141-251 Aldington Road, Kemps Creek, NSW

Frasers Property Industrial Pty Ltd

Unexpected (Contamination) Finds Protocol

JBS&G 66105 | 168,657 Rev 1

23 June 2025

We acknowledge the Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We pay respect to Elders past and present and in the spirit of reconciliation, we commit to working together for our shared future.

Caring for Country The Journey of JBS&G
Artist: Patrick Caruso, Eastern Arrernte

Table of Contents

List of Tables

List of Figures

Appendices

Abbreviations

Term	Definition
ACM	Asbestos Containing Material
AF/FA	Asbestos Fines/Fibrous Asbestos
BTEX	Benzene, Toluene, ethylbenzene and xylene
JBS&G	JBS&G Australia Pty Ltd
DP	Deposited Plan
DPHI	NSW Department of Planning, Housing and Infrastructure
EIL	Ecological Investigation Level
ENM	Excavated Natural Material
EPA	NSW Environment Protection Authority
ER	Environmental Representative
ESL	Ecological Screening Level
HIL	Health Investigation Level
HSL	Health Screening Level
LAA	Licensed Asbestos Assessor
m bgs	Metres Below Ground Surface
NEPC	National Environment Protection Council
NSW	New South Wales
OCP	Organochlorine Pesticide
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
QA/QC	Quality Assurance/Quality Control
TCLP	Toxicity Characteristic Leaching Procedure
TRH	Total Recoverable Hydrocarbon
UFP	Unexpected Finds Protocol
VENM	Virgin Excavated Natural Material
VOC	Volatile Organic Compound
WA DoH	Western Australia Department of Health
WHS	Work, Health and Safety

1. Introduction

JBS&G Australia Pty Ltd (JBS&G) was engaged by Frasers Property Industrial Pty Ltd (Frasers, the client), to provide environmental services for land located at 141-251 Aldington Road, Kemps Creek, NSW (the site, see **Figure 1**). The area, address and legal Lots and Deposited Plans (DPs) identifiers of the properties which comprise the site are detailed in **Table 1.1** and are shown on **Figure 2**.

Table 1.1 Site Identification Details

Lot/DP	Address	Area (ha)
Aldington Road – Edge South		
33/258949	155 to 167 Aldington Road, Kemps Creek, NSW, 2178	10.1
28/255560	169 to 181 Aldington Road, Kemps Creek, NSW, 2178	10.2
27/255560	183 to 197 Aldington Road, Kemps Creek, NSW, 2178	10.2
26/255560	199 Aldington Road, Kemps Creek, NSW, 2178	2.6
25/255560	201 to 217 Aldington Road, Kemps Creek, NSW, 2178	10.2
24/255560	219 to 233 Aldington Road, Kemps Creek, NSW 2178	10.2
10/253503	235 to 251 Aldington Road, Kemps Creek, NSW 2178	10.1
Approximate Site Area (ha)		63.6
Ancillary Works Zone		
Part 34/258949	141 to 153 Aldington Road, Kemps Creek, NSW 2178	10.1

The properties which comprise the site have been the subject of a number of previous environmental investigations, and remediation. Validation of remedial works at the site was completed by JBS&G in accordance with the RAP (JBS&G 2024a[1]), to demonstrate the successful remediation and, demonstrate that the site is suitable for the proposed commercial and industrial land use (unencumbered by contamination management plans or similar instrument) in accordance with guidelines made or approved by the NSW Environment Protection Authority (EPA). The remediation works have been documented in the JBS&G Validation Report (JBS&G 2024b[2]).

The site is owned by Frasers, and is to be redeveloped as eight warehouses, ancillary office space and associated infrastructure (stormwater, road infrastructure, landscaping etc).

A State Significant Development Application (SSDA, SSD-17552047[3]) has been approved by the Minister for Planning and Public Spaces. Conditions of the development consent include the following:

"Unexpected Finds Procedure:

- *B69. Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the CEMP in accordance with condition C2 and must ensure any material identified as contaminated is disposed of in accordance with the POEO Act and its associated regulations. Details of the final disposal location and the results of any associated testing*

[1] *Remedial Action Plan – Aldington Road Estate, Edge South Development, Aldington Road, Kemps Creek, NSW*. JBS&G Australia Pty Ltd reference 65376/157278 dated 5 February 2024 Rev 2, JBS&G (2024a).
[2] *155-251 Aldington Road, Kemps Creek, NSW, Frasers Property Industrial Pty Ltd, Validation Report*, reference JBS&G 66105/159,245 Rev 1, dated 26 July 2024 (JBS&G 2024b)
[3] *Development Consent, SSD-17552047*, Minister for Planning and Public Spaces, 3 June 2025 (SSD-17552047).

must be submitted to the Planning Secretary prior to removal of the contaminated material from the site."

This Unexpected Finds Protocol (UFP) has been developed in order to inform management of potential unexpected contamination, in accordance with the development consent condition B69 (SSD-17552047).

1.1 Objective

The objective of this protocol is to outline the actions required to protect human and environmental health from unexpected contamination that may be encountered during site development works including bulk earthworks and construction of an eight warehouse commercial/industrial estate.

2. Unexpected Finds Protocol

2.1 Unexpected Finds Identification

The possibility exists for hazards that have not been identified to date to be present within fill materials or underlying site structures on the site. The nature of hazards which may be present, and which may be discovered at the site are generally detectable through visual or olfactory means, as shown in **Appendix A**, and may include:

- The presence of significant aggregates of friable asbestos materials (visible) versus minor occurrences of fibre bundles in soil; and/or
- Excessive quantities of construction/demolition waste that represents an aesthetics issue beyond that reported to date (visible); and/or
- Hydrocarbon/chemical impacted materials beyond that reported to date (visible/odorous); and/or
- Drums, waste pits (visible); and/or
- Oily ash and/or oily slag contaminated soils/fill materials (visible/odorous); and/or
- Tarry like impacted soil/fill material (visible/odorous); and/or
- Potential chlorinated hydrocarbon impact (sweet odour soils).

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances (or any other unexpected potentially hazardous substance) be identified, the procedure summarised in **Appendix B** is to be followed.

An enlarged version of the Unexpected Finds Protocol, suitable for use on the site, should be posted in the Site Office and referred to during the site-specific induction by the Principal Contractor.

2.2 Potential Risks and Hazards

The potential hazards that may be encountered in the event of an unexpected find include impacts to human health and/or the environment and depend on the relevant contaminant of concern. The primary risks are:

- Exposure to workers/site occupants:
    - Oral ingestion and dermal contact of contaminated soil or water;
    - Inhalation of vapours, gases or dusts;
- Environmental exposure:
    - Contaminant uptake in flora; and
    - Contaminant exposure via ingestion, dermal contact or inhalation by fauna.

Where unexpected finds are exposed and not managed appropriately, there may be a potential for migration of contamination from the site via:

- Windblown dust;
- Migration via surface water flow and infiltration;
- Groundwater migration; and
- Vapour generation.

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned indicators be identified (or any other unexpected potentially hazardous substance), the protocol summarised in **Appendix B** and detailed in the following sections is to be followed.

2.3 Unexpected Finds Register

All unexpected contamination finds identified on site should be documented in an unexpected finds register by an appropriately qualified and experienced environmental consultant. An example register is provided in **Appendix C.** A copy should be made available onsite to allow initial documentation of unexpected finds and to provide a record of successfully managed unexpected finds. A copy of the completed register will be provided to the Environmental Representative (ER) and NSW Department of Planning, Housing and Infrastructure (DPHI) as requested.

