



**Works Approval Number** W6328/2019/1

**Works Approval Holder** Cowara Contractors Pty Ltd

**Registered business address** Suite 3 - 46 Albert Road  
BUSSELTON WA 6280

**File Number** DER2019/000116-1~1

**Duration** 25/06/2020 to 24/06/2025

**Date of issue** 25/06/2020

**Premises details** Cowara Contractors  
Lot 1062 Ablett Road, Cowaramup

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
Category 67A: Compost manufacturing and soil blending	15,000 tonnes/year

Tracey Hassell,  
**A/MANAGER, WASTER INDUSTRIES**  
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

## Interpretation

In this Works Approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a Condition, each row in a table constitutes a separate Condition;
- (d) any reference in this licence to an Australian or other standard, guideline, or code of practice, means the version of that document in force at the time of granting of this licence;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

# Conditions

## Infrastructure and equipment

1. The Works Approval Holder must construct the infrastructure listed in Table 1, in accordance with:
  - (a) the corresponding design and construction requirement; and
  - (b) at the corresponding infrastructure location
 set out in Table 1.

**Table 1: Design and construction requirements.**

	Infrastructure	Design and construction requirement	Infrastructure location
1	Composting facility hardstand and bunding	<p>The hardstand of the composting facility must be constructed with the following specifications:</p> <ul style="list-style-type: none"> <li>• Constructed in accordance with the Drawings provided in Schedule 2;</li> <li>• The hardstand shall be manufactured using compacted clay with a permeability of less than <math>1 \times 10^{-9}</math> m/s</li> <li>• The top layer of the hardstand must be a minimum of 300 mm in thickness;</li> <li>• The hardstand is to be 175 m wide by 220 m in length and have a minimum 2.0% cross fall to the centre of the pad and 2% slope to the leachate pond specified in Row 2 of this table;</li> <li>• The hardstand shall be bunded by the same material used to construct the hardstand to a height of at least 200 mm; and</li> <li>• The interface between the bunding and hardstand shall be sealed so run-off remains on the hardstand.</li> </ul>	Schedule 1
2	Leachate pond	<p>The leachate pond must be constructed with the following specifications:</p> <ul style="list-style-type: none"> <li>• Constructed in accordance with the Drawings provided in Schedule 2;</li> </ul> <p>Clay or modified soil installed:</p> <ul style="list-style-type: none"> <li>• At least 300 mm thick with a permeability of <math>1 \times 10^{-9}</math> m/s or less and minimum compaction of 95%; or</li> <li>• At least 600 mm thick with a permeability of <math>1 \times 10^{-8}</math> m/s or less and minimum compaction of 95%.</li> <li>• Clay liners are installed in successive layers up to 300 mm uncompacted thickness.</li> <li>• Permeability and compaction requirements are to be demonstrated by geotechnical testing conducted in accordance with Australian Standard 1289 Methods of testing soils for engineering purposes series (AS 1289).</li> <li>• Designed to contain a storm events of greater magnitude than the 1 in 10 year ARI storm event.</li> <li>• Designed to maintain free board of 0.5 m.</li> </ul>	Schedule 1 and Schedule 2 Drawings A and B

	Infrastructure	Design and construction requirement	Infrastructure location
3	Three (3) groundwater monitoring wells	<p>Well design and construction: designed and constructed according to ASTM D5092/D5092M-16; Standard practice for design and installation of groundwater monitoring wells.</p> <p>Well location and screened interval must target the part, or parts, of the aquifer most likely to be affected by potential contamination<sup>1</sup> from seepage generated from the compost processing. Where temporary/seasonal perched features are present, wells must be nested and the perched features individually screened.</p> <p>Where limited information is known on the geology/hydrogeology of the site (Where artesian bores are required then further advice should be sought from Water Licensing on bore construction requirements. Approvals under the RIWI Act 1914 may also be required for artesian bores).</p> <p><u>Logging of borehole:</u> soil samples must be collected and logged during the installation of the monitoring wells; a record of the geology encountered during drilling should be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS 1726. Any observations of staining/odours or other indications of contamination must be included in the bore log.</p> <p><u>Well construction log:</u> well construction details must be documented within a well construction log to demonstrate compliance with ASTM D5092/D5092M-16. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.</p> <p><u>Well Development:</u> all installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log.</p> <p><u>Installation survey:</u> the vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.</p> <p><u>Well network map:</u> a well location map (using aerial image overlay) must be prepared and include the location of all monitoring wells in the monitoring network and their respective identification numbers.</p>	To be determined

