

NSW Site Auditor Scheme

Site Audit Statement

A site audit statement summarises the findings of a site audit. For full details of the site auditor's findings, evaluations and conclusions, refer to the associated site audit report.

This form was approved under the *Contaminated Land Management Act* 1997 on 12 October 2017.

For information about completing this form, go to Part IV.

Part I: Site audit identification

Site audit statement no. MP181_14B

This site audit is	is a:	
⊠ statutory a	audit	
□ non-statu	utory audit	
within the mear	ning of the Contaminated Land Management Act 19	97.
Site auditor d	details	
(As accredited	under the Contaminated Land Management Act 199	97)
Name:		
Company: Sen	oversa Pty Ltd	
Address: Level	l 24, 1 Market Street, Sydney NSW	
		Postcode: 2000
Phone: 02 8252	2 000	
Email:	@senversa.com.au	
Site details		
Address: 43B L	Luddenham Road, Orchard Hills, NSW	
	Po	stcode: 2748

Pro	perty description
(Atta	ach a separate list if several properties are included in the site audit.)
Part	Lot 51 Deposited Plan 1276956 (refer to survey plan attached).
Loca	al government area: Penrith City Council
Area	a of site (include units, e.g. hectares): Approximately 4.5 hectares
Curr	ent zoning: RE1 Public Recreation and RU2 Rural Landscape
Reg	julation and notification
To th	ne best of my knowledge:
-	the site is the subject of a declaration, order, agreement, proposal or notice under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985, as follows: (provide the no. if applicable)
	□ Declaration no.
	□ Order no.
	□ Proposal no.
	□ Notice no.
\boxtimes	the site is not the subject of a declaration, order, proposal or notice under the Contaminated Land Management Act 1997 or the Environmentally Hazardous Chemicals Act 1985.
To th	ne best of my knowledge:
-	the site has been notified to the EPA under section 60 of the Contaminated Land Management Act 1997
\boxtimes	the site has not been notified to the EPA under section 60 of the <i>Contaminated Land Management Act</i> 1997.
Site	audit commissioned by
Nam	ne:
Com	pany: CPB Contractors Pty Ltd and United Infrastructure Pty Ltd (CPBUI JV)
Addı	ress: Level 5, 60 Miller Street, North Sydney NSW
	Postcode: 2060
Phor	ne: 02 9035 5007
Ema	nil: @cpbuijv.com.au

Contact details for contact person (if different from above) Name: Phone: @cpbuijv.com.au Email: Nature of statutory requirements (not applicable for non-statutory audits) Requirements under the Contaminated Land Management Act 1997 (e.g. management order; please specify, including date of issue) Requirements imposed by an environmental planning instrument (please specify, including date of issue) Development consent requirements under the Environmental Planning and XAssessment Act 1979 (please specify consent authority and date of issue) Development consent (SSI 10051, issued on 23 July 2021) was granted by the Minister for Planning and Public Spaces for construction and operation of a railway track to the Western Sydney Airport. Requirements under other legislation (please specify, including date of issue)

Purpose of site audit					
	A1 To determine land use suitability				
	Intended uses of the land:				
OR					
\boxtimes	A2 To determine land use suitability subject to compliance with either an active or passive environmental management plan				
	Intended uses of the land: Permanent stockpile / vegetated landform that is grassed and located within a fenced commercial/industrial setting.				
OR					
(Tick	all that apply)				
	B1 To determine the nature and extent of contamination				
	B2 To determine the appropriateness of:				
	□ an investigation plan				
	□ a remediation plan				
	□ a management plan				
-	B3 To determine the appropriateness of a site testing plan to determine if groundwater is safe and suitable for its intended use as required by the Temporary Water Restrictions Order for the Botany Sands Groundwater Resource 2017				
	B4 To determine the compliance with an approved:				
	□ voluntary management proposal or				
	☐ management order under the Contaminated Land Management Act 1997				
-	B5 To determine if the land can be made suitable for a particular use (or uses) if the site is remediated or managed in accordance with a specified plan.				
	Intended uses of the land:				
Info	rmation sources for site audit				
Cons	sultancies which conducted the site investigations and/or remediation:				
Sydn	ey Environmental Group Pty Ltd (Sydney Environmental)				
Doug	glas Partners Pty Ltd (Douglas Partners)				
Tetra	a Tech Coffey Pty Ltd (Coffey)				

Titles of reports reviewed:

'Site Validation Report, SCAW PS105, Luddenham Road, Orchard Hills NSW', 21 March 2025 by Sydney Environmental.

'Site Validation Report, SCAW PS105, Luddenham Road, Orchard Hills NSW', 1 by Sydney Environmental (Validation Report).	4 April 2025
'Long-term Environmental Management Plan, PS105, Luddenham Road, Orchar NSW' dated 14 April 2025 by Sydney Environmental (LTEMP) (attached).	d Hills
Other information reviewed, including previous site audit reports and statements the site:	relating to
'Sydney Metro Western Sydney Airport Surface and Civil Alignment Works (SCA Asbestos Management Plan', 19 May 2023, Coffey.	λW),
'Remediation Action Plan For Encapsulation of Contamination Soil', 22 December Douglas Partners.	er 2023,
'Environmental Impact Statement' dated October 2020 by Sydney Metro.	
Site Audit Statement MP181_14	
'Site Audit Report, Permanent Stockpile 105 43B Luddenham Road, Orchard Hil Number: MP181_14, dated 8 March 2024.	ls', Audit
Site audit report details	
Title: 'Site Audit Report, Permanent Stockpile 105, 43B Luddenham Road, Orcha	ard Hills'
Report no. MP181_14B Date: 6 May 202	25

Part II: Auditor's findings

Please complete either Section A1, Section A2 or Section B, not more than one section. (Strike out the irrelevant sections.)

- Use Section A1 where site investigation and/or remediation has been completed and a
 conclusion can be drawn on the suitability of land uses without the implementation of
 an environmental management plan.
- Use Section A2 where site investigation and/or remediation has been completed and a
 conclusion can be drawn on the suitability of land uses with the implementation of an
 active or passive environmental management plan.
- Use Section B where the audit is to determine:
 - o (B1) the nature and extent of contamination, and/or
 - (B2) the appropriateness of an investigation, remediation or management plan¹, and/or
 - (B3) the appropriateness of a site testing plan in accordance with the Temporary Water Restrictions Order for the Botany Sands Groundwater Source 2017, and/or
 - (B4) whether the terms of the approved voluntary management proposal or management order have been complied with, and/or
 - (B5) whether the site can be made suitable for a specified land use (or uses) if the site is remediated or managed in accordance with the implementation of a specified plan.

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¹ For simplicity, this statement uses the term 'plan' to refer to both plans and reports.

Section A1

I certify that, in my opinion: The site is suitable for the following uses: (Tick all appropriate uses and strike out those not applicable.) Residential, including substantial vegetable garden and poultry Residential, including substantial vegetable garden, excluding poultry Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry □ Day care centre, preschool, primary school Residential with minimal opportunity for soil access, including units Secondary school Park, recreational open space, playing field Commercial/industrial ☐ Other (please specify): OR ☐ I certify that, in my opinion, the site is not suitable for any use due to the risk of harm from contamination. Overall comments:

Section A2

ı	certify	that.	in	mv	opinion

•	ect to compliance with the <u>attached</u> environmental management plan ² (EMP), te is suitable for the following uses:
(Tick	all appropriate uses and strike out those not applicable.)
	Residential, including substantial vegetable garden and poultry
П—	Residential, including substantial vegetable garden, excluding poultry
	Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry
	Day care centre, preschool, primary school
	Residential with minimal opportunity for soil access, including units
	Secondary school
\boxtimes	Park, recreational open space, playing field
\boxtimes	Commercial/industrial
\boxtimes	Other (please specify):
	Permanent stockpile / vegetated landform
EMP	details
Title: NSW	Long-term Environmental Management Plan, PS105, Luddenham Road, Orchard Hills
Autho	or: Sydney Environmental
Date:	14 April 2025 No. of pages: 33
EMP	summary
This I	EMP (attached) is required to be implemented to address residual contamination on the
The E	EMP: (Tick appropriate box and strike out the other option.)
	requires operation and/or maintenance of active control systems ³
\boxtimes	requires maintenance of passive control systems only ³ .

² Refer to Part IV for an explanation of an environmental management plan. ³ Refer to Part IV for definitions of active and passive control systems.

Purpose of the EMP:
To outline the maintenance of the capping layers within the placement cell and prevent any unplanned breaches of the capping layer and containment cell.
Description of the nature of the residual contamination:
Approximately 3,365 m³ of fill material impacted by asbestos placed beneath the marker and capping layer. The fill material generally comprised of silty clay with gravels, plastics, metals, glass, asbestos, brick, terracotta, PVC and concrete. The capping layer was at least 2 m thick and deemed to be suitable for recreational and commercial uses.
Summary of the actions required by the EMP:
Maintenance of surface coverings, routine inspections of the cap and completion of registers.
How the EMP can reasonably be made to be legally enforceable:
The LTEMP is attached to the Site Audit Statement that will be provided to the Department of Planning and Environment, as well as Council. Council will note the presence of a Site Audit Statement on the Planning Certificate.
Condition of Approval E93 (SSI 10051) outlines that the EMP is to be submitted to the Planning Secretary and relevant Councils alongside the Section A2 SAS:
A Section A1 or Section A2 Site Audit Statement (accompanied by an Environmental Management Plan) and its accompanying Site Audit Report, which state that the contaminated land disturbed by the work has been made suitable for the intended land use, must be submitted to the Planning Secretary and the Relevant Council(s) after remediation and before the commencement of operation of the CSSI.
How there will be appropriate public notification:
The LTEMP is attached to the Site Audit Statement that will be provided to Council so that the presence of the Site Audit Statement is noted on the planning certificate.