2.4 Assessment of Unexpected Finds

The sampling strategy for the characterisation and validation of each 'unexpected find' shall be designed by a suitably qualified and experienced environmental consultant dependent upon the nature and extent of the unexpected find, in accordance with guidelines made or approved by NSW Environment Protection Authority[5]. The strategy will, however, be aimed at determining the nature of the substance – that is, is it hazardous and, if so, is it at concentrations which pose an unacceptable risk to human health or the environment for the land use.

The assessment approach for the identified substance / materials shall meet the requirements of EPA-made or approved guidelines including, but not limited to: the NEPC (2013) ASC NEPM[6] and EPA (2022) Contaminated Site: Sampling Design Guidelines[7]. Approaches to the assessment and management of potential unexpected finds are provided in **Section 2.5**.

2.5 Appropriate Assessment and Management Strategy

2.5.1 General Management Strategy

The general management strategy to manage unexpected contamination finds will be dependent on the results of the characterisation assessment. Materials are generally preferred to be retained on the site where they are assessed by the environmental consultant to be suitable for the intended land use consistent with EPA made or approved guidelines including assessment against applicable NEPC (2013) land use criteria, as described in **Section 2.6.1**, or in circumstances where, subject to an appropriate plan of remediation, they can be remediated to achieve appropriate land use criteria or contained on site subject to ongoing management controls. Alternatively, unexpected finds may be managed via offsite disposal. The details regarding any material requiring offsite disposal are outlined in **Section 2.5.7** below.

2.5.2 Asbestos

Minor asbestos unexpected finds (less than 10 m^2 of non-friable asbestos) should be assessed in accordance with *Managing Asbestos in or on soil* (SafeWork NSW 2014), specifically, the flow chart provided on page 9 of SafeWork (2014) document, which is presented in **Appendix D**.

Should significant asbestos unexpected finds (greater than 10 m^2 of non-friable, or any potential friable asbestos) be identified, these should be assessed by an appropriately qualified and experienced environmental

[5] NSW Environment Protection Authority, Contaminated Land, Statutory Guidelines (webpage) https://www.epa.nsw.gov.au/your-environment/contaminated-land/statutory-guidelines.
[6] *National Environment Protection (Assessment of Site Contamination) Measure 1999*, as amended 2013 (ASC NEPM), National Environment Protection Council (NEPC 2013).
[7] *Sampling design part 1 – application, Contaminated Land Guidelines* NSW EPA, September 2022 (EPA 2022)

consultant (competent person) in accordance with NEPC (2013) and WA DoH (2009)[8]. Dependent upon the initial assessment outcomes, an asbestos management plan (AMP) and register may be required.

Asbestos containing materials identified on-site should be managed in accordance with the following guidance documents:

- *Managing Asbestos in or on soil* (SafeWork NSW 2014).
- *How to Manage and Control Asbestos in the Workplace Code of Practice* (SafeWork NSW 2022).
- *How to Safely Remove Asbestos Code of Practice* (SafeWork NSW 2022).

Management and removal of greater than 10 m^2 non-friable asbestos materials must be undertaken by a Class A or Class B licensed asbestos contractor. Any friable asbestos materials must be removed by a Class A licensed asbestos contractor. A licensed asbestos assessor (LAA) will be required for clearance of friable asbestos impacts.

Asbestos air monitoring is required during all asbestos related works at the site and may be recommended for non-friable asbestos management particularly when close to public areas. Air monitoring for friable asbestos management will require supervision by a LAA.

2.5.3 Ash / Slag or Demolition / General Waste Impacted Fill Material

Any identified ash / slag or demolition / general waste material in on-site fill materials should be inspected by an appropriately qualified and experienced environmental consultant, and if required will be sampled and analysed for relevant contaminants. The extent of impact may be determined by excavation of the unexpected find or by test pitting on a grid pattern across the unexpected find.

Ash / slag and demolition / general waste material can pose an aesthetic issue if present in sufficient quantities on/near the ground surface and may require assessment to assist management of soil.

If assessment deems the ash / slag or demolition / general waste material unsuitable for the proposed land use, this material will require remediation or management, as noted in **Section 2.5.1**.

It is noted that open air burning of materials is prohibited in all NSW local government areas.

Uncontrolled filling may also present compaction and geotechnical issues, which would require assessment by appropriately qualified and experienced geotechnical engineers. Geotechnical considerations are beyond the scope of this document.

2.5.4 Petroleum Drums / Chemical Containers and Petroleum / Chemically Impacted Soils

Should drums and / or other chemical containers be observed, the type of contaminant present in the drum or chemical container will be identified where practicable and safe to do so by an appropriately qualified and experienced environmental consultant. Adjacent soils will need assessment for residual contaminants consistent with NEPC (2013) and EPA guidelines.

Any drums / chemical containers will be removed offsite to a licensed disposal facility in accordance with relevant guidelines and codes of practices for the type of contaminant identified. This may include removal of liquids, flammable materials or hazardous materials from the interior and / or adjacent soils of the unexpected find.

Should any odorous, stained or otherwise impacted soils be observed, the unexpected find should be inspected and sampled by an appropriately qualified and experienced environmental consultant consistent with NEPC (2013) and EPA guidelines. If volatile organic compounds (VOCs) are identified, an appropriate soil

[8] *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia*, WA Department of Health, May 2009 (WA DoH 2009).

vapour assessment will be undertaken if materials are to be considered for onsite retention or excavated and disposed offsite.

Soil analytical data will be assessed against appropriate land use criteria (refer **Section 2.6.1**) for consideration for onsite retention, or classified according to the *Waste Classification Guidelines* (EPA 2014). Soils not suitable to be retained onsite will require offsite disposal to a facility lawfully able to receive the classified waste.

2.5.5 Underground Petroleum Storage Systems

Should underground petroleum storage systems (UPSS) including underground storage tanks (USTs) and associated infrastructure be observed, the type of contaminant present in the tanks will be identified where practicable and safe to do so by an appropriately qualified and experienced environmental consultant. Adjacent soils will need assessment for residual contaminants consistent with NEPC (2013) and EPA guidelines.

The removal/decommissioning of any UPSS infrastructure should be completed by a duly qualified person in accordance with the *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2019*.

Validation of the removal works and associated remediation of impacted material shall be undertaken with consideration to the requirements of *UPSS Technical Note: Site Validation Reporting* (DECCW 2010), *Contamination assessment of service station sites, Minimum sampling requirements* (NSW EPA 2023*)* and the requirements of NEPC (2013). In addition, detailed notes and documentation (including photographs and description of tank contents) will be required to be made during removal of the petroleum infrastructure.

Soil analytical data will be assessed against appropriate land use criteria (refer **Section 2.6.1**) for consideration for onsite retention, or classified according to the *Waste Classification Guidelines* (EPA 2014) or compared against relevant waste resource recovery order requirements to determine the management of the soils. Soils not suitable to be retained onsite will require offsite disposal to a facility lawfully able to receive the classified waste.

2.5.6 Stockpiled / Dumped Material

Unexpected finds in stockpiles or illegally dumped material will be inspected by an appropriately qualified and experienced environmental consultant and assessed in accordance with NEPC (2013) and EPA guidance, in particular EPA (2022) Sampling Design Guidelines, as detailed in **Table 2.1** below for stockpiles up to 200 m^3, irrespective of whether they are intended for site re-use or waste disposal.

