



Asbestos Management Plan

209-308 Aldington Road and 59-63 Abbotts Road, Kemps Creek, NSW, 2178

Prepared for: ESR Australia

EP3244.008_ESR_Kemps Creek_AMP_v1 | 28 August 2024



Asbestos Management Plan

209-307 Aldington Road and 59-63 Abbotts Road, Kemps Creek, NSW, 2178

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28 August 2024

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LIMITATIONS

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It is not possible in an Asbestos Management Plan to present all data, which could be of interest to all readers of this report. Readers are referred to any referenced investigation reports for further data.

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Table of Contents

1	Introduction	1
1.1	Background.....	2
1.2	Objectives.....	3
1.3	Scope of Work.....	3
2	Site Identification	4
3	Site Conditions and Surrounding Environment	5
3.1	Site Description and Surrounding Land Use	5
3.2	Site Characterisation and Extent	5
4	Legislation, Regulations, Codes of Practice and Standards	6
5	Asbestos Management Plan.....	7
5.1	Purpose and Areas Affected.....	7
5.2	Asbestos Types	7
5.3	Roles and Responsibilities	7
5.4	Health and Safety Management.....	13
5.5	Works within Cover Materials over Placement Areas.....	14
5.6	Works within Asbestos Placement Areas	15
5.7	Dust Management During Asbestos Works.....	15
5.8	Asbestos Waste Management During Asbestos Works	16
5.9	Site Access Control, Signage and Communication During Asbestos Works	17
5.10	Personal Protective Equipment Requirements During Asbestos Works.....	17
5.11	Plant Operator Requirements During Asbestos Works	18
5.12	Airborne Asbestos Monitoring During Asbestos Works.....	18
5.13	Visual Clearance Inspection, Validation Sampling and Asbestos Clearance Certificates Following Asbestos Works.....	19
5.14	AMP Review	21
6	Unexpected Asbestos Finds Procedure.....	22
6.1	Minor and Numerous Bonded (Non-Friable) Asbestos Finds (<10 m ²)	22
6.2	Bonded (Non-Friable) Asbestos Finds (>10 m ²) or Friable Asbestos Finds	22
7	Conclusion	24

List of Tables in Body of Report

Table 1 – Site Identification	4
Table 2 – Responsibilities for AMP Implementation	7
Table 3 – Airborne Asbestos Monitoring Action Levels.....	23

List of Attached Figures

Figure 1	Site Location and Layout
Figure 2	Existing Lot Boundaries
Figure 3	Development Plan
Figure 4	Placement Areas

List of Appendices

Appendix A	Asbestos Placement Areas Survey Plans
Appendix B	Asbestos Finds Procedure Flow Chart

1 Introduction

ESR Australia Pty Ltd (ESR) engaged EP Risk Management Pty Ltd (EP Risk), to prepare an Asbestos Management Plan (AMP) for the property located at 290-308 Aldington Road and 59-63 Abbotts Road, Kemps Creek, NSW, 2178 (the Site).

The Site covers an area of approximately 32 hectares (Ha) and is legally described as Lots 111, 112 and 113 in Deposited Plan (DP) 1296469. The Site is currently zoned as IN1: General Industrial under the State Environmental Planning Policy (Industry and Employment) 2021 (currency 04.03.2024). The Site has been identified as a State Significant Development (SSD).

The location of the Site mapped against an aerial photograph dated March 2024 has been provided within **Figure 1**, with an overlay of the existing Lot boundaries presented in **Figure 2**. The layout of the Development, with proposed new Lot definitions has been provided in **Figure 3**.

This AMP has been prepared for the ongoing management of asbestos in soil (ASBINS) placed on-site at depth within two (2) asbestos placement areas (the Asbestos Placement Areas), containing concentrations of bonded (non-friable) asbestos below the health screening level (HSL) for a commercial / industrial land use criteria of 0.05 %w/w.

The two (2) Asbestos Placement Areas are described below:

- 1) **Lot 4 Placement Area (Figure 4):** Bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w), were placed within a portion of proposed Lot 4 (currently a portion of Lot 111 and Lot 112 in DP1296469). The Lot 4 Placement Area covered an area of approximately 8,050 m². The Lot 4 Placement Area has a theoretical capacity of 12,500 m³, with an actual volume of 12,384 m³. The average fill depth was 2.9 m, with maximum fill depth of 5.3 m. Material was placed at an approximate depth of 3.2 m – 7.6 m below finished surface levels and covered with Site won clay / shale.
- 2) **Lot 5 Northern Finger Placement Area (Figure 4):** Bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w), was buried within a portion of the proposed Lot 5 Northern Finger (currently a portion of Lot 112 in DP1296469). The Lot 5 Northern Finger Placement Area covered an area of approximately 19,800 m². The Lot 5 Northern Finger Placement Area has a theoretical capacity of 8,500 m³, with an actual volume of 8,185 m³. The average fill depth was 2.1 m, with maximum fill depth of 4.9 m. Material was placed at an approximate depth of 2.2 – 4.8 m below finished surface levels and covered with Site won clay/shale.

The placement of this material on-site was undertaken as part of remediation works undertaken at the Site in accordance with the Remediation Action Plan (RAP) prepared by Alliance Geotechnical Pty Ltd (Alliance 2023¹) and Addendum prepared by EP Risk (EP Risk 2023²). The validation of these works was undertaken by several consultants and have been summarised within the Site Remediation and Validation Report (SRVR) for the Site (EP Risk 2024³).

This AMP is also applicable to the management of unexpected asbestos finds at the Site, outside of the Asbestos Placement Areas.

This AMP should be provided to all workers involved in ground disturbance works within the Asbestos Placement Area and within the boundary of the Site.

¹ Alliance (2023), Remediation Action Plan, 290-308 Aldington Road and 59-63 Abbotts Road Kemps Creek NSW, Alliance geotechnical & environmental solutions, 21 June 2023 ref: 13546-ER-2-2_Rev2, dated 21 June 2023.

² EP Risk (2023) Addendum (01) – Alliance Remediation Action Plan, Westlink Stage 1 -290-308 Aldington Road and 59-63 Abbotts Road Kemps Creek, NSW, 2178 NSW, EP Risk Management Pty Ltd, ref: EP3244.004_Addendum 01_v1, dated 12 September 2023.

³ EP Risk (2024) Site Remediation and Validation Report (SRVR), Westlink Stage 1 -290-308 Aldington Road and 59-63 Abbotts Road Kemps Creek, NSW, 2178, ref: EP3244.006_v1, dated 27 August 2024.

1.1 Background

ESR acquired the Site with the intention to develop a commercial / industrial warehouse precinct. Remediation works were undertaken in accordance with the RAP (Alliance 2023) and Addendum (EP Risk 2023) over two (2) phases:

- Phase 1 of the Remediation Project - was undertaken between 10 July 2023 and 25 September 2023 by Class A Licensed Asbestos Remediation Contractor (LARC), TCE Contracting Pty Ltd (TCE) as engaged by JK Williams Pty Ltd (JKW) with asbestos hygiene and validation works undertaken by EP Risk. EP Risk was engaged by ESR from 10 July 2023 to 04 September 2023, and later engaged by TCE from 19 September 2023 to 25 September 2023.
- Phase 2 of the Remediation Project - was undertaken 28 September 2023 and 03 November 2023, by Class A LARC Omega Hazmat Pty Ltd (Omega) and Penny Green Pty Ltd (PG), as engaged by Ground King Civil Pty Ltd (GKC) with asbestos hygiene works undertaken by Foundation Earth Sciences Pty Ltd (FES).

As per the RAP (Alliance 2023), the preferred remediation option for the project involved the following:

- Excavation and disposal of the contaminated material to an approved site or facility, followed, where necessary by replacement with appropriate material; and
- On-site treatment of the contaminated material so that it is destroyed, or the associated risk is reduced to an acceptable level, after which the soil remains on the Site.

Within the Addendum (EP Risk 2023), a remediation hierarchy was developed for the on-site categorisation of materials at the Site. As per the remediation hierarchy, materials considered suitable to be placed on-site at depth, included ASBINS containing bonded (non-friable) asbestos below the adopted HSL (0.05 %w/w). According to the Addendum (EP Risk 2023), bonded (non-friable) asbestos below the adopted HSL (0.05 %w/w) must be placed more than 0.1 m below finished ground level (mBGL), and in areas where no services will be installed. Additional requirements were placed on the burial of the material by the Site Owner, ESR. It is understood ESR required the material to be placed at a minimum > 2 m below finished ground level to ensure adequate clearance from future building works, services and landscaping. Furthermore, the location of this material must be tracked, and a survey undertaken to confirm placement at depth.

It should be noted the material within the Asbestos Placement Areas previously comprised of bonded (non-friable) asbestos above the adopted HSL of 0.05 %w/w, however, was treated by means of emu-picking and mechanical raking to downgrade the material to bonded (non-friable) asbestos below the adopted HSL of 0.05 %w/w, in accordance with the RAP (Alliance 2023) and Addendum (EP Risk 2023).

Moreover, it should be noted that friable asbestos below and above the adopted HSL of 0.001 %w/w and asbestos contaminated building materials were buried on-site within a Containment Cell, located within the new Trunk Drainage Swale, currently within Lot 112 in DP1296469 as summarised and validated within the SRVR (EP Risk 2024). The management of the friable material and asbestos contaminated building materials within the Containment Cell is not covered by this AMP but is provided under the Long-Term Environmental Management Plan (LTEMP) (EP Risk 2024a⁴) for the Site.

⁴ EP Risk (2024a) Long Term Management Plan, *Westlink Stage 1 - 290-308 Aldington Road and 59-63 Abbotts Road Kemps Creek, NSW, 2178*, ref: EP3244.009_v1, dated 27 August 2024.

1.2 Objectives

The objective of this AMP is to provide procedures for the management of ASBINS placed on-site at depth, within two (2) Asbestos Placement Areas, containing bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w) and the management of unexpected asbestos finds at the Site, outside of the Asbestos Placement Areas (excluding the Containment Cell which is subject to an LTEMP).

This AMP should be provided to all workers involved in ground disturbance works within the Asbestos Placement Area and within the boundary of the Site.

1.3 Scope of Work

The scope of work included the preparation of this AMP accordance with the requirements of NSW legislation, NSW Environment Protection Authority (EPA) and SafeWork NSW Codes of Practice and Guidelines.

2 Site Identification

The Site identification details are presented in **Table 1** below.