Overall comments:			

Section	P
Occion	Ъ

Purpose of the plan ⁴ which is the subject of this audit:		
I certify that, in my opinion:		
(B1)		
☐ The nature and extent of the contamination has been appropriately determined		
☐ The nature and extent of the contamination has not been appropriately determined		
AND/OR (B2)		
☐ The investigation, remediation or management plan is appropriate for the purpose stated above		
☐ The investigation, remediation or management plan is not appropriate for the purpose stated above		
AND/OR (B3)		
☐ The site testing plan:		
□ is appropriate to determine		
if groundwater is safe and suitable for its intended use as required by the <i>Temporary</i> Water Restrictions Order for the Botany Sands Groundwater Resource 2017		
AND/OR (B4)		
☐ The terms of the approved voluntary management proposal* or management order**		
(strike out as appropriate):		
□ have been complied with □ have not been complied with.		
*voluntary management proposal no.		
**management order no.		
AND/OR (B5)		
The site can be made suitable for the following uses:		
(Tick all appropriate uses and strike out those not applicable.)		
Residential, including substantial vegetable garden and poultry		
 Residential, including substantial vegetable garden, excluding poultry 		

⁴ For simplicity, this statement uses the term 'plan' to refer to both plans and reports.

	Residential with accessible soil, including garden (minimal home-grown produce contributing less than 10% fruit and vegetable intake), excluding poultry				
☐ Day care centre, preschool, primary school					
☐ Residential with minimal opportunity for soil access, including units					
	Secondary school				
	Park, recreational open space, playing field				
	Commercial/industrial				
-	Other (please specify):				
IF the site	is remediated/managed* in accordance with the following plan (attached):				
*Strike ou	t as appropriate				
Plan title					
Plan autho	or				
Plan date	No. of pages				
SUBJECT	to compliance with the following condition(s):				
Overall co	mments:				

Part III: Auditor's declaration

I am accredited as a site auditor by the NSW Environment Protection Authority (EPA) under the *Contaminated Land Management Act 1997*.

Accreditation no. 0803

I certify that:

- I have completed the site audit free of any conflicts of interest as defined in the Contaminated Land Management Act 1997, and
- with due regard to relevant laws and guidelines, I have examined and am familiar with the reports and information referred to in Part I of this site audit, and
- on the basis of inquiries I have made of those individuals immediately responsible for making those reports and obtaining the information referred to in this statement, those reports and that information are, to the best of my knowledge, true, accurate and complete, and
- this statement is, to the best of my knowledge, true, accurate and complete.

I am aware that there are penalties under the *Contaminated Land Management Act 1997* for wilfully making false or misleading statements.

Signed:		
Date: 6 May 2025		

Part IV: Explanatory notes

To be complete, a site audit statement form must be issued with all four parts.

How to complete this form

Part I

Part I identifies the auditor, the site, the purpose of the audit and the information used by the auditor in making the site audit findings.

Part II

Part II contains the auditor's opinion of the suitability of the site for specified uses or of the appropriateness of an investigation, or remediation plan or management plan which may enable a particular use. It sets out succinct and definitive information to assist decision-making about the use or uses of the site or a plan or proposal to manage or remediate the site.

The auditor is to complete either Section A1 or Section A2 or Section B of Part II, **not** more than one section.

Section A1

In Section A1 the auditor may conclude that the land is *suitable* for a specified use or uses OR *not suitable* for any beneficial use due to the risk of harm from contamination.

By certifying that the site is *suitable*, an auditor declares that, at the time of completion of the site audit, no further investigation or remediation or management of the site was needed to render the site fit for the specified use(s). **Conditions must not be** imposed on a Section A1 site audit statement. Auditors may include **comments** which are key observations in light of the audit which are not directly related to the suitability of the site for the use(s). These observations may cover aspects relating to the broader environmental context to aid decision-making in relation to the site.

Section A2

In Section A2 the auditor may conclude that the land is *suitable* for a specified use(s) subject to a condition for implementation of an environmental management plan (EMP).

Environmental management plan

Within the context of contaminated sites management, an EMP (sometimes also called a 'site management plan') means a plan which addresses the integration of environmental mitigation and monitoring measures for soil, groundwater and/or hazardous ground gases throughout an existing or proposed land use. An EMP succinctly describes the nature and location of contamination remaining on site and states what the objectives of the plan are, how contaminants will be managed, who will be responsible for the plan's implementation and over what time frame actions specified in the plan will take place.

By certifying that the site is suitable subject to implementation of an EMP, an auditor declares that, at the time of completion of the site audit, there was sufficient information satisfying guidelines made or approved under the *Contaminated Land Management Act* 1997 (CLM Act) to determine that implementation of the EMP was feasible and would enable the specified use(s) of the site and no further investigation or remediation of the site was needed to render the site fit for the specified use(s).

Implementation of an EMP is required to ensure the site remains suitable for the specified use(s). The plan should be legally enforceable: for example, a requirement of a notice under the CLM Act or a development consent condition issued by a planning authority. There should also be appropriate public notification of the plan, e.g. on a certificate issued under s.149 of the Environmental Planning and Assessment Act 1979.

Active or passive control systems

Auditors must specify whether the EMP requires operation and/or maintenance of active control systems or requires maintenance of passive control systems only. Active management systems usually incorporate mechanical components and/or require monitoring and, because of this, regular maintenance and inspection are necessary. Most active management systems are applied at sites where if the systems are not implemented an unacceptable risk may occur. Passive management systems usually require minimal management and maintenance and do not usually incorporate mechanical components.

Auditor's comments

Auditors may also include **comments** which are key observations in light of the audit which are not directly related to the suitability of the site for the use(s). These observations may cover aspects relating to the broader environmental context to aid decision-making in relation to the site.

Section B

In Section B the auditor draws conclusions on the nature and extent of contamination, and/or suitability of plans relating to the investigation, remediation or management of the land, and/or the appropriateness of a site testing plan in accordance with the *Temporary Water Restrictions Order for the Botany Sands Groundwater Source 2017*, and/or whether the terms of an approved voluntary management proposal or management order made under the CLM Act have been complied with, and/or whether the site can be made suitable for a specified land use or uses if the site is remediated or managed in accordance with the implementation of a specified plan.

By certifying that a site *can be made suitable* for a use or uses if remediated or managed in accordance with a specified plan, the auditor declares that, at the time the audit was completed, there was sufficient information satisfying guidelines made or approved under the CLM Act to determine that implementation of the plan was feasible and would enable the specified use(s) of the site in the future.

For a site that *can be made suitable*, any **conditions** specified by the auditor in Section B should be limited to minor modifications or additions to the specified plan. However, if the auditor considers that further audits of the site (e.g. to validate remediation) are required, the auditor must note this as a condition in the site audit statement. The condition must not specify an individual auditor, only that further audits are required.

Auditors may also include **comments** which are observations in light of the audit which provide a more complete understanding of the environmental context to aid decision-making in relation to the site.

Part III

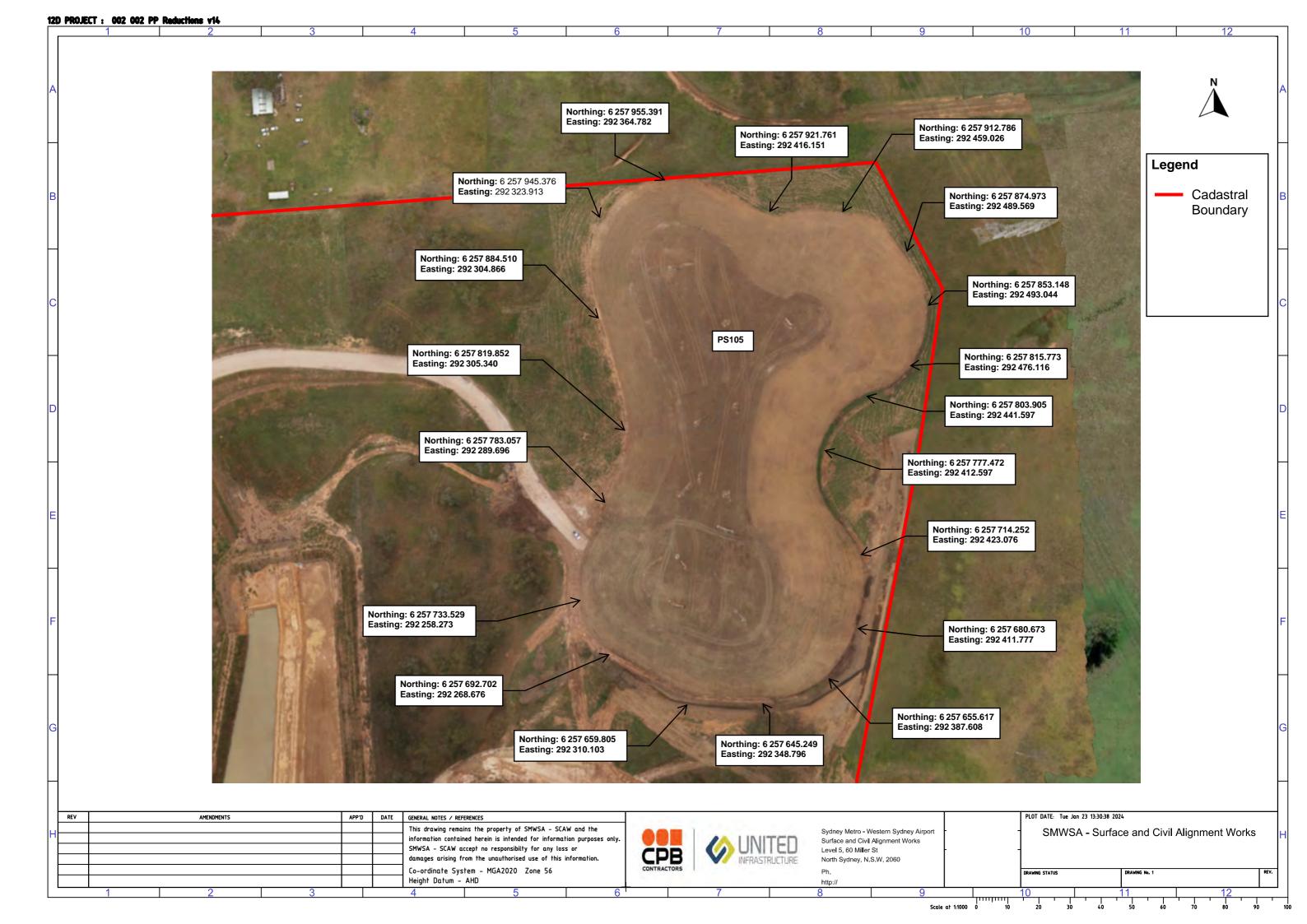
In **Part III** the auditor certifies their standing as an accredited auditor under the CLM Act and makes other relevant declarations.

