Government of Western Australia
Department of Water and Environmental Regulation

Licence number	L9215/2019/1
Licence holder	Rocky Ridge Brewing Co Pty Ltd
ACN (if applicable)	605381520
Registered business address	665 Boallia Road JINDONG WA 6280
DWER file number	DER2019/000251, APP-0026141
Duration	18/06/2025 to 16/06/2045
Date of amendment	21/07/2025
Premises details	Rocky Ridge Brewing Co 665 Boallia Road, JINDONG, WA, 6280 Legal description - Lot 2370 on Deposited Plan 203036

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 25: Alcoholic Beverage Manufacturing	Not more than 2,500 kL of alcoholic beverage (beer) produced per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 21 July 2025, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2025.07.21 09:09:34 +08'00'

MANAGER, PROCESS INDUSTRIES

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
17/06/2020	L9215/2019/1	New licence
25/05/2021	L9215/2019/1	Licence holder-initiated amendment to condition 2, Table 2(a) to temporarily allow irrigation of wastewater over the winter months of 2021 whilst the licence holder undertakes improvements to the wastewater treatment system and winter storage capacity. Updates to the premises infrastructure have also been made.
21/07/2025	L9215/2019/1	Licence holder-initiated amendment to increase production to 2500kL/year, approve an already expanded brewhouse/canning facility, replace wastewater treatment system, changes to wastewater land application areas, nutrient loading limits, monitoring and reporting. Department initiated amendment to extend expiry date to 2045.

Interpretation

In this licence:

(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 to an Australian or other standard, guideline, or code of practice in this licence:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Production Limits

1. The licence holder must ensure that the production limits listed in Table 1 are not exceeded in an annual period:

Table 1: Production limits

Product or waste		Production Limit (kL)
1	Beer manufactured and processed[1]	<2,500 per annual period
2	Wastewater irrigated to land	<9,295 per annual period

Note 1: This limit includes processing done for third parties, which can be a maximum of 250kL.

Works

2. The licence holder must construct the infrastructure listed in Table 2 by 31 October 2025, and in accordance with the requirements set out in Table 2.

Table 2: Improvement works

Item	Infrastructure and / or equipment	Design, construction and installation requirement	Infrastructure location
1.	Gutters	Must be installed along all rooves where rainfall run off falls onto hard stand areas that flow into the wastewater treatment system and be designed to divert rainfall runoff away from wastewater sumps 1,2 or 3.	Not shown
2.	Spent grain and solids waste storage/cooling area	25 m^2 concrete hardstand, graded to drain to Wastewater Collection Sump 4	Figure 4 in Schedule 1 and shown as: Spent grain/solid waste cooling area
3.	Wastewater collection sump #4	Designed to capture runoff water from the Spent Grain and Solids Waste Storage/Cooling Area and transfer it via pipework to the Wastewater Treatment and Storage Compound.	Figure 3 in Schedule 1 and shown as: Wastewater collection sump #4
4.	Wastewater storage compound	The Wastewater Treatment and Storage Compound (WTSC) must: a) Be constructed in accordance with the cross-section depicted on Figure 6. b) Contain a hardstand that is underlain by at least 100mm of compacted limestone. c) Be bunded by at least 300mm of clay or other suitable compactable soil and have a maximum slope of 3 horizontal to 1 vertical. d) Have a sump (wastewater sump #5) installed that allows for all surface water drainage within the compound to be directed to this and pumped	Figure 5 and Figure 6 in schedule 1 and shown as: Wastewater treatment and storage

		back into the WWTP. e) The bunding must be able contain at least 110% of the capacity of the largest wastewater vessel f) Wastewater Sump #5 and bunding must be able to contain at least 110% of the capacity of the largest wastewater vessel g) Wastewater Sump #5 must contain a float switch that is capable of detecting leaks into the sump. The float switch is to be connected to the Internet-of-Things (IoT) and be capable of sending an email signal when water is detected on the float switch at least every 24 hours. h) All pipeline connections for potable water to the wastewater treatment tanks and pumps are to be fitted with non-return valves. i) Any tank or vessel that is not equipped with a gravity overflow to another storage vessel must be fitted with visual and audible alarms to indicate fault conditions and/or high-water levels	
5.	Surface water diversion and related drainage	The existing stormwater pipe must be extended beyond the wastewater compound and discharge into the adjacent paddock via a concrete/rock energy dissipation device	
6.	Flowmeter (FM2)	a) Must be installed to be able to measure all irrigated wastewater from the wastewater treatment plant to the land application areas. b) Must be capable of taking daily meter reads automatically, with records able to be downloaded.	Figure 5 in schedule 1. and shown as Wastewater treatment and storage compound
7.	8 x 50 kL wastewater storage tanks	Wastewater storage tanks must be positioned within the hardstand area of the wastewater treatment compound.	
8.	Sampling point	Wastewater treatment system must contain a wastewater sampling port (i.e. valve or tap) on the main irrigation supply line	
9.	pH Dosing Controller	pH controller is to be capable of controlling the lime dosing pump	
10.	Land Application Area 1, 3, 5	Fixed sprinklers installed to uniformly irrigate the entire LAA 1,3 and 5 as evenly as practical.[1]	Figure 1 in schedule 1 and shown as Land Application Area 1, 3, 5

11.	Bores: For monitoring groundwater depth: OW2, OW5, OW8, OW9 and OW10 For monitoring groundwater quality and/or groundwater depth: MB3, MB4, MB5, MB6, MB7 and MB8.	a) Designed and constructed in accordance with the monitoring well design in Schedule 3, Figure 10 b) Must be capable of intercepting surficial groundwater during wet season. c) Must be designed to detect saturated soil conditions. d) Must be installed to a depth of at least 1 metre e) Well construction details must be documented within a well construction log. f) A float switch is to be installed in the following Observational Wells and/or Monitoring bores at 1 metre depth. LAA 1: OW6 LAA 2: MB6 LAA3: OW2 and OW5 LAA4: OW8 LAA5: OW10 g) The float switch is to be connected to the Internet of Things (IoT) and must take at least one water detection test per 24-hour period h) The IoT system must be capable of sending email alerts when free water is detected in the observation well or monitoring bore	Figure 7 in Schedule 1 and shown as: OW2, OW5 OW8, OW9 OW10, MB3 MB4, MB5 MB6, MB7 MB8.

Note 1: Fixed sprinklers in LAA 1 and 5 are not subjected to the listed date, rather must be installed prior to any irrigation occurring within them.

3. The licence holder must within 30 calendar days of the items identified by condition 2 being constructed or installed:
    a) undertake an audit of their compliance with the requirements of condition 2.
    b) prepare and submit to the CEO Infrastructure Report(s) on that compliance.

4. The Environmental Compliance Report required by condition 3, must include the following:
    a) certification by the licence holder that the items in Table 2 have been installed in accordance with the requirements and location specified;
    b) photographic evidence of the installation of all of infrastructure items listed in condition 2, Table 2;
    c) The serial number of FM2 as specified in Table 2: item 6.
    d) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Infrastructure and Operational Requirements

5. The licence holder must ensure that the premises' infrastructure and equipment listed is maintained and operated in accordance with Table 3.

Table 3: Infrastructure and operational controls

	Premises infrastructure and equipment	Operational requirements	Infrastructure location
Brew Stations			
1	**Brew Station 1 (inside) consisting of** Fermenting vessels and brewing equipment, Central Drain with filter basket and floor strip drain	**Brewing and brew waste** a) Brewing equipment must be located within corresponding Brew Stations depicted in Schedule 1 Figure 3. b) Spilt grain upon brew station hardstands must be removed daily. c) Spent grain and sediment from brewing activities must be stored in sealed containers, either within the brewery hardstand area or the designated 25 m² Spent Grain and Wastewater Solids Storage and Cooling Area, for a maximum of 24 hours. **Wastewater Collection and Flow** d) All wastewaters must pass through a solids filter basket before being directed to the relevant wastewater sump. e) All wastewater collected from brew stations 1 & 2 must be directed to Sump #1. f) All wastewater collected outside and from brew station 3 must be directed to sump #2. g) All wastewater sumps must be kept free of sludge and solids. h) Wastewater pipes and drains must be maintained free of leaks and blockages. i) Filter baskets are monitored daily and emptied at least once a week. j) Wastewater sumps (1, 2, and 3) must be fitted with visual and audible high-level alarms to prevent over-topping.	Figure 3 in Schedule 1 and shown as: Brew Station 1 Brew Station 2 Brew Station 3 Wastewater Sump #1 Wastewater Sump #2 Figure 2 in Schedule 1 and shown as: Spent Grain and Wastewater Solids Storage and Cooling Area
2	**Brew Station 2 (inside) consisting of** Fermenting Vessels, Floor strip drain and filter basket (outside, western side of brewery)		
3	**Brew Station 3 (outside) consisting of** Fermenting vessels, Floor strip drain, filter basket and wastewater sump #2		
	Brewing ancillary infrastructure		
4	Flow meter (FM1) installed on outlet of freshwater tank FM1 Serial Number at time of licence issue: 20-50037604	a) Flow meter (FM1) maintained to enable the cumulative volume of freshwater from the brewery supply	Figure 2 in Schedule 1 shown as: FM1

