Prepared for

HCLF Rosehill PropCo Pty Ltd as Trustee for HCLF Rosehill No 1 Trust

Prepared by

Ramboll Australia Pty Ltd

Date

24 August 2026

Project Number

318002146

Audit Number

RS-117A

SITE AUDIT REPORT

6 GRAND AVENUE, ROSEHILL

RAMBOLL

Bright ideas.
Sustainable change.

RAMBOLL

ENVIRONMENT
& HEALTH

24 August 2026

HCLF Rosehill PropCo Pty Ltd as Trustee for HCLF Rosehill No 1 Trust
C/- Hale Capital Partners Pty Ltd
Attn.: Alana Garrick
Level 14, 88 Phillip Street
Sydney, NSW 2000

By email: alana.garrick@halecp.com

Ramboll
Level 3, 100 Pacific Highway
PO Box 560
North Sydney NSW 2060
Australia

T +61 2 9954 8100
www.ramboll.com

Ref 318002146

Audit No. RS-117A

Dear Alana

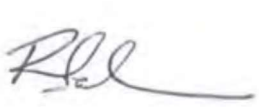
SITE AUDIT REPORT - 6 GRAND AVENUE, ROSEHILL

I have pleasure in submitting the Site Audit Report for the subject site. The Section A2 Site Audit Statement, produced in accordance with the NSW *Contaminated Land Management Act 1997*, is included as Appendix B of the Site Audit Report. The Audit was commissioned by HCLF Rosehill PropCo Pty Ltd as Trustee for HCLF Rosehill No 1 Trust to assess the suitability of the site for its intended use as a multi-level warehouse or distribution centre.

The Audit was initiated to comply with a condition of SSD-55522478 approved by Minister for Planning and Public Spaces on 25 July 2024 and modifications, and is therefore a statutory audit.

Thank you for giving me the opportunity to conduct this Audit. Please call me on 9954 8100 if you have any questions.

Yours faithfully,
Ramboll Australia Pty Ltd



Rowena Salmon
EPA Accredited Site Auditor 1002

cc: NSW EPA – Statement (nswauditors@epa.nsw.gov.au)
Parramatta City Council
(council@cityofparramatta.nsw.gov.au,
SHehir@cityofparramatta.nsw.gov.au)

Ramboll Australia Pty Ltd.
ACN 095 437 442
ABN 49 095 437 442

CONTENTS

1.	**Introduction**	**1**
1.1.	Audit Details	1
1.2.	Project Background	1
1.3.	Scope of the Audit	2
1.4.	Remediation and Audit Project Teams	4
2.	**Site Details**	**6**
2.1.	Location	6
2.2.	Zoning	6
2.3.	Adjacent Uses	6
2.4.	Site Condition Prior to Development	6
2.5.	Developed Site Condition	6
3.	**Site History**	**8**
3.1.	Auditor's Opinion	8
4.	**Contaminants Of Concern**	**9**
4.1.	Auditor's Opinion	9
5.	**Stratigraphy and Hydrogeology**	**10**
5.1.	Stratigraphy	10
5.2.	Hydrogeology	10
5.3.	Auditor's Opinion	11
6.	**Evaluation of Quality Assurance and Quality Control**	**12**
6.1.	Auditor's Opinion	18
7.	**Environmental Quality Criteria**	**19**
7.1.	Soil Assessment Criteria	19
7.1.1.	Imported Fill	19
7.2.	Soil Vapour Assessment Criteria	20
7.3.	Auditor's Opinion	20
8.	**Evaluation of Conceptual Site Model**	**21**
8.1.	Auditor's Opinion	21
9.	**Evaluation of Remediation and Validation**	**24**
9.1.	Remediation Planning and Proposed Remediation	24
9.1.1.	Amendment to Capping Layer Requirements	25
9.1.2.	Remedial Planning in Landscaped Areas	26
9.2.	Remedial Works Undertaken	27
9.3.	Validation Activities	28
9.3.1.	Piling Works – Field Screening Assessment -Potential Acid Sulfate Soil	28
9.3.2.	Piling Works – Field Screening Assessment – VOCs	29
9.3.3.	Progressing Asbestos Clearances and Placement of Marker Layer	30
9.3.4.	Validation of UST Excavation	31
9.3.5.	Crushed Concrete Stockpiles Re-Used On-Site	31
9.3.6.	Site-Won Material Re-used on Site	32
9.3.7.	Material Disposed Off-Site	32
9.3.8.	Imported Material	33
9.3.9.	Final Capping Layers	37
9.3.10.	Survey Data Validation	37
9.4.	Auditor's Opinion	38
10.	**Contamination Migration Potential**	**39**
10.1.	Auditor's Opinion	39
11.	**Assessment of Risk**	**40**

11.1. Post-Remediation CSM 40
11.2. Assessment of Risk 40
12. Ongoing Site Management 41
12.1. Auditor's Opinion 45
13. Compliance with Regulatory Guidelines and Directions 46
13.1. General 46
13.2. Notification 46
13.3. Development Approvals 46
13.4. Local Government Liaison 46
13.5. NSW EPA Liaison 47
13.6. Groundwater Abstraction 47
13.7. Duty to Report 47
13.8. Waste Management 47
13.9. VENM and Other Imported Materials 47
13.10. Licenses 47
13.11. Asbestos Register and Asbestos Management Plan 47
13.12. Conflict of Interest 48
14. Conclusions and Recommendations 49
15. Other Relevant Information 50

LIST OF TABLES

Table 1.1: Audit Team 4
Table 1.2: Remediation Project Team 5
Table 4.1: Contaminants of Concern 9
Table 6.1: Summary of Validation Data 12
Table 6.2: QA/QC – Sampling and Analysis Methodology Assessment 12
Table 6.3: QA/QC – Field and Laboratory Quality Assurance and Quality Control 16
Table 8.1: Conceptual Site Model (Source: the RAP) 22
Table 9.1 Proposed Capping Layer Amendments 25
Table 9.2 Remediation and Validation Activity Sequence 27
Table 9.3: Progressive Clearances and Marker Layer Placement 30
Table 9.4: Summary of Imported Fill 35
Table 11.1: Post-Remediation CSM 40
Table 12.1: Assessment of the EMP 41

APPENDICES

Appendix A
Attachments

Appendix B
Site Audit Statement and Environmental Management Plan

Appendix C
Correspondence

Appendix D
Auditor Comments and Consultant Responses for Validation Report and LTEMP

LIST OF ABBREVIATIONS

Measures

%	per cent
ha	Hectare
km	Kilometres
m	Metre
m^2	Square Metre
m^3	Cubic Metre
mAHD	Metres Australian Height Datum
mbgl	Metres below ground level
mg/kg	Milligrams per Kilogram
mm	Millimetre
ppm	Parts Per Million
w/w	Weight per weight

General

ACM	Asbestos Containing Material
ADWG	Australian Drinking Water Guidelines
AMP	Asbestos Management Plan
AF	Asbestos Fines
AHD	Australian Height Datum
ALS	Australian Laboratory Services
ANZG	Australian & New Zealand Guidelines
ASET	Australian Safer Environment and Technology Pty Ltd
ASLP	Australian Standard Leaching Procedure
ASS	Acid Sulfate Soil
ASSMP	Acid Sulfate Soil Management Plan
ANZECC	Australian and New Zealand Environment and Conservation Council
AMP	Asbestos Management Plan
BaP	Benzo(a)pyrene
BTEXN	Benzene, Toluene, Ethylbenzene, Xylenes & Naphthalene
CEMP	Construction Environmental Management Plan
CLM Act	NSW Contaminated Land Management Act 1997
CLMU	CLMU Pty Ltd
COC	Chain of Custody
Council	Parramatta City Council
CRS	Chromium Reducible Sulfur
CSM	Conceptual Site Model
CSR	CSR Building Products Limited
DA	Development Application
DGI	Data Gap Investigation
DP	Deposited Plan
DPHI	Department of Planning, Housing and Infrastructure
DQI	Data Quality Indicator
DQO	Data Quality Objective
Edison	Edison Environmental and Engineering Pty Ltd
EGA	Environmental Group Australia Pty Ltd
EIL	Ecological Investigation Level
EMP	Environmental Management Plan
Envirolab	Envirolab Services Pty Ltd
EPA	Environment Protection Authority (NSW)
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
ESL	Ecological Screening Level
FA	Fibrous Asbestos
Geoscapes Landscape Architects	GEOSCAPES Pty Ltd
HBM	Hazardous Building Materials
HIL	Health Investigation Level
HSL	Health Screening Level

HV	Headspace-in-Vial
JBS&G	JBS&G Australia Pty Ltd
KPMG	KPMG SGA Property Consultancy Pty Limited
LAA	Licensed Asbestos Assessor
LCS	Laboratory Control Sample
LEP	Local Environment Plan
LOR	Limit of Reporting
LTEMP	Long Term Environmental Management Plan
Metals	As: Arsenic, Cd: Cadmium, Cr: Chromium, Cu: Copper, Ni: Nickel, Pb: Lead, Zn: Zinc, Hg: Mercury
ML	Management Limits
MS	Matrix Spike
NATA	National Association of Testing Authorities
NEPM	National Environment Protection Measure
NHMRC	National Health and Medical Research Council
NL	Non-Limiting
n	Number of Samples
OCPs	Organochlorine Pesticides
OSD	On-site Detention (tanks)
PAHs	Polycyclic Aromatic Hydrocarbons
PASS	Potential Acid Sulfate Soil
PCBs	Polychlorinated Biphenyls
PFAS	Per- and Poly-Fluoroalkyl Substances
pH	A measure of acidity, hydrogen ion activity
pHf	Field pH
pHfox	Field Oxidised pH
PID	Photoionisation Detector
PQL	Practical Quantitation Limit
PSH	Phase Separated Hydrocarbon
QA/QC	Quality Assurance/Quality Control
Ramboll	Ramboll Australia Pty Ltd – previously Ramboll Environ Australia Pty Ltd and ENVIRON Australia Pty Ltd
RAP	Remediation Action Plan
RL	Relative Level
RPD	Relative Percent Difference
RRE	Resource Recovery Exemption
RRO	Resource Recovery Order
SAR	Site Audit Report
SAS	Site Audit Statement
SEG	Sydney Environmental Group Pty Ltd
SEPP R&H	Resilience and Hazards State Environment Planning Policy (2021)
SSD	State Significant Development
SWL	Standing Water Level
TEQ	Toxic Equivalence Quotient
TPHs	Total Petroleum Hydrocarbons
TPZ	Tree Protection Zone
TRHs	Total Recoverable Hydrocarbons
TV	Trigger Value
UFP	Unexpected Finds Procedure
UPSS	Underground Petroleum Storage System
UST	Underground Storage Tank
Vaughans	Vaughan Constructions Pty Ltd
VCH	Volatile Chlorinated Hydrocarbons
VENM	Virgin Excavated Natural Material
VMP	Voluntary Management Proposal
VOCs	Volatile Organic Compounds
WH&S	Workplace Health & Safety
-	On tables is "not calculated", "no criteria" or "not applicable"

1. INTRODUCTION

1.1. Audit Details

A site contamination audit has been conducted in relation to the site at 6 Grand Avenue, Rosehill, 2142.

The Audit was conducted to provide an independent review by an EPA Accredited Auditor of whether the land is suitable for any specified use or range of uses, i.e. a "Site Audit" as defined in Part 1 Clause 4 (1) (definition of a 'site audit' (b) (iii)) of the NSW *Contaminated Land Management Act 1997* (the CLM Act).

Condition B57 of Development Application for State Significant Development SSD-55522478 approved 25 July 2024 by Minister for Planning and Public Spaces for the construction and operation of a multi-level warehouse or distribution centre requires:

> *"Within six months of the completion of the remediation works and prior to the commencement of operation, or as otherwise agreed with the Planning Secretary, the Applicant must obtain a Site Audit Report and a Site Audit Statement from the Site Auditor and submit these to the Planning Secretary. These documents must be prepared in accordance with the relevant guidelines under the Contaminated Land Management Act 1997 and confirm:*
>
> *(a) the remedial works approved under this consent have been completed in accordance with the remediation objectives listed in the RAP; and*
>
> *(b) the site is suitable for its intended industrial and commercial uses, subject to the implementation of a Long Term Environmental Management Plan (see condition B58)."*

The Audit was initiated to comply with SSD-55522478 and modifications and is therefore a statutory audit. The Section A2 Site Audit Statement (SAS) is included as **Appendix B**.

Details of the Audit are:

Requested by:	Alana Garrick of Hale Capital Partners Pty Ltd (Hale) on behalf of HCLF Rosehill PropCo Pty Ltd as trustee for HCLF Rosehill No 1 Trust (the client)
Request/Commencement Date:	30 September 2024
Auditor:	Rowena Salmon
Accreditation No.:	1002
Audit No.:	RS-117A

1.2. Project Background

The site was formerly known as 10 Grand Avenue, Camellia and is now referred to as 6 Grand Avenue, Rosehill. A Section B Site Audit (GN-546, dated 15 April 2019) reviewing a Remedial Action Plan (RAP) (the 2019 RAP) was prepared by Graeme Nyland for the larger Lot 1 and Lot 2 site. This was completed as a requirement of a condition of Development Consent DA/776/2017 from City of Parramatta Council dated 27 September 2018 and was therefore a Statutory Audit.

The 2019 RAP proposed separation (capping) of asbestos contamination from fill material by importation of material to raise the site levels, and vapour controls for chlorinated hydrocarbon contamination in groundwater originating from an off-site source (the former Akzo Nobel manufacturing facility to the west (Akzo)).

Subsequently Edison Environmental & Engineering Pty Ltd (Edison) was engaged by Grand 4 Investment Pty Ltd (Grand 4) to prepare a separate RAP for Lot 1 (the Edison 2020 RAP). This was reviewed and endorsed in a Section B Site Audit by Rowena Salmon (RS-117 dated 27 March

2020). The RS-117 audit was also completed to address DA/776/2017 and was a Statutory Audit. The Edison 2020 RAP was largely consistent with the 2019 RAP and proposed capping of asbestos impacts. However, the vapour controls proposed by the 2019 RAP were included as a contingency if warranted based on proposed additional sampling, noting the main extent of vapour impacts appeared to be located on Lot 2 to the south and not on Lot 1 (the site).

In 2022, JBS&G Australia Pty Ltd (JBS&G) undertook additional soil, groundwater, and soil vapour investigations at the site. These investigations confirmed that vapour controls were not required at the site and JBS&G prepared a new RAP (the RAP) which proposed capping (physical separation) and long-term management of the site to address asbestos impacts and potential for unidentified impacts between sample locations. A Long-Term Environmental Management Plan (LTEMP) was identified to be required after completion of remediation.

In November 2024, the RAP was reviewed and endorsed in a Section B Site Audit by Rowena Salmon (RS-117B dated 14 November 2024). The RS-117B audit was completed to address SSD-55522478 and was a Statutory Audit.

This SAR considers the Validation Report which describes the remediation works and validation undertaken at the site by the environmental consultant, Environmental Group Australia Pty Ltd (EGA) (formerly Sydney Environmental Group (SEG) during development of the site as a warehouse and distribution centre and considers the LTEMP prepared for the completed development. The current audit (RS-117A) relies on the previous statutory audits that have been completed at the site for review of the adequacy of previous investigations and the suitability of the RAP.

1.3. Scope of the Audit

The scope of the Audit included:

- Reference to and reliance on the Section B Site Audit Statement (SAS) (GN-546) and Site Audit Report (SAR) 'Remediation Action Plan, 10 Grand Avenue Camelia' by Graeme Nyland dated 15 April 2019 (**GN-546**), and reference to the reports it was based on including:
  - 'Environmental Site Investigation, 10 Grand Avenue, Rosehill, NSW', 25 July 2016, KPMG SGA Property Consultancy Pty Limited (KPMG) (**the ESI**)
  - 'Report on Data Gap Investigation, 10 Grand Avenue, Camellia, New South Wales', 7 December 2018, Edison (**the DGI**)
  - 'Remediation Action Plan, 10 Grand Avenue, Camellia, New South Wales', 22 March 2019, Edison (**the 2019 RAP**)
- Reference to and reliance on the Section B SAS (RS-117) and SAR 'Remediation Action Plan, Lot 1, 10 Grand Avenue, Camellia' by Rowena Salmon dated 27 March 2020 (**RS-117**), and reference to the reports it was based on including:
  - 'Remediation Action Plan, Lot 1, 10 Grand Avenue, Camellia New South Wales', 24 March 2020, Edison (**the Edison 2020 RAP**)
  - 'Long-Term Site Management Plan, Lot 1, 10 Grand Avenue, Camellia, New South Wales', 24 March 2020, Edison (**the Lot 1 LTSMP**)
- A site visit by the Auditor on 25 March 2020 during preparation of RS-117
- Reference to and reliance on the statutory Section B SAS (RS-117B) and SAR 'Remedial Action Plan, 6 Grand Avenue, Rosehill' by Rowena Salmon dated 14 November 2024 (**RS-117B**) and reference to the reports it was based on including:
  - 'Environmental Site Assessment, 6-8 Grand Avenue Rosehill, NSW', 29 April 2022, JBS&G Australia Pty Ltd (JBS&G) (**the ESA**)

  - 'Remedial Action Plan, 6 Grand Avenue, Rosehill NSW', 1 November 2024, JBS&G (**the RAP**)
- Consideration of the Preliminary LTEMP submitted as part of the SSD Application, to ensure consistency with the EMP: 'Preliminary Long-Term Environmental Management Plan, 6 Grand Avenue Rosehill NSW', 31 May 2023, JBS&G
- Consideration of the following reports, that informed the remedial works:
  - 'Acid Sulfate Soil Management Plan, 6 Grand Avenue, Rosehill NSW', 31 May 2023, JBS&G (**the ASSMP**)
  - 'Asbestos Management Plan, 6 Grand Avenue, Rosehill NSW', 8 October 2024, Sydney SE) (**the AMP**)
  - 'Construction Environmental Management Plan, 6 Grand Avenue, Rosehill NSW', 17 October 2024, SLR (the CEMP)
- Review of the following reports:
  - 'RE: Amendment to Capping Layer Requirements for Site Remediation and Validation 6 Grand Avenue, Rosehill NSW', 24 September 2024, SEG (**the "RAP Addendum"**)
  - 'RE: Methodology - VOC in Piling Soil, 6 Grand Avenue, Rosehill NSW', 8 January 2025, SEG (**the VOC in Piling Spoil Methodology**)
  - 'RE: Methodology – Concrete Hardstand Removal, Crushing & Reuse, 6 Grand Avenue, Rosehill NSW (REV0), 20 November 2024, SEG (**the Concrete Crushing Methodology**)
  - 'RE: Unexpected Find of an Underground Storage Tank, Lot 1 DP1258587, 6 Grand Avenue, Rosehill NSW', 5 November 2025, EGA
  - 'RE: Validation of Removal of an Underground Storage Tank, Lot 1 DP1258587, 6 Grand Avenue, Rosehill NSW', 12 December 2025, EGA
  - 'Site Validation Report, 6 Grand Avenue, Rosehill NSW', 18 August 2026, EGA (**the Validation Report**)
  - 'Long-Term Environmental Management Plan, 6 Grand Avenue, Rosehill NSW', dated 18 August 2026 by EGA (**the LTEMP**)
- Site visits by the Auditor on 18 November 2024, 9 January 2025, 25 March 2025, 13 November 2025 (Auditor's Assistant), and 4 August 2026, during the remediation and development works
- Discussions with Archile Projects (the project managers for the site), and with EGA the environmental consultant.

Auditor review comments were provided to EGA following review of multiple draft versions of the Validation Report and the LTEMP. Records of comments and EGA responses are provided in **Appendix D**. Auditor comments were adequately addressed in the final versions referenced above.

The Auditor has reviewed the key documents against the guidelines made or approved under Section 105 of the CLM Act and other relevant documents, including:

- NSW Acid Sulfate Soil Management Advisory Committee (1998) *'Acid Sulfate Soil Manual'* (ASSMAC 1998)
- National Health and Medical Research Council (NHMRC) (2008) *'Guidelines for Managing Risks in Recreational Water'*
- NHMRC and Natural Resource Management Ministerial Council of Australia and New Zealand (2011) *'Australian Drinking Water Guidelines'* (ADWG)

- National Environment Protection Council (NEPC) *'National Environment Protection (Assessment of Site Contamination) Measure 1999'*, as Amended 2013 (NEPM)
- NSW EPA (2014) *'Waste Classification Guidelines, Part 1: Classifying waste'*
- NSW EPA (2015) *'Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997'*
- NSW EPA (2016) *'Environmental Guidelines: Solid Waste Landfills'*
- NSW EPA (2017) *'Guidelines for the NSW Site Auditor Scheme (3rd Edition)'*
- Australian and New Zealand Guidelines (ANZG) (2018) *'Guidelines for Fresh and Marine Water Quality'*
- Department of Agriculture and Water Resources (DAWR) (2018), *'National Acid Sulfate Soil Guidance'* (AGDAW)
- ANZECC & ARMCANZ (October 2000) *'Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Volume 3, Primary Industries - Rationale and Background Information'*
- Australia and New Zealand Heads of EPAs (HEPA 2020) *'PFAS National Environmental Management Plan, Version 2.0'*
- NSW EPA (2020a) *'Contaminated Land Guidelines, Consultants Reporting on Contaminated Land'*
- NSW EPA (2020b) *'Guidelines for the implementation of the Protection of the Environmental Operations (UPSS) Regulations 2019'*
- NSW EPA (2020c) *'Contaminated Land Guidelines, Assessment and management of hazardous ground gases'*
- Chapter 4 Remediation of Land in the Resilience and Hazards State Environment Planning Policy (SEPP) (2021) (SEPP R&H, formerly known as SEPP 55) and NSW Department of Urban Affairs and Planning and NSW EPA (1998) *'Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land'*
- Western Australia Department of Health (WA DoH) (2021) *'Guidelines for the assessment, remediation and management of asbestos contaminated sites'*
- NSW EPA (2022a) *'Contaminated Land Guidelines, Sampling design part 1 – application' and 'Contaminated Land Guidelines, Sampling design part 2 – interpretation'*
- NSW EPA (2022b) *'Contaminated Land Consultant Certification Policy'*
- HEPA (2026) *'PFAS National Environmental Management Plan 3.1'.*

1.4. Remediation and Audit Project Teams

The Audit team is presented in **Table 1.1.**

Table 1.1: Audit Team

Company	Project Role
Ramboll Australia Pty Ltd (Ramboll), previously known as Ramboll Environ Australia Pty Ltd and ENVIRON Australia Pty Ltd	NSW EPA Contaminated Land Auditor Site Auditor – Rowena Salmon Site Audit Assistant – Xanthe Holford until end 2025, then Angela Ruthenberg

The remediation project was undertaken in partnership with a range of companies, as identified by the project team presented in **Table 1.2.**

Table 1.2: Remediation Project Team

Company	Project Role
HCLF Rosehill PropCo Pty Ltd as Trustee for HCLF Rosehill No 1 Trust C/- Hale Capital Partners Pty Ltd	Site Owner
Archile Projects	Project Manager
Vaughan Constructions Pty Ltd (Vaughans)	Principal Contractor
CLMU Pty Ltd (CLMU)	Class A Licensed Asbestos Removal/Earthworks Contractor
Environmental Group Australia Pty Ltd (EGA), previously known as Sydney Environmental Group Pty Ltd (SEG)	Contaminated Land Consultants – Remedial Works Project Hygienist
JBS&G Australia Pty Ltd (JBS&G)	Former Contaminated Land Consultants – Preparation of remediation planning documents prior to the commencement of the remedial works
GEOSCAPES Pty Ltd (Geoscapes Landscape Architects)	Landscape Architect

2. SITE DETAILS

2.1. Location

The site locality is shown on **Attachment 1, Appendix A**.

The site details are as follows (**Attachment 2, Appendix A**):

Street address:	6 Grand Avenue, Rosehill NSW 2142 (previously identified as part of 10 Grand Avenue, Camellia)
Identifier:	Lot 1 DP 1258587 (previously identified as Part Lot 4 DP 623497)
Local Government:	Parramatta City Council
Owner:	HCLF Rosehill PropCo Pty Ltd as trustee for HCLF Rosehill No 1 Trust
Site Area:	Approximately 4.2 hectares (ha)

The boundaries of the site are well defined by streets and adjoining properties and is now a industrial facility with warehouse style buildings, defined by driveways and landscaping.

2.2. Zoning

The current zoning of the site is E5 – Heavy Industrial (Parramatta Local Environmental Plan 2023).

2.3. Adjacent Uses

The site is located within a highly industrialised precinct. The site is bound by Grand Avenue to the north and Lot 2 (Stage 1) to the south. Surrounding activities include a bitumen plant, pharmaceutical manufacturing and petroleum storage. The adjoining property to the west (formerly known as 6 Grand Avenue, Camellia) is the former Akzo manufacturing facility (a remediation site regulated under the CLM Act).

Former James Hardie landfill (now redeveloped as James Hardie warehouse) is located further to the southwest. James Hardie polyvinyl chloride manufacturing plant is also located to the southwest.

The adjacent Akzo site is known to be a source of groundwater contamination to Lot 2 and to a lesser extent the site. The nearest sensitive receptor is the Parramatta River approximately 150 m to the north. Duck Creek is located approximately 700 m to the south.

The former Shell Clyde Refinery is located approximately 100 m to the south and east. The James Hardie sites and the refinery are currently or formerly regulated under the CLM Act and have the potential to be sources of groundwater contamination.

The Akzo site is now occupied by Transport for NSW as a light rail depot and Lot 2 (site directly to the south) has been developed as data centre.

2.4. Site Condition Prior to Development

Prior to demolition and remediation, the site was occupied by CSR Building Products Limited (CSR) and used for the production and storage of tiles. The site was occupied by three buildings, and there was evidence of a former building in the central portion of the site.

Parking areas, roadways and former building footprints were sealed with concrete or asphalt. Remaining areas, used for storage of tiles, were unsealed and covered with gravel or road base.

2.5. Developed Site Condition

SSD-55522478 provides approval for construction and operation of a multi-level warehouse or distribution centre, including:

- Ancillary offices;
- Hardstand/car parking areas;
- Demolition of existing structures, remediation and site preparation;
- Earthworks;
- Landscaping; and
- Signage.

EGA described the site conditions at the completion of the remedial works in the LTEMP. Key features of the site considered to be relevant to the audit include:

- The site has undergone industrial redevelopment comprising a multi-unit industrial complex, including five ground-floor warehouse compartments ('Warehouse 01' to 'Warehouse 05') with associated hardstand driveways and loading zones, and peripheral landscape buffers surround the primary warehouse footprints.
- The northern site boundary consists of 'Grand Avenue', commercial/industrial properties to the east and south and a service easement corridor along the western boundary.
- The warehouse building structural construction consists of concrete slabs on ground with heavy duty structural frames. Key infrastructure is integrated directly adjacent to the building footprints, including an on-site Rainwater Treatment Plant, Hydrant Pump Room, Sprinkler Tank with dedicated concrete slab, and Underground Sewer Pump systems.
- Landscaped areas of widths varying from 4 m to 20 m are located at the site perimeter. Additional softscapes include trough planters and on-slab planter boxes. Vegetation was planted in 2026 in accordance with the landscaping plans.
- Stormwater management across the site combines surface swales, subsoil drainage, structural retention, and treatment systems. Surface runoff from hardstands and driveways is directed into concrete swales and a network of 49 heavy-duty stormwater pits fitted with pit inserts. Treated site stormwater discharges into the existing municipal pipe infrastructure along Grand Avenue, which flows toward the Parramatta River catchment.

The conditions observed by the Auditor during the site visit on 4 August 2026 were consistent with the above with the exception of the following areas pending completion:

- Geogrid capping was yet to be placed around retained trees within the tree protection zone (TPZ) in the north of the site, to be overlain by total 100 mm of imported mulch.
- Two open excavations around deep services being worked on at the east and west ends of the site frontage, to have marker layer re-emplaced (at 0.3 m depth) and landscaping soil/mulch/planting placed.
- Landscaping areas to be finished with further planting and application of additional mulch using mulch already imported to and stockpiled on site.

Photographic evidence of completed capping works in the TPZ and at deep services was provided by Vaughans on 11 and 12 August 2026, respectively.

The warehouse development is considered to fall within a 'commercial/industrial use' land use exposure scenario.

3. SITE HISTORY

The site history was reviewed for RS-117 and RS-117B and is summarised below.

The site history and was based on interviews with CSR personnel, a search the Contaminated Land Record and Public Register of Licenses held by the NSW EPA, review of NSW SafeWork Dangerous Goods Search and historical aerial photographs.

The site has been used for industrial purposes since at least 1930. The site has been occupied by CSR (or associated companies) for over 100 years for production of terracotta tiles and storage. The ESI and DGI report evidence that the site was also used as a source of clay as a raw material for tile manufacturing.

The factory originally and currently occupies the northern portion of the site with an additional two large buildings constructed in the central and southern portions of the site between 1965 and 1982. These central and southern buildings were demolished in approximately 2015.

The surrounding land has also been used for industrial purposes since 1930. A review of available information indicated that the industrial activities were likely associated with manufacturing. The adjacent property to the west (Akzo, previously 6 Grand Avenue, Camellia) was known to undertake chemical manufacturing. Chemicals associated with the Akzo property include chromium and volatile chlorinated hydrocarbons (VCHs) in soil and groundwater. The Akzo site is regulated under the CLM Act as a remediation site and is the subject of Voluntary Management Proposal (VMP). The latest VMP amendment (Notice Number 20244421) indicates remediation has been largely completed.

A former James Hardie landfill is located to the southwest of the site. The historical material placed within the landfill and the original landfill design is unknown. However, assessment of other James Hardie landfills in the Parramatta area has identified an abundance of asbestos containing materials (ACM).

Records held by SafeWork NSW indicate two decommissioned underground storage tanks (USTs) with capacity of 16,000 L each (diesel and petrol) located along the eastern boundary of the site. Although the USTs were reported to have been decommissioned, it was not known whether the USTs remain in-situ.

3.1. Auditor's Opinion

The site history provides a broad overview of past activities and indicates the primary potential for contamination at the site is due to heterogenous fill containing anthropogenic inclusions including ACM, hazardous building materials from demolition of previous buildings, possible USTs in the southeast and chromium and VCHs potentially migrating onto the site in groundwater from the Akzo site to the west.

Details regarding specific site usage are lacking. The absence of details regarding site-specific activities and history and uncertainties such as filling history were taken into consideration when assessing the remedial strategy, and the unexpected finds protocol adopted during the remediation works appropriately accounted for the identified uncertainties.

4. CONTAMINANTS OF CONCERN

EGA provided a list of the contaminants of concern and potentially contaminating activities, based on the information presented in the RAP. These have been tabulated in **Table 4.1**.

Table 4.1: Contaminants of Concern

Area	Activity	Potential Contaminants
Site wide	Historical filling activities	Asbestos in soil in the form of non-friable and friable asbestos.
Site wide	Chlorinated hydrocarbon and heavy metal impacted groundwater	Volatile Organic Compounds (VOC)
Site wide	Potential acid sulfate soils	Acid Sulfate Soils (ASS) (pH / pHfox)

Notes: pHfox: Field Oxidised pH.

EGA noted that chlorinated hydrocarbons and heavy metals had previously been identified in groundwater at the site. Further assessment or remediation was not considered necessary, as these impacts had been assessed in earlier investigations and audits, and the associated risks were adequately understood and considered in determining the remedial requirements. Additionally, EGA identified the potential for ASS to be present at the site. The RAP was noted to include specific requirements to manage the potential for impacted groundwater and ASS. Additionally, to account for the potential for VOC / volatile chlorinated hydrocarbons (VCH) impacted soil materials at/below the groundwater table, SEG prepared the VOC in Piling Spoil Methodology as an addendum to the RAP.

4.1. Auditor's Opinion

The contaminants of concern identified by EGA are representative of the primary contaminants of concern determined through previous investigations to require management. The potential for additional unidentified contaminants to be present associated with heterogeneity of the fill and the use of the site as a brickworks was addressed in the RAP through the unexpected finds protocol.

Prior to the commencement of piling works, the Auditor reviewed the VOC in Piling Spoil Methodology and considered the proposed strategy to screen excavated soil material for VOC impacts to be appropriate.

The potential for per- and polyfluoroalkyl substances (PFAS) contamination at the site was considered in previous investigations reviewed in RS-117B which did not identify the need for remediation for PFAS.

5. STRATIGRAPHY AND HYDROGEOLOGY

A summary of the site stratigraphy and hydrogeology based on information compiled for RS-117 and RS-117B is summarised below.

5.1. Stratigraphy

The ESA reported that review of 1:100,000 'Sydney' Geological Survey of NSW Sheet 9130 (1983) indicates the site and surrounds are underlain by Quaternary sediments including silty to peat quartz sand, silt and clay and manmade fill potentially consisting of dredged estuarine sand and mud, demolition rubble, industrial and household waste.

Investigations reviewed for RS-117 and RS-117B identified gravelly, clayey, sandy fill material with tile and terracotta fragments throughout, ranging to a depth of 2.6 m, above natural brown interbedded clays and sands. Other building rubble such as broken timber, concrete, bricks and asbestos cement sheeting were observed in fill at some locations. Ash was observed in fill at some locations.

Bedrock was encountered between 17.5 and 18.2 m and consisted of weathered sandstone. Natural soils were generally grey and tan clays with red, orange and grey mottles and red sandy clays from depths of 0.35 to 7.5 m.

The RAP recommended preparation of an Acid Sulfate Soil Management Plan (ASSMP) to manage ASS and/or potential acid sulfate soil (PASS). The remedial works were undertaken in accordance with the ASSMP.

5.2. Hydrogeology

RS-117 assessed that groundwater flow was to the east and northeast based on the groundwater investigations undertaken across both Lots 1 and Lot 2 for GN 546. It is expected that regional groundwater would migrate towards Parramatta River located approximately 150 m to the north.

The ESI reported groundwater to be at a depth of approximately 0.64 to 2.78 m below ground level (mbgl) in mid-2016 and identified three groundwater systems with the upper and lower groundwater tables likely to have some interconnection. Similar depths were reported in the DGI (0.49 to 2.9 mbgl) in August 2018.

The upper system consists of a perched water table which was encountered in numerous boreholes within fill material perched above residual concrete slabs or relatively impermeable clay layers. Perched water was also encountered overlying a concrete base at approximately 2.1 m in a borehole in Lot 2 just south of the southern site boundary at the location of a former site building. The ESI reported that this borehole was located in an area that was formerly a clay souring (soaking/maturing) pit suggesting that during demolition the concrete pits had been infilled with clay material. Location MW04 drilled by JBS&G for the ESA in this area included a layer of tiles and shallow seepage water below the slab.

Underlying the perched groundwater system, an upper groundwater table was encountered at a depth of 2.3 to 7.5 mbgl. This aquifer was generally located within sandy clays in between clay layers. During drilling, the groundwater table was encountered within the red sandy clay layers. Standing water levels (SWLs) in groundwater monitoring wells were higher and ranged from 0.65 to 4.7 mbgl suggesting that the clay layers are acting to confine the groundwater held within the sandy clay aquifers.

The ESI concluded that the stiff clay layers are acting as a partial aquitard with limited movement of water between layers of sandy clay. The ESI reported that the system encountered is indicative of quaternary alluvial deposition with numerous small paleochannels acting as interconnected aquifers. The groundwater flow direction was generally inferred to be to the northeast.

The deeper aquifer was located between approximately 12 and 18 m. Both upper and deeper aquifers were identified as sandy clay units trending to clayey sand. The aquifers were separated by a clay unit up to six metres thick.

EGA undertook a search for registered bores on 31 July 2025. Thirty two bores were identified within a 500 m radius of the site. The bores closest to the site were identified to be for monitoring purposes, located upgradient of the western site boundary and installed from 6.4 to 10.5 mbgl.

5.3. Auditor's Opinion

The conclusions of RS-117 and RS-117B are considered to remain valid, which is that the stratigraphy and hydrogeology are relatively complex but sufficiently well known for the purpose of remedial planning and assessing risk. RS-117 noted the following key findings in relation to the site stratigraphy and hydrogeology:

- Investigations identified gravelly, clayey, sandy fill material to ~2.6 m with anthropogenic inclusions and asbestos cement sheeting over natural clays and sandy clays followed by bedrock between 17.5 and 18.2 m.
- Groundwater flows to the east and northeast and regional groundwater would migrate towards Parramatta River located approximately 150 m to the north.
- Groundwater is at a depth of approximately 0.64 to 2.78 m with an upper system that consists of discontinuous perched water overlying a shallow groundwater table at a depth of 2.3 to 7.5 m within sandy clays in between clay layers. The deeper aquifer was located between approximately 12 and 18 m. Both upper and deeper aquifers were identified as sandy clay units trending to clayey sand. The aquifers were separated by a clay unit up to six metres thick.

The RAP did not discuss the hydrogeology to the same level of detail as reviewed above and referred to information in the ESI. However, overall, based on SWLs and geology reported by JBS&G, the conditions encountered appear to be consistent with the above interpretation.

RS-117B confirmed the ASSMP to be an appropriate way to manage the PASS at the site during the remedial works, acknowledging ASS may have been encountered during the proposed excavation and construction (e.g. piling works).

The Auditor notes the remedial works were generally based on the capping of impacted fill material, therefore the stratigraphy and hydrogeology of the site post remedial works remains to be generally consistent with historic assessments, however the importation of clean fill as a capping layer across the site has resulted in a raised site level.

6. EVALUATION OF QUALITY ASSURANCE AND QUALITY CONTROL

The Auditor has assessed the overall quality of the validation data by review of the information presented in the Validation Report, supplemented by field observations. The data sources are summarised in **Table 6.1**. Data quality of earlier reports was assessed in RS-117 and RS-117B.

Table 6.1: Summary of Validation Data

Stage of Works	Field Data	Analytical Data
Validation Report (EGA, 2026) *Fieldwork date: October 2024 to July 2026.*	Validation data included the collection of a range of field data to meet the remedial objectives, including: Assessment of piling spoil (4,680m^3) for chlorinated hydrocarbon impacts – Photoionisation Detector (PID) screening and headspace-in-vial samples. ASS screening of piling spoil. Validation of UST excavation – 1 base sample, 4 x wall samples, and 3 samples of resulting spoil material generated as part of the excavation. Assessment of site-won crushed concrete (2,850 m^3). Assessment of site-won excavated material sourced from the rainwater tank excavation (1,200 m^3 of clay and 125 m^3 of fill), and from the stormwater pipe installation at the north of the site (1,600 m^3). Soils originally proposed for off-site disposal and tested for waste classification (WCA-01 – July 2025, WCA-02 – November 2025 and WCA-03 – May 2026). Visual inspections and survey data of the marker layer. Imported material characterisation: associated with virgin excavated natural material (VENM) (1,045 tonnes), and material imported under a resource recovery order / exemption (RRO / RRE) (53,399 tonnes).	PID Screening: Piling spoil (468 samples). Headspace-in-vial samples from piling spoil: Analysis (2 samples) ASS assessment of piling spoil: pH (pH in deionised water) / pHfox (field iodised pH) (153 samples); Chromium Reducible Sulfur (CRS) (1 sample). Soil analysis for UST excavation: Metals, Total Recoverable Hydrocarbons (TRH) / Benzene, Toluene, Ethylbenzene and Xylene (BTEX), Polycyclic Aromatic Hydrocarbons (PAHs) (8 samples). Crushed concrete: asbestos (% w/w 500 mL) (44 samples). Site-won material rainwater tank: asbestos (% w/w 500 mL) (29 samples), Metals, TRH/BTEX, PAHs, Polychlorinated Biphenyls (PCB), VOC (7 samples in total – 4 from the fill and 3 from the clay) Site-won material stormwater pipe: asbestos (% w/w 500 mL) (32 samples). Waste classification sampling: Asbestos (presence/absence), Metals, TRH/BTEX, PAHs, Organochlorine Pesticides (OCPs), PCB (WCA-01 to WC-03) 11 samples. Imported material Soil analysis: Metals, TRH/BTEX, PAHs, OCPs, and asbestos (% w/w 500 ml) (235 samples).

The Auditor's assessment of data quality follows in **Table 6.2** and **Table 6.3**.

Table 6.2: QA/QC – Sampling and Analysis Methodology Assessment

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Data Quality Objectives (DQO) JBS&G defined specific DQOs in accordance with the seven-step process outlined in Schedule B2 of NEPM (2013), and presented these in the RAP. The Validation Report does not reflect the DQO's presented in the RAP, but describes the DQO Process, and provides a	The RAP presented a statement of pre-determined DQOs, a plan to achieve the pre-determined DQOs and procedures to be undertaken if the data does not meet the DQOs. Although the Validation Report does not reflect the DQOs presented in the RAP, as

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
series of data quality indicators to apply for the field data collection. The RAP identifies the following "Decisions" in relation to validation of the site: • Is the existing surface of the site absent of visible asbestos? • Has a visual marker layer been placed over the existing site surface? • Has the visual marker layer been capped with at least 0.5 m of imported material classified as VENM? • Has the surface of the capping layer been finished with an impermeable surface or landscaping? • Has a LTEMP been prepared?	the RAP was generally followed, the data collected by the consultant is considered sufficient to meet the stated data quality objectives, including consideration of the decisions presented in the RAP.
Sampling pattern and locations Soil sampling was targeted, and can generally be grouped into the following six types of soil/concrete samples: 1. Piling spoil was excavated from the 468 locations across the warehouse building footprint, stockpiled and sampled prior to placement below the capping layer. Two headspace-in-vial samples were collected to assess potential vapour concentrations where PID readings were elevated. 2. Validation samples were collected following the removal of the UST, with soil samples collected from the base and walls of the UST excavation. 3. Concrete that was crushed on-site was stockpiled and sampled prior to re-use on-site. 4. Site-won material included excavated spoil from the UST, the rainwater tank excavation, and the stormwater pipe. This material was stockpiled and sampled to allow for the assessment of re-use of the material on-site. 5. Imported material was sampled prior to importation to site, and inspected upon arrival to site to confirm the suitability and classification of the material. 6. Waste classification samples of stockpiled soil material was undertaken prior to expected off-site disposal (although this did not occur).	In consideration of the installation of the marker and capping layer across the site, the sampling pattern and the investigation locations adequately targeted the main chemicals of concern and the potential future exposure pathways. The sampling was adequate to support assessment of: - The potential for piling spoil which had been bought to the surface to have ASS or volatile impacts and corresponding suitability for re-use below the marker layer. - The suitability of the site-won material (rainwater tank and stormwater pipe material) and concrete to be re-used above the marker layer. - The suitability of site-won material to be re-used below the marker layer (UST spoil and general fill). - The suitability of imported material to be used above the marker layer. - Waste classification, for material planned to be disposed of off-site.
Sampling density EGA reported that *"Validation samples (of ASS, UST, Imported Materials and Site-Won Materials) were collected at a density meeting or exceeding the minimum requirements specified in the RAP. The collection of additional samples was undertaken to provide increased confidence in the validation dataset."* *Piling spoil:* Approximately 4,680m^3 of piling spoil was generated as a result of piling activities (approximately 10 m^3 per pile). Spoil materials generated from the piling activities were reported to have been immediately sampled and analysed for pH/pHfox before being consolidated into 100 m^3 stockpiles prior to receipt of the results. A PID screening assessment was undertaken with 468 PID readings recorded. The results were presented in the Validation Report as a range of readings for up to 11 combined piling locations. The Validation Report noted that 153 samples were analysed for pH/PHfox, and 1 sample was analysed for Chromium Reducbile Sulfur. Each piling location was assessed via a PID. Based on the elevated PID readings in PILE01, 2 x headspace-in-vial samples were collected from an inadvertently combined stockpile of PILE01 and PILE20 to assess potential vapour concentrations.	The Auditor notes that the individual size/volume of the combined stockpiles generated from the piling spoil have not been presented in the validation report, and the ASS sampling locations are not identifiable from the plan showing the stockpile locations. Notwithstanding these omissions, the Auditor observes results tables presented in the Validation Report show a total of 165 samples were analysed for pH / pHfox from 125 distinct stockpiles at an equivalent density of 1 per 28 m^3. The Auditor has not completed a detailed review of compliance with the ASSMP however considers the adopted sampling density to be adequate in consideration of the fate of the material, retained below the marker layer. The PID testing density of 1 per 10 m^3 is sufficient and exceeds the target density of 1 per 25 m^3 specified in the VOC in Piling Spoil Methodology, although material from below the groundwater table was not segregated (discussed below). Inadvertent combination of the target PILE01 stockpile with PILE20 calls into question the representativeness of the headspace-in-vial

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Validation of UST Excavation: 4 wall samples (1 per wall) and 1 base sample (1 per 25m^2) were collected from the UST excavation. Spoil generated as part of the UST excavation was to be sampled at a rate of 1 per 25 m^3, a total of 3 stockpile samples were collected. *Concrete sampling for asbestos:* 2,850 m^3 of crushed concrete was generated as part of the remedial works, a total of 44 concrete samples were analysed for asbestos. The Concrete Crushing Methodology required sampling at density specified in Table 4 of EPA (2022). *Site-won excavated material, generated from the rainwater tank* (1,325 m^3) was sampled for asbestos (29 samples), and the following additional COPC: Heavy Metals, TRH, BTEXN, PAH, PCB, VOC (7 samples). *Site-won excavated material, generated from the stormwater pipe* (1,600 m^3) was sampled for asbestos (32 samples). *Imported material* was required to be sampled at the following densities, based on the type of material: • VENM - a minimum rate of one sample per 500 m^3, with a minimum of 3 and a maximum of 10 samples. • RRO / RRE materials - a minimum rate of 1 sample per 400 tonnes, with a minimum of 3 samples. A total of 235 samples were reportedly collected of imported material. The breakdown of samples per material is presented in **Table 9.4**.	sample. This issue is not considered material given the overall limited number of locations with elevated PID readings and the placement of material below hardstand and additional validated capping material. The Auditor has calculated the crushed concrete was assessed for asbestos at a rate of 1 per 65 m^3. The density required under the Concrete Crushing Methodology (Table 4 of EPA (2022), equivalent to 1 per 25 m^3) was not met, however, is considered acceptable based on the consistency of results reported. The Auditor notes that the total volume of the excavated spoil from the UST excavation was not reported, however based on the reported excavation extent (5 m x 3.5 m x 2 m =35 m^3), the observations (no staining or odours), and the sampling results, the sampling density of the generated spoil (based on 3 samples) was considered to be adequate and likely exceeded the target density of 1 per 25 m^3. Site-won excavated material sourced from the rainwater tank was analysed for an appropriate range of COPC from only a limited number of samples (less than 1 per 200 m^3). This density was considered adequate based on the consistency of results reported and photographs of the material being free from evidence of contamination. Fill material from this excavation was determined to require placement below the marker layer. Site-won excavated clay sourced from the stormwater pipe excavation was analysed for asbestos only since *"…these materials originated outside of the groundwater impacts from within the site, and ASS/PASS was determined to not impact the site…".* This is considered reasonable since the natural clay has a low likelihood of contamination based on previous investigation results, based on both the source location and depth (refer **Section 9.3.6** for more details on source location). The sampling density of the UST excavation and imported material were acceptable. Overall, in consideration of the remedial works undertaken, the Auditor considers the sampling density was sufficient.
Sample depths Stockpiled piling spoil samples were considered to represent a depth of 0 to 20 mbgl. The 2 x headspace-in-vial samples were collected at a minimum depth of 0.5 m below the stockpile surface. Validation samples were collected from the walls and floor of the UST excavation. Imported material samples were collected from stockpiles, and following the application on site, are representative of material above the marker layer.	In the Auditor's opinion, this sampling strategy was appropriate and adequate to characterise the primary material types present on site.