Table 1 – Site Identification	
Item	Description
Site Address	209-307 Aldington Road and 59-63 Abbotts Road, Kemps Creek, NSW, 2178 (Figure 1)
Legal Description	Site: Lot 111, 112 and 113 in DP 1296469 (Figure 2) Lot 4 Placement Area: Portion of Lot 111 and Lot 112 in DP 1296469 (Figure 3 and 4) Lot 5 Northern Finger Placement Area: Portion of Lot 112 in DP1296469 (Figure 3 and 4)
Approximate Site Area	Site: 32 Hectares (ha) (Site) Lot 4 Placement Area: Approximately 8,050 m ² Lot 5 Northern Finger Placement Area: Approximately 19,800 m ²
Site Operator	ESR
Municipality	Penrith City Council
Current Land Zoning	IN1: General Industrial
Future Land Zoning	

3 Site Conditions and Surrounding Environment

3.1 Site Description and Surrounding Land Use

The Site is situated at the end of Abbotts Road, Kemps Creek and encompasses three (3) Lots, Lot 111, 112 and 113 in DP 1296469 (**Figure 2**).

A summary of the Site conditions based on the most recent aerial photograph (17.05.2024) has been provided below:

- Earthworks at the Site have been largely completed;
- All former residential properties within the boundary of the Site have been demolished;
- All former dams and man-made channels on the Site have been drained and filled in;
- An OSD basin has been constructed in the western end of the Site;
- Site compounds, sheds and associated parking lots for the earthworks have been established north of the OSD basin;
- A large warehouse is currently under construction towards the northern portion of the Site; and
- Earthworks have commenced in the adjacent area, to the west of the Site.

The layout of the Development, with proposed new Lot definitions is provided as **Figure 3**.

The Lot 4 Placement Area is located within a portion of Lot 111 and Lot 112 in DP1296469 and will exist within the newly proposed Lot 4 boundary (**Figure 4**). The Lot 4 Placement Area is surrounded by the OSD basin to the west, Trunk Drainage Swale and Containment Cell to the North, the Private Access Road to the east and Lot 4 to the south.

The Lot 5 Northern Finger Placement Area is located within a portion of Lot 112 in DP1296469 and will exist within the newly proposed Lot 5 boundary (**Figure 4**). The Lot 5 Northern Finger Placement Area is surrounded by the Private Access Road to the west and north, and Lot 5 to the east and south.

3.2 Site Characterisation and Extent

The Lot 4 Placement Area and Lot 5 Northern Finger Placement Area (**Figure 4**) comprises of bonded (non-friable) asbestos below adopted HSL of 0.05 %w/w as detailed in **Section 1**.

Within Lot 4 Placement Area, materials have been placed at depths of between 3.2 – 7.6 m below finished surface level. Within the Lot 5 Northern Finger Placement Area, materials have been placed at depths of 2.2 – 4.8 m below finished surface levels. Both Asbestos Placement Areas had site-won clay and shale placed on top as cover material, as shown in the survey plans attached within **Appendix A** (JK Williams 2024⁵).

There is small chance that minor friable ASBINS, likely below the adopted HSL of 0.001 %w/w is present within the Asbestos Placement Areas, due to degradation of bonded (non-friable) ACM through the process of emu-picking and mechanical raking from remediation works (EP Risk 2024).

There is a low potential that further asbestos may be present within other areas of the Site during future maintenance or construction works. These finds should be managed in accordance with the Unexpected Finds Protocol (UFP) in **Appendix B**.

⁵ JK Williams (2024), Remediation Works – Non-Friable (B2/B3) Burial Zone Report, *Westlink Stage 1 – Aldington Road and Abbotts Road, Kemps Creek, NSW*, ref: JKW Report B2 Material 1 Rev2, no date.

4 Legislation, Regulations, Codes of Practice and Standards

This AMP has been prepared in accordance with requirements from the following documents:

- *Work Health and Safety Act 2011 (NSW) (WHS Act).*
- *Work Health and Safety Regulation 2017 (NSW) (WHS Regulation).*
- *Code of Practice for Management and Control of Asbestos in Workplaces*, National Occupational Health and Safety Commission (NOHSC 2018 (2005))
- *Code of Practice How to Safely Remove Asbestos*, SafeWork NSW (December 2022) (SafeWork NSW 2022).
- *Code of Practice How to manage and control asbestos in the Workplace*, SafeWork NSW (December 2022) (SafeWork NSW 2022a).
- Australia 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)].
- National Environmental Protection Council (NEPC) *National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 1999*, as amended, April 2013 (ASC NEPM 2013).
- Australian Standard (AS) 4964-2004, *Method for the qualitative identification of asbestos in bulk samples*.
- *Protection of the Environment Operations Act 1997 (NSW) (POEO Act).*
- *Protection of Environment and Operations (Waste) Regulation (2014) (NSW) (POEO Waste Regulation).*
- *NSW EPA Waste Classification Guidelines, Part 1 - Classifying Waste* (NSW EPA, 2014).
- *NSW EPA Contaminated Land Guidelines, Sampling Design Part 1 – Application* (NSW EPA, 2022).
- Australian Standard (AS) 1319 – *Safety Signs for the Occupational Environment*.
- *Workplace Exposure Standards for Airborne Contaminants*, Safe Work Australia, 18 January 2024 (SWA, 2024).
- Western Australia (WA) Department of Health (DoH) *Guidelines for The Assessment, Remediation and Management of Asbestos Contaminated Sites* (WA DoH 2021).

5 Asbestos Management Plan

5.1 Purpose and Areas Affected

The AMP outlines procedures and measures required to protect the health and safety of workers who are involved in ground disturbance works within the Asbestos Placement Areas with known bonded (non-friable) asbestos contamination (**Figure 4**) and within the broader Site area, in which asbestos may be encountered as an unexpected find (excluding the Containment Cell, which is subject to an LTEMP) (**Figure 1**).

The Asbestos Placement Areas contain ASBINS below the adopted HSL (0.05 %w/w) as described in **Section 1** and **Figure 4**. There is small chance that minor friable ASBINS, likely below the adopted HSL of 0.001 %w/w is present within the Asbestos Placement Areas, due to degradation of bonded (non-friable) ACM through the process of emu-picking and mechanical raking from remediation works (EP Risk 2024).

There is a low possibility ACM may be identified outside of the two (2) Asbestos Placement Areas. Unexpected finds should be managed as per the Unexpected Finds Procedure in **Section 6**.

Procedures for handling and disposing of any identified ACM and ASBINS (if encountered) during works/maintenance at the Site are provided within this section.

These procedures and measures are required to prevent potential adverse health effects on any future workers or neighbouring community in accordance with relevant National Codes of Practice and WHS Legislation.

5.2 Asbestos Types

Bonded (non-friable) asbestos material is defined by SafeWork NSW (2022) as being “*material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.*” This includes bonded (non-friable) asbestos fragments found in soils, subject to laboratory analysis for respirable fibres.

Friable asbestos is defined by SafeWork NSW (2022) as being “*material that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos*”. This includes asbestos fibre impacted soils (AF or FA) as identified by laboratory analysis.

Mechanical disturbance of the fragments may result in the release of fibres and therefore such activities should be managed to prevent any fibres becoming airborne. The primary issue associated with the asbestos contamination is inhalation of respirable asbestos fibres if the materials were to be disturbed and/or abraded. A secondary issue with asbestos contamination is disposal of excess spoil that may be impacted with asbestos.

5.3 Roles and Responsibilities

Terminology and roles and responsibilities relevant to the Site and this AMP are provided in **Table 2** below.

Table 2 – Responsibilities for AMP Implementation	
Position and Company/Entity	Responsibilities
Person Conducting a Business or Undertaking (PCBU)	In accordance with the provisions of the WHS Regulation prepared under the WHS Act, the PCBU is appointed as the Principal Contractor for the purpose of assigning roles and responsibilities for this AMP. For the purposes of this AMP, ESR are considered the PCBU and the AMP has been prepared for the use of its employees, staff and sub-contractors.
Worker	Any worker on the Site, including any contractor or sub-contractor.

Table 2 – Responsibilities for AMP Implementation	
Position and Company/Entity	Responsibilities
	<p>Workers are responsible for undertaking their tasks in a safe manner.</p> <p>Workers at the Site must undertake site-specific induction, participate in asbestos awareness training and comply with the AMP if works are planned:</p> <ul style="list-style-type: none"> • Within the cover materials over the Asbestos Placement Areas; or • Below the cover materials, within the Asbestos Placement Areas; or • Or should asbestos be identified at the Site, outside the Asbestos Placement Areas. <p>If asbestos is encountered as an unexpected find, workers must stop work, the area made safe by means of an exclusion zone and the PCBU should be notified.</p>
Asbestos Consultant / Competent Person	<p>A person who has acquired through training or experience the knowledge and skills of relevant asbestos removal industry practice and holds a certification in relation to the specified vocational education and training (VET) course for asbestos assessor work or a tertiary qualification in occupational health and safety, occupational hygiene, science, building, construction or environmental health. For all other purposes, competent person means a person who has acquired through training, qualification or experience, the knowledge and skills to carry out the task.</p> <p>An Asbestos Consultant / Competent Person shall be engaged by the PCBU to assess any suspected ACM, to determine the type and potential volume of ACM to assist with determination of management measures, undertake asbestos hygiene services and to prepare a management/remediation plan, if necessary.</p> <p>An Asbestos Consultant / Competent Person shall be engaged where the CoPC is defined as bonded (non-friable) asbestos.</p> <p>The Asbestos Consultant / Competent Person shall:</p> <ul style="list-style-type: none"> • Provide a remediation or management strategy prior to works commencing; • Provide on-site supervision of all potential asbestos works; • Conduct static / control asbestos air monitoring during any potential asbestos works (where required) in accordance with Section 5.12⁶ and display daily results for the information of workers; • Provide on-site advice, if required, in relation to suspected asbestos containing materials and the management of asbestos issues associated with the works; • Be available, if required, for consultation with regards to the conditions and requirements of this AMP; • Conduct visual clearance inspections and clearance asbestos air monitoring (where required) to confirm the removal of all visible asbestos and the

⁶ Asbestos air monitoring is required for any friable asbestos work and is recommended for non-friable asbestos removal in or adjacent to public areas.