Table 2.1 Stockpile Sampling Frequency

Stockpile Volume (m^3)	Number of Samples
<75	3
75 - <100	4
100 - <125	5
125 - <150	6
150 - <175	7
175 - <200	8
> 200	Characterisation including use of statistical assessment consistent with EPA (2022)

Stockpiled spoil may be able to be assessed under an EPA waste order, such as *The excavated natural material order 2014* (ENM Order), subject to advice from an environmental consultant.

If ACM is present, the stockpiles will require to be assessed for offsite disposal as Special Waste in accordance with EPA (2014) and EPA (2022) guidance, or assessed in accordance with NEPC (2013) and WA DoH (2009) for possible alternate onsite remediation/management options. Soils impacted with ACM may be remediated onsite to reduce ACM to acceptable levels for onsite retention at depth or below structures with no further

long-term management, or, be contained beneath marker and capping layer/structures with ongoing long-term management if asbestos concentrations are above applicable land use criteria. Onsite retention of asbestos materials will require an AMP and inclusion on an asbestos register consistent with WHS Regulations.

Stockpiled or spoil materials that satisfy the site land use criteria, outlined in **Section 2.6.1** (as well as aesthetic criteria), may be reused onsite. Stockpiled or spoil material that does not meet the site validation criteria or aesthetic criteria may require waste classification and offsite disposal to a licensed waste disposal facility, or may be removed offsite under a relevant EPA waste resource recovery order where appropriate. It is noted some materials that do not meet site criteria may be retained on site with an appropriately planned capping/containment strategy and ongoing management plan, subject to consultation with relevant stakeholders, including the relevant consent authority. This assessment will need to be made by an appropriately qualified and experienced environmental consultant.

2.5.7 Offsite Disposal of Material

Any contaminated soils or other waste generated during remediation to be disposed offsite shall be classified in accordance with EPA (2014) *Waste Classification Guidelines.* Should natural soils/bedrock require offsite disposal then these shall also be classified as Virgin Excavated Natural Material (VENM) in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act). Should the material not meet these definitions, offsite disposal shall be in accordance with EPA (2014) *Waste Classification Guidelines* or an appropriate order as created under the *Protection of the Environment Operations (Waste) Regulation 2014*.

Waste certificates will be prepared for each stockpile and/or material type that is to be disposed. Disposal of waste to licensed waste facilities in accordance with relevant waste regulations will be undertaken by the Principal Contractor and the waste facility must be lawfully licensed to receive the material sent to it for disposal. All waste tracking documentation including disposal dockets must be maintained by the remedial contractor for at least 1 year after the completion of the project, and must be provided to the client's representative and environmental consultant for inclusion in a validation/clearance advice confirming the outcomes of works completed at the site, and for submission to DPHI in accordance with Condition B64 of the SSDA.

Any asbestos waste exceeding 100 kilograms or more than 10 m^2 of bonded ACM in one load disposed offsite must also be tracked using the NSW EPA Integrated Waste Tracking Solution (IWTS) by the Principal Contractor.

2.6 Validation of Unexpected Finds

Validation inspection(s) and possible sampling/analysis of unexpected contamination finds is required to be undertaken to assess appropriate management options and to demonstrate each unexpected find has been managed to a standard suitable for the proposed land use. Where sampling is required, the assessment should consider EPA (2022) Sampling Design Guidelines and appropriate contaminants of potential concern, as outlined in **Table 2.2** below, the criteria in **Section 2.6.1**, and reporting requirements of applicable EPA/SafeWork NSW guidance.

Table 2.2 Validation Sampling and Analytical Schedule

Validation Area	Sampling Frequency	Analytes[1]
Excavations formed by the removal of unexpected finds	Minimum of 1 validation sample per 10 m linear of wall and 1 m depth, minimum of 1 validation sample per 100 m^2 area for the base (10 m grid).	As appropriate, based on the characteristics of the find.
Excavations formed by the removal of UPSS infrastructure	Minimum of 1 validation sample per 5 m linear of wall and 1 m depth, minimum of 1 validation sample per 25 m^2 area for the base (5 m grid).	Total Recoverable Hydrocarbons (TRH), Volatile Organic Compounds (VOCs) and lead.

Contaminated material requiring disposal offsite	See **Table 2.1** above.	Heavy metals, TRH, Benzene, Toluene, Ethylbenzene and Xylene (BTEX), Polycyclic Aromatic Hydrocarbons (PAH), Organochlorine Pesticides (OCP)/Polychlorinated Biphenyls (PCB), asbestos and Toxicity Characteristic Leaching Procedure (TCLP) (if required), or as appropriate based on the characteristics of the find.
Excavated material for onsite reuse	See **Table 2.1** above and EPA (2022) Table 5 of Section 5.4.7.	Heavy metals, TRH/BTEX, PAH, OCP/PCB, asbestos and ASLP if required.
Residual soils underneath stockpiles where contaminated material has been stored on unsealed surfaces	Minimum of 1 sample per 100 m^2 grid, with at least 1 sample per stockpile footprint, with consideration to requirements to generate a suitable data set for validation.	As appropriate, based on the characteristics of the find.

Note:
[1] All samples analysed for asbestos validation / re-use purposes (including ENM) will be 500 mL samples in accordance with WA DOH (2009) guidelines, and analysed in accordance with AS 5370:2024. Asbestos samples for waste disposal purposes will be 50 g samples.

2.6.1 Assessment / Validation Criteria

Following the scope of works, the site will be utilised for land use consistent with commercial/industrial, as such the following NEPC (2013) land use criteria are applicable to any unexpected finds:

- Health investigation levels for Commercial/Industrial (HIL-D) scenario, which includes premises such as shops, offices, factories and industrial sites;
- Health screening levels for Commercial/Industrial (HSL-D) for TRH, BTEX & PAH compounds (fine soils);
- HSL-D: Commercial/Industrial for asbestos (ACM and AF/FA);
- Ecological investigation levels (EIL) for Commercial/Industrial;
- Ecological screening level (ESL) for Commercial/Industrial (coarse soils) for hydrocarbons; and
- Management limits: Commercial/Industrial (coarse soil).

In addition to the above, materials assessed for onsite reuse and/or validation at the walls and base of the resulting excavations will be required to satisfy aesthetic considerations, as per NEPC (2013).

It is noted that in lieu of site-specific soil data, coarse soil criteria has been selected as a conservative approach. Should soil assessment be undertaken confirming the presence of fine soils on the site, the criteria should be updated to fine soils.

2.6.2 Clearance / Validation Reporting

Clearance / validation letter reports will be prepared at the completion of the management of each unexpected find. The clearance / validation letter will be prepared in general accordance with relevant EPA published or endorsed guidelines, documenting the works undertaken. These are to be prepared by a suitably qualified and experienced environmental consultant.

The letter report will generally contain:

- Details on type of contaminant, size, extent and location of the unexpected find;

- Information demonstrating that the unexpected find was adequately assessed (including sampling plan, all relevant analytical or observational data, QA / QC);
- Information on the remediation / management of the unexpected find (such as disposal dockets from a licensed waste facility or asbestos surface picking);
- Information on the clearance / validation of the unexpected find to meet the adopted site criteria (including all relevant analytical and / or observational data); and
- Advice on the removal of temporary exclusion zones and return to work as per the UFP flowchart in **Appendix B**.

3. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties. The report has been prepared specifically for the client for the purposes of the commission, and no warranties, express or implied, are offered to any third parties and no liability will be accepted for use or interpretation of this report by any third party.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose. This report should not be amended in any way without prior approval by JBS&G, or reproduced other than in full including all attachments as originally provided to the client by JBS&G.

