Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6317/2019/1
Works approval holder	Water Corporation
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	2010/006288-1
Duration	19/11/2020 to 18/11/2025
Date of issue	19 November 2020
Date of amendment	13 April 2021
Premises details	Waroona Wastewater Treatment Plant 22 Drake Road Waroona WA 6215 Legal description - Lot 22 on Deposited Plan 223194 Certificate of Title Volume 1536 Folio 692; and Lot 305 on Deposited Plan 223194 Certificate of Title Volume 410 Folio 90A

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	Assessed design capacity
Category 54: Sewage Facility	880 m^3 per day

This amended works approval is granted to the works approval holder, subject to the attached conditions, on 13 April 2021, by:

Michael Greenslade

Digitally signed by Michael Greenslade
Date: 2021.04.13 09:52:13 +08'00'

A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
19/11/2020	W6317/2019/1	Works approval granted.
17/02/2021	W6317/2019/1	Administrative amendment to correct clerical error
13/04/2021	W6317/2019/1	Amendment to replace discharge to the Drakesbrook Drain via a clay-lined channel with direct discharge via an underground pipeline.

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 to an Australian or other standard, guideline or code of practice in this works approval means the version of the standard, guideline or code of practice in force at the time of granting of this works approval and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the works approval;

(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 works approval.

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct and/or install the infrastructure and/or equipment;

(b) in accordance with the corresponding design and construction / installation requirements; and

(c) at the corresponding infrastructure location

as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Sludge dewatering facility	• Designed to be free of leaks and defects and lined and bunded within with concrete to achieve a permeability ≤1.7x10^{-11} m/sec. • Concrete integrity shall be tested in accordance with AS 3735-2001. • Designed to capture all leachate within the sludge dewatering facility and include a return drain line for leachate to be directed back to the treatment plant.	As depicted in Figure 3 of Schedule 1
2.	Existing pond system	• Shall be decommissioned and disconnected from the wastewater treatment process.	As depicted in Figure 3 of Schedule 1
3.	Groundwater monitoring wells	• Must be constructed, developed (purged), and determined to be operational prior to the commencement of environmental commissioning activities under condition 8. <u>Well design and construction</u>: • Designed and constructed in accordance with ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores. <u>Logging of boreholes:</u> • Soil samples must be collected and logged during the installation of the monitoring wells. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.	Three groundwater wells to be located within the Premises as depicted in Figure 1 of Schedule 1. The groundwater wells must comprise one upstream location and two downstream locations

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		Well construction log: • 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. Well development: • 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. Installation survey: • The vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.	

2. The works approval holder must:

(a) construct the critical containment infrastructure;

(b) in accordance with the corresponding design and construction requirements; and

(c) at the corresponding infrastructure location

as set out in Table 2.

Table 2: Critical containment infrastructure design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	Pre-Treatment Inlet Works	• The grit removal system must be a closed unit. • Installation of an inline magnetic flow meter. • Inflows must be directed to the wastewater treatment system via a siphone shaped pipe in front of the new inlet works. • The existing inlet (discharge) must be decommissioned.	As depicted in Figure 3 of Schedule 1
2.	Wastewater treatment system	• Designed and constructed to receive and treat sewage inflow of up to 880 m^3 per day To comprise: • Unaerated selector zone; and • In-ground oxidation ditch reactor with vertical shaft slow speed surface aeration	As depicted in Figure 3 of Schedule 1

	Infrastructure	Design and construction requirements	Infrastructure location
		• The anaerobic bioselector shall be constructed of prefabricated concrete to have a permeability of $1.7x10^{-11}$ m/s or less. • Concrete integrity shall be tested in accordance with AS 3735-2001. • The oxidation ditch reactor shall be lined with a 40 mm thick impervious, bituminous geotextile membrane to achieve a permeability of 10^{-13} m/s or less. • The integrity of the bituminous geotextile membrane shall be tested in accordance with ASTM D7748. • All process tanks or conveyance systems to be designed and constructed for complete containment of relevant process fluids. • An underground pipe and discharge flow meter from the phase-separation system to Discharge Point 1 will be constructed.	

Compliance reporting

3. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:

(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.

