



Works approval number	W6773/2023/1
Works approval holder	Talison Lithium Australia Pty Ltd
ACN	139 401 309
Registered business address	Level 15, 216 St Georges Terrace PERTH WA 6000
DWER file number	DER2023/000095
Duration	26 April 2023 to 25 April 2026
Date of issue	26 April 2023
Premises details	Talison Greenbushes Lithium Mine Maranup Ford Road GREENBUSHES WA 6254 Legal description - Mining tenement L70/232 As shown in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 85: Sewage facility	50m ³ /day

This works approval is granted to the works approval holder, subject to the attached conditions, on 26 April 2023, by:

MANAGER, PROCESS INDUSTRIES

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

Works approval history

Date	Reference number	Summary of changes
26/04/2023	W6773/2023/1	Works approval granted.

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:
 - (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 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 requirements; and
 - (c) at the corresponding infrastructure location as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	Wastewater Treatment Plant (WWTP)	<p>The WWTP must be designed and installed to meet the following specifications:</p> <p>(a) Comprising the following equipment:</p> <ol style="list-style-type: none"> i. Balance pump and balance tank (50 kL); ii. Containerised modular Sequential Batch Reactor (SBR) utilising anoxic and aerobic treatment of wastewater; iii. Sludge storage tank (50 kL); iv. 2 x treated effluent holding tanks (50 kL each); v. Inlet bar screen; vi. Decant pump and sludge pump; vii. Recirculation pump with online chlorine dosing; viii. Sodium hypochlorite dosing system; ix. Poly aluminium chloride dosing system; and x. Control Panel; <p>(b) Be able to receive and treat a combined sewage inflow of up to 50 m³/day;</p> <p>(c) Able to treat sewage to the following output standards:</p> <ol style="list-style-type: none"> i. 5-day biochemical oxygen demand (BOD₅) <20 mg/L; ii. pH 6.5 – 8.5; iii. Total suspended solids (TSS) <30 mg/L; iv. Total nitrogen (TN) < 30 mg/L; v. Total phosphorus (TP) <8 mg/L; vi. <i>E. coli</i> <1000 cfu/100mL; and vii. Residual free chlorine 0.2mg/L to 2.0mg/L; <p>(d) Have a sealed connection point for pumping-out tank sludge for offsite disposal to a licensed waste facility;</p>	<p>As shown in Schedule 1: Figure 1 and Schedule 2: Figure 2</p>

	Infrastructure	Design and construction requirements	Infrastructure location
		<p>(e) Flow meters are required to be installed on the inlet and outlet side of the plant to record both inflows and outflows from the WWTP;</p> <p>(f) Incorporate an alarm system of warning beacons, as well as audible and visual pump fault alarms, which will activate in the event of:</p> <ul style="list-style-type: none"> i. system faults; ii. high tank levels; and iii. tank overflows <p>(g) All above ground infrastructure to be located on compacted ground within an earthen bund to contain spills;</p> <p>(h) All sewage conveyance, storage and treatment infrastructure must be designed and constructed to ensure that stormwater does not enter the sewage treatment system and sewage and treated wastewater storage infrastructure; and</p> <p>(i) All sewage storage and treatment tanks, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks and defects.</p>	

Compliance reporting

2. The works approval holder must within 30 calendar days of the infrastructure or equipment required by condition 1 being constructed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a suitably qualified engineer that the infrastructure or equipment as specified in condition 1, has 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.

Environmental commissioning phase

Environmental commissioning requirements

4. The works approval holder is only authorised to commence environmental commissioning of an item of infrastructure listed in condition 5 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this Works Approval.

5. The works approval holder must ensure that all environmental commissioning activities undertaken for infrastructure specified in Table 2 are only conducted:
- (a) in accordance with the corresponding commissioning requirements; and
 - (b) for the corresponding authorised commissioning duration as set in Table 2.

Table 2: Environmental commissioning requirements

Infrastructure	Commissioning requirements	Authorised commissioning duration
WWTP	<ul style="list-style-type: none"> (a) All treated effluent is stored in the treated effluent holding tanks prior to removal by a licensed Controlled Waste Carrier for disposal to a premises authorised by the department to accept the waste; (b) Sludge is contained within sealed sludge tanks prior to removal by a licensed Controlled Waste Carrier for disposal to a premises authorised by the department to accept the waste; and (c) Inspections are conducted daily to verify WWTP operation and function, and to ensure that containment infrastructure is maintained and operational. 	For a period not exceeding 90 calendar days in aggregate from the date the Environmental Compliance Report was submitted to the CEO.

Monitoring during environmental commissioning

6. The works approval holder must monitor treated effluent during environmental commissioning in accordance with Table 3 and record the results of monitoring.