	Premises infrastructure and equipment	Operational requirements	Infrastructure location
		water tank to be measured. b) End of month meter reads of FM1 must be taken.	Water Tank
	Canning, Packaging and Storage Shed		
5	Shed consisting of bright beer tanks, packaging and canning infrastructure, canning line from Brew Stations 1, 2 and 3 and wastewater sump #3	a) The floor drains are to receive all wastewater from the canning and packaging operations and direct it to Wastewater Collection Sump #3.	Figure 4 in Schedule 1 and shown as: Canning, Packaging and Storage Shed. Wastewater sump #3
	Wastewater Treatment and Storage Compound (WTSC)		
6	Wastewater treatment system consisting of silicon carbide filtration system, pH dosing tank, drum solids separator, storage tanks, Intermediate Bulk Containers (IBC's), a Biofilmtech Pty Ltd 'Passive Aeration Simultaneous Nitrification and Denitrification' (PASND), reverse osmosis membranes, Flow Meter (FM2) measuring all water discharged to LAA's and Sump #5.	a) All wastewater must pass through the silicon carbide filtration system. b) Wastewater treatment compound hardstand to be maintained free of cracks and leaks. c) All Intermediate Bulk Containers (IBCs) within the Wastewater Treatment and Storage Area must be stored within a secondary containment system capable of holding at least 110% of the volume of the largest IBC d) Sump #5 must be visually inspected within 24 hours of water being detected in the sump. If wastewater is observed, the sump pump must be activated to transfer all water from the sump to the wastewater treatment plant (WWTP). e) An alarm with visual and audible indicators is to be set at the start of the months listed in item 'f'. The alarm must be set to trigger when the specified level of wastewater storage specified in item 'f' is no longer available. f) If the amount of available wastewater storage during each of the following months is less than the value specified, then all wastewater generating activities must cease until the specified value of wastewater storage is made available by	Figure 5 in Schedule 1 and shown as: PVC tanks IBC's FM2 Sump #5 Silicon carbide filtration system Biofilmtech Pty Ltd PASND

	Premises infrastructure and equipment	Operational requirements	Infrastructure location
		commencing irrigation, offsite disposal or additional wastewater storage is installed: i. June: 250 kL ii. July: 200 kL iii. August: 150 kL iv. September to May: 50 kL **Metering and Logbook Records** g) Flow meter (FM2) maintained to enable the daily cumulative volume of wastewater discharged to the irrigation areas to be measured. h) Daily read of FM2 must be recorded i) End of month photographs must be taken of the FM2 meter face, clearly showing the meter read. j) A logbook (LB1) record must be kept of an inspection to determine wastewater storage capacity at the start of each month and of any inspection events triggered by the float sensor within Sump #5. k) The LB1 logbook must include: i. Name and signature of the person filling out the logbook. ii. Date and time of the inspection. iii. Volume of available wastewater storage on that day. iv. The meter read of FM2 at the time of inspection. **Offsite Disposal** l) If liquid waste cannot be irrigated or stored onsite, it must be removed from wastewater storage tanks by a licensed controlled waste carrier and transported off-site. m) Sludge not applied to any LAA must be collected and removed from tanks and pits by a licensed controlled waste carrier and transported off-site to a licensed waste facility.	
Land Applications Areas			

	Premises infrastructure and equipment	Operational requirements	Infrastructure location
7	1.8ha Land Application Area 1 (LAA1) 1.6ha Land Application Area 2 (LAA2) 2.7ha Land Application Area 3 (LAA3) 2.2ha Land Application Area 4 (LAA4) 4.0ha Land Application Area 5 (LAA5)	**Land Application Areas** a) Each LAA must have a well capable of detecting and alerting when groundwater is within 1 metre of the surface. b) Irrigation or application of solids must not occur in a LAA when groundwater is detected within 1 metre below ground level. c) Solids removed from the wastewater treatment plant are to be applied to LAA 1,2,3,4 & 5 with a tractor mounted surface spreader. d) LAA's must contain a healthy pasture e) No irrigation or solids generated runoff, spray drift or discharge occurs beyond the boundary of the LAAs. f) Nitrogen (<50 N kg/ha per application), phosphorus, and potassium fertilisers may be applied to the Land Application Areas to promote optimal pasture growth, provided it does not exceed the licence loading limits. g) Gypsum must be applied to soils if the Exchangeable Sodium Percentage (ESP %) rises above 6%. **Irrigation** h) Wastewater must only be applied to LAA 1, 3 and 5. i) Wastewater must be applied via fixed sprinklers. j) Irrigation must be controlled by an automated rainfall sensor system that prevents irrigation when more than 3 mm of rainfall has been recorded within a 24-hour period (midnight to midnight) k) All wastewaters directed to the LAA3 must flow through the flow meter (FM2). l) Irrigation system valves, pumps, pipelines, and other fittings must be kept in working order with no leaks and be routinely inspected for ruptures or leaks when irrigating. **Grazing and Harvesting** m) If any waste has been applied to an	Figure 1 in Schedule 1 and shown as: LAA1 LAA2 LAA3 LAA4 LAA5

	Premises infrastructure and equipment	Operational requirements	Infrastructure location
		LAA from November 1 the previous year, stock are to be excluded from each Land Application Area from 1 July until 31 October or until after a mechanical harvest has taken place. n) After the stock exclusion period, pasture is to be cut and harvested to be used as stock feed. o) Grazing may only occur within the LAAs outside of the Stock Exclusion Period or after a mechanical harvest, for a maximum of 2 weeks at a time. p) Harvested pasture must be removed from LAA's within a week of it being harvested. **Logbook Records** q) A logbook (LB2) record must be kept tracking the harvesting and cattle grazing within each LAA r) The LB2 logbook must include: i. A record and signature of the person's name filling out the logbook. ii. The date and time of the record being entered. iii. The date the LAA was mechanically harvested. iv. The date cattle entered each LAA. v. The date cattle left each LAA s) A logbook (LB3) record must be kept tracking which LAA is irrigated and when. The LB3 logbook must include: i. A record and signature of the person's name filling out the logbook. ii. The date and time of the record being entered. iii. What LAA is being irrigated iv. The meter read (FM2) at the time of logbook entry	
	5 groundwater depth monitoring wells (OW) and 6 groundwater quality monitoring bores (MB)	a) Maintained to allow access to groundwater for measuring its level, physical and chemical properties.	Figure 7 in Schedule 1 shown as: OW2, OW5, OW8, OW9, OW10 MB3, MB4, MB5, MB6, MB7 and MB8

Monitoring

General monitoring

6. The licence holder must ensure that:

   a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

   b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;

   c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;

   d) all soil sampling is conducted in accordance with AS/NZS 4482.1; and

   e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

7. The licence holder must ensure that all sampling in Table 4, 5 and 6 (except flow measurement, collection of wastewater and wastewater solids samples) is undertaken using the services of a qualified environmental scientist and record all the results of such sampling specified in that table.

8. The licence holder must record the results of all monitoring activity required by conditions 10,11,12 and 13.

9. The licence holder must ensure that:

   a) monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months; and

   b) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years.

Emissions to Land

10. The licence holder must monitor emissions in accordance with the requirements specified in Table 4.

Table 4: Brewery wastewater and solids monitoring

Discharge point	Monitoring location	Parameter	Unit	Frequency
Flow meter (FM2) on outgoing irrigation pipe from WTTS		Volumetric flow rate (wastewater)	m^3	Daily
	A composite of 5 raw wastewater samples flowing into the pH balancing tank	TSS	mg/L	Monthly
LAAs via fixed sprinklers	Sampling port on irrigation supply line	pH[1]	-	Monthly
		Total Nitrogen	Mg/L	
		Total Phosphorus		
		TDS		
		TSS		
		BOD		
		Electrical conductivity[1]	dS/m	

Discharge point	Monitoring location	Parameter	Unit	Frequency
		Sodium Adsorption Ratio	Based on Na+, Ca2+ and Mg2+ in the units meq/L	
LAAs via tractor mounted spreaders	Composite sample of wastewater solids container	Total Nitrogen	mg/kg	Quarterly (January, April, July, October)
		Total Phosphorus		
		Available phosphorus (Colwell)		
		Available potassium (Colwell)		
		Available nitrogen (nitrate and ammonium)		
		BOD_5		

Soil

11. The licence holder must monitor, using a certified soil scientist, soil for concentrations of the identified parameters in accordance with Table 5.