4. The Environmental Compliance Report required by condition 3 must include as a minimum the following:

(a) certification by a suitably qualified engineer that the items of infrastructure or components thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and

(c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

5. The works approval holder must within 30 calendar days of the Critical Containment Infrastructure identified by condition 2 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 2; and

(b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.

6. The Critical Containment Infrastructure Report required by condition 5 must include as a minimum the following:

(a) certification by a suitably qualified engineer that each item of critical containment infrastructure or component thereof, as specified in condition 2,

has been built and installed in accordance with the requirements specified in condition 2;

(b) as constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, as specified in condition 2;

(c) photographic evidence of the installation of the infrastructure;

(d) monitoring data indicating the baseline ambient environmental conditions at the premises prior to and immediately following construction of the items of infrastructure;

(e) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person; and

(f) a construction quality assurance report from an independent third party which demonstrates that all components of the critical containment infrastructure meets the requirements specified in condition 2.

7. The monitoring of the baseline ambient environmental conditions required under condition 6(d) must be undertaken in accordance with Table 3.

Table 3: Determination of baseline ambient environmental conditions

Monitoring well location	Parameter	Unit	Frequency	Method
Groundwater monitoring wells constructed in accordance with Table 1, condition 1	Standing water level[1]	m(AHD) and m(BGL)	One monitoring event prior to the commencement of commissioning	Spot sample, in accordance with AS/NZS 5667.11.
	pH[1]	pH units		
	Electrical conductivity[1]	µS / cm		
	Total suspended solids	mg/L		
	Total dissolved solids			
	Biochemical oxygen demand			
	Total Phosphorus			
	Total Nitrogen			
	Oxidised nitrogen (nitrate + nitrite-nitrogen)			
	Ammonium-nitrogen			
	Dissolved aluminium			
	E. coli	Colony forming units per 100 mL		

Environmental commissioning phase

Environmental commissioning requirements

8. The works approval holder may only commence environmental commissioning of an item of infrastructure identified in condition 1 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 3 of this works approval.

9. The works approval holder may only commence environmental commissioning for an item of critical containment infrastructure identified in condition 2:

(a) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 5 meets the requirements of that condition; or

(b) where at least 10 business days have passed after the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 5 has been submitted to the CEO.

10. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 4 may only be carried out:

(a) in accordance with the corresponding commissioning requirements; and

(b) for the corresponding authorised commissioning duration.

Table 4: Environmental commissioning requirements

Infrastructure	Commissioning requirements	Authorised commissioning duration
Pre-treatment Inlet works	• Grit tank to be periodically aerated by manual timer to improve separation	For a period not exceeding 90 calendar days in aggregate.
Wastewater treatment system	• To receive an inflow of up to 880 m^3/day; • Waste Activated Sludge to be transferred to geobags daily; • Only discharge treated wastewater from the WWTP to Boundary Discharge Point 1, as specified in Figure 2 of Schedule 1. • All process tanks or conveyance systems to be tested to demonstrate complete containment of relevant process fluids.	
Sludge dewatering facility	• All geobags containing waste activated sludge are to be stored in this area; • All leachate to be captured within the sludge dewatering facility and directed back to the wastewater treatment plant; • Once dried, the sludge cake shall be transferred to an appropriate waste facility.	

11. During environmental commissioning, the works approval holder must ensure that the emission(s) specified in Table 5 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 5: Authorised discharge points during commissioning

	Emission	Discharge point	Discharge point location
1.	Treated wastewater discharged from Boundary Discharge Point 1 to Drakesbrook Drain	Boundary Discharge Point 1	As depicted in Figure 2 of Schedule 1.

Monitoring during environmental commissioning

12. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 6.

Table 6: Emissions and discharge monitoring during environmental commissioning

Discharge point	Parameter	Frequency	Averaging Period	Unit	Method	
					Sampling	Analysis
• Boundary Discharge Point 1 - the point where treated wastewater is discharged from the phase separation system to the discharge pipe	Total volume discharged	Continuous	Monthly and cumulative	m^3		
	pH[1]	Monthly	Spot sample	pH units	AS/NZS 5667.1;	AS/NZS 5667.4, AS/NZS 5667.6, AS/NZS 5667.9 or AS/NZS 5667.10 as relevant
	Total suspended solids			mg/L and kg/day		
	Total dissolved solids					
	Biochemical oxygen demand					
	Total Phosphorus					
	Total Nitrogen					
	Oxidised nitrogen (nitrate + nitrite-nitrogen)					
	Ammonium-nitrogen					
	Total aluminium					
	E. coli			Colony forming units per 100 mL		

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

13. 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.

