



Licence number	L5961/1991/12
Licence holder	Water Corporation
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DER2014/001269-1
Duration	01/11/2015 to 31/10/2035
Date of issue	01/11/2015
Date of amendment	30/08/2023
Premises details	Geraldton No.2 Water Resource Recovery Facility Webborton Road, Wonthella GERALDTON WA 6530 Legal description – Lot 1 on Deposited Plan 57545 Lot 2 on Deposited Plan 57545 and Lot 3 on Deposited Plan 72567

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 54: Sewage Facility: premises – (a) On which sewage is treated (excluding septic tanks); or (b) From which treated sewage is discharged onto land or into waters.	3,500 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 30 August 2023, by:

Grace Campbell

**A/SENIOR ENVIRONMENTAL OFFICER
INDUSTRY REGULATION**

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

Licence history

Date	Reference number	Summary of changes
1999/05/11	W2748/1991/1	Works Approval
02/10/2000	L5961/1991/4	Licence re-issue
03/10/2001	L5961/1991/5	Licence re-issue
11/10/2002	L5961/1991/6	Licence re-issue
06/10/2003	L5961/1991/7	Licence re-issue
12/08/2004	L5961/1991/8	Licence re-issue
21/09/2006	L5961/1991/9	Licence re-issue
31/10/2008	L5961/1991/10	Licence re-issue
22/10/2010	L5961/1991/11	Licence re-issue
22/10/2015	L5961/1991/12	Licence re-issue and update to new format
25/08/2016	L5961/1991/12	Licence amendment for inclusion of additional infiltration ponds
30/08/2023	L5961/1991/12	Amendment to alter the due date for the environmental report and annual audit compliance report to be 1 October annually, and to change the Premises name to be 'Geraldton No. 2 Water Resource Recovery Facility'.

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:

1. The licence holder must maintain all production bores, monitoring bores, flow meters and sampling points at the premises to enable their operation in accordance with design specifications.
2. The licence holder must immediately recover, or remove and dispose of spills of screenings, sewage, sewage sludge and septage waste (as defined in Table 1 outside an engineered containment system.
3. The licence holder must only allow waste to be accepted on to the Premises if:
 - (a) it is of a type listed in Table 1;
 - (b) the quantity accepted is below any limit listed in Table 1; and
 - (c) it meets any specification listed in Table 1.

Table 1: Waste acceptance

Waste	Waste Code	Quantity Limit	Specification
Sewage - waste from the reticulated sewerage system	K130	3,500 m ³ /day	Accepted through sewer inflow(s) only.
Septage wastes	K210		Tankered into the premises and discharged directly into the primary pond only, via the receival point.

4. The licence holder must ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 2 and in accordance with any process limits described in that table.

Table 2: Waste Processing

Waste type	Process	Process limits
Sewage	Physical, biological and chemical treatment	<ul style="list-style-type: none"> • Dispose of collected screenings to a licenced landfill
Treated wastewater	Infiltration area	<ul style="list-style-type: none"> • Treated wastewater discharged to on-site infiltration area; • ensure no erosion, pooling or ponding occurs; and • pH of treated wastewater to be maintained at 6.5 to 8.
Sewage sludge	Storage	<ul style="list-style-type: none"> • Stored within geobags on a bunded, HDPE lined area; • waste activated sludge leachate returned to Pond 1; and • dispose of sludge and biosolids to a licensed landfill or in accordance with the <i>Western</i>

		<i>Australian Guidelines for Biosolids Management</i> , Department of Environment and Conservation, December 2012 (as amended from time to time).
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5. The licence holder must ensure that wastewater and sewage sludge is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 3.

Table 3: Containment infrastructure

Storage vessel or compound	Material	Infrastructure details
Inlet works	Screenings	Stored in a sealed bin which is surrounded by a bunded hardstand area which returns sludge leachate to the start of the treatment process.
Ponds 1-2	Wastewater	Lined to achieve a permeability of no greater than 1×10^{-9} m/s or equivalent.
Distribution chamber	Wastewater	Unlined, in-situ soils.
Ponds IP5-IP8 (Infiltration)	Wastewater	Unlined, in-situ soils. The infiltration ponds shall be maintained to ensure that the combined total capacity of the ponds does not exceed 28 ML.
Temporary holding ponds	Sewage Sludge	Temporary or permanent infrastructure to consist of a bunded hardstand or lined area (lined to achieve a permeability of less than 10^{-9} m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system. The sewage sludge geobag laydown area should be managed such that: (a) stormwater runoff is prevented from entering the area; (b) discharges/ leachate from the area are directed to the primary pond.