Table 2 – Responsibilities for AMP Implementation

Position and Company/Entity	Responsibilities
	<p>suitability of the work site prior to works recommencing without asbestos controls; and</p> <ul style="list-style-type: none"> Conduct validation sampling, for the clearance and validation of soils suspected of containing bonded (non-friable) and friable asbestos. Validation sampling for bonded (non-friable) impacted soils should involve on-site field screening a 10 L soil sample through a 7 mm sieve. Validation sampling for friable impacted soils should involve on-site field screening a 10 L soil sample through a 7 mm sieve and the collection of 500 mL soil samples for gravimetric analysis at a National Association of Testing Authorities (NATA) accredited laboratory.
Licensed Asbestos Assessor (LAA)	<p>An asbestos consultant who holds an asbestos assessor licence and is therefore a Licensed Asbestos Assessor (LAA).</p> <p>A LAA shall be engaged where the CoPC is defined as friable asbestos.</p> <p>In addition to the responsibilities specific to an Asbestos Consultant / Competent Person, an LAA is responsible for undertaking control and clearance asbestos air monitoring and conducting visual clearance inspections for friable asbestos remediation works.</p> <p>Validation sampling for friable impacted soils should involve on-site field screening a 10 L soil sample through a 7 mm sieve and the collection of 500 mL soil samples for gravimetric analysis at a National Association of Testing Authorities (NATA) accredited laboratory.</p>
Licensed Asbestos Removal Contractor (LARC)	<p>A PCBU who is licensed under the Work Health and Safety (WHS) Regulation to carry out Class A (friable) or Class B (non-friable) asbestos removal work.</p> <p>A LARC is responsible for the safe removal of asbestos or any ACM in accordance with the relevant legislation and codes of practice.</p>
Class A LARC (any amount of friable asbestos, notifiable work)	<p>A Class A (friable) LARC must be engaged for the removal of friable asbestos. The Class A licensed asbestos removal contractor will be the primary person responsible and in charge for works on site involving friable asbestos or ASBINS.</p> <p>The Class A asbestos removal contractor responsibilities for notifiable works include:</p> <ul style="list-style-type: none"> Completion of required SafeWork NSW notifications (5 days) for any amount of friable asbestos works are required (Class A work); Preparing a site-specific ARCP prior to commencement of any asbestos removal works; Ensuring compliance with relevant legislation and the conditions of this AMP; Removal of friable ACM or ASBINS; Handling of any friable ACM or ASBINS across Site;

Table 2 – Responsibilities for AMP Implementation

Position and Company/Entity	Responsibilities
	<ul style="list-style-type: none"> • Disposal of friable ACM or ASBINS to a suitably licensed waste facility lawfully able to accept the waste; • Ensure appropriate environmental and safety controls outlined in the ARCP and this AMP are maintained for the duration of the works; • Assisting all site sub-contractors where required in complying with relevant legislation and the procedures outlined in the ARCP and this AMP; • Ensure a wet decontamination area is set-up and operated in accordance with the Code of Practice (SafeWork NSW 2022) (Class A generally requires a wet decontamination unit); and • Ensure all asbestos wastes are handled and disposed to a licensed facility in accordance with the Code of Practice (SafeWork NSW 2022).
Class B LARC (>10 m ² of bonded ACM, notifiable work)	<p>A Class B (non-friable) LARC must be engaged where >10 m² of bonded (non-friable) ACM is identified or will likely be disturbed during the works. The Class B LARC will be the primary person responsible and in charge for works on site involving bonded (non-friable) asbestos or ASBINS.</p> <p>Asbestos removal contractor responsibilities for notifiable works include:</p> <ul style="list-style-type: none"> • Completion of required SafeWork NSW notifications (5 days) for >10 m² of bonded (non-friable) asbestos removal (Class B work); • Prepare a site-specific Asbestos Removal Control Plan (ARCP) prior to commencement of any asbestos removal works; • Ensuring compliance with relevant legislation and the conditions of this AMP; • Removal of bonded (non-friable) ACM or remediate bonded (non-friable) ASBINS via a method approved by the Asbestos Consultant / Competent Person / LAA; • Handling of any bonded (non-friable) ACM or ASBINS across Site; • Disposal of bonded (non-friable) ACM or ASBINS to a suitably licensed waste facility lawfully able to accept the waste; • Ensure appropriate environmental and safety controls outlined in the ARCP and this AMP are maintained for the duration of the works; • Assisting all site sub-contractors where required in complying with relevant legislation and the procedures outlined in the ARCP and this AMP; • Ensure a dry decontamination area is set-up and operated in accordance with the Code of Practice (SafeWork NSW 2022); and • Ensure all asbestos wastes are handled and disposed to a licensed facility in accordance with Code of Practice (SafeWork NSW 2022).

Table 2 – Responsibilities for AMP Implementation

Position and Company/Entity	Responsibilities
Asbestos Awareness Trained Person	<p>An asbestos awareness trained person is someone who has acquired through training, the knowledge and skills to carry out work at a Site which has asbestos or is suspected of having asbestos. The person will have undergone asbestos awareness training and be aware of potential sources of asbestos and understand measures for works with potential to disturb asbestos (for example staff or contractors working around bonded (non-friable) asbestos conduits / pits or where bonded (non-friable) ACM has been identified).</p> <p><u>Removal of minor ACM finds, < 10m² of bonded (non-friable) ACM</u></p> <p>An asbestos removal licence is not required for <10 m² of bonded (non-friable) asbestos. For minor bonded (non-friable) asbestos finds / low level asbestos contamination (typically trace fragments up to two (2) individual bonded (non-friable) ACM fragments per m² or <10 cm² per m²), an asbestos awareness trained person (minimum training requirement) can remove the ACM fragments, if necessary⁷.</p> <p>For minor asbestos finds of <10 m² of bonded (non-friable) ACM, the following conditions and requirements of the Code of Practice (SafeWork NSW 2022), specifically within Chapter 3 and Chapter 4 and this AMP must be complied with:</p> <ul style="list-style-type: none"> • Ensure the area is secure; • Ensure signs and barricades are erected to indicate and delineate the asbestos work area; • Use the wet method to remove asbestos where reasonably practicable; • Ensure the correct tools, equipment and PPE are used. PPE should include RPE including a P2 class respirator and disposable gloves. • Ensure decontamination facilities are available; • Remove and dispose of the asbestos fragments in accordance with the Code of Practice (SafeWork NSW 2022) to a licensed waste facility that is able to accept asbestos waste; and • Ensure that PPE used in the asbestos removal work area that is contaminated with asbestos is handled in accordance with the WHS Regulation. <p><u>Removal of numerous ACM finds, < 10m² of bonded (non-friable) ACM</u></p> <p>An asbestos removal licence is not required for <10 m² of bonded (non-friable) asbestos. When numerous bonded (non-friable) asbestos finds are encountered (typically more than two (2) individual bonded (non-friable) ACM fragments per square metre or >10 cm²/m²), an asbestos awareness trained person (minimum</p>

⁷ No licence is required for removal of up to 10 m² of non-friable asbestos, provided staff are appropriately trained and have suitable PPE. Less than two (2) bonded (non-friable) asbestos fragments per m² (approximately 10 cm²) was selected based on a risk-based approach, referencing the NEPC ASC NEPM 2013 which identifies low level ACM contamination as <10 cm² per m².

Table 2 – Responsibilities for AMP Implementation

Position and Company/Entity	Responsibilities
	<p>training requirement) can remove the impacted material, provided there is less than 10 m² of bonded (non-friable) asbestos and asbestos controls are in place as per the SafeWork NSW (2022); however it is recommended a bonded (non-friable) asbestos removal trained staff member, such as a Class B LARC is involved⁸.</p> <p>For numerous asbestos finds of <10 m² of bonded (non-friable) ACM, the following conditions and requirements of the Code of Practice (SafeWork NSW 2022), specifically within Chapter 3 and Chapter 4 and this AMP must be complied with:</p> <ul style="list-style-type: none"> • Ensure the area is secure; • Ensure signs and barricades are erected to indicate and delineate the asbestos work area; • Use the wet method to remove asbestos where reasonably practicable; • Ensure the correct tools, equipment and PPE are used. PPE should include disposable Type 5 Category 3 rated coveralls, RPE including a P2 class respirator, disposable gloves and lace-less steel capped rubber soled work shoes with boot covers or gum boots; • Ensure decontamination facilities are available; • Remove and dispose of the asbestos fragments in accordance with the Code of Practice (SafeWork NSW 2022) to a licensed waste facility that is able to accept asbestos waste; and • Ensure that PPE used in the asbestos removal work area that is contaminated with asbestos is handled in accordance with the WHS Regulation.

⁸ No licence is required for removal of up to 10 m² of non-friable asbestos, provided staff are appropriately trained and have suitable PPE. Greater than two (2) bonded (non-friable) asbestos fragments per m² (approximately 10 cm²) was selected based on a risk-based approach, referencing the NEPC ASC NEPM 2013 which identifies low level ACM contamination as <10 cm² per m².

5.4 Health and Safety Management

Training and Certification

The PCBU must not allow any person to carry out ground disturbance works at the Site unless they are satisfied that the person has undergone WHS induction and asbestos awareness training.

The WHS induction training required by the Regulation is as follows:

- General occupational health and safety training for construction work;
- Work activity based health and safety training (job specific training); and
- Site-specific health and safety induction training.

Ground disturbance works within the Asbestos Placement Areas must be undertaken by a Class B LARC, under Class B (bonded; non-friable) controls.

Safe Work Method Statements (SWMS)

Safe Work Method Statements (SWMS) must be prepared by all subcontractors completing ground disturbance works at the Site and consider other aspects of the proposed project works not related to significant intrusive works. SWMS are to be prepared and approved by the client or the client's representatives prior to those activities commencing.

SWMS must:

- Describe how work is to be carried out;
- Identify the safety risks;
- Describe the control measures that must be applied to the work;
- Describe the equipment used for undertaking the work;
- Describe any Australian Standards or codes of Practice applicable to the work; and
- Training and qualifications required of persons undertaking the work.

SWMS for all workers must be reviewed and approved by the PCBU (the Principal Contractor).

Site Safety Induction

It is the responsibility of the PCBU to ensure all persons carrying out work on-site involving disturbance of the ground surface are given site-specific occupational health and safety training and asbestos awareness training.

The asbestos awareness training shall address the following topics as per the requirements of this AMP:

- Identification of any site-specific hazards and risk control measures in relation to the asbestos impacted nature of the site;
- Regulatory requirements or Codes of Practice relevant to identified site specific hazards as restricted to asbestos impact;
- Directions on what to do if suspected asbestos containing materials or asbestos impacted soils are encountered;
- Site orientation including location of asbestos decontamination areas at site access / egress points; and

- Site specific safety rules in relation to asbestos.

The PCBU is responsible for establishing site specific safety rules. The rules must be displayed in an easily observable location (nominally in the site office) to ensure all site workers, have ready access.

At the completion of the induction presentation, each worker shall be required to acknowledge that they have understood the requirements for the site works and health, safety and environmental obligations by completion of a site induction form.

Management of Subcontractors

All workers involved in ground disturbance works on-site will be required to adopt the provisions of this AMP and will be advised of potential safety and environmental issues on site during site-specific induction training. This induction will include the occupational health and safety responsibilities, requirements and controls for all workers on site. All workers involved in asbestos works will be monitored by the PCBU, the LARCA and the Asbestos Consultant / Competent Person / LAA to ensure compliance with the requirements of this AMP.