Where to send completed forms

In addition to furnishing a copy of the audit statement to the person(s) who commissioned the site audit, statutory site audit statements must be sent to

- the NSW Environment Protection Authority: <u>nswauditors@epa.nsw.gov.au</u> or as specified by the EPA AND
- the local council for the land which is the subject of the audit.

Attachment 1: Site Survey Plan



Attachment 2: Long-term Environmental Management Plan



Sydney Environmental

Group

Long-term Environmental Management Plan

PS105, Luddenham Road, Orchard Hills NSW

CPB Contractors Pty Ltd and United Infrastructure Pty Ltd Joint Venture (CPBUIJV)

Report No: 1870-EMP-01-170125.v3f

Report Date: 14 April 2025



- A1420, Sydney South NSW
- Info@sydneyenvironmental.com.au

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DOCUMENT RECORD

Revision	Date	Author	Reviewer
v1f	17 January 2025		
v2f	21 March 2025		
v3f	14 April 2025		

Author Signature		Reviewer Signature	
Name		Name	
Credentials	B.Sc. Earth Sc.	Credentials	CEnvP, M.Sc.Envir.Sci, B.Sc. Meteorology
Title	Environmental Scientist	Title	Managing Consultant

Document Title:	Environmental Management Plan, PS105, Luddenham Road, Orchard Hills NSW
Site Address:	PS105, Luddenham Road, Orchard Hills NSW
Client Name:	CPB Contractors Pty Ltd & United Infrastructure Pty Ltd Joint Venture (CPBUIJV)
Site Size:	4.5 ha
Reference Number:	1870-EMP-01-170125.v3f
Project Type:	Long Term Environmental Management Plan
Project Type Abbreviation:	EMP
Document Draft:	FINAL
Document Revision No.	v3

Prepared by Sydney Environmental Group Pty Ltd ABN: 14 631 026 214



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Inspection Record Form

Incident Reporting Form

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1. PURPOSE

1.1. Background

Sydney Environmental Group Pty Ltd (SE) was engaged by CPB Contractors Pty Ltd and United Infrastructure Pty Ltd Joint Venture (CPBUIJV) (the client) to prepare an Environmental Management Plan (EMP) for asbestos impacted soils that have been capped and contained within the site located within PS105, Luddenham Road, Orchard Hills NSW (refer **Figure 1**). The site is legally identified as a Part of Lot 51 in DP1276956.

Non-Friable and Friable asbestos impacted soils were transported to the site during development works. Asbestos impacted soils were remediated using a 'cap and contain' strategy. The containment strategy is a passive system comprised of a clean capping layer, overlying an additional layer of clean fill soils, and finally an orange geotextile marker layer. Friable and Non-Friable asbestos impacted soils are buried beneath the capping system.

This EMP describes conditions of the site and details passive management strategies to manage contained asbestos impacted soils. The protocols outlined in this EMP must be considered in future works that may result in a breach of the capping layer covering the asbestos impacted soils containment cell on-site (refer to **Figure 2** and **Attachment A – Containment Cell Survey**).

1.2. Objectives

The key objective of this EMP is to outline the maintenance of the capping layers within the placement cell and prevent any unplanned breaches of the capping layer and containment cell. To achieve the objective, this EMP documents: This long-term EMP is required to be implemented to:

- Detail the known extent and construction of the asbestos impacted soils containment cell;
- Define responsibilities and safe work procedures for working with asbestos impacted soils;
- Define incident response and reporting requirements;
- Define the roles and responsibilities of relevant stakeholders to ensure the safe, long-term management of the site; and
- Detail the mechanism to make this EMP legally enforceable and the parties responsible for the ongoing management of the containment cell on-site.

1.3. Supporting Documentation

This EMP has been developed based on the findings of the following previous investigation, remediation and validation:

- Remediation Action Plan, prepared by Douglas Partners, 204814.01.RAP.006.Rev3; dated 22 December 2023; and
- Site Validation Report, prepared by SE, 1870-SVR-03-211124.v3f, dated 21 March 2025

1.4. Legal Enforceability

All operations and activities conducted on the site must fully comply with the provisions of relevant NSW environmental legislation and WHS legislation, as well as any further requirements imposed by the relevant authorities, e.g. NSW EPA under the *Contaminated Land Management Act, 1997, Work Health and Safety Act, 2011*, and the *Protection of the Environment Operations Act, 1997* and associated Regulations.

In NSW, Long-Term Environmental Management Plans (LTEMPs) become legally enforceable when they are required as conditions of development consent under the *Environmental Planning and Assessment Act 1979* or included in Environment Protection Licences under the *Protection of the Environment Operations Act 1997*. Once approved, these conditions are binding, and non-compliance can lead to penalties, stop-work orders, or court action. Enforcement is carried out by agencies like the NSW EPA, the Department of Planning, and the Land and



Environment Court, ensuring ongoing environmental protection through monitoring, reporting, and legal oversight.

1.5. Public Disclosure

The public disclosure of the asbestos impacted soils retained on-site within the on-site containment cell will be via the following instruments:

- Section 10.7 certificate and Land Titles
- Section 88B Covenant (Refer to Appendix B)
- Site Audit Statement

The Site Owner is to register a covenant on title of the land (S88B) binding the owners and future owners to the following:

- Responsibility for ongoing maintenance of the asbestos containment cell in accordance with the EMP;
 and
- Responsibility for any future management of site contamination that may be required by NSW
 Environment Protection Authority to ensure that the site remains suitable for present or proposed land
 uses and to ensure risks to human health remain low and acceptable.

Penrith City Council is to amend the Section 10.7 (2) Planning Certificate to include the following notations:

- The site is identified as Contaminated Land; and
- The existence of the Site Audit Statement and Environmental Management Plan

1.6. Key Stakeholders and Responsibilities

The key stakeholders and their contact details are listed in **Table 1.6.1** below.

Table 1.1 Stakeholder Contact Details

Stakeholder	Organisation	Address
Council	Penrith City Council	601 High Street, Penrith NSW
Site Owner	Sydney Metro	47 Tallawong Road, Tallawong NSW
Property Operator	Sydney Metro	47 Tallawong Road, Tallawong NSW



Table 1.2 Key Stakeholders and Responsibilities

Stakeholder	Organisation	Responsibility
Council	Penrith City Council	Update s10.7 Planning Certificate to identify the land as 'Contaminated Land' and identify the existence of this EMP. Enforce the EMP
Site Owner	Sydney Metro Environment Manager	Ensure the EMP is readily available, up to date, and relevant for those who operate the site. If there is a material change to the EMP (remediation) provide Council with updated EMP.
Property Operator	Sydney Metro	Implement and maintain EMP Induct sub-surface workers to EMP Keep records or entry / closure of containment cell
		Ensure EMP is on file at property and that the EMP remains relevant, as well as review and update the EMP if site conditions change (for example change of land use or there is a breach of the EMP.
Property	Sydney Metro	A suitably qualified environmental consultant may be engaged to undertake this, as required, at the discretion of Sydney Metro.
Manager	Property Manager	Review any proposed works and documentation from future site contractors against the requirements of this EMP. This includes any intrusive works which may damage the cap and / or the marker layer.
		Cap inspections must be routinely implemented by the property manager and documented.
Future Site Contractors	Various	All contractors who may breach the containment cell must be provided with and review this EMP. Where the containment cell is likely to be breached, then management strategies detailed in this EMP must be implemented. All future site contractors must also be inducted to the site.
Environmental Consultant	Engaged as required	An appropriately qualified Environmental Consultant must be consulted prior to any sub-surface works. Update EMP as engaged by the Property Manager.
Class A Licensed Asbestos Removalist	Engaged as required	A SafeWork NSW Class A Licensed Asbestos Removalist must be engaged to supervise any sub-surface works that require or may involve disturbing or removing asbestos contaminated materials.
Licensed Asbestos Assessor	Engaged as required	A SafeWork NSW Licensed Asbestos Assessor must be engaged to undertake airborne asbestos monitoring during any sub-surface works that require or may involve disturbing or removing asbestos contaminated materials and issue a clearance certificate at the successful completion of those works.
Site Auditor	Engaged as required	An auditor may be engaged to review EMP after material change to the EMP which may impact the use or suitability of the land, as required, at the discretion of Sydney Metro. Issue Site Audit Statement (SAS)
Site Visitors	Public	PS105 is to be fenced off and not publicly accessible. Maintenance will be associated with corridor landscaping works. Vegetation and landscaping will be as per what is implemented by SCAW (i.e. grass or shallow/surficial landscaping).



2. SITE SETTING

2.1. Site Identification

The site identification details and associated information are presented in **Table 2.1.**

Table 2.1. Site Identification Information

Attribute	Description
Street Address	PS105, Luddenham Road, Orchard Hills NSW
Lot and Deposited Plan (DP)	Part of Lot 51 in DP1276956
Geographical Coordinates	-33° 47' 59" S, 150° 45' 25" E (Centre of site)
Site Area	4.5 ha
Local Government Area (LGA)	Penrith City Council
Parish	Claremont
County	Cumberland
	RE1 – Public Recreation
Zoning	RU2 – Rural Landscape
	Penrith Local Environmental Plan 2010



3. Site History Summary

3.1. Site History Summary

The previous land use of the site was observed to be a for grazing activities. No previous contamination was identified at the site before it was selected as a containment area for asbestos impacted soils from other areas of the project.

