control (if engaged to do so by the client); and
- Notifying the client of any observed or documented non-compliance with this AMP.

4.6 Site Workers and Subcontractors

All subcontractors are to be inducted onto the site and informed of their responsibilities in relation to this AMP as part of the induction. Signing of the site induction is to include agreement by the subcontractors to abide by the AMP requirements. Where necessary, subcontractors are also to be trained in accordance with the requirements of this document. All subcontractors must conduct their operations in accordance with this AMP as well as all applicable regulatory requirements.

4.7 Validation Consultant

The Validation Consultant is responsible for providing advice in relation to the implementation of the RAP and for validating the works described under these plans. The Validation Consultant, if different to the LAA, must be advised of any unexpected asbestos-related finds should these be encountered during the work.

In the event the Validation Consultant is a LAA, they may also undertake surface clearance inspections and prepare surface clearance certificates relevant to the remediation and validation, as allowed under the regulations with due consideration of the type of clearances required.

5 LEGISLATIVE REQUIREMENTS

5.1 Legislative Requirements and Regulations/Guidelines

All works must be undertaken with regards to (but not limited to) the following:

- Protection of the Environment Operations (POEO) Act 1997 (NSW);
- POEO (Waste) Regulation 2014 (NSW)
- Work Health and Safety Act 2011 (NSW);
- WHS Regulation 2017 (NSW);
- Contaminated Land Management Act 1997 (NSW);
- CoP How to Manage and Control Asbestos in the Workplace;
- CoP How to Safely Remove Asbestos;
- National Occupational Health and Safety Commission (NOHSC), (2005). Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition (NOHSC:3003 [2005]);
- NOHSC, (2005). Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment 3rd Edition (NOHSC:3008 [1995]);
- AS/NZS 1715:2009 Selection, Use and Maintenance of Respiratory Protective Devices; and
- AS/NZS 1716:2012 Respiratory Protective Devices.

5.2 Non-Compliance with the AMP

Where a non-compliance with this AMP is identified, the client, the Asbestos Contractor, LAA, Principal Contractor and the Validation Consultant are to be notified and, where required, necessary actions are to be discussed and documented. The Principal Contractor is to inform the non-complying party in writing of the non-compliance. The non-compliant party will be required to rectify the non-compliance as soon as possible.

Details of the action taken to rectify the non-compliance shall be provided to the Principal Contractor and the client. Where a non-compliance cannot be rectified, the AMP is to be reviewed, and revised if required. The LAA and the Asbestos Contractor must agree to any addendum to this AMP, prepare a written document outlining and changes, and sign off on that document.

5.3 SafeWork Notification

SafeWork NSW must be notified five calendar days in advance of any licensed asbestos removal work. JKG is of the opinion that the notification should be lodged even if off-site “removal” of asbestos does not occur and to prevent delays in the event that offsite removal of asbestos-impacted soil is required. It should be noted that friable (Class A) asbestos work is being undertaken for the purpose of the notification.

Before commencing licensed asbestos removal work, the Asbestos Contractor is to inform the Principal Contractor that licensed asbestos removal work is to be carried out at the workplace, and inform them of when the work is to commence. A copy of the notification is to be provided to the Principal Contractor.

5.4 Asbestos Removal Control Plan

The licenced asbestos removalist must prepare a site-specific ARCP prior to any asbestos removal work commencing. This document must identify the specific control measures a licence holder will undertake to ensure workers and other persons are not at risk when asbestos removal work is being carried out.

6 MANAGEMENT PLAN FOR MITIGATION MEASURES

This AMP is intended to apply to works where fill/soils are to be disturbed. The following mitigation measures must be implemented to ensure any potential asbestos exposure hazard is minimised during these activities.

Prior to the commencement of any works within the project area that involve disturbance of the fill/soil, this AMP is to be reviewed by all relevant parties and steps are to be taken to implement the management and WHS procedures throughout the work.