14. The works approval holder shall undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Input monitoring

Input	Parameter	Unit	Averaging period	Frequency
Raw wastewater inflows	Volume	m^3/day	Monthly	Continuous

Environmental commissioning reporting

15. The works approval holder must submit to the CEO an Environmental Commissioning Report within 60 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 4.

16. The works approval holder must ensure the Environmental Commissioning Report required by condition 15 of this works approval includes the following:

(a) a summary of the environmental commissioning activities undertaken, including timeframes and volume of wastewater accepted;

(b) the point-source emissions monitoring results recorded in accordance with conditions 12;

(c) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at minimum includes records detailing the:

(i) environmental commissioning of the treatment plant;

(ii) testing the treatment plan; and

(iii) commissioning of the process control system;

(d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and

(e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

Time limited operations phase

Time limited operations requirements

17. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1:

(a) where the item of infrastructure is authorised to undertake environmental commissioning under condition 10, the Environmental Commissioning Report for that item of infrastructure as required by condition 15 has been submitted by the works approval holder.

18. The works approval holder may only commence time limited operations for an item of critical containment infrastructure identified in condition 2:

(a) where the infrastructure does require commissioning, the Environmental Commissioning Report for that item of infrastructure as required by condition 15 has been submitted to the CEO; and

(b) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 5 meets the requirements of that condition; or

(c) where at least 10 business days have passed after the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 5 has been submitted to the CEO.

19. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 20:

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of conditions 17 and 18 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*.

20. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 8 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 8.

Table 8: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	**Operational requirement**	**Infrastructure location**
1.	Pre-treatment Inlet works	Grit tank to be periodically aerated by manual timer to improve separation	As depicted in Figure 3 of Schedule 1
2.	Wastewater treatment system	• To receive an inflow of up to 880 m^3/day; • Waste Activated Sludge to be transferred to geobags daily; • Only discharge treated wastewater from the WWTP to Boundary Discharge Point 1, as specified in Figure 2 of Schedule 1.	As depicted in Figure 3 of Schedule 1
3.	Sludge dewatering facility	• All geobags containing waste activated sludge are to be stored in this area; • All leachate to be captured within the sludge dewatering facility and directed back to the wastewater treatment plant; • Once dried, the sludge cake shall be transferred to an appropriate waste facility.	As depicted in Figure 3 of Schedule 1

21. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 9, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 9: Authorised discharge points during commissioning

	Emission	Discharge point	Discharge point location
1.	Treated wastewater discharged from Boundary Discharge Point 1 to Drakesbrook Drain	Boundary discharge point 1	As depicted in Figure 2 of Schedule 1.

Monitoring during time limited operations

22. The works approval holder must monitor emissions during time limited operations in accordance with Table 10.

Table 10: Emissions and discharge monitoring during time limited operations

Discharge point	Parameter	Frequency	Averaging Period	Unit	Method	
					Sampling	Analysis
• Boundary Discharge Point 1 - the point where treated wastewater is discharged from the phase separation system to the discharge pipe	Total volume discharged	Continuous	Monthly and cumulative	m^3		
	pH[1]	Monthly	Spot sample	pH units	AS/NZS 5667.1;	AS/NZS 5667.4, AS/NZS 5667.6, AS/NZS 5667.9 or AS/NZS 5667.10 as relevant
	Total suspended solids			mg/L and kg/day		
	Total dissolved solids					
	Biochemical oxygen demand					
	Total Phosphorus					
	Total Nitrogen					
	Oxidised nitrogen (nitrate + nitrite-nitrogen)					
	Ammonium-nitrogen					
	Total aluminium					
	E. coli			Colony forming units per 100 mL		

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

23. The licence holder must monitor groundwater during time limited operations for concentrations of the identified parameter(s) in accordance with Table 11.