Table 5: Monitoring of ambient soil concentrations

Monitoring location	Parameter	Unit	Frequency	Number of core samples	Soil Profile	Number of core samples	Soil Profile
				Composite Surface Soil Sample		Composite Deep Soil Sample	
S1 (LAA 1) S6 (LAA 2) S11 (LAA 3) S16 (LAA 4) S21 (LAA5) S22 (LAA5) Within each irrigation area as shown in Figure 8 in Schedule 1 Note: Only required in the LAAs where waste has been applied in the previous 12 months.	pH ($CaCl_2$)	-	Annually in the months of February, March or April	40	0-10cm	5	Composite sample of each major soil horizon to 1 metre depth increments[1,2]
	Electrical conductivity (1:5)[3]	dS/m					
	Cation exchange capacity	meq/100g					
	Exchangeable sodium percentage	%					
	Exchangeable potassium percentage	%					
	Available N[4]	mg/kg					
	Total N						
	Available P (Colwell)						
	Total P						
	Available K (Colwell)						

Monitoring location	Parameter	Unit	Frequency	Number of core samples	Soil Profile	Number of core samples	Soil Profile
				Composite Surface Soil Sample		Composite Deep Soil Sample	
S2, S3, S4, S5 (LAA 1) S7, S8, S9, S10 (LAA 2) S12, S13, S14, S15 (LAA 3) S17, S18, S19, S20 (LAA 4) S23, S24, S25 S26 (LAA5) as shown in Figure 8 in Schedule 1	Heavy metals and pesticides	mg/kg	Baseline survey in 2026 reporting period, then every 5 years	40	0 - 10cm	5	Composite sample of each major soil horizon to 1 metre depth increments[1,2]
	Phosphorus retention using CSIRO method 9H1 Anion Storage Capacity	mg P/ kg	Every 5 years	N/A	N/A		
EMI survey area as shown in Figure 8 in Schedule 1	EMI survey[5]	mS/m Soil EC_e in dS/m	Every 5 years	Topsoil and subsoil samples collected to 1 metre depth in the most conductive areas of each LAA. Note: Only required in the LAAs where waste has been applied in the previous 5 years.			

Notes: 1. Positioned within major soil horizons or layers 2. Within a 5m diameter plot 3. Converted to saturated extract (EC_e) based on field texture 4. Nitrate-N and ammonium-N 5. with EM 38 + soil sampling in the highest conductivity area (EC:1:5) converted to EC_e using field texture

Groundwater

12. The licence holder must monitor the groundwater for the identified parameter in accordance with Table 6.

Table 6: Monitoring of ambient groundwater concentrations

Monitoring location	Parameter	Unit	Frequency	Sample
OW2, OW5, OW8, OW9, OW10 and MB6 as shown in Figure 7 in Schedule 1	Detection of standing water level less than 1 metre below ground level	m BGL	Continuous	Real-time sensor In-field measurement
MB3, MB4, MB5, MB6, MB7 and MB8 as shown in Figure 7 in Schedule 1	Standing water level[1]	m BGL		In-field measurement
MB3, MB4, MB5, MB6, MB7 and	pH[1]	-		Pump sample (at least 4-6 times
	Electrical	dS/m		

Monitoring location	Parameter	Unit	Frequency	Sample
MB8 as shown in Figure 7 in Schedule 1	conductivity[1]		One sample within 1 week of water being detected within the bores for the first time each year, and then monthly until the water level recedes back below 1 meter.	volume of bore)
	Total Dissolved Solids (TDS)	mg/L		
	Na^+			
	K^+			
	Ca^{2+}			
	Mg^{2+}			
	Cl^-			
	SO_4^{2-}			
	HCO_3^-			
	Total N			
	Ammonium nitrogen			
	Nitrate N			
	Total P (filtered and unfiltered)			
	Sodium Adsorption Ratio (SAR)	Based on Na^+, Ca^{2+} and Mg^{2+} in the units meq/L		

Wastewater Emissions to Land Loading Limits

13. The licence holder must ensure that emissions listed in Table 7 for the corresponding parameters do not exceed the corresponding limit.

Table 7: Irrigation emission limits

Parameter	LAA1	LAA 2	LAA 3	LAA 4	LAA 5
Daily irrigated wastewater limit (kL/day) for each month, if groundwater is not within 1 metre of the surface.	Jan: 166 Feb: 159 March: 128 April: 91 May: 43 June: 23 July: 19 August: 39 September: 64 October: 103 November: 127 December: 156	No irrigation allowed	Jan: 249 Feb: 239 March: 192 April: 135 May: 61 June: 30 July: 23 August: 54 September: 93 October: 153 November: 190 December: 234	No irrigation allowed	Jan: 249 Feb: 234 March: 164 April: 80 May: 0 June: 0 July: 0 August: 0 September: 18 October: 106 November: 161 December: 227
Total N	633 kg (N/ha/annual period)				360 kg (N/ha/annual period)

Total P	51 kg P/ha/ annual period, or revised (condition 15) loadings based on 5-year phosphorus retention measurements	40 kg P/ha/ annual period, or revised (condition 15) loadings based on 5-year phosphorus retention measurements	45 kg P/ha/ annual period, or revised (condition 15) loadings based on 5-year phosphorus retention measurements	73 kg P/ha/ annual period, or revised (condition 15) loadings based on 5-year phosphorus retention measurements	29 kg P/ha/ annual period, or revised (condition 15) loadings based on 5-year phosphorus retention measurements
Potassium measured as available K (Colwell) for solids and K ions for wastewater	297 kg K/ha/ annual period				169 kg K/ha/ annual period
BOD	< 1,500 (kg/ha/month)				
SAR	Within the “stable soil structure” range depicted in Figure 9, Schedule 1				
pH (wastewater)	Between 6 and 8.5				

14. The licence holder must revise the phosphorus loading values to each LAA every 5 years using a Certified Soil Scientist. If the revised value is less than the current stated amount, the lesser amount must be adhered to. The first revision is due with the 2030 AER.

15. If average SAR is greater than 6 for the Annual Period, the licence holder must undertake a review aimed at identifying potential opportunities to reduce the SAR of treated wastewater and implement any recommendations that arise from the review.

Records and reporting

16. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

    a) the name and contact details of the complainant, (if provided);

    b) the time and date of the complaint;

    c) the complete details of the complaint and any other concerns or other issues raised; and

    d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

17. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

    a) the calculation of fees payable in respect of this licence;

    b) the works conducted in accordance with condition 1 of this licence;

    c) any maintenance of infrastructure that is performed in the course of complying with condition 4 of this licence;

    d) monitoring programmes undertaken in accordance with conditions 10, 11, 12, and 13 of this licence; and

e) complaints received under condition 16 of this licence.

18. The books specified under condition 17 must:

be legible;

a) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

b) be retained by the licence holder for the duration of the licence; and

c) be available to be produced to an inspector or the CEO as required

19. The licence holder must notify the CEO within 48 hours:

a) Once irrigation is required to cease as the groundwater in LAA1, LAA3 and LAA5 has risen to within 1m, and provide a photograph of the flowmeter (FM2) at that stage.

b) if production ceases because of the wastewater storage capacity being reached.

20. The licence holder must notify the CEO within 14 days of detecting a malfunction of any site infrastructure listed in Table 3.

21. The licence holder must:

a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

b) for each annual period, prepare and submit to the CEO by no later than 30 June each year an Annual Audit Compliance Report in the approved form.

22. The licence holder must submit to the CEO by no later than 30 June, an Annual Environmental Report for that annual period for the conditions listed in Table 8, and which provides information in accordance with the corresponding requirement set out in Table 8.

Table 8: Annual Environmental Report

Condition	Requirement
-	a) Monthly beer production as reported to the Australian Taxation Office. b) Monthly volume of beer processed for third parties.
Condition 5, Table 3	a) Monthly read of flow meter (FM1). b) Daily reads of flow meter (FM2). c) Copy of logbook (LB1) showing the wastewater storage availability. d) Copy of logbook (LB2) showing cattle movement and harvesting dates. e) Copy of logbook (LB3) showing the dates and the amount of wastewater irrigated. f) Number of bales harvested, and approximate tonnes harvested from each LAA where waste was applied in the previous 12 months. g) Tabulated treated wastewater monitoring data showing the monthly volume of wastewater irrigated to each LAA. h) Yearly monitoring data of groundwater depth from within each bore fitted with groundwater depth sensors. i) Summary of when wastewater irrigation was first restricted in each LAA to when it was able to resume. j) the daily volume (in kilolitres) of brewery wastewater and sludge removed from the premises via a licensed controlled waste contractor.