6.1 Management of Fill/Soils

All fill/soil disturbed during the construction works must be conducted under the asbestos management controls outlined in this AMP and the ARCP. Any changes to the management of the fill/soil must be discussed with the Asbestos Contractor and LAA. A revision to the AMP may be required to appropriately capture significant changes to the proposed works.

6.2 Clearance Inspections / Certificates

The entire project area will be deemed to be an 'asbestos work area' until appropriate inspection/clearance and sampling (if required) has been undertaken. Consideration can be made to include temporary capping measures using builder's plastic or similar if the site clearance/s are staged.

In circumstances where an area of the site has been inspected/cleared, but subsequently undergoes further disturbance/excavation (i.e. installation of services, etc) or is used for the temporary storage/stockpiling of asbestos materials etc, such disturbance/excavation will be deemed to be within an asbestos-impacted work area. On completion of the disturbance, another round of inspection/clearance is to be undertaken in order to exclude the area from the asbestos work area.

6.3 Site Management and WHS

6.3.1 Overview and Required Plans

All site work must be undertaken in a controlled and safe manner with due regard to potential hazards, training/licencing requirements and safe work practices. To assist in achieving this and in addition to this AMP, the following documents, as a minimum, shall be developed by the Principal Contractor (or the relevant subcontractors and provided to the Principal Contractor for approval):

- Work Health and Safety Plan (WHSP) detailing the WHS procedures for the site, this may incorporate or include references to the details in this AMP;
- Safe Work Method Statements (SWMS) which are to be specific to individual tasks undertaken at the site;
- ARCP; and
- Emergency Response Plan.

The above documents are to comply with regulatory requirements, including the WHS Regulation and SafeWork NSW requirements.

The ARCP must include:

- Details of how the asbestos works will be carried out, including the method, tools, equipment, PPE to be used and washdown/decontamination facilities; and
- Details of the asbestos-impacted fill to be disturbed, including the known location/s and where it is to be placed (or removed if required).

The licensed Asbestos Contractor must retain the ARCP in accordance with the WHS Regulation.

6.3.2 Isolation, Barricading and Signage

The Asbestos Contractor will ensure that the necessary measures are in place for the effective exclusion of unauthorised persons to asbestos-impacted work area. The asbestos work area(s) is/are to be adequately isolated and must be signposted with warning signs, or labels, as appropriate to ensure personnel are not unknowingly exposed to asbestos when undertaking operational activities.

The location, type and positioning of signs and labels must be decided, or authorised, by a competent person. Asbestos warning signs must comply with the requirement of AS 1319-1994 Safety Signs for the Occupational Environment and the CoP How to Manage and Control Asbestos in the Workplace, for size, illumination, location and maintenance. Warning signs may include some of the following examples:

In-text Figure A: Example signage

6.3.3 Restriction of Access to Asbestos Work Area / Zone

Access to the asbestos-impacted work area(s) will be restricted to:

- Workers engaged in the asbestos works;
- Other persons associated with the asbestos work such as the LAA; and
- Anyone allowed under the WHS Regulation or another law to be in the asbestos works area.

6.3.4 Induction

All site personnel must be inducted by the Principal Contractor. The induction is to include, but not be limited to, general hazards associated with construction works, hazards specific to the site including asbestos, evacuation and emergency response plans, first aid provisions and providers, what to do in the case of finds of additional asbestos and any aspects of this AMP applicable to their tasks.

6.3.5 Personal Protective Equipment (PPE)

As a minimum, all personnel on site will be required to wear the following PPE at all times during disturbance of fill/soils and other asbestos works as applicable:

- Steel-capped boots (preferably lace-less);
- Hard hat meeting relevant standards;
- High visibility clothing;
- Gloves;
- P2 rated disposable dust mask, or a half-face respirator fitted with an appropriate particulate filter in compliance with the relevant standards. Respiratory Protective Devices and be used in accordance with AS/NZS 1715:2009;
- Disposable coveralls that prevent tearing and penetration of asbestos fibres (e.g. coveralls type 5, category 3 per EN ISO 13982–1 or equivalent); and
- Disposable boot covers made of a material consistent with the disposable coveralls or:
    - Gumboots may be worn in the asbestos removal area if they are decontaminated upon exiting the asbestos removal area; or
    - A separate set of work boot may be maintained in the asbestos work area.