6. The licence holder must manage the wastewater treatment ponds such that:
- (a) overtopping of the wastewater treatment ponds does not occur;
 - (b) storm water runoff is prevented from entering the wastewater treatment ponds or causing the erosion of outer pond embankments; and
 - (c) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.
7. The licence holder must:
- (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site;

- (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
- (c) ensure the entrance gates are closed and locked when the site is closed or unmanned.

Emissions and discharges

8. The licence holder must ensure that where waste is emitted to land from the emission points in Table 4, it is done so in accordance with the conditions of this Licence.

Table 4: Emissions to land

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
Infiltration area	L2	Infiltration of wastewater on site.	Discharge of treated wastewater from final treatment pond only. Groundwater from infiltration area is redrawn via production bores for reuse.

Monitoring

9. 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 microbiological samples are collected and preserved in accordance with AS/NZS 2031;
 - (e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
10. The licence holder must ensure that :
- (a) monthly monitoring is undertaken at least 15 days apart;
 - (b) quarterly monitoring is undertaken at least 45 days apart; and
 - (c) six monthly monitoring is undertaken at least 5 months apart.
11. The licence holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
12. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.
13. The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Monitoring of emissions to land

Emission point reference	Parameter	Limits	Units	Average period	Frequency
M3 (Flow meter)	Volumetric flow rate	3,500	m ³ / day	Monthly	Continuous
M2 (Monitoring point – FL No. S4000068)	pH ¹	6.8–8.5	pH units	Spot sample	Quarterly
	Total suspended solids	-	mg/L		
	Total dissolved solids	-			
	5-day Biochemical oxygen demand	-			
	Total Nitrogen	125			
	Total Phosphorus	12			
	Ammonium-nitrogen	-			
	Nitrate-nitrogen	-			
	Nitrite-nitrogen	-			
	<i>Escherichia coli</i> (<i>E.coli</i>) ²	-			
	Aluminium	-	mg/L	Spot sample	Annual
	Arsenic	-			
	Beryllium	-			
	Boron	-			
	Cadmium	-			
	Chromium	-			
	Cobalt	-			
	Copper	-			
	Fluoride	-			
	Lead	-			
	Mercury	-			
Nickel	-				
Selenium	-				
Zinc	-				

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

- 14.** The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter ¹	Units	Averaging period	Frequency
Sewage received	Inflow meter (M1 – S4000066)	Volumetric flow rate (cumulative)	m ³ / day	Monthly	Continuous
Treated wastewater discharged from the final treatment pond to on-site infiltration area	Outflow meter (M3)	Volumetric flow rate (cumulative)	m ³ / day	Monthly	Continuous
Septage received into the premises	Tankered waste receivable point	Volumetric flow rate (cumulative)	m ³ / day	Monthly	Continuous
Redraw of groundwater	Outflow meter from production bore 'A1/97'	Volumetric flow rate (cumulative)	m ³ / day	Monthly	Continuous

Note 1: In-field non-NATA accredited analysis permitted.

15. The licence holder must undertake the monitoring in Table 7 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Table 7: Monitoring of ambient groundwater quality

Monitoring point reference and location ³	Parameter	Limits	Units	Averaging period	Frequency
Monitoring and production bores: A1/97, 1/94, 2/94, 3/94, 4/94, 5/94, 6/94, 7/94, 8/94, 9/94, 10/94,	Standing water level	-	m(BGL)	Spot sample	Six monthly
	Electrical conductivity	-	µS/cm		
	Total dissolved solids	-	mg/L		
	Total Nitrogen	-			
	Total Phosphorus	-			
	pH ¹	6.5–8.5	pH		Monthly
	<i>E. coli</i> ²	<1,000	cfu/100ml		Annual
	Aluminum	-	mg/L		
	Arsenic	-			
	Beryllium	-			