Workers whose work will be performed on-site, or who otherwise could be exposed to health and safety hazards, will be advised of known hazards through distribution of site information contained within this AMP.

They shall be solely responsible for the health and safety of their employees and shall comply with all applicable laws and regulations. All workers are responsible for:

- Providing their own personal protective equipment (PPE) / respiratory protective equipment (RPE) as required by the PCBU;
- Ensuring all employees are face fitted to P2/P3 RPE;
- Ensuring all employees are clean shaven in order to use fit tested P2/P3 RPE;
- Complying with the conditions set out in this AMP;
- Training their employees in accordance with applicable laws;
- Providing medical surveillance and obtaining medical approvals for their employees, as appropriate;
- Ensuring their employees are advised of and meet the minimum requirements of this AMP and any other additional measures required by their site activities; and
- Designating their own site safety officer.

Workers must sign an acceptance form prior to commencing work on site. Workers may only modify, and then only to improve, the conditions specified in this AMP with approval from the PCBU, or his/her nominee.

5.5 Works within Cover Materials over Placement Areas

Care must be taken during any excavation works within the cover materials over Asbestos Placement Areas, to ensure there is no disturbance of the ASBINS within the Asbestos Placement Areas (**Figure 4**). Within the Lot 4 Placement Area, cover materials refer to materials at an approximate depth of 3.2 – 7.6 m below finished surface levels. Within the Lot 5 Northern Finger Placement Area, cover materials refer to materials at an approximate depth of 2.2 – 4.8 m below finished surface levels. A survey of Asbestos Placement Areas with relative levels (RLs) in m Australian Height Datum (m AHD) is provided in **Appendix A**.

Re-instatement of cover materials must ensure thickness as per the survey in **Appendix A** is maintained and material is backfilled in the same order. Where additional material is required to be imported to Site for the maintenance of the cover materials as per the survey in **Appendix A**, soil must comprise of clay soil that is

classified as excavated natural material (ENM) / virgin excavated natural material (VENM), resource recovery material or road base material validated by an Environmental Scientist.

If ACM is encountered, **Section 6** of this AMP should be followed.

5.6 Works within Asbestos Placement Areas

Works below the cover materials as defined in the survey in **Appendix A** and within the Asbestos Placement Areas, thereby intercepting bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w) will need to be undertaken by a Class B LARC under bonded (non-friable) controls. An Asbestos Consultant / Competent Person / LAA shall be engaged to provide relevant asbestos hygiene services, such as asbestos air monitoring and visual clearance inspections.

Prior to commencement, the proposed excavation area or work area should be barricaded off as an exclusion zone, to prevent commercial/industrial site users or any other unauthorised personnel entering the work area.

All subsurface works involving the disturbance beyond the cover materials as defined in the survey in **Appendix A** and into the Asbestos Placement Areas must be undertaken in accordance with relevant health and safety guidelines and SafeWork NSW provisions including the requirements in within **Section 5** and the provisions below:

- Designated dry decontamination area.
- Additional induction or daily toolbox talk for personnel who will be entering the work zone.
- Dust emissions should be minimised within the work area by employing dust control procedures as required, including the wetting of areas prior to excavation, use of a fine mist spray, and keeping excavation and stockpile surfaces moist. Water use will be in accordance with any applicable restrictions.
- Cover material and ASBINS must be segregated during excavation works through the use of a designated stockpiling area to ensure no cross contamination of material.
- Any soil surplus to site requirements must be sampled in accordance with the NSW EPA *Sampling Design Guidelines* (2022) and classified in accordance with NSW EPA (2014) prior to disposal at an appropriately licensed facility. All materials to be pre-classified as Special Waste (Asbestos) at minimum.
- Materials that are not excess to requirements can remain on the Site but must be placed back in the Asbestos Placement Area excavation at the same depth they were removed. Caution must be employed to ensure no mixing of material types.
- Reinstatement of the cover layer in the same order which it was removed.
- Re-instatement of cover materials must ensure thickness as per the survey in **Appendix A** is maintained.
- Where additional material is required to be imported to Site for the maintenance of the cover materials as per the survey in **Appendix A**, soil must comprise of clay soil that is classified as excavated natural material (ENM) / virgin excavated natural material (VENM), resource recovery material or road base material validated by an Environmental Scientist.

5.7 Dust Management During Asbestos Works

Dust levels in asbestos impacted areas shall be managed by ensuring:

- The asbestos work area is wetted down and a water source be available if required;
- All stockpiles will be either periodically wetted down or covered to control dust;

- Water sprays will be used on the excavation areas, stockpiles, and haulage pathways;
- Any haulage vehicles shall be covered and leave via the designated (stabilised) site access;
- All haulage vehicles and plant and equipment shall be washed down whenever they leave the asbestos work area; and
- All access roads are sufficiently maintained to ensure no visible dust at the site boundary.

If dusty conditions are observed, additional dust control measures shall be employed, which may include:

- Temporarily suspending activities until winds speeds reduce; and / or
- Additional use of water sprays.

5.8 Asbestos Waste Management During Asbestos Works

All asbestos waste should be transported to a licensed facility lawfully able to accept the waste in accordance with the POEO Act requirements by an LARC. The NSW EPA (2014) *Waste Classification Guidelines, Part 1 - Classifying Waste*, states the following definition with respect to pre-classified waste:

“Special Waste (Asbestos) - ‘Special waste’ is a class of waste that has unique regulatory requirements. The potential environmental impacts of special waste need to be managed to minimise the risk of harm to the environment and human health.”

All wastes disposed off-site will be controlled as per the EPA’s requirements for waste tracking and acceptance using the WasteLocate online tracking system. Under clauses 76 and 79 of the POEO Waste Regulation transporters must use WasteLocate when consigning, transporting or accepting more than 100 kilograms of asbestos waste, or more than 10 m² of waste asbestos sheeting, in any single load.

ACM Fragments

Asbestos waste as ACM fragments should be stored in two (2) layers of 200 µm thick high-density polyethylene (HDPE) sheet or bags of maximum size 1,200 mm in length x 900 mm in width with an asbestos warning label. Where applicable, the bags should not be filled more than half full and excess air removed before secured and sealed with duct tape in a goose neck method. The bags should be labelled with an appropriate warning statement to the effect that the bag contains asbestos.

ASBINS

Asbestos waste as ASBINS, if stored on-site as stockpiles, should be covered in geotextile fabric and periodically wetted down for dust control.

Should ASBINS require off-site disposal, the material should be assessed in accordance with NSW EPA (2014) *Waste Classification Guidelines, Part 1 - Classifying Waste* and as per the sampling frequency detailed in the NSW EPA (2022) *Contaminated Land Guidelines, Sampling Design Part 1 – Application*. For a stockpile, a minimum of three (3) samples and one (1) sample per 25 m³ is required for larger volumes of material. If a minimum of ten (10) samples are collected, the 95% UCL⁹_{mean} value can be used to determine the chemical classification of the material, without further laboratory testing such as Toxicity Characteristic Leaching Procedure (TCLP). Samples should be collected from a minimum of 0.3 metres below surface (mBS) of the stockpile, in a three-dimensional representative grid of sampling points. For in-situ sampling, the volume of

⁹ UCL – upper confidence limit.

material generated, inclusive of a bulking factor must be calculated to determine the appropriate sampling density for waste. For in-situ sampling, samples should cover all soil materials required for off-site disposal, and may include various fill layers which may need to be classified separately.

When ASBINS is ready to be transported for off-site disposal, ASBINS should be transported within plastic lined skip bins or trucks.

5.9 Site Access Control, Signage and Communication During Asbestos Works

The PCBU shall ensure, if works are to occur in an area in which asbestos has been identified, the work area is securely fenced, sign posted, and access is controlled. Entrance to the asbestos area will be via a dedicated entry point which will contain the following features in addition to site security measures as required for a construction site as per relevant health and safety provisions:

- Readily identifiable and delineated site access / egress point. Where possible this location shall be visibly identifiable by site fencing / barricading;
- Decontamination area / unit for all workers to remove PPE and dispose of contaminated articles and will also include a hand wash and boot wash facility. The decontamination unit/area will be located in close proximity of the designated site access / egress point. A wet decontamination area / unit is required if works involved friable asbestos;
- Signage stating that the work area contains asbestos, that there should be no entry without the required PPE and RPE and a contact number for members of the public to direct any queries / complaints; and
- Emergency contact details.

In addition to asbestos work area security controls, the asbestos impacted area must be delineated. Asbestos removal boundaries (if required) shall be determined by the PCBU in consultation with the Asbestos Consultant / Competent Person / LAA and will vary according to the location and size of the required daily activities.

Access to the asbestos work area will be controlled and permitted by the LARC (where required). Site access will not be allowed until the workers have been inducted, have signed in, and if entering the asbestos area, must have donned the required PPE in accordance with **Section 5.11**. Upon exiting the area, personnel must remove and dispose of / clean the PPE in the provided decontamination area.

5.10 Personal Protective Equipment Requirements During Asbestos Works

Workers undertaking ground disturbance works within the Asbestos Work Areas must wear additional items of PPE due to the known presence of bonded (non-friable) ASBINS.

Workers undertaking ground disturbance works within the broader Site area must wear additional items of PPE if asbestos is encountered as an unexpected find.

Additional PPE must include:

- Disposable Type 5, Category 3 (EN ISO 13982–1) rated (or better) coveralls¹⁰;
- RPE such as a P2/P3 class respirator, with non-disposable respirators cleaned in the decontamination unit in accordance with SafeWork (2022);
- Disposable gloves; and
- Lace-less steel capped rubber soled work shoes with boot covers or gumboots.

During the removal of minor bonded (non-friable) asbestos finds / low level asbestos contamination (typically trace fragments up to two (2) individual bonded (non-friable) ACM fragments per m² or <10 cm² per m²) by an Asbestos Awareness Trained Person, where the likelihood of airborne asbestos fibres is considered low and the risk of exposure is considered low, removal works may be undertaken with a P2 class respirator and disposable gloves only, provided that wetting of the ACM is undertaken.

An assessment of the likelihood of airborne asbestos fibres should be determined through a visual inspection of the material, its location and an understanding of the work practices / disturbance potential. As per Section 2.6 in SafeWork NSW (2022a), when deciding if there is a risk to health from asbestos, consider whether the asbestos or ACM is:

- In poor condition;
- Likely to be further damaged or to deteriorate;
- Likely to be disturbed due to work practices carried out in the workplace (for example routine and maintenance activities and their frequency); or
- In an area where workers are exposed to the material.