Care should be taken to ensure PPE compatibility and that a suitable degree of worker comfort is maintained. Regardless of the PPE adopted, asbestos removal workers must undertake appropriate personal decontamination upon leaving the asbestos work area as outlined in the CoP How to Safely Remove Asbestos.

Workers in enclosed excavator cabins equipped with High Efficiency Particulate Air (HEPA) filtered air conditioning systems may not require use of certain PPE (such as masks/respirators) but should have appropriate PPE on hand for general egress and emergency purposes.

Other PPE shall be adopted as required by any task-based SWMS and/or the ARCP.

6.4 Air Monitoring

During all disturbance of asbestos-impacted fill/soil, and for the duration of the works, airborne asbestos fibre monitoring is to be undertaken by an appropriate subcontractor using calibrated portable air sampling pumps. Monitoring locations shall be determined in agreement with the LAA and Principal Contractor, and shall consider the surrounding the asbestos work area/site boundary. At the end of each monitoring period, the pump and attached filter will be collected and analysed at a NATA-accredited laboratory.

Air monitoring works shall be conducted in accordance with NOHSC Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition (NOHSC:3003 [2005]). The results of air monitoring are to be made available prior to the commencement of work on the following business day (with exception to weekend monitoring). Daily air monitoring reports shall be displayed in a common area outside of the asbestos work area (e.g. site office or lunch shed) or be able to be produced upon request.

The following action levels will be applied upon receipt of daily results:

- Reading of less than 0.01 fibres/mL – control measures in place are working effectively, site works to continue;

- Reading between 0.01 and 0.02 fibres/mL a review of control measures shall be completed in the work area; and
- Reading greater than 0.02 fibres/mL works shall cease until the cause of contamination is identified and rectified and SafeWork shall also be notified.

6.5 Wet Methods and Decontamination

A constant low-pressure water supply is required for wetting down fill/soils, including any generated fill spoil. This may be achieved via mains or tanker supplied water fitted to a garden hose with a pistol grip (i.e. fogging nozzle). If no water supply is readily available, a portable pressurised vessel, such as a pump-up garden sprayer, may be suitable for small areas. Should potable water be used, Sydney Water should be contacted prior to commencement to establish whether any further approvals are required in the context of any water restrictions which may be in place at the time.

6.5.1 Decontamination

When exiting the asbestos work area, which is to be via the one entry / exit point, each person is to undertake personal decontamination. The personal decontamination zone/unit must be located on the edge of the barricaded work area and include an asbestos waste bin, wet rags/wet wipes, bucket or shower with detergent solution and a sink with soap to wash hands. Personal decontamination involves the following:

- A damp rag or wet wipe is used to wipe down the exterior surface of the overalls and boot covers;
- Removal of boot covers and placing in appropriate plastic bags within the provided disposal bin located at the decontamination zone;
- Rinsing boots in a bucket or shower with detergent solution in the decontamination zone to remove residual soil from the boots, or alternatively, wiping down with a wet rag;
- Removing overalls and gloves and placing in appropriate plastic bags within the provided disposal bin located at the decontamination zone. For privacy this can be undertaken in a designated decontamination area surrounded by black plastic or in a decontamination unit;
- Removing of P2 respirator and wiping down with damp rag or wet wipe; and
- Thoroughly washing of hands (including under nails) with water and detergent.

The decontamination procedure is to comply with Table 3 Personal Decontamination as presented in the CoP How to Safely Remove Asbestos. A water supply for decontamination purposes is to be maintained at the entry / exit point at all times.

With respect to any plant or equipment used in the asbestos work area, these are to be appropriately decontaminated at the edge of the asbestos removal area on a designated area overlain with geofabric. Vehicles, excavators, etc. are to be inspected and clods of soil are to be removed. Where deemed necessary, plant can also be wetted down with a fine mist/water spray. The amount of water generated from these decontamination activities is not expected to be significant and hence will infiltrate into the surface within the exclusion zone. However, if the volume of water used causes surface migration, then the exclusion zone is to be bunded to an appropriate height to prevent water migrating outside the exclusion zone. In this regard changes to the delineated exclusion areas and other entry / exit points within the site and hence any changes to the decontamination point are to be made aware to site personnel by the Principal Contractor.