Note 1: Refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on well screen depth and length

2. The Works Approval Holder must within 60 days of each item of infrastructure required by Condition 1 being constructed:
  - (a) undertake an audit of their compliance with the requirements of Condition 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by Condition 2, must include at minimum the following:
  - (a) A report from a Qualified and Experienced Engineer, confirming each item of infrastructure or component of infrastructure, specified in Table 1, has been

- constructed with no material defects and to the requirements specified Table 1;
- (b) A well construction report which assesses compliance for the groundwater monitoring well construction with the requirements of Condition 1.
  - (c) Where a departure from the requirements specified in Table 1 occurs, the Works Approval Holder must provide to the CEO a description of, and explanation for the departure; and
  - (d) Be signed by a person authorised to represent the Works Approval Holder and contains the printed name and position of that person within the company.

## Dust management

- 4. The Works Approval Holder must wet down areas subject to earthworks to minimize dust generation.
- 5. The Works Approval holder shall wet down trafficked areas to minimise dust generation.
- 6. All vehicles on site shall comply with a speed limit of less than 40 km per hour.

## Record-keeping

- 7. The Works Approval Holder must maintain accurate Books including information, reports and data in relation to the Works and the Books must:
  - (a) be legible;
  - (b) if amended, be amended in such a ways that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) be retained for at least 3 years from the date the Books were made;
  - (d) be available to be produced to an Inspector or the CEO.
- 8. The Works Approval Holder must comply with a Department Request within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

## Definitions

In this Works Approval, the terms in Table 8 have the meanings defined.

**Table 8: Definitions**

Term	Definition
ACN	Australian Company Number
AS 1289	Means the Australian Standard 1289 <i>Methods of testing soils for engineering purposes series</i>
AS 1726	means the Australian Standard AS1762 <i>Geotechnical site investigations</i> , as amended from time to time
AS 4454	means the Australian Standard AS 4454 Compost, soil conditioners and mulches.
ASTM D5092 / D5092M-16	means the ASTM international standard for <i>Standard practice for design and installation of groundwater monitoring wells (Designation: ASTM D5092/D5092M-16)</i> , as amended from time to time
Assessment of Site Contamination	means the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> , as amended from time to time
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means:  Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919  <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Condition	means a condition to which this Works Approval is subject under s.62 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.

<b>Term</b>	<b>Definition</b>
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Works Approval Holder in writing and sent to the Works Approval's address for notifications, as described at the front of this Works Approval, in relation to: <ul style="list-style-type: none"> <li>(a) compliance with the EP Act or this Works Approval;</li> <li>(b) the Books or other sources of information maintained in accordance with this Works Approval; or</li> <li>(c) the Books or other sources of information relating to Emissions from the Premises.</li> </ul>
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation
Emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that Works have been constructed in accordance with the Works Approval.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	means the <i>Environmental Protection Regulations 1987 (WA)</i> .
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Works Approval applies, as specified at the front of this Works Approval and as shown on the map in Schedule 1 to this Works Approval.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Qualified and Experienced Engineer	means a person who: <ul style="list-style-type: none"> <li>a) holds a Bachelor of Engineering recognised by the Institute of Engineers;</li> <li>b) has a minimum of five years of experience working in a supervisory area of geotechnical or civil engineering; and</li> <li>c) is employed by an independent third party external to the Works Approval Holder's business</li> </ul> or is otherwise approved in writing by the CEO to act in this capacity.
Waste	has the same meaning given to that term under the EP Act.