5.11 Plant Operator Requirements During Asbestos Works

Plant operators must close cabin doors and windows and set air conditioning to re-circulate when operating within the asbestos work area. A High-Efficiency Particulate Air (HEPA) filter should also be fitted within the plant. Operators should also have access to PPE and RPE should they need to exit cabin within the asbestos work area.

5.12 Airborne Asbestos Monitoring During Asbestos Works

Airborne Asbestos Monitoring should be performed by the Asbestos Consultant / Competent Person / LAA using calibrated portable air sampling pumps.

Airborne Asbestos Monitoring is not mandatory during bonded (non-friable) asbestos removal works involving <10 m² of material or bonded (non-friable) asbestos removal works involving >10 m², however it is recommended as a control measure for works in a public location, where the effectiveness of controls is unclear or where there has been an uncontrolled disturbance of asbestos in accordance with Section 3.11 of SafeWork NSW (2022).

Airborne Asbestos Monitoring is required during friable asbestos removal works and must be undertaken by a LAA (See Asbestos Finds Procedure in **Section 6**).

¹⁰ Disposable Type 5 Category 3 rated coveralls are not required for minor bonded (non-friable) asbestos finds / low level asbestos contamination (typically trace fragments up to two (2) individual bonded (non-friable) ACM fragments per m² or <10 cm² per m²) based on the low likelihood of airborne asbestos fibres, and low risk of exposure.

Control Airborne Asbestos Fibre Monitoring

Control Airborne Asbestos Monitoring should be conducted at a minimum of four (4) locations at the boundary of the work area each day over the work period and target any neighbouring sensitive receptors and with consideration to the daily location of works. At the end of each monitoring period, the pump and attached filter will be collected and analysed at a NATA-accredited laboratory 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 should be made available on a 24-hour turnaround time basis. 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, as outlined in SafeWork NSW (2022):

- 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.

It is noted that these action levels adopted are more conservative (10x) than the exposure standard for airborne asbestos (0.1 fibres/mL [time weighted average (TWA)]) as outlined in the Adopted National Exposure Standards for Workplace Exposure Standards for Airborne Contaminants (SWA 2024) for an 8-hour shift.

Clearance Airborne Asbestos Monitoring

Following the completion of all friable asbestos removal works and a visual clearance inspection, clearance airborne asbestos monitoring will be undertaken to ensure that asbestos work area can be reoccupied without asbestos controls. Clearance air monitoring will be achieved by recording airborne asbestos concentration levels in all sampling locations below 0.01 fibres/mL. Clearance airborne asbestos monitoring may also be conducted for bonded (non-friable) asbestos removal if there is potential to impact nearby workers on the neighbouring site.

5.13 Visual Clearance Inspection, Validation Sampling and Asbestos Clearance Certificates Following Asbestos Works

Visual Clearance Inspection

Following the completion of any asbestos removal works, a visual clearance inspection will be completed by the Asbestos Consultant / Competent Person / LAA to confirm the removal of visible asbestos. Once a successful inspection has been completed and the Asbestos Consultant / Competent Person / LAA is satisfied there is no visible residual asbestos, the area shall be deemed suitable for re-occupation (subject to additional clearance airborne asbestos monitoring and validation sampling, if required).

Validation Sampling

Validation sampling for bonded (non-friable) impacted soils should involve on-site field screening a 10 L soil sample through a 7 mm sieve, by an Environmental Consultant trained and experienced in the identification of ACM (Asbestos Consultant / Competent Person / LAA) in accordance with the below:

- If ACM is identified in in-situ material, samples will be collected at a rate of 1/10 m² and at 1 m intervals (as per guidance provided in NEPM 2013).
- If ACM is identified within stockpiled material, samples will be collected at a rate of 1/25 m³ (as per guidance provided in NSW EPA 2022).
- ACM in stockpiled fill material will be quantified by the methods advised in NEPM 2013 and WA DoH 2021. At each sample location, recovered fill material (10 L) will be spread and raked. All ACM will be recovered and bagged. The volume of fill material within the test pit will be calculated and logged.

Validation sampling for friable impacted soils should involve the on-site field screening of 10L soil through a 7 mm sieve and collection of 500 mL soil samples for gravimetric analysis at a NATA accredited laboratory by an Environmental Consultant trained and experienced in the identification of ACM (Asbestos Consultant / Competent Person / LAA) in accordance with the below:

- If ACM is identified in in-situ material, samples will be collected at a rate of 1/10 m² and at 1 m intervals (as per guidance provided in NEPM 2013).
- If ACM is identified within stockpiled material, samples will be collected at a rate of 1/25 m³ (as per guidance provided in NSW EPA 2022).
- ACM in stockpiled fill material will be quantified by the methods advised in NEPM 2013 and WA DoH 2021. At each sample location, recovered fill material (10 L) will be spread and raked. All ACM will be recovered and bagged. The volume of fill material within the test pit will be calculated and logged.
- One 500 mL soil sample will be collected per 25 m³ and submitted for laboratory analysis to assess for the presence of FA/AF and free asbestos (respirable) fibres.

Samples should be collected from the base across a depth of 0.0 – 0.1 mBGL. Samples collected from walls should be collected across a profile of 0.1 – 0.2 in thickness and will target suspect materials based on visual and/or olfactory observations.

During the collection of soil samples, features such as seepage, discolouration, staining, odours and other indications of contamination (including, ACM, staining, odours) should be noted and photographs taken.

Asbestos Clearance Certificate (ACC)

An Asbestos Clearance Certificate (ACC) should be prepared by the Asbestos Consultant / Competent Person / LAA to document the findings of the inspection, clearance airborne asbestos monitoring and validation sampling.

5.14 AMP Review

This AMP is based on the placement of ASBINS within two (2) Asbestos Placement Areas (**Figure 4**) at depth, containing bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w) and the management of unexpected asbestos finds at the Site, outside of the Asbestos Placement Areas (excluding the Containment Cell which is subject to an LTEMP).

Should ACM be detected in other areas of the Site (excluding the Containment Cell which is subject to an LTEMP) or be detected in subsurface soils during site activities, additional surveying for asbestos records / AMP is recommended. A review and update of the AMP will be required should additional areas of asbestos be detected.

A periodic review of the AMP should be undertaken for the following:

- The AMP should be reviewed and potentially revised if there are any regulatory changes relevant to the implementation of the AMP.
- The AMP should be reviewed if there is any significant change in land use or development of the Site.

Where the AMP is revised, copies should be provided to all current stakeholders, training provided and induction procedures updated where necessary.

6 Unexpected Asbestos Finds Procedure

The volume and type of asbestos found will determine the procedure for managing the find.

Sections 6.1 and 6.2 below summarise the procedures, these procedures are also summarised in the Flow Chart presented in **Appendix B**.

6.1 Minor and Numerous Bonded (Non-Friable) Asbestos Finds (<10 m²)

Unexpected finds consisting of minor and numerous bonded (non-friable) asbestos finds (two (2) or more individual bonded (non-friable) ACM fragments per m² or <10 cm² per m²) may be performed without a licence by an Asbestos Awareness Trained Person provided it is <10 m² and work is performed in accordance with the Code of Practice SafeWork (2022), which requires (as a minimum):

- Personnel must have undergone asbestos awareness training;
- The work area is secure, with signs and barricades around the asbestos work area;
- Wetting of material with a fine mist;
- Appropriate PPE is available (disposable Type 5 Category 3 rated coveralls, RPE including a P2 class respirator, disposable gloves and lace-less steel capped rubber soled work shoes with boot covers or gum boots must be worn if it is a numerous find. RPE and disposable gloves are to be worn if it is a minor find i.e. only two (2) fragments);
- A decontamination area / facility is available for personnel conducting the works; and
- Waste, including used PPE is wrapped within two (2) layers of 200 µm thick HDPE sheet or bags of maximum size 1,200 mm in length x 900 mm in width with an asbestos warning label and disposed to a licensed facility lawfully able to accept the waste.

It is recommended a Class B LARC is involved for the removal of numerous bonded (non-friable) asbestos finds.

6.2 Bonded (Non-Friable) Asbestos Finds (>10 m²) or Friable Asbestos Finds

The following steps should be implemented if a worker comes across previously unidentified or suspected asbestos:

1. Immediately notify the PCBU / Supervisor.
2. If safe to do so he / she should quarantine the area.
3. The PCBU / Health Safety Environmental Manager should contact the Asbestos Consultant / Competent Person or LAA.
4. The Asbestos Consultant / Competent Person or LAA should undertake the following steps and provide advice with respect to the following:
 - a. Undertake a site inspection to verify the condition and extent of potential asbestos including an assessment of exposure and friability (where applicable).
 - b. Sample collection where required, for analytical testing by a NATA accredited laboratory.
 - c. Advice relating to removal in accordance with SafeWork NSW (2022).

- d. Classification of waste in accordance with the NSW EPA (2014) *Waste Classification Guidelines, Part 1 - Classifying Waste* as Special Waste (Asbestos) to allow waste to be disposed of, to a waste facility lawfully able to accept the waste.
 - e. Provide reports or written instruction in accordance with SafeWork NSW and NSW EPA requirements.
5. Asbestos removal will be undertaken by an independent LARC where their responsibilities include but are not limited to:
 - a. Hold the appropriate licence for type of asbestos removal (Class A for friable or Class B for non-friable ACM) in accordance with Section 1.3 of SafeWork NSW (2022).
 - b. Notify all receptors that may be impacted by the asbestos removal works as outlined in Section 3.3 of SafeWork NSW (2022).
 - c. Prepare an ARCP and submit a notification to SafeWork NSW.
 - d. Provide an exclusion zone and signage during asbestos removal works.
 - e. Ensure all personnel involved in the asbestos removal work are appropriately trained.
 - f. Provide appropriate PPE / RPE and decontamination facilities e.g. disposable coveralls, P2 respirators, gloves, boot covers or gumboots, face wipes, water spray bottles, duct tape and 200 µm thick HDPE sheets / bags with an appropriate asbestos warning label.
6. Where required, airborne asbestos monitoring will be carried out by the Asbestos Consultant / Competent Person / LAA in accordance with the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres*, 2nd Edition [NOHSC: 3003 (2005)], Australia National Occupational Health and Safety Commission. Results of asbestos air monitoring should be made available within 24 hours after collection. The results of air monitoring will be made available to all workers on site and the site supervisor will be notified immediately if the SafeWork NSW (2022) action levels are exceeded as per **Table 3**.