Table 3: Monitoring during environmental commissioning and time limited operations.

Monitoring location	Parameter	Frequency	Averaging period	Unit	Method/ Analysis
WWTP outlet prior to storage in balance tank(s)	<i>E. coli</i>	Weekly during commissioning Monthly during time limited operations	Spot sample	cfu/100ml	Sample collection and preservation as per AS/NZS 5667.1. Analysis as per AS/NZS 5667.10 and conducted by a laboratory with NATA accreditation.
	Thermotolerant coliforms				
	BOD ₅				
	Total Suspended Solids				
	Total Nitrogen				
	Total Phosphorous				
	Total Dissolved Solids	Daily or Continuous	N/A	mg/L	
	pH ¹				
	Residual chlorine ¹				
Cumulative volumetric flow	Continuous	Daily	m ³ /day	-	

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

7. The works approval holder must ensure that monitoring specified in Table 3:
 - (a) is undertaken in each weekly period such that there are at least 4 days in between the days on which samples are taken in successive weeks; and
 - (b) 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.

Environmental Commissioning Report

8. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for the infrastructure specified in condition 5.
9. The works approval holder must ensure the Environmental Commissioning Report required by condition 8 of this works approval includes the following:
 - (a) a summary of the environmental commissioning activities undertaken, including date(s) for commencement of environmental commissioning, timeframes and amount of wastewater processed and removed from the premises for disposal;
 - (b) a summary of monitoring results obtained during environmental commissioning under condition 6.
 - (c) copies of laboratory reports for effluent monitoring results recorded in accordance with condition 6;
 - (d) a summary of the environmental performance of each item of infrastructure or equipment as installed, which at minimum includes a comparison of the effluent monitoring results against design specifications listed in condition 1;
 - (e) a review of performance and compliance against the conditions of the works approval; and
 - (f) where the 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.

Time limited operations phase

Commencement and duration

10. The works approval holder may only commence time limited operations for the infrastructure identified in condition 1 where the Environmental Commissioning Report for that infrastructure as required by condition 8 has been submitted by the works approval holder.
11. The works approval holder may conduct time limited operations for the infrastructure specified in condition 1
 - (a) for a period not exceeding 90 calendar days from the day the works approval holder meets the requirements of condition 10 for that item of infrastructure; or
 - (b) until such time as a registration for that item of infrastructure is granted in accordance with regulation 5B of the Environmental Protection Regulations 1987, if one is granted before the end of the period specified in condition 11(a).

Time limited operations requirements and emission limits

12. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 4, and located at the corresponding infrastructure location is maintained and operated in accordance with

the corresponding operational requirements set out in Table 4.

Table 4: Infrastructure and equipment requirements during time limited operations

	Infrastructure	Operational requirements	Infrastructure location
1	WWTP	<p>(a) All treated effluent is stored in the treated effluent holding tanks prior to removal by a licensed Controlled Waste Carrier for disposal to a premises authorised by the department to accept the waste;</p> <p>(b) Sludge is contained within sealed sludge tanks prior to removal by a licensed Controlled Waste Carrier for disposal to a premises authorised by the department to accept the waste; and</p> <p>(c) Inspections are conducted daily to verify WWTP operation and function, and to ensure that containment infrastructure is maintained and operational.</p>	As shown in Schedule 1: Figure 1 and Schedule 2: Figure 2

Monitoring during time limited operations

13. The works approval holder must monitor treated effluent during time limited operations in accordance with Table 3.

Compliance reporting

14. 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 30 calendar days before the expiration date of the works approval, whichever is the sooner.
15. The works approval holder must ensure the report required by condition 14 includes the following:
- (a) a summary of the time limited operations, including date(s) for commencement of time limited operations, timeframes and amount of wastewater processed and removed from the premises for disposal;
 - (b) a summary of monitoring results obtained during time limited operations under condition 13.
 - (c) copies of laboratory reports for effluent monitoring results recorded in accordance with condition 13;
 - (d) a summary of the environmental performance of each item of infrastructure or equipment as installed, which at minimum includes a comparison of the effluent monitoring results against design specifications listed in condition 1;
 - (e) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and
 - (f) where the 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.

Records and reporting (general)

16. 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.

17. 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 condition 1;
- (b) any maintenance of infrastructure that is performed in the course of complying with condition(s) 5 and 12;
- (c) records of inspections undertaken in accordance with condition(s) 5 and 12.
- (d) monitoring programmes undertaken in accordance with condition(s) 6 and 13; and
- (e) complaints received under condition 16.

18. The books specified under condition 17 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 5 have the meanings defined.