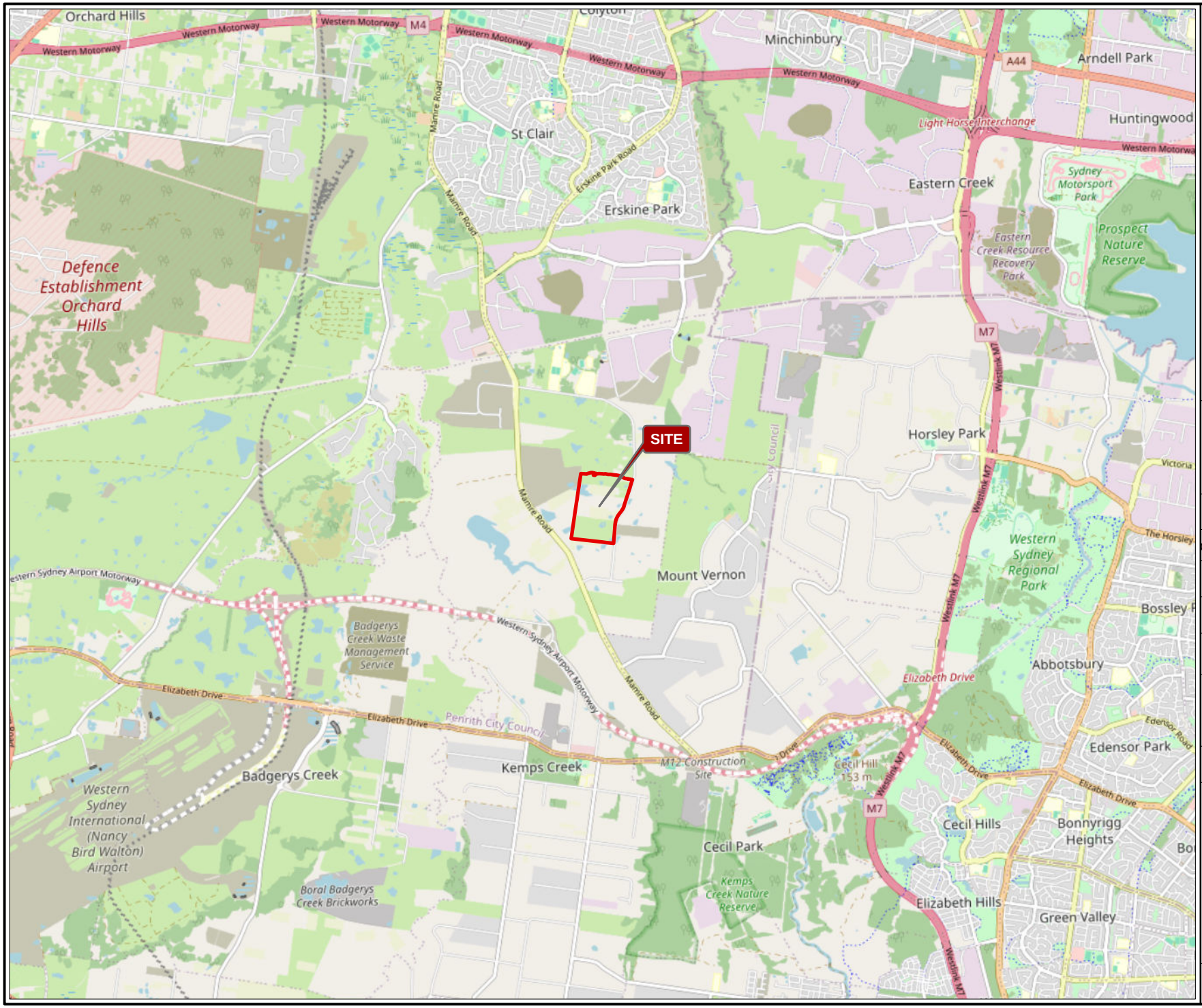
Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements or agreed scope of work.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

Figures



Legend

Approximate Site Boundary

JBS&G

Job No: 66105

Client: Frasers Property Group

Version: R005 Rev 1	Date 26/06/2025
Drawn By: MW	Checked By: SK

Scale 1:75,000

0 750 1,500

metres

Coord. Sys. GDA 1994 MGA Zone 56

141-251 Aldington Road,
Kemps Creek, NSW

SITE LOCATION

FIGURE 1

File Name: 66105_KempsCreek_FrasersProperty_R01_Rev0

Legend

- Approximate Site Boundary
- NSW Cadastre

JBS&G

Job No: 66105	
Client: Frasers Property Group	
Version: R005 Rev 1	Date 23/06/2025
Drawn By: MW	Checked By: SK
Scale 1:5,500	

0 50 100
metres

Coord. Sys. GDA 1994 MGA Zone 56

141-251 Aldington Road, Kemps Creek, NSW

SITE LAYOUT

FIGURE 2

File Name: 66105_KempsCreek_FrasersProperty_L008_Rev0
Reference: Nearmap - www.nearmap.com (Capture Date: 20211017)