Condition	Requirement
Condition 10, Table 4	a) Estimate of mass of solids produced based on records of number of IBCs applied and average moisture content of IBC or wastewater monitoring results. b) Tabulated data of the daily read of (FM2). c) End of month photographs of FM2 meter face. d) Laboratory data sheets for monthly monitoring in accordance with Table 5 e) A tabulated data summary of monitoring results. f) An interpretation of monitoring data results including comparison to historical trends. g) Summary of tabulated treated wastewater monitoring data showing the annual volume of wastewater and loads of Total N, Total P, Potassium (measured as potassium ions), BOD5, pH, EC and SAR to each LAA.
Condition 11, Table 5	a) Tabulated soil monitoring data results and time series graphs for each irrigation area showing concentrations and kg/ha nutrients for all parameters. b) Name of the Certified Soil Scientist who collected samples
Condition 12, Table 6	Tabulated groundwater monitoring data results and time series graphs for each monitoring well showing concentrations of all parameters.
Condition 13, Table 7	Annual nutrient loading calculations, including inputs from wastewater, fertiliser and solids application.
Condition 15	SAR review (if required).
Condition 16	Summary of complaints.
Condition 19	Summary of any ceasing of production that occurred due to wastewater storage limitations. Include the date production resumed and how the storage deficit was overcome (irrigation/contractor taken off site).
Condition 20	Summary of any failure or malfunction of any infrastructure listed in Table 3 and any environmental incidents that have occurred during the annual period and any corrective actions taken.

Definitions and interpretation

Definitions

In this Licence, the terms in Table 9 have the meanings defined.

Table 9: Definitions

Term	Definition
ACN	Australian Company Number
Alcoholic Beverage	means the final fermented beverage ready for packaging.
Annual Period	means a 12-month period commencing from 1 May until 30 April of the immediately following year.
AS/NZS 4482.1-2005	means Australian Standard AS4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil – Non-volatile and semi volatile compounds.
AS/NZS 5667.1-1998	means the Australian Standard AS/NZS 5667.1-1998 Water quality - Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.4:1998	means AS/NZS 5667.4:1998. Water quality – Sampling. Part 4: Guidance on sampling from lakes, natural and man-made.
AS/NZS 5667.10-1998	means the Australian/New Zealand Standard AS/NZS 5667.10-1998 Water quality – Sampling – Guidance on sampling of waste waters.
AS/NZS 5667.11-1998	means the current version of Australian/New Zealand Standard AS/NZS 5667.11-1998 Water quality – Sampling – Guidance on sampling of groundwaters.
Beverage	means for the purpose of this licence, beer only.
BOD_5	means the amount of dissolved oxygen consumed in five days by biological processes breaking down organic matter.
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 *Environmental Protection Act 1986* Locked Bag 10, Joondalup DC, WA 6919 info@dwer.wa.gov.au
Certified Soil Scientist	means a qualified Soil Scientist who: • holds a current science tertiary qualification with specialisation in Soil Science and relevant wastewater management experience; or • holds current Certified Professional Soil Scientist accreditation with Soil Science Australia.
Collection Sump	means a hollow or a depression on the floor into which liquids can drain off to and get collected. The sump provides a collection point from which to recover liquid, using a pump or other means.
Commissioning	means certification that newly constructed infrastructure has been installed, inspected, tested, and is operating as designed.
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Continuous	means a data recovery rate of at least 90%
Department	means the department established under s.35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to:

Term	Definition
	(a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
dS/m	means deciSiemens per metre
DWER	Department of Water and Environmental Regulation
EC	means Electrical Conductivity
EMI	means Electromagnetic Induction
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the *Environmental Protection Act 1986* (WA).
EP Regulations	means the *Environmental Protection Regulations 1987* (WA).
Harvested	means the cutting and removal off site of paddock grasses in the form of hay or silage.
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Irrigation area	LAAs as defined in Schedule 1
kL	means kilolitre
LAA	Land Application Area as defined by the coordinates in Table 13 in Schedule 1
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Malfunction	means a piece of monitoring, treatment or emission control equipment or machinery which fails to function normally. This can include but is not limited to meters failing to record, over topping of tanks, blocked sprinklers or pipes bursting etc.
mg/L	means milligrams per litre
Monthly Period	A one-month period commencing from the first day of a month until first day of the immediately following month.
Na+	means sodium ion
Nitrate N	means Nitrate nitrogen
K+	means potassium ion
Ca2+	means calcium ion
Mg2+	means magnesium ion
Cl-	means chloride ion
SO42-	means sulfate ion
HCO3-	means bicarbonate ion
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on Figure 1 in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
PR	means Phosphorus Retention
PVC	means Polyvinyl chloride
SAR	means Sodium Adsorption Ratio
Stock Exclusion Period	means the period when stock are excluded from a Land Application Area.

Term	Definition
	This occurs from 01 July until 31 October each year
TDS	means Total Dissolved Solids
TSS	means Total Suspended Solids
Total N	means Total Nitrogen
Total P	means Total Phosphorus
Waste	has the same meaning given to that term under the EP Act
WTSC	means wastewater treatment and storage compound
WWTS	means the brewery wastewater treatment system consisting of a solids separator, a pH control system, 2 x 20-kL flow balancing tanks, 8 x 50 kL storage tanks, a silicon carbide filtration systems, a Biofilmtech Pty Ltd 'Passive Aeration Simultaneous Nitrification and Denitrification' (PASND) that includes 2 x 10kL reactor vessels, up to 8 IBCs and associated pipework, pumps and control systems

Schedule 1: Maps

Premises map

The Premises and LAA's are shown in the map below. The blue line depicts the premises boundary.