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
Sample collection method *Soil*: Where initial PID screening of piling spoil exceeded 10 ppm, soil was collected and sealed in a 500 mL sample bag and rested for 5 minutes before another PID reading was undertaken. Where the secondary reading was elevated (10 and 25 ppm screening criteria adopted), a headspace-in-vial (HV) sample was collected for laboratory analysis of vapour concentration. Headspace-in-Vial samples were collected by placing a small sample of soil sample in a 40 mL volatile organic analysis glass vial fitted with a Teflon-silicone metal foil lined septum screw cap. The vial is filled with the soil to be analysed to approximately 80% fill level, leaving the remaining space as a vapour headspace. UST validation samples and site-won material subject to chemical analysis were collected by hand trowel for near surface samples, or from hand trowel from excavator bucket samples for deeper samples. Jars were 250 mL capacity laboratory supplied items. Each soil sample was collected using a new clean pair of nitrile gloves. Samples analysed for asbestos were not collected according to the asbestos quantification methodology outlined in NEPM (2013) (Schedule B1) which comprises both 10 L and 500 mL samples. 500 mL samples were collected for laboratory analysis for asbestos fines/ fibrous asbestos (AF/FA) and 50 g samples were collected for asbestos presence/absence (waste classification samples only).	Analysis of 50 g/500 mL samples for asbestos is sufficient for the soil analyses performed. Overall in the context of the remediation works undertaken, the soil sample collection method was found to be acceptable. It is noted that the Concrete Crushing Methodology also required ACM quantification from 10 L field screened samples, however, this was not performed. EGA considers that this deviation is not significant in the context of assessing the suitability of the crushed concrete materials for re-use at the site since, prior to demolition, the building materials were subject to asbestos removal and clearance inspections to confirm that identified ACM had been removed before demolition proceeded. In addition, no asbestos was observed within the samples collected, and no asbestos was detected within the samples following laboratory analysis. The absence of 10 L sampling is considered acceptable by the Auditor based on the pre-demolition clearances performed, the consistency of AF/FA results (all <0.001%) and the low risk from this material being re-used on-site as subgrade below pavement.
Decontamination procedures *Soil:* Samples were collected using one-use-only equipment and using clean gloved hands. Purpose-specific sample containers were used for all analytes.	Acceptable
Sample handling and containers EGA reported *"upon collection, soil samples were placed in cool boxes, protection wrapped to prevent glass container breakage, packed with ice and dispatched by courier for same day or overnight delivery to the primary laboratory. Sample tracking control was maintained at all times, including the labelling of sample containers at the point of sampling, holding and transport at all times in appropriate cooled (where necessary) containers, and tracking through chain of custody (CoC) documentation.* Samples were placed into prepared and preserved sampling containers provided by the laboratory and chilled during storage and subsequent transport to the laboratories. Samples for asbestos analysis were placed in plastic zip-lock bags.	Acceptable
Chain of Custody (COC) Completed COC forms were provided in the Validation Report.	Acceptable
Detailed description of field screening protocols *Soil:* PID field screening was undertaken immediately following generation of piling spoil stockpiles. The PID readings recorded represent mixed fill and natural soils originating from depths 0.0 – 20.0 mbgl. A PID with an 11.7 eV lamp was used for the field screening validation of soils. EGA note that spoil piles generated during November and December 2024 were initially screened with a 10.6 eV lamp, however subsequent screening of plastic covered stockpiled material was undertaken in January 2025 with a 11.7 eV lamp.	The appropriate PID lamp (11.7 eV) to detect volatile chlorinated compounds was used. Volatile impacts were expected at depths below the groundwater table in parts of the site. The PID screening assessment of pile spoil was undertaken across material generated from depths of 0 to 20 mbgl. This approach was not consistent with the agreed method which required material encountered from below the water table to be separated and screened separately. However, the screening assessment is considered to be acceptable for the following reasons:

Sampling and Analysis Plan and Sampling Methodology	Auditor's Opinion
EGA advised *"PID readings for UST excavation were not undertaken as the guidelines within 'Unexpected Find of an Underground Storage Tank' (EGA 2025a, Appendix B) outlined field assessment would only be undertaken if evidence of spilling/leaking occurred (such as soil odours or staining). 'Validation of Removal of an Underground Storage Tank' … did not identify any evidence of leaking or spilling and validation results did not identify any exceedances."*	• The shallow depth to groundwater and therefore minimal contribution of (and potential for dilution by) soil from above the groundwater table. • Combined piling spoil stockpiles were observed to be covered by plastic by the Auditor during a site visit on the 9 January 2025, and the 25 March 2025. • Piling spoil material generally reported PID readings <10 ppm indicating volatile impacts were not widespread. • No odorous piling material was observed/reported by the consultant. • Headspace sampling of piling spoil with elevated PID readings did not identify volatile impacts. • All piling material was placed below the marker layer. PID screening for the UST excavation was not undertaken, however based on the sample results and the observations recorded, volatile impacts were not identified in soil material within the excavation. Therefore, this omission is not considered to be significant.
Calibration of field equipment Calibration certificates from the equipment supplier were provided. Field calibration records were provided for: • A PID with a 10.6 eV lamp, dated 11 November 2024. • A PID with a 11.7 eV lamp, dated 8 January 2025.	Although the reports indicated that calibration had been undertaken prior to use, no subsequent checks were reported to have been performed during use. As the calibration certificates were provided by the equipment supplier and initial field calibration was performed, calibration of the PID is considered to be acceptable.
Sampling logs Soil logs are not provided within the report	Sample logs indicating sample depth, PID readings, lithology and observations were not provided in the Validation Report. Notwithstanding this omission, the Validation Report does describe a number of soil profiles throughout the report e.g. fill, clay. In consideration of the remedial works that have been undertaken, and the historic sampling logs collected across the site which describe the geology and hydrogeology, the sub-surface profile is sufficiently understood, therefore the omission of this data from the validation report is considered to be acceptable.

Table 6.3: QA/QC – Field and Laboratory Quality Assurance and Quality Control

Field and Laboratory QA/QC	Auditor's Opinion
Field quality control samples Field quality control samples including trip blanks, trip spikes, field intra-laboratory and inter-laboratory duplicates were generally undertaken for soil samples. Wash blanks were not required since dedicated sampling equipment was used for each location.	The field quality control sampling density was generally acceptable given the consistency of the results or low risk associated with the materials (imported material or material placed below the marker layer).

Field and Laboratory QA/QC	Auditor's Opinion
EGA reported (excluding imported material) a total of eighteen soil samples were submitted to the primary laboratory for chemical analysis. One sample (collected from the wall of the UST excavation) was analysed in duplicate and triplicate. This sample density was noted to meet the target density. In relation to the imported material, a total of 241 primary samples were collected and analysed, 17 duplicate and triplicate samples were collected for the purpose of assessing the QA/QC of this data. Field QC samples were not analysed for asbestos analyses.	No QC samples were collected for the waste classification samples which was acceptable given the material was ultimately retained below the marker layer. The Auditor notes no intra- or inter-laboratory duplicates were collected for the headspace-in-vial analysis. In consideration of the field screening undertaken and analysis results this omission is not considered to be significant. The Concrete Crushing Methodology did not require any QC testing given assessment was for asbestos only. Overall, acceptable
Field quality control results The results of field quality control samples were within appropriate limits.	Acceptable
NATA registered laboratory and NATA endorsed methods Laboratories used included: ALS, Envirolab, Eurofins | mgt, Leeder. Laboratory certificates were NATA stamped for all analyses except AF/FA in accordance with NEPM (2013) which is not NATA accredited.	The Auditor observed samples of crushed concrete and aggregate were described by ALS on lab certificates as "A soil sample" which would not appear an appropriate description. Following a comment made by the Auditor, EGA confirmed with the laboratory that photographs of the samples were not consistent with "A soil smple" and this description should not have been used. Overall, acceptable
Analytical methods Analytical methods were included in the laboratory test certificates. ALS provided brief method summaries of in-house NATA accredited methods used based on USEPA and/or APHA methods (excluding asbestos) for extraction and analysis in accordance with the NEPM (2013). Asbestos identification was conducted by Eurofins in accordance with the Australian Standard AS 5370:2024 *Sampling and qualitative identification of asbestos in bulk materials* (ISO 22262-1:2012, MOD), formerly AS 4964-2004.	Acceptable The analytical methods are considered acceptable for the purposes of the site audit, noting that the AS4964-2004 is currently the only available method in Australia for analysing asbestos.
Holding times Review of the COCs and laboratory certificates indicate that the holding times had been met. EGA also reported that holding times have been met.	Acceptable
Practical Quantitation Limits (PQLs) *Soil:* PQLs (except asbestos) were less than the threshold criteria for the contaminants of concern. *Asbestos:* The NATA approved limit of detection for asbestos in soil was 0.01% w/w although NEPM (2013) analysis were reported to 0.001% w/w for AF/FA. *Soil vapour headspace:* PQLs were less than the threshold criteria.	*Soil (except asbestos):* Overall the soil PQLs are acceptable. *Asbestos:* In the absence of any other validated analytical method, the detection limit for asbestos is considered acceptable. *Headspace samples:* Overall the headspace PQLs are acceptable.
Laboratory quality control samples Laboratory quality control samples including laboratory control samples, matrix spikes, surrogate spikes, blanks and duplicates were undertaken by the laboratories.	Acceptable
Laboratory quality control results EGA reported: • *"The laboratory quality control results did not identify any significant analytical quality control issues that would affect the interpretation or use of the validation data.*	Acceptable

Field and Laboratory QA/QC	Auditor's Opinion
Laboratory duplicate results were within the applicable acceptance criteria, method blanks did not identify contamination attributable to the laboratory analytical process, and laboratory control/spike and matrix spike recoveries were within the applicable acceptance criteria or otherwise did not indicate significant matrix interference. The laboratory also reported no analytical holding-time outliers"	
Data Quality Indicators (DQI) and Data Evaluation (completeness, comparability, representativeness, precision, accuracy) Predetermined data quality indicators (DQIs) were set for laboratory analysis including blanks, replicates, duplicates, laboratory control samples, matrix spikes and surrogate spikes. These were discussed with regard to the five category areas. EGA concluded that *"The field and laboratory QA/QC program provided multiple lines of evidence to assess the precision and accuracy of the analytical data, including field replicates, trip spikes and trip blanks, laboratory duplicates, laboratory control/spiked samples and matrix spike samples. The results of the QA/QC assessment did not identify any significant issues that would adversely affect the interpretation of the analytical dataset.* *Accordingly, the analytical data are considered sufficiently reliable and suitable for the purpose and objectives of the remediation validation program.".*	An assessment of the data quality with respect to the five category areas has been undertaken by the Auditor and is summarised in **Section 6.1** below.

6.1. Auditor's Opinion

In considering the data as a whole, the Auditor concludes that:

- The data and records are considered to be adequately complete.
- Based on the analysis of duplicate and triplicate soil samples, and the generally consistent results reported by the laboratory (e.g. ASS, asbestos etc) there is adequate confidence that data is comparable for each sampling and analytical event.
- The sampling was generally considered to be representative of the material being assessed, although the sample densities did not always meet the requirements of the RAP and subsequently prepared methodology statements, and target PILE01 was combined with material from PILE20 prior to headspace-in-vial sampling. Analytes selected were generally appropriate except limited chemical analyses were undertaken for site-won natural material re-used on-site above the marker layer in service trenches, and crushed concrete was not tested for ACM using 10 L sieved samples. These deficiencies were considered acceptable based on the low likelihood of contamination being present and the generally low risk use locations (beneath pavement that is unlikely to be disturbed).
- Generally consistent and expected results (e.g. no asbestos in crushed concrete) in addition to the consideration of the calculated RPDs, and the laboratory QA/QC results, provided sufficient information to conclude that data is of sufficient precision.
- While most of the data is likely to be accurate, there is some doubt regarding possible loss of volatiles and dilution during stockpiling of piling spoil, as material was combined from a depth of 0 to 20m bgl. In consideration of the observations made (i.e. PID and no odour), and the placement of material below the marker layer, the accuracy of the PID data is not considered to be material.

7. ENVIRONMENTAL QUALITY CRITERIA

Assessment criteria are the concentrations of a contaminant above which further appropriate investigation and evaluation will be required and provide the basis of a Tier 1 risk assessment. As defined in NEPM (2013), a Tier 1 risk assessment is a risk-based analysis comparing site data against generic assessment criteria for various land uses to determine the need for further assessment or development of an appropriate management strategy.

Assessment criteria are developed for the protection of human health and ecological receptors, for a range of media including soil, groundwater and soil vapour. When selecting appropriate criteria for this Audit a commercial/industrial exposure scenario has been adopted. Soil and headspace criteria are relevant for assessment of validation data. Soil criteria are applicable to material re-used or imported to the site for placement above the marker layer.

7.1. Soil Assessment Criteria

Tier 1 (screening) soil criteria were adopted as follows:

- Human Health Assessment
    - NEPM (2013) Health Based Investigation Levels (HIL D) for non-volatile compounds
    - NEPM (2013) Health Screening Levels (HSL D) (sand) for TRH, BTEX and naphthalene compounds for the vapour intrusion pathway.
    - Asbestos has been assessed based on presence/absence within a weight of evidence framework.
- Terrestrial Ecological Assessment
    - NEPM (2013) Ecological Screening Levels (ESL) (coarse soil) and Ecological Investigation Levels (EIL).
- Management limits (ML) for coarse soil
- 'Aesthetic' contamination as outlined in *Section 3.6 Aesthetic Considerations* of NEPM (2013) Schedule B1 which requires a balanced consideration of the quantity, type and distribution of foreign material or odours in relation to the specific land use and its sensitivity.

7.1.1. Imported Fill

Imported fill has been assessed in relation to attributes expected of virgin excavated natural material (VENM). The NSW EPA (2014) *Waste Classification Guidelines, Part 1: Classifying Waste* defines VENM as "*…natural material (such as clay, gravel, sand, soil or rock fines):*

- *'that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities*
- *'that does not contain sulfidic ores or soils, or any other waste, and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved from time to time by a notice in the NSW Government Gazette."*

On this basis, the Auditor considers that for soil to be classified as VENM, the following criteria generally apply:

- Organic compounds (including petroleum hydrocarbons, PAHs, OCPs, PCBs and phenols) should be less than the PQLs.
- Inorganic compounds should be consistent with background concentrations.
- The material should not contain or comprise actual or potential acid sulfate soil.

Imported material, such as excavated natural material (ENM) or mulch, was assessed against the requirements of the applicable RRO / RRE issued by the EPA under clause 93 of the *Protection of the Environment Operations (Waste) Regulation 2014*.

7.2. Soil Vapour Assessment Criteria

Headspace-in-vial samples were collected as part of the validation process, the Auditor considered VOCs should be less than the PQLs.

7.3. Auditor's Opinion

The environmental quality criteria referenced by the Auditor are generally consistent with those adopted by EGA.

In addition to the above criteria relevant to contamination, the Auditor notes PASS was required to be managed in accordance with the ASSMP, which references the ASSMAC (1998) Acid Sulfate Manual, Acid Sulfate Soil Management Advisory Committee. The Validation Report presented results relating the assessment for PASS, in accordance with the ASSMP, however, the Auditor has not completed a detailed review of compliance with the ASSMP.

8. EVALUATION OF CONCEPTUAL SITE MODEL

RS-117B reviewed previous investigations to inform the site remediation requirements, including assessment of soil, groundwater and soil vapour data. A conceptual site model (CSM) is a representation of the contaminant source, pathway and receptor linkages at a site. JBS&G developed a CSM to inform the RAP. The CSM is presented as **Table 8.1** on the following page, extracted from the RAP.

8.1. Auditor's Opinion

The CSM was assessed in RS-117B as a reasonable representation of the contamination at the site and was considered an adequate basis for assessing remedial requirements.

The CSM indicated the risks to human health and the environment were low and acceptable subject to remediating any USTs encountered, and capping and managing soil at the site to address asbestos and potential for unexpected finds.

The remediation and validation works reviewed herein are considered adequate to address the identified risks to human health under a commercial / industrial land use scenario based on the CSM.

Table 8.1: Conceptual Site Model (Source: the RAP)

Area	Potentially Source of Impact	Receptor	Exposure Pathways for Commercial Use (Complete or Not Complete?)				Comment
			Inhalation - Particulates	Inhalation – Vapour	Oral	Dermal	
Site	Potentially Impacted soil	Commercial worker	C[1]	C	C[1]	C[1]	Considered low Risk: There is potential for asbestos containing material (ACM) to be present in fill material underlying the full extent of the site. Exposure to this ACM impacted fill can be managed through an EMP, as well as via the implementation of the proposed remedial strategy (cap and contain). Additionally, given the absence of decommissioning documentation, there is potential for USTs to remain present at the site. The potential for USTs or related infrastructure to be present underlying the site can be managed via the implementation of the Unexpected Finds Protocol (UFP) and assessed vis test pitting in the inferred UST locations to confirm their presence/absence. Although some elevated chloroform concentrations were identified in groundwater and soil vapour by KPMG (2016), the source of these impacts was on-site migration from contamination on the adjoining site to the west. The adjoining site to the west has since been remediated and site assessment completed by JBS&G (2022) did not identify chlorinated hydrocarbon contamination to groundwater or soil vapour. Source material was not identified on the site by JBS&G (2022), and any potential residual chlorinated hydrocarbon impacts will be highly localised. Any potential preferential pathway for vapour migration would be limited to the extent of pile outlines, which would comprise only a small fraction of the building footprint and is not consistent with uniform volatile sources of volatile impact, which vapour intrusion risk is based on. Therefore, there would be low potential for piles to increase the risk for potential deeper vapour impacts to affect the extent of vapour intrusion via a preferential pathway. Similarly, placement of piling spoil recovered from depth would have a low potential to increase the risk from vapour intrusion, if placed beneath the pavement, subject to assessment of any odourous material
		Site Visitor	C[1]	C	C[1]	C[1]	
		Maintenance Worker (underground)	C[1]	C	C[1]	C[1]	
	Potentially impacted groundwater	Commercial worker	-	C	N	N	Considered low Risk: Current heavy metals concentrations are within the range of urban background levels. Chlorinated hydrocarbons concentrations have decreased to a level below the site adopted criteria (JBS&G 2022). The requirement to prevent all users from contacting groundwater at depth can be managed through an EMP.
		Site Visitor	-	C	N	N	
		Maintenance Worker (underground)	-	C	C	C	
Adjacent surface	Potentially impacted	Commercial worker	-	C	C	C	Considered low risk: Current heavy metals concentrations are within the range of urban background levels and would likely be no higher than those levels currently present in the

Area	Potentially Source of Impact	Receptor	Exposure Pathways for Commercial Use (Complete or Not Complete?)				Comment
			Inhalation - Particulates	Inhalation – Vapour	Oral	Dermal	
water receptors	seepage/ surface runoff	Maintenance Worker (underground)	-	C	C	C	Parramatta River. Chlorinated hydrocarbons concentrations have decreased to a level below the site adopted criteria. (JBS&G 2022).

Notes: - = Pathway not valid C = potentially complete exposure pathway N = exposure pathway not complete

1. Pathway is only considered potentially complete where the surface of the site is unsealed at the surface.

9. EVALUATION OF REMEDIATION AND VALIDATION

9.1. Remediation Planning and Proposed Remediation

RS-117B presented the Auditor's review of the remediation required, and the evaluation of the RAP.

The RAP proposed the following remediation process / requirements:

- Existing above ground structures were to be removed.
- Test pits were required to be excavated in the inferred potential UST locations to confirm their presence/absence. If UST are encountered in the test pits or during civil works, decommissioning works would be completed under an unexpected finds protocol (UFP) in accordance with *Underground Petroleum Storage Systems (UPSS) Regulation 2019.* Following the removal of the UST (if applicable) validation sampling was required to be completed.
- Remediation for asbestos impacts and potential unexpected finds is to comprise installation of a physical separation layer, to be managed under a LTEMP.
- Existing sealed surfaces are to be retained on-site where possible and construction will occur above the existing site surface level.
- Where the existing slab was proposed to be removed, either for off-site disposal or for potential on-site re-use (e.g., crushing as an aggerate), the RAP required that a suitably qualified and experienced contaminated land consultant inspect the slab (prior to and following removal) to confirm the absence of any gross or widespread indicators of contamination, inclusive of asbestos, staining, or odours, prior to on-site re-use or off-site disposal.
- Surplus spoil associated with piling will be re-used on site between the pile caps as fill and will be placed beneath the marker layer. This is to also include any excess material generated from services constructed beneath the existing slab on site.
- Due to potential for remnant, localised areas of impact in deeper soils, material at depth including clay would not be considered VENM and would not be suitable for re-use at the site unless validated or placed under the marker layer for ongoing management. Where excavated soil/piling returns are observed to be stained or odorous, these soils will be segregated and inspected via PID (fitted with an 11.7 eV lamp) and/or analytical testing to confirm suitability for on-site re-use (to ensure risk profile is not increased by relocating these materials to a shallower depth).
- The remainder of filling would be achieved using clean imported material.
- A marker layer shall be laid directly on the underside of road base where sealed surfaces are nominated to be constructed on site (i.e., the majority of the site). In these areas the road base and the concrete slab will form the physical separation layer.
- Where service trenches are excavated within the impacted fill material, this will be under asbestos controls and a marker layer will be placed in the completed trenches. Service works will be completed within the trenches, with placement of validated material above the marker layer.
- The RAP required validation inspections for placement of marker layer and completion of capping as well as inspections following removal of existing slabs and inspections of piling arising. Routine/regular supervision by the environmental consultant was not described in the RAP.

Additionally, as part of the remediation planning process following preparation of the RAP, the Auditor reviewed the methodology for the assessment of piling soils, crushing and re-use of concrete hardstand and the validation of the UST.

Following preparation of the RAP and RS-117B and prior to commencement of remediation, SEG prepared the document titled Amendment to Capping Layer Requirements for Site Remediation and Validation to outline justification for deviation of the approved RAP, to provide a robust strategy for the validation of both hardstand and landscaped areas proposed for the site and ensure project objectives are achieved, while continuing to manage and mitigate the risk of ongoing contamination remaining within the site. This document was not provided to the Auditor for review during the course of the audit, however, was considered in review of the Validation Report. This document and associated deviations from the RAP are discussed in **Section 9.1.1** below.

The Auditor also considered the proposed landscape plans for consistency with the RAP requirements, discussed in **Section 9.1.2** below.

9.1.1. Amendment to Capping Layer Requirements

SEG prepared the document titled *Amendment to Capping Layer Requirements for Site Remediation and Validation, 6 Grand Avenue, Rosehill NSW* dated 24 September 2024 to document proposed departures from the capping requirements specified in the RAP. EGA refer to this document as a "RAP Addendum". The document was not reviewed or endorsed by the Auditor prior to commencement of works and was only provided at the validation reporting stage. Notwithstanding, the Auditor has considered the proposed amendments in the context of the completed validation works and final capping construction profiles. The proposed capping layer amendments were summarised in the Validation Report as presented in **Table 9.1**.

Table 9.1 Proposed Capping Layer Amendments

Surface Type	RAP Requirement	Amended Design	New Capping Thickness
Concrete / Hardstand	Visual marker layer + > 500 mm validated imported fill + concrete slab	Marker layer + > 100 mm road base + 180 mm concrete slab	280 mm
Asphalt	Visual marker layer + > 500 mm validated imported fill + asphalt	Marker layer + > 150 mm DGS + 150 mm DGB + 20 mm asphalt	320 mm
Landscaped / Unsealed	Visual marker layer + > 500 mm validated imported topsoil	Marker layer + > 300 mm validated fill + 100 mm validated topsoil	400 mm (tree pits retained per original RAP depth)

SEG provided the following technical justifications and risk mitigations considered in determining the capping layer amendments:

- *Concrete and asphalt surfaces eliminate direct human and ecological exposure pathways to underlying contamination;*
- *Unsealed areas primarily feature shallow-rooted vegetation, with minimal receptor interaction. Deep root zones will still adhere to original tree pit specifications;*
- *All capped and contained contamination will be managed post-construction under a Long-Term Environmental Management Plan (LTEMP);*
- *All backfill must be pre-approved, validated Virgin Excavated Natural Material (VENM) or EPA-exempt materials; and*
- *Photos and survey records are to be captured at every layer during construction, supported by material tracking documentation and rejection of non-compliant soils prior to placement.*

The Auditor is of the opinion that the amendments were reasonable, however, notes that these were not implemented in landscaping areas, discussed further below.

9.1.2. Remedial Planning in Landscaped Areas

The RAP indicated that the plan to remediate landscape areas was expected to be presented in a separate Landscape Area Capping Plan which was expected to be determined in conjunction with the project landscaper to either:

- Install a physical separation layer including a marker layer; or
- Excavate all fill material across the extent of the proposed landscaped area and use of imported fill or growing mediums.

The RAP provided the following guidance to formulate the capping requirements in the Landscape Area Capping Plan:

- In areas of proposed turfed / grassed surface – installation of a visual marker layer at a minimum depth of 300 mm below final finished site levels, with a capping layer consisting of environmentally suitable materials for potential human and/or ecological exposure
- In areas of shallow landscaping areas – installation of the marker layer at a minimum depth of 300 mm below the final finished site levels, with a capping layer consisting of environmentally suitable materials for potential human and/or ecological exposure
- New tree pit zones / deep landscaping zones – installation of the marker layer at a minimum depth of 1500 mm below the final finished site levels, with a capping layer consisting of environmentally suitable materials for potential human and/or ecological exposure, noting that the maker layer should extend to the depth required for installation of the new tree's existing root ball or otherwise consistent with the anticipated root zone of the deep landscaping area
- Existing tree zones – installation of the marker layer consistent with immediately adjacent marker layer depths (e.g., 300 mm in turfed areas and 300 mm in mass planting areas) to the extent practicable, with a capping layer consisting of environmentally suitable materials for potential human and/or ecological exposure.

The Auditor notes a separate Landscape Area Capping Plan was not presented in the Validation Report, however landscaping design plans were prepared by Geoscapes Landscape Architects and were approved under the SSD and modifications. Based on the landscaping design plans provided in the Validation Report, the Auditor notes the marker layer was planned to occur at depths equal to or greater than the depths identified in the RAP with the exception of the following aspects:

- The design plans show a range of depths for new tree pit zones including:
  - In the north (outside of existing TPZ), marker layer installed at a minimum depth of 600 mm, with additional mounding of landscaping material of 700 mm (totalling 1300 mm)
  - In the south, marker layer installed at a minimum depth of 1000 mm landscaping material
  - In the west and east, marker layer installed at a minimum depth of 600 mm.

  This is not strictly in accordance with the RAP which required a minimum depth of 1500 mm, and additionally is not in accordance with the capping profiles eventually constructed which were adjusted to provide a minimum depth of 600 mm for the northern area, achieved via mounding, and by providing 600 mm of landscaping material (not 1000 mm) over capping material in the southern area. The deviation from the RAP was considered by the Auditor to be acceptable since the plans were prepared by the project landscaper, and based on confirmation provided in February 2025 from both Geoscapes

Landscape Architects and EGA via Vaughans that a tree pit depth of 600 mm is sufficient for planting of the trees, noting that the roots may penetrate the geofabric marker layer.

- Within the existing tree zones, located at the northern site boundary, a geogrid marker layer would be installed at a maximum depth of 100 mm within the TPZ, with native tubestock grasses planted in this area to ensure minimum excavation around tree roots. This depth is understood to be the extent practicable for protection of existing trees and is considered by the Auditor to be acceptable.

Remaining areas of shallow landscaping had a capping of 300 mm of landscaping material, consistent with the requirements of the RAP and the landscape design plans (although less than the proposed thickness in the "RAP Addendum").

The final capping systems within the landscaped areas are described in the LTEMP (**Section 12** and **Appendix B**) and shown on **Attachment 4, Appendix A**. Based on the advice provided by the project landscaper and hygienist, the Auditor is satisfied that the deviations from the RAP for capping systems in the landscaping areas are acceptable.

9.2. Remedial Works Undertaken

EGA presented a summary of the remediation and validation activities that were undertaken, presented as **Table 9.2**.

Table 9.2 Remediation and Validation Activity Sequence

Remediation & Validation Activity	Date
Demolition of building structures, footings, hardstand	October to December 2024
Piling works through existing hardstand into potentially asbestos, chlorinated hydrocarbon, or ASS impacted fill, validation soil sampling for ASS and VOCs.	November 2024 to April 2025
Excavation and removal of underground storage tank & pit soil validation sampling	October 2025 November 2025
Waste classification of stockpiled soils	WCA-01 – July 2025 WCA-02 – November 2025 WCA-03 – 20 May 2026
Placement of contaminated soils in containment cell 1	January to April 2025
Placement of contaminated soils in containment cell 2	May to June 2025
Placement of marker liners over buried remediated soil	January to June 2025
Survey of containment cells (1 & 2) geotextile layer	June 2025
Survey of final surface level of site	July 2026
Importation of VENM, ENM and RRO materials for final levels and services trenches	December 2024 to July 2026

Inground remediation works were undertaken by CLMU followed by construction works by Vaughans, with environmental consulting provided by SEG/EGA, between October 2024 and August 2026.

A summary of the remediation works is provided in this section, with further details and discussion of associated validation tasks discussed in subsections within **Section 9.3**.

In association with the demolition works, Hazardous Building Materials (HBM) were removed and clearance certificates were prepared by a NSW Licensed Asbestos Assessor (LAA), prior to demolition of building structures, and following the disposal of building material. Building footprints were retained as part of the redevelopment works. Concrete from demolished buildings was subject to asbestos validation to allow for subsequent re-use as crushed aggregate beneath proposed building footprints.

During demolition and remedial works on-site, asbestos air monitoring was set up along the site exclusion zones by the occupational hygienist appointed to the project, due to the presence of asbestos risk within the site. The reported asbestos air monitoring results were all below the

minimum action level of < 0.01 fibres/mL across the entirety of the works. Field screening assessment for PASS and volatile impacts was undertaken during the piling works. All piling spoil was subsequently placed into two areas identified as Containment Cell 1 (west) and Containment Cell 2 (east) (shown as "Capping System 2" on **Attachment 3** of **Appendix A**) i.e. on top of the existing hardstand surface and below the marker layer, below the two buildings.

In accordance with the unexpected finds protocol detailed in the RAP, following the identification of a UST in the northern central portion of the site, SEG/EGA prepared a series of documents that outlined the appropriate removal and validation methodology which were reviewed by the Auditor. The UST and associated pipework were removed, resulting in an irregularly shaped excavation footprint of approximately 5 m by 3.5 m, with a depth of approximately 2 m. Excavated soils were temporarily stockpiled adjacent to the excavation footprint, atop a geofabric marker layer while they awaited laboratory analysis. Validation samples were collected from the walls and base of the UST excavation. Following validation, the UST excavation was backfilled with validated excavated material noted to be below the final capping layer.

As site works progressed, a geotextile marker layer was installed across potentially contaminated material at the site in a staged approach, and progressive asbestos clearances that confirmed areas were "safe" were prepared. The marker layer was subsequently surveyed as part of the validation process. In areas where piling spoil or other site-won contaminated material was not placed on top of the previous hardstand surface, this surface was considered to be the marker layer, and adjoining areas of geotextile marker layer were tied into this level.

Material was imported from a range of sources for placement above the marker layer. The material comprised sandstone and recovered aggregate material. The final capping layer in landscaped areas consisted of a imported topsoil and mulch material.

Following placement of the soil landscaping material, the landscaping surface was surveyed, and the depth to the marker layer was identified to allow for confirmation of capping depths.

In the Auditor's opinion, remediation works undertaken were appropriate and in general accordance with the RAP and agreed deviations. The Validation Report does not clearly discuss deviations from the RAP, however, these have been considered by the Auditor.

Validation testing and results are discussed in **Section 0**.

9.3. Validation Activities

9.3.1. Piling Works – Field Screening Assessment -Potential Acid Sulfate Soil

EGA reported that spoil materials generated from the piling activities were immediately sampled and analysed for pH/pHfox prior to being consolidated into 100 m^3 stockpiles prior to receipt of the results.

The ASS results table presented in the validation report includes the key screening parameters used to assess the potential presence of ASS, namely pHF, pHFOX, pHF-pHFOX change and reaction rating. These parameters were used to identify samples requiring further investigation through CRS analysis.

A total of 153 spoil samples were collected and analysed for pHF and pHFOX. Screening results indicated that ASS was not detected in the majority of samples, with only one sample (SP51-01) identified as potentially containing PASS. This sample was subsequently subjected to confirmatory CRS analysis, which confirmed that ASS was not present. Based on the screening and confirmatory testing results, PASS was considered unlikely to be present within the assessed spoil materials, no ASS remediation was required, and the piling spoil was deemed suitable for retention beneath the marker layer in proposed hardstand areas.

In the Auditor's opinion the ASS screening program appears technically appropriate and comprehensive, comprising more than 150 pHF/pHFOX screening analyses across piling spoil generated from the works.

The individual sample (SP51-01) triggered the adopted screening criteria for potential PASS and was appropriately selected for CRS confirmation. The Auditor notes a number of samples exhibited moderate to large pH decreases, but only sample SP51-01 combined a substantial pH reduction (4.6 units) with a low pHFOX value (3.3) and was therefore identified as requiring confirmatory CRS analysis.

9.3.2. Piling Works – Field Screening Assessment – VOCs

EGA reported that piling works were conducted between November 2024 and April 2025. Spoil materials generated from the piling activities were reported to have been immediately sampled with the PID following generation of piling spoil stockpiles. The Validation Report included a Piling Stockpiles Tracking Sheet as an appendix which included field records from PID screening of spoil from each pile, a log of the subsurface conditions encountered at each pile and reference to plans for the corresponding combined stockpile ID.

EGA reported that prior to January 2025, VOC screening assessment was not undertaken with a PID fitted with the required 11.7 eV lamp. However, spoil generated during November and December 2024 was covered with plastic and was subsequently screened using the 11.7 eV PID in January 2025 to ensure materials did not contain chlorinated hydrocarbon impacts.

One piling location 'PILE01' had a reported PID reading of 280.9 ppm and was subject to further field assessment which identified a PID reading of 207.5 ppm following additional equilibration. This material was stockpiled separately to other pile material and was covered in black plastic.

EGA reported *"all remaining piling spoil materials indicated PID readings < 10 ppm and were considered suitable for use beneath the high-visibility geotextile marker layer within the site".* However, the Auditor notes this discussion does not correspond with field screening results presented in Appendix S of the Validation Report, which notes the following additional exceedances of the screening value (10 ppm):

- PILE33 – PID of 22 ppm, recorded on the 21 January 2025
- PILE20 – PID of 230 ppm, recorded on the 22 January 2025 (together with PILE01)
- PILE17 – PID of 13.1 ppm, recorded on the 24 January 2025
- PILE13 – PID of 31.1 ppm, recorded on the 24 January 2025
- PILE20b – PID of 51.2 ppm, recorded on the 29 January 2025
- PILE16b – PID of 16 ppm, recorded on the 29 January 2025

EGA reported PILE01 was subject to further VOC (headspace-in-vial) assessment, however, prior to testing the PILE01 stockpile was inadvertently combined with PILE20, therefore a headspace-in-vial assessment was conducted via collection of two samples from the combined material (PILE01 and PILE20). EGA reported *"VOCs were not detected within the soil samples collected from the combined stockpiles. As such, soil materials associated with 'PILE01' and 'PILE20' were not considered to pose an inhalation risk and were proposed for retention beneath proposed hardstand footprints within the site."*

Based on the results from testing of the highest PID concentration material and combined stockpiling of material prior to placement under the marker layer, the absence of additional testing for the five locations listed above (with around 50 ppm and below) is not considered material.

The VOC screening undertaken was adequately in accordance with the VOC in Piling Spoil Methodology. The Validation Report notes that all piling spoil was placed above existing hardstand footprints located within Containment Cell 1 and Containment Cell 2, prior to the placement of the marker layer and instalment of the capping layers. This is consistent with the RAP and is considered adequate.

9.3.3. Progressing Asbestos Clearances and Placement of Marker Layer

Progressive asbestos clearances were prepared by a SafeWork NSW LAA and provided in the Validation Report, as detailed in **Table 9.3**. These clearances were undertaken where removal of the concrete slab was required, and to confirm the placement of the marker layer at the site (identified as "make safe" clearances).

The Validation Report documents the general placement of the high-visibility orange geotextile marker layer installed atop the fill materials retained across the site (at depths greater than 0.3 m). The described placement was supported by photographic evidence, clearance certificates, the make safe inspections and survey data provided in the Validation Report.

Where original hardstand was retained, the marker layer comprised the existing concrete hardstand (at depths greater than 0.8 m). The Validation Report indicates the marker layer was not placed up to the base of existing trees in the TPZs located at the northern landscaped area. Alternatively, geogrid was used as a marker layer to the tree bases and 0.1 m mulch capping was placed atop the geogrid. Photographs included in the Validation Report show marker layer was placed between the trees within the TPZ.

The table below includes only asbestos clearance certificates relevant to contaminated land, being those associated with ground-level asbestos removal or land remediation works. These generally comprised visual inspections or clearances of residual soil surfaces, concrete stockpiles, containment cell areas and trench excavations following asbestos-related make-safe or removal works. Clearances relating solely to above-ground buildings, structures or equipment decontamination were not considered directly relevant and have not been documented.

Table 9.3: Progressive Clearances and Marker Layer Placement

Clearance period	Areas covered	Description	Report references
October–November 2024: slab removal and concrete stockpile clearances	Small area at the southern site boundary; south-western portion of the site; central portion of the site associated with the former 'Administration Building'.	Visual clearances of residual soil surfaces following removal/demolition of concrete slab hardstand and visual clearance of the resultant concrete stockpile.	2482-ASBCLR-01-291024.v1f; 2582-ASBCLR-04-201124.v1f; 2582-ASBCLR-07-221124.v1f.
December 2024–March 2025: early make-safe inspections	Northern portion of the site associated with stormwater infrastructure works; Containment Cell 1 and Containment Cell 1 – northern portion.	Visual inspections of subject areas following **'make safe'** works, including works associated with the installation of stormwater infrastructure.	2582-ASBCLR-13-061224.v1f; 2582-ASBCLR-17-110425.v1f; 2582-ASBCLR-14-250325.v1f.
June 2025: containment cells and broader site soil-surface clearances	Containment Cell 2 – southern and northern portions; central, north-west, north-east, northern and north-western portions of Warehouse 4.	Visual clearances of subject area soil surfaces following **'make safe'** works, with boundary control airborne asbestos monitoring and, for the north-western portion, boundary control and clearance airborne asbestos monitoring.	2582-ASBCLR-18-130625.v1f; 2582-ASBCLR-19-260625.v1f; 2582-ASBCLR-20-260625.v1f; 2582-ASBCLR-21-300625.v1f; 2582-ASBCLR-22-260625.v1f.
December 2025: temporary make-safe inspection	Northern portion of the site, residual soil surface within the subject area.	Temporary **'Make Safe'** inspection following installation of geofabric marker and boundary control airborne asbestos monitoring.	2582-ASBCLR-25-051225.v1f.

Clearance period	Areas covered	Description	Report references
January–March 2026: eastern/south-eastern trench excavation clearances	Eastern portion of the site, including trench excavation between Warehouse 1 and Warehouse 2 made safe with geofabric material; eastern trench excavation made safe with geofabric material; south-eastern portion trench excavation made safe with geofabric material; western portion of Warehouse 2 east of the breeze way.	Visual clearances of subject area soil surfaces following **'make safe'** works, with boundary control and clearance airborne asbestos monitoring.	2582-ASBCLR-28-140126.v1f; 2582-ASBCLR-29-150126.v1f; 2582-ASBCLR-30-160126.v1f; 2582-ASBCLR-31-290126.v1f; 2582-ASBCLR-32-300126.v1f; 2582-ASBCLR-33-300126.v1f; 2582-ASBCLR-35-230226.v1; 2582-ASBCLR-36-050326.v1f.
May 2026: northern entrance trench clearances	Area A: northern portion of the site, eastern entrance area, trench excavation made safe with geofabric material; Area B: northern portion of the site, western entrance area, trench excavation made safe with geofabric material.	Visual clearance of subject area soil surfaces following **'make safe'** works.	2582-ASBCLR-37-080526.v1f.