<b>Term</b>	<b>Definition</b>
Works	refers to the Works described in Schedule 2, at the locations shown in Schedule 1 of this Works Approval to be carried out at the Premises, subject to the Conditions.
Works Approval	refers to this document, which evidences the grant of the works approval by the CEO under s.54 of the EP Act, subject to the Conditions.
Works Approval Holder	refers to the occupier of the Premises being the person to whom this Works Approval has been granted, as specified at the front of this Works Approval.

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**END OF CONDITIONS**

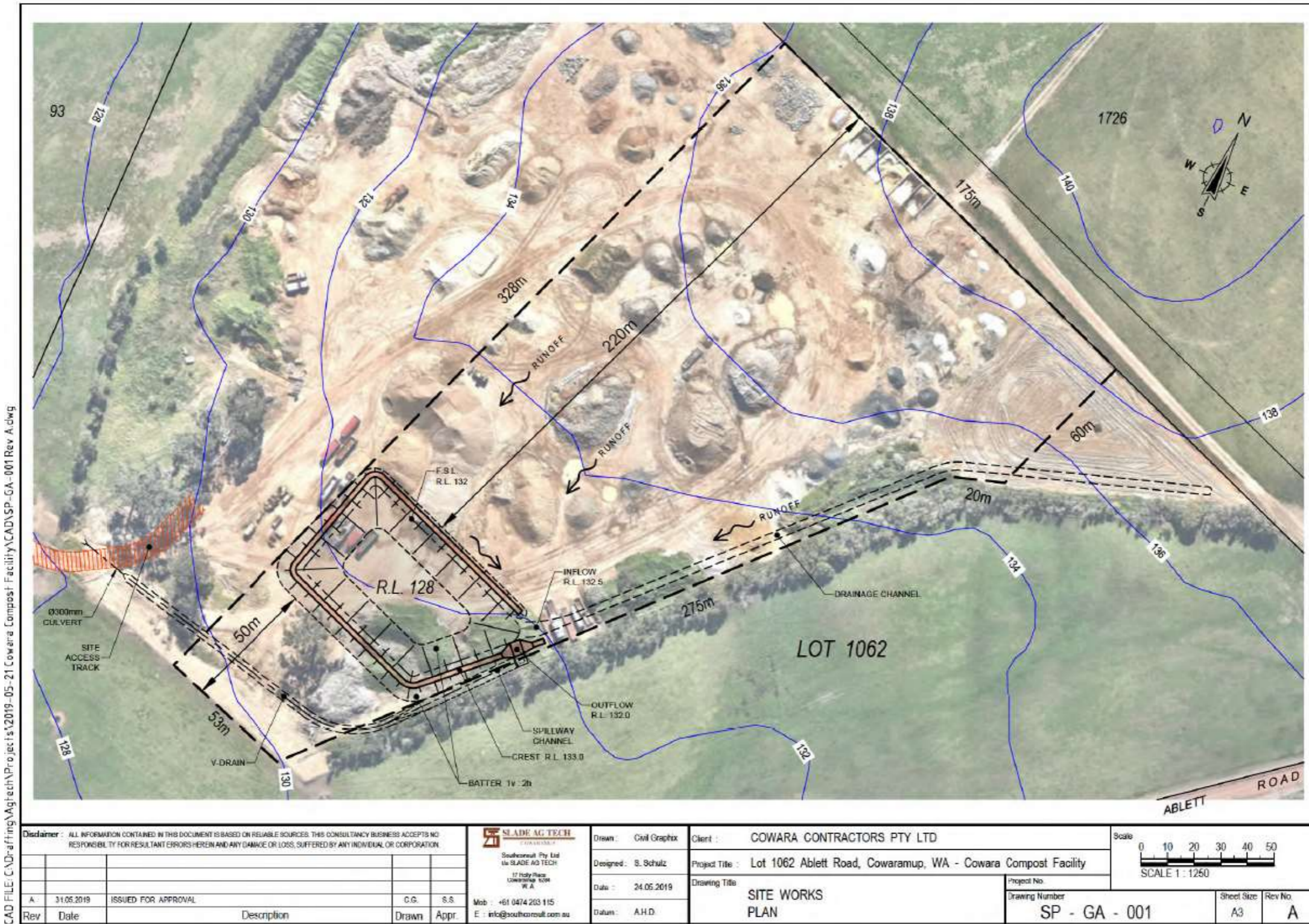


# Schedule 1: Maps

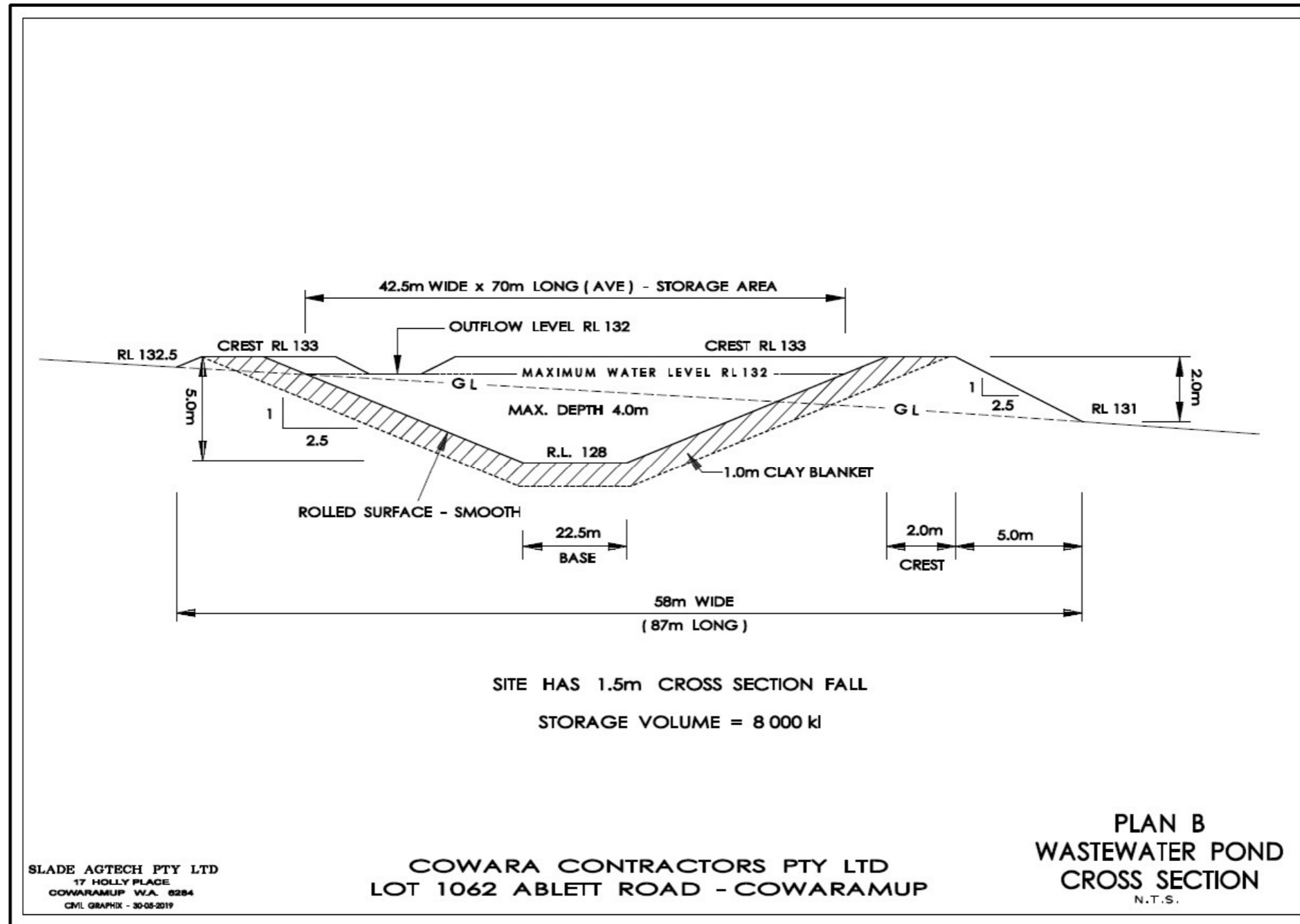
## Premises map

The Premises are shown in the map below within the dashed line.