Table 3 – Airborne Asbestos Monitoring Action Levels	
Level (fibres/mL)	Action
<0.01	Safe, continue with control measure
0.01-0.02	Review control measures
>0.02	Stop removal works, find the cause and notify SafeWork NSW

7. Following asbestos removal, a visual clearance inspection should be undertaken by the Asbestos Consultant / Competent Person / LAA to ensure all visible asbestos has been removed. If asbestos removal works involved friable asbestos, clearance airborne asbestos monitoring must be undertaken by an LAA. Validation sampling should be undertaken in accordance with **Section 5.13**. An ACC should be prepared to document the findings of the inspection, clearance airborne asbestos monitoring and validation sampling.
8. The area of the unexpected find may be re-occupied once the ACC has been issued or written instruction has been provided to the PCBU by the Asbestos Consultant / Competent Person / LAA.

7 Conclusion

EP Risk was engaged by ESR to prepare an AMP for the ongoing management of ASBINS placed on-site at depth, within two (2) Asbestos Placement Areas, containing bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w) and the management of unexpected asbestos finds at the Site, outside of the Asbestos Placement Areas.

The two (2) Asbestos Placement Areas are described below:

- 1) Lot 4 Placement Area (Figure 4):** Bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w), were placed within a portion of Lot 4 (currently a portion of Lot 111 and Lot 112 in DP1296469). The Lot 4 Placement Area covered an area of approximately 8,050 m². The Lot 4 Placement Area has a theoretical capacity of 12,500 m³, with an actual volume of 12,384 m³. The average fill depth was 2.9 m, with maximum fill depth of 5.3 m. Material was placed at an approximate depth of 3.2 m – 7.6 m below finished surface levels and covered with Site won clay / shale.
- 2) Lot 5 Northern Finger Placement Area (Figure 4):** Bonded (non-friable) asbestos at concentrations below the adopted HSL (0.05 %w/w), was buried within a portion of the Lot 5 Northern Finger (currently a portion of Lot 112 in DP1296469). The Lot 5 Northern Finger Placement Area covered an area of approximately 19,800 m². The Lot 5 Northern Finger Placement Area has a theoretical capacity of 8,500 m³, with an actual volume of 8,185 m³. The average fill depth was 2.1 m, with maximum fill depth of 4.9 m. Material was placed at an approximate depth of 2.2 – 4.8 m below finished surface levels and covered with Site won clay/shale.

As such, an AMP is required to ensure there are no unacceptable exposure risks to Site maintenance or construction workers by providing a management framework and procedures for ground disturbance works within the cover materials and within the Asbestos Placement Areas. Moreover, the AMP provides a protocol for managing unexpected asbestos finds at the Site, outside of the Asbestos Placement Areas.

It is recommended the measures detailed within this AMP be implemented, to minimise the potential for site workers and the public to be exposed to asbestos within the Asbestos Placement Areas and other areas at the Site.

It should be noted, a Containment Cell is present on-site within the Trunk Drainage Swale, located within Lot 112 in DP1296469 or the new proposed Lot 4 boundary. The management of friable asbestos below and above the adopted HSL of 0.001 %w/w within the Containment Cell is discussed under a separate cover, within the LTEMP (EP Risk 2024a).

Figures



Figure 1 - Site Location and Layout



Figure 2 - Existing Lot Boundaries

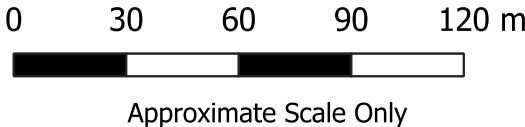
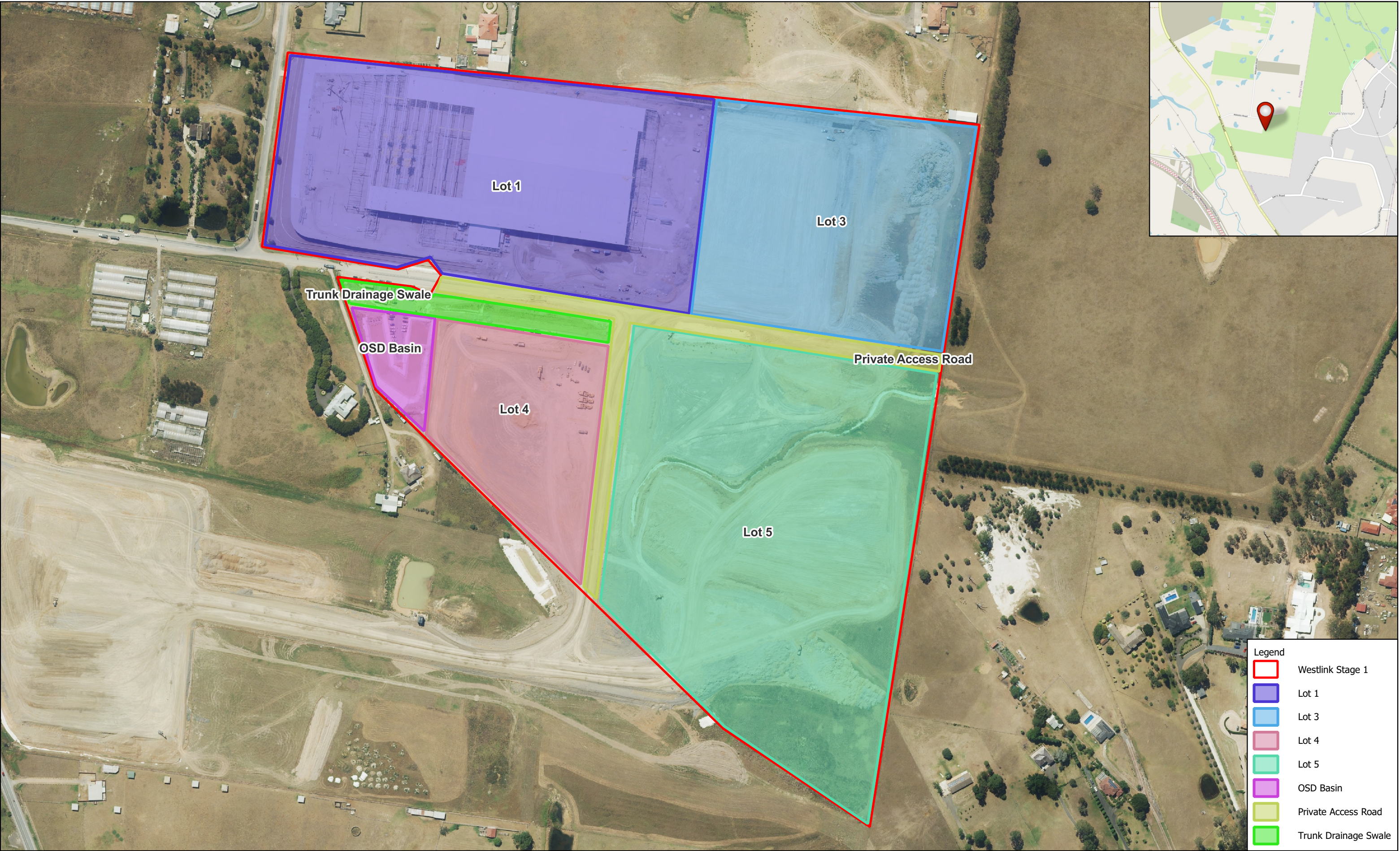


Figure 3 - Development Plan

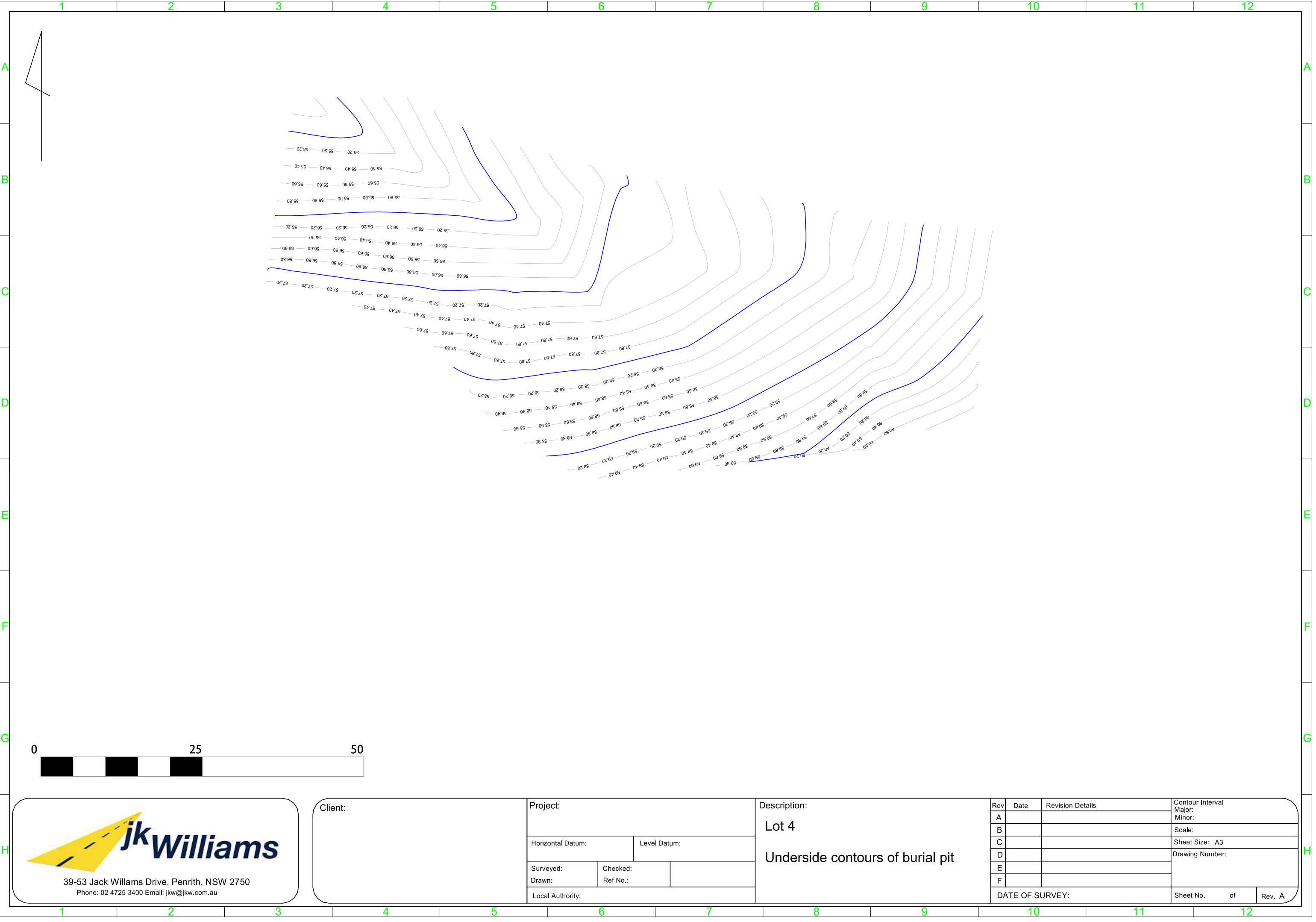




Figure 4 - Placement Areas

Appendix A

ASBESTOS PLACEMENT AREAS SURVEY PLANS



39-53 Jack Williams Drive, Penrith, NSW 2750
Phone: 02 4725 3400 Email: jkw@jkw.com.au