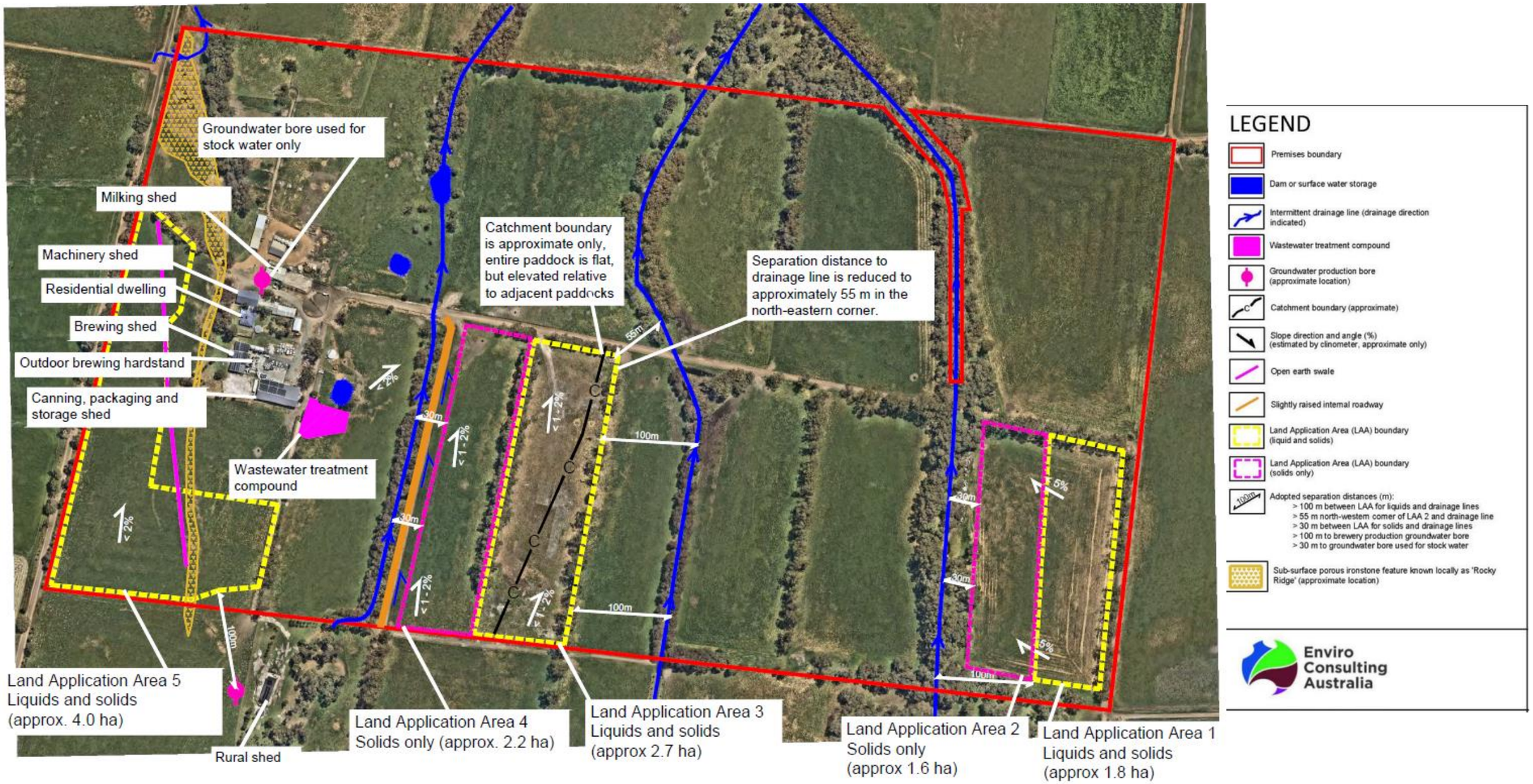

Figure 1. Premises map and Land application area boundaries

Premises infrastructure plan overview

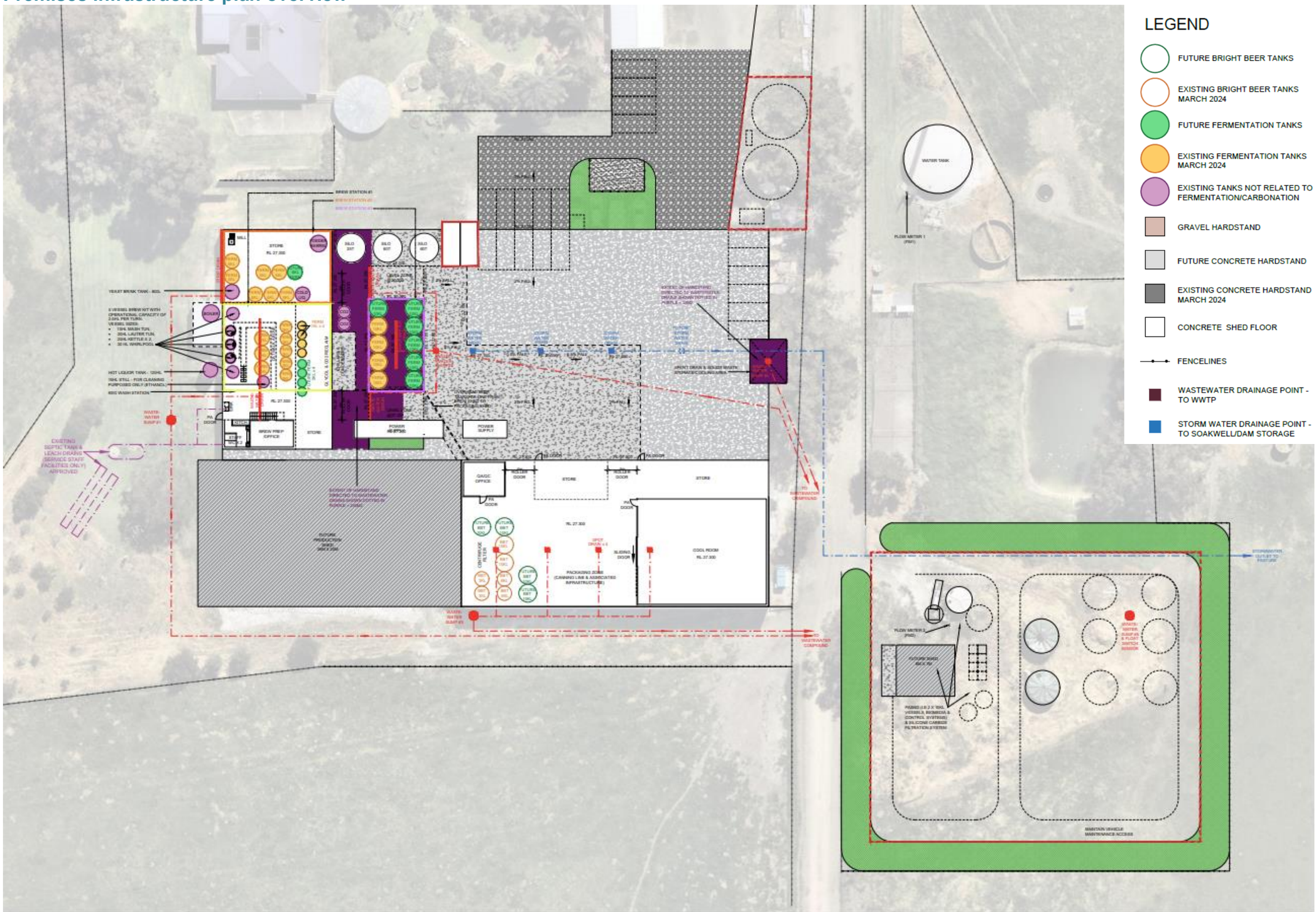

Figure 2: Brewery site facility plan overview

Brew stations layout plan

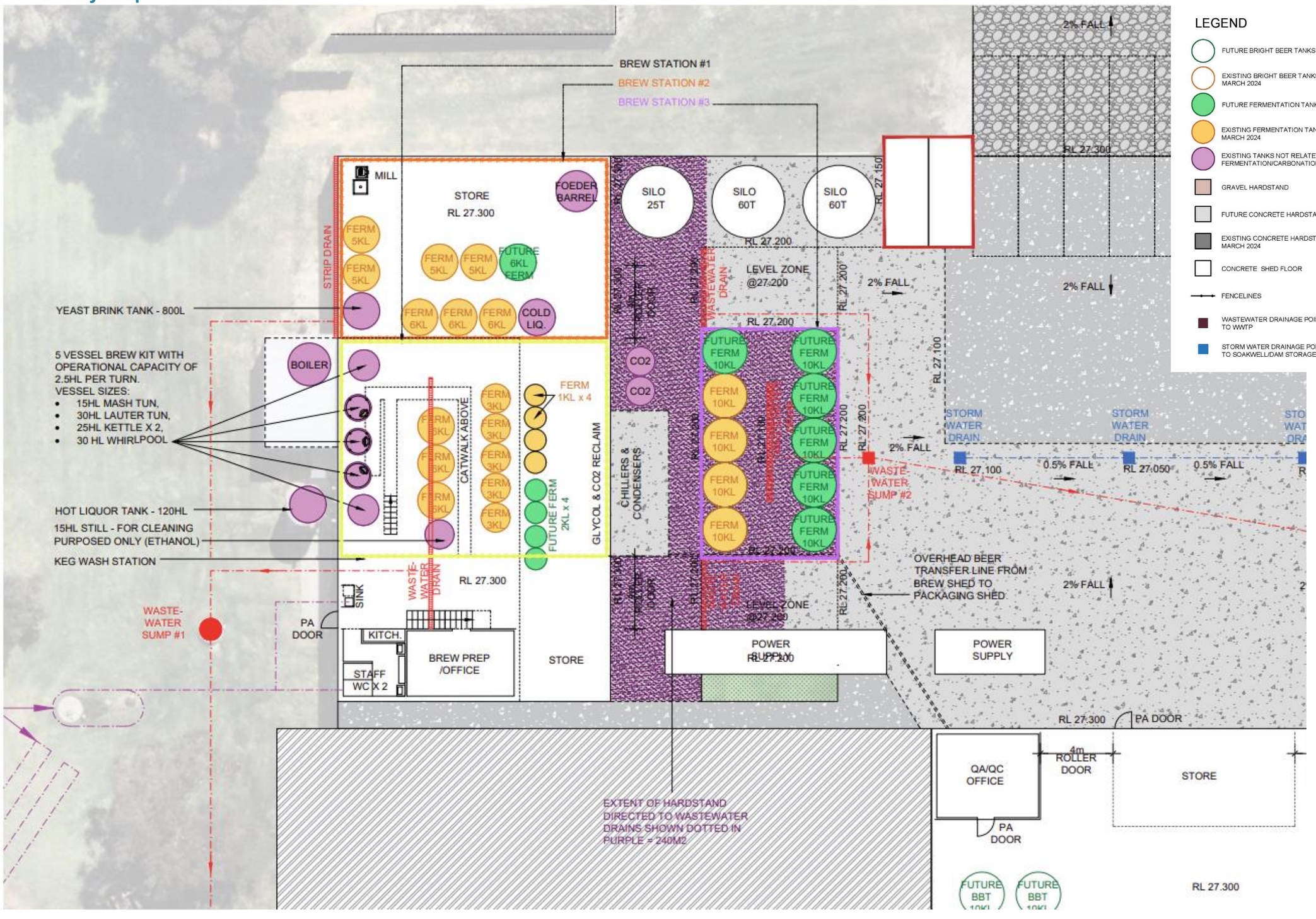

Figure 3: Brew stations layout plan

Canning and packing shed plan