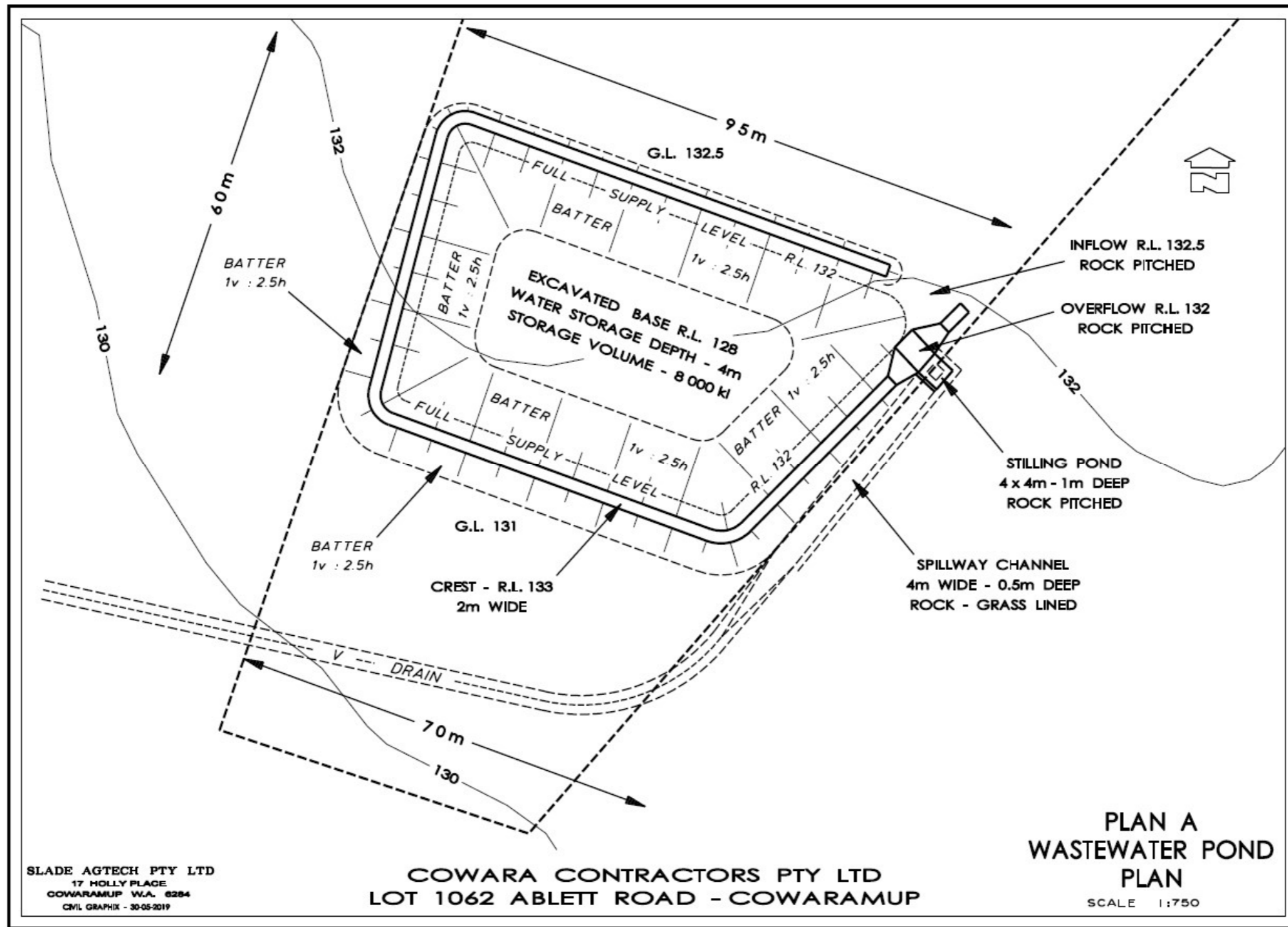
Figure 1. Premises map



Schedule 2:  
Drawing A



Drawing B



## Site layout

The infrastructure and equipment are set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1 and Drawings in Schedule 2.