Table 5: Definitions

Term	Definition
annual period	a 12 month period commencing from 1 April until 31 March of the immediately following year.
AS/NZS 5667.1-1998	means <i>Australian Standard/New Zealand Standard 5667.1-1998 Water quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.</i>
AS/NZS 5667.10-1998	means <i>Australian Standard/New Zealand Standard 5667.1-1998 Water quality – Sampling – Guidance on sampling of waste waters</i>
BOD ₅	5-day biochemical oxygen demand
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
cfu	colony forming units
Controlled Waste Carrier	means a carrier licensed under the Environmental Protection (Controlled Waste) Regulations 2004
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
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.
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

Term	Definition
	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	<i>Environmental Protection Act 1986 (WA).</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
m ³	cubic metres
mg/L	milligrams per litre
NATA	National Association of Testing Authorities
NATA accreditation	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	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.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
suitably qualified engineer	means a person who: <ul style="list-style-type: none"> (a) holds a Bachelor's degree recognised by Engineers Australia; and (b) has a minimum of five years of experience working in a supervisory role in civil, structural, environmental or wastewater engineering; and (c) is employed by an independent third party external to the Works Approval Holder's business; or is otherwise approved in writing by the CEO to act in this capacity.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
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

Term	Definition
	of this works approval.
WWTP	wastewater treatment plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

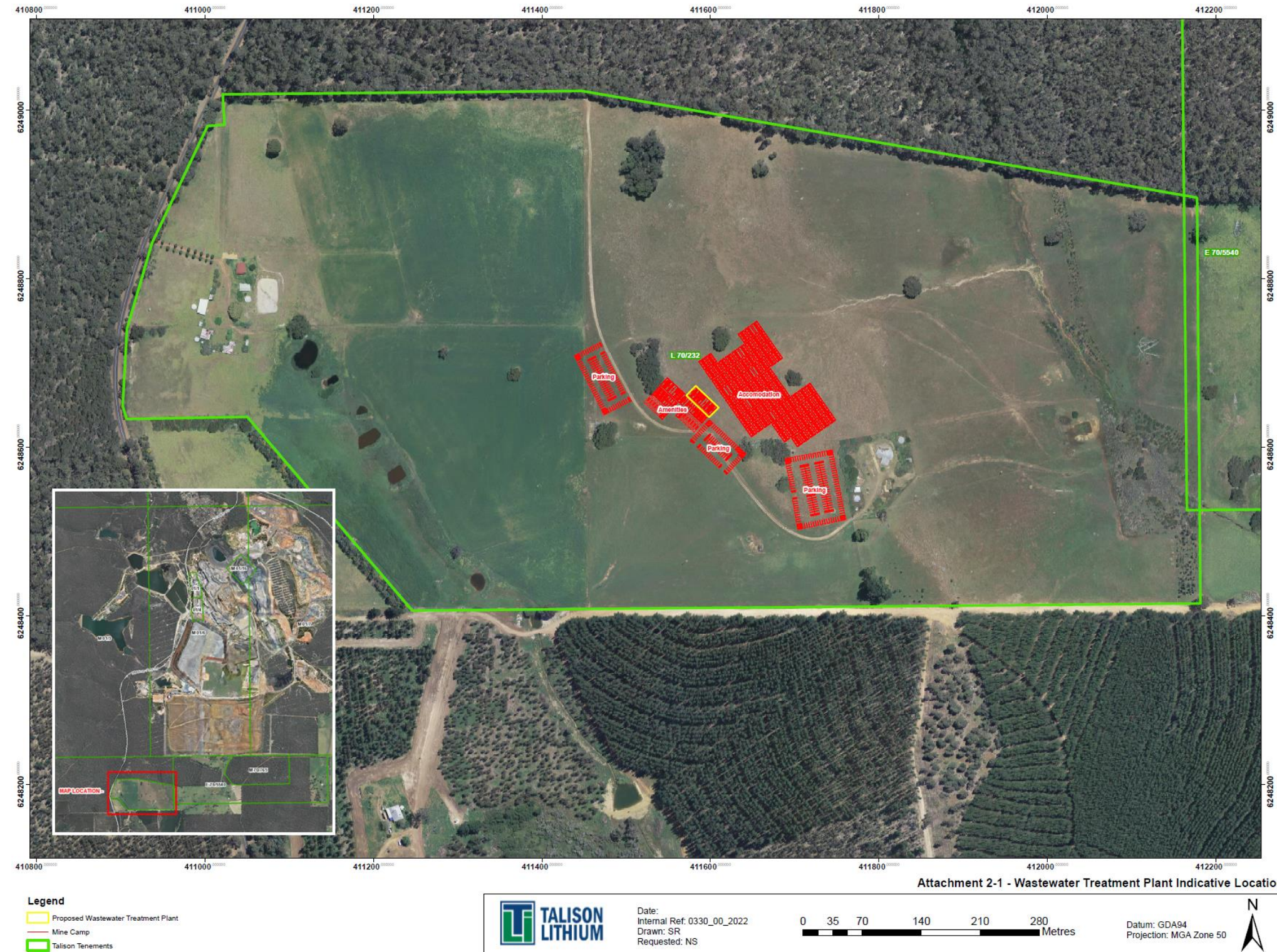


Figure 1: Map of the boundary of the prescribed premises (green polygon) with the indicative location of the WWTP shown in yellow.