Appendix A Unexpected Finds Summary

BE AWARE

UNEXPECTED HAZARDS MAY BE PRESENT

drums

asbestos

chemical bottles

staining

odour

ash / slag

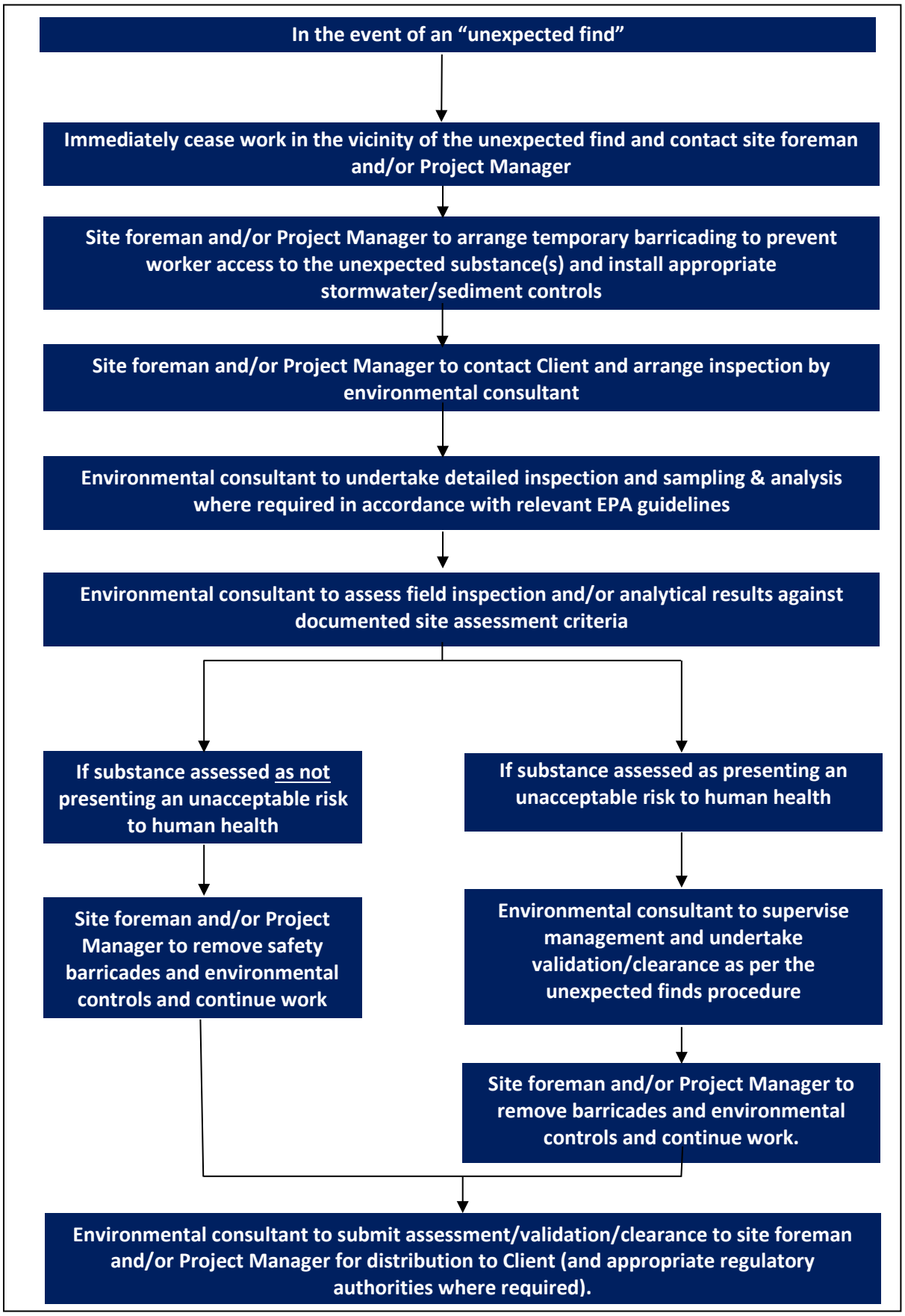
demolition waste

if you SEE or SMELL anything unusual

STOP WORK & contact the Site Foreman

do not restart working before the area has been investigated and cleared by an Environmental Consultant

Appendix B Unexpected Finds Protocol Flowchart



Appendix C Unexpected Finds Register

Unexpected Finds Register
Aldington Road, NSW JBS&G Australia Pty Ltd

Unexpected Find Identification							Unexpected Find Characterisation		Remedial Action	Unexpected Find Validation				
UF#	Grid Reference	Date	Nature of Find	Approximate Area of UF (m^2)	Depth of Impact (m bgs)	Appox. Volume (m^3)	Characterisation Samples	Lab Report	Remedial Actions Undertaken	Validation Action Undertaken	Lab Report Number	Clearance of UF	Additional Notes	Closed?

Appendix D SafeWork Asbestos Flowchart

NSW GOVERNMENT

Managing asbestos in or on soil

March 2014

Contents

1. Introduction

This guide provides general guidance on the assessment and management of asbestos in soil. Managing asbestos in soil has implications for the current and future occupants of the land and/or any workers employed on the site.

The guidance provided in this document applies principally to legacies from poor historical onsite management of asbestos materials, and not to illegal disposal or landfilling activities related to waste generated offsite.

There are other mechanisms for managing:

- emergency situations – eg natural disasters, fires
- naturally-occurring asbestos
- management of derelict mine sites
- asbestos contamination in waste or recycled materials.

Advice relevant to these situations may be found in the citations in section 14 below.

A range of asbestos materials can be found at different residential properties, workplaces, or other sites. Depending on the type of material and its location several regulatory regimes can be relevant.

The objective of the approach outlined here is to ensure that proportionate and practicable controls are applied in accordance with regulatory requirements and in a manner commensurate with actual risk[1].

The principles underlying the guidance in this document are those endorsed by the NSW Heads of Asbestos Coordination Authorities (HACA) and contained in the *NSW Asbestos Blueprint (2011)*. Work health and safety, land-use planning and environmental legislation, and the amended *National environment protection (Assessment of site contamination) measure 1999 (April 2013)* are referenced where they apply.

Terminology consistent with industry standards has been used wherever possible.

2. Human health risk from asbestos in or on soil

Asbestos only poses a risk to human health when elevated levels of asbestos fibres are breathed in.

The likelihood of exposure occurring depends upon the potential for the asbestos material to release fibres, whether the asbestos material is contained or covered, and any operational control measures or personal protective equipment which have been applied to limit the generation and/or inhalation of airborne fibres.

Non-friable asbestos, previously referred to as 'bonded asbestos', in sound condition represents a low human health risk. However, friable asbestos materials or damaged, crumbling bonded asbestos, have the potential to generate, or be associated with, free asbestos fibres and therefore must be carefully managed to minimise the release of asbestos fibres into the air.

1 The pragmatic approach described in the Western Australia Department of Health's *Guidelines for the assessment, remediation and management of asbestos-contaminated sites in Western Australia (2009)* has been particularly helpful.

3. Factors that influence how asbestos in soil is managed

The site history and information about how it came to be contaminated with asbestos provide useful insight into the nature of the issue and what further information may be needed. The principal considerations in determining how to manage asbestos in soil include:

- the form of the asbestos containing material, and how readily it generates airborne fibres
- the extent or scale of asbestos contamination on the property
- whether the asbestos is predominantly on the surface or is buried at depth
- the current and possible future uses of the affected land and whether these uses may materially affect the risk posed from the asbestos containing material.

These factors are considered in more detail in the following sections. If there is any uncertainty in how to assess these factors, it is recommended that independent expert advice is sought (see section 10, below).

4. Form of asbestos and potential to generate airborne asbestos fibres

The potential for materials containing asbestos to generate airborne asbestos fibres (at which point asbestos may become a human health risk) varies significantly depending upon the form of the asbestos material.

Non-friable asbestos is asbestos bound in a matrix such as cement or resin. 'Fibro' is the most common form of non-friable asbestos. When in a sound condition, the potential for these materials to release fibres is relatively low.

Friable asbestos is usually in the form of loose asbestos that is not bound together. The most common forms of friable asbestos are thermal lagging used on steampipes, boilers, as fire protection, ceiling insulation and the like, and raw asbestos waste from asbestos products manufacturing. Friable asbestos can usually be broken up or crumbled using hand pressure to generate free fibres. If it is disturbed, friable asbestos has the potential to generate significant quantities of airborne fibres, and because of this requires a high level of control.

Schedule B1 of the *National environment protection (Assessment of site contamination) measure 1999 (April 2013)* (scew.gov.au) provides more comprehensive definitions of the various forms of asbestos and how to identify them. Independent expert advice should be sought (see section 10, below) if it is not clear what form of asbestos is present.

5. Assessing and managing 'non-friable' asbestos ('fibro') in or on soils

Often fragments of bonded asbestos material such as fibro are present in or on the soil surface as a result of incomplete clean-up following the demolition of structures that contained asbestos cement products. Where asbestos material is buried throughout the soil stratum (below 10cm) as a result of onsite disposal of demolition wastes, the approach outlined in section 7 should be applied.

Where fragments of non-friable asbestos (eg fibro cement) are identified on the soil surface, then the fragments may be removed by hand-picking, tilling or screening (applying suitable work health and safety practices). A fact sheet *How to deal with asbestos fibro in soil at home* (catalogue no. WC01254) provides advice to homeowners on how to manage small quantities of fibro sheet and fragments found at home. A grid pattern should be applied to ensure a structured and systematic approach to assessment and removal.

Upon completion, no visible asbestos fragments should be present on the surface. Where practicable, the top 10cm of wetted soil should be gently raked to expose any residual asbestos fragments. The collected material should be securely wrapped in plastic sheeting and taken to an appropriate landfill (see section 8, below).