Client:

Project:

Description:

Lot 4

Underside contours of burial pit

Horizontal Datum:

Level Datum:

Surveyed:

Checked:

Drawn:

Ref No.:

Local Authority:

Rev

Date

Revision Details

Contour Interval

Major:

Minor:

Scale:

Sheet Size: A3

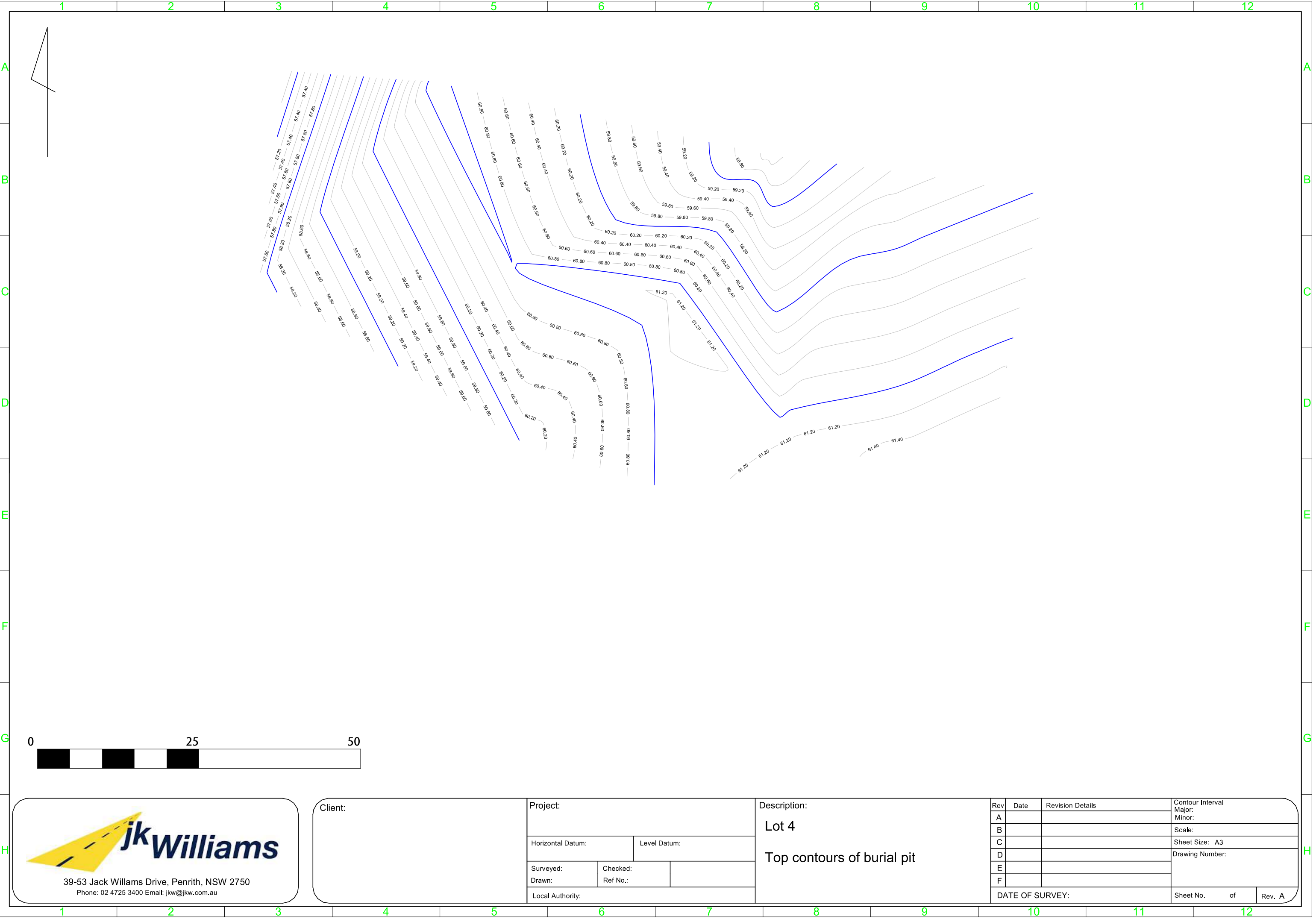
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DATE OF SURVEY:

Sheet No.