Any water collected as part of the above decontamination works (or asbestos works more generally) is to be placed in a suitable leak-proof receptacle and disposed of as asbestos containing waste by a suitable licensed waste contractor.

Any other equipment (e.g. shovels) leaving the exclusion zone are to be decontaminated. Where possible this should be done with a detergent solution within the exclusion zone. If not possible to decontaminate equipment, then the equipment must be sealed in a suitable container until it is next used for asbestos removal purposes. Such containers must be appropriately labelled to warn of the asbestos risk and the exterior of the container decontaminated prior to it leaving the asbestos removal area.

6.5.2 Dust Control / Management

Given the presence of friable asbestos at the site, it is important to mitigate risk through appropriate dust control measures and that such measures are adhered to. The following is provided as a guide to control dust during earthworks and asbestos removal works, and whilst soils remain exposed at the ground surface:

- Erection of dust screens around the work area;
- Real-time monitoring of dust generation;
- Dampening with water of the proposed excavation area prior to commencement of excavation;
- Prior to movement of stockpiled soils, dampening with water across the stockpile surface;
- During soil movement the materials should be kept sufficiently damp to minimise the emission of dust;
- Ceasing works during periods of high winds;
- If trucks are required to enter the asbestos work area, the wheels of the trucks and the sides of the body should be washed down before the truck leaves the asbestos work area; and
- Securely covering all loads entering or exiting the site.

Any exposed fill/soil should be continually monitored and the surface wet down as drying occurs. This process should continue until the construction works are complete and the fill/soils are successfully removed/capped.

The above method relies on the following factors:

- Use of water fogging nozzle (not high-pressure hoses); and
- Constant vigilance of trained operators/contractors.

Water used for dust suppression is to be only the minimum required to prevent dust generation and must not to be allowed to escape the confines of the works areas. If dust is unable to be appropriately managed at any time, works are to cease until the dust is sufficiently suppressed.

6.6 Stockpile Management

Any stockpiles must be kept damp (not flooded) and covered by secured heavy duty plastic (200µm) or geofabric as soon as practical. Stockpiles should not remain exposed/uncovered overnight or during periods of high winds or where site works have ceased.

All stockpiles must be appropriately bunded. All stockpiles must be maintained within an asbestos-work zone and managed accordingly. Where a stockpile is removed from an area, the ground surface beneath the stockpile requires a surface clearance inspection (including sampling) and issue of a clearance certificate for that area to be excluded/removed from the asbestos work area.

6.7 Unexpected Finds Protocol

It is acknowledged that ground conditions may vary, and further hazards may arise from unexpected sources and/or in unexpected locations during site works. The nature of any residual hazards which may be present at the site are generally detectable through visual (e.g. stained soil or other inclusions) or olfactory (e.g. hydrocarbon odours in soil) means. In the event of an unexpected find, work in the area should cease and the asbestos assessor and/or a suitably qualified contaminated land consultant[9] should be engaged to inspect the find and provide further advice.

6.8 Waste Management

6.8.1 Asbestos Waste (including consumables and ACM fragments/pipework)

All asbestos waste, including (but not limited to) used disposable coveralls, boot covers, gloves, respirators, plastic sheeting and items deemed contaminated with asbestos are to be kept damp until they can be placed in double-sealed, 200µm thick plastic sheeting, asbestos waste bags or another suitable receptacle. The sealed waste shall be appropriately labelled as containing asbestos and removed from site as soon as practicable.

Asbestos waste shall not be allowed to accumulate excessively within the work area and shall be bagged or placed in appropriate receptacles as the work proceeds.