9.3.4. Validation of UST Excavation

The RAP identified the potential presence of two USTs within the eastern portion of the site. The historical information relating to the inferred UST locations was provided to SEG at commencement of the project and was considered in assessing the potential presence and interaction of the UST and the proposed piling works. EGA reported that, during piling works, no construction materials inferring the presence of a UST were identified. In addition, excavation works associated with the installation of a stormwater main was undertaken within the eastern portion of the site (adjacent to the piling works) and these and test pitting and landscaping works along the eastern boundary of the site did not identify the presence of any USTs. Based on these observations, EGA considered that the two USTs previously understood to be present in the eastern portion of the site were likely removed following decommissioning.

A UST was identified in the northern portion of the site during the bulk earthworks. Following removal and off-site disposal, validation samples were collected in accordance with the RAP, including the following samples:

- Four (4) wall samples, representing one per wall per 2 m depth.
- One (1) base sample, representing one sample per 25 m².
- Three (3) samples were collected from the excavated and stockpiled material.

EGA reported no residual evidence of odours or staining within the excavation walls, base, or generated spoil, and all soil validation samples collected from the excavation walls and base and stockpile returned concentrations below the adopted remedial acceptance criteria. The Validation Report noted the material was confirmed to be *"suitable for reuse as backfill beneath the sites capping layer".*

9.3.5. Crushed Concrete Stockpiles Re-Used On-Site

SEG prepared the Concrete Crushing Methodology to provide a methodology for minimising the asbestos exposure risk associated with the proposed re-use of concrete. The methodology included the requirement for LAA clearances and inspections prior to crushing as well as validation sampling post-crushing.

Asbestos validation sampling from a stockpile of approximately 2,850 m^3 of crushed concrete building materials was undertaken prior to the materials being re-used on site as either fill material or capping beneath pavement.

EGA reported *"A total of 44 samples were collected and submitted for asbestos analysis per the WA DOH / NEPM (0.001%) guidelines to ensure the material was suitable for unrestricted use within the site. No asbestos was detected in any of the validation samples submitted and the materials are considered suitable for the intended land-use."*

As discussed in **Section 6**, crushed concrete sampling was not in accordance with the Concrete Crushing Methodology, however, was found by the Auditor to be adequate.

9.3.6. Site-Won Material Re-used on Site

The Validation Report identified the following soil materials were generated as a result of service installation, including the rainwater tank installation:

- Approximately 125 m^3 of fill material generated from depths of 0 to 0.4 m in association with the rainwater tank excavation, with the material described as silty clay, grey to dark brown, dry with rocks and gravels.
- Approximately 1,200 m^3 of natural clay material generated from depths of 0.4 to 2.0 m in association with the rainwater tank excavation, with the material described as red to orange and dry.
- Approximately 1,600 m^3 of natural clay material generated from depths of 0.4 to 2.0 m in association with service trench (stormwater pipe) excavations, with the material described as red to orange and dry.

Validation samples confirmed no asbestos or chemical concentrations were detected above the adopted site criteria in any of the samples submitted, with the exception of chromium (1,630 mg/kg within one fill sample). The EIL exceedance for chromium indicated fill material were unsuitable for use above the marker layer, and the fill was stockpiled with material to be placed below the marker layer.

The clay material was considered by EGA to be suitable for the intended commercial land use and was re-used above the marker layer. This is noted to be a deviation from the RAP which required site-won material generated from service excavations to be re-used below the marker layer. However, the RAP also allowed for re-use of natural material subject to validation, therefore this deviation is not considered material.

As discussed in **Section 6**, limited chemical analyses were undertaken for site-won clay used above the marker layer, however, this is considered by the Auditor to be acceptable based on the low likelihood of contamination being present (based on source location and depth) and the low potential for exposure in the location placed (below pavement over newly installed stormwater infrastructure). Overall, in the Auditor's opinion, the re-use of the fill and clay material generated as a result of service installation across the site was acceptable.

9.3.7. Material Disposed Off-Site

In association with the removal of the existing above ground structures, demolition waste was disposed of off-site. The Validation Report documented the asbestos building material disposal.

Waste classification letters were prepared for in-situ material located at the northern site boundary, and two soil stockpiles generated on-site including:

- WCA-01, 196 m^3 of material located at the northern site boundary and classified in-situ through the collection soil samples from 8 test pit locations at the northern site boundary.
- WCA-02, 60 m^3 of stockpiled soil material described to have been located in the north-west portion of the site, but shown on a figure to be located in the south-east portion of the site.

- WCA-03, 750 m^3 of stockpiled material located at the north-eastern portion of the site.

Sample locations are shown on **Attachment 5, Appendix A**. The Validation Report notes although the material was characterised for off-site waste disposal as General Solid Waste (non-putrescible) – Special Waste (asbestos), all material was retained beneath the on-site capping layer.

In the Auditor's opinion the analytical testing undertaken for waste classification confirmed the suitability for the material to remain on-site as analytical results reviewed by the Auditor, with the exception of asbestos, were below the adopted site assessment criteria. Placement of the asbestos impacted material beneath the marker layer was in accordance with the intention of the RAP.

9.3.8. Imported Material

Approximately 54,444 tonnes of imported material were brought to the site to achieve final design levels and establish a clean capping layer over encapsulated contaminated soils.

Imported soils (VENM and non-VENM) and engineered aggregate materials were sourced from a number of suppliers and were accompanied by relevant RRO documentation, waste classification reports, and source site documentation where available. EGA was engaged to review this documentation and assess the suitability of the imported materials in accordance with the RAP.

For materials imported prior to June 2025, EGA was not provided with source documentation for review prior to importation. For these materials the validation strategy involved undertaking representative sampling and analytical testing of imported materials upon delivery to the site. Testing included analytes relevant to the site validation requirements, including metals, TRH, BTEX, PAHs, OCPs, PCBs, and asbestos (refer to **Table 9.4**).

Upon arrival at the site, imported materials were subject to inspection and validation sampling, as required, to verify material quality and suitability. This process generally confirmed that all imported materials complied with the applicable regulatory requirements and site validation criteria, including the relevant site-specific validation criteria.

The Validation Report noted that 100 m^3 of asbestos impacted material was imported from CR Plus on 11 February 2026. Samples IM-RED01 to 03 identified as ENIVROSAND sampled on 11 February 2026 were reported to include friable asbestos. This material was reported to have been returned to the CR Plus site.

The Validation Report includes a summary table of imported material and a 'Material Tracking Sheet' listing the date, ID and source for imported material verification samples. The Auditor's summary of the imported materials is presented in **Table 9.4**, including volumes (as summarised by EGA), details of the source documentation reviewed, validation testing undertaken, and the outcomes of the suitability assessment. Individual import documentation was not provided to allow the Auditor to verify volumes for all imported materials.

Based on review of the Validation Report, the Auditor notes that the material tracking methods adopted by EGA were not consistent with the documentation requirements identified in the RAP, which specifically identified:

"At the time of arrival the imported material shall be tracked by record of the following details for inclusion in the final validation report:

- *Date (yyyy/mm/dd);*
- *Source site details including reference to the relevant product specification sheets, and samples collected prior to placement;*
- *Unique material load identification code (starting at 001);*
- *Estimated volume (cubic metres);*
- *Type of material;*

- *Confirmation that each load of the material is free from visual and olfactory indicators of contamination including anthropogenic inclusions and/or construction waste;*
- *Confirmation that the material is consistent with expectations based on the source site; and*
- *Site figure showing placement location, date of placement and likely final depth below finished ground level (approximate).”*

The material tracking documentation did not include unique material load identification codes, and the placement locations were not recorded. Notwithstanding these deviations from the RAP, the Auditor notes the information provided in the Validation Report demonstrates a material tracking process was implemented and the process was observed during site inspections undertaken by the Auditor and Assistant. The Material Tracking Sheet provides sufficient information which identifies the source of the imported material, and details of the validation sampling.

Overall, the information provided is sufficient to demonstrate the imported material as suitable for use at the site.

Table 9.4: Summary of Imported Fill

Source Site	Volume imported (tonnes)	Material Type	Importation Period	Validation Sampling Documentation Presented (Including laboratory reports)	Summary of Validation Data following importation to site
Falcon Street Bridge	46,352	Sandstone Tunnel Spoil – Tunnelling Material Order and Exemption February 2024	March 2025	Initial compliance assessment by ADE Consulting Group Pty Ltd prior to importation dated September 2024. Verification sampling results presented in the Validation Report.	A total of 10 samples were collected prior to June 2025. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria
Cammeray Golf Course			December 2024 to February 2026		A total of 166 samples were collected. Nine of these samples were collected after June 2025. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals 15 samples underwent further analysis using silica gel clean up. No exceedances; all below LOR/Site Criteria
CR Plus Pty Ltd	987	Envirosand Recovered Aggregate Order 2014	November 2024 to February 2026	Material test report by Alliance Geotechnical Pty Ltd and asbestos lab results for Camellia Recycling facility. Verification sampling results presented in the Validation Report	A total of 35 samples were collected. 14 of these samples were collected between June 2025 and March 2026. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals 5 samples underwent further analysis using silica gel clean up. No exceedances; all below LOR/Site Criteria. 100m^3 of this material failed the validation process and was returned to CR Plus as discussed above.
	854	Aggregate Recovered Aggregate Order 2014	December 2025 to March 2026	As above plus test report from Resource Laboratories Verification sampling results presented in the Validation Report	A total of 6 samples were collected after June 2025. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria
Sydney Wide Building Materials – PF Formation Quarry Products	660	VENM Sydney Tiling Sand	January 2026 to February 2026	Quarried product Verification sampling results presented in the Validation Report	A total of 9 samples were collected were collected between January 2026 and February 2026. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria

Source Site	Volume imported (tonnes)	Material Type	Importation Period	Validation Sampling Documentation Presented (Including laboratory reports)	Summary of Validation Data following importation to site
Gunlake Quarries	385	VENM 8mm Crusher Dust	December 2025	Letter from supplier confirming quarried materials Verification sampling results presented in the Validation Report	A total of 8 samples were collected were collected in December 2025. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria
Elite Sand and Soil	360 m^3	Mulch – The Mulch Order	August 2026	Statement of compliance by supplier Verification sampling results presented in the Validation Report	A total of 3 samples were collected were collected in August 2026. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria
Eastern Creek - Organic Resource Recovery Facility	4,846 m^3	Organic Garden Mix Compost Resource Recovery Order 2016	June 2026 to August 2026	Product Data Sheet Provided. Environmental Analysis Laboratory test report Verification sampling results presented in the Validation Report	A total of 13 samples were collected were collected in June 2026 and August 2026. Analysis included: Asbestos 500ml, TRH/BTEXN/PAH/OCP/PCB/Metals No exceedances; all below LOR/Site Criteria

9.3.9. Final Capping Layers

The Validation Report identified 12 distinct capping layer construction profiles to occur across the site as shown on **Attachments 3 and 4, Appendix A** and described in the LTEMP (**Section 12** and **Appendix B** of this SAR).

Section 3.2 of the LTEMP, attached to the SAS in **Appendix B**, provides a summary of the capping details and depths. In summary, the marker layer is achieved by the original hardstand surface, or by use of a geofabric marker layer where the original hardstand was removed or where site-won fill was placed above the original hardstand (e.g. Containment Cells). Capping materials comprise imported sandstone tunnel spoil, subgrade and pavement and/or landscaping materials.

9.3.10. Survey Data Validation

The RAP identified survey data as core validation evidence demonstrating placement, thickness, and final configuration of the capping system. In accordance with the RAP, four specific surveys were required to be included:

- Pre-remediation site level survey;
- Post-marker layer placement survey;
- Post-capping soil placement survey; and
- Post-surfacing survey.

The Validation Report states *"at the completion of demolition works, a registered surveyor undertook a survey of the site footprint outlining the lateral extent of the site"*. The Auditor notes this survey was not presented in Appendix P of the Validation Report, however this omission is not considered to be significant.

The Validation Report states *"following placement of a marker layer atop the containment areas, a survey of the upper surface of the marker layer was undertaken to confirm the extent and final levels of the containment areas. The survey was completed to document the installed marker layer location and elevation prior to placement of any overlying materials and to verify that the works were completed in accordance with the remedial design requirements outlined in the RAP",* and *"Survey levels within landscaped areas were recorded following installation of the marker layer and following placement of the topsoil layer."*

The Validation Report presents the following survey information, reproduced in **Appendix A**:

- **Attachment 6: Site Survey – Marker Layer to Finished Surface in Landscaped Areas,** dated 27 July 2026.
- **Attachment 7: Site Survey – Finished Surface across Built Areas, detailing G Force Trenching,** dated 22 January 2026
- **Attachment 8: Site Survey – Marker Layer,** dated 19 July 2026
- **Attachment 9: Site Survey – Finished Surface External Pavements,** dated 29 July 2026
- **Attachment 10: Site Survey – Detailing Western and Southern Fence Line and select services,** dated 10 October 2024.
- **Attachment 11: Site Survey – Detailing Prime Trenching**, dated 22 January 2026
- **Attachment 12: Site Survey – Detailing Stormwater Drainage, dated 25 November 2025**

The Auditor notes that, although the surveys were not limited to four specific plans (as expected in the RAP), the provided plans are considered to provide sufficient information relevant to the placement, thickness, and final configuration of the capping system.

9.4. Auditor's Opinion

The PASS screening dataset for the piling material is considered to provide reasonable evidence that widespread ASS/PASS material was not encountered. Notwithstanding, while the screening itself was sufficient, the assessment does not clearly demonstrate compliance with the profile-based delineation approach described in the ASSMP, as the investigation relied on spoil sampling from stockpiled material rather than stratigraphically discrete in-situ soil profile assessment. Consequently, the conclusion of negligible ASS risk for excavated spoil is reasonably supported, but strict conformance with the ASSMP investigation methodology is less clearly demonstrated. The Auditor has not completed a detailed review of implementation of the ASSMP.

In the Auditor's opinion the VOC screening process adopted by EGA was not consistent with the planned approach for assessing the potential for VOC impacts in piling spoil, as PID samples were not targeted to soil material generated from below the water table, however in consideration of the lack of reported staining or odours generated during piling and stockpiling works, the reported PID results (generally < 10 ppm), and the lack of VOCs detected in the headspace-in-vial analysis, the VOC screening assessment was considered to be acceptable.

Asbestos clearance certificates including air monitoring results and the adopted staged approach for excavations to be "made safe" are considered to demonstrate the conformance with the asbestos management requirements designed to limit both exposure and migration of asbestos impacts as a result of the remedial works program.

The Auditor notes the asbestos analysis undertaken in concrete samples was not in accordance with the NEPM (2013) guidelines as stated, however the non-detect concentrations reported in the approximate 500 mL samples collected were sufficient to validate the material as being free from asbestos.

Site-won and imported materials have been demonstrated as suitable for use at the site, from a contamination perspective, in the context of the completed capping systems.

The Auditor considers that, in addition to the detailed capping layers and plan, the available survey information provides sufficient detail to allow future intrusive works to appropriately plan excavation works.

The Auditor has considered the departures from the RAP capping requirements, including the reduced capping thicknesses proposed in the RAP Addendum, the final capping construction profiles in hardstand, asphalt and landscaped areas, and the deviations from the nominated tree pit marker layer depths. Based on the validation records, survey information, final capping plans, asbestos clearance documentation, advice from the project landscaper and the requirement for ongoing management under the LTEMP, the Auditor considers that the final capping system provides an acceptable physical separation layer for the proposed commercial/industrial land use.

The Auditor notes that some validation and tracking documentation did not strictly conform with the RAP requirements, including aspects of imported material tracking, landscape capping documentation, re-use of site-won material above the marker layer and some field screening methodologies. However, based on the available lines of evidence, including laboratory validation results, source documentation, material tracking records, survey data, site observations and the final LTEMP controls, these deviations are not considered to materially affect the overall validation outcome.

Overall, the Auditor concludes the validation activities have been generally undertaken in accordance with the intention of the RAP. Remediation was undertaken adequately in accordance with the intention of the RAP, agreed deviations and agreed methodologies for unexpected finds, and validation has been adequate to demonstrate successful remediation.

10. CONTAMINATION MIGRATION POTENTIAL

10.1. Auditor's Opinion

In the Auditor's opinion, in addition to the environmental management controls adopted as part of the remedial works, the asbestos air monitoring data collected during the remedial works program provides an additional line of evidence that migration of asbestos has not occurred as a result of the remedial works undertaken in association with the re-development of the site.

Furthermore, due to the containment of the ACM impacted fill material across the site and in consideration of the ongoing management under the LTEMP, the Auditor considers that there is limited or no potential for ongoing or future migration of contamination from the site in dust or surface water.

RS-117 and RS-117B also concluded, "*…concentrations of contaminants in groundwater on the downgradient site boundary and in soil vapour are below levels that would potentially pose a risk to offsite receptors… Overall, the potential for migration of soil, soil vapour or groundwater is considered adequately managed by the proposed remediation and restriction of groundwater abstraction.* These conclusions are considered to remain applicable based on the current remediation and validation outcomes

11. ASSESSMENT OF RISK

11.1. Post-Remediation CSM

EGA provided the post-remediation CSM in the Validation Report, provided as **Table 11.1**.

Table 11.1: Post-Remediation CSM

Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern	Affected mediums	Exposure risk
In-situ Asbestos Contaminated Fill Materials Across the Site	'Cap & Contain' Strategy	Asbestos (Friable and Non-Friable)	Soil	Human Health

EGA stated: *"The potential contamination pathways are considered to be via inhalation of contaminants released in dust during future development and maintenance works, if the marker layer were to be breached.*

The potential contamination pathways are now considered to be incomplete. The following future works at the site may result in completion of the pathways:

- *Excavation and subsequent exposure to soil materials retained beneath the site wide marker layer; and*
- *Under-boring for utilities or similar infrastructure"*

The Auditor notes that, as a result of the remedial works, there is limited potential for a complete source-pathway-receptor linkage with asbestos impacts at the site, and the potential risks associated with future intrusive works below the marker layer are required to be managed in accordance with the LTEMP.

11.2. Assessment of Risk

Based on the assessment of validation results against relevant guidelines, and in consideration of the overall remedial works including the capping of asbestos impacted soil material, it is the Auditor's opinion that the contamination risks to human health and the environment from contained asbestos impacts at the site are low and acceptable.

The site, in its current condition i.e. mostly sealed with concrete and buildings, would present a low risk to human health and the environment if used for commercial/industrial purposes, subject to implementation of the LTEMP.

There is a risk that excavations below the marker layer could expose asbestos impacted soils, however this risk is able to be managed through the implementation of the LTEMP. The LTEMP has been prepared so if the contaminated soil is disturbed, it will be handled in an appropriate manner to avoid any increase in potential risks to human health or the environment.

Although an upgradient source of groundwater impacts has previously been identified, groundwater impacts requiring remediation have not been identified at the site, and direct contact pathways with groundwater are mitigated as groundwater abstraction does not occur at the site, and any future use of groundwater would require appropriate assessment and regulatory approvals from the NSW Office of Water. Groundwater abstraction is also restricted under the LTEMP. Therefore, in the Auditor's opinion the contamination risk from groundwater at the site is low and acceptable.

12. ONGOING SITE MANAGEMENT

In accordance with the conditions of consent of SSD-55522478, EGA prepared the following document, which is attached to the Section A2 SAS in **Appendix B**:

> 'Long-Term Environmental Management Plan, 6 Grand Avenue, Rosehill NSW', dated 18 August 2026 by EGA.

Table 12.1 presents the Auditor's assessment of the LTEMP in consideration of the requirements of NSW EPA (2020) *Contaminated Land Guidelines, Consultants Reporting on Contaminated Land*.

Table 12.1: Assessment of the EMP

Item	Auditor Comments
Purpose of the EMP The EMP was prepared for the whole site, identified as Lot 1 DP1258587. The EMP describes conditions of the site and details management strategies of the contained impacted soils. The EMP outline the protocols that are required to be considered in future works that may result in a breach of the capping layer covering the impacted soils on-site. The EMP is applicable for as long as the capped and contained materials are retained within the site.	The EMP adequately describes the site and conditions as a standalone document. The EMP is noted to have been prepared in accordance with the conditions of consent relevant to the redevelopment of the site.
Objectives of the EMP The EMP was prepared to outline the maintenance of the capping layers within the site and prevent any unplanned breaches of the capping layers. The following information was included: • Details of the known extent and construction of the capping areas; • The responsibilities and safe work procedures for working with the impacted soils; • Incident response and reporting requirements; • The roles and responsibilities of relevant stakeholders to ensure the safe, long-term management of the site; and • The mechanism that makes the LTEMP legally enforceable and the parties responsible for the ongoing management of the capping material within the project boundary.	The objectives of the EMP are suitable, the EMP provides measures to mitigate exposure with asbestos impacted fill material, and appropriate management details are provided if the marker layer is breached.
The Nature and Location of Contamination Remaining Previous investigations identified asbestos in friable and bonded forms within in-situ site soils. In addition, VOCs at or below the groundwater table may occur as a result of an upgradient contaminant source to groundwater. The EMP acknowledges the asbestos-impacted soils and other contaminants have been isolated from potential receptors as a result of the cap and containment methodology described in the RAP. The EMP details the site layout following the remediation and redevelopment of the site, and describes the different capping profiles that have been installed across the site. As a result of remedial works undertaken at the site, potential exposure pathways with contaminants are incomplete in association with the ongoing commercial/industrial land use operations. The EMP identifies the potential for a complete exposure pathway (inhalation) with in-situ asbestos contaminated fill would occur if the marker layer were to be breached, and	The nature and location of contamination are appropriately identified and described in the EMP. The Auditor notes the potential for off-site migration of contamination is mitigated by the remedial works and the EMP. The EMP appropriately identifies future works that may result in complete exposure pathways with contaminated fill material.

Item	Auditor Comments
specifically identifies the following future works that may result in completion of the exposure pathways: - Excavation and subsequent exposure to soil materials retained beneath the site wide marker layer; and - Under-boring for utilities or similar infrastructure.	
Extent of Capping and Specification of the Cap The EMP identifies 12 distinct capping layers, relevant to the following areas as shown on the site plan (**Attachments 3 and 4, Appendix A**): • Capping System 1 – Encompassing the breezeway, access roads and surrounding the site buildings. • Capping System 2 – Encompassing the constructed warehouse footprints, including Containment Cell 1 and Containment Cell 2. • Capping System 3a – Encompassing landscaped areas with topsoil / mulch surface covering in the northern area. • Capping System 3b – Encompassing landscaped areas with topsoil / mulch surface covering in the western area including the data centre services alignment. • Capping System 3c – Encompassing landscaped areas in the northern area where new trees have been planted on mounds. • Capping System 3d – Encompassing landscaped areas in the northern area within the tree protection zones. • Capping System 3e – Encompassing landscaped areas and garden bedding within the breezeway. • Capping System 3f – Encompassing the eastern landscaped areas. • Capping System 3g – Encompassing the southern landscaped areas. • Capping System 4 – Encompassing driveways and access roads located to the north, east and southeast of the site. • Capping System 5 – Encompassing On-site Detention (OSD) tanks and associated infrastructure. • Capping System 6 – Encompassing service trench footprints.	The Auditor notes the EMP appropriately details the in-situ profile expected to be encountered during future intrusive works if / where the cap is breached i.e. thickness of concrete (if present), thickness and nature of capping material (except imported material), depth of maker layer and depth of asbestos impacted fill material. In hardstand areas, the capping across the site is noted to have a combined depth at least 0.4 m. In landscaped areas, the topsoil / mulch surface covering generally has a depth of at least 0.3 m, except within the TPZ where the mulch capping layer has been placed over a geogrid mesh product in proximity to tree bases and has a depth of 0.1 m. The capping depth beneath newly planted trees is at least 0.6 m.
Management Activities The EMP presents a passive management approach, whereby the asbestos impacted material is capped and contained. The document applies continuously for the life of the development and whenever maintenance, landscaping or subsurface works are undertaken. Key activities and procedures presented in the plan include the following requirements: • Maintain and protect the capping layer and marker layer at all times. • Induct all personnel undertaking subsurface works. • Restrict intrusive works and require approval before any excavation or penetration of the capping system. • Implement asbestos management controls where works may breach the marker layer.	The management activities presented in the EMP have been reviewed by the Auditor, and are appropriate to mitigate potential future risk in instances where the capping or marker layer are breached.

Item	Auditor Comments
• Reinstate any disturbed capping and marker layers following works, in accordance with the defined capping layers presented in the EMP. • Manage excavated spoil, including waste classification, tracking and disposal to licensed facilities where required. • Prohibit groundwater use unless suitability has been demonstrated. • Follow unexpected encounter procedures if marker layers or impacted soils are exposed. • Maintain records of inductions, inspections, incidents, repairs and soil movements. The EMP identifies the management structure and responsibilities for the different stakeholders, including communication protocols. The EMP identifies several approvals and licencing requirements that are required for works beneath the capping or marker layer, including: • Approval from the Property Maintenance Contractor. • Engagement of a SafeWork NSW Licensed Asbestos Assessor. • Engagement of a SafeWork NSW Class A Licensed Asbestos Removalist. • SafeWork NSW notification before asbestos-related works commence. • Preparation of project-specific asbestos management documentation where required. • Environmental consultant involvement for deeper intrusive works. An unexpected encounters protocol provides a contingency plan if the marker layer is exposed. Several corrective actions are described throughout the EMP. Examples of these actions include stopping work, securing areas, notifying responsible personnel, engaging asbestos specialists, implementing asbestos controls, repairing/reinstating marker and capping layers, and responding to complaints or incidents as soon as practicable.	
Inspections, Maintenance, Sampling, Analysis and Reporting All planned or unexpected works involving a breach of the capping layer must be documented and records kept by the Property Maintenance Contractor. Several management triggers are identified in the EMP, including exposure of marker layer, proposed excavation below capping, capping damage, environmental incidents, complaints, redevelopment proposals, or changes to site conditions. These trigger notification, specialist engagement, repairs, or EMP review. The EMP contains a capping integrity inspection program (including a Capping Inspection Record Form), which requires annual inspections by the Site Owner, quarterly inspections by the Property Maintenance Contractor, and additional inspections after intrusive works or damage. Repairs to the marker or capping layer must be documented and where breached the capping layer / marker layer is required to be reinstated in accordance with the EMP.	Acceptable

Item	Auditor Comments
EMP Audit and Review The EMP requires: (i) annual audits by the Site Owner; (ii) An independent audit by a suitably qualified environmental consultant every 10 years; and (iii) review/revision following significant changes to site conditions, redevelopment, land use change, or material amendments. Revised versions of the EMP must be provided to Parramatta City Council following amendments. Where significant or material changes to the LTEMP are presented in the future, review by an NSW EPA Site Auditor will be required.	Acceptable
Responsibilities The EMP identifies the management structure and responsibilities for the different stakeholders, including communication protocols.	The EMP identifies the management structure, stakeholder responsibilities and communication protocols, and provides a clear allocation of responsibility for environmental management of the capping system and retained contamination. In the Auditor's opinion, the responsibilities are appropriate, provided the EMP is incorporated into the owner/site manager's management system and communicated to workers, contractors and maintenance personnel who may disturb the capping or marker layer. The Auditor has been provided with a letter from the site owner dated 13 August 2026 confirming understanding of, and agreement to implement, the LTEMP requirements, including transfer of those obligations through any future contract of sale.
How will the EMP be made legally enforceable? EGA note the EMP is legally enforceable as it is a condition of development consent. The enforcing authority is noted to be the Department of Planning, Housing and Infrastructure.	The EMP is noted to be legally enforceable by Condition B59(a) of the SSD approval which requires *B59. Prior to the commencement of operation of the development, the Applicant must: (a) implement the approved LTEMP for the life of the development.*
Public notification mechanisms to ensure potential purchasers or other interested parties are aware of contamination and EMP EGA confirm Parramatta City Council has agreed to list the EMP on the Section 10.7 certificate under the *Environmental Planning & Assessment Act 1979* (EP&A Act), thereby ensuring public disclosure of the EMP.	The public notification mechanism is suitable and is a requirement of the SSD approval which requires *B59. Prior to the commencement of operation of the development, the Applicant must: (b) provide evidence to the Planning Secretary the LTEMP is listed on the relevant planning certificate for the land, issued under section 10.7 of the EP&A Act, for the development.* The Auditor has sighted correspondence with Parramatta City Council (**Appendix C**) agreeing to provide limited information in the 10.7(5)) Certificate relating to Environmental Management Plans. The wording to be used is as follows: ***"Environmental Management Plan*** *The site the subject of this certificate is subject to an Environmental Management Plan (EMP) detailing the appropriate management of contamination present within soils at the site. A copy of this plan can be obtained by making an information access application with Council."*

Item	Auditor Comments
	The SAS will also be noted in the 10.7(2) Certificate as required under section 59(2)(e) of the CLM Act.
Are the Council in agreement with the EMP? The EMP notes written agreement has been obtained from Parramatta City Council to list the EMP on the Section 10.7 planning certificate.	Council has agreed to list the EMP on the Section 10.7 certificate (**Appendix C**). As a statutory audit, a copy of the SAR/SAS will be provided to Council for this purpose. To make the EMP more accessible it is attached to the Section A2 SAS, included as **Appendix B**.

12.1. Auditor's Opinion

The appropriate conditions for the implementation of a Environmental Management Plan stated under Section 3.4.6 of NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd Ed.)* have been met, namely:

- The EMP has been reviewed by the Auditor.
- The EMP can reasonably be made to be legally enforceable, as implementation of the EMP is a requirement of the development consent conditions for operation of the site.
- There will be appropriate public notification of restrictions applying to the site through listing of the EMP on the Section 10.7(2) and (5) Planning Certificate for the site.
- The known asbestos contamination that has been capped at the site is not considered to pose an unacceptable risk to on-site or off-site environments.
- The EMP is considered to appropriately account for exempt and/or complying development which may occur at the site, as consideration of the EMP is required across the site where there is a breach in the capping and/or marker layer.

Based on the above, the Auditor considers that the EMP provides an adequate framework for the management of the asbestos contamination which has been contained at the site.

13. COMPLIANCE WITH REGULATORY GUIDELINES AND DIRECTIONS

13.1. General

The Auditor has used guidelines currently made and approved by the EPA under section 105 of the CLM Act.

The reporting was generally conducted following the content requirements of the NSW EPA (2020a) *Contaminated Land Guidelines, Consultants Reporting on Contaminated Land*, although some deficiencies were noted with the validation reporting as discussed throughout **Section 6 and 9**. Overall, considering the weight of evidence and the final site conditions, the deficiencies in the reporting were not considered material.

13.2. Notification

JBS&G indicated that the remediation works were classified 'Category 2' Remediation Works not requiring consent. The SSD approval, which provides consent for construction and operation of the project, incorporates the remediation as part of the development.

EGA reported that the asbestos removal contractors notified SafeWork NSW of the proposed asbestos remediation works and three separate notifications were appended to the Validation Report:

- Notice of intent to remove friable asbestos (site wide), dated 24 September 2024, prepared by CLMU.
- Notice of intent to remove non-friable asbestos (administration building), dated 17 October 2024, prepared by Brena Group Pty Ltd on behalf of CLMU.
- Notice of intent to remove friable asbestos (site wide), dated 3 February 2025, prepared by CLMU.

13.3. Development Approvals

This SAR and the Section A2 SAS (**Appendix B**) have been prepared to address the following conditions of SSD-55522478:

> *B57. Within six months of the completion of the remediation works and prior to the commencement of operation, or as otherwise agreed with the Planning Secretary, the Applicant must obtain a Site Audit Report and a Site Audit Statement from the Site Auditor and submit these to the Planning Secretary. These documents must be prepared in accordance with the relevant guidelines under the Contaminated Land Management Act 1997 and confirm:*
>
> *(a) the remedial works approved under this consent have been completed in accordance with the remediation objectives listed in the RAP; and*
>
> *(b) the site is suitable for its intended industrial and commercial uses, subject to the implementation of a Long-Term Environmental Management Plan (see condition B58).*

13.4. Local Government Liaison

The Section A2 SAS will be provided to Council as required for a statutory audit. Council will note the Section A2 SAS on the Section 10.7(2) Planning Certificate for the site as required under section 59(2)(e) of the CLM Act and will consider the requirements of the EMP during the assessment of any future development applications on the site as required under the *Environmental Planning & Assessment Act 1979* and SEPP R&H. In addition, Council has agreed (correspondence dated 3 August 2026, refer **Appendix C**) to note the LTEMP on the Section 10.7(5) Planning Certificate, as required by the SSD approval.

13.5. NSW EPA Liaison

The Auditor was not required to undertake liaison with NSW EPA in relation to the Audit. The Audit is statutory, therefore, a copy of the Section A2 SAS (**Appendix B**) has been provided to NSW EPA as required by the CLM Act.

13.6. Groundwater Abstraction

Groundwater quality is not suitable for abstraction and beneficial use without further assessment, and this requirement is included in the LTEMP.

As discussed in **Section 3**, several sites surrounding and adjacent to the site are regulated under the CLM Act. Therefore, we understand WaterNSW will require review of applications, or deny any applications, for bores within a 250 m buffer of the notified sites. This is considered adequate control to address the potential risk associated with abstraction and beneficial use of groundwater in the vicinity of the site.

13.7. Duty to Report

Consideration has been given to the requirements of the NSW EPA (2015) *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997*. In association with the development of the RAP, JBS&G stated: *"JBS&G do not believe there is a duty to report contamination under Section 60 of the CLM Act."* The SAR RS-117B confirmed the Auditor's agreement that the site was not required to be notified under the Duty to Report requirements. The remedial and validation works undertaken at the site as reported in this SAR further support this finding.

13.8. Waste Management

As discussed in **Section 9.3.7**, no soil or water waste requiring off-site disposal was generated as a result of the remedial works. The Validation Report documented the asbestos building material disposal, however this disposal documentation is outside of the scope of the contaminated land Audit. EGA (12 December 2025) included disposal documentation to Sell & Parker Pty Ltd recycling for the unexpected find UST.

13.9. VENM and Other Imported Materials

Based on the information in **Section 9.3.8** and the various Auditor inspections throughout the project, including the final inspection on 4 August 2026, the Auditor is of the opinion that the various materials imported to the site are consistent with the identified classifications and are suitable for use at the site, from a contamination perspective.

13.10. Licenses

The Validation Report indicates that, prior to demolition activities within the site, hazardous materials were removed from all structures. Asbestos and lead containing materials were removed by CLMU a Class A licensed asbestos removalist (AD214300).

Excavation and containment of asbestos fibre contaminated soils was also conducted by CLMU, as documented in the Make-Safe Clearance certificates discussed in **Section 9.3.3**.

Asbestos Clearance Certificates were prepared by SEG LAAs Isabelle Figatowski (LAA 002032) and Andrew O'Neill (LAA001413).

13.11. Asbestos Register and Asbestos Management Plan

Asbestos impact remains in the subsurface soil as documented in the LTEMP. This should be recorded on an Asbestos Register maintained at the site and an Asbestos Management Plan prepared to reflect the remedial works that have been undertaken and the management required under the LTEMP.

13.12. Conflict of Interest

The Auditor has considered the potential for a conflict of interest in accordance with the requirements of Section 3.2.3 of the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd Edition)*.

The Auditor considers that there are no conflicts of interest, given that:

1. The Auditor is not related to a person by whom any part of the land is owned or occupied.
2. The Auditor does not have a pecuniary interest in any part of the land or any activity carried out on any part of the land.
3. The Auditor has not reviewed any aspect of work carried out by, or a report written by, the site auditor or a person to whom the site auditor is related.

14. CONCLUSIONS AND RECOMMENDATIONS

EGA conclude in the Validation Report that *"…the site has been made suitable, in the context of land contamination, for the proposed commercial/industrial development."*

EGA noted the Long-Term Environmental Management Plan (LTEMP) had been prepared and *"discusses the ongoing management of the in-situ asbestos contaminated fill materials across the site"*.

Based on the information presented in the SEG/EGA reports and observations made on site, and following the Decision-making process for assessing urban redevelopment sites in NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd Edition)*, the Auditor concludes that the site is suitable for the approved warehouse and distribution centre development subject to compliance with the following environmental management plan (**Appendix B**):

> 'Long-Term Environmental Management Plan, 6 Grand Avenue, Rosehill NSW', dated 18 August 2026 by EGA.

Groundwater has not been assessed for any beneficial re-use. Any future use of groundwater would require appropriate assessment and regulatory approvals from the NSW Office of Water.

15. OTHER RELEVANT INFORMATION

This Audit was conducted on behalf of ITG Australia TS Mid Pty Ltd as Trustee for HCLF Rosehill No 1 Trust for the purpose of assessing whether the land is suitable for the proposed commercial/industrial uses, i.e. a "Site Audit" as defined in Part 1 Clause 4 (1) (definition of a 'site audit' (b)(iii)) of the CLM Act.

This summary report may not be suitable for other uses. The consultants' reports listed in **Section 1.3**, reviewed for this Audit, included limitations. The Audit must also be subject to those limitations. The Auditor has prepared this document in good faith, but is unable to provide certification outside of areas over which the Auditor had some control or is reasonably able to check.

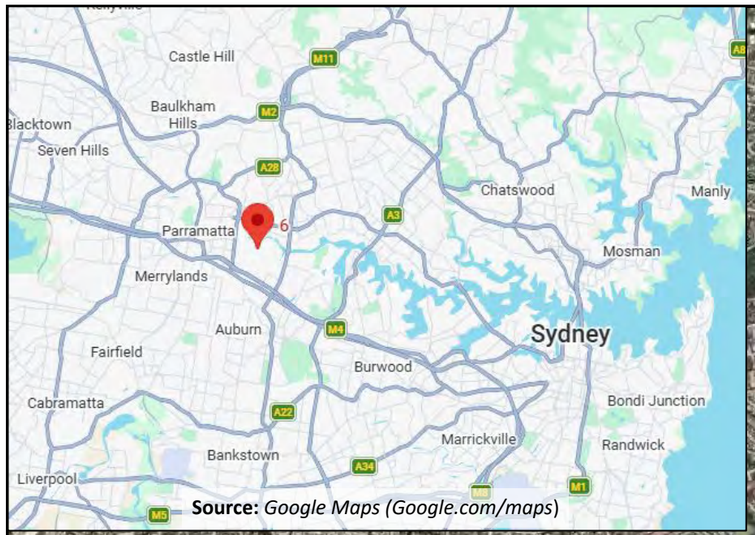
The Auditor has relied on the documents referenced in **Section 1.3** of the Site Audit Report in preparing the Auditor's opinion. If the Auditor is unable to rely on any of those documents, the conclusions of the audit could change.

It is not possible in a Site Audit Report to present all data which could be of interest to all readers of this report. Readers are referred to the referenced reports for further data. Users of this document should satisfy themselves concerning its application to, and where necessary seek expert advice in respect to, their situation.