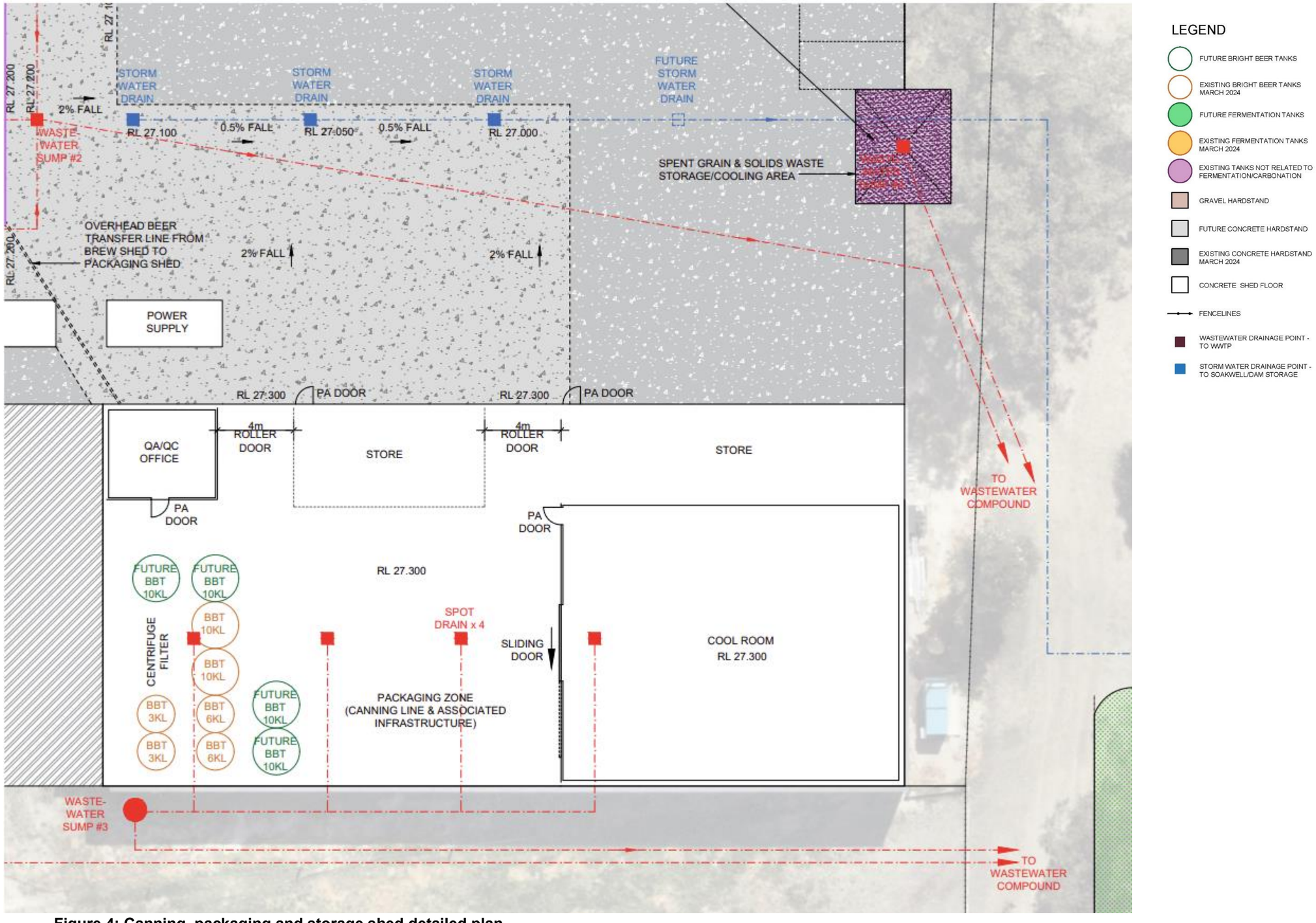

Figure 4: Canning, packaging and storage shed detailed plan

Wastewater Treatment and Storage Compound

Earth surface water diversion bunding depicted by green hatched area.
Tanks and IBCs can be placed anywhere within the Wastewater Treatment and Storage Compound provided that all conditions of this licence are complied with.