Table 11: Groundwater monitoring of ambient concentrations

Monitoring well location	Parameter	Unit	Frequency	Method
Groundwater monitoring wells constructed in accordance with Table 1, condition 1	Standing water level[1]	m(AHD) and m(BGL)	Six-monthly – commencing within three months of commencement of time-limited operations	Spot sample, in accordance with AS/NZS 5667.11.
	pH[1]	pH units		
	Electrical conductivity[1]	µS / cm		
	Total suspended solids	mg/L		
	Total dissolved solids			
	Biochemical oxygen demand			
	Total Phosphorus			
	Total Nitrogen			
	Oxidised nitrogen (nitrate + nitrite-nitrogen)			
	Ammonium-nitrogen			
	Dissolved aluminium			
	E. coli	Colony forming units per 100 mL		

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

24. The works approval holder shall undertake the monitoring in Table 12 according to the specifications in that table.

Table 12: Input monitoring

Input	Parameter	Unit	Averaging period	Frequency
Raw wastewater inflows	Volume	m^3/day	Monthly	Continuous

Time limited operations reporting

25. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 90 calendar days before the expiration date of the works approval, whichever is the sooner.

26. The works approval holder must ensure the report required by condition 25 includes the following:

(a) a summary of the time limited operations, including timeframes and volume of wastewater accepted;

(b) a summary of emissions and discharge monitoring results obtained during time limited operations under condition 22;

(c) a summary of groundwater monitoring results obtained during time limited operations under condition 23;

(d) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and

(e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Monitoring specifications

27. The works approval holder must ensure that all monitoring equipment used to comply with conditions of the works approval is operated and calibrated in accordance with the manufacturer's specifications.

28. The works approval holder must adhere to the field quality assurance and quality control procedures specified in Schedule 2 for the monitoring required by conditions 7 and 23.

29. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for the relevant parameters, unless otherwise specified in Schedule 2.

Records and reporting (general)

30. The works approval holder must record the following information in relation to complaints received by the works approval 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 works approval holder to investigate or respond to any complaint.

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

(a) the works conducted in accordance with conditions 1 and 2;

(b) any maintenance of infrastructure that is performed in the course of complying with conditions 1 and 2;

(c) monitoring programmes undertaken in accordance with conditions of the works approval; and

(d) complaints received under condition 30.

32. The books specified under condition 31 must:

(a) be legible;

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

(c) be retained by the works approval holder for the duration of the works approval; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 13 have the meanings defined.

Table 13: Definitions

Term	Definition
Assessment of Site Contamination NEPM	means the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended from time to time.
AS1726	means the Australian Standard AS1762 Geotechnical site investigations, as amended from time to time.
AS 3735-2001	means the Australian Standard AS 3735-2001 Concrete Structures Retaining Liquids, as amended from time to time.
ASTM D5092/D5092M-16	means the ASTM international standard for Standard practice for design and installation of groundwater monitoring wells (Designation: ASTM D5092/D5092M-16), as amended from time to time.
ASTM D7748	means the ASTM for Standard Test Method for Flexural Rigidity of Geogrids, Geotextiles and Related Products (Designation: ASTM D7748/D7748M-14e1), 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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
critical containment infrastructure	means the items of infrastructure listed in condition 2.
Critical Containment Infrastructure Report	means a report to satisfy the CEO that works of critical containment infrastructure have been constructed in accordance with the works approval.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
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
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
monthly period	means a one-month period commencing from day one of a month until the last day of the same month.
premises	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 works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
six monthly period	a six month period comprising the following periods: • January 1 to June 30; and • July 1 to December 31.
Suitably qualified engineer	means a person who: (a) holds a Bachelor of Engineering recognised by the Institute of Engineers; and (b) has a minimum of five years of experience working in a supervisory area of structural, civil or geotechnical engineering; 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.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 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.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