Appendix A
Attachments

Attachment 1: Site Location
Attachment 2: Site Layout
Attachment 3: Capping System Plan – Capping System 1 to 6
Attachment 4: Landscaped Areas Capping System Plan – Capping System 3a to 3g
Attachment 5: Waste Classification Sample Locations
Attachment 6: Site Survey – Marker Layer to Finished Surface in Landscaped Areas
Attachment 7: Site Survey – Finished Surface across Built Areas
Attachment 8: Site Survey – Marker Layer
Attachment 9: Site Survey – Finished Surface External Pavements
Attachment 10: Site Survey – Detailing Western and Southern Fence Line and select services
Attachment 11: Site Survey – Detailing Prime Trenching
Attachment 12: Site Survey – Detailing Stormwater Drainage

Attachment 1: Site Location

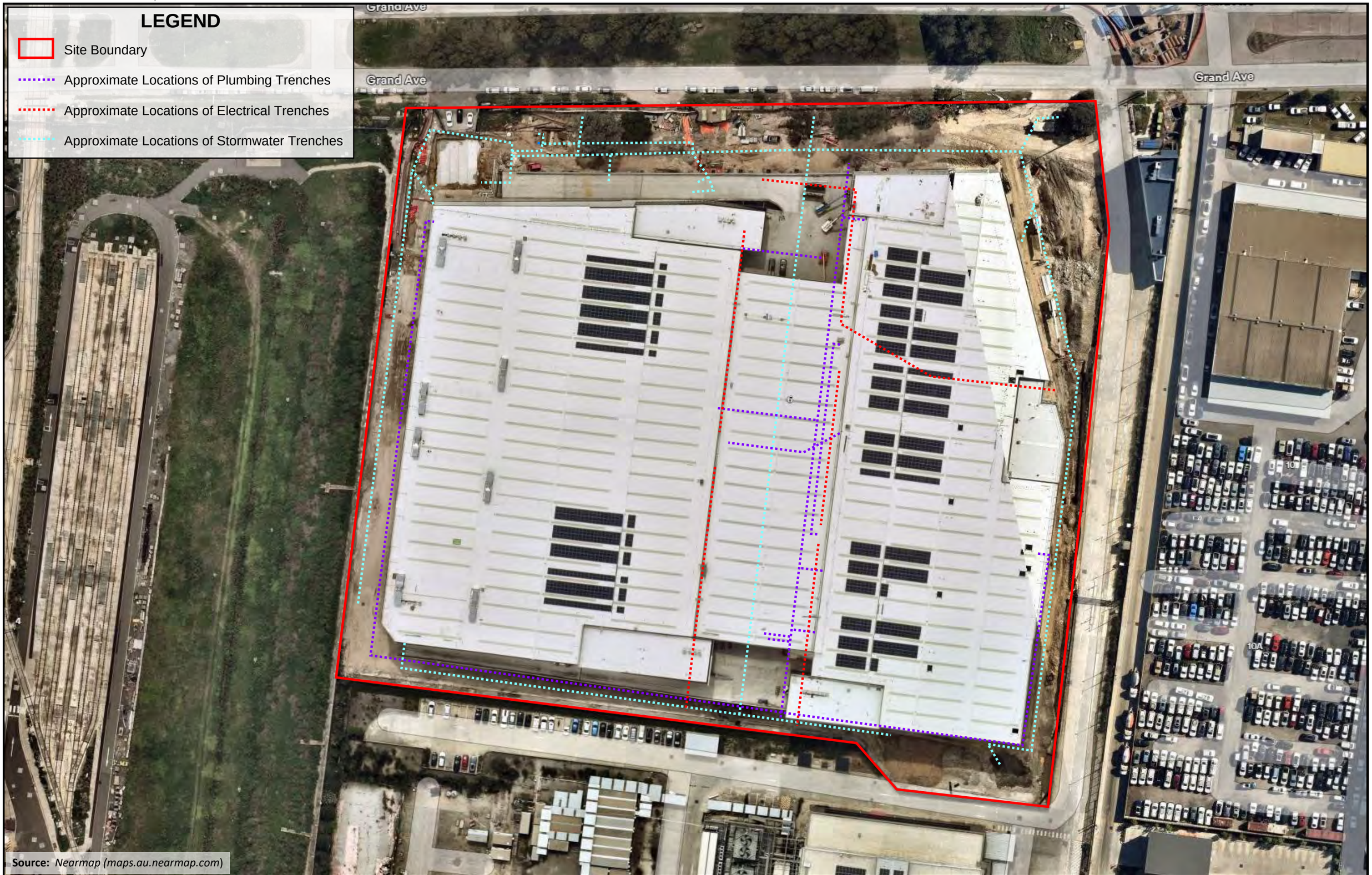


Source: *Google Maps (Google.com/maps)*

Source: *Nearmap (maps.au.nearmap.com)*

Scale:	800 m	Site Locality		
Client Name:	Vaughans Construction Pty Ltd	N	Figure Number:	1
Project Name:	Site Validation Report		Figure Date:	16 April 2026
Project Location:	6 Grand Avenue, Rosehill NSW		Report Number:	2582-SVR-01-170426.v1d

Attachment 2: Site Layout



Source: *Nearmap (maps.au.nearmap.com)*

EGA	**Scale:**	30 m	**Site Layout**	
	Client Name:	**Vaughans Construction Pty Ltd**	N	**Figure Number:** **2**
	Project Name:	**Site Validation Report**		**Figure Date:** **7 August 2026**
	Project Location:	**6 Grand Avenue, Rosehill NSW**		**Report Number:** **2582-SVR-01-020626.v4d**

Attachment 3: Capping System Plan – Capping System 1 to 6



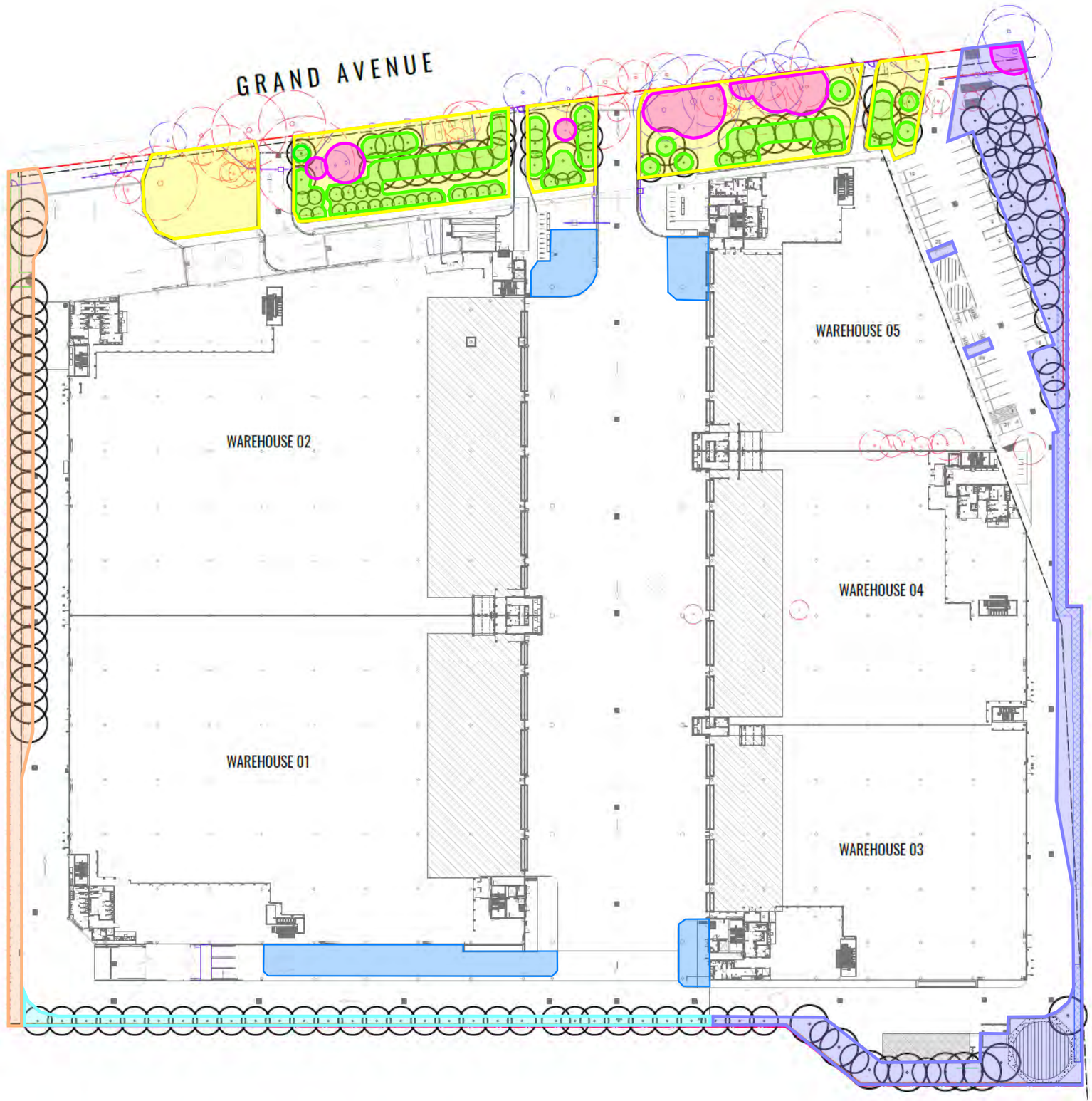
Source: *Nearmap (maps.au.nearmap.com)*

Scale:	30 m	**Capping Layer Construction**		
Client Name:	**Vaughans Construction Pty Ltd**	N	**Figure Number:**	**3**
Project Name:	**Site Validation Report**		**Figure Date:**	**16 April 2026**
Project Location:	**6 Grand Avenue, Rosehill NSW**		**Report Number:**	**2582-SVR-01-020626.v4d**

Attachment 4: Landscaped Areas Capping System Plan – Capping System 3a to 3g

LEGEND

- Site Boundary
- Approximate Locations of Capping System 3a
- Approximate Locations of Capping System 3b
- Approximate Locations of Capping System 3c
- Approximate Locations of Capping System 3d
- Approximate Locations of Capping System 3e
- Approximate Locations of Capping System 3f
- Approximate Locations of Capping System 3g



LEGEND
- SITE BOUNDARY
- PROPOSED TREES
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- EASEMENT LINES
- PALISADE FENCE TO ARCHITECTS DETAILS
- CHAIN WIRE FENCE TO ARCHITECTS DETAILS
- FENCE WITH TIMBER POSTS TO ARCHITECTS DETAILS
- TROUGH PLANTERS TO ARCHITECTS DETAILS
- RETAINING WALL TO ENGINEERS DETAILS
- SWALE TO ENGINEERS DETAILS
- PROPOSED ROOT BARRIER LOCATIONS
- EXTENT OF GEOGRID BEHIND RETAINING WALL. REFER TO ENGINEERS DETAILS
- 700mm TALL MOUND TO BASE OF TREES. REFER DETAIL 01 LCON-601
- TIMBER EDGING. REFER TO DETAIL 03 LCON-601

REVISION	DATE	DESCRIPTION	BY
4	25.03.26	FOR CONSTRUCTION	KC
3	14.08.25	FOR CONSTRUCTION	KC
2	13.08.25	FOR CONSTRUCTION	KC
1	13.08.25	FOR DEV	KC

© GEOSCAPES LANDSCAPE ARCHITECTS, 2025

NOTE:
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. REPORT ALL DISCREPANCIES TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DRAWINGS. DRAWINGS MADE TO LARGER SCALES AND THOSE SHOWING PARTICULAR PARTS OF THE WORKS SHALL TAKE PRECEDENCE OVER DRAWINGS MADE TO SMALLER SCALE AND THOSE FOR GENERAL PURPOSES. ALL WORK IS TO CONFORM TO RELEVANT AUSTRALIAN STANDARDS AND OTHER CODES AS APPLICABLE, TOGETHER WITH OTHER AUTHORITIES REQUIREMENTS AND REGULATIONS. THIS DRAWING AND DESIGN IS SUBJECT TO COPYRIGHT AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT. IF IN DOUBT, ASK.

GEOSCAPES
LANDSCAPE ARCHITECTS

GEOSCAPES Pty Ltd
Suite 2.03, 8 Help Street
Chatswood, NSW 2067, Australia
ACN: 620 205 781
ABN: 84 620 205 781
P (02) 9411 1485
E. admin@geoscapes.com.au
www.geoscapes.com.au
NLA NO # 5808

CLIENT: HALE CAPITAL
STATUS: FOR CONSTRUCTION
PROJECT: 6 GRAND AVENUE, Rosehill, NSW
TITLE: SITE PLAN

SCALE	DATE	DRAWN	CHECKED
1:400 @ A1	MAR 2026	KC	BG
JOB NO	DRAWING NO		REV
240528	LCON-001		4

N

Scale:	Landscaping Design Construction		
Client Name:	Vaughans Construction Pty Ltd	Figure Number:	2
Project Name:	Site Validation Report	Figure Date:	7 August 2026
Project Location:	6 Grand Avenue, Rosehill NSW	Report Number:	2582-SVR-01-020626.v4d

Attachment 5: Waste Classification Sample Locations



Scale:	30 m	Sampling Locations		
Client Name:	Vaughans Construction Pty Ltd	N	Figure Number:	5
Project Name:	Site Validation Report		Figure Date:	16 April 2026
Project Location:	6 Grand Avenue, Rosehill NSW		Report Number:	2582-SVR-01-020626.v1d

Attachment 6: Site Survey – Marker Layer to Finished Surface in Landscaped Areas

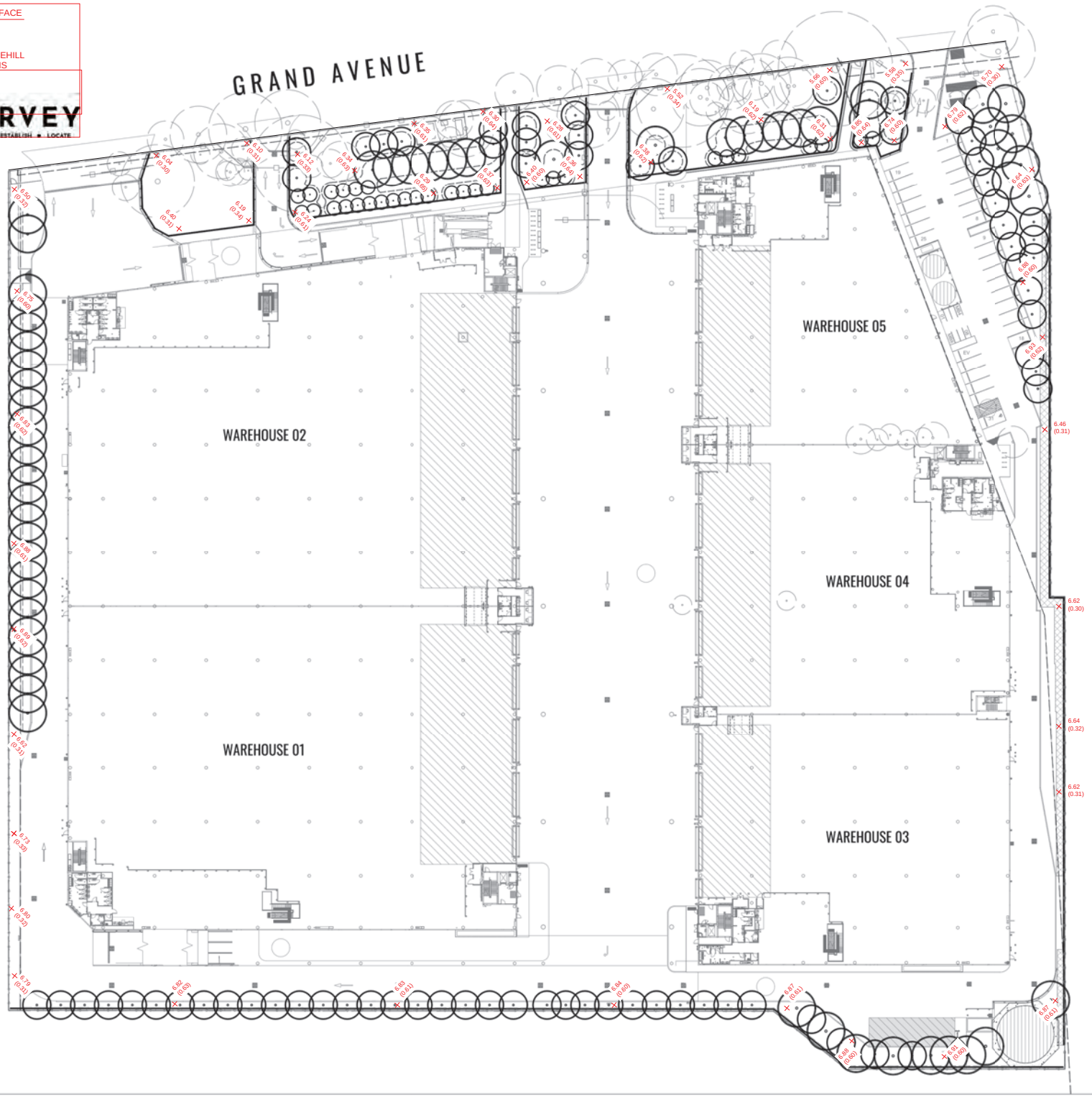
MARKER LAYER TO FINISHED SURFACE

FIGUIRES SHOWN IN RED

ADDRESS: 6 GRAND AVENUE, ROSEHILL
CLIENT: VAUGHAN CONSTRUCTONS

DATE: 27.7.26
REVISION: 1

3 SURVEY
SETOUT ■ ESTABLISH ■ LOCATE



LEGEND

- SITE BOUNDARY
- PROPOSED TREES
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- EASEMENT LINES
- PALISADE FENCE TO ARCHITECTS DETAILS
- CHAIN WIRE FENCE TO ARCHITECTS DETAILS
- FENCE WITH TIMBER POSTS TO ARCHITECTS DETAILS
- TROUGH PLANTERS TO ARCHITECTS DETAILS
- RETAINING WALL TO ENGINEERS DETAILS
- SWALE TO ENGINEERS DETAILS
- PROPOSED ROOT BARRIER LOCATIONS
- EXTENT OF GEOGRID BEHIND RETAINING WALL. REFER TO ENGINEERS DETAILS
- 700mm TALL MOUND TO BASE OF TREES. REFER DETAIL 01 LCON-601
- TIMBER EDGING. REFER TO DETAIL 03 LCON-601

REVISION	DATE	DESCRIPTION	BY
4	25.03.26	FOR CONSTRUCTION	KC
3	14.08.25	FOR CONSTRUCTION	KC
2	13.08.25	FOR CONSTRUCTION	KC
1	12.08.25	FOR CC3	KC

© GEOSCAPES LANDSCAPE ARCHITECTS 2025

NOTE:
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. REPORT ALL DISCREPANCIES TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DRAWINGS. DRAWINGS MADE TO LARGER SCALES AND THOSE SHOWING PARTICULAR PARTS OF THE WORKS SHALL TAKE PRECEDENCE OVER DRAWINGS MADE TO SMALLER SCALE AND THOSE FOR GENERAL PURPOSES. ALL WORK IS TO CONFORM TO RELEVANT AUSTRALIAN STANDARDS AND OTHER CODES AS APPLICABLE, TOGETHER WITH OTHER AUTHORITIES' REQUIREMENTS AND REGULATIONS.THIS DRAWING AND DESIGN IS SUBJECT TO COPYRIGHT AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT. IF IN DOUBT, ASK.

GEOSCAPES
LANDSCAPE ARCHITECTS

GEOSCAPES Pty Ltd
Suite 3.03, 8 Help Street
Chatswood, NSW 2067 Australia
ACN: 620 205 781
ABN: 84 620 205 781
P (02) 9411 1485
E. admin@geoscapes.com.au
www.geoscapes.com.au
RLA NO # 5868

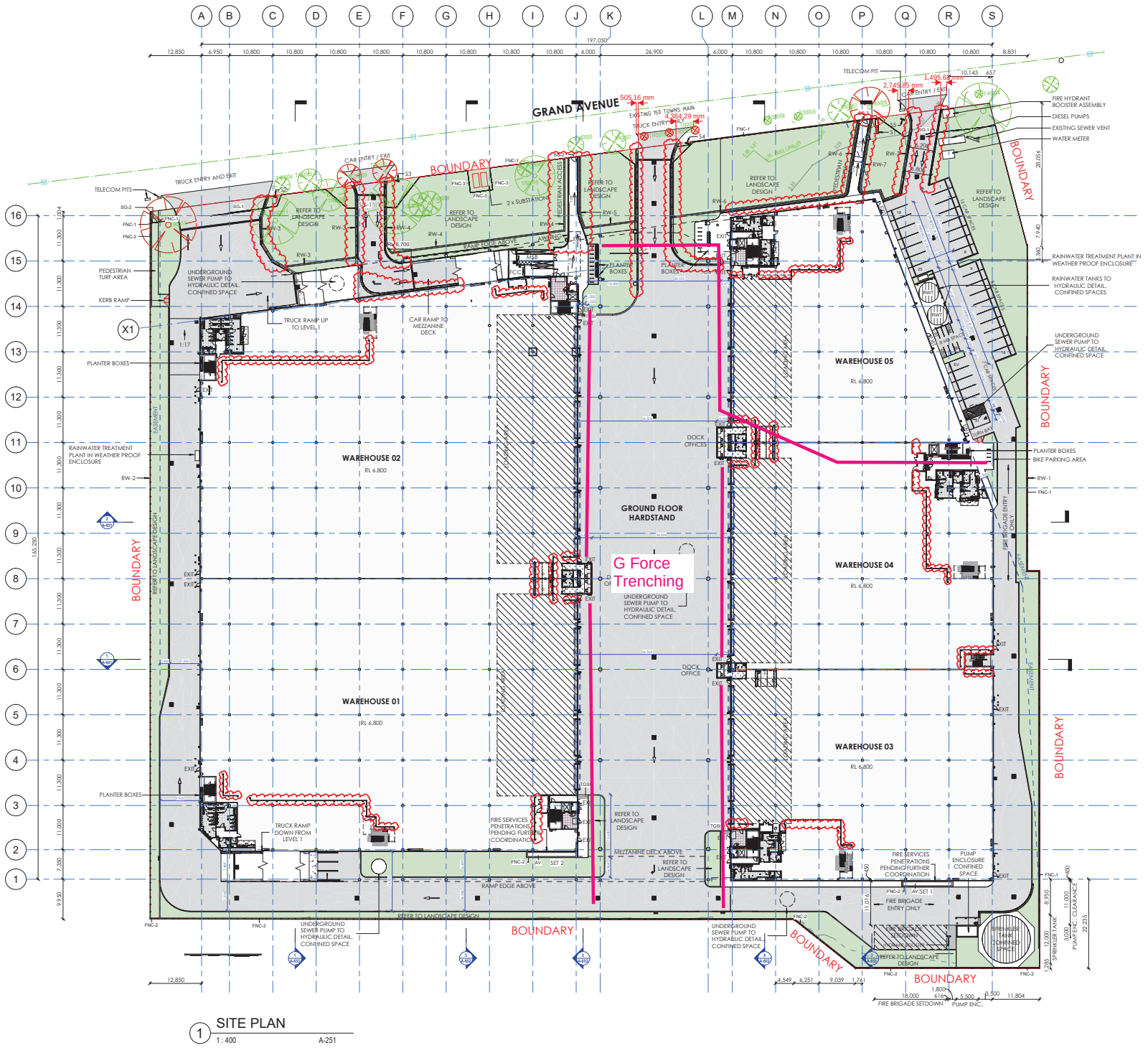
CLIENT	STATUS
HALE CAPITAL	FOR CONSTRUCTION

PROJECT
6 GRAND AVENUE
Rosehill, NSW

TITLE
SITE PLAN

SCALE	DATE	DRAWN	CHECKED
1:400 @ A1	MAR 2026	KC	BG
JOB NO	DRAWING NO		REV
240528	LCON-001		4

Attachment 7: Site Survey – Finished Surface across Built Areas



1 SITE PLAN
1 : 400 A-251

LEGEND

- RAISED PLANTING PLANTER BOXES
- PROPOSED ON GRADE GRAVEL AREA
- SOFT LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS
- SOFT LANDSCAPING EXTERNAL TO SITE
- BUILDING - REFER TO FLOOR PLANS
- KEEP CLEAR
- HARDSTAND CONCRETE
- FNC - # FENCING
- S# SIGNAGE REFER TO SIGNAGE SCHEDULE
- SG# SLIDING GATE
- BOUNDARY LINE

GENERAL LEGEND

AV	ALARM VALVE SET
FNC-1	BLACK POWDER COATED "PALISADE STYLE PRESSED METAL FENCE WITH SPEAR TOP @ 1800mm"
FNC-2	BLACK CHAINWIRE MESH FENCING WITH AN OVERALL HEIGHT OF 2100MM, INCLUDING THREE ROWS OF BARBED WIRE."
FNC-3	FENCE WITH TIMBER POSTS AT SUBSTATION AREA
SG-1	SLIDING GATE 1 TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE" BLACK POWDER COATED FINISH OR EQUAL APPROVED
SG-2	SWING GATE TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE - GATE DOOR OPENABLE FROM THE INSIDE OF THE PROPERTY AT ALL TIMES - GATES TO BE PROVIDED WITH 003 KEYS OR TO UNLOCK AUTOMATICALLY UPON GENERAL FIRE ALARM
TGSI	TACTILE INDICATORS WARNING TGSI STAINLESS CLASSIC

LANDSCAPE SCHEDULE - GF

SITE AREA	42387 m²
LANDSCAPE - GF	5967 m²
LANDSCAPE PERCENTAGE	14.11 %

PACEARCHITECTS
A.B.N. 72 159 266 350
E: ppace@pacearchitects.com.au
P: 02 9452 1400
M: 0404 450 317
W: www.pacearchitects.com.au
A: Level 1, Suite S-6, Alexander Street, Crows Nest, NSW 2065

REV	DESCRIPTION	DATE
P8	ISSUED FOR COORDINATION	22.01.25
C3	ISSUED FOR CC2	21.02.25
C4	REISSUED FOR CC2	25.02.25
C5	MSB ROOM UPDATE	03.03.25
C6	REISSUED FOR CC2	05.03.25
C7	GENERAL UPDATES	07.05.25
C8	ISSUED FOR CC3	22.07.25
C9	UPDATED FOR CC3	30.07.25
C10	PEDESTRIAN PATH UPDATE	01.09.25
C11	DRIVEWAY AMENDMENTS	12.09.25
C12	FENCING AMENDMENTS	16.09.25
C13	SITE PLAN UPDATED	21.11.25
C14	PARKING UPDATE	19.01.26
C15	METALWORKS, ELECTRICAL CUPBOARDS, DIMENSIONS & DOOR SCHEDULE UPDATES	22.01.26

DO NOT SCALE THIS DRAWING. VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK. COPYRIGHT © THIS DRAWING REMAINS THE PROPERTY OF PACEARCHITECTS. REPRODUCTION IN WHOLE OR PART IS FORBIDDEN.

NOTE: THE LOCATION OF PROPERTY ALIGNMENTS IS DETERMINED FROM SURVEY INFORMATION PROVIDED BY SURVEYOR.

FOR CONSTRUCTION

CLIENT: Hale

BUILDER / PROJECT MANAGER: VAUGHAN CONSTRUCTIONS

ARCHITECT: PACE ARCHITECTS

PROJECT: MULTI-LEVEL WAREHOUSES

ADDRESS: 6 GRAND AVENUE, ROSEHILL NSW 2142

DRAWING TITLE: SITE PLAN

PURPOSE: FOR CONSTRUCTION

GRAPHIC SCALE 1:400

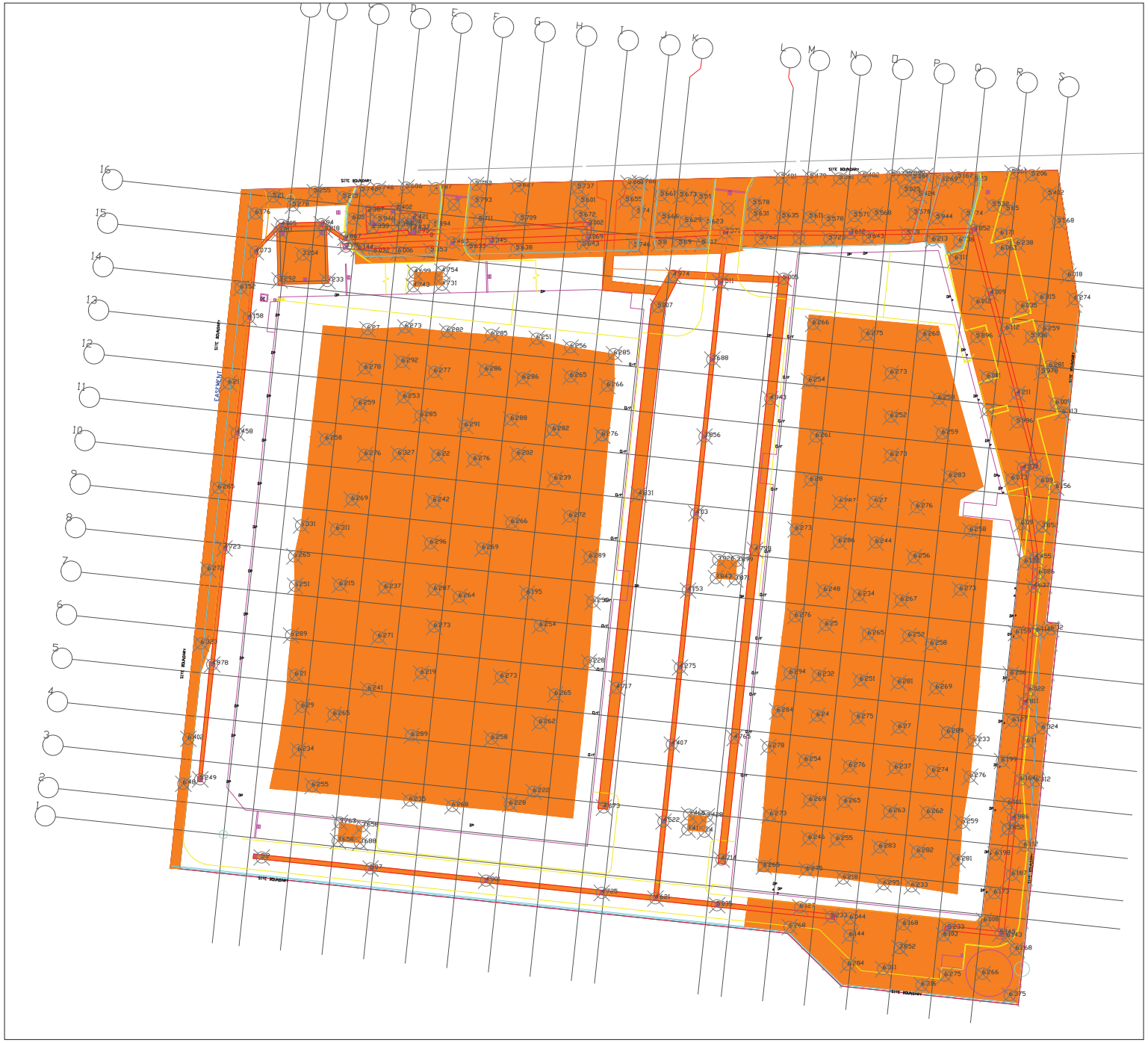
SCALE: As indicated | B1

PROJECT NO: 24432

DATE: 22.01.26

DWN: SP | DWG NO: 24432 - A-100 | ISSUE: C15

Attachment 8: Site Survey – Marker Layer



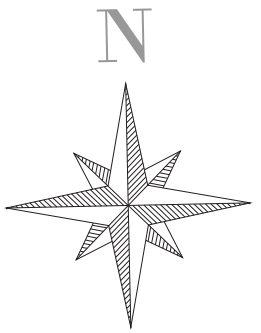
Organization Name

CLMU

LEGEND

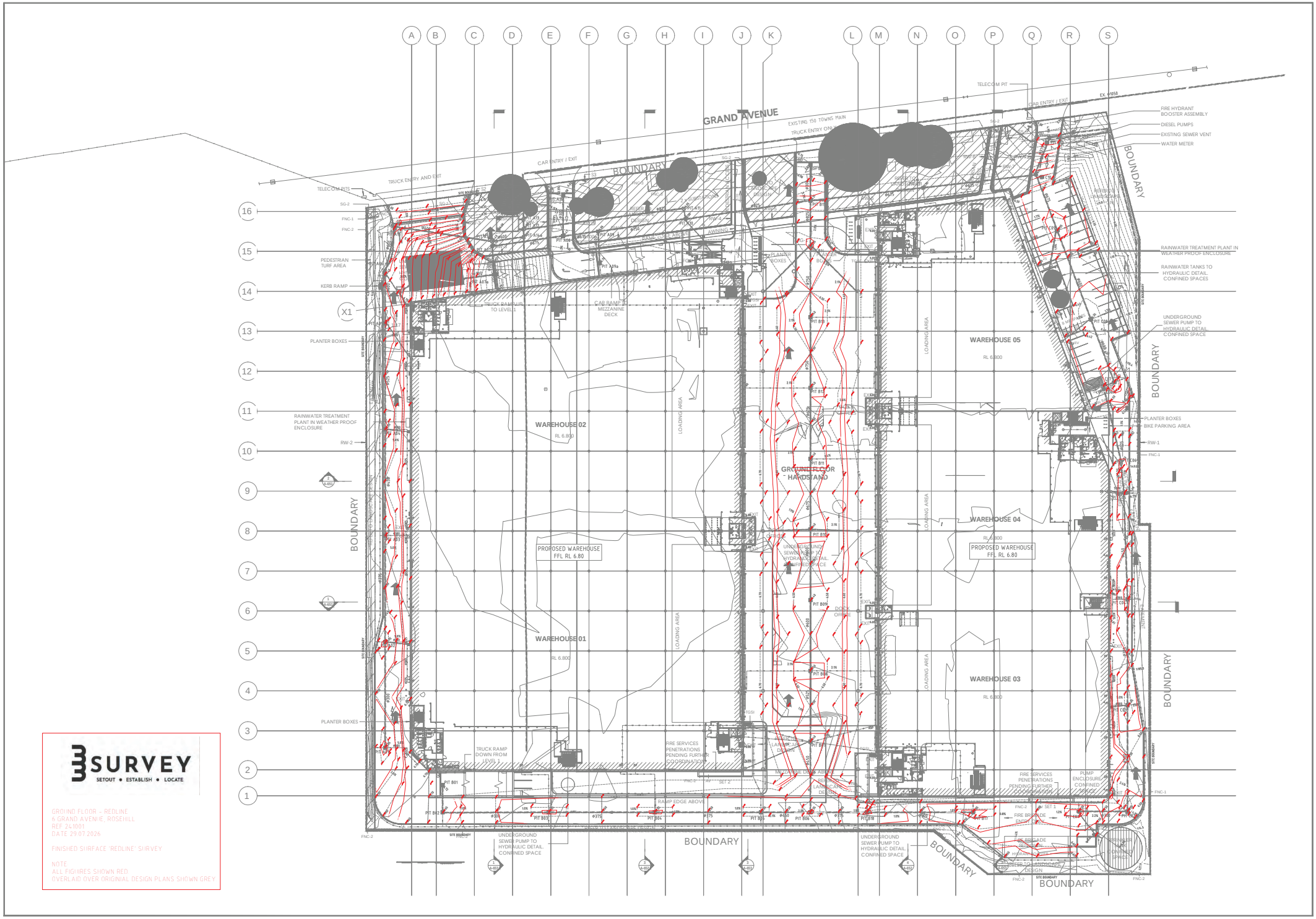
XXXX MARKER LAYER LEVELS

KEY MAP



SCALE	SHEET NUMBER
NTS	1
PLOT DATE	
19/07/2026	
FILE NAME	
ROSEHILL SURVEY	

Attachment 9: Site Survey – Finished Surface External Pavements



SURVEY
SETOUT • ESTABLISH • LOCATE

GROUND FLOOR – REDLINE
6 GRAND AVENUE, ROSEHILL
REF 241001
DATE 29.07.2026

FINISHED SURFACE 'REDLINE' SURVEY

NOTE
ALL FIGURES SHOWN RED
OVERLAID OVER ORIGINAL DESIGN PLANS SHOWN GREY

Attachment 10: Site Survey – Detailing Western and Southern Fence Line and select services

SKETCH FOR ASBUILT DATA AT: 6 GRAND AVENUE, ROSEHILL	
CLIENT: VAUGAHAN CONSTRUCTION	
LOT1 DP1258587	TITLE AREA: 4.239 Ha
LOCAL GOVERNMENT: CITY OF PARRAMATTA	
HEIGHT DATUM: SSM59227 RL6.083 (AHD)	
REF: 241001 - ASB	DATE: 10.10.24 (REV1)
SCALE: 1:500 (A1)	SHEET: 1 OF 1

3 SURVEY
SETOUT • ESTABLISH • LOCATE

MGA

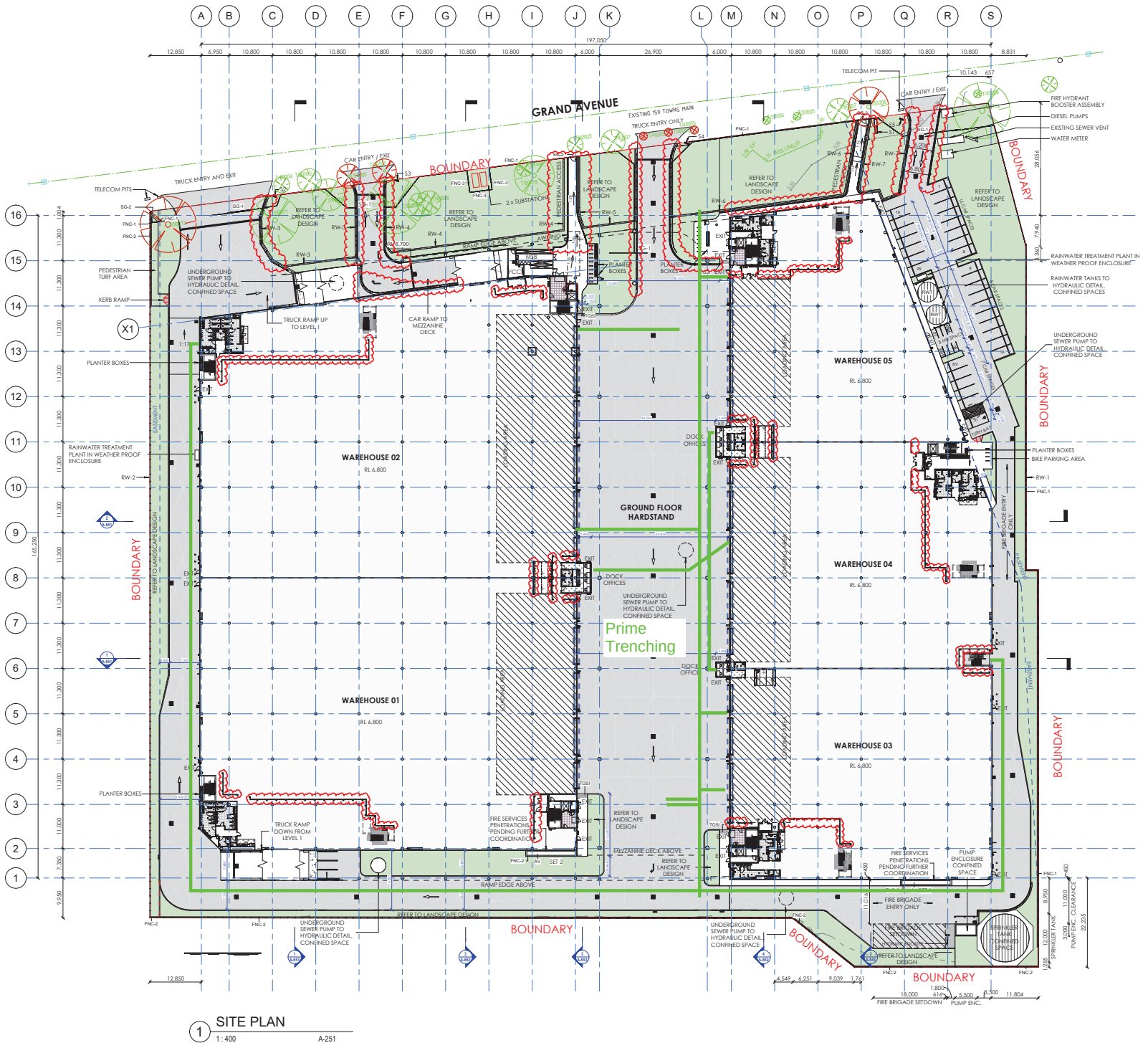


PLANS USED FOR SETOUT:

PLANS USED FOR GRID ESTABLISHMENT:
ARCHITECTURAL SITE SETOUT PLAN
VIA SIMPEL BY 'PACE ARCHITECTS' JOB 24432
DRAWING NO. 24432-A-100 ISSUE C1

NOTE:
- BOUNDARIES OBTAINED USING PLANS FROM PUBLIC RECORD
  BOUNDARY BY ARCHITECTURAL PLANS SHOWN IN BLUE. ASSOSIATED EASEMENTS SHOWN IN CYAN.
- MARKS PLACED ARE TRUE AND ACCURATE AT THE TIME OF SURVEY
- NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THESE MARKS AFTER ANY SIGNIFICANT WORKS SUCH AS EXCAVATION OR DEMOLITION IS UNDERATKEN
- IT IS THE NOTED CLIENTS RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THESE MARKS AND HOW THEY ARE USED BY SUBCONTRACTORS.
- THIS SURVEY IS FOR SETOUT PURPOSES AND IS NOT TO BE USED FOR ANY OTHER REASONS OTHER THEN THE SPECIFIED DESCRIPTION
- ⊙ DENOTES PEG PLACED UNLESS OTHERWISE NOTED
- ⌴ DENOTES DIMENSIONS (RED-SETOUT, GREEN-DESIGN BUILDING OUTLINE, GREY-BUILDING DIMENSION, BLUE-BOUNDARY)
- ANNOTATION DESCRIPTIONS. TMP-TEXT.A MARK PLACED, NLP-NAIL PLACED

Attachment 11: Site Survey – Detailing Prime Trenching



1 SITE PLAN
1 : 400 A-251

LEGEND

- RAISED PLANTING PLANTER BOXES
- PROPOSED ON GRADE GRAVEL AREA
- SOFT LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS
- SOFT LANDSCAPING EXTERNAL TO SITE
- BUILDING - REFER TO FLOOR PLANS
- KEEP CLEAR
- HARDSTAND CONCRETE
- FNC - # FENCING
- S# SIGNAGE REFER TO SIGNAGE SCHEDULE
- SG# SLIDING GATE
- BOUNDARY LINE

GENERAL LEGEND

AV	ALARM VALVE SET
FNC-1	BLACK POWDER COATED "PALISADE STYLE PRESSED METAL FENCE WITH SPEAR TOP @ 1800mm"
FNC-2	BLACK CHAINWIRE MESH FENCING WITH AN OVERALL HEIGHT OF 2100MM, INCLUDING THREE ROWS OF BARBED WIRE."
FNC-3	FENCE WITH TIMBER POSTS AT SUBSTATION AREA
SG-1	SLIDING GATE 1 TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE" BLACK POWDER COATED FINISH OR EQUAL APPROVED
SG-2	SWING GATE TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE - GATE DOOR OPENABLE FROM THE INSIDE OF THE PROPERTY AT ALL TIMES - GATES TO BE PROVIDED WITH 003 KEYS OR TO UNLOCK AUTOMATICALLY UPON GENERAL FIRE ALARM
TGSI	TACTILE INDICATORS WARNING TGSI STAINLESS CLASSIC

LANDSCAPE SCHEDULE - GF

SITE AREA	42387 m²
LANDSCAPE - GF	5967 m²
LANDSCAPE PERCENTAGE	14.11 %

PACEARCHITECTS
A.B.N. 72 159 266 350
E: ppace@pacearchitects.com.au
P: 02 9452 1400
M: 0404 450 317
W: www.pacearchitects.com.au
A: Level 1, Suite S-6, Alexander Street, Crows Nest, NSW 2065

REV	DESCRIPTION	DATE
P8	ISSUED FOR COORDINATION	22.01.25
C3	ISSUED FOR CC2	21.02.25
C4	REISSUED FOR CC2	25.02.25
C5	MSB ROOM UPDATE	03.03.25
C6	REISSUED FOR CC2	05.03.25
C7	GENERAL UPDATES	07.05.25
C8	ISSUED FOR CC3	22.07.25
C9	UPDATED FOR CC3	30.07.25
C10	PEDESTRIAN PATH UPDATE	01.09.25
C11	DRIVEWAY AMENDMENTS	12.09.25
C12	FENCING AMENDMENTS	16.09.25
C13	SITE PLAN UPDATED	21.11.25
C14	PARKING UPDATE	19.01.26
C15	METALWORKS, ELECTRICAL CUPBOARDS, DIMENSIONS & DOOR SCHEDULE UPDATES	22.01.26

DO NOT SCALE THIS DRAWING. VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK. COPYRIGHT © THIS DRAWING REMAINS THE PROPERTY OF PACEARCHITECTS. REPRODUCTION IN WHOLE OR PART IS FORBIDDEN.

NOTE: THE LOCATION OF PROPERTY ALIGNMENTS IS DETERMINED FROM SURVEY INFORMATION PROVIDED BY SURVEYOR.

FOR CONSTRUCTION

CLIENT: Hale

BUILDER / PROJECT MANAGER: VAUGHAN CONSTRUCTIONS

ARCHITECT: PACE ARCHITECTS

PROJECT: MULTI-LEVEL WAREHOUSES

ADDRESS: 6 GRAND AVENUE, ROSEHILL NSW 2142

DRAWING TITLE: SITE PLAN

PURPOSE: FOR CONSTRUCTION

GRAPHIC SCALE 1:400

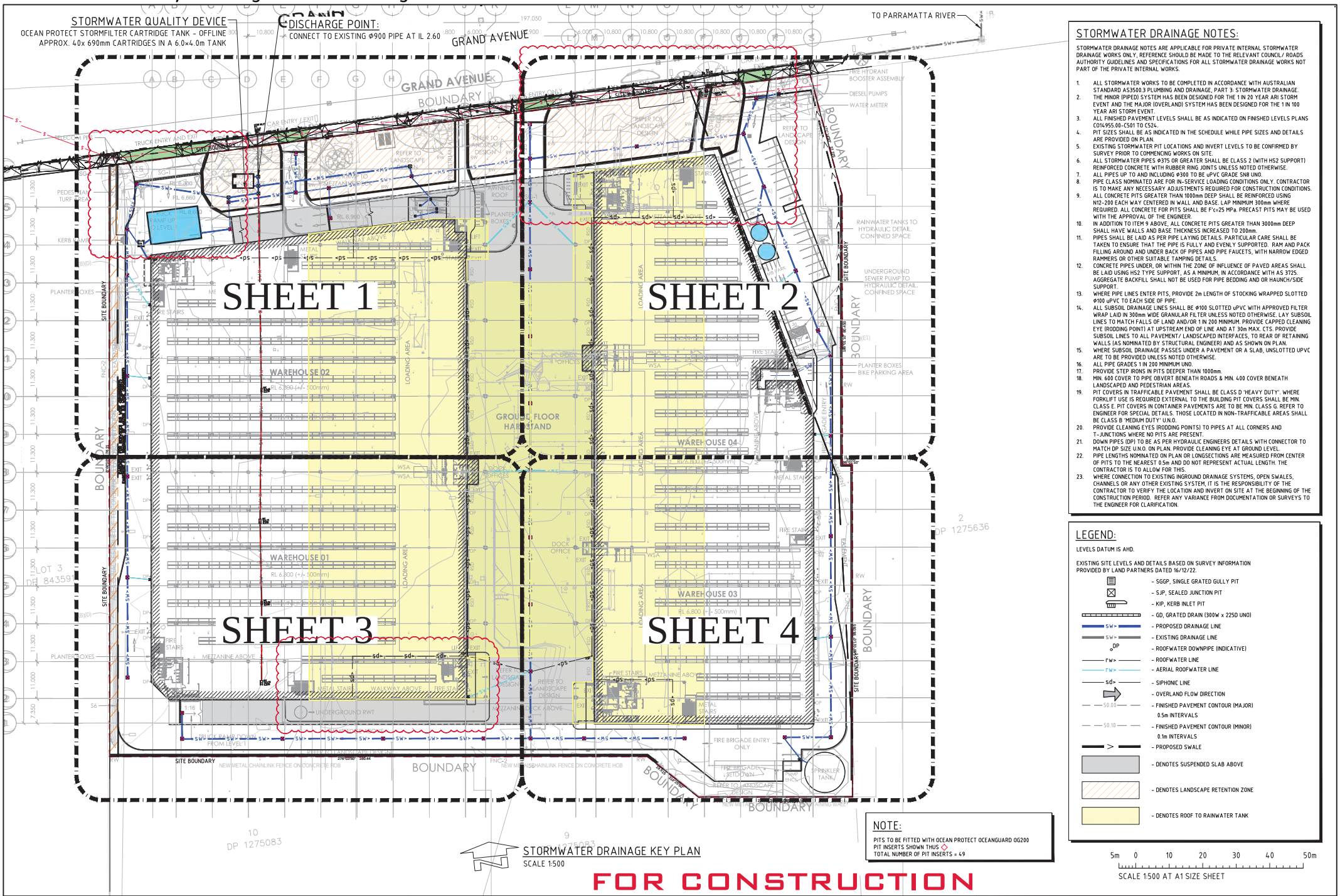
SCALE: As indicated | B1

PROJECT NO: 24432

DATE: 22.01.26

DWN: SP | DWG NO: 24432 - A-100 | ISSUE: C15

Attachment 12: Site Survey – Detailing Stormwater Drainage



STORMWATER DRAINAGE NOTES:

STORMWATER DRAINAGE NOTES ARE APPLICABLE FOR PRIVATE INTERNAL STORMWATER DRAINAGE WORKS ONLY, REFERENCE SHOULD BE MADE TO THE RELEVANT COUNCIL/ ROADS AUTHORITY GUIDELINES AND SPECIFICATIONS FOR ALL STORMWATER DRAINAGE WORKS NOT PART OF THE PRIVATE INTERNAL WORKS.

1. ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
2. THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
3. ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS C014955.00-C501 TO C524.
4. PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
5. EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
6. ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
7. ALL PIPES UP TO AND INCLUDING Ø300 TO BE uPVC GRADE SN8 UNO.
8. PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
9. ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F'_{c}=25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
10. IN ADDITION TO ITEM 9 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
11. PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
12. CONCRETE PIPES UNDER, OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM, IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE SUPPORT.
13. WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 uPVC TO EACH SIDE OF PIPE.
14. ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/ LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
15. WHERE SUBSOIL DRAINAGE PASSES UNDER A PAVEMENT OR A SLAB, UNSLOTTED UPVC ARE TO BE PROVIDED UNLESS NOTED OTHERWISE.
16. ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
17. PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
18. MIN. 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
19. PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY'. WHERE FORKLIFT USE IS REQUIRED EXTERNAL TO THE BUILDING PIT COVERS SHALL BE MIN. CLASS E. PIT COVERS IN CONTAINER PAVEMENTS ARE TO BE MIN. CLASS G. REFER TO ENGINEER FOR SPECIAL DETAILS. THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
20. PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
21. DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE U.N.O. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
22. PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.
23. WHERE CONNECTION TO EXISTING INGROUND DRAINAGE SYSTEMS, OPEN SWALES, CHANNELS OR ANY OTHER EXISTING SYSTEM, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND INVERT ON SITE AT THE BEGINNING OF THE CONSTRUCTION PERIOD. REFER ANY VARIANCE FROM DOCUMENTATION OR SURVEYS TO THE ENGINEER FOR CLARIFICATION.

LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- AERIAL ROOFWATER LINE
- SIPHONIC LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS
- PROPOSED SWALE
- DENOTES SUSPENDED SLAB ABOVE
- DENOTES LANDSCAPE RETENTION ZONE
- DENOTES ROOF TO RAINWATER TANK

NOTE:

PITS TO BE FITTED WITH OCEAN PROTECT OCEANGUARD OG200
PIT INSERTS SHOWN THUS ◇
TOTAL NUMBER OF PIT INSERTS = 49

STORMWATER DRAINAGE KEY PLAN
SCALE 1:500

5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SIZE SHEET

FOR CONSTRUCTION

AMENDMENTS	DATE	ISSUE
ISSUED FOR CONSTRUCTION	16.12.24	1
ISSUED FOR CONSTRUCTION	11.02.25	2
ISSUED FOR CONSTRUCTION	30.10.25	3
REVISED AS CLOUDED	12.11.25	4
REVISED AS CLOUDED	14.11.25	5
REVISED AS CLOUDED	25.11.25	6

ARCHITECT: PACE ARCHITECTS
CLIENT: VAUGHAN CONSTRUCTIONS

PROJECT
PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
NZ	JB	AUG '24	DS	A1	AS SHOWN	C014955.01-C400

CONSULT AUSTRALIA

Costin Roe Consulting Pty Ltd.
ABN 50 003 696 446
PO Box N419 Sydney NSW 1220
Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au
CRC COSTIN ROE CONSULTING
CIVIL & STRUCTURAL ENGINEERS

DRAWING TITLE
STORMWATER DRAINAGE KEY PLAN

DRAWING No C014955.01-C400
ISSUE 6

Appendix B
Site Audit Statement and Environmental Management Plan

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. RS-117A

This site audit is a:

☒ statutory audit

☐ non-statutory audit

within the meaning of the *Contaminated Land Management Act 1997*.

Site auditor details

(As accredited under the *Contaminated Land Management Act 1997*)

Name	Rowena Salmon
Company	Ramboll Australia Pty Ltd
Address	Level 3
	100 Pacific Highway, North Sydney NSW
	Postcode 2060
Phone	02 9954 8100
Email	rsalmon@ramboll.com

Site details

Address: 6 Grand Avenue, Rosehill NSW (previously identified as 10 Grand Avenue, Camellia)

Postcode 2142

Property description

(Attach a separate list if several properties are included in the site audit.)

Lot 1 DP 1258587 (previously identified as Part Lot 4 DP 623497)

Local government area: Parramatta City Council

Area of site (include units, e.g. hectares): approximately 4.2 hectares

Current zoning: E5 – Heavy Industrial (Parramatta Local Environmental Plan 2023)

Regulation and notification

To the 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.

☒ **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 the best of my knowledge:

☐ the site **has** been notified to the EPA under section 60 of the *Contaminated Land Management Act 1997*

☒ the site **has not** been notified to the EPA under section 60 of the *Contaminated Land Management Act 1997*.

Site audit commissioned by

Name: Alana Garrick

Company: HCLF Rosehill PropCo Pty Ltd as trustee for HCLF Rosehill No 1 Trust

Address: Level 14, 88 Phillip Street Sydney, NSW

Postcode 2000

Phone: 0400 071 707

Email: alana.garrick@halecp.com

Contact details for contact person (if different from above)

Name N/A

Phone

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 Assessment Act 1979* (please specify consent authority and date of issue)

SSD-55522478, Minister for Planning and Public Spaces, 25 July 2024 and modifications

☐ 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

☒ **A2** To determine land use suitability subject to compliance with either an active or passive environmental management plan

Intended uses of the land: Warehouse and distribution centre (commercial/industrial)

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.

Information sources for site audit

Consultancies which conducted the site investigations and/or remediation:

DLA Environmental Services Pty Ltd (DLA Environmental)

Edison Environmental and Engineering Pty Ltd (Edison)

JBS&G Australia Pty Ltd (JBS&G)

KPMG SGA Property Consultancy Pty Limited (KPMG)

Sydney Environmental Group Pty Ltd (SEG)

Environmental Group Australia Pty Ltd (EGA, formerly SEG)

Titles of reports reviewed:

‘RE: Amendment to Capping Layer Requirements for Site Remediation and Validation 6 Grand Avenue, Rosehill NSW’, 24 September 2024, SEG

‘RE: Methodology - VOC in Piling Soil, 6 Grand Avenue, Rosehill NSW’, 8 January 2025, SEG

‘RE: Methodology – Concrete Hardstand Removal, Crushing & Reuse, 6 Grand Avenue, Rosehill NSW (REV0), 20 November 2024, SEG

‘RE: Unexpected Find of an Underground Storage Tank, Lot 1 DP1258587, 6 Grand Avenue, Rosehill NSW’, 5 November 2025, EGA

‘RE: Validation of Removal of an Underground Storage Tank, Lot 1 DP1258587, 6 Grand Avenue, Rosehill NSW’, 12 December 2025, EGA.

‘Site Validation Report, 6 Grand Avenue, Rosehill NSW’, 18 August 2026, EGA

‘Long-Term Environmental Management Plan, 6 Grand Avenue, Rosehill NSW’, 18 August 2026, EGA

Other information reviewed, including previous site audit reports and statements relating to the site:

Section B Site Audit Statement (SAS) (RS-117B) and Site Audit Report (SAR) ‘Remedial Action Plan, 6 Grand Avenue, Rosehill’ by Rowena Salmon dated 14 November 2024

Section B Site Audit Statement (SAS) (RS-117) and Site Audit Report (SAR) ‘Remediation Action Plan, Lot 1, 10 Grand Avenue, Camellia’ by Rowena Salmon dated 27 March 2020

Section B SAS (GN-546) and SAR ‘Remediation Action Plan, 10 Grand Avenue Camelia’ by Graeme Nyland dated 15 April 2019

Site audit report details

Title	Site Audit Report – 6 Grand Avenue, Rosehill		
Report no.	RS-117A (Ramboll Ref: 318002146)	Date	24 August 2026

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:
  - (B1) the nature and extent of contamination, and/or
  - (B2) the appropriateness of an investigation, remediation or management plan[1], 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.

[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

I certify that, in my opinion:

Subject to compliance with the **attached** environmental management plan[2] (EMP), 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):

Multi-level warehouse or distribution centre in accordance with SSD-55522478 approved 25 July 2024 and modifications

EMP details

Title: Long-Term Environmental Management Plan, 6 Grand Avenue, Rosehill NSW

Author: Environmental Group Australia Pty Ltd

Date: 18 August 2026 No. of pages: 47

EMP summary

This EMP (attached) is required to be implemented to address residual contamination on the site.

The EMP: (Tick appropriate box and strike out the other option.)

☐ requires operation and/or maintenance of **active** control systems[3]

☒ 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:

Between November 2024 and August 2026, remedial works were undertaken at the site, whereby asbestos impacted soil materials were subject to a ‘cap and contain’ remedial strategy.

The EMP identifies 12 distinct capping profiles that have been installed across the site and details management strategies for the contained impacted soils.

The EMP is applicable for as long as the capped and contained materials are retained within the site.

Description of the nature of the residual contamination:

Previous investigations identified asbestos in friable and bonded forms within in-situ site soils requiring ongoing management.

Chlorinated hydrocarbon compounds at or below the groundwater table may occur as a result of an upgradient contaminant source to groundwater.

The EMP acknowledges the asbestos-impacted soils have been isolated from potential receptors as a result of the cap and containment approach.

Although an upgradient source of groundwater impacts has previously been identified, groundwater impacts requiring remediation have not been identified at the site, and direct contact pathways with groundwater are mitigated as groundwater abstraction does not occur at the site, and any future use of groundwater would require appropriate assessment and regulatory approvals from the NSW Office of Water.

The EMP identifies 12 distinct capping profiles that have been installed across the site. This information is expected to inform future intrusive works programs. The capping profiles constructed at the site includes the following key features:

- The marker layer is generally identified as: an existing concrete hardstand (at depths greater than 0.8 m); or an orange geotextile placed atop contaminated soil materials (at depths generally greater than 0.3 m).
- In hardstand areas, the capping has a combined depth at least 0.4 m.
- Imported validated capping sandstone material was used to raise site levels.
- In landscaped areas, the topsoil / mulch surface covering generally has a depth of at least 0.3 m, except within tree protection zones where the mulch capping layer has been placed over a geogrid mesh product in proximity to tree bases and has a depth of 0.1 m.
- The capping depth beneath newly planted trees is at least 0.6 m.

Summary of the actions required by the EMP:

Key actions required by the EMP include:

- Maintain and protect the capping layer and marker layer at all times.

- Induct all personnel undertaking subsurface works.
- Restrict intrusive works and require approval before any excavation or penetration of the capping system.
- Implement asbestos management controls where works may breach the marker layer.
- Reinstate any disturbed capping and marker layers following works, in accordance with the defined capping layers presented in the EMP.
- Manage excavated spoil, including waste classification, tracking and disposal to licensed facilities where required.
- Prohibit groundwater use unless suitability has been demonstrated.
- Follow unexpected encounter procedures if marker layers or impacted soils are exposed.
- Maintain records of inductions, inspections, incidents, repairs and soil movements.
- Audit, review and revision of the EMP.

How the EMP can reasonably be made to be legally enforceable:

The EMP is legally enforceable as it is a condition of development consent. The enforcing authority is noted to be the Department of Planning, Housing and Infrastructure.

How there will be appropriate public notification:

City of Parramatta has agreed to list the Site Audit Statement and the EMP on the Section 10.7(2) and (5) Planning Certificate, providing a public notification mechanism.

Overall comments:

At the completion of the remedial works, the contamination risks to human health from contained asbestos impacts in soil at the site are low and acceptable.

Excavations below the marker layer could expose asbestos impacted soils, however this risk is able to be managed through the implementation of the EMP.

The EMP provides details of the actions required to be taken if the contaminated soil below the marker layer is disturbed.

Groundwater should not be abstracted for beneficial use unless further assessment is undertaken to assess its suitability for the intended use.

Section B

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

☐ **is not** appropriate 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*

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 out as appropriate

Plan title:

Plan author:

Plan date: No. of pages

SUBJECT to compliance with the following condition(s):

Overall comments:

Part III: Auditor's declaration

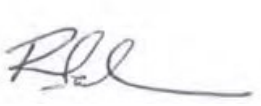
I am accredited as a site auditor by the NSW Environment Protection Authority (EPA) under the *Contaminated Land Management Act 1997.*

Accreditation no. 1002

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 24 August 2026

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**: nswauditors@epa.nsw.gov.au or as specified by the EPA

AND

- the **local council** for the land which is the subject of the audit.

Environmental Group Australia

Vaughan Constructions

Long-Term Environmental Management Plan

6 Grand Avenue, Rosehill NSW

Report No:

2582-LTEMP-01-020626.v3f

Report Date:

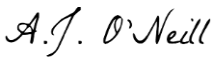
18/08/2026

info@egau.com.au

NSW: 36E Fitzroy Street, Marrickville, NSW 2204
VIC: 88 Langridge St, Collingwood VIC 3066

DOCUMENT RECORD

Revision	Date	Author	Reviewer
v1d	2 June 2026	Rachelle Conna	Andrew O'Neill
v2d	14 July 2026	Rachelle Conna	Andrew O'Neill
v3d	23 July 2026	Rachelle Conna	Andrew O'Neill
v4d	3 August 2026	Rachelle Conna	Adrian Heggie
v1f	7 August 2026	Rachelle Conna	Adrian Heggie
v2f	12 August 2026	Rachelle Conna	Adrian Heggie
v3f	18 August 2026	Rachelle Conna	Adrian Heggie

Author Signature		**Reviewer Signature**		
Name	Rachelle Conna	**Name**	Andrew O'Neill	Adrian Heggie
Credentials	B.Sc. Zoology	**Credentials**	B. Sci. Earth Sci.	CEnVP (Accreditation No. SC40942), BSc Earth Sciences, Dip Env. Studies
Title	Environmental Consultant	**Title**	Senior Project Manager	Principal Environmental Consultant

Document Title:	Long Term Environmental Management Plan - 6 Grand Avenue, Rosehill NSW
Site Address:	6 Grand Avenue, Rosehill NSW
Client Name:	Vaughan Constructions
Site Size:	≈ 4.2 ha (irregular in shape)
Reference Number:	2582-LTEMP-01-020626.v3f
Project Type:	Long-Term Environmental Management Plan
Project Type Abbreviation:	LTEMP
Document Draft:	FINAL
Document Revision No.	v3f

Prepared by Environmental Group Australia Pty Ltd ABN: 83 671 599 143

TABLE OF CONTENTS

DOCUMENT RECORD .....

1. PURPOSE **4**
1.1. Background 4
1.2. Objectives 4
1.3. Supporting Documentation 4
1.4. Legal Enforceability 4
1.5. Public Notification 5
1.6. Key Stakeholders and Responsibilities 5
2. SITE IDENTIFICATION **7**
2.1. Current Site Conditions 7
2.1.1. General Layout 7
2.1.2. Building Information 7
2.1.3. Landscaping 7
2.1.4. Access and Circulation 7
2.1.5. Surface Water and Stormwater Controls 8
3. SITE HISTORY SUMMARY **9**
3.1. Site History Summary 9
3.1.1. Key Historical Findings and Management Strategies 9
3.1.2. Remediation and Current Site Status 9
3.2. Cap and Containment Details 10
3.3. Asbestos Health Risks 14
3.4. Residual Source-Pathway-Receptor Assessment 15
4. MANAGEMENT PROCEDURES **16**
4.1. Induction 16
4.2. Requirements for Intrusive Works 16
4.2.1. Licensing 17
4.2.2. Preparation of Management Documentation Related to Asbestos 17
4.2.3. Spoil Management 18
4.3. Sub-Surface Works Beneath the Marker Layer 18
4.4. Groundwater Management 18
4.5. Ongoing Maintenance and Ground Disturbance Controls 19
4.5.1. General Requirements 19
4.5.2. Subsurface Services 20
4.5.3. Airborne Asbestos Monitoring 20
4.5.4. Mowing Activities 20
4.5.5. Gardening and Landscaping Works 20
4.5.6. Unexpected Encounters Protocol 21

4.6. Record Keeping 21
4.7. Reporting of Complaints and Incidents 21
4.8. Routine Inspection 21
4.9. Emergency Response and Reporting 21
4.10. Audit, Review and Revision of the Long-Term LTEMP 22
5. REFERENCES 23
6. STATEMENT OF LIMITATIONS 24

FIGURES

Figure 1 Site Locality
Figure 2 Site Layout
Figure 3 Capping Layer Construction
Figure 4 Landscaping Design Construction

APPENDICES

Appendix A Surveys
Appendix B Capping Inspection Form
Appendix C Inspection Reporting Form
Appendix D Induction Record
Appendix E Materials Tracking Sheet
Appendix F Service Figures

1. PURPOSE

1.1. Background

Environmental Group Australia Pty Ltd (EGA) was engaged by Vaughan Constructions ('the client') to prepare a Long-Term Environmental Management Plan (LTEMP) for residual asbestos that has been capped and contained within the sub-surface located at 6 Grand Avenue, Rosehill NSW (refer to **Figure 1** with the 'site' boundaries outlined in **Figure 2**).

Asbestos impacted soil materials were subject to a 'cap and contain' strategy, where remedial works were undertaken between November 2024 and July 2026. The cap and containment strategy is a passive system designed to capsulate impacted soil materials. Due to design constraints, the capping profile consists of 12 distinct cap and containment strategies as outlined in **Section 3.2**. All imported materials used for capping were classified as Virgin Excavated Natural Materials (VENM) or materials subject to a suitable Resource Recovery Order (RRO) as outlined in the site-specific Remedial Action Plan (RAP).

This LTEMP describes conditions of the site and details management strategies of the contained impacted soils. The protocols outlined in this LTEMP must be considered in future works that may result in a breach of the capping layer covering the impacted soils on-site (refer to **Figures 3 & 4** and **Appendix A).**

1.2. Objectives

The key objective of this LTEMP is to outline the maintenance of the capping layers within the site and prevent any unplanned breaches of the capping layers. To achieve the objective, this LTEMP documents:

- Details of the known extent and construction of the capping areas;
- Defines the responsibilities and safe work procedures for working with the impacted soils;
- Includes incident response and reporting requirements;
- Details the roles and responsibilities of relevant stakeholders to ensure the safe, long-term management of the site; and
- Details the mechanism to make this LTEMP legally enforceable and the parties responsible for the ongoing management of the capping material within the project boundary.

1.3. Supporting Documentation

This LTEMP has been developed based on the findings of the remediation and validation works undertaken within the site, as documented within the interim site validation report:

- Environmental Group Australia Pty Ltd (2026), 'Site Validation Report, 6 Grand Avenue, Rosehill NSW', dated: 7 August 2026, report ref: 2582-SVR-01-020626.v4d.

1.4. Legal Enforceability

All operations and activities conducted on the site must fully comply with the provisions of relevant NSW environmental and WHS legislation, including but not limited to the *Contaminated Land Management Act 1997*, *Work Health and Safety Act 2011*, and *Protection of the Environment Operations Act 1997* (and their associated Regulations), as well as any other requirements of relevant authorities (e.g., NSW EPA).

In accordance with the *Practice Note: Preparing environmental management plans for contaminated land* (NSW EPA 2022), legal enforceability for this LTEMP is as follows:

- This LTEMP is enforceable as a condition of the State Significant Development (SSD) consent Condition B59. Condition B59 requires the Applicant to implement the approved LTEMP for the life of the development, prior to the commencement of operation. The enforcing authority for the implementation of this LTEMP is the Department of Planning, Housing and Infrastructure (DPHI).

These conditions are binding, and non-compliance can lead to penalties, stop-work orders, or court action.

1.5. Public Notification

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

- In accordance with SSD Consent Condition B59(b), public notification of this LTEMP is provided by listing the LTEMP on the planning certificate for the land issued under Section 10.7 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Written agreement has been obtained from Parramatta City Council to list the LTEMP on the Section 10.7 planning certificate for the site.

1.6. Key Stakeholders and Responsibilities

The key stakeholders and their contact details are listed in **Table 1.6.1**. The responsibilities of the key stakeholders are provided in **Table 1.6.2**.

Table 1.6.1 Stakeholder Contact Details

Stakeholder	Organisation	Address	Contact Number
Council	City of Parramatta Council	5 Parramatta Square, Parramatta NSW	(02) 9806 5050
Site Owner	Hale Capital Development Management	Aurora Place Suite 14.03, Level 14, 88 Phillip Street, Sydney NSW	cosec@halecp.com

Table 1.6.2 Key Stakeholders and Responsibilities

Stakeholder	Organisation	Responsibility
Council	City of Parramatta Council	Update section 10.7 Planning Certificate to identify the land as 'Contaminated Land' and identify the existence of this LTEMP.
Site Owner	Hale Capital Development Management	Ensure the LTEMP is readily available, up to date, and relevant for those who operate the site. Ensure the LTEMP is implemented for the duration of site operation. Ensure the LTEMP is externally audited and reviewed for the duration of site operation. If there is a material change to the LTEMP (remediation) provide all relevant parties with updated LTEMP.
Property Maintenance Contractor	Various	Day to day implementation and maintenance of the LTEMP. Engage and induct sub-surface workers to LTEMP. Ensure LTEMP is on file at property and that the LTEMP remains relevant, as well as review and update the LTEMP if site conditions change (for example change of land use or there is a breach of the LTEMP. Keep records of entry & closure of the capping area. Review any proposed works and documentation from future site contractors against the requirements of this LTEMP. This includes any intrusive works which may damage the cap or the marker layer. Cap inspections must be routinely implemented by the Property Maintenance Contractor and documented.
Future Site Contractors	Various	All contractors who may breach the capping system must be provided with and review this LTEMP. Where the capping area is likely to be breached, then management strategies detailed in this LTEMP must be implemented. All future site contractors must also be inducted to the site.
Environmental Consultant	Engaged as required	An appropriately qualified Environmental Consultant may be consulted prior to any sub-surface works proposed beneath the marker layer. Update LTEMP as engaged by the Property Maintenance Contractor.
Class A Licensed Asbestos Removalist	Engaged as required	A SafeWork NSW Class A Licensed Asbestos Removalist must be engaged by the Property Maintenance Contractor 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 by the Property Maintenance Contractor 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 LTEMP after material change to the LTEMP which may impact the use or suitability of the land, as required.
Site Visitors	Public	Access to the capping area is limited via the concrete hardstand barriers, vegetation, capping material, and marker layer. Access beneath the concrete hardstand, the capping material, or the marker layer will be limited to maintenance works.

2. SITE IDENTIFICATION

Site details and associated information are presented in **Table 2.1.**

Table 2.1 Site Identification Information

Attribute	Description
Street Address	6 Grand Avenue, Rosehill NSW
Lot and Deposited Plan (DP)	Lot 1 DP1258587
Geographical Coordinates	33°49'18.8"S 151°02'03.2"E (approximate centre of site)
Site Area	≈ 4.2 ha (irregular in shape)
Current Owner	Hale Capital Development Management
Local Government Area (LGA)	City of Parramatta Council
Parish	St. John
County	Cumberland
Zoning	E5: Heavy Industrial *Parramatta Local Environmental Plan 2023*

2.1. Current Site Conditions

2.1.1. General Layout

The site has undergone industrial redevelopment comprising a multi-unit industrial complex, including five ground-floor warehouse compartments ('Warehouse 01' to 'Warehouse 05') with associated hardstand driveways and loading zones. The northern site boundary consists of 'Grand Avenue', commercial/industrial properties to the east and south and an easement corridor along the western boundary. Vehicle access routes, loading bays, parking areas (including EV charging spaces), and peripheral landscape buffers surround the primary warehouse footprints.

2.1.2. Building Information

The warehouse buildings are oriented along a north to south axis, positioning the main structures toward the north (facing Grand Ave). Warehouses 01 and 02 occupy the western portion of the site, while Warehouses 03, 04, and 05 occupy the eastern side. The facilities feature multi-level configurations and Level 1 mezzanine office spaces (offices 06 through 10) positioned in the first level. Structural construction consists of concrete slabs on ground with heavy duty structural frames. Key infrastructure is integrated directly adjacent to the building footprints, including an on-site Rainwater Treatment Plant, Hydrant Pump Room, Sprinkler Tank with dedicated concrete slab, and Underground Sewer Pump systems.

2.1.3. Landscaping

Around the site perimeter landscaping areas overlie the marker layer. Along the northern boundary, a 20 m wide landscape buffer has been installed and will be maintained as part of the ongoing operation of the site. The southern boundary incorporates a 4.0 m wide landscape buffer supported by engineered retaining walls, root barrier systems, and native species. The western easement boundary features an 11.5 m wide buffer zone with low-growing shrubs and groundcovers. Additional softscapes include trough planters and on-slab planter boxes built with internal waterproofing membranes, drainage cells, geotextile filter fabrics, and automated subsurface drip irrigation.

2.1.4. Access and Circulation

Vehicular ingress and egress to the complex are provided via dedicated entry corridors on Grand Avenue along the northern site boundary. Internal traffic movement is facilitated by heavy-duty concrete driveways ranging from 1.5 m to 5.5 m wide that connect internal hardstands, loading docks, and parking

areas. For emergency services, the site layout provides a 6.0 m wide fire truck set down area and a 9.5 m wide fire access route traversing the internal perimeter to allow unobstructed access around all warehouse modules.

2.1.5. Surface Water and Stormwater Controls

Stormwater management across the site combines surface swales, subsoil drainage, structural retention, and treatment systems designed to Australian Standard AS3500.3. Surface runoff from hardstands and driveways is directed into concrete swales and a network of 49 heavy-duty stormwater pits fitted with pit inserts. Overland flow from minor and major storm events (1 in 20-year and 1 in 100-year events) are conveyed to an offline cartridge tank system containing approximately forty 690 mm filter cartridges within a 6.0 m x 4.0 m tank. Treated site stormwater discharges into the existing municipal 900 mm diameter pipe infrastructure along Grand Avenue at invert level 2.60 m, flowing toward the Parramatta River catchment. Dedicated service easements, including an Easement for Drainage of Water along the western boundary and an Easement to Drain Sewage along the eastern boundary are designed to protect hydraulic discharge corridors.

3. SITE HISTORY SUMMARY

3.1. Site History Summary

The site, located at 6 Grand Avenue, Rosehill NSW, comprises approximately 4.2 hectares and was historically occupied by CSR Building Products Ltd for the manufacture of roof tiles. The adjoining property to the west (formerly known as 6 Grand Avenue, Camellia) is the former Azko manufacturing facility (a remediation site regulated under the CLM Act) which is known to be a source of groundwater contamination at the site. This industrial history left a legacy of various contaminants that required extensive assessment and remediation to facilitate the proposed commercial/industrial warehouse redevelopment.

Between 2023 and 2024, several assessments were undertaken by JBS&G Australia Pty Ltd (JBS&G) and Sydney Environmental Group Pty Ltd (SE). These findings are detailed within the Site Validation Report (SVR) prepared by EGA (2026).

3.1.1. Key Historical Findings and Management Strategies

JBS&G (2023) conducted a Hazardous Building Material Survey (HBMS) that identified Asbestos Containing Materials (ACM), Lead-based paints and Synthetic Mineral Fibres (SMF) within the existing site structures (warehouses and administration buildings) and presumed PCBs in light fittings.

Intrusive investigations identified friable asbestos and Polycyclic Aromatic Hydrocarbons (PAHs), specifically Benzo(a)pyrene, within in-situ site soils.

The ACM present within the site posed human health risks via inhalation and aesthetic concerns. The other identified PAHs posed unacceptable ecological risks and potential human health risks, primarily through ingestion or dermal contact.

JBS&G (2023a) developed an Acid Sulfate Soil Management Plan (ASSMP) to manage the risk of disturbing potential acid sulfate soils (PASS) during deep excavation and piling works as risk mapping indicated the site is located in an area of "disturbed terrain".

Due to potential Volatile Organic Compound (VOC) impacts at or below the groundwater table, a specific methodology was implemented for piling works (SE 2024). This included Photoionisation Detector (PID) screening and strict Personal Protective Equipment (PPE) requirements for workers to manage vapor risks.

3.1.2. Remediation and Current Site Status

A Remedial Action Plan (RAP) was prepared by JBS&G (2024) to address these impacts, primarily utilising a cap and containment methodology. This strategy focused on managing asbestos-impacted soils and other contaminants by isolating them from potential receptors. EGA supervised remediation works and prepared a Site Validation Report at the completion of remedial works, outlining the works undertaken.

As part of the remediation undertaken at the site, the existing concrete hardstand footprint resulting from the former land use activities was retained onsite across majority of the site footprint (where possible). This existing concrete hardstand footprint comprises a portion of the marker layer identified at the site. In locations where site-won asbestos impacted fill was relocated atop the existing concrete hardstand, a high-visibility geotextile marker layer was installed across the surface prior to installation of the capping materials.

All services and OSD tanks installed within the site, have been installed within validated capping materials, atop a geotextile marker layer. As such, any future maintenance works on existing services, will be undertaken within clean materials.

This LTEMP details the final, post-remediation site conditions and sets out the ongoing operational, inspection, and maintenance controls required to manage the contained impacts across the site. Future works involving excavation or disturbance below the marker layer or within the capping materials may

recreate a risk pathway. To manage this residual risk, the site must be managed in perpetuity under this Long-Term Environmental Management Plan (LTEMP).

3.2. Cap and Containment Details

Due to design constraints, the capping profile located within trenching or excavations, beneath the warehouse structures, within landscaping areas and, the retained in-situ hardstand offer distinct cap and containment strategies. Two marker layer strategies were adopted across the site and consist of the existing concrete hardstand layer, and an orange geotextile marker layer placed atop contaminated soil materials, per the 'cap and containment' strategy outlined within the RAP JBS&G (2024) and RAP addendum prepared by Sydney Environmental Group (SE)[1].

A summary of the capping details and depths are provided below in **Table 3.2.1** through to **Table 3.2.12**, and are presented in **Figure 3** and **Figure 4**.

As the asbestos impacted soils beneath the existing concrete hardstand layer were not assessed as part of the remedial works, the depth of the impacted fill materials is expected to be approximately 1.2 m thick based on the findings of the Environmental Site Assessment undertaken by JBS&G[2].

Refer to **Appendix A** for containment area surveys and service trenching locations.

Table 3.2.1 Capping Layer Construction Profile – Capping System 1

Layer	Average Thickness (m)	Description
Hardstand	0.2	Concrete hardstand barrier followed by crushed concrete or imported RRO material (aggregate, dark grey/black, dry to moist, no foreign materials).
Validated Capping Materials	0.6	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Existing Hardstand (Marker Layer)	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

[1] SE 2024, 'Amendment to Capping Layer Requirements for Site Remediation and Validation, 6 Grand Avenue, Rosehill NSW', dated 24 September 2024, report ref: 2482-LTR-01-240924.v1f.
[2] JBS&G 2022, 'Environmental Site Assessment, 6-8 Grand Avenue, Rosehill NSW', dated 29 April 2022, report ref: 61873/141436 Rev 0.

Table 3.2.2 Capping Layer Construction Details – Capping System 2

Layer	Average Thickness (m)	Description
Hardstand	0.2	Concrete hardstand barrier followed by site-won crushed concrete or imported RRO material (aggregate, dark grey/black, dry to moist, no foreign materials).
Validated Capping Materials	0.33	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	0.5	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.
Existing Hardstand	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 2 was utilised beneath the constructed warehouse footprints.

Table 3.2.3 Capping Layer Construction Details – Capping System 3a

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.3	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	Unknown	Silty CLAY, medium plasticity, dark brown, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3a was utilised within landscaping areas to the north.

Table 3.2.4 Capping Layer Construction Details – Capping System 3b

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.6	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	Unknown	Silty CLAY, medium plasticity, dark brown, dry to moist. Contains friable and non-friable asbestos impacted soil materials..

EGA notes that capping system 3b was utilised within landscaping areas to the west.

Table 3.2.5 Capping Layer Construction Details – Capping System 3c

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.6	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	Unknown	Silty CLAY, medium plasticity, dark brown, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3c was utilised within tree zones within the landscaping areas.

Table 3.2.6 Capping Layer Construction Details – Capping System 3d

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.1	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Geogrid (Marker Layer)	0.05	Black geogrid mesh material.
Impacted Soil Materials	Unknown	Silty CLAY, medium plasticity, dark brown, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3d was utilised within the tree protection zones within the landscaping areas, where existing trees were retained in the north.

Table 3.2.7 Capping Layer Construction Details – Capping System 3e

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.2	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Validated Capping Materials	0.59	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Existing Hardstand (Marker Layer)	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3e was utilised for garden bedding areas located within the breezeway.

Table 3.2.8 Capping Layer Construction Details – Capping System 3f

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.6	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	0.47	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.
Existing Hardstand	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3f was utilised within landscaping areas to the east.

Table 3.2.9 Capping Layer Construction Details – Capping System 3g

Layer	Average Thickness (m)	Description
Mulch & topsoil	0.6	Mulch underlain by topsoil comprising a medium brown, low plasticity, dry-moist organic and sand mixture.
Validated Capping Materials	0.7	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Existing Hardstand	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 3g was utilised within landscaping areas to the south.

Table 3.2.10 Capping Layer Construction Details – Capping System 4

Layer	Average Thickness (m)	Description
Hardstand	0.2	Concrete hardstand barrier followed by site-won crushed concrete or imported RRO material (aggregate, dark grey/black, dry to moist, no foreign materials).
Validated Capping Materials	0.36	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	0.76	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.
Existing Hardstand	0.15	Existing concrete hardstand barrier.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 4 was utilised within driveway areas to the north, east and southeast of the site.

Table 3.2.11 Capping Layer Construction Details – Capping System 5

Layer	Average Thickness (m)	Description
Hardstand	0.2	Concrete hardstand barrier followed by site-won crushed concrete or imported RRO material (aggregate, dark grey/black, dry to moist, no foreign materials).
Validated Capping Materials	2.85	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials or re-used site won CLAY, low plasticity, red to orange, dry.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 5 was utilised in areas containing OSD tanks and associated infrastructure.

Table 3.2.12 Capping Layer Construction Details – Capping System 6

Layer	Average Thickness (m)	Description
Hardstand and Aggregate	0.2	Concrete hardstand barrier followed by site-won crushed concrete or imported RRO material (aggregate, dark grey/black, dry to moist, no foreign materials).
Validated Capping Materials	0.2	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Imported Validated Soil Materials (Capping)	1.22	SANDSTONE, light grey/white/yellow, dry to moist, no foreign materials or re-used site won CLAY, low plasticity, red to orange, dry.
Orange Geotextile (Marker Layer)	0.05	Orange geotextile marker layer.
Impacted Soil Materials	Unknown	CLAY, medium plasticity, medium to dark brown, red and orange, dry to moist. Contains friable and non-friable asbestos impacted soil materials.

EGA notes that capping system 6 was utilised within service trench footprints that breached the existing hardstand (maker layer).

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 7 mm x 7 mm 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 7 mm x 7 mm 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 capping 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.

3.4. Residual Source-Pathway-Receptor Assessment

Based on the remediation and validation works undertaken and summarised in EGA (2026), the identified remaining areas of environmental concern and associated contaminants of potential concern are summarised in **Table 3.4.1.**

Table 3.4.1 Revised Areas of Environmental Concern and Contaminants of Potential Concern

Area of Environmental Concern	Land Use Activity	Contaminants of Potential Concern	Affected mediums	Exposure risk
In-situ Asbestos Contaminated Fill Materials Across the Site	'Cap & Contain' Strategy	Asbestos (Friable and Non-Friable)	Soil	Human Health

The potential contamination pathways were considered to be via inhalation of contaminants released in dust during future development and maintenance works, if the marker layer were to be breached.

Following the remediation works undertaken within EGA (2026), the potential contamination pathways are now considered to be incomplete. The following future works at the site may result in completion of the pathways:

- Excavation and subsequent exposure to soil materials retained beneath the site wide marker layer; and
- Under-boring for utilities or similar infrastructure.

Groundwater beneath the site has been identified to contain chlorinated hydrocarbons and heavy metals at concentrations that preclude its relevant beneficial use. Accordingly, groundwater beneath the site is not considered a suitable beneficial resource.

4. MANAGEMENT PROCEDURES

The cap and containment strategy present across the site consists of a marker layer (orange geotextile or the existing concrete hardstand) and a minimum 300 mm of validated Virgin Excavated Natural Material (VENM) or Resource Recovery Order/Exemption (RRO/RRE). The surface layer atop the capping layer comprises of either concrete hardstand or landscaping. As such, the underlying contaminated materials are considered inaccessible to human and ecological receptors.

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.

The capping material should be inspected annually and following any breaches, to ensure its condition remains suitable. These inspections should be undertaken as required by the Property Maintenance Contractor. This LTEMP is applicable for as long as the capped and contained materials are retained within the site.

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 minimised as far as is reasonably practicable. Should significant redevelopment be proposed, Council, an LAA, a SafeWork NSW Class A licensed asbestos removalist, and environmental consultant will need to be notified and engaged.

The Property Maintenance Contractor is to ensure all contractors undertaking subsurface works on the site have completed a site-specific induction in relation to the on-site contaminated soils.

The induction program is to include the following:

- Information about the nature of the hazards arising from exposure to the relevant contaminants of concern;
- Identification of the location of contained impacted soils;
- Composition of capping materials for visual reference, including the marker layer;
- Procedures to be followed if subsurface works are planned within the capped and contained areas;
- Procedures to be followed for accidental breach of the marker layer;
- Exposure monitoring that may be required for working with asbestos;
- Personal Protective Equipment (PPE) required for excavation works below the capping material; and
- Incident reporting.

An induction record should be kept as outlined in **Appendix D**. The Property Owner 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 SafeWork NSW as required.

4.2. Requirements for Intrusive Works

Where intrusive works are proposed at the site, the following management measures must be followed:

- Prior to any intrusive works commencing within the site, approval for the works must be sought from the person responsible for the management of the LTEMP (Property Maintenance Contractor);
- Site personnel, contractors or maintenance personnel involved in the works must be inducted per **Section 4.1**, undertake asbestos awareness training and be aware of their responsibilities with regards to health and safety and the protection of the environment; and

- All repairs to cover layers must be documented by the Property Maintenance Contractor and any changes must be detailed and kept on record, refer to **Appendix B** for documentation pertaining to capping inspection following repair.

As part of the approval for works to occur, the Property Maintenance Contractor must make an assessment of the likelihood of capping layer breach by considering the proposed depth of works compared to the depth of capping in the proposed works location. If works are proposed below the capping layer at the site, asbestos management measures are to be applied and the relevant approvals obtained prior to works starting as described herein.

4.2.1. 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 proposed for underneath the marker layer 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.

4.2.2. Preparation of Management Documentation Related to Asbestos

As asbestos-impacted soils remain beneath the capping layer, an overarching Asbestos Management Plan (AMP) shall be prepared and maintained for the site. The site AMP will document the location and extent of the asbestos-impacted materials, identify the engineering controls and management measures implemented to prevent exposure, and establish the procedures for the ongoing management of asbestos during future works that have the potential to disturb asbestos. The AMP should be read in conjunction with this LTEMP, which establishes the long-term management requirements for the engineered capping system and associated environmental controls.

Where intrusive works are proposed that will penetrate the capping layer and disturb the underlying asbestos-impacted soils, project-specific asbestos management documentation shall be prepared prior to commencement of works. Depending on the scope of the proposed activities, this may include an Asbestos Removal Control Plan (ARCP), the site AMP, and other documentation required under the Work Health and Safety Act and associated Work Health and Safety Regulation. This documentation shall outline the proposed asbestos handling procedures, control measures, air monitoring requirements, decontamination procedures, emergency response procedures, waste management requirements and the minimum personal protective equipment (PPE) required for the works.

For all works involving disturbance of asbestos-impacted soils, the project-specific asbestos management documentation shall act as the primary document governing asbestos handling and worker health and safety. This LTEMP shall act as the overarching environmental management document for such works, providing the framework for site access, identification of the capping boundaries, protection of the engineering control and the mandatory requirements for reinstatement of the capping layer following completion of the works.

All works below the capping layer within asbestos-impacted soils shall be undertaken by an appropriately licensed contractor in accordance with the current requirements of the Work Health and Safety Act 2011, the Work Health and Safety Regulation 2025, and applicable SafeWork NSW guidance. Contractors shall prepare all documentation required by the relevant legislation, including a Site Safety Management Plan, Safe Work Method Statements and any project-specific asbestos management documentation required for the proposed works.

The following details the minimum PPE required to be worn in addition to standard construction site PPE requirements:

- Disposable coveralls;
- Disposable gloves;
- Disposable boot covers; and
- P3 class respirator or higher.

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.

4.2.3. Spoil Management

Where temporary stockpiling of contaminated soils is required, additional measures such as stockpiling atop a plastic or geofabric layer, wetting down soils, and covering stockpiles will be required to prevent cross-contamination and risk to receptors.

Appropriate dust, sediment and erosion controls must be implemented and maintained for the duration of the soil management works, consistent with Landcom (2004) Managing Urban Stormwater: Soils and Construction guide and other relevant guidelines and standards.

All materials excavated from below the capped and contained materials must either be returned beneath capping layer prior to closing or be removed off-site to a licensed waste receiving facility. No materials from below the marker layer are to be retained above the site wide marker layer. All materials excavated from below the marker layer must be tracked with the Material Tracking Sheet presented in **Appendix E**.

Contaminated soil materials from below the marker layer proposed for removal from the site to a licensed waste receiving facility, will require classification as **Special Waste**, and further chemical characterisation in accordance with NSW EPA Waste Classification Guidelines: Part 1: Classifying waste, November 2014 (NSW EPA 2014).

Should capping materials above the marker layer be proposed for offsite disposal, waste classification will be required, in accordance with NSW EPA Waste Classification Guidelines: Part 1: Classifying waste, November 2014 (NSW EPA 2014).

4.3. Sub-Surface Works Beneath the Marker Layer

Prior to any works that may breach the capping layers, 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 beneath the marker layer is classified as friable, a SafeWork NSW Licensed Asbestos Assessor must undertake airborne asbestos monitoring and issue clearance reports. Additionally, a SafeWork Class A licensed asbestos removalist must be engaged to supervise asbestos handling works.

Contaminants of Potential Concern (CoPC) in soils are known to remain beneath the capped and contained surfaces at the site and may be encountered if the capping layer is breached. Requirements outlined in **Section 4.2** must be followed if disturbing materials beneath the capping layers. Following completion of any intrusive works into the capping layer, the capping layer must be re-instated in accordance with the requirements of this LTEMP, as outlined in **Table 4.4.1**.

4.4. Groundwater Management

Groundwater beneath the site has historically been impacted by chlorinated hydrocarbons and heavy metals. Groundwater must not be abstracted or used for potable, irrigation, stock watering, industrial, construction or any other beneficial purpose unless an assessment has first been undertaken to demonstrate that the groundwater is suitable for the intended use.

Any proposed groundwater abstraction must also be undertaken in accordance with applicable legislative requirements. Where groundwater abstraction is proposed as part of future development or construction activities (e.g. dewatering), the potential risks associated with groundwater quality must be assessed and appropriate management measures implemented to ensure protection of human health and the environment.

4.5. Ongoing Maintenance and Ground Disturbance Controls

To maintain the integrity of the installed capping layer and ensure the continued protection of underlying materials, the following requirements shall apply to all maintenance and minor works across the site.