Schedule 2: Plans

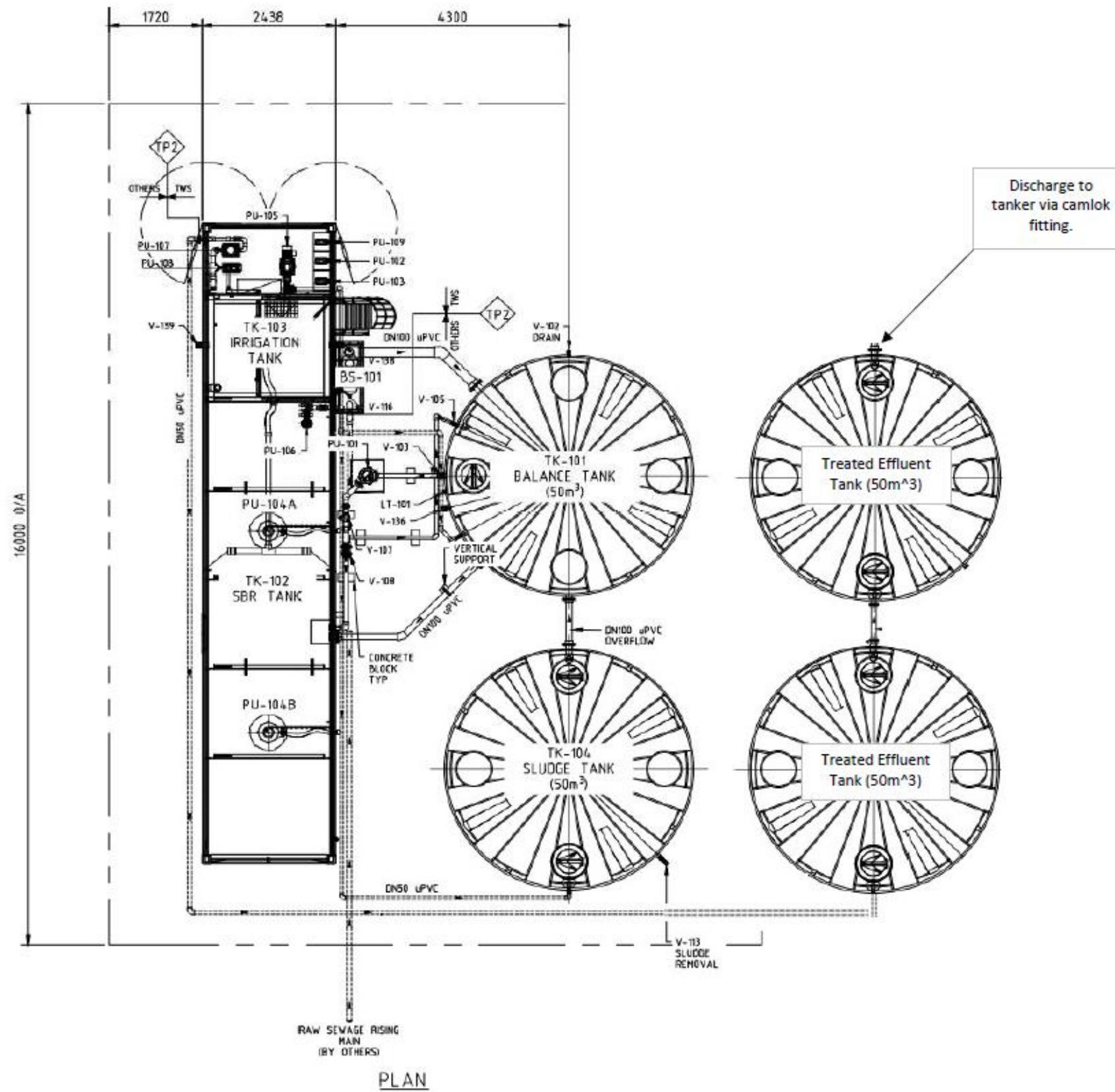


Figure 2: Layout of the temporary WWTP