If the site is a workplace (as defined in the work health and safety legislation), only workers who have been appropriately trained in asbestos removal techniques, that include identification, safe handling and suitable control measures, may conduct asbestos removal work or asbestos related work at a workplace. Safe Work Australia has published *How to safely remove asbestos code of practice (2011)* which provides additional information on safety standards when removing asbestos.

For non-friable asbestos totalling greater than the equivalent of 10 square metres of fibro sheet or fragments, only a class A or B asbestos removal licence holder may conduct the asbestos removal work. If there is uncertainty about the quantity of asbestos material, a licensed removalist must be engaged.

All workers involved in removing fragments of non-friable asbestos constituting a total of greater than 10 square metres of fibro, must hold current certification showing that they have successfully completed the approved non-friable removal course.

Soil sampling for the detection of asbestos fibres released from fragments of non-friable asbestos such as fibro is not required where the non-friable asbestos product is in good condition – ie it is not weathered or damaged and is unlikely to release fibres unless carelessly handled.

For more complex sites, the *National environment protection (Assessment of site contamination) measure 1999 (April 2013)* identifies criteria for assessment and remediation of non-friable asbestos in soil. Independent expert advice should be used when applying these quantitative measures (see section 10, below).

For further information on management techniques for non-friable asbestos, see the *Management of asbestos in the non-occupational environment* (enHealth 2005) and *Public health and contamination of soil by asbestos cement material 2010* (WA Department of Health 2010).

6. Assessing and managing 'friable' asbestos in or on soil

If friable asbestos is identified in or on soil, all the following actions are recommended:

- isolate and secure the area by installing warning signs and a temporary barricade (eg marker tape) around the affected area to prevent anyone from accidentally disturbing the materials and generating airborne asbestos fibres
- to minimise the release of fibres into the air keep soil damp (but not flooded); and, if it is safe to do so, cover the area with plastic sheeting
- engage an independent expert (see Section 10, below) as soon as practicable to provide specialist advice on how to manage the situation.

In NSW, only class A asbestos removal licence holders are permitted to conduct asbestos removal work or asbestos related work that involves friable asbestos. All workers involved in friable asbestos removal work must hold current certification in relation to the approved friable removal course[2].

Where friable asbestos is present only a licensed asbestos assessor may undertake air monitoring, risk assessments and issue clearance certificates for removal work.

The *National environment protection (Assessment of site contamination) measure 1999 (April 2013)* identifies criteria for assessment and remediation of friable asbestos in soil. Independent expert advice should be used when applying these quantitative measures (see section 10, below).

7. Asbestos materials buried at depth in soil

Asbestos only presents a risk if fibres may become airborne and breathed in. Where non-friable or friable asbestos is present in soil at depth (greater than 0.5 metres below the soil surface), the asbestos material should not be disturbed unless it is for the purpose of site remediation, redevelopment or site management. Any remediation work should be conducted in a controlled manner in accordance with protocols for contaminated sites assessment and management[3].

For sites where asbestos is found at depths between 10cm and 0.5 metres, a site-specific assessment should be undertaken to determine an appropriate management strategy. For guidance on assessment methods, refer to Western Australia's Department of Health's *Management of small-scale low-risk soil asbestos contamination (2009)* and *Guidance note on identification, assessment and management of asbestos contamination in regional public areas (2011).*

For more complex sites, where asbestos is distributed throughout the soil stratum, the *National environment protection (assessment of site contamination) measure 1999 (April 2013)* identifies criteria for asbestos in soil that are unlikely to generate elevated levels of airborne asbestos. These criteria provide a useful yardstick for assessment and clean-up of more complex sites that contain significant quantities of buried asbestos. Independent expert advice should be used when applying these quantitative measures (see section 10, below).

It is important to ensure that owners and future purchasers are aware of the presence of asbestos so that they can apply appropriate precautions if/when the land is disturbed or redeveloped. In NSW, therefore, the presence of buried asbestos at concentrations above the *National environment protection (Assessment of site contamination) measure 1999 (April 2013)* criteria, should be noted on the section 149 planning certificate issued under the *Environmental Planning and Assessment Act 1979* (legislation.nsw.gov.au) or be captured on the land title.

Implementation of an asbestos management plan or environmental management plan can aid in the management of the risks associated with any asbestos that remains on a site.

Information that could be included in a management plan is available in Appendix E of WA Health's *Guidelines for the assessment, remediation and management of asbestos-contaminated sites in Western Australia – May 2009* (public.health.wa.gov.au).

2 *Class A asbestos removal licence: remove friable asbestos* (catalogue no. WC03527) workcover.nsw.gov.au

3 For more information on contaminated sites assessment and management protocols, please refer to the *Guidelines for the NSW site auditor scheme (2nd Edition) (DEC 2006)* epa.nsw.gov.au and the *National environment protection (Assessment of site contamination) measure 1999 (NEPC 2013)* scew.gov.au

8. Management of asbestos waste

There are regulatory requirements under clause 42 of the *Protection of the Environment Operations (Waste) Regulation 2005* that apply to the management of asbestos waste, including:

- Waste must be stored on the premises in an environmentally safe manner.
- Non-friable asbestos material must be securely packaged at all times.
- Friable asbestos material must be kept in a sealed container.
- Asbestos-contaminated soil must be wetted down.
- All asbestos waste must be transported in a covered, leak-proof vehicle.
- Asbestos waste must be disposed of at a landfill site that can lawfully receive this waste. Always contact the landfill beforehand to find out whether asbestos is accepted and any requirements for delivering asbestos to the landfill.
- It is illegal to dispose of asbestos waste in domestic garbage bins.
- It is also illegal to re-use, recycle or dump asbestos waste.

9. Regulation of asbestos in soil under the *Contaminated Land Management Act 1997* and reporting requirements under section 60

In general, the presence of asbestos does not warrant that a site be notified to the NSW Environment Protection Authority (EPA) under the *Contaminated Land Management Act 1997* (CLM Act).

Sites may be regulated under the CLM Act where the EPA determines that there is 'significant contamination' of land, such as where the scale and nature of the contamination is giving rise to actual or potential harm to human health or the environment. This could occur where there are elevated levels of asbestos fibres in air and the responsible party is not addressing the source of the risk.

Examples of such regulated sites may include former asbestos manufacturing sites (eg James Hardie) and/or their asbestos waste disposal sites or large emplacements of friable material such as thermal lagging from power stations. These sites should be notified to the EPA under section 60 of the CLM Act and, following assessment, may be subsequently regulated by the EPA.

Incidents of illegal dumping, or sites that contain non-friable asbestos material (such as fibro) do not need to be reported to the EPA under section 60 of the CLM Act as these would be managed under the framework outlined in the sections above. Incidents of illegal dumping can be reported to the local council or to EPA's Environment Line (**13 15 55**).

10. Obtaining independent expert advice on asbestos in soil

The assessment of asbestos in soil should only be conducted by a competent person who has acquired through training, qualification or experience, the knowledge and skills to identify, investigate and assess asbestos and to develop appropriate risk management strategies.

If occupational hygienists are engaged to provide advice, they should:

- be certified as a full member of the Australian Institute of Occupational Hygienists Incorporated
- have experience in relation to asbestos identification, handling and disposal
- have current professional indemnity insurance.

WorkCover's website contains listings of licensed asbestos assessors and licensed asbestos removalists.

Where friable asbestos is present, it is a legal requirement that only a WorkCover Licensed Asbestos Assessor may undertake air monitoring and risk assessments, and issue clearance certificates for removal work.

The testing of all samples must be undertaken at a laboratory accredited by nata.asn.au (or its mutual recognition agreement partners).