4.5.1. General Requirements

All activities involving ground disturbance or penetration (including but not limited to excavation, installation of stakes or star pickets, gardening, and service adjustments) shall be undertaken in a manner that avoids compromising the capping layer. The depth of any such works must not exceed the capping layers outlined in **Section 3.2**.

Refer to **Table 4.5.1** for when planned works are proposed to breach the on-site capping layer.

Table 4.5.1 Planned Works Beneath the Marker Layer

Actions	Due to the potential risk of interacting with impacted soils, when conducting sub-surface works beneath the marker layer, the following procedures must be adopted prior to works commencing: 1. Notify the Owner and the Property Maintenance Contractor prior to undertaking any disturbance within 0.3 m of the marker layer; 2. Engage a Licenced Asbestos Assessor (LAA) or environmental consultant prior to commencement of works below the capping layer; 3. Engage a SafeWork NSW Class A licensed asbestos removalist to undertake and supervise asbestos handling works; 4. The NSW Class A licensed asbestos removalist must submit a notification to SafeWork NSW; 5. 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; 6. 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 7. Prohibit access to all personnel unless wearing PPE that is appropriate for protection against airborne asbestos fibres. The following procedure must be adopted for handling asbestos impacted soils: • A NSW Licensed Asbestos Assessor (LAA) or appropriately experienced occupational hygienist and Class A licensed asbestos removalist 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 should be placed on plastic lining 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; and At the completion of any works, the marker layer and capping layer must be physically re-instated to their original condition and surveyed levels using the following process:

	• Ensure the base of the excavation is graded and free of sharp debris that could puncture the marker layer; • Lay a new, highly visible orange geotextile marker layer across the extent of the disturbed area. The new marker layer must overlap the existing, undisturbed marker layer by a minimum of 0.5 metres on all sides to ensure a continuous visual barrier; • Backfill the area above the marker layer with certified clean imported materials (VENM, ENM, or approved RRO materials) in lifts not exceeding 150mm; • Compact each lift to match the density of the surrounding undisturbed capping material, ensuring a minimum capping thickness of 0.3 m is achieved; and • Re-instate the final surface covering (concrete hardstand or landscaping profile) to match the surrounding finish and original surveyed levels. Any deviation from this process requires written input and approval from the appointed Environmental Consultant.
Frequency	• As required
Responsibility	• Environmental Consultant; • Licensed Asbestos Assessor; • Class A Licensed Asbestos Removalist; • Appointed contractor; • Property Maintenance Contractor; and • The Owner (if required).

4.5.2. Subsurface Services

Services installed across the site have been completed within the capping layer or in a manner where they were excavated, lined with a geofabric marker layer and backfilled with validated site-won clay or validated imported RRO or VENM as outlined in the SVR (EGA 2026). Refer to **Figure 2, Appendix A, Appendix F** and **Section 3.2** for depths to service trenches.

Any modifications, repairs, or adjustments to services must consider the surrounding capping layer thickness and must not result in penetration beyond the approved depths. Where deeper works are required, specific environmental approval and controls must be implemented.

A detailed plan of service and trench alignments in relation to the capping extents is provided in **Appendix F**. The structural integrity of the cap must be maintained during any service works by strictly adhering to the reinstatement process detailed in **Table 4.4.1**.

4.5.3. Airborne Asbestos Monitoring

A SafeWork NSW Licensed Asbestos Assessor (LAA) must be engaged to carry out air monitoring during all earthworks that extend below the marker 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 Membrane filter [NOHSC3003:2005]*.

4.5.4. Mowing Activities

Routine mowing activities may be undertaken without restriction, provided they do not disturb subsurface materials. If, during mowing, any orange geofabric (geotextile marker layer) becomes visible or exposed, works must cease immediately in the affected area. The area shall be secured, and appropriate environmental/site management personnel notified for further assessment and direction.

4.5.5. Gardening and Landscaping Works

All gardening and landscaping activities must be restricted to shallow surface works and must not extend beyond the marker layers outlined in **Section 3.2**. If orange geofabric is encountered at any time, all works in the immediate area must stop immediately. The location should be clearly marked, and advice sought prior to recommencing any activities.

4.5.6. Unexpected Encounters Protocol

During any maintenance or ground-penetrating activity, personnel must remain vigilant for signs of exposed orange geotextile or hardstand marker layers as outlined in **Section 3.2**. If encountered:

- Stop work immediately in the vicinity;
- Prevent further disturbance of the area;
- Clearly delineate and secure the location; and
- Notify the site manager or the environmental manager for assessment and instruction.

No works are to recommence in the affected area until appropriate management measures have been implemented and approval has been provided.

4.6. Record Keeping

All planned or unexpected works involving a breach of the capping layer must be documented and records kept by the Property Maintenance Contractor. Refer to **Appendix B** for the inspection forms to be completed if damage is observed to the capping layer and following re-instatement of the capping layer. Records are also required to be kept for incidents (**Appendix C**), inductions (**Appendix D**) and general inspections (**Appendix B**).

4.7. 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 Property Maintenance Contractor 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 Property Maintenance Contractor as soon as practicable after a complaint has been made or an environmental incident has occurred. If appropriate, and following the Property Maintenance Contractor'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. Refer to **Appendix C** for the environmental incident report form to be completed or where possible.

4.8. Routine Inspection

A routine inspection of the capping layer at the site must be undertaken annually by The Site Owner, to ensure capping materials at the site are maintained and upkept. The annual inspections must be recorded in the Capping Inspection Record provided in **Appendix B** and retained on file. In addition, the Property Maintenance Contractor shall undertake routine inspections on a quarterly basis to identify any damage, erosion or other defects requiring maintenance. Inspections must also be undertaken as required following any intrusive site works by the Property Maintenance Contractor or Licensed Asbestos Assessor or Environmental Consultant.

In the event that the capping layer has been compromised, the Property Maintenance Contractor must ensure the capping layer is re-instated in strict accordance with the restoration process outlined in **Table 4.5.1** and document the observation in the Capping Inspection Record form provided in **Appendix B**.

4.9. Emergency Response and Reporting

All unplanned events, irrespective of how minor the event, shall at the first opportunity be reported to The Site Owner and relevant stakeholders and government agencies as necessary. All unplanned events shall

be investigated. The degree and level of investigation shall depend on the outcome of the actual event and outcome of a similar event if not assessed and controlled.

Any release of contamination to the land, surface, groundwater or air must be reported immediately to The Site Owner. Any occurrence which does or may result in exposure to site users or the public should be reported immediately to The Site Owner and to emergency services if necessary.

If an occurrence is deemed to be reportable to the NSW EPA, it should be reported at the earliest opportunity.

4.10. Audit, Review and Revision of the Long-Term LTEMP

Where significant or material changes to the LTEMP are presented in the future, review by an NSW EPA Site Auditor will be required.

Annual audit of the LTEMP implementation must be undertaken by the Site Owner to check that records are being kept, including if the capping layers are damaged, or if the marker layer has been breached. A check of changes to site conditions that may impact on the relevance of the LTEMP should also be undertaken.

Every 10 years, The Site Owner must engage a suitably qualified environmental consultant to undertake an independent audit of the LTEMP implementation.

Revisions to this LTEMP may be necessary from time to time to ensure the document is relevant and up to date with regards to changes in legislation, changes to site conditions, if further controls are required and when there are improvements in technologies or knowledge.

In the event that a change to land use activities or redevelopment works are proposed for the site, the LTEMP will require revision immediately following these changes to ensure that the new site conditions are captured within the revised document and to address aspects of the development that may not be reflected in this existing version of the LTEMP.

Any revisions of the LTEMP must be prepared by an appropriately qualified and experienced environmental consultant. It is advised that the updated LTEMP be reviewed and approved by an environmental consultant with CEnvP Contamination Specialist (SC) certification, or equivalent. Any revisions of the LTEMP must be provided to Parramatta City Council.

This LTEMP has been developed to address the management of site-specific environmental concerns associated with t contamination remaining beneath the marker layer.

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, 2025 NSW Work Health and Safety Regulation 2025.

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: *How to Manage and Control Asbestos in the Workplace*, 2022.

WA DOH, 2021 Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, 2021.

EGA, 2026 'Site Validation Report, 6 Grand Avenue, Rosehill NSW', dated 5 August 2026, report ref: 2582-SVR-01-020626.v4d.

JBS&G, 2022 'Environmental Site Assessment, 6-8 Grand Avenue, Rosehill NSW', dated 29 April 2022, report ref: 61873/141436 Rev 0.

SE, 2024 'Amendment to Capping Layer Requirements for Site Remediation and Validation, 6 Grand Avenue, Rosehill NSW', dated 24 September 2024, report ref: 2482-LTR-01-240924.v1f

WA DOH, 2021 Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia, 2021.

Amendment to Capping Layer Requirements for Site Remediation and Validation, 6 Grand Avenue, Rosehill NSW', dated 24 September 2024, report ref: 2482-LTR-01-240924.v1f

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 Environmental Group Australia Pty Ltd. Should information become available regarding conditions at the site including previously unknown sources of contamination, EGA reserves the right to review the report in the context of the additional information.

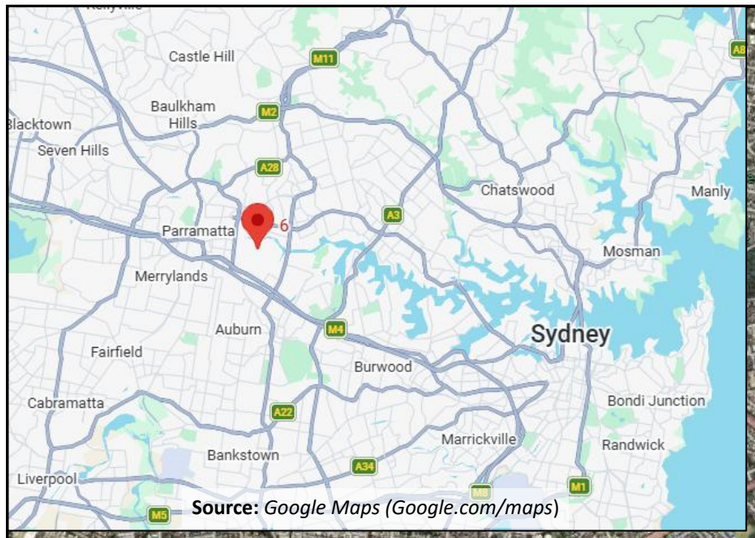
This report must be reviewed in its entirety and in conjunction with the objectives, scope and terms applicable to EGA's engagement. The report must not be used for any purpose other than the purpose specified at the time EGA was engaged to prepare the report.

Logs, figures, and drawings are generated for this report based on individual EGA 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, EGA reserves the right to review and amend this report.

FIGURES

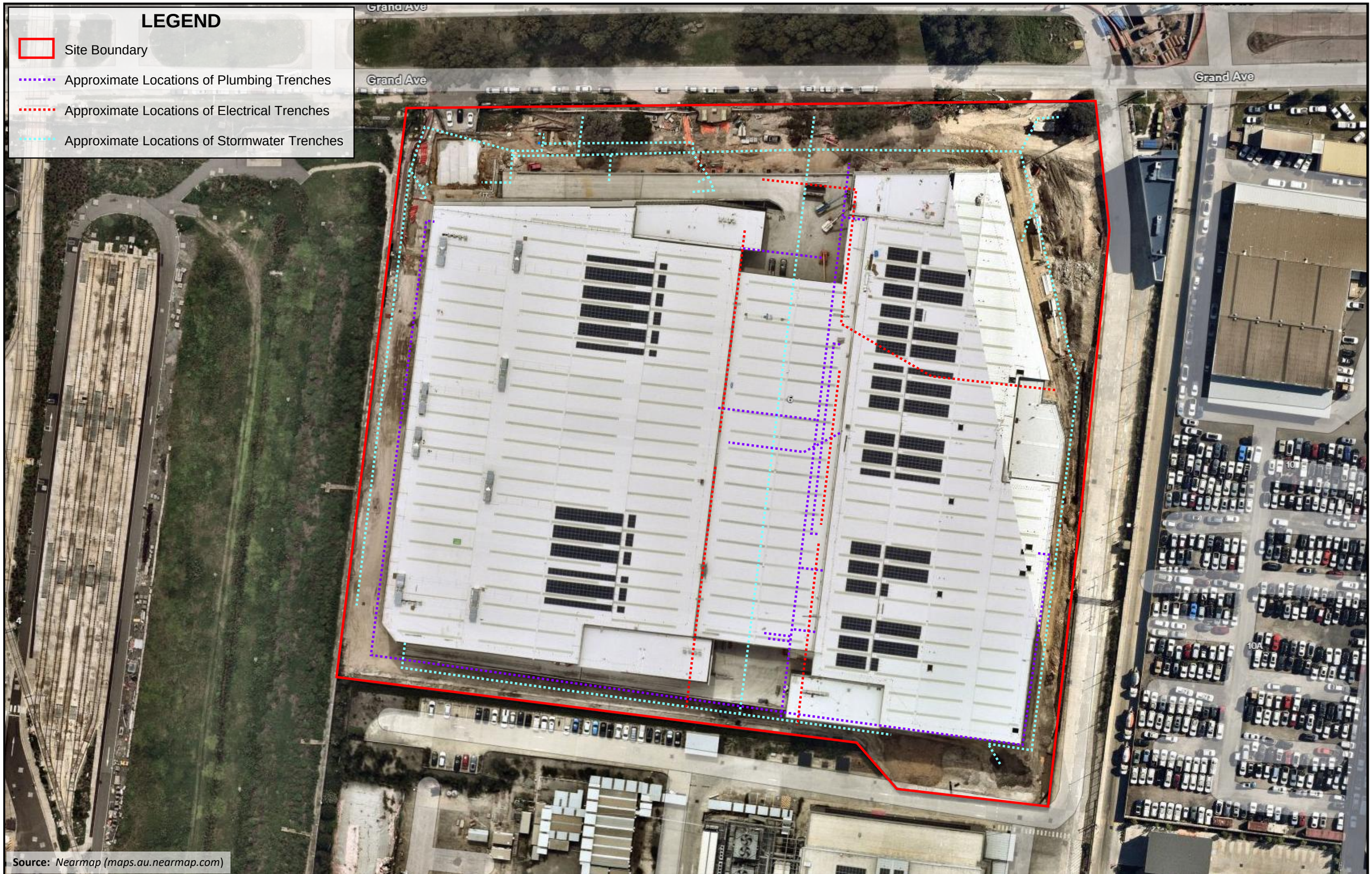


Source: *Google Maps (Google.com/maps)*

Subject Site
6 Grand Avenue, Rosehill NSW

Source: *Nearmap (maps.au.nearmap.com)*

Scale:	800 m	Site Locality		
Client Name:	Vaughans Construction Pty Ltd	N	Figure Number:	1
Project Name:	Long-Term Environmental Management Plan		Figure Date:	16 April 2026
Project Location:	6 Grand Avenue, Rosehill NSW		Report Number:	2582-LTEMP-01-020626.v2f



Source: *Nearmap (maps.au.nearmap.com)*

Scale:	30 m	**Site Layout**	
Client Name:	**Vaughans Construction Pty Ltd**	N	**Figure Number:** **2**
Project Name:	**Long-Term Environmental Management Plan**		**Figure Date:** **16 April 2026**
Project Location:	**6 Grand Avenue, Rosehill NSW**		**Report Number:** **2582-LTEMP-01-020626.v2f**

LEGEND

- Site Boundary
- Approximate Locations of Capping System 1
- Approximate Locations of Capping System 2
- Approximate Locations of Capping System 3*
- Approximate Locations of Capping System 4
- Approximate Locations of Capping System 5
- Approximate Locations of Capping System 6

*Capping system 3 is further detailed in Figure 4

Grand Ave

Grand Ave

Grand Ave

4

10

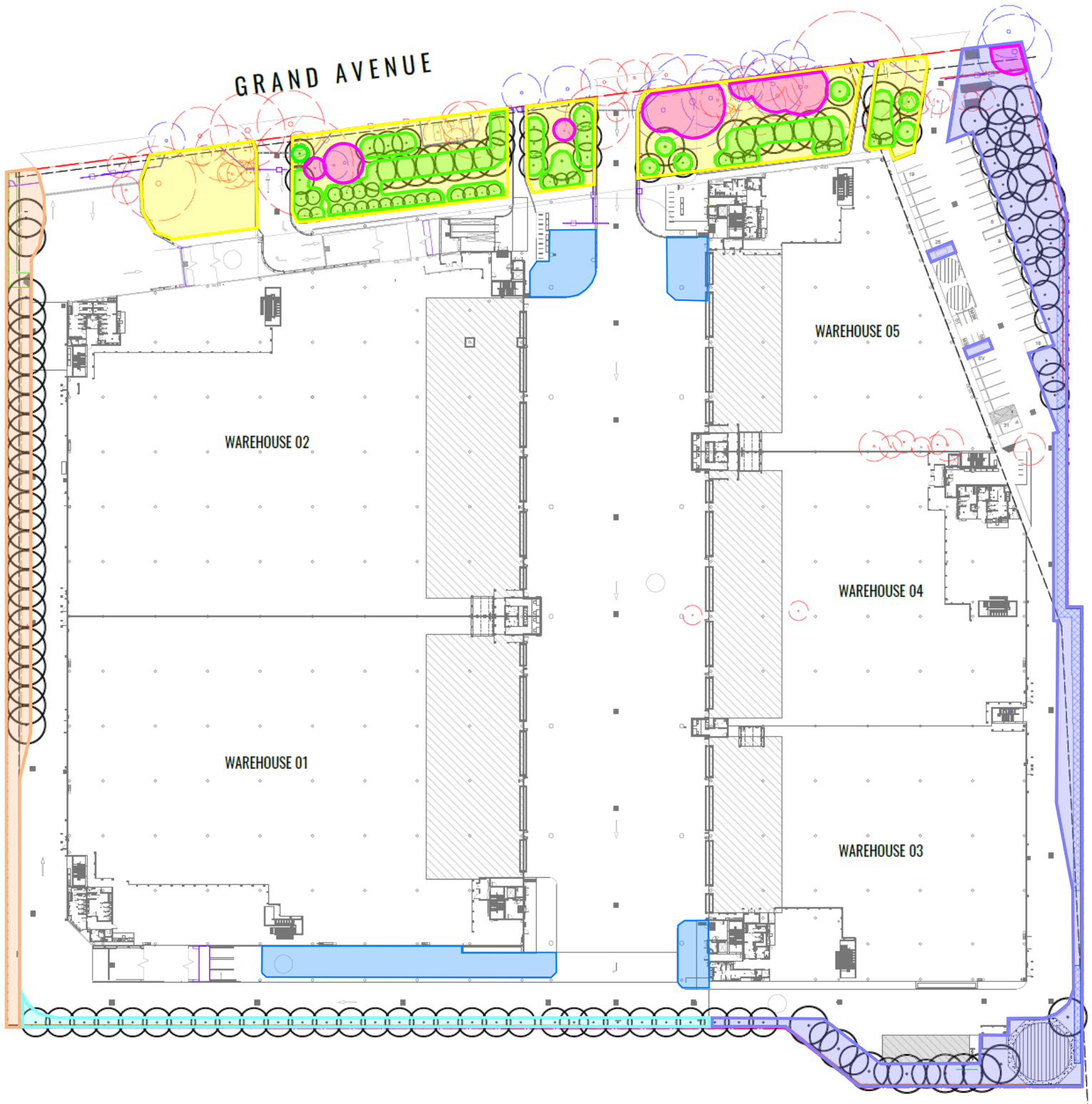
10A

Source: *Nearmap (maps.au.nearmap.com)*

Scale:	30 m	**Capping Layer Construction**		
Client Name:	**Vaughans Construction Pty Ltd**	N	**Figure Number:**	**3**
Project Name:	**Long-Term Environmental Management Plan**		**Figure Date:**	**16 April 2026**
Project Location:	**6 Grand Avenue, Rosehill NSW**		**Report Number:**	**2582-LTEMP-01-020626.v2f**

LEGEND

- Site Boundary
- Approximate Locations of Capping System 3a
- Approximate Locations of Capping System 3b
- Approximate Locations of Capping System 3c
- Approximate Locations of Capping System 3d
- Approximate Locations of Capping System 3e
- Approximate Locations of Capping System 3f
- Approximate Locations of Capping System 3g



LEGEND

- SITE BOUNDARY
- PROPOSED TREES
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- EASEMENT LINES
- PALISADE FENCE TO ARCHITECTS DETAILS
- CHAIN WIRE FENCE TO ARCHITECTS DETAILS
- FENCE WITH TIMBER POSTS TO ARCHITECTS DETAILS
- TROUGH PLANTERS TO ARCHITECTS DETAILS
- RETAINING WALL TO ENGINEERS DETAILS
- SWALE TO ENGINEERS DETAILS
- PROPOSED ROOT BARRIER LOCATIONS
- EXTENT OF GEOGRID BEHIND RETAINING WALL. REFER TO ENGINEERS DETAILS
- 700mm TALL MOUND TO BASE OF TREES. REFER DETAIL 01 LCON-601
- TIMBER EDGING. REFER TO DETAIL 03 LCON-601

REVISION	DATE	DESCRIPTION	BY
4	25.03.26	FOR CONSTRUCTION	KC
3	14.09.25	FOR CONSTRUCTION	KC
2	13.09.25	FOR CONSTRUCTION	KC
1	12.09.25	FOR DCC	KC

© GEOSCAPES LANDSCAPE ARCHITECTS 2025

NOTE:
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK, REPORT ALL DISCREPANCIES TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DRAWINGS. DRAWINGS MADE TO LARGER SCALES AND THOSE SHOWING PARTICULAR PARTS OF THE WORKS SHALL TAKE PRECEDENCE OVER DRAWINGS MADE TO SMALLER SCALE AND THOSE FOR GENERAL PURPOSES. ALL WORK IS TO CONFORM TO RELEVANT AUSTRALIAN STANDARDS AND OTHER CODES AS APPLICABLE, TOGETHER WITH OTHER AUTHORITIES REQUIREMENTS AND REGULATIONS.THIS DRAWING AND DESIGN IS SUBJECT TO COPYRIGHT AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT. © IN QUOTE, ASK.

GEOSCAPES
LANDSCAPE ARCHITECTS
GEOSCAPES Pty Ltd
Suite 3.03, 8 Help Street
Chatswood, NSW 2067, Australia
P (02) 9411 1485
E. admin@geoscapes.com.au
www.geoscapes.com.au
ACN: 620 205 781
ABN: 84 620 205 781
RLA NO # 5868

CLIENT	STATUS
HALE CAPITAL	FOR CONSTRUCTION

PROJECT: 6 GRAND AVENUE, Rosehill, NSW

TITLE: SITE PLAN

SCALE	DATE	DRAWN	CHECKED
1:400 @ A1	MAR 2026	KC	BG
JOB NO	DRAWING NO		REV
240528	LCON-001		4

N

EGA

Landscaping Design Construction			
Client Name:	Vaughans Construction Pty Ltd	Figure Number:	2
Project Name:	Long-Term Environmental Management Plan	Figure Date:	7 August 2026
Project Location:	6 Grand Avenue, Rosehill NSW	Report Number:	2582-LTEMP-01-020626.v2f

APPENDIX A

SURVEYS

Pre-Construction Survey

MGA

SKETCH FOR ASBUILT DATA AT:
6 GRAND AVENUE, ROSEHILL

CLIENT: VAUGAHAN CONSTRUCTION	
LOT1 DP1258587	TITLE AREA: 4.239 Ha
LOCAL GOVERNMENT: CITY OF PARRAMATTA	
HEIGHT DATUM: SSM59227 RL6.083 (AHD)	
REF: 241001 - ASB	DATE: 10.10.24 (REV1)
SCALE: 1:500 (A1)	SHEET: 1 OF 1

3 SURVEY
SETOUT • ESTABLISH • LOCATE



PLANS USED FOR SETOUT:

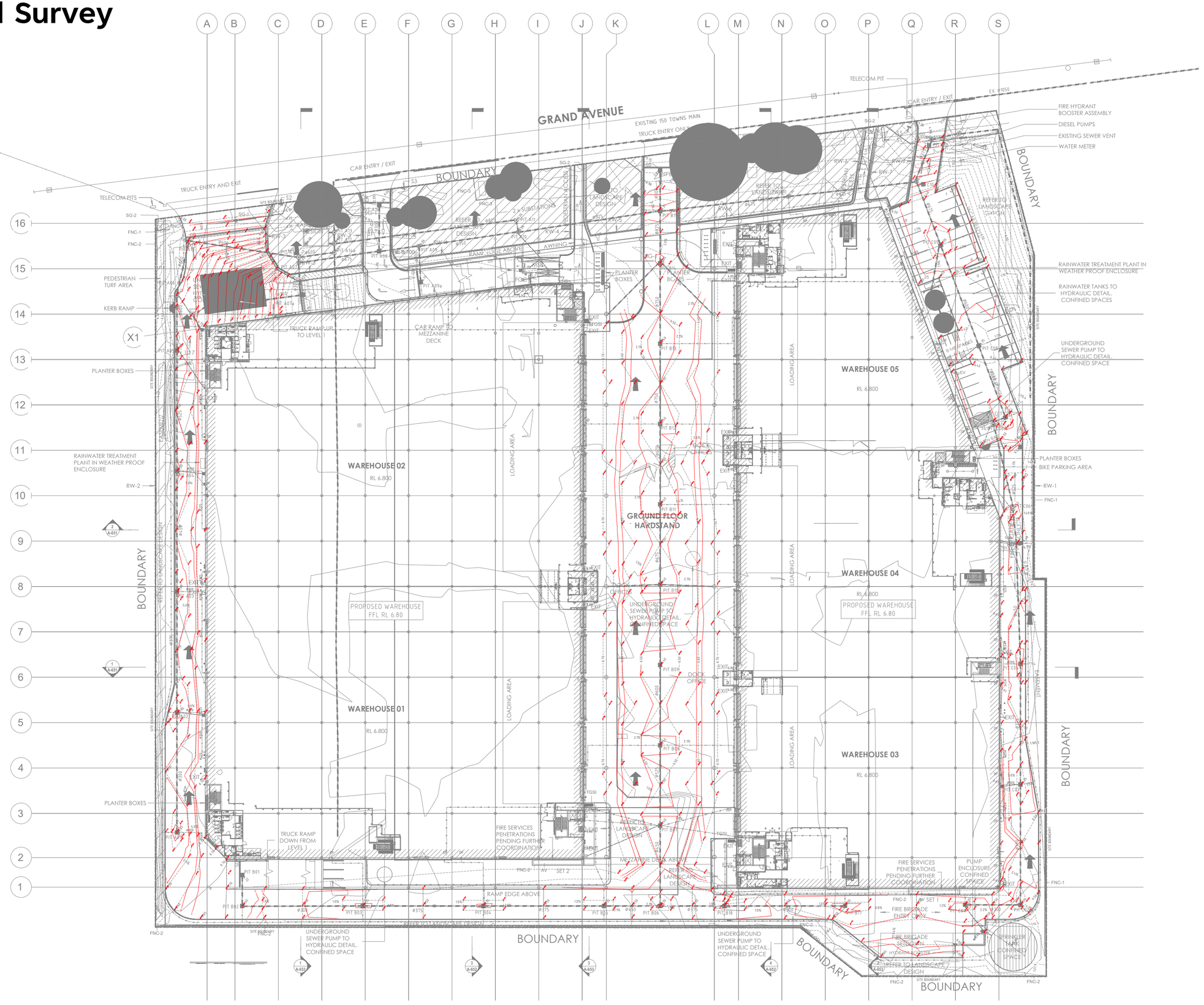
PLANS USED FOR GRID ESTABLISHMENT:

ARCHITECTURAL SITE SETOUT PLAN
VIA SIMPEL BY 'PACE ARCHITECTS' JOB 24432
DRAWING NO: 24432-A-100 ISSUE C1

NOTE:

- BOUNDARIES OBTAINED USING PLANS FROM PUBLIC RECORD
  BOUNDARY BY ARCHITECTURAL PLANS SHOWN IN BLUE. ASSOSIATED EASEMENTS SHOWN IN CYAN.
- MARKS PLACED ARE TRUE AND ACCURATE AT THE TIME OF SURVEY.
- NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THESE MARKS AFTER ANY SIGNIFICANT WORKS SUCH AS EXCAVATION OR DEMOLITION IS UNDERATKEN.
- IT IS THE NOTED CLIENTS RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THESE MARKS AND HOW THEY ARE USED BY SUBCONTRACTORS.
- THIS SURVEY IS FOR SETOUT PURPOSES AND IS NOT TO BE USED FOR ANY OTHER REASONS OTHER THEN THE SPECIFIED DESCRIPTION.
- ◎ DENOTES PEG PLACED UNLESS OTHERWISE NOTED
- ⌊⌋ DENOTES DIMENSIONS (RED-SETOUT, GREEN-DESIGN BUILDING OUTLINE, GREY-BUILDING DIMENSION, BLUE-BOUNDARY)
- ANNOTATION DESCRIPTIONS. TMP-TEXTA MARK PLACED, NLP-NAIL PLACED

Final Hardstand Survey



SURVEY
SETOUT • ESTABLISH • LOCATE

GROUND FLOOR – REDLINE
6 GRAND AVENUE, ROSEHILL
REF 241001
DATE 29.07.2026

FINISHED SURFACE 'REDLINE' SURVEY

NOTE:
ALL FIGURES SHOWN RED.
OVERLAID OVER ORIGINIAL DESIGN PLANS SHOWN GREY

MARKER LAYER TO FINISHED SURFACE

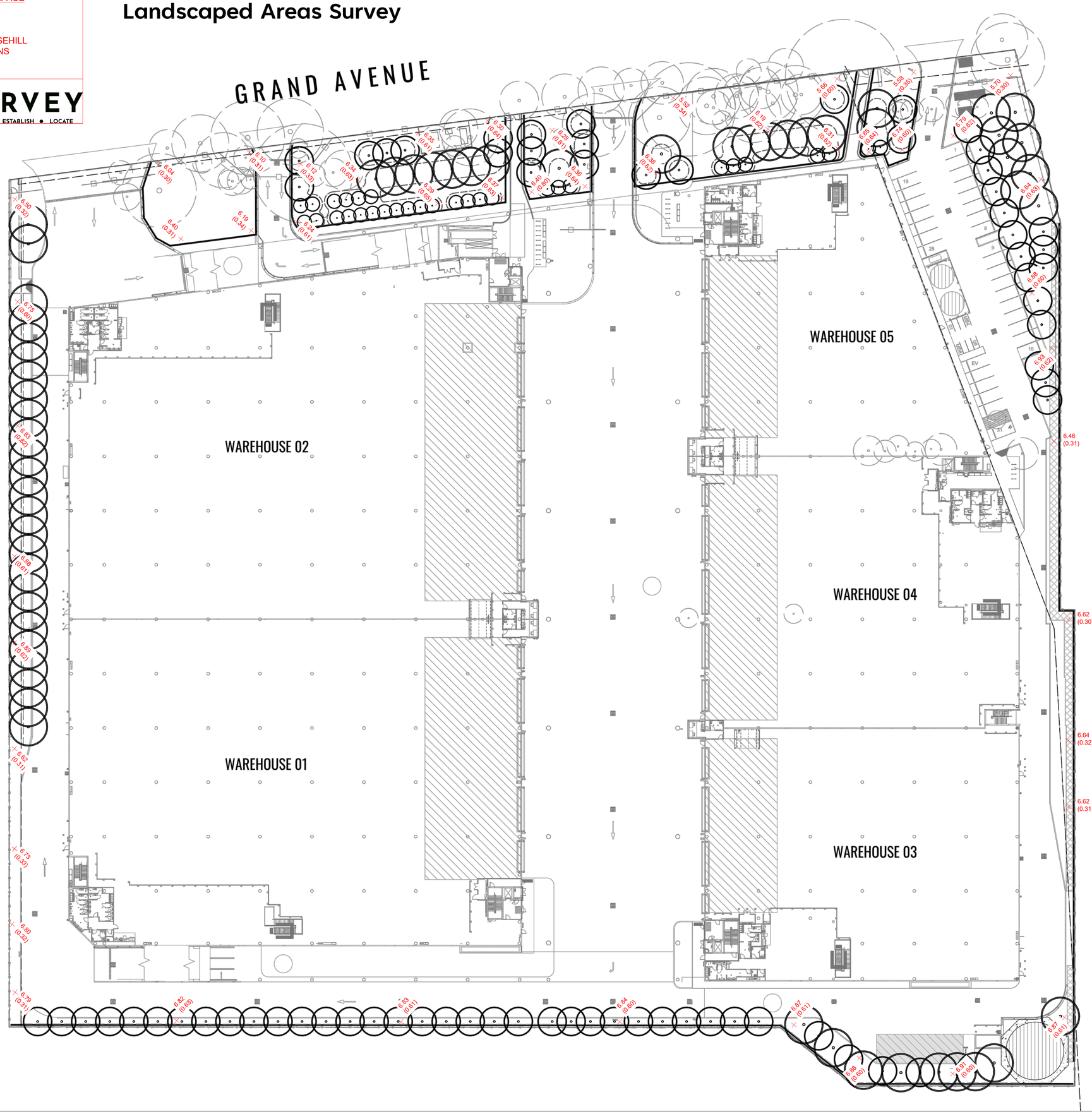
FIGUIRES SHOWN IN RED

ADDRESS: 6 GRAND AVENUE, ROSEHILL
CLIENT: VAUGHAN CONSTRUCTONS

DATE: 27.7.26
REVISION: 1

SURVEY
SETOUT ● ESTABLISH ● LOCATE

Landscaped Areas Survey



LEGEND

- SITE BOUNDARY
- PROPOSED TREES
- EXISTING TREES TO BE RETAINED
- EXISTING TREES TO BE REMOVED
- EASEMENT LINES
- PALISADE FENCE TO ARCHITECTS DETAILS
- CHAIN WIRE FENCE TO ARCHITECTS DETAILS
- FENCE WITH TIMBER POSTS TO ARCHITECTS DETAILS
- TROUGH PLANTERS TO ARCHITECTS DETAILS
- RETAINING WALL TO ENGINEERS DETAILS
- SWALE TO ENGINEERS DETAILS
- PROPOSED ROOT BARRIER LOCATIONS
- EXTENT OF GEOGRID BEHIND RETAINING WALL. REFER TO ENGINEERS DETAILS
- 700mm TALL MOUND TO BASE OF TREES. REFER DETAIL 01 LCON-601
- TIMBER EDGING. REFER TO DETAIL 03 LCON-601

REVISION	DATE	DESCRIPTION	BY
4	25.03.26	FOR CONSTRUCTION	KC
3	14.08.25	FOR CONSTRUCTION	KC
2	13.08.25	FOR CONSTRUCTION	KC
1	12.08.25	FOR CC3	KC

© GEOSCAPES LANDSCAPE ARCHITECTS 2025

NOTE:
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK. REPORT ALL DISCREPANCIES TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DRAWINGS. DRAWINGS MADE TO LARGER SCALES AND THOSE SHOWING PARTICULAR PARTS OF THE WORKS SHALL TAKE PRECEDENCE OVER DRAWINGS MADE TO SMALLER SCALE AND THOSE FOR GENERAL PURPOSES. ALL WORK IS TO CONFORM TO RELEVANT AUSTRALIAN STANDARDS AND OTHER CODES AS APPLICABLE, TOGETHER WITH OTHER AUTHORITIES' REQUIREMENTS AND REGULATIONS.THIS DRAWING AND DESIGN IS SUBJECT TO COPYRIGHT AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT. IF IN DOUBT, ASK.

GEOSCAPES
LANDSCAPE ARCHITECTS

GEOSCAPES Pty Ltd
Suite 3.03, 8 Help Street
Chatswood, NSW 2067. Australia
ACN: 620 205 781
ABN: 84 620 205 781

P (02) 9411 1485
E. admin@geoscapes.com.au
www.geoscapes.com.au
RLA NO # 5868

CLIENT	STATUS
HALE CAPITAL	FOR CONSTRUCTION

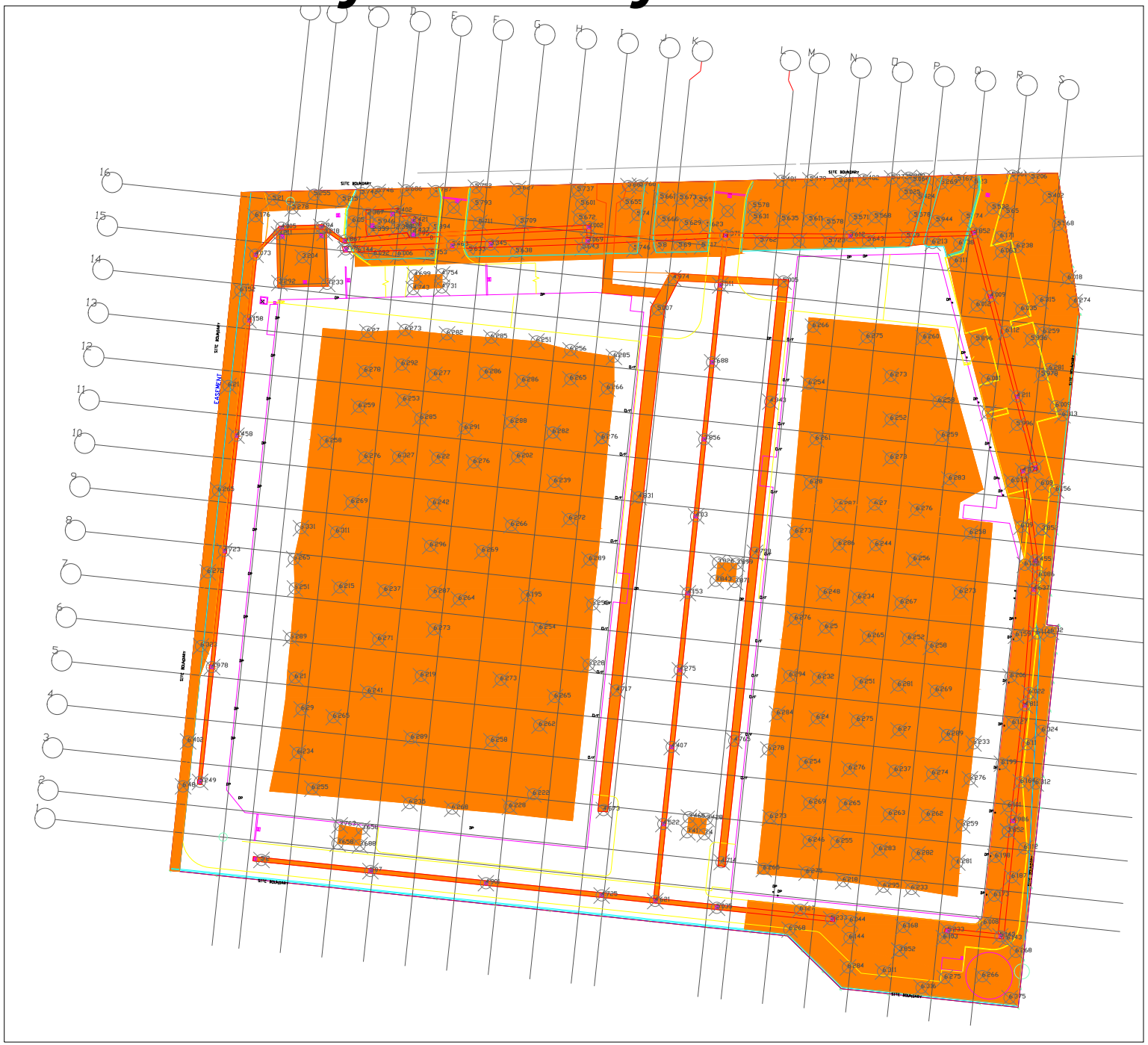
PROJECT
6 GRAND AVENUE
Rosehill, NSW

TITLE
SITE PLAN

SCALE	DATE	DRAWN	CHECKED
1:400 @ A1	MAR 2026	KC	BG
JOB NO	DRAWING NO		REV
240528	LCON-001		4

J:\240528 - Hale NSW Rosehill - CONS\Documentation\Construction\DRAWINGS\CAD\Print Sheets\240528_CON_Print Sheet.dwg

Marker Layer Survey



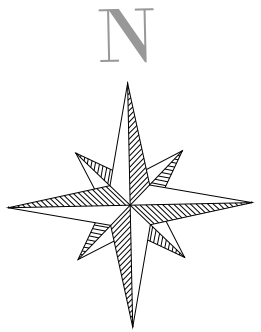
Organization Name

CLMU

LEGEND

XXXX MARKER LAYER LEVELS

KEY MAP



SCALE	SHEET NUMBER
NTS	1
PLOT DATE	
19/07/2026	

FILE NAME

ROSEHILL SURVEY

APPENDIX B

CAPPING INSPECTION RECORD FORM

Capping Inspection Record

6 Grand Avenue, Rosehill 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 the steps in **Table 4.4.1** of the LTEMP (EGA 2026) been implemented?	
Have photographs of the exposed areas been collected?	