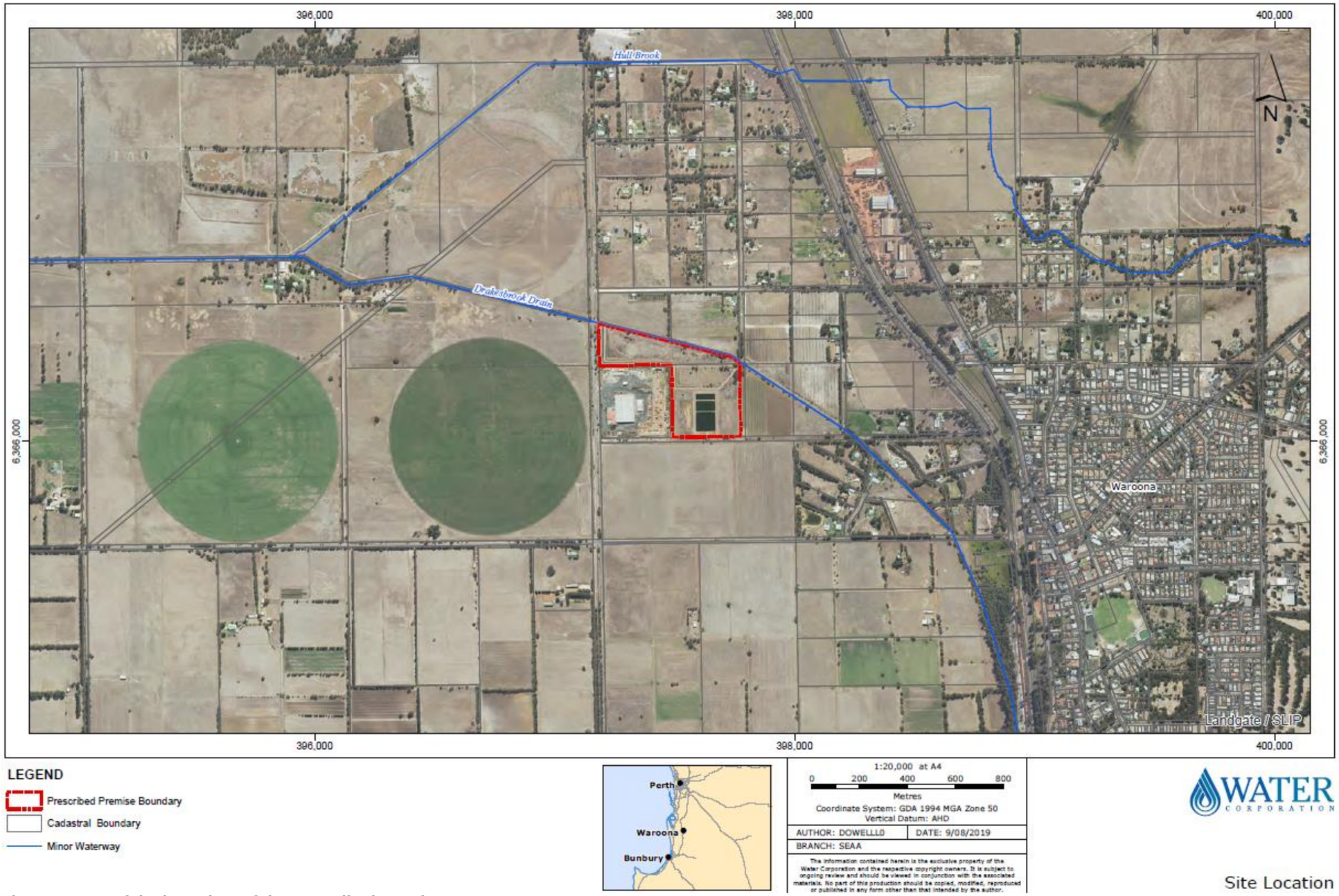

Figure 1: Map of the boundary of the prescribed premises

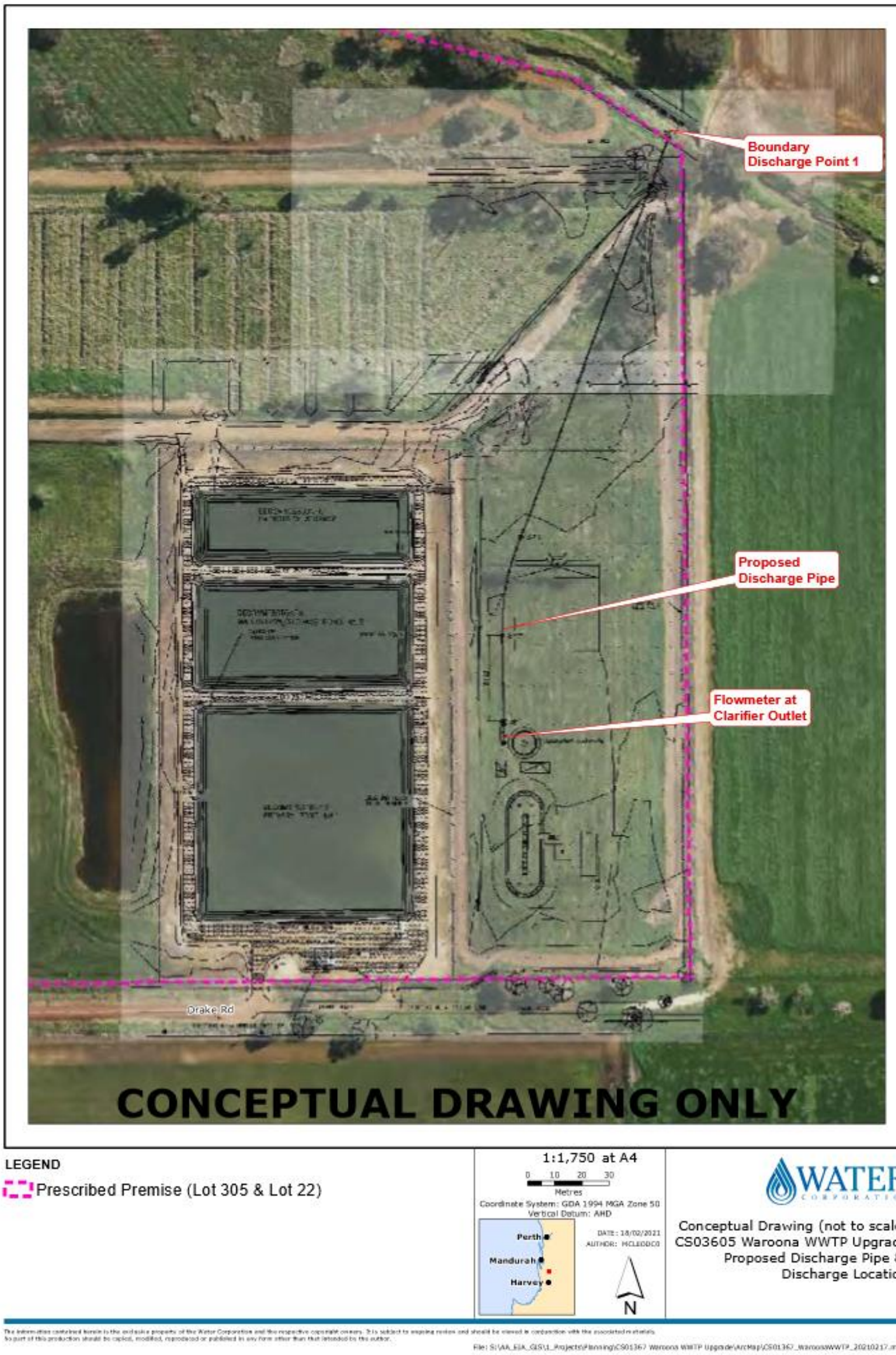

Figure 2: Discharge location

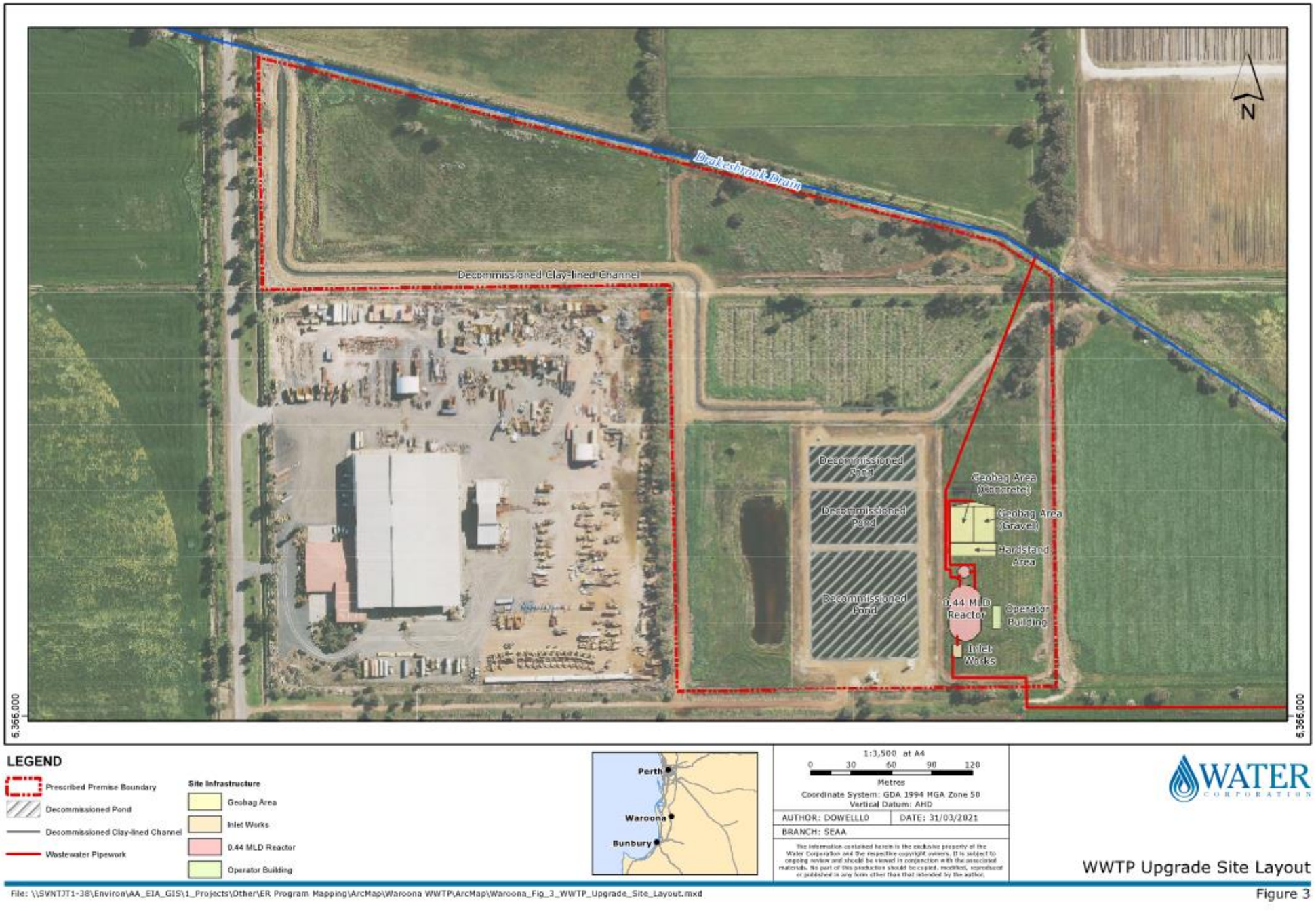

Figure 3: Proposed site layout

Schedule 2: Quality assurance and quality control requirements

Quality assurance and quality control requirements

1. The licence holder must adhere to the following field quality assurance and quality control procedures, as specified in Schedule B2 of the Assessment of Site Contamination NEPM, and must include as a minimum:

(a) decontamination procedures for the cleaning of tools and sampling equipment before sampling and between samples;

(b) field instrument calibration for instruments used on site;

(c) blind replicate samples and rinsate blanks must be collected in the field and sent to the primary laboratory to determine the precision of the field sampling and laboratory analytical program;

(d) completed field monitoring sheets / sampling logs for each sample collected, showing:

(i) time of collection;

(ii) location of collection;

(iii) initials of sampler;

(iv) sampling method;

(v) field analysis results;

(vi) duplicate type / location (if relevant); and

(vii) site observations and weather conditions, and

(e) chain-of-custody documentation must be completed which details the following information:

(i) site identification;

(ii) the sampler;

(iii) nature of the sample;

(iv) collection time and date;

(v) analyses to be performed;

(vi) sample preservation method;

(vii) departure time from site;

(viii) dispatch courier(s); and

(ix) arrival time at the laboratory.