Controlled wetting of waste shall be used to eliminate asbestos dust emission during bag sealing or in case of subsequent rupture of a bag. Bags and sheeting which have contained asbestos material shall not be reused, and bags and sheeting marked as asbestos waste shall not be used for any other purpose.

Asbestos waste bags shall not be filled more than half full, in order to minimise the risk of bag tearing / splitting and to assist in manual handling of bags. The neck end of each bag shall be twisted tightly, folded over and the neck secured in the folded position with wire ties, adhesive tape or another effective method. Sealed asbestos waste shall be detailed cleaned before being removed from the asbestos removal area.

All drums or bins used for the storage and disposal of asbestos waste are to be in a good condition, with lids and rims in good working order, and free of hazardous residues. The drums or bins should be lined with plastic (minimum 200µm thickness), and labels warning of the asbestos waste should be placed on the top and side of each drum or bin, with the words, 'Danger: Asbestos. Do not break seal' (or similar). If the drum or bin is to be re-used, the asbestos waste must be packed and sealed so that when the drum or bin is emptied there is no residual asbestos contamination.

[9] JKG recommend that the consultancy engaged for the work be a member of the Australian Contaminated Land Consultants Association (ACLCA), and/or the individual undertaking the works be certified under one of the NSW EPA endorsed certified practitioner schemes

Controlled wetting of the waste should be used to reduce asbestos dust emissions. Where possible, the drums or bins should be placed in the asbestos work area before asbestos work begins. The drums or bins should have their rims sealed and their outer surfaces wet wiped and inspected before they are removed from the asbestos work area. If it is not possible to locate the drums or bins inside the asbestos work area, they should be located as close to the work area as possible. Routes for moving the waste from the asbestos work area to the waste drums or bins should be designated prior to the commencement of each task. Drums or bins used to store asbestos waste should be stored in a secure location within the site when they are not in use.

If the volume or size of the asbestos waste cannot be contained in asbestos waste bags, drums or bins, a waste skip, vehicle tray or similar container that is in good condition can be utilised. The asbestos should be sealed in double-lined, heavy duty polyethylene sheeting (minimum 200µm thickness) or double bagged before it is placed in the skip, tray or similar container. Non-friable asbestos waste may be placed directly into a skip or vehicle tray that has been double-lined with polyethylene sheeting, provided it is kept damp to minimise the generation of airborne asbestos.

Once the skip, tray or similar container is full, its contents should be completely sealed with the polythene sheeting. If the skip is emptied at a waste disposal site, waste disposal procedures which prevent the tearing of the polythene lining should be developed. If asbestos waste cannot be disposed of immediately, the skip may be used for storing the asbestos waste on site over a period of time, provided that the contents are secured (i.e. using a lockable lid or locating the skip in a secure area) to prevent unauthorised access.

Current requirements for asbestos waste disposal must be adhered to and copies of asbestos waste disposal certificates/receipts must be retained. An example waste tracking register is attached in Appendix B.

6.8.2 Loading, Transport and Disposal of Asbestos Waste

A waste classification is required for any waste soil containing asbestos in accordance with the Waste Classification Guidelines 2014. Once the waste classification is complete, a waste classification report is to be prepared. Asbestos waste can only be disposed of to a waste facility licensed by the NSW EPA to receive asbestos waste. The nominated landfill should be contacted to obtain the required approvals prior to commencement of excavation and or loading of asbestos waste.

Part 7 of the POEO Waste Regulation set outs the requirements for the transportation and management of asbestos waste and Clause 79 of the POEO Waste Regulation requires waste transporters to provide information to the NSW EPA regarding the movement of any load in NSW of more than 10m^2 of asbestos sheeting, or 100 kilograms of asbestos waste. To fulfil these legal obligations, asbestos waste transporters must use WasteLocate.

Clause 78 of the POEO Waste Regulation requires that a person who transport asbestos waste must ensure that:

- Any part of any vehicle in which the person transports the waste is covered, and leak-proof, during the transportation; and
- If the waste consists of bonded asbestos material—it is securely packaged during the transportation; and

- If the waste consists of friable asbestos material—it is kept in a sealed container during transportation; and
- If the waste consists of asbestos-contaminated soils—it is wetted down.