A remedial action plan, approved by the site auditor was implemented to consolidate and bury asbestos impacted soils from other areas associated with the project within a designed containment cell area on-site. Remedial works were undertaken from June to September 2023.

The remediation works have resulted in asbestos impacted fill materials being retained onsite within a containment cell area. The containment cell is comprised of a capping layer, overlying an additional layer of clean fill soils, and finally an orange geotextile marker layer. Asbestos impacted soils are retained beneath the orange geotextile layer. Asbestos impacted soils were excavated from areas outside of the containment cell and placed atop of asbestos impacted soils that remained in-situ. The remedial surface outside of the containment cell area was validated and backfilled with clean fill soils.

3.2. Asbestos Containment Details

One containment cell is situated on-site. The cell covers an approximate area of 4.5 ha across the northern portion of the site. A summary of the containment cell details, and construction are provided below. Refer to **Appendix A** for containment cell surveys.

Table 3.2.1 Placement Cell Construction Details (PS105 Containment Cell)

Layer Average Thickness (m)		Description	
Soil Surface	0 m Below Ground Level	Soil Surface	
Validated Fill Material	0 m – 4.9 m Below Ground Level	CLAY/, light to medium brown, medium plasticity, no foreign materials identified.	
Top of Cell (Orange geotextile marker layer)	4.9 m – 7.27 m Below Ground Level	Orange geotextile marker layer	
Relocated Asbestos Impacted Materials	4.9 to 6.9 m; 7.27 to 9.27 m Below Ground Level	Silty CLAY, medium plasticity, medium brown, moist-dry, foreign materials including brick, metal, tile and plastic. Contains friable and non-friable asbestos fibre cement fragments	
Beneath Asbestos Cell 6.9 to 9.36m + Below Ground Level		CLAY, orange to yellow / red, medium/high plasticity, no foreign materials identified.	



Table 3.2.2 Placement Cell Surveyed Depths (PS105 Containment Cell)

Location			AHD (m)		
Ch120					
Surface	37.53	37.51	37.93	37.48	37.47
Encapsulation Depth	5.17	5.13	5.57	5.15	5.1
Encapsulation Top	32.36	32.39	32.36	32.34	32.36
Ch100					
Surface	37.51	37.47	37.93	37.67	37.65
Encapsulation Depth	4.98	4.9	5.6	5.26	5.27
Encapsulation Top	32.53	32.57	32.32	32.41	32.38
Ch160					
Surface	37.8	37.81	38.06	38.12	38.06
Encapsulation Depth	5.52	5.32	5.75	5.4	5.44
Encapsulation Top	32.06	32.32	32.35	32.38	32.23
Ch140					
Surface	37.58	37.64	38.09	37.79	37.67
Encapsulation Depth	5.52	5.32	5.75	5.4	5.44
Encapsulation Top	32.06	32.32	32.35	32.38	32.23
Ch170					
Surface	37.88	37.85	38.05	38.16	-
Encapsulation Depth	6.01	5.41	5.67	7.27	-
Encapsulation Top	31.86	32.44	32.38	30.89	-

3.3. Asbestos Health Risks

Asbestos is the generic term for a number of fibrous silicate minerals. There are two major groups of asbestos: the serpentine group (i.e. chrysotile) and the amphibole group (i.e. amosite, crocidolite, tremolite, actinolite and anthophyllite). Asbestos has widely been used in building products due to its insulation and fire-resistant properties. The toxic effects of asbestos are well recognised and primarily result from the inhalation of free fibres. If fibres are inhaled into the lungs, they can initiate diseases that take many years to produce major health effects. These effects include asbestosis, lung cancer and mesothelioma.

The National Environmental Protection Council (NEPC) recognises the following forms of asbestos contamination:

- Asbestos-containing material (ACM) which is in sound condition and the asbestos is bound in a matrix (cement sheeting, tiles). This is also restricted to ACM that cannot pass through a 7mm x 7mm sieve. ACM represents a low human health risk;
- Fibrous Asbestos (FA) encompasses asbestos in the form of loose fibrous material such as insulation and severely weathered ACM defined by its crumbly nature under hand pressure; and
- Asbestos Fines (AF) includes free fibres of asbestos, small fibre bundles and ACM fragments that pass through a 7mm x 7mm sieve.

Both FA and AF have the potential to generate airborne fibres and can pose a considerable inhalation risk if made airborne.

Asbestos presents a hazard only if fibres of respirable size become airborne, and there is a potential for site users to inhale them. The release of asbestos fibres from materials and substrates is dependent on the amount of disturbance impacted upon by these materials. The danger of the airborne asbestos is that fibres are not visible to the naked eye, and the long duration required between exposure to asbestos and the onset of the disease associated.



The cap and contain methodology removes the pathway between the asbestos source (contained asbestos impacted fill soils) and receptors (on-site users, maintenance and construction workers, and persons off-site). If the containment is removed or penetrated, then a pathway may be generated, leading to a complete source – pathway – receptor link.

The presence of asbestos beneath the capping layer at the site does not affect the present safe use of the site under the current land use scenario whilst the existing surface coverings are undisturbed. If however these surface coverings are disturbed, a risk of exposure may result. In order to develop appropriate measures to control this potential exposure, it is necessary to understand the potential exposure pathways.



4. MANAGEMENT PROCEDURES

The PS105 area will be fenced off and not publicly accessible. The cap should be inspected routinely to ensure no significant erosion or breaches are present. These inspections should be undertaken as required by the Sydney Metro Environment Manager. An inspection record should be kept as outlined in **Appendix C**. This EMP is applicable for as long as the containment cell within PS105 exists.

4.1. Induction

Subsurface works are not anticipated to be undertaken at the site unless significant redevelopment works are proposed. Any subsurface works should be prevented and/or minimised as far as is reasonably practicable. Should significant redevelopment be proposed, Council, an LAA, and a Safework NSW Class A licensed asbestos removalist, and/or environmental consultant will need to be notified/engaged.

The Property Owner (Sydney Metro) is to ensure all contractors undertaking subsurface works on the site have completed a site-specific induction in relation to the on-site contained asbestos contamination soils.

The induction program is to include the following:

- Information about the nature of the hazards arising from exposure to asbestos;
- Identification of the location of contained asbestos impacted soils;
- Composition of capping materials for visual reference, including orange marker layer;;
- Procedures to be followed if subsurface works are planned within the containment cell area;
- Procedures to be followed for accidental breach of capping layer;
- Exposure monitoring that may be required for working with asbestos; and
- · Incident reporting.

The Building Operator must keep records of all inductions for 5 years after the day the worker stops carrying out the subsurface works. These records must also be made available for inspection by the Site Owner, Property Manager, or SafeWork NSW as required.

4.2. Licensing

A SafeWork NSW Licensed Asbestos Assessor must be engaged prior to any subsurface works involving the breach of capping materials. All asbestos related works relating to the containment cell must be supervised by:

- A SafeWork NSW Licensed Asbestos Assessor; and
- A SafeWork Class A Asbestos Removalist.

A notification to SafeWork NSW must be submitted and approved prior to any asbestos related works commencing on-site.

4.3. Personnel Protective Equipment

Works conducted below the capping layer in asbestos contaminated soils, must be undertaken by an appropriately licensed contractor meeting the current NSW Work Health and Safety (WHS) and SafeWork requirements. All contractors are required to show compliance with the *Work Health and Safety Act*, 2011, including the preparation of a Site Safety Management Plan and Safe Work Method Statements. An Asbestos Management Plan will require preparation and implementation prior to disturbance of the capping layer including outlining the personnel protective equipment (PPE).

All work shall be undertaken with due regard to the minimisation of environmental effects and to meet all statutory requirements and as such that work on the site complies with all relevant legislation and guidelines.



4.4. Airborne Asbestos Monitoring

A NSW Licensed Asbestos Assessor (LAA) must be engaged to carry out air monitoring during all earthworks conducted below the capping layer. Air monitoring involves sampling airborne asbestos fibres to assist in assessing exposure to asbestos and the effectiveness of implemented control measures. It must be conducted in accordance with the *Guidance Note on the Mebrane filter* [NOHSC3003:2005].

4.5. Spoil Management

Where required, asbestos impacted soil materials to be removed from the site will require classification in accordance with NSW EPA *Waste Classification Guidelines: Part 1: Classifying* waste, November 2014 (NSW EPA 2014).

Where temporary stockpiling of asbestos impacted soils is required, additional measures such as wetting down soils, covering stockpiles etc will be detailed by the supervising Licensed Asbestos Assessor.

4.6. Reporting of Complaints and Incidents

If a complaint is made by a member of the public or by any other person with respect to any environmental management or control issue, appropriate corrective action is required to be undertaken as soon as practicable. The site owner is responsible for ensuring the corrective action is undertaken.

Similarly, if an environmental incident occurs that has given or may give rise to pollution of soil, air or waters, appropriate corrective action is required to be undertaken as soon as practicable.

In addition to the above, complaints and environmental incidents are required to be notified to the site owner as soon as practicable after a complaint has been made or an environmental incident has occurred. If appropriate, and following the site owner's instructions, notification may need to be made to the applicable regulatory authority.

Records of complaints and incidents are required to be entered into a register to be developed for the Site, but only after corrective action has been taken and the site owner has been notified.

4.7. Sub-Surface Works Within the Containment Cell Footprint

Prior to any works that may breach the marker layer / containment cell within PS105, or following an unexpected breach, a SafeWork NSW Licensed Asbestos Assessor must be engaged to review the proposed scope of works and provide a specific works methodology. As the asbestos contained within the containment cell is classified as friable, only a SafeWork NSW Licensed Asbestos Assessor can undertake airborne asbestos monitoring and issue clearance reports. Additionally, a SafeWork Class A licensed asbestos removalist must be engaged to supervise works.

The surface of PS105 comprises of grass or other shallow/surficial landscaping with no deep-rooted vegetation requiring further management. Vegetation will be as per what is implemented under SCAW.