Person Completing Inspection: _____

Date Submitted to Site Owner: _____

APPENDIX C

INCIDENT REPORTING FORM

Environmental Incident Report Form

6 Grand Avenue, Rosehill 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: _____

APPENDIX D

INDUCTION RECORD

Induction Record

6 Grand Avenue, Rosehill NSW					
Full Name	**Date of Induction**	**Signature**	**Full Name**	**Date of Induction**	**Signature**

APPENDIX E

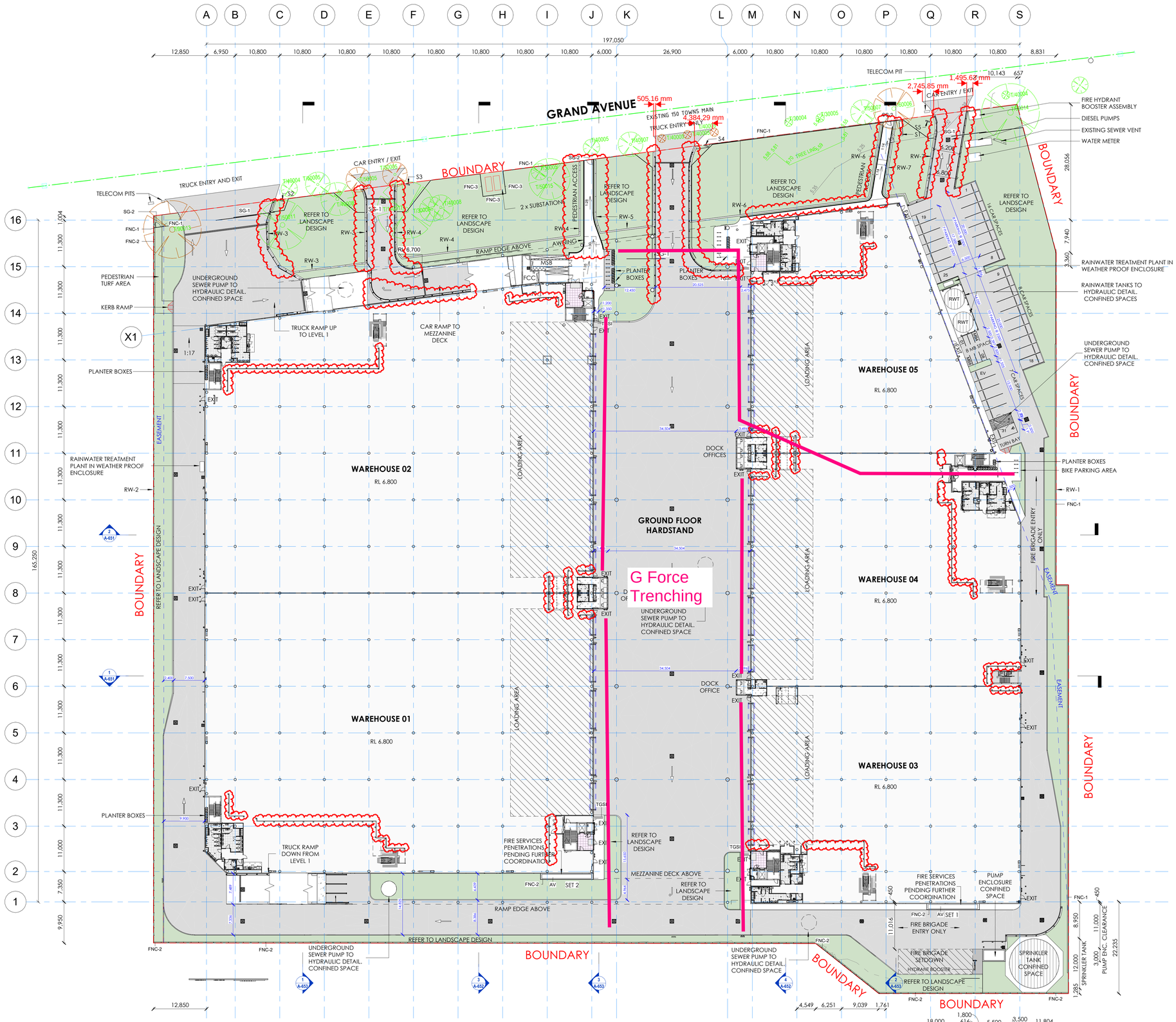
MATERIAL TRACKING SHEET

Material Tracking Sheet

6 Grand Avenue, Rosehill NSW							
Source Location	**Date Generated**	**Description of Works**	**Stockpile ID**	**Contamination Present? (Y/N) (e.g. Asbestos, hydrocarbon staining/odours)**	**Placement Location**	**Date of Placement**	**Comments**

APPENDIX F

SERVICE FIGURES



1 SITE PLAN
1 : 400 A-251

LEGEND

- RAISED PLANTING PLANTER BOXES
- PROPOSED ON GRADE GRAVEL AREA
- SOFT LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS
- SOFT LANDSCAPING EXTERNAL TO SITE
- BUILDING - REFER TO FLOOR PLANS
- KEEP CLEAR
- HARDSTAND CONCRETE

FNC - # FENCING
S# SIGNAGE REFER TO SIGNAGE SCHEDULE
SG# SLIDING GATE
BOUNDARY LINE

GENERAL LEGEND

AV	ALARM VALVE SET
FNC-1	BLACK POWDER COATED "PALISADE STYLE PRESSED METAL FENCE WITH SPEAR TOP @ 1800mm"
FNC-2	BLACK CHAINWIRE MESH FENCING WITH AN OVERALL HEIGHT OF 2100MM, INCLUDING THREE ROWS OF BARBED WIRE."
FNC-3	FENCE WITH TIMBER POSTS AT SUBSTATION AREA
SG-1	SLIDING GATE 1 TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE" BLACK POWDER COATED FINISH OR EQUAL APPROVED
SG-2	SWING GATE TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE - GATE DOOR OPENABLE FROM THE INSIDE OF THE PROPERTY AT ALL TIMES - GATES TO BE PROVIDED WITH 003 KEYS OR TO UNLOCK AUTOMATICALLY UPON GENERAL FIRE ALARM
TGSI	TACTILE INDICATORS WARNING TGSI STAINLESS CLASSIC

LANDSCAPE SCHEDULE - GF

SITE AREA	42387 m²
LANDSCAPE - GF	5967 m²
LANDSCAPE PERCENTAGE	14.11 %

PACEARCHITECTS
A.B.N. 72 159 266 350
Member Australian Institute of Architects
E: ppace@pacearchitects.com.au
P: 02 9452 1400
M: 0404 450 317
W: www.pacearchitects.com.au
A: Level 1, Suite S-6 , Alexander Street, Crows Nest, NSW 2065

REV	DESCRIPTION	DATE
P8	ISSUED FOR COORDINATION	22.01.25
C3	ISSUED FOR CC2	21.02.25
C4	REISSUED FOR CC2	25.02.25
C5	MSB ROOM UPDATE	03.03.25
C6	REISSUED FOR CC2	05.03.25
C7	GENERAL UPDATES	07.05.25
C8	ISSUED FOR CC3	22.07.25
C9	UPDATED FOR CC3	30.07.25
C10	PEDESTRIAN PATH UPDATE	01.09.25
C11	DRIVEWAY AMENDMENTS	12.09.25
C12	FENCING AMENDMENTS	16.09.25
C13	SITE PLAN UPDATED	21.11.25
C14	PARKING UPDATE	19.01.26
C15	METALWORKS, ELECTRICAL CUPBOARDS, DIMENSIONS & DOOR SCHEDULE UPDATES	22.01.26

DO NOT SCALE THIS DRAWING. VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK. COPYRIGHT © THIS DRAWING REMAINS THE PROPERTY OF PACEARCHITECTS. REPRODUCTION IN WHOLE OR PART IS FORBIDDEN.

NOTE: THE LOCATION OF PROPERTY AUGNMENTS IS DETERMINED FROM SURVEY INFORMATION PROVIDED BY SURVEYOR.

FOR CONSTRUCTION

CLIENT
Hale

BUILDER / PROJECT MANAGER
VAUGHAN CONSTRUCTIONS

ARCHITECT
PACE ARCHITECTS

PROJECT
MULTI-LEVEL WAREHOUSES

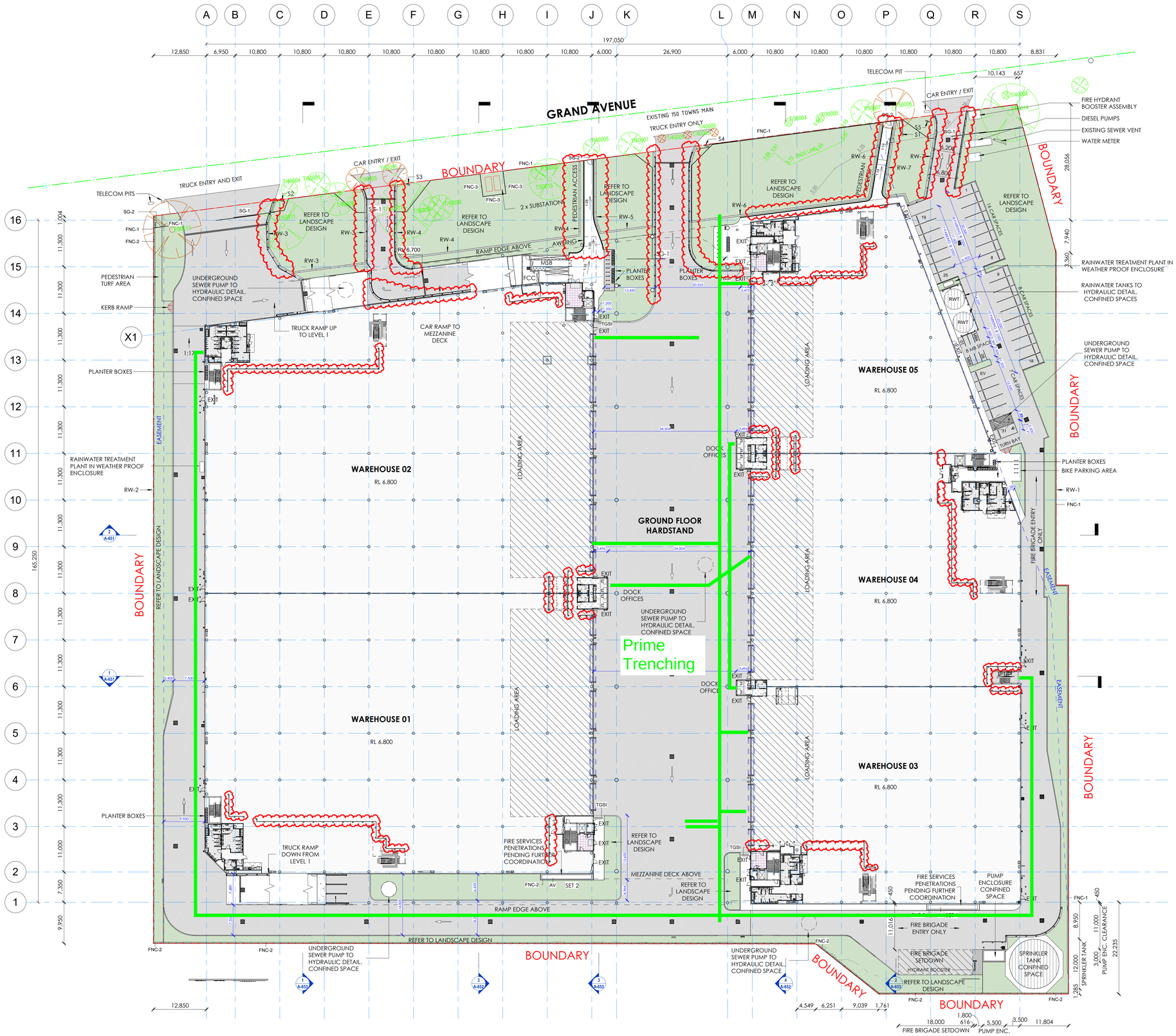
ADDRESS
6 GRAND AVENUE,
ROSEHILL NSW 2142

DRAWING TITLE
SITE PLAN

PURPOSE FOR CONSTRUCTION

GRAPHIC SCALE: 1:400

SCALE As indicated | B1
PROJECT NO 24432
DATE 22.01.26
DWN SP | DWG NO 24432 - A-100 | ISSUE C15



1 SITE PLAN
1 : 400 A-251

LEGEND

- RAISED PLANTING PLANTER BOXES
- PROPOSED ON GRADE GRAVEL AREA
- SOFT LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS
- SOFT LANDSCAPING EXTERNAL TO SITE
- BUILDING - REFER TO FLOOR PLANS
- KEEP CLEAR
- HARDSTAND CONCRETE
- FNC - # FENCING
- S# SIGNAGE REFER TO SIGNAGE SCHEDULE
- SG# SLIDING GATE
- BOUNDARY LINE

GENERAL LEGEND

AV	ALARM VALVE SET
FNC-1	BLACK POWDER COATED "PALISADE STYLE PRESSED METAL FENCE WITH SPEAR TOP @ 1800mm"
FNC-2	BLACK CHAINWIRE MESH FENCING WITH AN OVERALL HEIGHT OF 2100MM, INCLUDING THREE ROWS OF BARBED WIRE."
FNC-3	FENCE WITH TIMBER POSTS AT SUBSTATION AREA
SG-1	SLIDING GATE 1 TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE" BLACK POWDER COATED FINISH OR EQUAL APPROVED
SG-2	SWING GATE TO MATCH "DIPLOMAT STYLE PRESSED METAL FENCE - GATE DOOR OPENABLE FROM THE INSIDE OF THE PROPERTY AT ALL TIMES - GATES TO BE PROVIDED WITH 003 KEYS OR TO UNLOCK AUTOMATICALLY UPON GENERAL FIRE ALARM
TGSI	TACTILE INDICATORS WARNING TGSI STAINLESS CLASSIC

LANDSCAPE SCHEDULE - GF

SITE AREA	42387 m²
LANDSCAPE - GF	5967 m²
LANDSCAPE PERCENTAGE	14.11 %

PACEARCHITECTS
A.B.N. 72 159 266 350
E: ppace@pacearchitects.com.au
P: 02 9452 1400
M: 0404 450 317
W: www.pacearchitects.com.au
A: Level 1, Suite S-6 , Alexander Street, Crows Nest, NSW 2065

REV	DESCRIPTION	DATE
P8	ISSUED FOR COORDINATION	22.01.25
C3	ISSUED FOR CC2	21.02.25
C4	REISSUED FOR CC2	25.02.25
C5	MSB ROOM UPDATE	03.03.25
C6	REISSUED FOR CC2	05.03.25
C7	GENERAL UPDATES	07.05.25
C8	ISSUED FOR CC3	22.07.25
C9	UPDATED FOR CC3	30.07.25
C10	PEDESTRIAN PATH UPDATE	01.09.25
C11	DRIVEWAY AMENDMENTS	12.09.25
C12	FENCING AMENDMENTS	16.09.25
C13	SITE PLAN UPDATED	21.11.25
C14	PARKING UPDATE	19.01.26
C15	METALWORKS, ELECTRICAL CUPBOARDS, DIMENSIONS & DOOR SCHEDULE UPDATES	22.01.26

DO NOT SCALE THIS DRAWING. VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK. COPYRIGHT © THIS DRAWING REMAINS THE PROPERTY OF PACEARCHITECTS. REPRODUCTION IN WHOLE OR PART IS FORBIDDEN.

NOTE: THE LOCATION OF PROPERTY AUGNMENTS IS DETERMINED FROM SURVEY INFORMATION PROVIDED BY SURVEYOR.

FOR CONSTRUCTION

CLIENT: Hale

BUILDER / PROJECT MANAGER: VAUGHAN CONSTRUCTIONS

ARCHITECT: PACE ARCHITECTS

PROJECT: MULTI-LEVEL WAREHOUSES

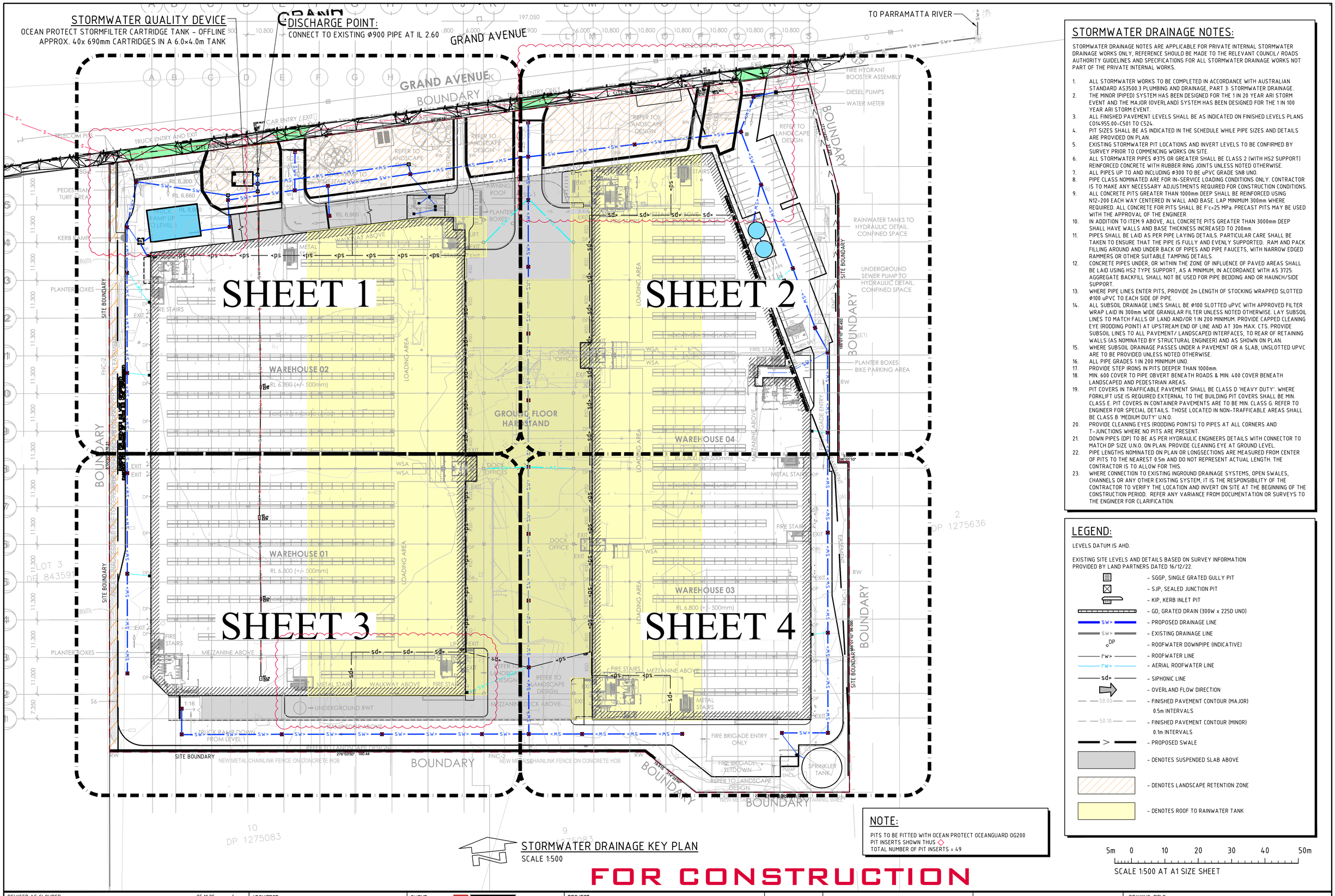
ADDRESS: 6 GRAND AVENUE, ROSEHILL NSW 2142

DRAWING TITLE: SITE PLAN

PURPOSE: FOR CONSTRUCTION

GRAPHIC SCALE: 1:400

SCALE	As indicated	B1
PROJECT NO	24432	
DATE	22.01.26	
DWN	DWG NO	ISSUE
SP	24432 - A-100	C15



STORMWATER DRAINAGE KEY PLAN
SCALE 1:500

STORMWATER DRAINAGE NOTES:

STORMWATER DRAINAGE NOTES ARE APPLICABLE FOR PRIVATE INTERNAL STORMWATER DRAINAGE WORKS ONLY, REFERENCE SHOULD BE MADE TO THE RELEVANT COUNCIL/ ROADS AUTHORITY GUIDELINES AND SPECIFICATIONS FOR ALL STORMWATER DRAINAGE WORKS NOT PART OF THE PRIVATE INTERNAL WORKS.

1. ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
2. THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
3. ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS C014955.00-C501 TO C524.
4. PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
5. EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
6. ALL STORMWATER PIPES Φ375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
7. ALL PIPES UP TO AND INCLUDING Φ300 TO BE uPVC GRADE SN8 UNO.
8. PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
9. ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F'c=25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
10. IN ADDITION TO ITEM 9 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
11. PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
12. CONCRETE PIPES UNDER, OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM, IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE SUPPORT.
13. WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Φ100 uPVC TO EACH SIDE OF PIPE.
14. ALL SUBSOIL DRAINAGE LINES SHALL BE Φ100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/ LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
15. WHERE SUBSOIL DRAINAGE PASSES UNDER A PAVEMENT OR A SLAB, UNSLOTTED UPVC ARE TO BE PROVIDED UNLESS NOTED OTHERWISE.
16. ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
17. PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
18. MIN. 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
19. PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY'. WHERE FORKLIFT USE IS REQUIRED EXTERNAL TO THE BUILDING PIT COVERS SHALL BE MIN. CLASS E. PIT COVERS IN CONTAINER PAVEMENTS ARE TO BE MIN. CLASS G. REFER TO ENGINEER FOR SPECIAL DETAILS. THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' U.N.O.
20. PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
21. DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE U.N.O. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
22. PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.
23. WHERE CONNECTION TO EXISTING INGROUND DRAINAGE SYSTEMS, OPEN SWALES, CHANNELS OR ANY OTHER EXISTING SYSTEM, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND INVERT ON SITE AT THE BEGINNING OF THE CONSTRUCTION PERIOD. REFER ANY VARIANCE FROM DOCUMENTATION OR SURVEYS TO THE ENGINEER FOR CLARIFICATION.

LEGEND:

LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS DATED 16/12/22.

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- GD, GRATED DRAIN (300W x 225D UNO)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- AERIAL ROOFWATER LINE
- SIPHONIC LINE
- OVERLAND FLOW DIRECTION
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS
- PROPOSED SWALE
- DENOTES SUSPENDED SLAB ABOVE
- DENOTES LANDSCAPE RETENTION ZONE
- DENOTES ROOF TO RAINWATER TANK

NOTE:

PITS TO BE FITTED WITH OCEAN PROTECT OCEANGUARD OG200
PIT INSERTS SHOWN THUS ◇
TOTAL NUMBER OF PIT INSERTS = 49

5m 0 10 20 30 40 50m
SCALE 1:500 AT A1 SIZE SHEET

FOR CONSTRUCTION

AMENDMENTS	DATE	ISSUE
REVISED AS CLOUDED	25.11.25	6
REVISED AS CLOUDED	14.11.25	5
REVISED AS CLOUDED	12.11.25	4
ISSUED FOR CONSTRUCTION	30.10.25	3
ISSUED FOR CONSTRUCTION	11.02.25	2
ISSUED FOR CONSTRUCTION	16.12.24	1

ARCHITECT: PACE ARCHITECTS
CLIENT: VAUGHAN CONSTRUCTIONS

PROJECT
PROPOSED DEVELOPMENT
6 GRAND AVE
ROSEHILL, NSW, 2142

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
NZ	JB	AUG '24	DS	A1	AS SHOWN	C014955.01-C400

CONSULT AUSTRALIA

Costin Roe Consulting Pty Ltd.
ABN 50 003 696 446
PO Box N419 Sydney NSW 1220
Level 4, 8 Windmill Street, Millers Point NSW 2000
p: +61 2 9251 7699 f: +61 2 9241 3731
e: mail@costinroe.com.au w: costinroe.com.au
COSTIN ROE CONSULTING | CIVIL & STRUCTURAL ENGINEERS

DRAWING TITLE
STORMWATER DRAINAGE KEY PLAN

DRAWING No C014955.01-C400
ISSUE 6

Appendix C
Correspondence

From: Lorenzo Lun
To: Rowena Salmon
Cc: alana.garrick@halecp.com; Charles Humphries; Niamh Gale; Xanthe Holford; Angela Ruthenberg
Subject: FW: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement
Date: Monday, 3 August 2026 3:39:13 PM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image008.jpg

Hi Rowena,

I managed to speak to Shaun from Parramatta Council and similar to you he was surprised with the condition.

That being said, he advised that they can list the LTEMP on the section 10.7 once we issue it to them. Noting that the LTEMP has been endorsed by a qualified Site Auditor, I asked what level of review will their Enviro team be conducting, he confirmed which is also per below, it is to ensure they apply the correct Environmental Management Plan notation so that it comes up when they do the section 10.7 search.

He advised it would be a 1 to 2 week exercise.

Regards

Lorenzo Lun

Mob: +61 416 151 202
Email: llun@archile.com.au
Web: www.archile.com.au

This message contains confidential information and is intended only for the intended recipients. If you are not an intended recipient you should not disseminate, distribute or copy this e-mail. Please notify us immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Therefore we do not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

From: Shaun Hehir <SHehir@cityofparramatta.nsw.gov.au>
Sent: Monday, 3 August 2026 3:22 PM
To: Lorenzo Lun <llun@archile.com.au>
Subject: RE: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement

Dear Lorenzo Lun

Thankyou for your email.

This is an unusual request as Environmental Management Plans are not one of the items listed to be included in the 10.7(2) Certificate under Schedule 2 of the Environmental Planning and

Assessment Regulation 2021 or under Section 59 of the Contaminated Land Management Act 1997.

We do provide limited information in the 10.7(5) portion of a 10.7(2) and (5) Certificate relating to Environmental Management Plans. The wording we include is as follows:

"Environmental Management Plan
The site the subject of this certificate is subject to an Environmental Management Plan (EMP) detailing the appropriate management of contamination present within soils at the site. A copy of this plan can be obtained by making an information access application with Council."

Can you please provide the Remedial Action Plan (RAP) and Long Term Environmental Plan (LTEMP) for Councils records. Once we have received these documents they will need to be reviewed by our environmental health department before applying our Environmental Management Plan notation.

After our environmental health department reviewed the documents and provided their advice to my team you will need to order a 10.7(2) and (5) Certificate from Council and pay the appropriate Certificate Fee.

Regards

Shaun Hehir

Shaun Hehir
Senior Planning Certification Officer | Development & Traffic Services
02 9806 5519

City of Parramatta
9 Wentworth Street, Parramatta NSW 2150 Australia
PO Box 32, Parramatta, NSW 2124
cityofparramatta.nsw.gov.au



Outlook-signature-copc_.png



Council acknowledges the Traditional Owners of the land, the Dharug Peoples and pays respect to their Elders past and present.

From: Lorenzo Lun <llun@archile.com.au>
Sent: Monday, 3 August 2026 2:14 PM
To: Shaun Hehir <SHehir@cityofparramatta.nsw.gov.au>
Cc: alana.garrick@halecp.com; Charles Humphries <charles.humphries@halecp.com>; Niamh Gale <ngale@archile.com.au>; Alice Ng <ang1@cityofparramatta.nsw.gov.au>; Claire Stephens <CStephens@cityofparramatta.nsw.gov.au>
Subject: RE: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement

***[EXTERNAL EMAIL] Stop and think before opening attachments, clicking on links or responding. ***

Hi Shaun,

Per email below, Clarie from your office provided me your details in relation to my query on our development at 6 Grand Ave, Rosehill Planning under SSDA-55522478.

Per our SSDA Consent Conditions, following the completion of the remediation works under our approved Remedial Action Plan (RAP) and completion of a Long Term Environmental Plan (LTEMP) which is signed off by a Site Auditor, we are required to lodge the LTEMP with Parramatta City Council so it is listed under section 10.7 Planning Certificate.

Are you able to assist with arranging this and outlining what process is required. Appreciate any assistance you can provide.



Regards

Lorenzo Lun



Mob: +61 416 151 202
Email: llun@archile.com.au
Web: www.archile.com.au

This message contains confidential information and is intended only for the intended recipients. If you are not an intended recipient you should not disseminate, distribute or copy this e-mail. Please notify us immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Therefore we do not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

From: Claire Stephens <CStephens@cityofparramatta.nsw.gov.au>
Sent: Wednesday, 29 July 2026 11:52 AM
To: Lorenzo Lun <llun@archile.com.au>
Cc: alana.garrick@halecp.com; Charles Humphries <charles.humphries@halecp.com>; Niamh Gale <ngale@archile.com.au>; Alice Ng <ang1@cityofparramatta.nsw.gov.au>; Shaun Hehir

<SHehir@cityofparramatta.nsw.gov.au>
Subject: Fw: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement

Good Morning Lorenzo

Thanks for your email. The Senior Planning Certification Officer returns from leave on Monday 3 August 2026, and he is best placed to deal with your enquiry and how his can be achieved.

I have included him and his Planning Certificate Officer on this reply so that is drawn to their attention to respond to asap next week.

Claire Stephens (she/her)
Development Assessment Manager | Development Assessment

City of Parramatta
9 Wentworth Street, Parramatta NSW 2150 Australia
PO Box 32, Parramatta, NSW 2124

cityofparramatta.nsw.gov.au

Outlook-signature-copc_.png

Council acknowledges the Traditional Owners of the land, the Dharug Peoples and pays respect to their Elders past and present.

From: Planning Certificates <Planning.Certificates@cityofparramatta.nsw.gov.au>
Sent: Wednesday, July 29, 2026 11:45 AM
To: Claire Stephens <CStephens@cityofparramatta.nsw.gov.au>
Subject: FW: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement

FYI

From: Lorenzo Lun <llun@archile.com.au>
Sent: Wednesday, 29 July 2026 11:25 AM
To: Planning Certificates <Planning.Certificates@cityofparramatta.nsw.gov.au>
Cc: alana.garrick@halecp.com; Charles Humphries <charles.humphries@halecp.com>; Niamh Gale <ngale@archile.com.au>
Subject: Section 10.7: 6 Grand Ave, Rosehill Planning SSDA-55522478 Consent Requirement

***[EXTERNAL EMAIL] Stop and think before opening attachments, clicking on links or responding. ***

Dear Sir/ Madam,

I am the Project Manager for Hale Capital who is the owner of 6 Grand Ave, Rosehill. We are near completion of the warehouse development that was approved under SSDA-55522478 which is under Parramatta City Council.

Per our SSDA Consent Conditions, following completion of the remediation works under our approved Remedial Action Plan (RAP) and completion of a Long Term Environmental Plan (LTEMP) which is signed off by a Site Auditor, we are required to lodge the LTEMP with Parramatta City Council so it is listed under section 10.7 Planning Certificate.

Can someone from your office please contact me and assist in arranging this? My contact details below.



Regards

Lorenzo Lun



Mob: +61 416 151 202
Email: llun@archile.com.au
Web: www.archile.com.au

This message contains confidential information and is intended only for the intended recipients. If you are not an intended recipient you should not disseminate, distribute or copy this e-mail. Please notify us immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. Therefore we do not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by Mimecast, a leader in email security and cyber resilience. Mimecast integrates email defenses with brand protection, security awareness training, web security, compliance and other essential capabilities. Mimecast helps protect large and small organizations from malicious activity, human error and technology failure; and to lead the movement toward building a more resilient world. To find out more, visit our website.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by Mimecast, a leader in email security and cyber resilience. Mimecast integrates email defenses with brand protection, security awareness training, web security, compliance and other essential capabilities. Mimecast helps protect large and small organizations from malicious activity, human error and technology failure; and to lead the movement toward building a more resilient world. To find out more, visit our website.

Appendix D
Auditor Comments and Consultant Responses for Validation Report and LTEMP

From:	Rowena Salmon
To:	"Lorenzo Lun"
Cc:	Alana Garrick; Charles Humphries; Xanthe Holford; Angela Ruthenberg
Date:	Friday, 8 May 2026 3:12:46 PM
Attachments:	image003.png image004.png image005.jpg

Hi Lorenzo,

Following review of the submitted Interim Site Validation Report dated 17 April 2026, it is considered that the report is not currently at an acceptable standard for technical or audit purposes.

It is understood the document was prepared as an "Interim" report, however, it contains significant gaps, inconsistencies/errors, and a lack of supporting detail. Therefore, as the report requires substantial revision prior to further technical assessment a comprehensive detailed review has not been undertaken.

To progress the Validation Report to an acceptable standard, the report should be subject to a detailed internal technical peer review prior to re-submission. This review should ensure:

- Consistency with the Remedial Action Plan, Site Audit Report (SAR), and associated supporting documentation.
- Completeness of data presentation.
- Clarity in methodology, validation approach, and conclusions.

The SAR (Audit RS-117B) dated 14 November 2024 documented the Auditor's review of the RAP. The SAR has established the regulatory and technical basis for the remedial works, and presents the Auditor's approval of the RAP subject to a number of compliance conditions. Please ensure consistency with Auditor expectations and previously identified risks.

The report must incorporate and clearly document all aspects of site works, including:

- Relevant addenda or methodologies (e.g. SE 2023 documentation)
- The unexpected finds and their management, including the Underground Storage Tanks (USTs) and associated infrastructure remedial works and associated validation activities (including validation results tables).
- Clear documentation of the origin/source of the material that was disposed of off-site (including excavation extents).
- All relevant details if, following completion of the buildings, any excavation spoil has been reused in proposed landscaping areas.
- VENM source details, and placement areas.

These elements should be fully described, assessed, and integrated into the validation framework rather than introduced inconsistently or late in the report.

A number of inconsistencies have been identified in the remediation /validation approach when compared with the requirements presented in the RAP and/or supporting documentation. For example:

- The Auditor notes Site Photograph 8.1 shows the service trench within the building footprint (i.e. not "outside the designated capping layers and containment cell areas". The validation report is required to describe how the marker layer interacts with other capping layers, especially in areas of service trenches.
- The Methodology – VOCs / VCHs in Piling Soil (dated 8 January 2025) indicated a vapour sample would be collected from a soil vapour probe for piles with PID VOC reading greater than 10 ppm, however headspace-in-vial analysis was adopted. These types of deviations (from the agreed approach) are required to be discussed in the Validation Report.

The report must include clear and complete survey information. The validation report will need to document the surveyed level and extent of the visual marker layer and the surveyed level of the final finished surface level and include details of the nature of material used below and above the marker layer.

Survey data should:

- Be presented clearly (e.g. figures, plans, appendices).
- Demonstrate compliance with RAP requirements.
- Allow verification of capping thickness and placement.
- Identify the areas where the marker layer has been placed or where the existing

pavement has comprised the marker layer.
- Identify marker layer placement in the service trenches.

The Validation Report is required to present a clear description of residual conditions. The report must clearly describe:

- What contamination remains on-site
- Where it is located (spatially and vertically), consider defined extent of containment areas relative to site features and future use
- How it has been managed (e.g. containment cells, beneath slabs, capped areas).

The Environmental Management Plan (EMP) should:

- Clearly identify all areas requiring management
- Reflect different capping systems across the site
- Include clear mapping (e.g. shaded/zoned areas) to show:
    - Containment areas
    - Capping extents and types
    - Areas of residual risk
    - Service and trench alignments across the site
    - How these interact with the capping system
    - The specific capping and marker layer arrangements within these areas including cross-sections or schematics
    - Clear explanation of how integrity of the cap is maintained
- The EMP is required to present the capping layer levels, and describe the process to allow for the capping layer to be restored if necessary.
- The EMP should clearly identify the requirement for an Asbestos Management Plan, and describe how the AMP and EMP interact (i.e. which document is the primary document, and which is the subordinate document).

It is understood that ASSMP, CEMP and AMP including OH&S aspects were prepared, in accordance with the recommendations presented in the RAP and the conditions presented in the SAR. For completeness, these aspects should be discussed/mentioned in the Validation Report.

A substantially revised version, addressing the issues outlined above and supported by appropriate documentation, is required prior to further detailed review.

Please call me to discuss if required.

Kind regards
Rowena Salmon

Principal and NSW EPA Accredited Site Auditor

D +61 2 9954 8100
M +61 412 834 360
rsalmon@ramboll.com

Ramboll Australia Pty Ltd.
ACN 095 437 442
ABN 49 095 437 442

From: Lorenzo Lun <llun@archile.com.au>
Sent: Monday, April 20, 2026 9:31 AM
To: Rowena Salmon <rsalmon@ramboll.com>
Cc: Alana Garrick <alana.garrick@halecp.com>; Charles Humphries <charles.humphries@halecp.com>
Subject: Draft Validation Report and LTEMP Report

Hi Rowena,

From:	Rowena Salmon
To:	"Lorenzo Lun"
Cc:	Alana Garrick; Charles Humphries; Xanthe Holford; Angela Ruthenberg; Niamh Gale
Date:	Monday, 29 June 2026 3:25:52 PM
Attachments:	image001.jpg image002.png image003.png image004.png

---

Hi Lorenzo,

Thanks for providing the following revised reports:

- "Interim Site Validation Report" dated 2 June 2026, Ref 2582-SVR-01-020626.v1d (**ISVR**)
- "Long-Term Environmental Management Plan" dated 2 June 2026, Ref 2582-LTEMP-01-020626.v1d (**LTEMP**).

Comments on each document are provided below.

Following review of the second version of the **ISVR**, it is considered that the report requires further review and inclusion of key details as significant gaps, inconsistencies/errors, and a lack of supporting detail remain.

It is understood a number of the remedial works tasks are yet to be completed, and are therefore not captured in the ISVR including: the completion of works at the landscaped areas located at the northern and eastern site boundaries; survey data showing the finished capping levels and finalisation of the LTEMP. In addition to these identified gaps, it is noted that previous comments have not been considered as expected. Please **review the former commentary**, in addition to the following specific comments:

1. Executive Summary: Typographical error, missing text: *"in the RAP (give reference) [or from a review of available reports]".*
2. The Site Audit Report (SAR) noted that *"The RAP provides adequate guidance for preparation of the Landscape Area Capping Plan. If completed in accordance with the guidance, the Landscape Area Capping Plan would not require separate review by the Auditor."* Please include the Landscape Area Capping Plan in the Validation Report.
3. *Table 3.1 notes the "ASSMP has been prepared for the site".* Please reference the ASSMP that has been prepared in accordance with the recommendations presented in the RAP and the conditions presented in the SAR.
4. Table 3.1 presents the regional setting information. The Auditor notes the following inconsistencies/errors:
    a. It is unclear why groundwater flow is considered likely to flow towards the southwest. Groundwater flow at the site has previously been identified to flow to the east and northeast towards the Parramatta River (located 150 m north of the site).
    b. Reference to the Bureau of Meteorology Groundwater Dependent Ecosystem Map (Atlas) to determine the closest sensitive ecological receptor (identified as *"Georges River, located approximately 10.61 km southwest of the site")* is not appropriate. The Auditor would consider the nearest sensitive ecological receptor to be the Parramatta River approximately 150 m to the north.
    c. Last sentence states *"The closest sensitive human receptors are the residential properties surrounding the site's boundary and any future onsite construction workers"*. The site is located in a highly industrialised area and the Auditor is not aware of any adjacent residential properties.
5. Section 3.3: The ISVR references the incorrect version of *the "Methodology for VOC / VHC in Piling Spoil".* The Auditor notes the document was updated on the 8 January 2025. Please reference here and update Section 3.3.4, please update to reflect the January 2025 document.
6. Section 3.3: Please include reference to the letters reporting on the agreed UST validation procedure (LTR-01 vf4) and validation completed (LTR-02 v2f).
7. Section 3.3.3 identifies a number of recommendations that were presented in the RAP. The ISVR should discuss if these recommendations were addressed e.g. preparation of the CEMP, AMP, and ASSMP.
8. Section 5.4 the interim site validation report should reference the RAP in preference to older site investigation reports (e.g. JBS&G, 2022).
9. Section 7 references Table 3 of the 2009 version of the Western Australian (WA) Department of Health (DoH) *'Guidelines for the assessment, remediation and management of asbestos contaminated sites'. It is noted this guideline was updated in 2021 and Table 3 of the 2009 version does not appear to present assessment criteria. Please update the reference as appropriate.*
10. Section 11.4:
    a. Field screening method should reference the agreed methodology (2025).

b. *One calibration certificate dated 14 January 2025 has been provided for the PID. Please provide all calibration certificates or daily bump test results, which correspond to all sampling dates (e.g. piling activities).*
c. The calibration certificate provided shows the lamp was a 10.6 eV lamp, however the ISVR notes the requirement of a 11.7 eV lamp which is discussed in Section 9.1.2.1 and Section 11.4. Please discuss the significance of this deviation from the RAP, in consideration that the PID was used to screen for potential chlorinated hydrocarbons in piling spoil material.

11. Section 9.1.2.1. Please confirm if PILE01 and PILE20 were covered in plastic as per the methodology document.
12. Section 9.1.2.2. Please confirm the criteria used to assess the presence of acid sulfate soils.
13. Section 9.1.3 and Section 9.1.5. Please clearly identify the source, material description, assessment undertaken and results (i.e. results tables), and volume of site won validated "VENM" that was used as capping or to backfill service trenches. Results should be discussed in Section 12. Reference as VENM is not appropriate as discussed in the RAP (Section 5.5 "Due to potential for remnant, localised areas of impact in deeper soils, material at depth including clay would not be considered VENM and will not be suitable for reuse at the site unless validated or placed under the marker layer for ongoing management. Where excavated soil/piling returns are observed to be stained or odourous, these soils will be segregated and inspected via PID and/or analytical results to confirm suitability for onsite reuse). Reference as site won clay would be more appropriate than VENM.
14. Section 9.1.3.1 states *"Trenching works were extended into the underlying subsurface soils prior to marker layer installation and capping."* It is noted Site Photograph 9.1.8.8 taken on the 15 January 2026 shows trenching works were undertaken following the placement of the marker layer which was completed in June 2025 (as shown on subsequent photos). The caption to the photo states *"This trench is outside the containment cell footprint"*. As previously requested, the arrangement of the marker layer and capping layers (including the location of trenches lined with marker layer is required to be shown in the ISVR.
15. Table 10.1:
    a. Typographical error, missing/incomplete text: *"Samples were collected and"*
    b. Please present the total number of each type of sample collected from the UST excavation e.g. 1 base sample, 4 x wall samples, etc.
    c. Please clarify if "Site-won excavated material" is natural or fill material and reuse location. Include details of volume and sampling density. Focus on asbestos analysis suggests fill. Please also include details for site won clay testing.
16. Table 10.1 shows the types and number of samples analysed, and it is expected that the total samples analysed are presented in results tables. The Auditor is unable to cross check the results tables presented in the "Tables" (LAR1 and LAR2) with Table 10.1. Section 12.1 should also cross-reference where the results can be observed.
17. Section 12:
    a. Include discussion of results for site won clay reuse.
    b. Section 12.6, include reference to results tables in all subsections.
18. Section 12.1.1, *PID readings from the piling spoil (including dates and sample descriptions) should be presented in tabulated form or by reference to supporting field documentation.* The Auditor notes the PID results shown on the piling spoil sent for analysis (noted to have a PID reading of 0.4 ppm) was not consistent with the PID results presented in Section 12.1.1 (where the PID reading was reported to be 280 and 207 ppm). Please provide a discussion regarding the cause and significance of the observed inconsistency.
19. Section 12.1.2, include cross-reference to sample results.
20. Section 12.2, include reference to the agreed methodology document and a reference to the Appendix where the detailed validation report is presented.
21. Section 12.2.1 the validation methodology for the UST should describe the depth of the excavation.
22. Section 12.2.3, please confirm the location of UST spoil reuse, and whether this was placed below marker layer.
23. Section 8.1, Section 8.2 and Section 13 are required to include consideration of the QA/QC approach and results undertaken as part of the UST removal and validation. It is noted in December 2025 EGA proposed to "*include the DQO and QA/QC in the site validation report*".
24. Section 12.4 Please provide waste classification information, which is also expected to include a description of the waste generated, source, volume etc. This section should not include waste disposal from demolition, only waste from inground works (soil).
25. Table 12.6.1 is required to: identify if the material is VENM, ENM or resource recovery material; provide a summary of documentation reviewed by EGA prior to importation; identify/confirm the number of samples collected from each source by EGA; identify / confirm

the analysis undertaken. Classification documentation should be presented in a manner that allows clear reference and review. Documentation from suppliers demonstrating sampling in accordance with any RRO is required (where relevant).

26. In relation to imported material, the RAP required, in summary, at the time of arrival, the imported material shall be tracked and inspected (and recorded) including amongst other things, confirmation that each load of the material is free from visual and olfactory indicators of contamination including anthropogenic inclusions and/or construction waste; and confirmation that the material is consistent with expectations based on the source site (detailed in RAP Section 7.5). This information was required to be recorded for inclusion in the final validation report. The ISVR is required to demonstrate and document this process and include the materials tracking register. Please include this information in Section 12.6.
27. Section 12.6.1. Please detail what material was imported to site and then sent back. Do any of the sample results in the summary tables correspond to returned material (e.g. IM-RED-01 to 03)?
28. Section 13.1, last sentence is redundant.
29. Section 14, include a conclusion regarding site-won clay reuse.
30. The figures are required to show additional details such as: the location of service trenches where the depth to the marker layer is different to the general site capping; the different capping approaches across the site (e.g. geofab marker layer vs concrete hard surface).
31. It is unclear what data "LAR1 - Chemical Laboratory Summary Table" is presenting. The tables listing in the Table of Contents indicates Imported Material Chemical Characterisation. Please clarify/correct. Please include an additional column listing what material/source each sample represents.
32. Please correct the formatting of the tables, so they may be read if printed, especially for page 65 and 66 of the pdf file. It is noted page 66 does not present the chemicals analysed.
33. It is unclear what data "LAR2 - Asbestos Laboratory Summary Table" is presenting. The tables listing in the Table of Contents (ToC) indicates Imported Material Asbestos, however, it appears multiple types of sample results are included, not just imported material. Please clarify the title at the table and in the ToC and include an additional column listing what material/source each sample represents.
34. Please ensure reference to the tables is made in the appropriate discussion sections.
35. IM-RED01 to 03 had asbestos impacts, what does this material represent and where was it placed?
36. A number of samples presented in the "LAR2 - Asbestos Laboratory Summary Table" are described to include foreign material e.g. IMP06-03 had "Beige coarse-grained soil, glass, brick, cement, vinyl-tile fragments, bitumen and rocks". What is this material and where was it placed?
37. Please present the ASS results in a table.

Overall, the **LTEMP** presents conflicting statements and figures that describe asbestos impacts at the site. Please update all statements and figures to show that the LTEMP is applicable to the site in its entirety. The different capping approaches should be clearly identified and described.

Per the previous Auditor comments, the LTEMP should:

- Clearly identify all areas requiring management
- Reflect different capping systems across the site
- Include clear mapping (e.g. shaded/zoned areas) to show:
    - Containment areas
    - Capping extents and types
    - Areas of residual risk
    - Service and trench alignments across the site
    - How these interact with the capping system
    - The specific capping and marker layer arrangements within these areas including cross-sections or schematics
    - Clear explanation of how integrity of the cap is maintained
- The EMP is required to present the capping layer levels, and describe the process to allow for the capping layer to be restored if necessary.