01/17, 02/17 03/17, 04/17 05/17 and 06/17 (as defined within Schedule 1: Maps)	Boron	-			
	Cadmium	-			
	Chromium	-			
	Cobalt	-			
	Copper	-			
	Fluoride	-			
	Lead	-			
	Mercury	-			
	Nickel	-			
	Selenium	-			
	Zinc	-			

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

- 16.** The licence holder must undertake a triennial review of the ambient groundwater monitoring data to validate the 'Rockwater Report 2010' modelling data, as submitted for the new infiltration ponds. The review shall incorporate all monitoring and production bore ambient quality data obtained since initiating discharge to the new infiltration ponds (IP5-IP8). The triennial review shall consider:
- (a) the 'Rockwater Report 2010' modelling data, as submitted for the new infiltration ponds;
 - (b) 'Australian Guidelines for Water Recycling – Managed Aquifer Recharge, July 2009';
 - (c) the 'ANZECC 2000' guidelines;
 - (d) nutrient loads to the irrigation and infiltration areas; and
 - (e) groundwater directional flow
- 17.** The licence holder must submit the triennial review (as defined in condition 16 to the CEO by 25 February 2020 and by 25 February every three years thereafter.
- 18.** The licence holder must include in the initial triennial review (to be submitted by 25 February 2020 in accordance with Condition 16, a timeline for the installation of additional bores for monitoring the MAR area, to be located on the basis of validating the modelled extent of the wastewater plume after 10 years of infiltration, as outlined within Section 10.1 of the 'Rockwater, 2010' report.

Records and reporting

- 19.** The licence holder must implement a complaints management system that as a minimum record the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

- 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) prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 1 of October each year.
- 22.** The licence holder must:
- (a) prepare an environmental report that provides information in accordance with Table 8 for the preceding annual period, and
 - (b) submit the environmental report to the CEO by 1 of October each year.

Table 8: Environmental reporting requirements

Condition or table (if relevant)	Parameter
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken
Table 4	Summary of emissions to land
Table 5	Summary of monitoring of emissions to land
Table 6	Summary of monitoring of inputs/outputs
Table 7	Summary of monitoring of ambient groundwater quality
Condition 19	Complaints summary
Condition 20	Compliance

- 23.** The licence holder must ensure that the Environmental Report also contains:
- (a) any relevant process, production or operational data recorded; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.
- 24.** The licence holder must submit the information in Table 9 to the CEO according to the specifications in that table.

Table 9: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
-	Copies of original monitoring reports submitted to the licence holder by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the licence holder from third parties

25. The licence holder must ensure that the parameters listed in Table 10 are notified to the CEO in accordance with the notification requirements of the table.

Table 10: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Taking a treatment pond offline for maintenance	Notify 72 hours prior to any action taking place.	None specified
-	Removal of sludge from a treatment pond	No less than 14 days prior to removal.	None specified
Condition 13 Table 5 Condition 15 Table 7	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
Condition 12	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 2.

26. All information and records required by the licence holder must:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 26(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

Definitions

In this licence, the terms in Table 11 have the meanings defined.

Table 11: Definitions

Term	Definition
annual period	a 12 month period commencing from 1 of July until 30 June of the immediately following year.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
AS/NZS 2031	means the Australian Standard AS/NZS 2031 <i>Selection of containers and preservation of water samples for microbiological analysis</i>
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples;</i>
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
averaging period	means the time over which a limit is measured or a monitoring result is obtained;
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
condition	a condition to which the licence is subject under section 62 of the <i>Environmental Protection Act 1986</i>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.

Term	Definition
engineered containment system	means any infrastructure associated with the containment of wastewater, sewage sludge or inlet screenings
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
hardstand	means a surface with a permeability of no greater than 1×10^{-9} metres/second or equivalent
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
monthly	means a one-month period commencing from day 1 of a month until the last day of that same month.
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
quarterly	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March and 1 April to 30 June:
Schedule 1	means Schedule 1 of this Licence unless otherwise stated
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
six monthly	means the 2 inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year
spot sample	means a discrete sample representative at the time and place at which the sample is taken; and
triennial	means a submission date of 25 February 2020 and every three years thereafter.