Table 4.1 Planned Works Beneath the Capping Layer

Table 4.1 I familea	works beneath the capping tayer			
	Due to the potential risk of interacting with impacted soils during excavations beneath the capping layer within the containment cell area. When conducting works below the capping layer, the following procedures must be adopted prior to works commencing:			
A ation	 Notify the site owner prior to undertaking any disturbance beneath the capping layer; Engage a Licenced Asbestos Assessor (LAA) / environmental consultant prior to commencement of works below the capping layer; Engage a SafeWork NSW Class A licensed asbestos removalist to undertake and supervise works; SafeWork NSW Class A licensed asbestos removalist must submit a notification to SafeWork NSW. Prior to commencement of soil disturbance, the work area is to be barricaded to restrict entry of unauthorised personnel and to minimise the potential for tracking impacted soil beyond the work area; Placement of an adequate number of indelibly labelled warning signs at the boundary of the area of asbestos removal works, which comply with AS 1319 Safety Signs for Occupational Environment; and Prohibit access to all personnel unless wearing PPE that is appropriate for protection against airborne asbestos fibres. 			
Action	against airborne asbestos fibres.			
	The following procedure must be adopted for handling asbestos impacted soils:			
	 A NSW Licensed Asbestos Assessor (LAA) or appropriately experienced / competent occupational hygienist will be present onsite to manage and supervise works. Keep potentially asbestos impacted soils lightly wetted at all times (without generating free water); If asbestos contaminated soils are to be stockpiled on site, stockpiles must be placed on plastic lining, geotextile, or hard stand surfaces (i.e. bitumen/concrete) to avoid cross contamination of underlying soils; Disposal (if required) of asbestos impacted soil will require assessment, in accordance with the appropriate guidelines, prior to disposal; During transport, all asbestos impacted wastes must be placed in a sealed truck, with appropriate cover, then transported to an appropriately licensed waste receiving facility; Cover stockpiled soils with plastic sheeting or geofabric, during dry and windy conditions whilst awaiting disposal; At the completion of any works, the marker layer and capping layer must be re-instated to the original condition and levels. Any deviation from this will require input from the environmental consultant. 			
Frequency	As required			
Responsibility	 Environmental Consultant; Licensed Asbestos Assessor; Class A Licensed Asbestos Removalist; Appointed contractor; and The site owner (or an appointed representative) 			
	The site owner (or an appointed representative).			



	 Should asbestos impacted soils become exposed, the affected area is to be managed appropriately to reduce risks from asbestos, such as covering the affected area as soon as possible. The area should be delineated and cordoned off through placement of barriers or other appropriate means with appropriate signage. The breach must be rectified as soon as possible and in accordance with the provisions as outlined in this EMP;
	Engage a Licenced Asbestos Assessor (LAA) / environmental consultant to inspect the area and conduct boundary control airborne asbestos monitoring for the duration of the incident;
	Engage a SafeWork NSW Class A licensed asbestos removalist to undertake and supervise works;
Action	The relevant Incident Report Form (Appendix B) must be completed and the breach reported. An incident investigation must be undertaken with the cause of the incident (to prevent reoccurrence) assessed. Copies of the incident report are to be kept on file and a copy provided to the site owner;
	Follow procedures presented in Table 4.7.1 .
	 The capping layer must be re-instated to the original condition. Inspection of the reinstated ground surface and capping layer must be inspected by a SafeWork NSW Licenced Asbestos Assessor (LAA) and supervising Environmental Consultant;
	Corrective action/s are to be implemented to rectify the incident and an associated inspection.
Frequency	As required.
	The site owner (or an appointed representative);
	Environmental Consultant
Responsibility	Licensed Asbestos Assessor;
	Class A Licensed Asbestos Removalist; and
	Appointed contractors.

Table 4.3 EMP Review

Action	A review of this EMP is required when:
	 Site conditions change (redevelopment works, change in land use, change in infrastructure at the site);
	2. Legislation / guidelines change;
	 Inspections indicate exposure of soil materials (i.e. significant erosion, vegetation stripping, or other significant damage to the soil surface) within the containment area and additional management or controls are required;
	4. Incident review indicates further controls are required; and
	5. There is a change of management or ownership of the site.
	Items 1 and 4 must be present to the site auditor for review and acceptance prior to finalisation.
Frequency	Yearly (Consult with environmental consultant to ensure no significant legislation or guideline changes)
	 Anytime material changes are made to the containment cell (i.e. removal of impacted soils, changes to the marker or capping layers, change in land-use, or tenant).
Responsibility	The site owner, with the change to be completed by an environmental consultant (where required) and signed off by the Site Auditor. Note that the site owner is responsible for disseminating the revised EMP to the occupant and council.

4.8. Record Keeping

All planned or unexpected works involving a breach of the capping layer must be recorded and kept by the site owner and site operator.



4.9. PS105 Marker Layer

The marker layer is comprised of mastaTEX Orange Hi Vis Geotextile Warning Layer, photographed upon placement below.



Site Photograph 1. Top of PS105 containment cell, following placement of mastaTEX Orange Hi Vis Geotextile Warning Layer (facing east), as observed 1 February 2024.



5. REFERENCES

CLM Act, 1997	Contaminated Lands Management Act 1997.
POEO Act, 1997	Protection of Environment Operations Act 1997.
WHS Act, 2011	NSW Work Health and Safety Act 2011.
NOHSC, 2005	Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition, (NOHSC: 3003 (2005)).
NEPC, 2013	National Environmental Protection (Assessment of Site Contamination) Measure, 1999, Volume 3: Schedule B2, Guidelines on Site Characterisation, as amended May 2013, National Environment Protection Council (NEPC).
WHS Reg, 2017	NSW Work Health and Safety Regulation 2017
NSW EPA, 2022	Sampling Design Guidelines, September 2020, NSW Environmental Protection Authority (EPA).
NSW EPA, 2020	Guidelines for Consultants Reporting on Contaminated Sites, 2020, NSW EPA
SafeWork, 2022a	SafeWork NSW Code of Practice: How to Safely Remove Asbestos, 2022.
SafeWork, 2022b	SafeWork NSW Code of Practice: <i>How to Manage and Control Asbestos in the Workplace</i> , 2022.
WA DOH, 2021	Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, 2021.
DP 2023	Remediation Action Plan, dated 22 December 2023, prepared by Douglas Partners, ref: 204814.01.RAP.006.Rev3;
SE 2025	Site Validation Report – PS105, Luddenham Road, Orchard Hills NSW', dated 21 March 2025, prepared by SE, ref: '1870-SVR-03-211124.v5f



6. STATEMENT OF LIMITATIONS

The findings presented in this report are based on specific searches of relevant, government historical databases and anecdotal information that were made available during the course of this investigation. To the best of our knowledge, these observations represent a reasonable interpretation of the general condition of the site at the time of report completion.

This report has been prepared solely for the use of the client to whom it is addressed and no other party is entitled to rely on its findings.

No warranties are made as to the information provided in this report. All conclusions and recommendations made in this report are of the professional opinions of personnel involved with the project and while normal checking of the accuracy of data has been conducted, any circumstances outside the scope of this report or which are not made known to personnel and which may impact on those opinions is not the responsibility of Sydney Environmental Group Pty Ltd. Should information become available regarding conditions at the site including previously unknown sources of contamination, SE reserves the right to review the report in the context of the additional information.

This report must be reviewed in its entirety and in conjunction with the objectives, scope and terms applicable to SE's engagement. The report must not be used for any purpose other than the purpose specified at the time SE was engaged to prepare the report.

Logs, figures, and drawings are generated for this report based on individual SE consultant interpretations of nominated data, as well as observations made at the time site walkover/s were completed.

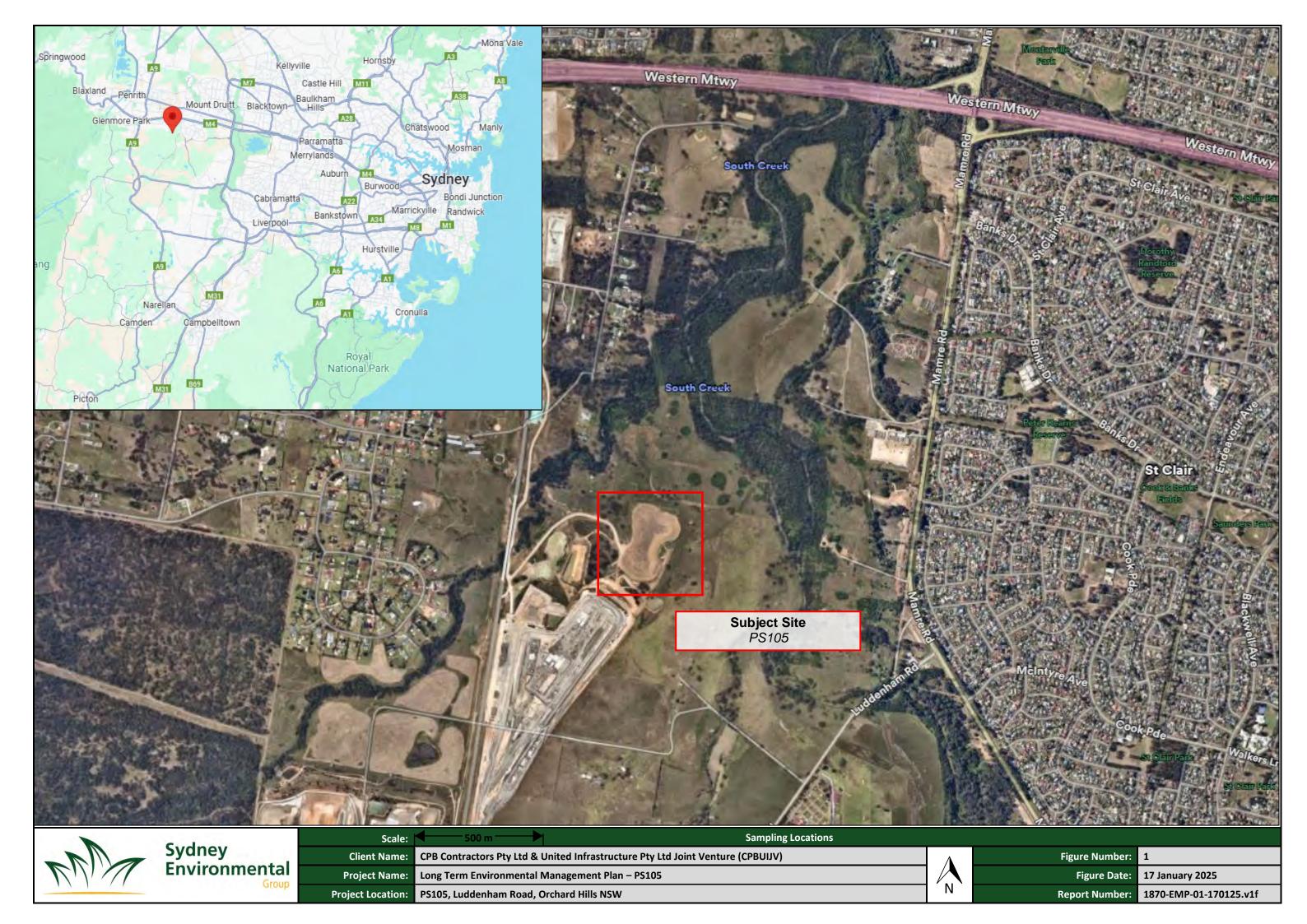
Data and/or information presented in this report must not be redrawn for its inclusion in other reports, plans or documents, nor should that data and/or information be separated from this report in any way.