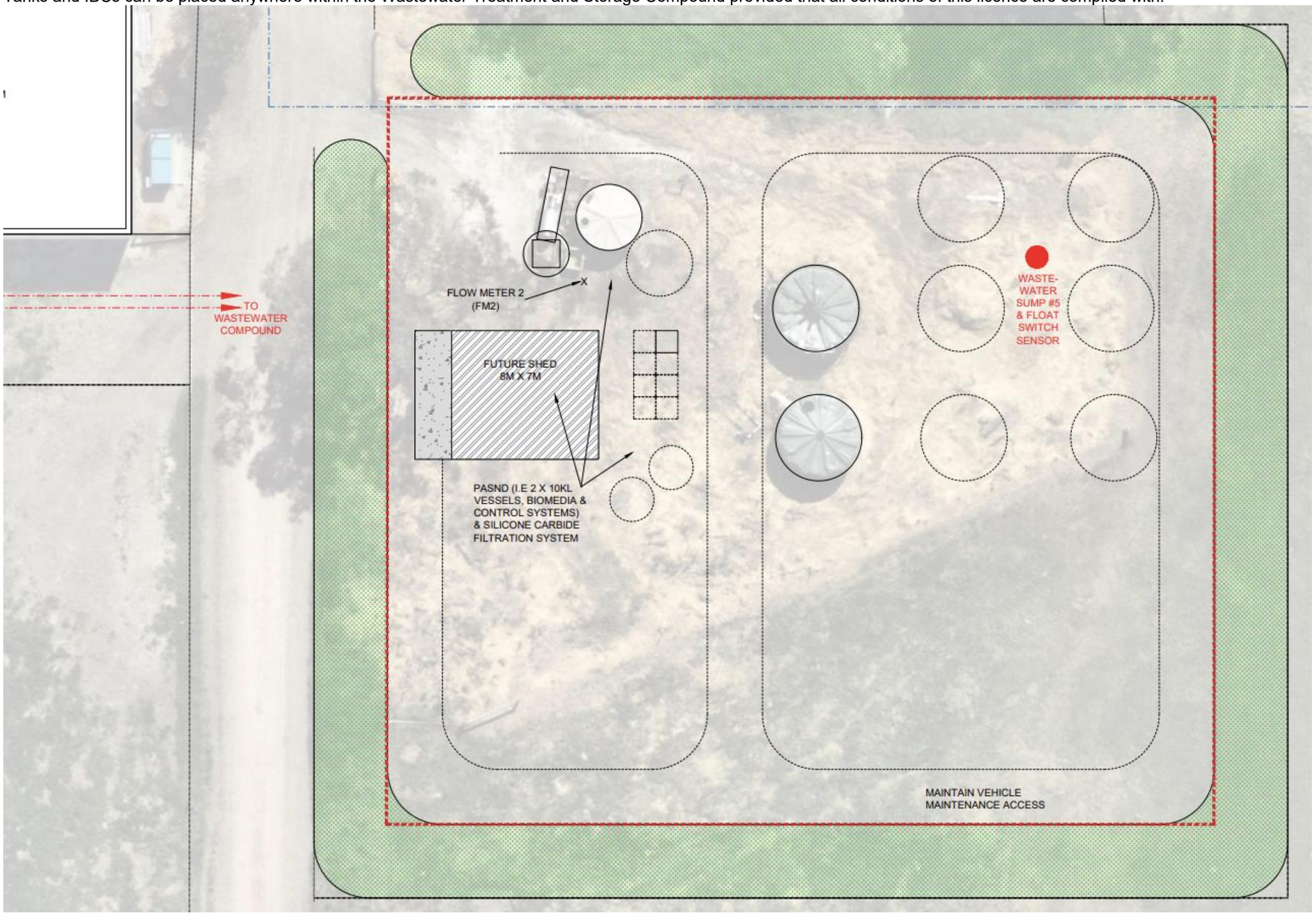

Figure 5: Wastewater Treatment and Storage Compound layout plan

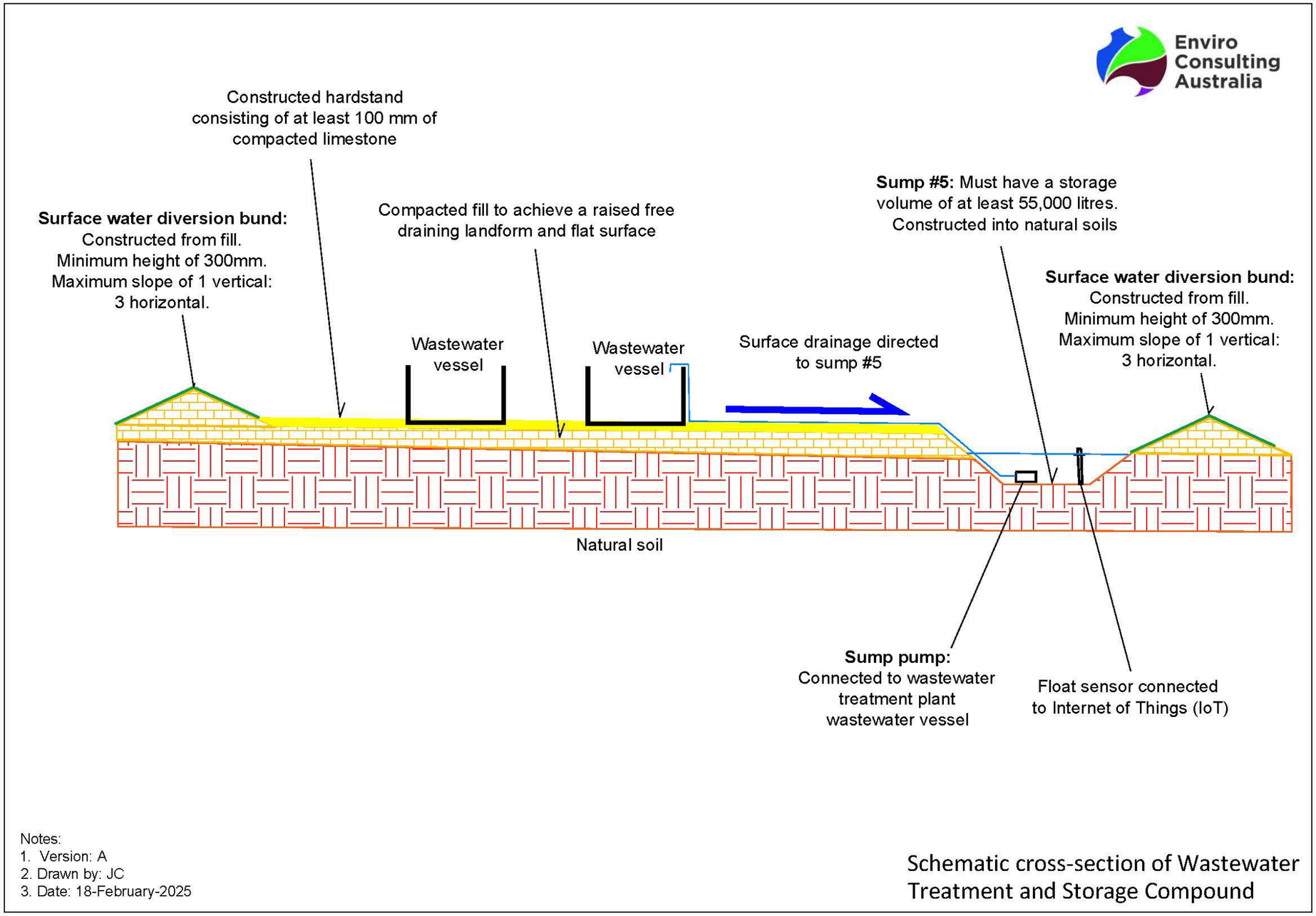

Figure 6: Wastewater Treatment and Storage Compound cross-section

Groundwater observation well locations plan

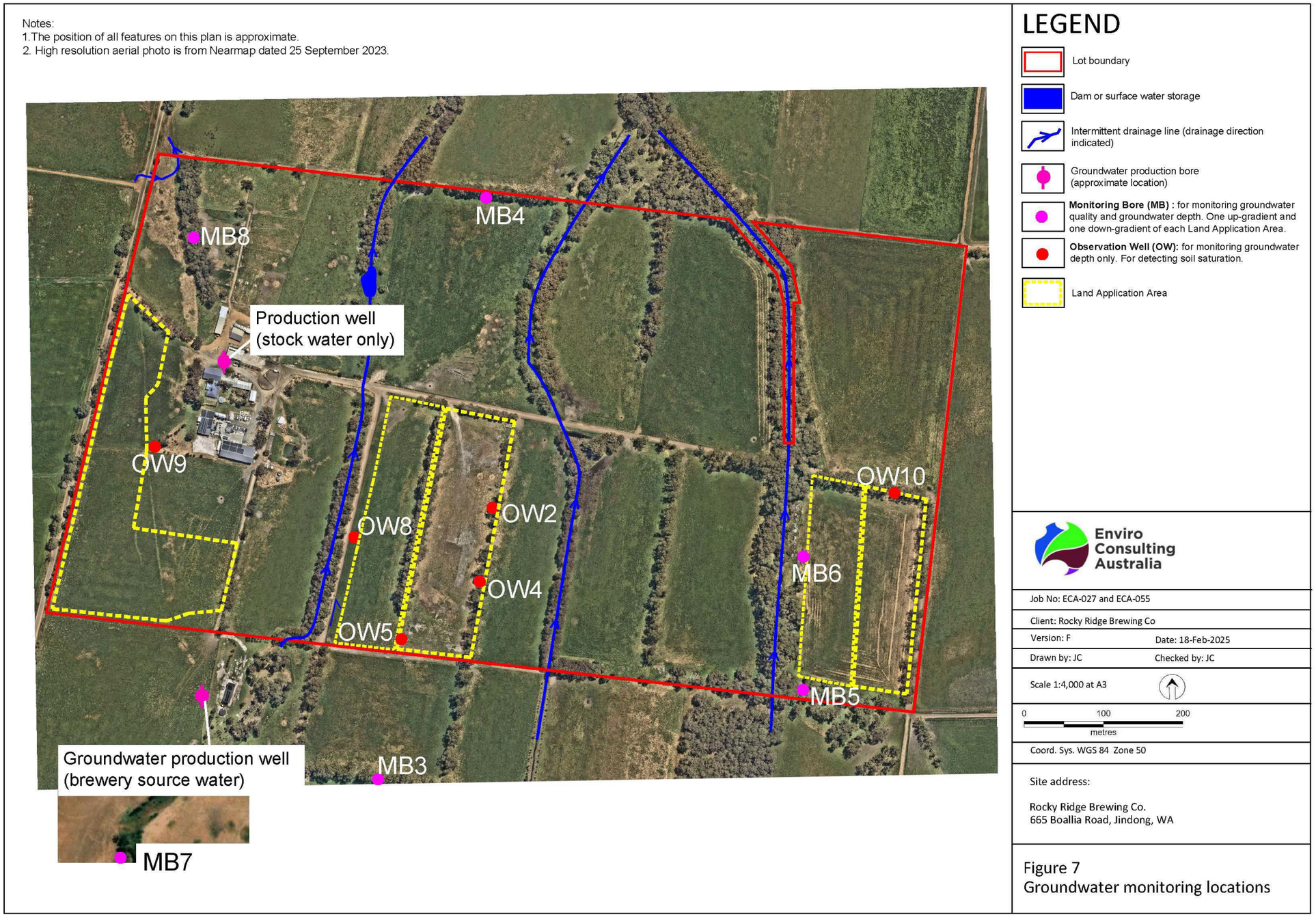

Figure 7: Groundwater well locations plan

Soil monitoring locations plan

Notes:
1.The position of all features on this plan is approximate.
2. Aerial photo is from Nearmap dated 25 September 2023.