Term	Definition
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1). The red line depicts the Premises boundary.



Figure 1: Map of the boundary of the prescribed premises

Map of emission and monitoring points

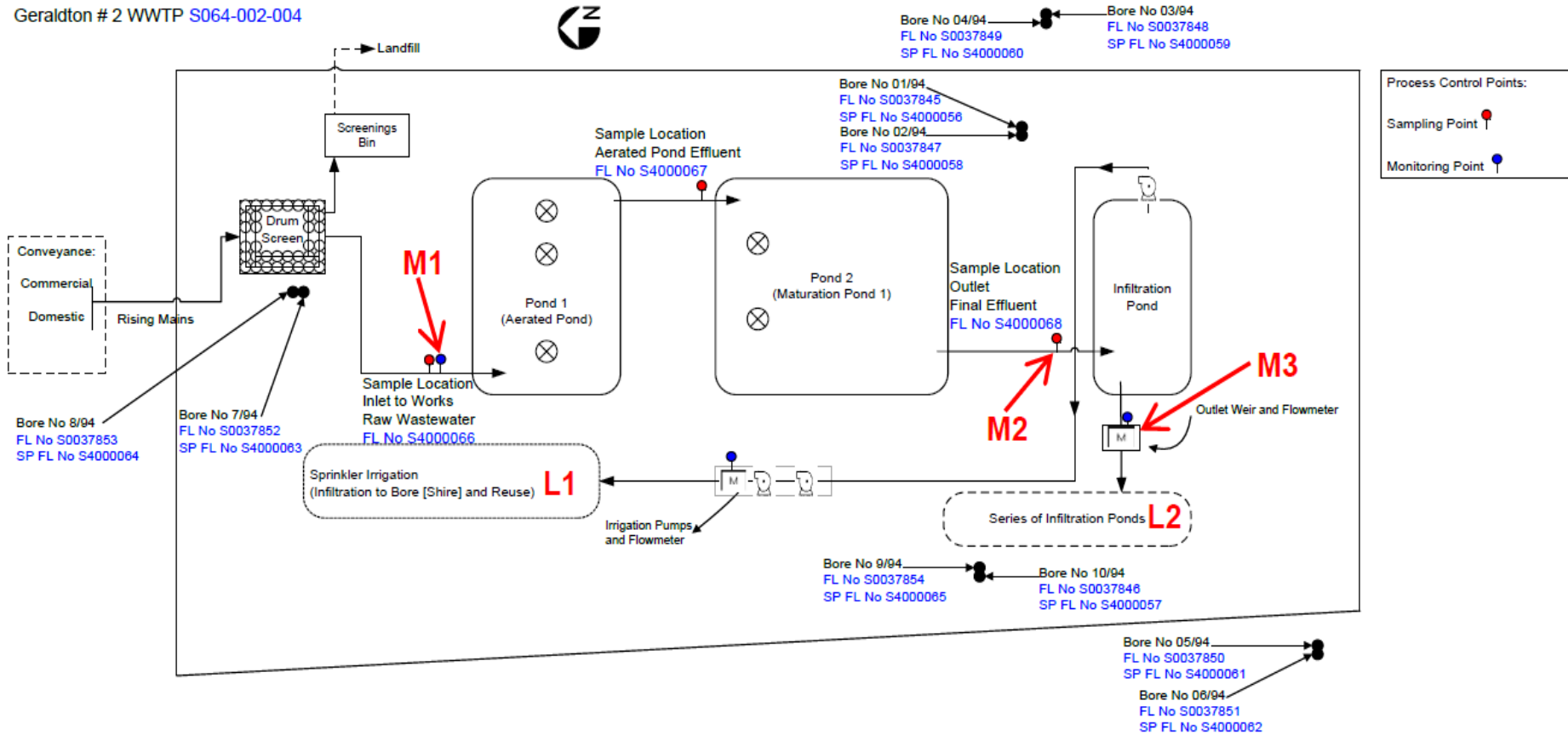