For the appropriate classification of asbestos waste, the competent person should be independent and have previous experience in classifying waste in accordance with the *Waste classification guidelines* and the *Protection of the Environment Operations Act 1997*.

11. Relevant Government Agencies

The local council may be contacted where asbestos in or on soil is found on a residential or non-workplace property. Local councils can provide advice on planning requirements, information on land restrictions or the existence of other information about a particular parcel of land, and details of the appropriate facilities for receiving asbestos-contaminated waste.

The EPA should be contacted where asbestos is found on a licensed premises (under the *Protection of the Environment Act 1997*), public land, or where the contamination may be considered significant under the CLM Act (see section 9). The EPA may also provide advice on the transport and disposal of asbestos waste materials.

WorkCover should be contacted for asbestos identified in or on soil at a workplace or if there are questions or concerns about asbestos removalists or asbestos remediation works.

The *Asbestos blueprint* (catalogue no. WC03508) (workcover.nsw.gov.au) provides a complete list of roles and responsibilities of government agencies.

12. Additional guidance on the assessment and management of asbestos in or on soil

- *National environmental protection (Assessment of site contamination) measure 1999*, Schedules B1 and B2, NEPC (2013) scew.gov.au
- *Guidelines for the assessment, remediation and management of asbestos-contaminated sites in Western Australia – May 2009*, Western Australia Health (2009) public.health.wa.gov.au
- *Public health and contamination of soil by asbestos cement material 2010, Environmental health guideline* Western Australia Health (2010) public.health.wa.gov.au
- *Asbestos: A guide for householders and the general public – May 2012*, enHealth (2012) health.gov.au
- *Management of asbestos in the non-occupational environment*, enHealth (2005) health.gov.au
- *How to safely remove asbestos code of practice*, Safe Work Australia (2011) workcover.nsw.gov.au

13. Further advice or assistance

- NSW Heads of Asbestos Coordination Authorities (HACA)
  Ph. **13 10 50** workcover.nsw.gov.au

Information for Homeowners and Renovators

- *NSW Government – How to deal with asbestos in soil at home* (catalogue no. WC01254)
- *NSW Government – Fibro and asbestos: A renovator and homeowner's guide* (catalogue no. WC00315)
- *NSW Government – How to safely remove asbestos: code of practice* (catalogue no. WC03561)
- Asbestos Awareness asbestosawareness.com.au

Guidance on selecting an environmental consultant

- epa.nsw.gov.au

Testing laboratories

- Australian National Association of Testing Authorities (NATA) nata.asn.au Ph. **9736 8222**

Find an asbestos license holder asbestos and demolition license holder

- Search workcover.nsw.gov.au

14. Information on related topics

Safely disposing of asbestos waste

- NSW EPA, Waste and Resource Recovery epa.nsw.gov.au
- NSW EPA Environment Line Ph. **13 15 55**

Information on Fire Damaged Sites with Asbestos

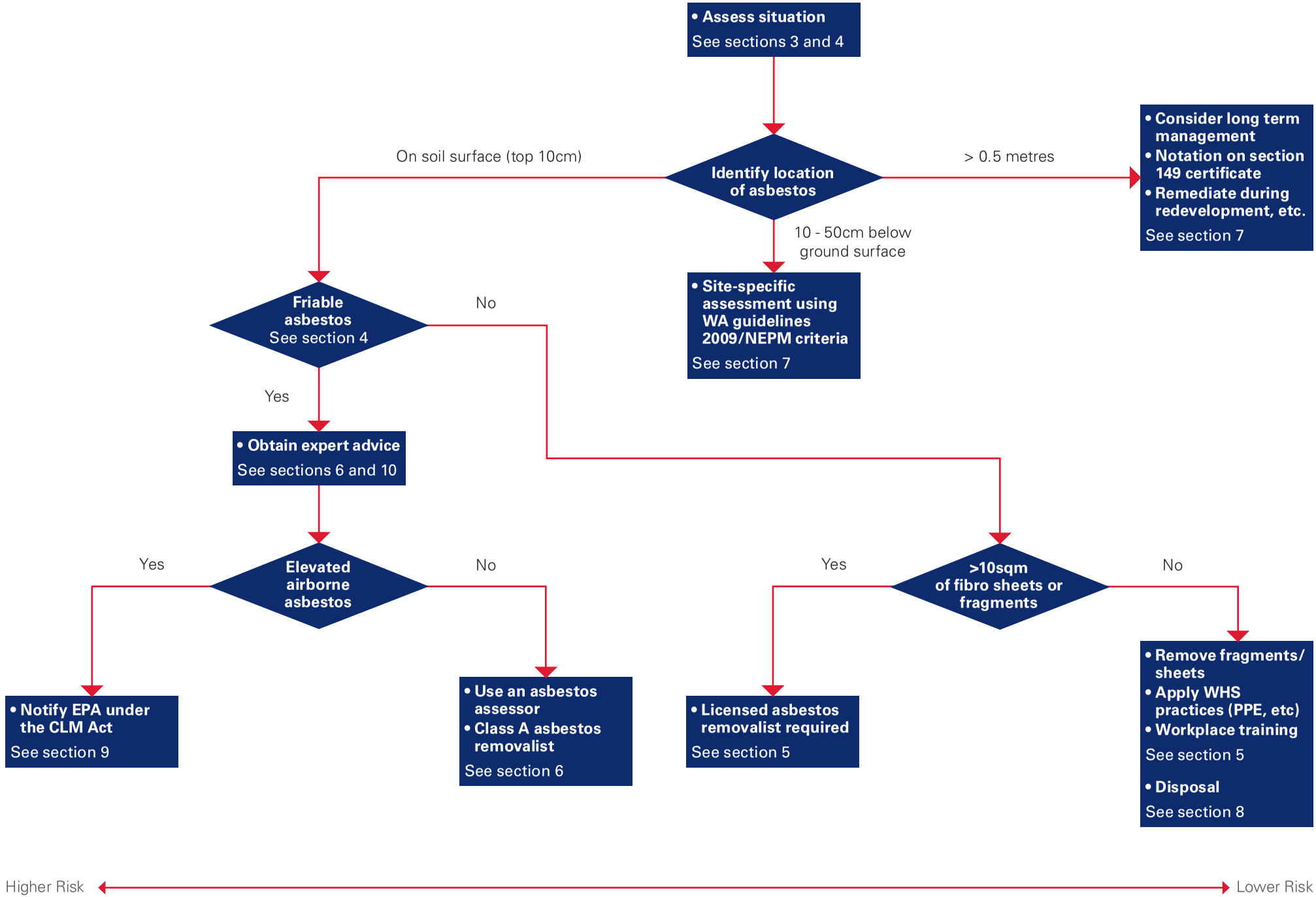
- NSW EPA, Waste and Resource Recovery epa.nsw.gov.au
- NSW EPA Environment Line Ph. **13 15 55**

James Hardie legacy sites

- NSW EPA, Contaminated Sites epa.nsw.gov.au
- NSW EPA Environment Line Ph. **13 15 55**

Information on mine sites and naturally occurring asbestos

- Derelict Mines Program Ph. **1300 736 122** dpi.nsw.gov.au
- NSW EPA Environment Line Ph. **13 15 55** epa.nsw.gov.au
- NSW Government WorkCover Authority of NSW, Work Health and Safety, Asbestos Ph. **13 10 50** workcover.nsw.gov.au
- NSW Ministry of Health. Contact a public health unit Ph. **1300 066 055** health.nsw.gov.au