of

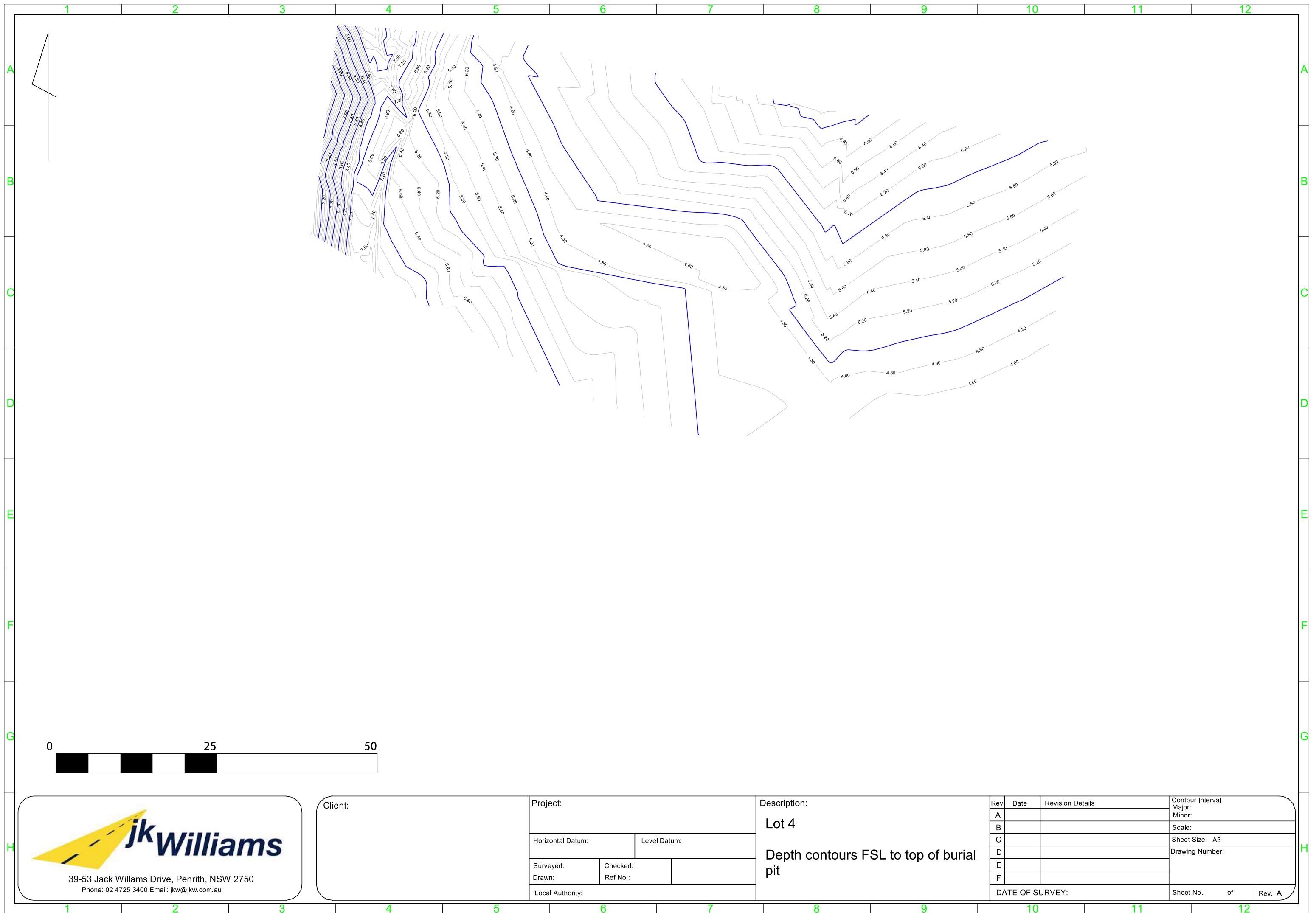
Rev. A

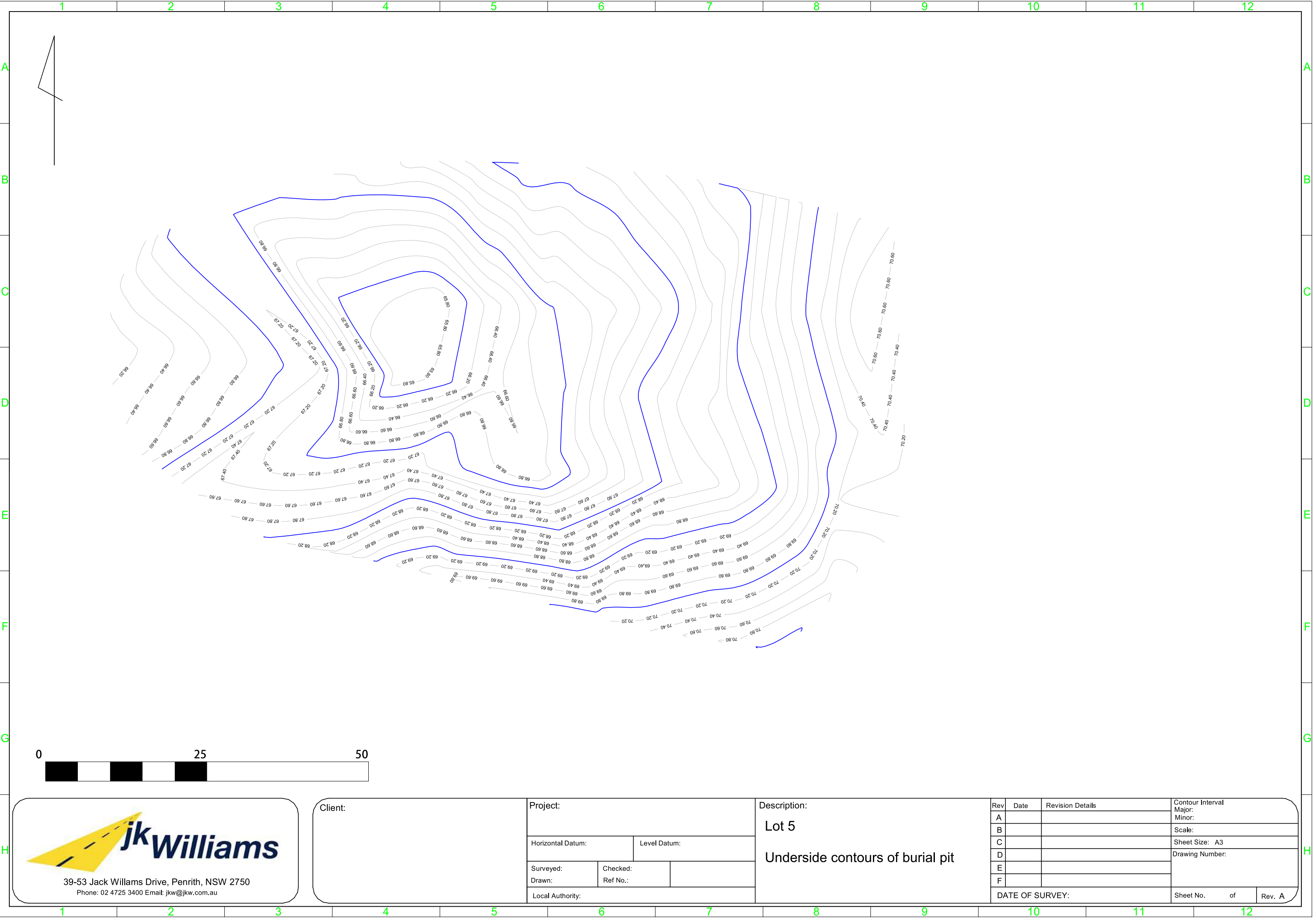




39-53 Jack Williams Drive, Penrith, NSW 2750
Phone: 02 4725 3400 Email: jkw@jkw.com.au

Client:	Project:		Description: Lot 4 Top contours of burial pit	Rev	Date	Revision Details	Contour Interval Major:	
	Horizontal Datum:			A			Minor:	
	Level Datum:			B			Scale:	
	Surveyed:	Checked:		C			Sheet Size: A3	
	Drawn:	Ref No.:		D			Drawing Number:	
Local Authority:				E				
				F				
			DATE OF SURVEY:			Sheet No. of Rev. A		





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Client:

Project:

Description:

Lot 5

Underside contours of burial pit

Horizontal Datum:

Level Datum:

Surveyed:

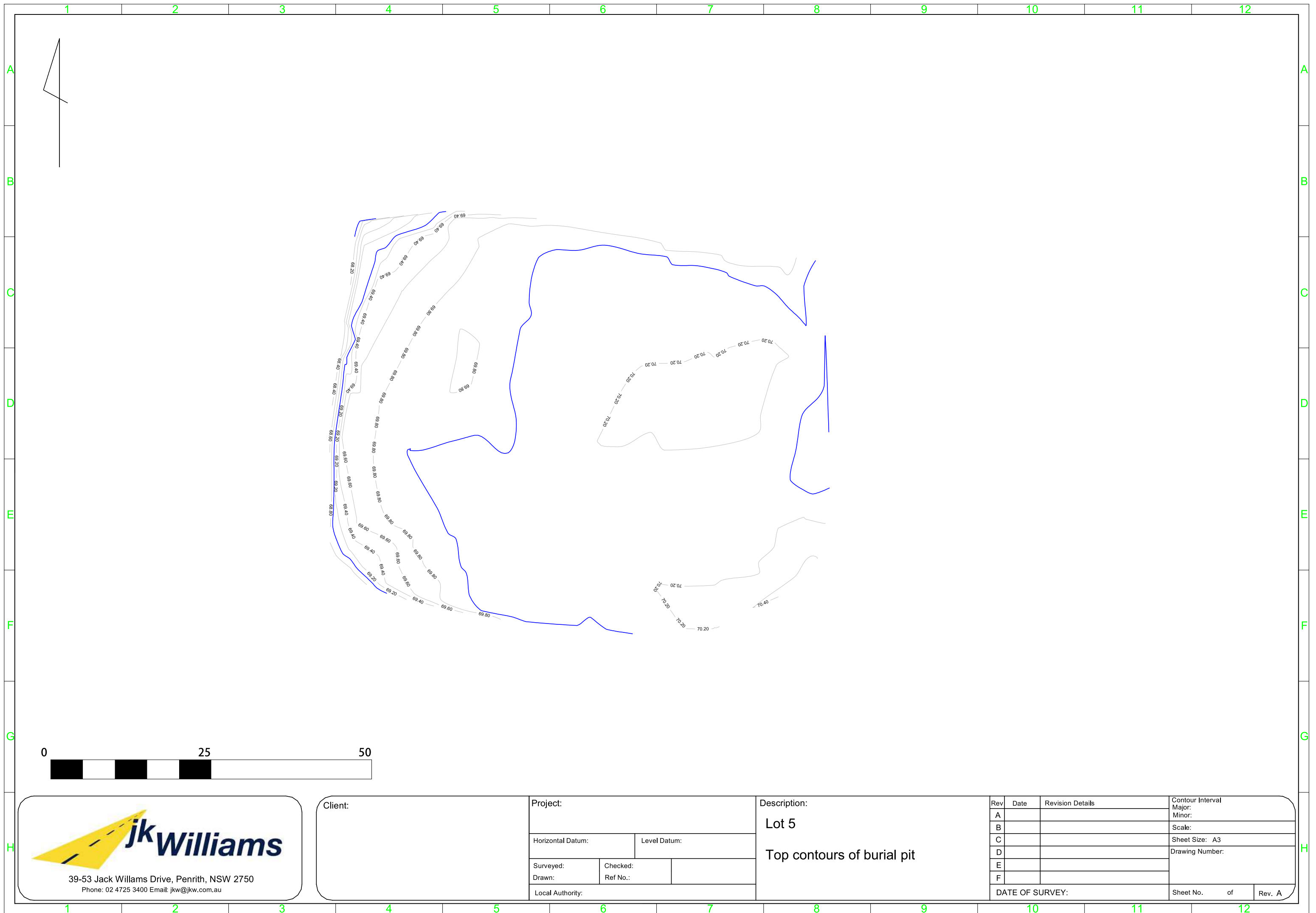
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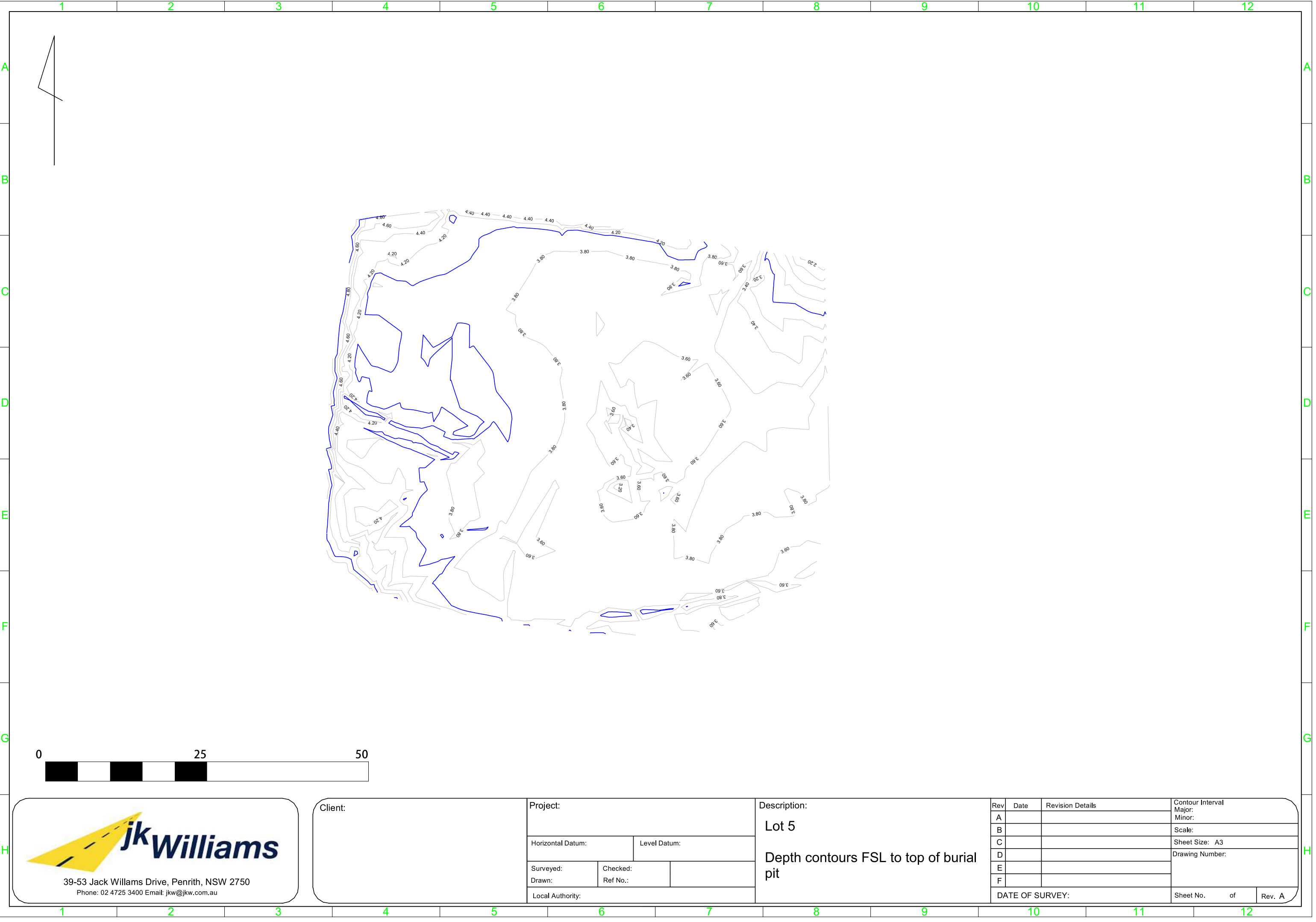
Drawn:

Ref No.:

Local Authority:

Rev	Date	Revision Details	Contour Interval
A			Major:
B			Minor:
C			Scale:
D			Sheet Size: A3
E			Drawing Number:
F			
DATE OF SURVEY:			Sheet No. of Rev. A







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Client:		Project:		Description: Lot 5 Depth contours FSL to top of burial pit		Rev	Date	Revision Details	Contour Interval Major:	
						A			Minor:	
						B			Scale:	
						C			Sheet Size: A3	
						D			Drawing Number:	
						E				
						F				
						DATE OF SURVEY:				Sheet No. of Rev. A

Appendix B

ASBESTOS FINDS PROCEDURE FLOW CHART

Unexpected Finds Protocol (UFP)