Figure 2: Map of emission and monitoring points

Map of monitoring bore locations

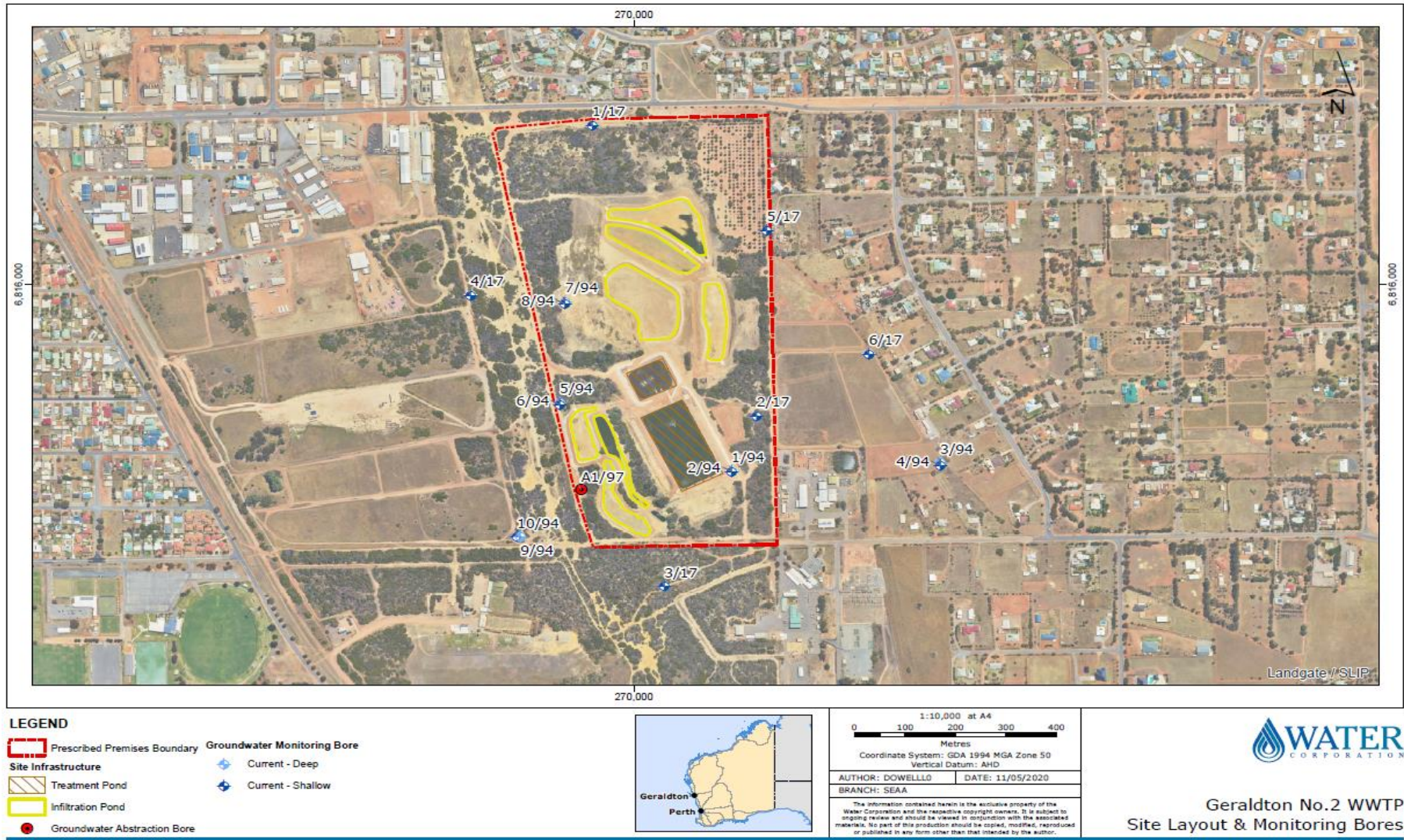


Figure 3: Map of site layout and monitoring bore locations

Licence: L5961/1991/12 (Amended 30/08/2023)