Clause 144AAB of the POEO Act 1997 stipulates that a person must not cause or permit asbestos waste in any form to be re-used or recycled.

7 DOCUMENTATION REQUIREMENTS FOR MITIGATION MEASURES

Documentation is to be maintained by each party throughout the project and provided to other relevant parties to meet the validation and regulatory requirements for the site. The documentation relevant to each party is discussed in the following subsections:

7.1 Principal Contractor Requirements

The Principal Contractor (or their nominated subcontractor) is to maintain (or prepare, where relevant) the documentation outlined below:

- Any licences and approvals required for the works which are the responsibility of the Principal Contractor to provide;
- Tracking of asbestos waste and asbestos-impacted fill from cradle-to-grave is required by the Principal Contractor and the records are to be provided to the LAA. For waste materials disposed off-site, this will require the documentation of an appropriate tracking register outlining all dates/times of waste movements, registration numbers of vehicles, a summary of any waste classification relating to the waste, the tonnage of each load of waste, load characteristics, destination, waste docket (i.e. the weighbridge docket from the landfill) number and Waste Locate tracking number. An example of a waste tracking register is provided in Appendix B;
- Records of any non-compliance or implementation of contingency actions;
- All surface clearance documentation and air monitoring results; and
- Incident reports.

7.2 Asbestos Contractor

The Asbestos Contractor is to provide the following documentation to the Principal Contractor:

- SafeWork notification (approval);
- ARCP and SWMS/WHSP;
- All surface clearance documentation and air monitoring results they arrange via their nominated asbestos sub-contractor; and
- Any records in relation to unexpected finds or non-compliance with the AMP.

7.3 Licensed Asbestos Assessor

The LAA is to provide the following documents to the Asbestos Contractor:

- Asbestos air monitoring records;
- Clearance certificates;
- Any other laboratory reports for additional testing (if undertaken); and
- Written notices of any non-compliance with the AMP.

7.4 Validation Consultant

In the context of the AMP, the Validation Consultant is to be provided with copies of all records and documents listed above for review and inclusion in the site validation reports.

8 MITIGATION MEASURES

Table 8-1: Mitigation Measures

Project Stage Design (D) Construction (C) Operation (O)	**Mitigation Measure**	**Reason for Mitigation Measure**
C	The AMP is to be implemented during construction phase in conjunction with the RAP[10] prepared by JKG.	To reduce the risks posed to human health by asbestos (bonded and friable) in fill/soil during construction phase.

[10] JKG, (2025a). *Report to NSW Department of Education on Remediation Action Plan for Parramatta East Public School (PEPS) Upgrade, 30-32 Brabyn Street, North Parramatta, NSW*. (Ref: E35073BR2rpt3.Rev5-RAP)

9 LIMITATIONS

- The AMP was prepared based on investigation data from inspection of the site and wider school property and boreholes drilled during previous site investigations. Data gaps exist as some areas were inaccessible for sampling (e.g. beneath the pools) and some sample locations were terminated in shallow fill;
- JKG accepts no responsibility for any unidentified contamination issues at the site. Any unexpected problems/subsurface features that may be encountered during future development or maintenance works should be inspected by an environmental consultant or licensed asbestos assessor as soon as possible;
- Previous use of this site may have involved excavation for the foundations of buildings, services, and similar facilities. In addition, unrecorded excavation and burial of material may have occurred on the site. Backfilling of excavations could have been undertaken with potentially contaminated material that may be discovered in discrete, isolated locations across the site during future work;
- This plan has been prepared based on site conditions which existed at the time of the soil contamination screening and waste classification assessment; scope of work and limitations outlined in the JKG proposal; and terms of contract between JKG and the client (as applicable);
- Subsurface soil and rock conditions encountered between investigation locations may be found to be different from those expected;
- The preparation of this report has been undertaken in accordance with accepted practice for environmental consultants, with reference to applicable environmental regulatory authority and industry standards, guidelines and the assessment criteria outlined in the report;
- Where information has been provided by third parties, JKG has not undertaken any verification process, except where specifically stated in the report;
- JKG has not undertaken any assessment of off-site areas that may be potential contamination sources or may have been impacted by site contamination, except where specifically stated in the report;
- JKG have not and will not make any determination regarding finances associated with the site;
- Additional investigation work may be required in the event of changes to the proposed development or land use. JKG should be contacted immediately in such circumstances;
- Material considered to be suitable from a geotechnical point of view may be unsatisfactory from a soil contamination viewpoint, and vice versa; and
- This plan has been prepared for the particular project described and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