LEGEND

- Lot boundary
- Dam or surface water storage
- Intermittent drainage line (drainage direction indicated)
- Soil monitoring location (S) - annual monitoring (agronomic parameters)
- Soil monitoring location (S) - sampled every 5 years (heavy metals, pesticides, salinity and phosphorus retention)
- Electromagnetic induction survey boundary

Enviro Consulting Australia

Job No: ECA-027 and ECA-055
Client: Rocky Ridge Brewing Co
Version: F Date: 18-Feb-2025
Drawn by: JC Checked by: JC
Scale 1:4,000 at A3
0 100 200
metres
Coord. Sys. WGS 84 Zone 50

Site address:

Rocky Ridge Brewing Co.
665 Boallia Road, Jindong, WA

Figure 8
Soil monitoring locations

Figure 8: Soil monitoring locations

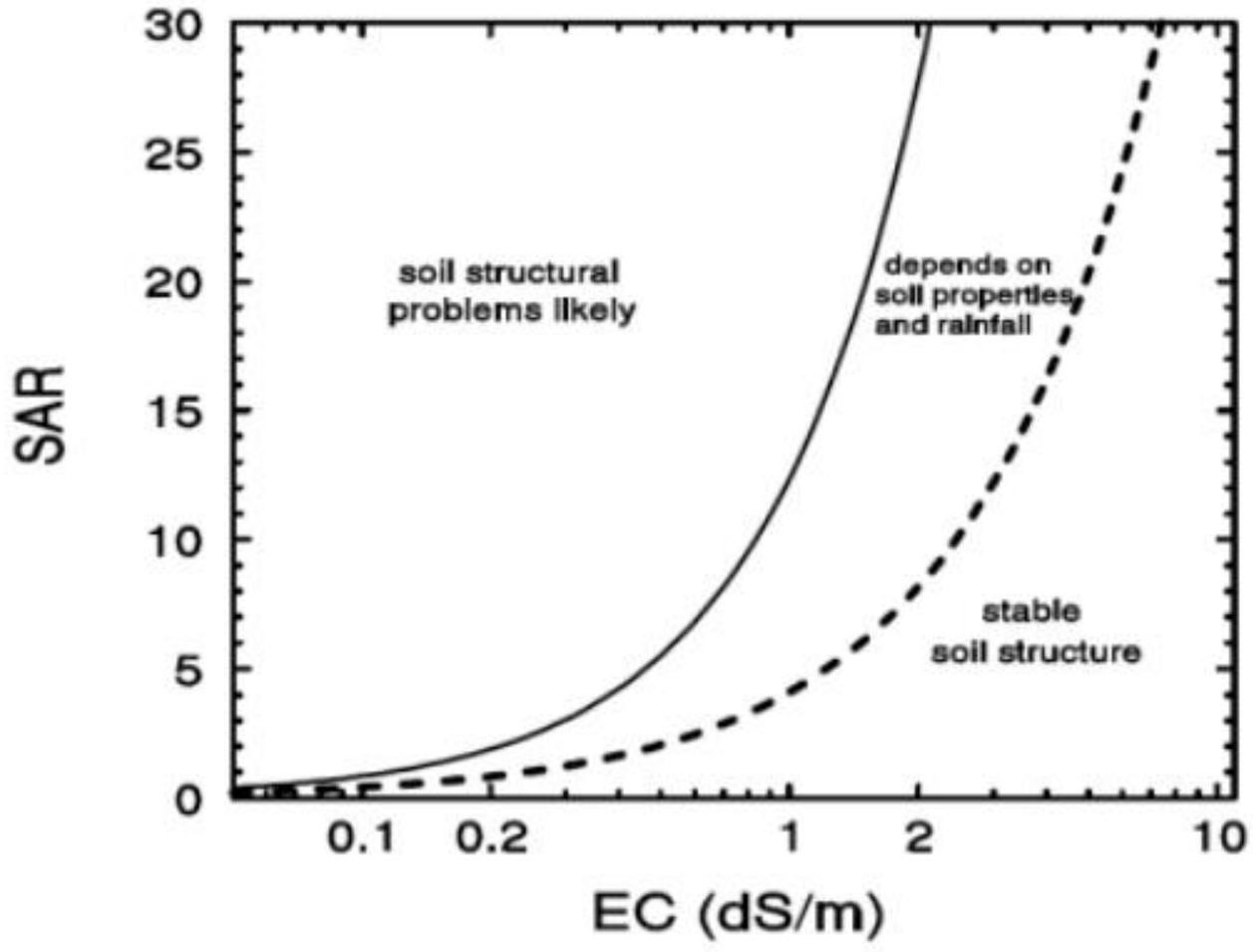

Figure 9: Soil structure: SAR and EC relationship

Schedule 2: coordinates

The LAA boundary is defined by the coordinates (WGS 84, Zone 50) in Table 13.

Table 10: LAA boundary coordinates

	Eastings	Northings		Eastings	Northings
	LAA 1 - 1.8 ha			**LAA 4 – 2.2ha**	
1	340850	6264587	1	340131	6264650
2	340784	6264596	2	340205	6264642
3	340800	6264846	3	340267	6264945
4	340874	6264830	4	340201	6264958
	LAA 2 - 2.7 ha			**LAA 5 – 4.0 ha**	
1	340210	6264643	1	339987	6264690
2	340301	6264632	2	339948	6264686
3	340356	6264927	3	339918	6264677
4	340271	6264943	4	339871	6265085
	LAA 3 - 2.2 ha		5	339121	6265041
1	340131	6264650	6	339908	6264974
2	340205	6264642	7	339894	6264957
3	340267	6264945	8	339894	6264891
4	340201	6264958	9	339877	6264794
			10	34008	6264775

Table 11. Locations of each observation well and monitoring bore

	Eastings	Northings
OW2	340332	6264821
OW4	340315	6264728
OW5	340215	6264653
OW8	340153	340153
OW9	339902	6264894
OW10	340835	6264835
MB3	340185	6264484
MB4	340325	6265217
MB5	340721	6264587
MB6	340725	6264759
MB7	339863	6264380
MB8	339957	6265155

Schedule 3: Monitoring well design

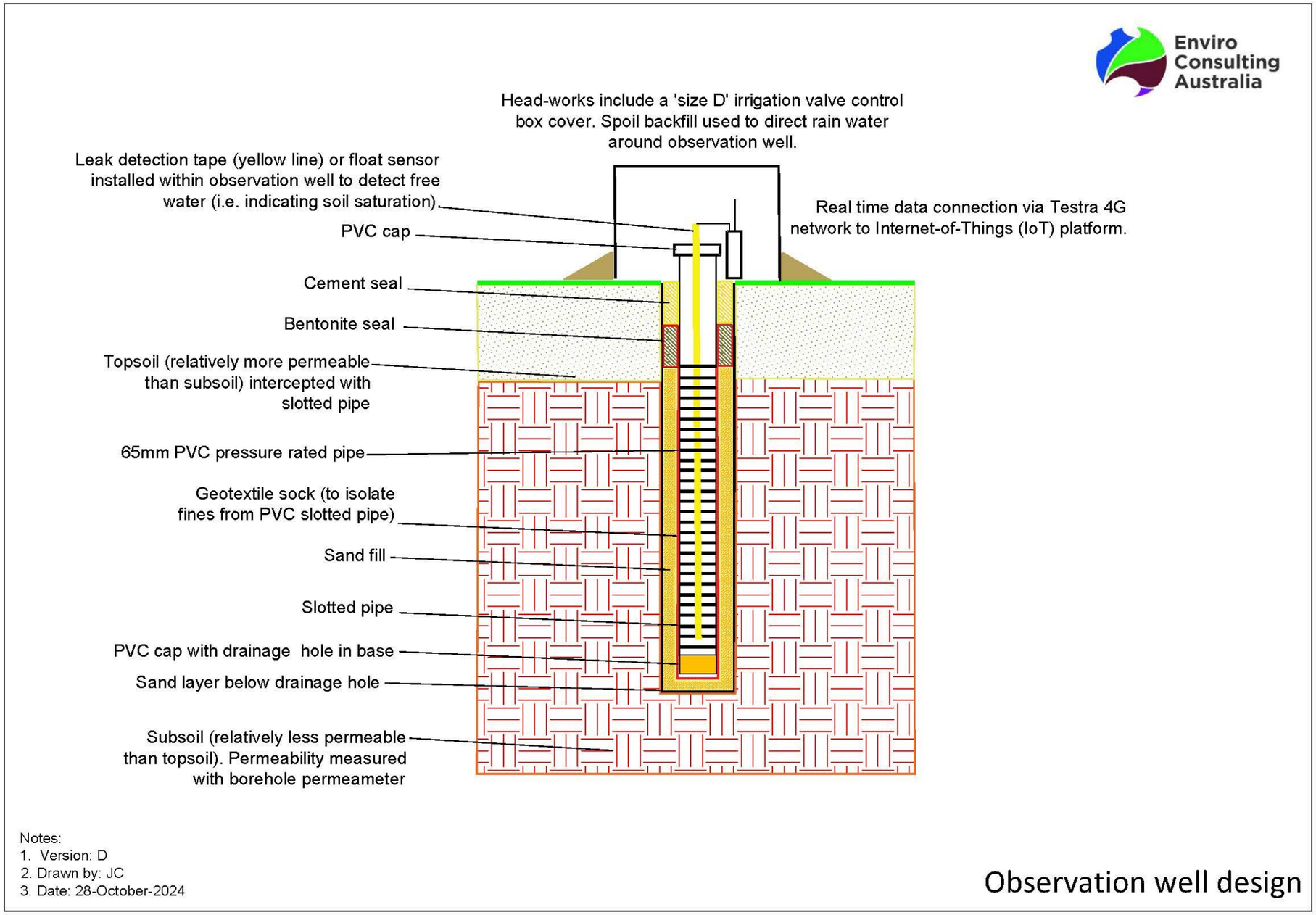

Figure 10. Well construction design