Map of premises layout

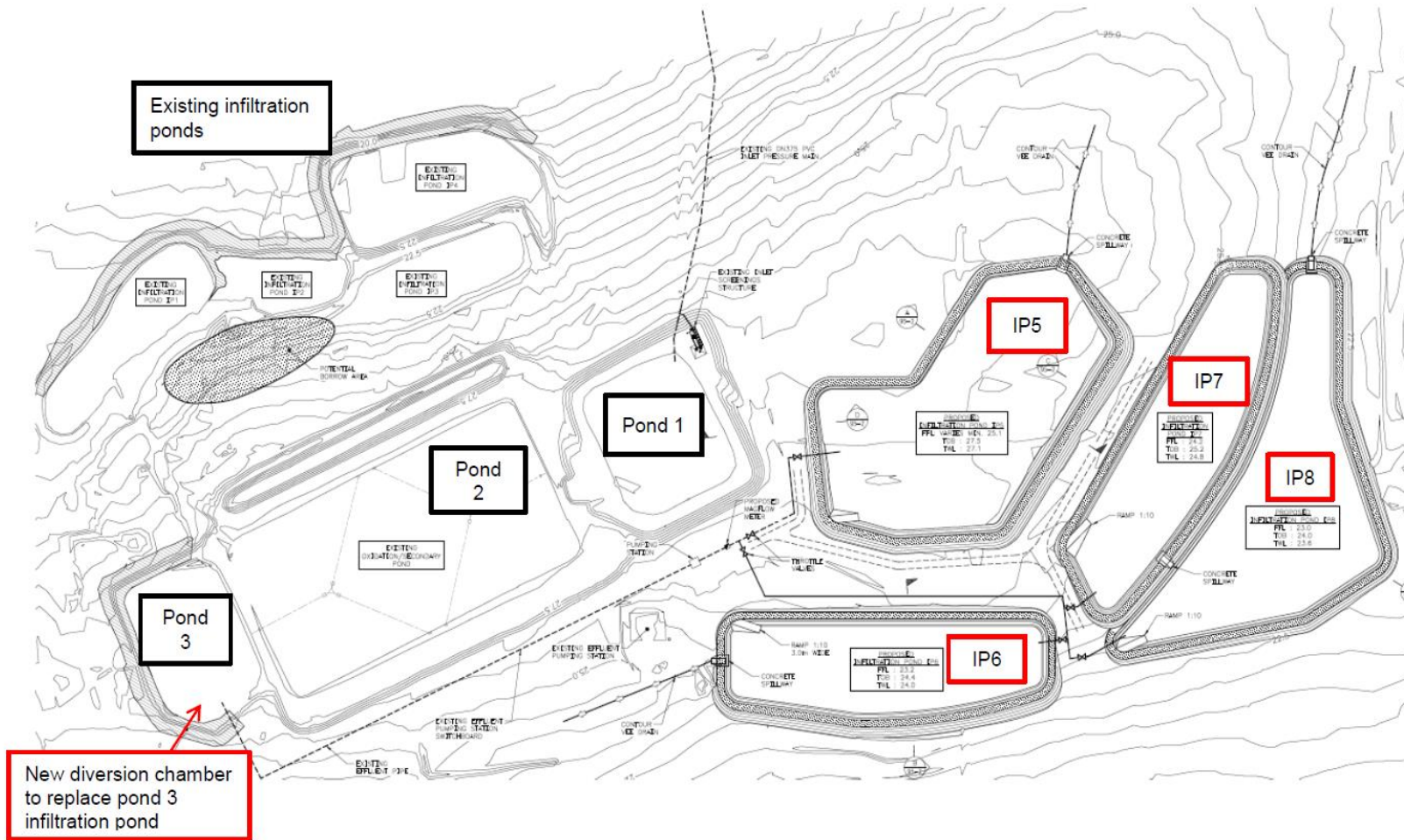


Figure 4: Map of premises layout

Schedule 2: Reporting & notification forms

Licence: _____ Licence Holder: _____

Form: N1 Date of breach: _____

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature of behalf of	
Date	