Appendix A: Site Figures

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM

This plan should be read in conjunction with the report.

Title:	**SITE LOCATION PLAN**
Location:	PARRAMATTA EAST PUBLIC SCHOOL, NORTH PARRAMATTA, NSW
Report No:	E35073BR2
Figure No:	1

JKGeotechnics

PLOT DATE: 27/09/2024 1:48:40 PM DWG FILE: K:\SC EIS \JOBS\35000\SIE35073B PARRAMATTA\CAD\BR2\E35073BR2.DWG

LEGEND

APPROXIMATE PROJECT AREA BOUNDARY	
APPROXIMATE OUTLINE OF WIDER SCHOOL BOUNDARY	
FCF(Surface)	FIBRE CEMENT FRAGMENT LOCATION, NUMBER AND DEPTH (Surface/m)
BH(Fill Depth)	BOREHOLE LOCATION, NUMBER AND DEPTH OF FILL (m)
BH/MW(Fill Depth)	BOREHOLE AND GROUNDWATER MONITORING WELL LOCATION, NUMBER AND DEPTH OF FILL (m)

0 10 20 30 40 50

SCALE 1:1000 @A3 METRES

This plan should be read in conjunction with the report.

Title: **SITE FEATURES PLAN**

Location: PARRAMATTA EAST PUBLIC SCHOOL, NORTH PARRAMATTA, NSW

Report No: E35073BR2-AMP

Figure No: 2

JKGeotechnics

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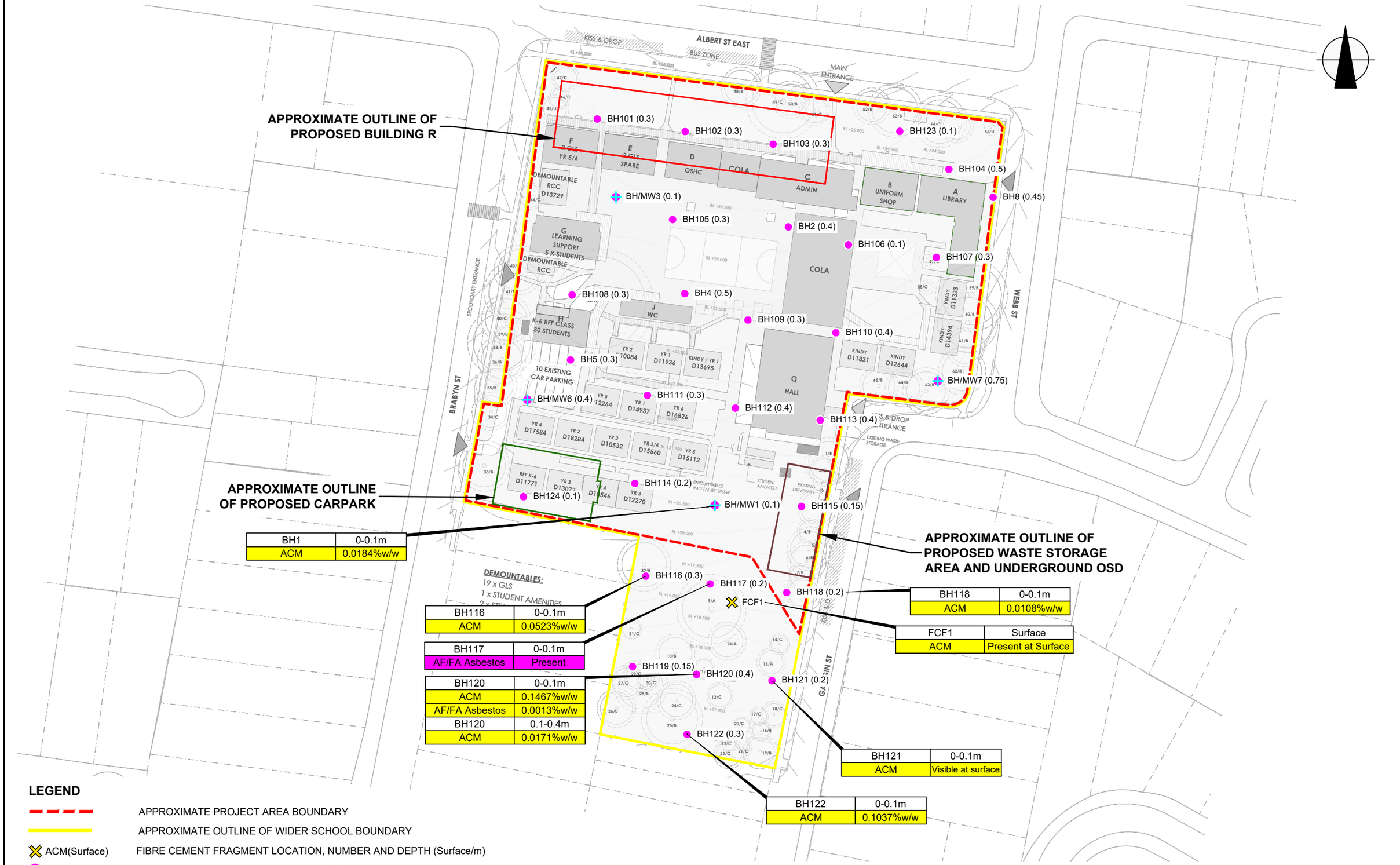