• Assess situation
See sections 3 and 4
Identify location of asbestos
On soil surface (top 10cm)
> 0.5 metres
10 - 50cm below ground surface
• Consider long term management
• Notation on section 149 certificate
• Remediate during redevelopment, etc.
See section 7
• Site-specific assessment using WA guidelines 2009/NEPM criteria
See section 7
Friable asbestos
See section 4
No
Yes
• Obtain expert advice
See sections 6 and 10
Elevated airborne asbestos
Yes
No
• Notify EPA under the CLM Act
See section 9
• Use an asbestos assessor
• Class A asbestos removalist
See section 6
>10sqm of fibro sheets or fragments
Yes
No
• Licensed asbestos removalist required
See section 5
• Remove fragments/ sheets
• Apply WHS practices (PPE, etc)
• Workplace training
See section 5
• Disposal
See section 8
Higher Risk
Lower Risk

Catalogue No. **WC01253** WorkCover Publications Hotline **1300 799 003**
WorkCover NSW, 92–100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252 | Customer Service Centre **13 10 50**
Website **workcover.nsw.gov.au**
ISBN 978 1 74341 507 8

SAVE AS PRINT

NSW GOVERNMENT | SafeWork NSW

Work Health and Safety Act 2011 (WHS Act) –
Work Health and Safety Regulation 2017(WHS Regulation)

ASBESTOS AND DEMOLITION CHECKLIST

OCTOBER 2016

Completed by

Date

Time

Company name

Nominated supervisor

Site address

Contact number

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Is the workplace secured from unauthorised access?	298	☐	☐	☐	
Are barricades erected to delineate the asbestos removal area?	469	☐	☐	☐	
Is there adequate signage for asbestos removal work?	469	☐	☐	☐	
Are adequate facilities available for workers (toilets, meal area, drinking water, means to wash hands)?	41	☐	☐	☐	
Is there an adequate first aid kit available?	42	☐	☐	☐	
Is someone trained in first aid?	42	☐	☐	☐	
Is there an emergency plan for the workplace?	43	☐	☐	☐	
Is the designated asbestos supervisor present for friable work?	459 and 529	☐	☐	☐	
Is the designated asbestos supervisor present for non friable work (ie able to arrive at the workplace within 20 minutes)?	459 and 529	☐	☐	☐	
Does the contractor hold the correct licence for the work being undertaken?	485 and 487	☐	☐	☐	

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Has licensed asbestos removal work been notified to SafeWork NSW?	142 and 466	☐	☐	☐	
Are work surfaces and access ways clear of debris and trip hazards?	40	☐	☐	☐	
Is there an asbestos removal control plan prepared?	464	☐	☐	☐	
Is the Asbestos Removal Control Plan readily accessible?	465	☐	☐	☐	
Are there arrangements (eg health and safety representative, health and safety committee or other agreed arrangements) to consult with workers on safety matters?	Sections 47 – 49 of the WHS Act	☐	☐	☐	
Have safe work method statements been prepared for high risk construction work?	299	☐	☐	☐	
Is there an asbestos register?	450 and 463	☐	☐	☐	
Has the structure been inspected to determine whether asbestos is present?	451–453	☐	☐	☐	
Do all persons working with asbestos have correct training?	460	☐	☐	☐	
Do all workers have construction induction cards?	316	☐	☐	☐	
Is plant inspected on a regular basis?	213	☐	☐	☐	
Do workers have high risk work licences (if required)?	81	☐	☐	☐	
Is correct personal protective equipment provided, fit tested, and used?	44	☐	☐	☐	
Have all services been disconnected (ie electrical, gas, water, fire)?	163	☐	☐	☐	
Is dust generated by demolition activity being controlled?	35	☐	☐	☐	
If air monitoring is undertaken, is it done by a competent person?	475 and 482	☐	☐	☐	
Are workers prevented from falling through open penetrations and unprotected edges?	78	☐	☐	☐	
Are exclusion zones or overhead protection in place to stop building debris from falling on workers below?	54	☐	☐	☐	
Is a compliant scaffold provided?	225	☐	☐	☐	
Has the handover certificate been provided for the scaffold?	225	☐	☐	☐	

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
For a Class A Friable Asbestos Removal License holder, is there a current certified safety management system in place?	493	☐	☐	☐	
Are arrangements in place for a clearance inspection to be carried out, after asbestos is removed, by an independent licensed assessor or competent person?	473	☐	☐	☐	
Is asbestos waste and contaminated PPE planned to be disposed of as soon as practicable at a site authorised to accept asbestos waste?	472	☐	☐	☐	
Has notification of asbestos removal been given to the neighbours?	467	☐	☐	☐	
Are there facilities available to decontaminate the following: asbestos removal area, plant used in the asbestos removal area, workers carrying out asbestos removal work, other persons who have access to the asbestos removal area?	471	☐	☐	☐	
Does the licence holder have systems in place for decontamination and annual maintenance of Class H asbestos vacuum cleaners?	35	☐	☐	☐	
Has health monitoring for workers been undertaken by a licensed medical practitioner?	435–444	☐	☐	☐	

Notes

Catalogue No. SW08481
ISBN 978 1 74341 158 2
SafeWork NSW, 92–100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252 | Customer Service Centre **13 10 50**
Website **www.safework.nsw.gov.au**

Document Distribution

Rev No.	Copies	Recipient	Date
Rev A	1 x Electronic	Monica Ngo – Frasers monica.ngo@fraserspropery.com.au	25/10/2024
Rev 0	1 x Electronic	Monica Ngo – Frasers monica.ngo@fraserspropery.com.au	9/12/2024
Rev 1	1 x Electronic	Monica Ngo – Frasers monica.ngo@fraserspropery.com.au	23/06/2025

Document Status

Rev No.	Author	Reviewer	Approved for Issue		
		Name	Name	Signature	Date
Rev A	Samuel Knott	Seth Molinari	Draft for client comment		25/10/2024
Rev 0	Samuel Knott	Seth Molinari	Seth Molinari		9/12/2024
Rev 1	Samuel Knott	Seth Molinari	Seth Molinari		23/06/2025

www.jbsg.com.au

JBS&G

Adelaide
Kaurna Country | 100 Hutt St,
Adelaide, SA 5000
T: 08 8431 7113

Brisbane
Turrbal/Yuggera Country | Level 37,
123 Eagle Street, Brisbane, QLD 4000
T: 07 3211 5350

Bunbury
Wardandi Country | 177 Spencer
Street Bunbury, WA 6230
T: 08 9792 4797

Canberra
Ngunnawal Country | Level 1, The Realm
18 National Circuit Barton, ACT 2600
T: 02 6198 3278

Darwin
Larrakia Country | Suite G1, Level 1,
48-50 Smith Street, Darwin NT 0800
T: 08 8943 0600

Hobart
Muwununa/Nuenon Country | Level 6,
111 Macquarie Street Hobart, TAS 7000
T: 03 6108 9054

Melbourne
Wurundjeri Country | Level 19,
31 Queen Street, Melbourne VIC 3000
T: 03 9642 0599

Newcastle
Awabakal/Worimi Country | 61 / 63
Parry Street Newcastle West, NSW 2302
T: 02 8245 0300

Perth
Whadjuk Country | Allendale Square,
Level 9, 77 St Georges Terrace, WA 6000
T: 08 9380 3100

Sydney
Gadigal Country | Level 1,
50 Margaret Street, Sydney, NSW 2000
T: 02 8245 0300

Wollongong
Dharawal Country | Suite 1A, 280 - 286
Keira Street, Wollongong, NSW 2500
T: 02 4225 2647