Specific comments on the current version of the LTEMP are as follows:

1. Section 1.3: the LTEMP should be informed by the validation report.
2. Table 1.6.2: notes the site owner to be the city of Paramatta Council. Please confirm.
3. Table 1.6.2: notes the responsibility of "ESR". Please clarify who/what this is referring to.
   Table 1.6.2: notes the requirement for the site auditor to "issue a SAS". It is noted the LTEMP

4. informs the SAS/SAR. The SAS/SAR will not be prepared until the completion of site works (i.e Section 4.9 is incorrect when it states *"A mandatory revision of this LTEMP must be undertaken immediately following the completion of Containment Cell 3, and the finalisation of the ISVR amendment."* The LTEMP will be finalised only when all works are completed.
5. The LTEMP is required to describe how the capping layer is required to be re-instated if breached.

Please provide the updated ISVR and LTEMP in a tracked changes format to facilitate the review process, in addition to the provision of a response to each of the Auditor comments detailed above.

Please call me to discuss if required.

Kind regards
Rowena Salmon

Principal and NSW EPA Accredited Site Auditor

D +61 2 9954 8100
M +61 412 834 360
rsalmon@ramboll.com

Ramboll Australia Pty Ltd.
ACN 095 437 442
ABN 49 095 437 442

From: Lorenzo Lun <llun@archile.com.au>
Sent: Tuesday, June 9, 2026 3:13 PM
To: Rowena Salmon <rsalmon@ramboll.com>
Cc: Alana Garrick <alana.garrick@halecp.com>; Charles Humphries <charles.humphries@halecp.com>; Xanthe Holford <xholford@ramboll.com>; Angela Ruthenberg <ARUTHENBERG@ramboll.com>; Niamh Gale <ngale@archile.com.au>
Subject: RE: Draft Validation Report and LTEMP Report

Hi Rowena,

Hope you are well.

Please find link to the Site Validation Report and the LTEMP (which has been reviewed by Adrain), ahead of the final surveys to be taken upon completion of the landscape works.

Can you please review and provide comments. Once you have had a quick look, could you confirm the timing on when you will have comments back?

https://www.dropbox.com/scl/fo/v21hghpqkd0r3qsose5z8/AAS6EFAjvxFibWN_UPdZQ7o?rlkey=d1kddoo1w78tip64e19i7liu2&dl=0

Regards
Lorenzo Lun

Mob: +61 416 151 202
Email: llun@archile.com.au
Web: www.archile.com.au

This message contains confidential information and is intended only for the intended recipients. If you are not an intended recipient you should not disseminate, distribute or copy this e-mail. Please notify us

Interim Site Validation Report (ISVR) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 2

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	New Report Section	Consultant Response / Action Taken
1	Executive Summary	Typographical error, missing text: "in the RAP (give reference) [or from a review of available reports]".		Amended.
2	General / Landscape Capping	The Site Audit Report (SAR) noted that "The RAP provides adequate guidance for preparation of the Landscape Area Capping Plan. If completed in accordance with the guidance, the Landscape Area Capping Plan would not require separate review by the Auditor." Please include the Landscape Area Capping Plan in the Validation Report.		Landscape Area Capping Plan added to Section 12.9 and Appendix J.
3	Table 3.1	Table 3.1 notes the "ASSMP has been prepared for the site". Please reference the ASSMP that has been prepared in accordance with the recommendations presented in the RAP and the conditions presented in the SAR.		Table 3.1 updated to: "An Acid Sulfate Soil Management Plan (ASSMP) for the site was prepared by JBS&G (2023a) which outlined that assessment for potential acid sulfate soils was required in any areas of proposed ground disturbance within the site due to the potential for acid sulfate soils to be present within the site". Note: EGA were provided with SAR: 'Audit RS-117B' (12 November 2024) - ASSMP was not reviewed in this version, RAP conclusions state "An [acid sulfate soil management plan] ASSMP is to be developed to manage identified PASS/ASS during construction/excavation activities"
4a	Table 3.1 (Regional Setting)	It is unclear why groundwater flow is considered likely to flow towards the southwest. Groundwater flow at the site has previously been identified to flow to the east and northeast towards the Parramatta River (located 150 m north of the site).		Amended GW flow to northeast.
4b	Table 3.1 (Regional Setting)	Reference to the Bureau of Meteorology Groundwater Dependent Ecosystem Map (Atlas) to determine the closest sensitive ecological receptor (identified as "Georges River, located approximately 10.61 km southwest of the site") is not appropriate. The Auditor would consider the nearest sensitive ecological receptor to be the Parramatta River approximately 150 m to the north.		As Parramatta River is considered a disturbed ecosystem, it is not recognised by BoM GDE. Table 3.1 (Adjacent Sensitive Receptors) updated to include: "The closest ecological receptors to the site include vegetated areas within the site / neighbouring properties and the closest receiving watercourses are as outlined above"
4c	Table 3.1 (Regional Setting)	Last sentence states "The closest sensitive human receptors are the residential properties surrounding the site's boundary and any future onsite construction workers". The site is located in a highly industrialised area and the Auditor is not aware of any adjacent residential properties.		Amended to reflect surrounding setting: "The closest sensitive human receptors originate from the industiral properties surrounding the site's boundary and any future onsite construction workers.".
5	Section 3.3	The ISVR references the incorrect version of the "Methodology for VOC/VHC in Piling Spoil". The Auditor notes the document was updated on the 8 January 2025. Please reference here and update Section 3.3.4 to reflect the January 2025 document.		Updated "Methodology for VOC/VHC in Piling Spoil" in Section 3.3.
6	Section 3.3	Please include reference to the letters reporting on the agreed UST validation procedure (LTR-01 vf4) and validation completed (LTR-02 v2f).		Section 3.3.5 updated to the 2025 "Methodology for VOC/VHC in Piling Spoil" document.
7	Section 3.3.3	Identifies a number of recommendations that were presented in the RAP. The ISVR should discuss if these recommendations were addressed e.g. preparation of the CEMP, AMP, and ASSMP.		Section 3.4 added to note EMP documents relevant to the site, that were available for EGA review. Further commentary to the site's previous assessments are outlined in Section 4.1.
8	Section 5.4	The interim site validation report should reference the RAP in preference to older site investigation reports (e.g. JBS&G, 2022).		Removed notes about previous report findings triggering JBS&G 2022 report. Section 5.4 now states: "JBS&G (2022) did not identify any previously reported chlorinated hydrocarbon contamination to groundwater or soil vapour. Potential residual chlorinated hydrocarbon impacts were suspected to be highly localised and remediated due to the remediation of adjacent sites. "
9	Section 7	References Table 3 of the 2009 version of the Western Australian (WA) Department of Health (DoH) 'Guidelines for the assessment, remediation and management of asbestos contaminated sites'. It is noted this guideline was updated in 2021 and Table 3 of the 2009 version does not appear to present assessment criteria. Please update the reference as appropriate.		Updated reference to 2021 WA DoH, Table 3. Criteria also outlined within Table 7.3.
10a	Section 11.4	Field screening method should reference the agreed methodology (2025).		Section 11.4 updated.
10b	Section 11.4	One calibration certificate dated 14 January 2025 has been provided for the PID. Please provide all calibration certificates or daily bump test results, which correspond to all sampling dates (e.g. piling activities).		Incorrect attached document. 11.7 eV (8 January 2025 to 8 July 2025) and 10.6 eV (dated 19 November 2024-18 December 2025, used until 8 January per Appendix I) calibration certificates attached (Appendix G).
10c	Section 11.4	The calibration certificate provided shows the lamp was a 10.6 eV lamp, however the ISVR notes the requirement of a 11.7 eV lamp which is discussed in Section 9.1.2.1 and Section 11.4. Please discuss the significance of this deviation from the RAP, in consideration that the PID was used to screen for potential chlorinated hydrocarbons in piling spoil material.		As above. Updated 11.7 eV lamp calibration certificate now attached (Appendix G).
11	Section 9.1.2.1	Please confirm if PILE01 and PILE20 were covered in plastic as per the methodology document.	9.2.2	Updated Section 9.1.3 to state "After testing, the stockpile comprising 'PILE01' and 'PILE20' was covered in black plastic per SE (2024)".
12	Section 9.1.2.2	Please confirm the criteria used to assess the presence of acid sulfate soils.	9.2.2	Section 9.1.4 states "spoil materials generated from piling works were subject to sampling for potential acid sulfate soils, per JBS&G 2023a. Assessment and validation of the spoil materials is discussed within Section 10".
13	Section 9.1.3 & 9.1.5	Please clearly identify the source, material description, assessment undertaken and results (i.e. results tables), and volume of site won validated "VENM" that was used as capping or to backfill service trenches. Results should be discussed in Section 12. Reference as VENM is not appropriate as discussed in the RAP (Section 5.5). Reference as site won clay would be more appropriate than VENM.	9.6	Section 9.6 changed to state "site-won materials" instead of "site-won ENM", clay material description added, volumes already noted. Section updated to clearly state source location of clay. Section 12.3 (Site-won Excavated Clay Validated for Re-Use) added.
14	Section 9.1.3.1	States "Trenching works were extended into the underlying subsurface soils prior to marker layer installation and capping." It is noted Site Photograph 9.1.8.8 taken on the 15 January 2026 shows trenching works were undertaken following the placement of the marker layer which was completed in June 2025. The caption to the photo states "This trench is outside the containment cell footprint". As previously requested, the arrangement of the marker layer and capping layers (including the location of trenches lined with marker layer) is required to be shown in the ISVR.	9.3	Site Photograph 9.1.8.8 (renamed Site Photograph 9.3.1) shows a trench cut into previously imported and clean materials, and is within the breezeway between the elevated containment cells constructed following piling. Section 9.1.6 (renamed 9.3) updated to accurately reflect site works. Attachment F outlines locations of the trenches & areas with geofabric marker layers.

15a	Table 10.1	Typographical error, missing/incomplete text: "Samples were collected and"		Removed from table
15b	Table 10.1	Please present the total number of each type of sample collected from the UST excavation e.g. 1 base sample, 4 x wall samples, etc.		Table 10.1 updated to better clarify all samples taken across the site.
15c	Table 10.1	Please clarify if "Site-won excavated material" is natural or fill material and reuse location. Include details of volume and sampling density. Focus on asbestos analysis suggests fill. Please also include details for site won clay testing.		"Site-won excavated material" updated to "Site-won Excavated Clay Material". Asbestos was sampled at double density to allow confidence in safety of results for site re-use above the marker layer. Volumes added.
16	Table 10.1 & Section 12.1	Table 10.1 shows the types and number of samples analysed, and it is expected that the total samples analysed are presented in results tables. The Auditor is unable to cross check the results tables presented in the "Tables" (LAR1 and LAR2) with Table 10.1. Section 12.1 should also cross-reference where the results can be observed.		Table 10.1 and Table 12.7.1 updated to include relevant 'Appendix - Table' references, alongside updated attachment organisation.
17a	Section 12	Include discussion of results for site won clay reuse.		Section 12.3 added.
17b	Section 12 & 12.6	Section 12.6, include reference to results tables in all subsections.		Appendix - Table references added to Table 12.7, per Comment 16. All Section 12 now include reference to appropriate tables/results.
18	Section 12.1.1	PID readings from the piling spoil (including dates and sample descriptions) should be presented in tabulated form or by reference to supporting field documentation. The Auditor notes the PID results shown on the piling spoil sent for analysis (noted to have a PID reading of 0.4 ppm) was not consistent with the PID results presented in Section 12.1.1 (where the PID reading was reported to be 280 and 207 ppm). Please provide a discussion regarding the cause and significance of the observed inconsistency.		Lowered headspace in vial results are considered to originate from the wait between the field screening exceedance to the auditor approval of VOC sampling methodology. Section 9.1.3 has been updated to include this reference: "As 'PILE01' was proposed for further VOC assessment, the soil materials were stockpiled separately and covered in black plastic per SE (2024), while the VOC assessment methodology awaited auditor approval. Once approved by the auditor, 'PILE01' was then subject to further VOC (headspace-in-jar) analytical testing. during the wait for the approval, 'PILE01' was inadvertently combined with the adjacent stockpile 'PILE20', leading to PILE20's inclusion in the headspace-in-jar analytical testing. Field screening at the time of headspace-in-vial testing indicated 0.4 ppm". Field observations and PID readings added to Appendix I.
19	Section 12.1.2	Include cross-reference to sample results.		Sample results and fieldwork references added to Section 12.1 & 12.1.2.
20	Section 12.2	Include reference to the agreed methodology document and a reference to the Appendix where the detailed validation report is presented.		Reference to the EGA (2026) methodology within Section 12.1 & Appendix reference added.
21	Section 12.2.1	The validation methodology for the UST should describe the depth of the excavation.		Depth added to Section 12.2.1 (excavation).
22	Section 12.2.3	Please confirm the location of UST spoil reuse, and whether this was placed below marker layer.		Section 12.2.3 (Section 12 in general) updated with further clarification.
23	Section 8.1, 8.2 & 13	Required to include consideration of the QA/QC approach and results undertaken as part of the UST removal and validation. It is noted in December 2025 EGA proposed to "include the DQO and QA/QC in the site validation report".		Section 13 updated to include QA/QC of the UST. Section 5. 6 & 7 also updated to include UST.
24	Section 12.4	Please provide waste classification information, which is also expected to include a description of the waste generated, source, volume etc. This section should not include waste disposal from demolition, only waste from inground works (soil).		Section 12.5 and 12.5.1 discusses waste classifications (no materials associated with soils were removed from site, indstead were and were planned for retention underneath the capping layer). Waste classification reports available in Appendix A.
25	Table 12.6.1	Required to: identify if the material is VENM, ENM or resource recovery material; provide a summary of documentation reviewed by EGA prior to importation; identify/confirm the number of samples collected from each source by EGA; identify / confirm the analysis undertaken. Classification documentation should be presented in a manner that allows clear reference and review. Documentation from suppliers demonstrating sampling in accordance with any RRO is required (where relevant).	Table 12.8.1	Updated reference to material types in Section 12.7. Provided source site documents available in Appendix H. EGA material assessment available in Appendix - Tables (Material Tracking). Appendix - Tables also overhauled to separate materials for easier review.
26	Section 12.6	In relation to imported material, the RAP required, in summary, at the time of arrival, the imported material shall be tracked and inspected (and recorded) including confirmation that each load is free from indicators of contamination. The ISVR is required to demonstrate and document this process and include the materials tracking register. Please include this information in Section 12.6.	Section 12.8	Tables - Material Tracking Sheet added to the appendicies.
27	Section 12.6.1	Please detail what material was imported to site and then sent back. Do any of the sample results in the summary tables correspond to returned material (e.g. IM-RED-01 to 03)?	12.8.1	Material was rejected and returned to the source site, removal described within Section 12.8.1. Notes also included in Tables - Material Tracking.
28	Section 13.1	Last sentence is redundant.		Sentence removed.
29	Section 14	Include a conclusion regarding site-won clay reuse.		Section 14.1.2 added.
30	Figures	The figures are required to show additional details such as: the location of service trenches where the depth to the marker layer is different to the general site capping; the different capping approaches across the site (e.g. geofab marker layer vs concrete hard surface).		Figure 3 edited to address varying locations of services and general site composition. Further reference and explanation is detailed in Section 1.4 and Section 12.7 (new). Comprehensive detail to the composition of capping approaches (such as depths) will be further detailed in the LTEMP (pending surveys supplied by VC).
31	Table LAR1	It is unclear what data "LAR1 - Chemical Laboratory Summary Table" is presenting. The tables listing in the Table of Contents indicates Imported Material Chemical Characterisation. Please clarify/correct. Please include an additional column listing what material/source each sample represents.		Tables attachments split into material types.
32	Table Formatting	Please correct the formatting of the tables, so they may be read if printed, especially for page 65 and 66 of the pdf file. It is noted page 66 does not present the chemicals analysed.		Amendments made to tables as requested.
33	Table LAR2	It is unclear what data "LAR2 - Asbestos Laboratory Summary Table" is presenting. The tables listing in the Table of Contents (ToC) indicates Imported Material Asbestos, however, it appears multiple types of sample results are included, not just imported material. Please clarify the title at the table and in the ToC and include an additional column listing what material/source each sample represents.		As comment 31 - Tables seperated into material types.
34	Tables / Discussion	Please ensure reference to the tables is made in the appropriate discussion sections.		Reference to appropriate Appendix - Tables updated across the document.
35	Table LAR2 (IM-RED01-03)	IM-RED01 to 03 had asbestos impacts, what does this material represent and where was it placed?		Material was rejected and returned to the source site, removal described within Section 12.7.1. Notes also included in Tables - Material Tracking.

36	Table LAR2 (IMP06-03)	A number of samples presented in the "LAR2 - Asbestos Laboratory Summary Table" are described to include foreign material e.g. IMP06-03 had "Beige coarse-grained soil, glass, brick, cement, vinyl-tile fragments, bitumen and rocks". What is this material and where was it placed?		These materials were EnviroSand, Table organisation adjusted as per comment 31.
37	ASS Results	Please present the ASS results in a table.		ASS Table now included in appendix (Tables - ASS).

Long-Term Environmental Management Plan (LTEMP) Comments

Project: 6 Grand Avenue (Rose Hill) | Auditor Review Review Round 2

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	Section 1.3	The LTEMP should be informed by the validation report.	Section 1.3 updated to state: "This LTEMP has been developed based on the findings of the remediation and validation works undertaken within the site, as documented within the site validation report" Note: reference to document version will require updating at completion of the SVR.
2	Table 1.6.2	Notes the site owner to be the city of Paramatta Council. Please confirm.	Amended to Hale Capital Development Management & Vaughans Construction.
3	Table 1.6.2	Notes the responsibility of "ESR". Please clarify who/what this is referring to.	Table 1.6.2 updated to "Environmental Site Representative (ESR)".
4	Table 1.6.2 & Section 4.9	Notes the requirement for the site auditor to "issue a SAS". It is noted the LTEMP informs the SAS/SAR. The SAS/SAR will not be prepared until the completion of site works (i.e. Section 4.9 is incorrect when it states "A mandatory revision of this LTEMP must be undertaken immediately following the completion of Containment Cell 3, and the finalisation of the ISVR amendment."). The LTEMP will be finalised only when all works are completed.	Table 1.6.2 updated to "Issue Site Audit Statement (SAS) at the completion of site works and finalisation of site SVR and LTEMP".
5	General / Re-instatement	The LTEMP is required to describe how the capping layer is required to be re-instated if breached.	Section 4.3 updated to state "Following completion of any intrusive works into the capping layer, the capping layer must be re-instated in accordance with the requirements of this LTEMP, as outlined in Table 4.4.1".
N/A	Whole	N/A	Figure 2 updated to reflect ISVR amendments, Section 3.2 updated to differentiate multiple capping styles across the site. Further commentary cannot be made until provided with depth and extents surveys.

Interim Site Validation Report (ISVR) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 3

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1a	General / Imported Materials	Imported material is still unable to be easily identified /cross referenced / tracked. Additionally, imported material is still not clearly identified as VENM, ENM or resource recovery material.	'Tables - Material Tracking Sheet' updated fully with notes to the imported material source site, imported volumes, RRO/RRE/VENM identification per provided certificates, and reference to the provided certificates for the materials.
1b	General / Imported Materials	Laboratory analysis reports of some samples are unable to be identified e.g. IMP01-01.	Thorough cross-reference of sampled materials and laboratory documents conducted. All samples are now accounted for within Appendix C and within LAR tables.
1c	General / Imported Materials	There are no sample dates in table LAR1 on Page 82, LAR2 on Page 84 or LAR2 on Page 94.	LAR table sampling dates updated.
1d	General / Imported Materials	Please present the Source Site on the material tracking sheet, this column is currently only partially completed. What was the source site of the sand in November 2024? Alternately, please add importation date ranges to Table 12.8.1 to allow for identification of the source / characterisation of material.	'Tables - Material Tracking Sheet' updated to provide Source sites.
1e	General / Imported Materials	Include in Table 12.8.1 what information was provided/reviewed by EGA prior to import to assess suitability (from a contamination perspective).	'Tables - Material Tracking Sheet' updated to provide reference to provided material certificates (documented in Appendix H). Section 12.8 updated to reflect when certificates were available for review, and how this was reflected in the sampling regime.
1f	General / Imported Materials	Include in Table 12.8.1 whether material is classified as VENM, ENM or under a resource recovery order (RRO), and if so which RRO is applicable.	Material classifications added to Table 12.8.1.
1g	General / Imported Materials	The volume of the failed imported material that was removed from the site is unclear.	Section 12.8.1 updated to include volumes.
2	Table 3.2	Table 3.3 presents inaccurate statements. The RAP required the ASSMP and AMP to be updated, and the SAR identified that the Auditor's acceptance of the RAP was contingent on these documents being updated. The Validation Report should clearly identify these documents were not updated and discuss the significance of this deviation from the RAP.	Tabble 3.2 updated to address RAP deviations.
3	Table 5.2	Future residents are identified in the CSM (Table 5.2)	Amended (removed).
4	Section 9.3	"Site-won validated VENM" remains in Section 9.3.	Section amended to state "Site-won clay".
5	Appendicies	Please provide Appendix J – the landscape plan published in March 2026.	Amended (attached).

Long-Term Environmental Management Plan (LTEMP) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 3

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	General / LTEMP Wide	Please read through the LTEMP and update the entire document in consideration of the following points: (1) The entire site has been capped/contained. Please remove all statements which indicate the impacts have been retained in discrete cells e.g. Section 3.4 (area of concern as "On-Site Containment Cells"), Section 4.3 ("Works within the containment cell footprint"), Section 4.9 ("including if the cap over the cells are damaged"), Table 4.4.1 ("within the containment areas"). (2) The LTEMP is a standalone document required to document mitigation/monitoring measures where on-site containment is proposed, and must be finalised prior to preparation of the SAS/SAR without further updates for Cell 3 works following issue. (3) Parramatta City Council is not responsible for the site and is not responsible to "undertake annual inspections", "ensure capping materials are maintained", "corrective actions", "emergency response", "engaging consultants" etc.	Reference to 'The City of Parramatta Council' and 'cells'/reference to specific encapsulation has been removed throughout the document.
2	General / New Section	Please include a section in the report that describes the site condition e.g. site layout, building orientation, building design, landscape area design, site access, surface water / stormwater controls etc.	Section 2.1 'Current Site Conditions' (2.1.1 to 2.1.5) added.
3	Section 1.1	The following sentence is inaccurate, as in-situ impacts have been retained across the site: "Ex-situ site-won soil materials were subject to a 'cap and contain' strategy". Please consider replacement with "Asbestos impacted soil materials were subject..."	Amended to "Asbestos impacted soil materials".
4	Section 1.1	The text indicates the landscaped area is overlain by a 0.3m capping layer plus a vegetation layer. If accurate, the vegetation layer detail will need to be presented in Table 3.2.3, including if different types of vegetation / other landscaping is proposed (e.g. turf, plantings, trees).	Paragraph 2 of Section 1.1 updated.
5	Section 1.3	The final validation report will be required to be referenced here.	Reference updated to most recent .v3 of the interim site validaiton report as final SVR is not issued.
6	Section 1.4	Please update this section in consideration of the information presented in the Practice Note: Preparing environmental management plans for contaminated land (NSW EPA 2022). (1) The EMP is required to be legally enforceable under SSD consent conditions B59; Council does not have an enforcement role. (2) Public notification required via section 10.7 planning certificate; agreement from Council to list the EMP is required prior to finalisation of the audit.	Section 1.4 updated to address all comments.
7	Table 1.6.2	The role of "ESR" is not defined as a stakeholder and is understood to be a typo.	"at the discretion of Environmental Site Representative (ESR)." removed from Table 1.6.2.
8	Table 1.6.2	Please remove the following text: "Issue Site Audit Statement (SAS) at the completion of site works and finalisation of site SVR and LTEMP". The LTEMP is required to be finalised and legal enforcement agreed prior to finalisation of the SAS/SAR.	Text removed from Table 1.6.2.
9	Section 3.1.2	Please update the third paragraph. The LTEMP is a standalone document. It is required to detail the site conditions (post remediation) and describe how the contained impacts are required to be managed.	Section 3.1.2 updated to note the current site conditions (paragaph 3).
10	Section 3.1.2	The LTEMP has been reviewed by the Site Auditor, as part of the validation process.	Section 3.1.2 updated to note the LTEMP has been reviewed (paragaph 4).
11	Section 3.2	Paragraph 2 is expected to be updated to reflect final site conditions presented in the final validation report.	Section 3.2 updated to reflect site conditions.
12	Table 3.2.1	Should clearly identify that the existing hardstand is considered to be the marker layer across the areas of the site where the Final Hardstand Surfaces are.	Table 3.2.1 updated to 'Existing Hardstand (Marker Layer)' in Layer column.
13	Section 3.4	Typographical error.	Heading changed to 'Residual Source-Pathway-Receptor Assessment'.
14	Table 3.4	Please update the "Area of Environmental Concern" to site wide.	Table 3.4 updated to 'Site Wide', 'In-situ Asbestos Contaminated Fill Materials Across the Site' and 'Remedial 'Cap & Contain' Strategy'.
15	Section 3.4	The ingestion pathway is not considered to be relevant to asbestos.	Ingestion pathway removed.
16	Section 4	Indicates there are areas at the site where the capping may be less than 30mm due to heritage or other constraints. Please clearly identify these areas in the report text, and on Figure 2.	Unable to comment on final finish levels as no final site surveys have been provided. Reference to heritage constraints removed (not relevant to Rosehill site).
17	Section 4.2.3	States: "No materials are to be removed from the containment cells and retained on-site outside of the containment cell." Please update text to clarify no material is to be "retained above the site wide marker layer". The Auditor notes the marker layer for "Final Hardstand Surfaces" is considered to be existing hardstand at approximately 0.65 m bgl.	Amendment made per comment 17.
18	Section 4.2.3	States "All soil materials excavated from within the containment cell...". Please update text to clarify all materials excavated below the marker layer are required to be tracked.	Updated to state "All materials excavated from below the marker layer must be tracked with the Material Tracking Sheet presented in Appendix E".
19	Section 4.4	Notes requirements apply to "all maintenance and minor works within landscaped and grassed areas of the site". Auditor considers Section 4 relates to the entire site (not simply landscaped areas). Please confirm/update.	Updated to "all maintenance and minor works across the site".
20	Section 4.4.1 and 4.4.5	Refer to "allowable limits" of excavation within landscaped areas shown on Appendix A Figures 1 and 2, however these limits have not been presented in text or Figure 1 provided. Please detail "allowable limits" in report text and present on Figures when available.	"Allowable limits" removed across the document, in place for statements such as "must not exceed the capping layers outlined in Section 3.2".
21	Section 4.4.2	Please confirm all site services have been installed within the capping layer (including stormwater trenches located within the landscaped area).	Section 4.4.2 (paragraph 1) updated.
22	Section 4.4.3	Airborne monitoring should only be required where works extend below the marker layer. Section 4.2 states conservative measures apply within 0.3m of marker layer; clarify this is not relevant to landscaped areas where all works are likely within 0.3m of the marker layer.	Section 4.4.3 updated to state 'works extend below the marker layer'. Section 4.2 (last paragraph) updated to state no asbestos controls required within landscaping areas, unless geofabric is encountered.
23	Section 4.4.6	States "personnel must remain vigilant for signs of exposed orange geotextile." The hardstand marker layer at 0.65 m bgl is also required to be considered.	Updated to state "exposed orange geotextile or hardstand marker layers".
24	Section 4.7	Not consistent with Section 4 which states biannual inspections will occur.	Updated to annually.
25	Section 4.9	The LTEMP is required to include the landscaped area. Please update the first paragraph.	Section 4.9 (paragraph 1) removed.
26	Section 4.9	Where significant or material changes to the LTEMP are presented in the future, additional review by a NSW EPA Site Auditor will also be required.	Added to Section 4.9 (paragraph 2).
27	Figure 2 / Legend	The legend presented on Figure 2 should reflect capping layer descriptions used in the document (Final Hardstand Areas, Containment Cells 1 & 2, Landscaping Areas/Turfed Areas). Ensure different landscaping/capping types are described in text and shown on Figure.	Figure 2 legend updated. Capping areas/strategies updated based on landscaping plans for the site within Section 3.2.
28	Appendix B	The capping inspection record notes: "have contingency measures been implemented?". The LTEMP is required to detail what these contingency measures are.	Capping record updated to state 'If yes, have the steps in Table 4.4.1 of the LTEMP (EGA 2026) been implemented?'.

Site Validation Report (SVR) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 4

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	Section 9.7	Please provide rationale why material excavated from the stormwater pipe alignment was assessed for asbestos impacts only, and did not encompass re-use analysis. Please discuss significance of this deviation.	Section 9.7 updated to state that double denisty NEPM sampling was chosen for the stormwater ENM (site-won clay) materials. Materials were excavated from approcimately 0.4-2 m bgl, not considered to have interacted with groundwater, no ASS/PASS was present within the site, and site observations did not indicate any potential contamination within the materials.
2	Table 10.1	Table 10.1 notes the rainwater tank material was analysed for ACH VOC Suite. Please confirm what ACH VOC is referring to. These results do not appear to be presented in the results tables.	Results for rainwater tank materials were included in Appendix N, all attachements moved to Attachment E.
3	General	The final validation report and LTEMP is required to describe the final site condition at the completion of the remedial works. The Auditor expects the 'as built' arrangement to be documented in the validation report and LTEMP.	Section 14.1 'Cap and Containment Details' added.
4	General / Appendix	Appendix R is incomplete. Please ensure importation documents are provided for each material, the documents should reflect the total material imported as presented in the "Material Tracking Table".It is noted that the "Material Tracking Table" identifies a larger volume of material than indicated on the dockets provided, specifically for the material sourced from CR Plus Pty Ltd. Where available please provide all imported material dockets to allow verification of the imported volumes / source of material.	Table 12.8.1 volumes updated and originates from material dockets. Error on sample 216 within "Material Tracking Table" amended, import volume amnded from 2100 to 200. EGA advised that tunnel spoil/sandstone materials do not have dockets. Please note that m^3 volumes of sandstone and aggregate materials were estimated from site conditions within "Material Tracking Table", as importation documents weren't available for review at the time of import.
5	General / Appendix	A VENM certificate for PF Formation Quarry Products has been provided in Appendix R – but imported products from this source have not been presented in the "Imported Material Table". Please confirm if material was imported from this site.	PF Formation Quarry Products correlates to the imported sydney tilling sand & Table 12.8.1 updated to reflect.
6	General / Appendix	Laboratory results for Recovered Aggregate sourced from Bingo Recycling Pty Ltd (Auburn) have been provided in Appendix R – but imported products from this source have not been presented in the "Imported Material Table". Please confirm if material was imported from this site.	EGA was informed by the client that the plumbers (who imported the material) provided these laboratory documents from CR+ and materials that arrived to site originated from CR+.
7	General	The validation report needs to include a final statement about the post remediation CSM.	Section 14 'Revised CSM' added.
8	Appendix	Where possible please provide PID readings, including for piling spoil and the UST excavation.	PID readings for pile spoil is located within Appendix S, Section 9.3 and 12.1 outlines no exceedances and explains about the one exceedance identified during works. PID readings for UST excavation were not undertaken as the guidelines within 'Unexpected Find of an Underground Storage Tank' (EGA 2025a, Appendix B) outlined field assessment would only be undertaken if evidence of spilling/leaking occoured (such as soil odours or staining). 'Validation of Removal of an Underground Storage Tank' (EGA 2025b, Appendix B) did not identify any evidence of leaking or spilling and validation results did not identify any exceedances.
9	Appendix	Please confirm SafeWork NSW was notified of the proposed asbestos remediation works and where possible attach the notification to the Validation Report.	Attached under Appendix U.
10	Appendix	Asbestos clearance certificate #19 is noted to be repeated, and #22 is noted to be missing.	Clearance 22 added. Note clearance #27 and #34 were not completed and finalised in subsequent reports #28 and #35.
11	Section 12.9.1	Section 12.9.1. Please review/confirm the following text which relates to the landscape plans: In regard to the Western Tree Planting Corridor, "the design establishes the geofabric demarcation layer at a depth of 1000 mm…". The Auditor notes, Section CC states "Demarcation line to be 600 mm below surface level to western landscape area with trees". Will the marker layer be placed at 1m adjacent to the hardstand areas (where the native tree planting will be) and at 0.6 m in the easement area? In regard to the Engineered Tree Mounding, "the plan integrates 1000 mm high earth mounds…." The Auditor notes the earth mounds are comprised of 75 mm of mulch, followed by 800 mm of soil type D2, then soil type D4 which does not have a depth specified, then the marker layer. Please confirm this understanding. In regard to the Engineered Tree Mounding, "This design configuration provides up to 2000 mm of continuous…." The Auditor can't identify this detail on the plan, please clarify what the 2m of material will likely be?	Landscaping plans originally were referenced as works were not completed. As works are now complete, Section 12.9 is now updated to reflect survey data provided, the RAP addendum (SE 2024) and current site composition (per site walkover).
12	General	-	Representative imported material images added to Section 12.8.

Long-Term Environmental Management Plan (LTEMP) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 3

Comment ID	Report Section / Table Requirement	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	Section 1.1	update reference to "three distinct cap and containment strategies".	Updated and references 12 systems, in line with the SVR.
2	Section 1.1	check figure references	Now updated
3	Section 1.3	update cross referencing between the LTEMP and Validation Report	Now updated
4	Section 1.4	1. states "legal enforceability and public notification for this LTEMP are as follows" however only legal enforceability is discussed in the bullet list. Add details here or change title of next section to Public Notification (rather than Public Disclosure):	Section 1.5 updated to 'Public Notification'
5	Section 1.5	please remove the following text: "SAS, through the NSW EPA public register". The site has not been notified to EPA. The SAS and LTEMP can be obtained from Council or NSW EPA through an information request in accordance with the Government Information (Public Access) Act 2009 (GIPA).	Removed
6	Section 1.5	bullet point two, update wording to reflect that written agreement from Parramatta City Council to list the LTEMP on the Section 10.7 certificate has been obtained. Please delete the words "prior to finalisation of the site audit".	Updated
7	Table 1.6.1, 1.6.2, Table 2.1,	please remove Vaughan Constructions as the "Property Operator"/Occupier and update with proposed details for this role (or remove the "Property Operator" role if not relevant).	Removed
8	Table 1.6.2:	1. Site Owner should have ultimate responsibility for ensuring LTEMP is implemented. Also include annual audit of the LTEMP implementation, and arrange external audit and review processes (per s4.9) 2. If Property Operator role is relevant this should be a separate row to be clear on responsibilities. 3. Per above, suggest Property Maintenance Contractor role should be "Day to Day" implementation and maintenance of LTEMP. 4. Typo under Property Maintenance Contractor, "Keep records or entry & closure". Of not or? 5. In regard to the "Future Site Contractors" responsibilities please replace "breach the containment area" with "breach the capping system". 6. In regard to the "Environmental Consultant" responsibilities please replace "beneath the concrete hardstand barrier" with "beneath the marker layer"	1. Updated 2. Property Owner removed 3. Updated 4. Updated 5. Updated 6. Updated
9	Section 2.1.3	further to comment above, confirm the following description is correct: "Along the northern boundary, a 20 m wide landscape buffer features 700 mm high earth mounds planted with dense screening tree species".	Updated to be more relevant to the site.
10	Section 3.1	include reference to historical usage and regulatory status of adjoining property to the west. The adjoining property to the west (formerly known as 6 Grand Avenue, Camellia) is the former Akzo manufacturing facility (a remediation site regulated under the CLM Act) which is known to be a source of groundwater contamination at the site.	Updated and included.
11	Section 3.1.1	please define PID and PPE.	Updated
12	Section 3.2	please remove the words "site-won" from the 3rd paragraph.	Removed
13	Section 3.2	2nd para, ensure reference to Tables includes the correct tables numbers.	Now updated
14	Section 3.4	reference should be made to potential groundwater impacts (Chlorinated hydrocarbon and heavy metals) that make groundwater unsuitable for beneficial use.	Updated
15	Section 4	please include a management procedure/requirement that groundwater is not abstracted for beneficial use unless assessment is undertaken to determine suitability for the intended use and appropriate approvals are obtained.	Now added as Section 4.4
16	Section 4.2.2	please check wording around AMP in this section. There is also required to be an overarching AMP for the site to document the presence of asbestos. Ensure the overarching AMP is discussed and distinguished from the works-based AMP discussed here.	Updated
17	Table 4.4.1	please replace "prior to undertaking any disturbance within 0.3 m of the capping layer" with "prior to undertaking any disturbance within 0.3 m of the marker layer".	Updated
18	Section 4.7	responsible party for inspection is identified in other sections of the LTEMP as Property Maintenance Contractor, not Site Owner. If there is a distinction between annual inspection by Site Owner and more frequent inspections by Property Maintenance Contractor this should be clarified throughout.	Updated
19	Section 4.7	should note the requirement to record the annual inspection in the Capping Inspection Record in Appendix B. Current reference to Appendix B relates to documentation of reinstatement only.	Now included
20	Section 4.9	please remove the following text from the first paragraph: "A mandatory revision of this LTEMP must be undertaken immediately following the completion of the landscaping area and the finalisation of the ISVR amendment. This revision must update Figure 2 and Appendix A to include the final surveyed 'as-built' extents and cross-sections".	Removed
21	Section 4.9	second last paragraph finishes: "The LTEMP should be registered against the land title". Please delete.	Removed

Long-Term Environmental Management Plan (LTEMP) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round 3

Comment ID	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	It was advised on site that 600 mm thickness to accommodate tree planting was achieved by localised excavation (in E, W and S) or mounding (in N). The localised excavation has not been described in the validation report or EMP for the E, W or S landscaped areas. System 3b (west) and 3f (east) describe 0.3 m of mulch/topsoil above marker layer. In the capping system description, please note the marker layer is locally deeper under trees (i.e. 0.6 not 0.3 m) if this is correct (previous comment 2).	Surveys reviewed, landscaping depths 600 mm average across the landscaped areas containing deep root tree zones, capping systems updated to reflect.
2	As previously requested (comments 3-5), please confirm the depth of soil constructed for mounded trees is sufficient for the planted tree . There appear to be deviations from the landscaping plan that should be discussed in the validation report.	As above, landscaping depths 600 mm and as such, no deivation from the landscaping plan.
3	Capping System 3g (representing the southern landscaped areas) does not include a marker layer. Please confirm. This deviation from the RAP is required to be discussed in the validation report.	Capping system 3g updated as the marker layer comprises the existing hardstand.
4	As previously noted (comment 10), Capping System 1 (yellow) is understood to extend further east to encompass the external hardstand and access road. Please update	The system east of the warehouse includes existing hardstand overlain by impacted materials, overlain by a marker layer, overlain by imported materials and followed by hardstand. Capping system 4 retained. EGA can confirm that capping system 1 was not adopted east of the eastern warehouse as impacted fill materials were placed atop the existing hardstand prior to installation of a marker layer.
5	As previously noted (comment 13), Capping System 4 shows the validated capping material was only 0.25 m (not 0.3 m, as per the RAP). This deviation from the RAP is required to be discussed in the validation report.	Surveys reviewed and capping system 4 indicates a minimum 0.37 m capping, with a 0.67 m average capping thickness. Capping system in Table 3.2.10 updated to reflect this.
6	As per other Capping Systems, please provide a description of the area where Capping System 4 relates to beneath Table 3.2.10.	"EGA notes that capping system 4 was utilised within driveway areas to the north, east and southeast of the site" added beneath Table 3.2.10.
7	The following Capping Systems (3b, 3f and 3g) identify a layer of “Existing Landscaping Area” beneath validated capping material or “impacted soil material”. This area is expected to be equivalent to “impacted soil materials” as there was no previous distinction between general fill and material in landscaping areas. Please clarify what the difference is (if any), and amend the description if/as necessary.	Capping System descriptions (3b, 3f and 3g) updated to impacted fill.
8	Section 3.4. Monitoring of groundwater is not planned/detailed/expected, please delete the statement in the EMP that indicates ongoing monitoring of groundwater will occur.	Paragraph updated to remove requirement for ongoing monitoring/management.

Site Validation Report (SVR) Comments

Project: 6 Grand Avenue, Rose Hill | Auditor Review Review Round .v1f

Comment ID	Auditor Review Comment / Data Gap Identified	Consultant Response / Action Taken
1	10 L sampling of crushed concrete for ACM was not reported and was not observed or discussed on site however was required under the Crushed Concrete methodology. Please confirm this was not undertaken.	The report has been amended to clearly distinguish the asbestos sampling undertaken and to remove any implication that this sampling was undertaken. As building materials were subject to asbestos clearance inspections prior to demolition works and crushing works occurred following these inspections, EGA do not consider this deviation to be significant for the purposes of assessing suitability of the materials for re-use at the site, as the crushing of materials would have likely generated friable asbestos, if ACM had been present prior to crushing. Justification for deviation to the crushed concrete methodology is provided in Section 12.4.
2	Please add WCA-3 to Table 9.1 for Waste classification of stockpiled soils (currently includes WCA-01 – July 2025, WCA-02 – November 2025).	Now added.
3	The Tables with asbestos results appear to have formatting errors that cut off later columns and notes. The LAR2 series (under multiple material types) include a column of results for ACM % w/w against HSL of 0.05 % but AF/FA results and comparison to the corresponding HSL of 0.001% is not presented. It is noted that comparison of 500 mL sample ACM results against the HSL of 0.05 % is not appropriate as this requires on collection of the 10 L sample. The tables of asbestos results should include AF/FA results where available as this is the primary metric for asbestos compliance.	All asbestos tables (LAR2) series updated to include asbestos AF/FA and ACM (D/ND).
4	Almost all samples for analysis by the laboratory are described on ALS lab certificates as "A soil sample" including samples of imported aggregate and site-won crushed concrete (ES2511130). Were these descriptions ever queried with the laboratory? This sample description calls into question the representativeness of the samples collected which would be described as something other than "a soil sample".	The laboratory certificates describe the submitted samples using the generic sample matrix description "A soil sample". The laboratory has been queried about the 'a soil sample' descriptor and have responded outlining that the samples are no longer in their possession, however, have photos and agree that the material should not have been classified as 'a soil sample'.
5	The relevance of the following information presented in Section 13.3.3 Laboratory Quality Control is not clear given the extensive laboratory analytical program performed: "Laboratory quality control results consisted of: – duplicate analyses of two submitted samples, for all chemical analytes – one method blank for all chemical analytes – one spike recovery for all chemical analytes – one matrix spike recovery" Please replace this with an appropriate commentary on the laboratory quality control program implemented for the project. Also please update the results paragraph following which relates to the limited program described above. "Results for laboratory QC testing were: – RPDs for laboratory duplicates were all within the acceptable ranges – Method blank samples showed no detections – Analysis of spiked sample showed recoveries within the acceptable range for all analytes – The matrix spike showed no matrix interference"	Relevant changes have been made to the report to update the above. Due to the extensive sampling regime adopted, and the collection of QA/QC throughout the duration of the project, this has been updated.
6	The RAP noted that "KPMG (2016) identified the potential presence of two UST within the eastern portion of the site. Test pits are to be excavated in the inferred UST locations to confirm their presence/absence". Historical information was shared with SEG early during the project to allow for identification of potential UST location and assessment of whether proposed piling would be at risk, with test pitting to be undertaken if so. I will need to comment on whether this RAP item has been closed out. Can commentary be provided in the Validation Report to this effect?	Commentary to the USTS in KPMG 2016 noted within Sections 9.8 and 15.1.5. No evidence of USTs aside from the UXF in the north was noted during fieldworks and assessments across the site.

Ramboll Australia Pty Ltd
Level 3, 100 Pacific Highway
PO Box 560
North Sydney NSW 2060

T +61 2 9954 8100

www.ramboll.com