Should additional information that may impact on the findings of this report be encountered or site conditions change, SE reserves the right to review and amend this report.



FIGURES







Sydney Environmental Group

Project Name:

Project Location:

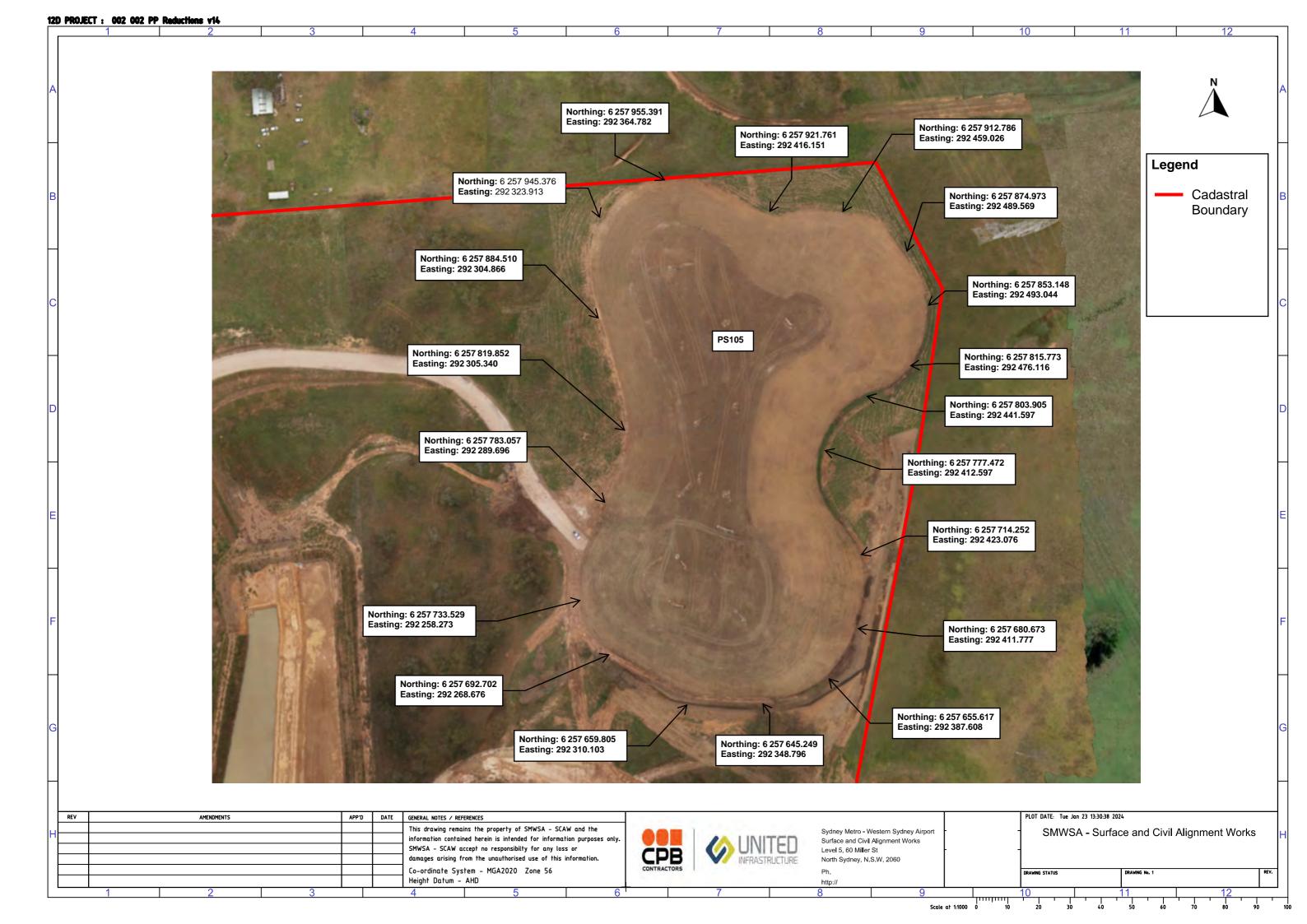
Site Validation Report – PS105

CPBUIJC SCAW Project Compound, Orchard Hills NSW

Figure Date: Report Number:

2 December 2024

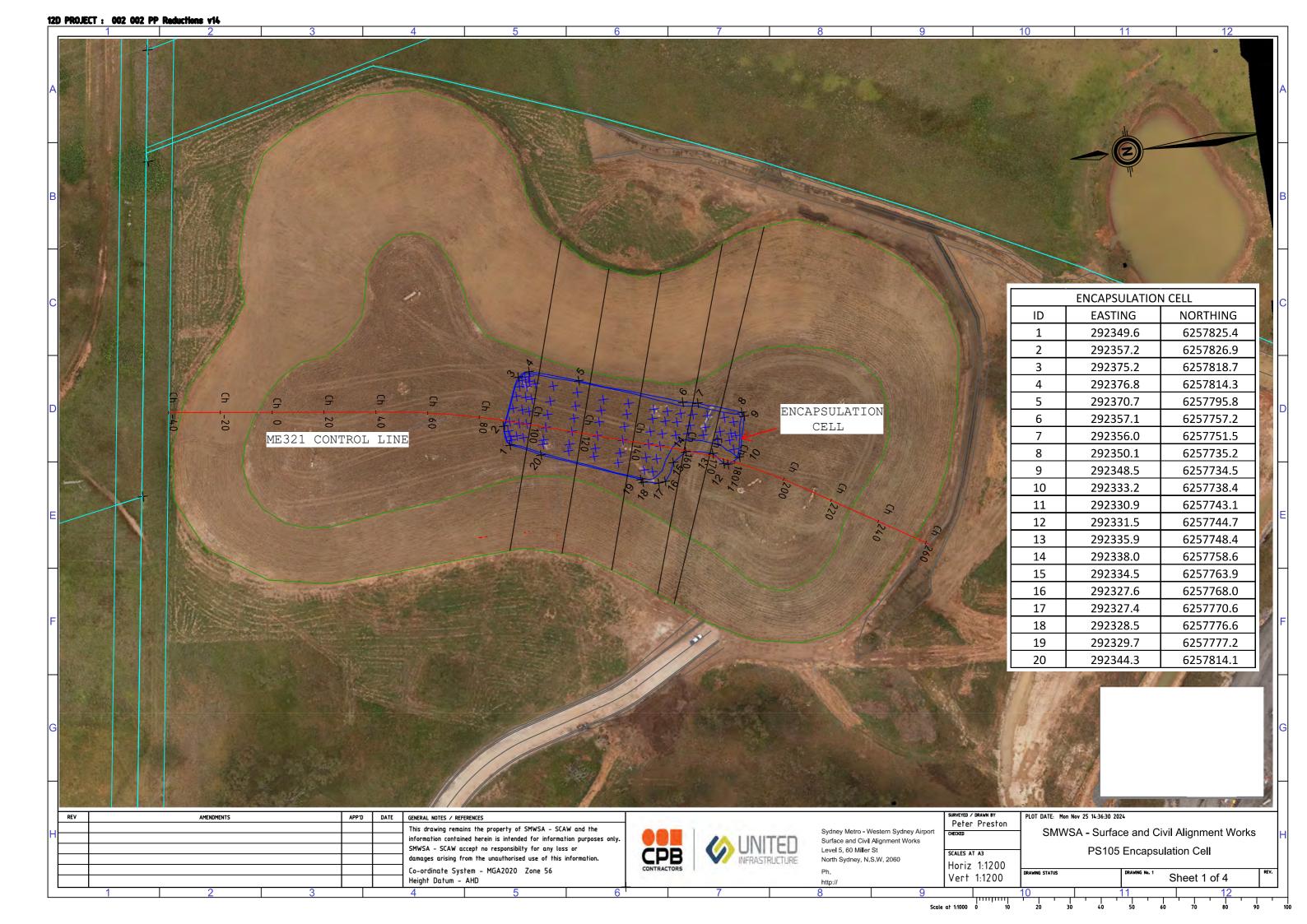
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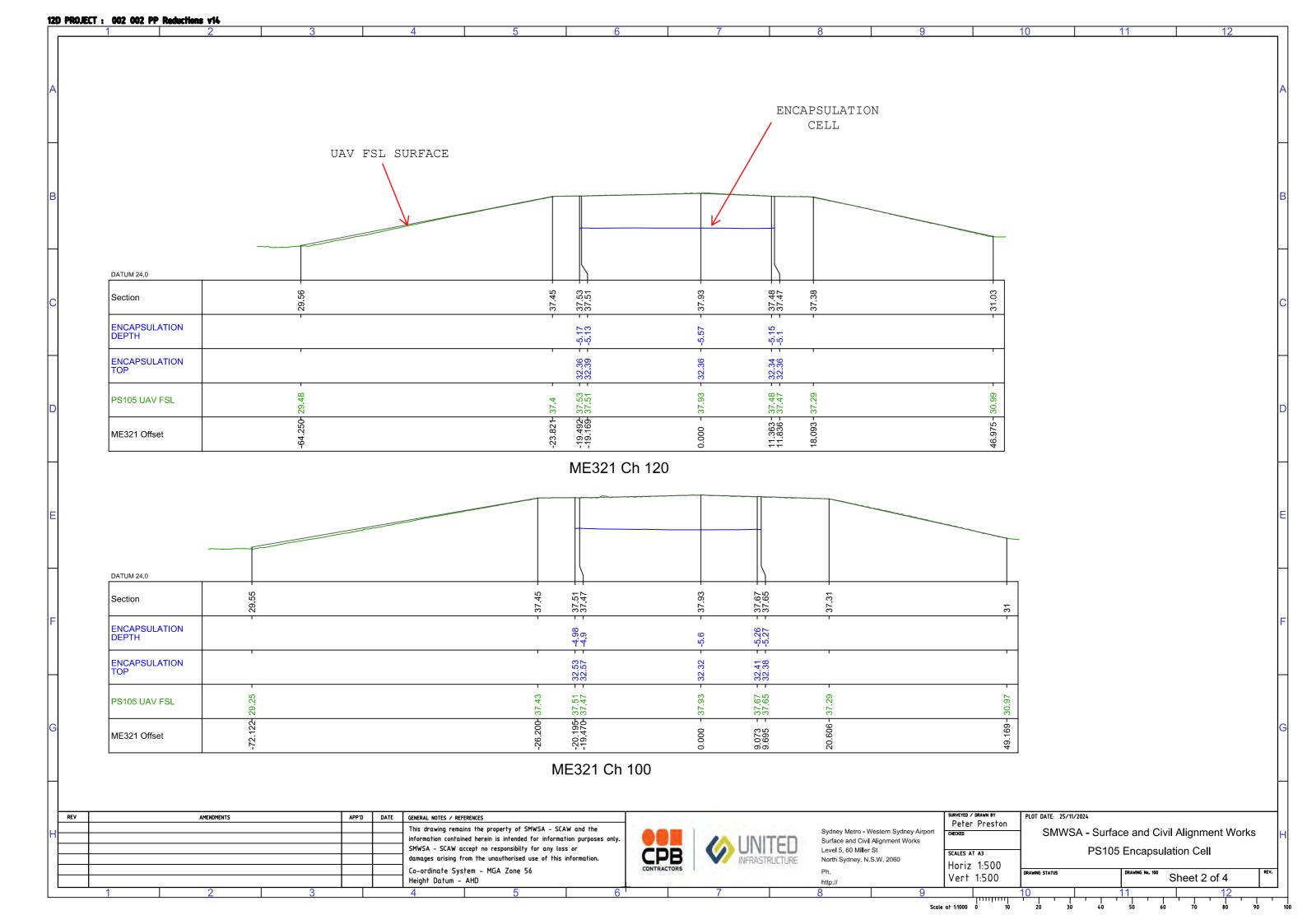