BH1	0-0.1m
ACM	0.0184%w/w

BH116	0-0.1m
ACM	0.0523%w/w

BH117	0-0.1m
AF/FA Asbestos	Present

BH120	0-0.1m
ACM	0.1467%w/w
AF/FA Asbestos	0.0013%w/w
BH120	0.1-0.4m
ACM	0.0171%w/w

BH118	0-0.1m
ACM	0.0108%w/w

FCF1	Surface
ACM	Present at Surface

BH121	0-0.1m
ACM	Visible at surface

BH122	0-0.1m
ACM	0.1037%w/w

LEGEND

- APPROXIMATE PROJECT AREA BOUNDARY
- APPROXIMATE OUTLINE OF WIDER SCHOOL BOUNDARY
- ACM(Surface) — FIBRE CEMENT FRAGMENT LOCATION, NUMBER AND DEPTH (Surface/m)
- BH(Fill Depth) — BOREHOLE LOCATION, NUMBER AND DEPTH OF FILL (m)
- BH/MW(Fill Depth) — BOREHOLE AND GROUNDWATER MONITORING WELL LOCATION, NUMBER AND DEPTH OF FILL (m)

SAMPLE ID	DEPTH (metres)
CHEMICAL	CONCENTRATION

SOIL/SURFACE SAMPLE EXCEEDANCE

- SOIL/SURFACE CONTAMINATION ABOVE SAC FOR HUMAN HEALTH RISK
- ASBESTOS DETECTED

0 10 20 30 40 50
SCALE 1:1000 @A3 METRES

This plan should be read in conjunction with the report.

Title: **SAC EXCEEDANCES PLAN**

Location: PARRAMATTA EAST PUBLIC SCHOOL, NORTH PARRAMATTA, NSW

Report No: E35073BR2-AMP

Figure No: 3

JKGeotechnics

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Appendix B: Example of Waste Tracking Register

Exported (Waste) Materials Register

Load	Date	Material Type / Classification	Site Area where Waste was Generated	Waste Classification Report Reference	Disposal Facility	Tipping Receipt/Docket Number	Tracking Number (where relevant)	Tonnage