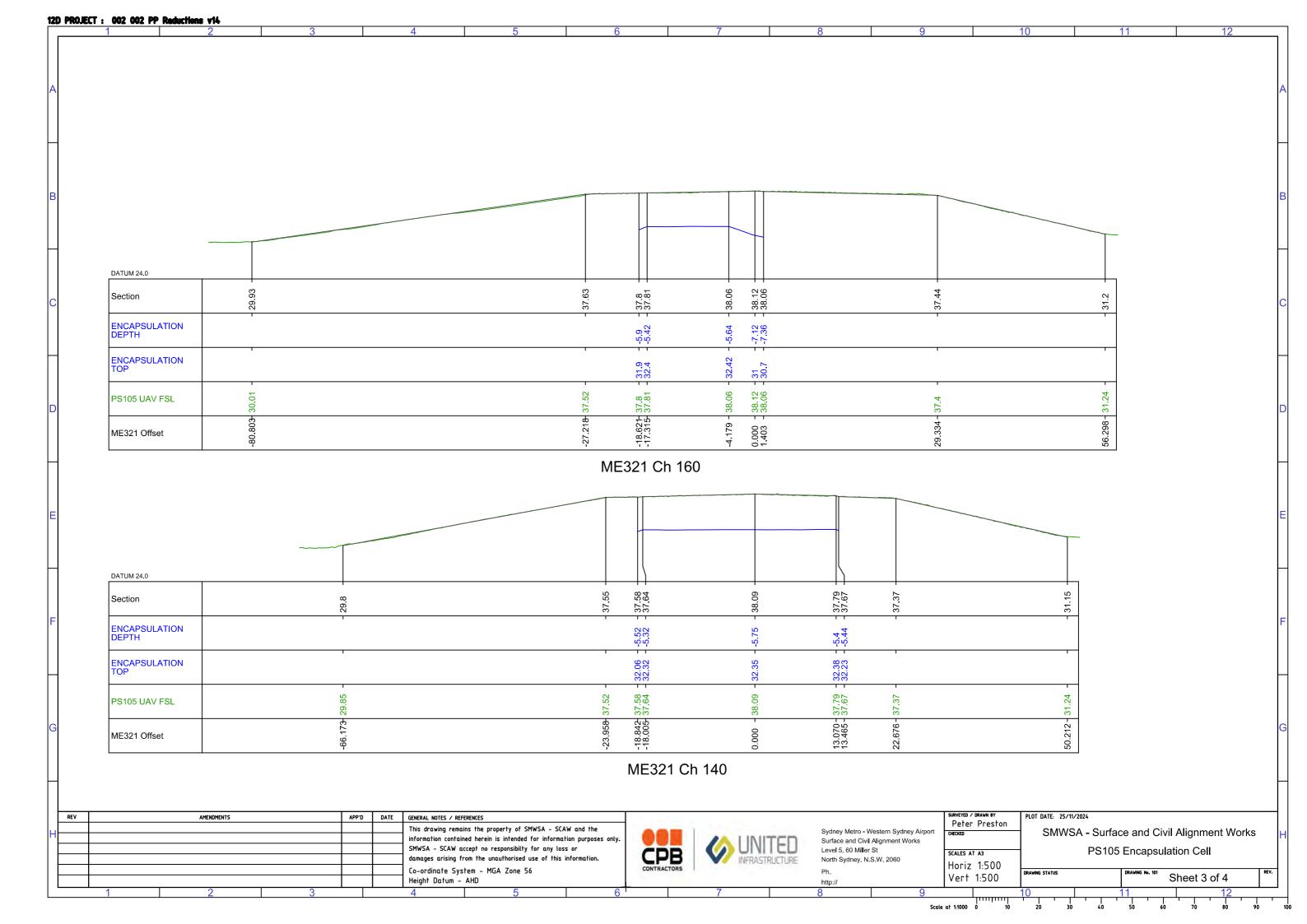


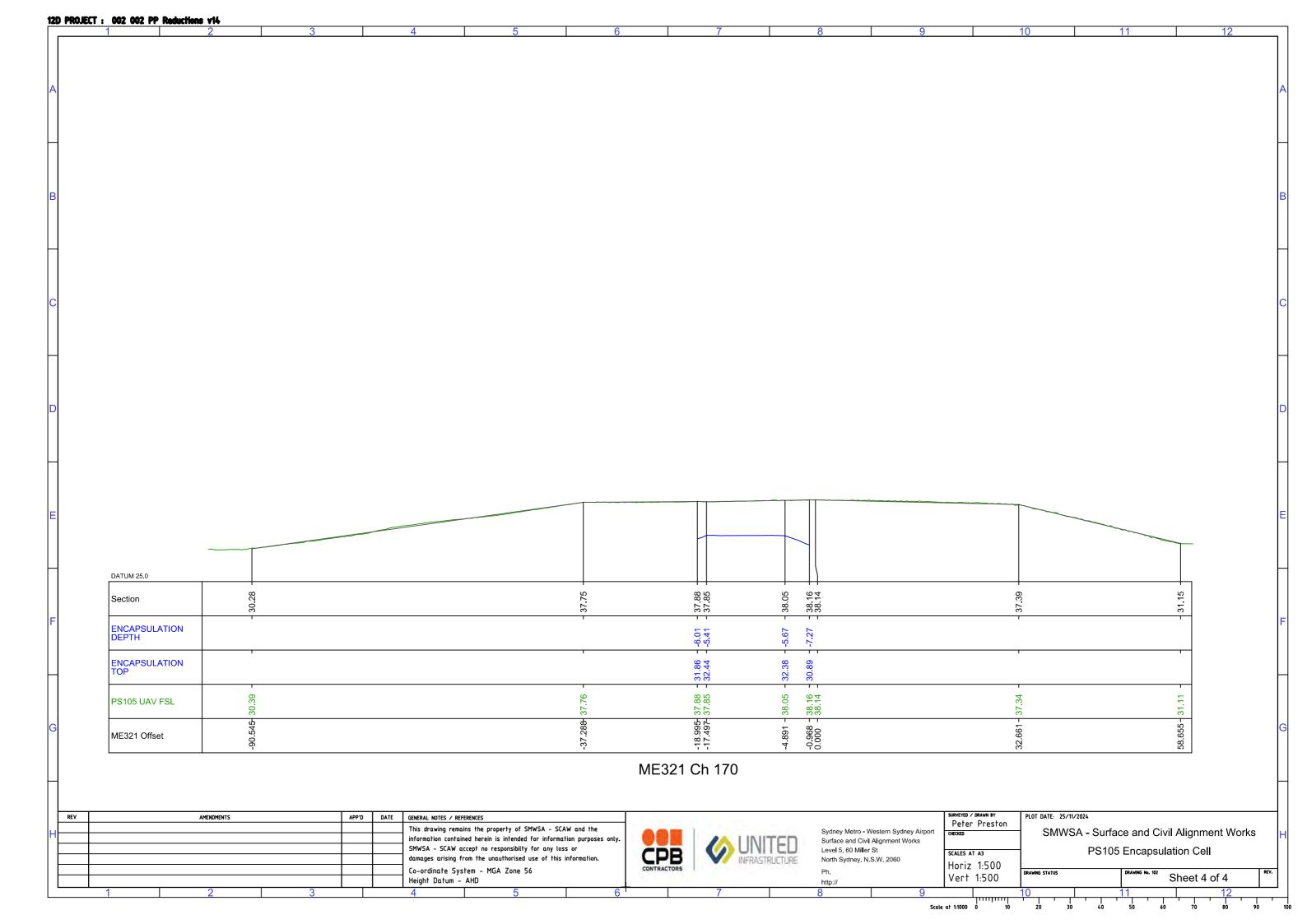
APPENDIX A

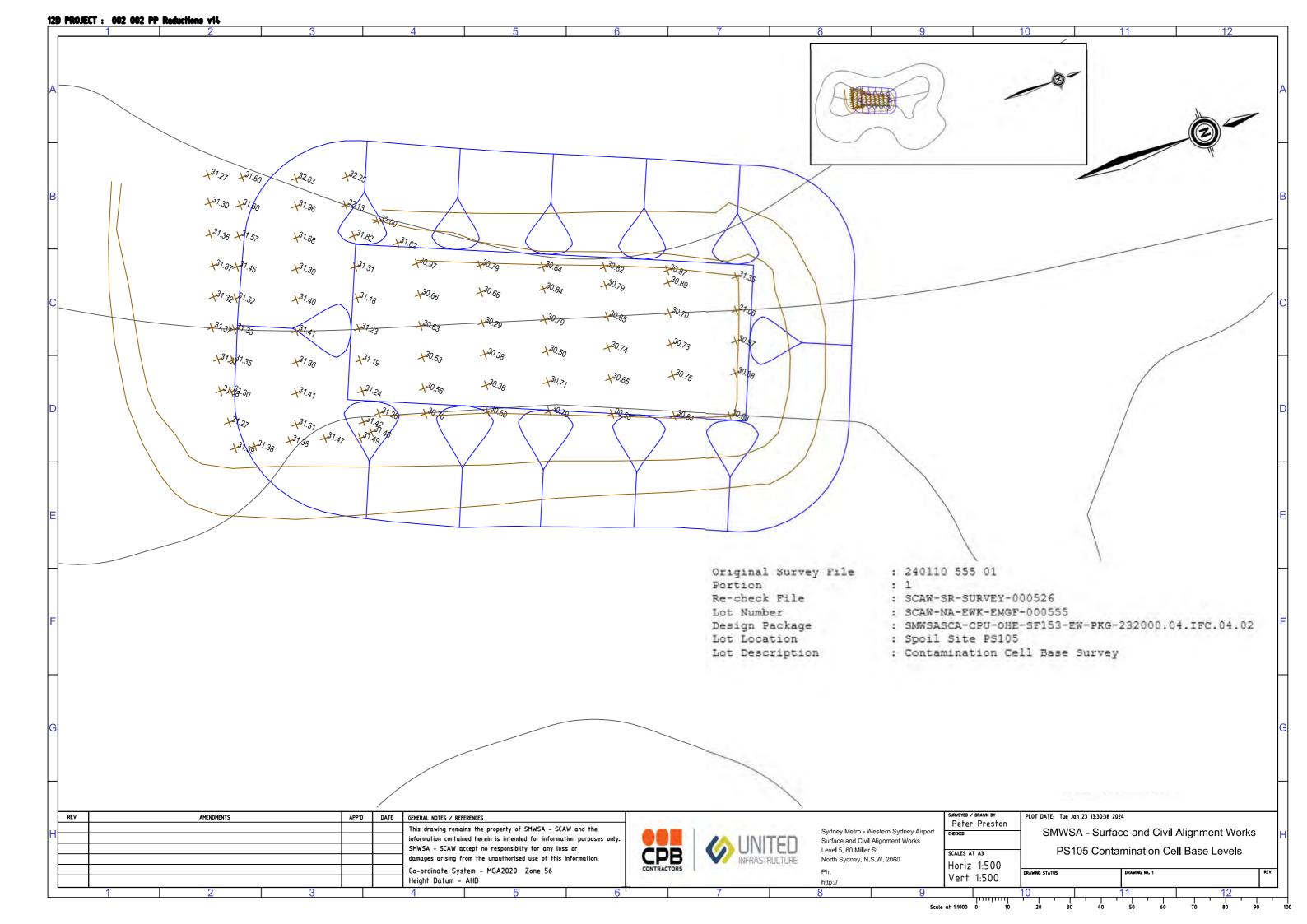
ASBESTOS CONTAINMENT CELL SURVEYS

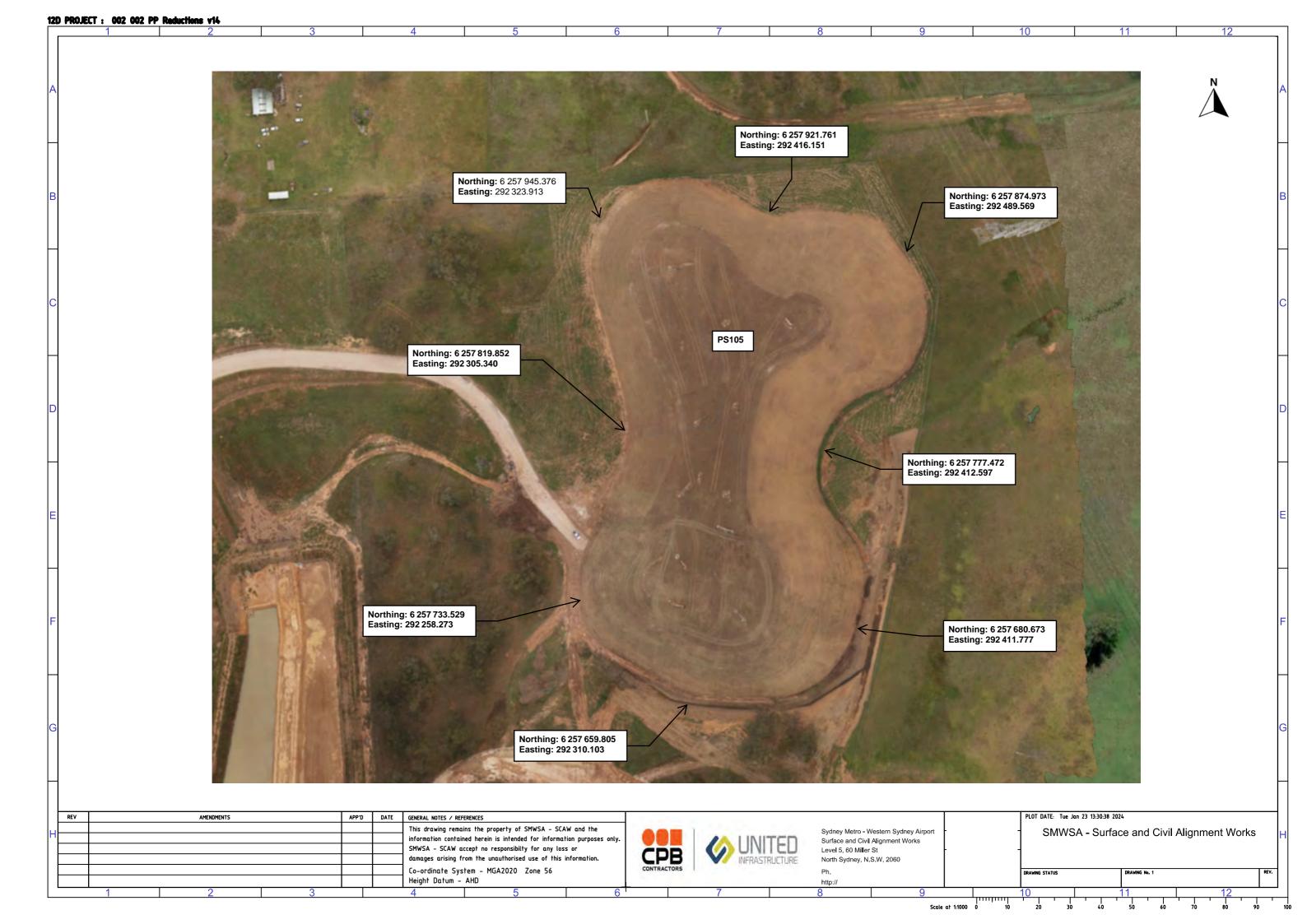














APPENDIX B

SECTION 88B COVENANT



APPENDIX C

INSPECTION RECORD FORM

Capping Inspection Record

PS105, Luddenham Road, Orchard Hills NSW		
Is there any evidence of damage to the capping?		
If yes, describe the location and depth of the damage of the capping.		
Have photographs of damage of the capping been collected.		
Is there any disturbance / erosion of soil in the capping area?		
If yes, describe the location and depth of the disturbance.		
Have photographs of the disturbance in the capping area been collected.		
Are there any areas of exposed marker layer?		
If yes, have contingency measures been implemented?		
Have photographs of the exposed areas been collected?		
Person Completing Inspection		
Date Submitted to Site Owner		





APPENDIX D

INCIDENT REPORTING FORM

Environmental Incident Report Form

PS105, Luddenham Road, Orchard Hills NSW	
Date:	
Time:	
Reported by:	
Persons involved or in the vicinity:	
Type of Incident:	
Severity of Incident:	
Description & Cause of Incident:	
Remedial Actions Required:	
Approved By:	
Date Submitted to Site Owner:	

