Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8664/2012/2
Licence holder	Lanfranchi Nickel Mines Pty Ltd
ACN	110 078 263
Registered business address	Level 9, 40 The Esplanade Perth, WA 6000
DWER file number	2012/002931-1
Duration	15/10/2020 to 14/10/2040
Date of issue	2/10/2020
Premises details	Lanfranchi Nickel Mine Legal description - Mineral Lease ML15/346, ML15/347, ML15/377 ML 15/385, ML 15/386, ML 15/387, ML 15/388 ML 15/486, ML 15/487, ML 15/493 and M 15/473 KAMBALDA WA 6429

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed design capacity**
Category 61A: Solid waste facility	876 000 tonnes per annual period
Category 85: Sewage facility	80 cubic metres per day
Category 89: Putrescible landfill site	2 500 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 22 November 2022, by:

Digitally signed by Abbie Crawford
Date: 2022.11.22 14:41:14 +08'00'

Abbie Crawford
A/Manager, Waste Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
20/06/2014	L8664/2012/1	Licence converted to REFIRE format
04/06/2015	L8664/2012/1	Amendment to increase the maximum approved throughput at the landfill
29/04/2016	L8664/2012/1	Notice of Amendment: to extend the expiry date of the Licence
1/03/2019	L8664/2012/1	Notice of Amendment to update the registered office and contact details for the premises.
29/11/2019	L8664/2012/1	Amendment to relocate the putrescible landfill to another site within the waste rock dump area and update registered address details. Amendment was granted in the form of a revised licence, including consolidation of amendment notice issued on 1 March 2019.
2/10/2020	L8664/2020/2	Licence renewal application
22/11/2022	L8664/2020/2	Amendment to add an irrigation field to the existing WWTP. Licence updated to latest format.

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:

Infrastructure and equipment

1. The licence holder must construct and/or install the infrastructure listed in Table 1, in accordance with;

(a) the corresponding design and construction requirement / installation requirement; and

(b) at the corresponding infrastructure location; and

(c) within the corresponding timeframe.

as set out in Table 1.

Table 1: Design and construction requirements / installation requirements

Site infrastructure and equipment	Design and construction requirements / installation requirement	Infrastructure location	Timeframe
Irrigation field	• The area must be at a minimum 1 hectare in size; • The area must be fully fenced; • Fitted with a meter to track and record total volumes of waste water discharged; and • Fitted with non-spray sprinklers only.	Schedule 1	Works to be completed by 30 June 2023

2. 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.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:

(a) certification by a suitably qualified civil engineer that the items of infrastructure or component(s) 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.

4. The licence holder may only commence operation for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the licence holder for that item of infrastructure.

5. Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Landfill	• Landfill trench located within the footprint of the waste rock dump; • The trench will be approximately 50m long, 5m wide and 6m deep; and • Earthen bunding constructed around landfill trenches.	Schedule 1
Wastewater treatment plant	• MAK MBR-50 Membrane Bioreactor Sewage treatment plant system to service the accommodation village; • Four clay lined effluent storage ponds, each with a capacity of 6ML or 6000m^3 to receive effluent from the administration village; 24ML • Clay lined ponds, including pond embankments, to be kept free of vegetation; • 1 x mechanical aerator to aerate effluent in pond 1; • Capacity to store a 24-hour duration, 1 in 20 year ARI critical rainfall event without overflow; • Storage pond embankments to have a minimum freeboard of 300mm; • 2 x 60,000L storage tanks; • 3 x 25,000L storage tanks; • 2.8km HDPE effluent pipeline; and • Pump	Schedule 1
Irrigation field	• The area must be at a minimum 1 hectare in size; • The area must be fully fenced; • Fitted with a meter to track and record total volumes of waste water discharged; • Irrigation to the irrigation field to be via pond 3 or 4 only; • Fitted with non-spray sprinklers only; • Not more than 20 m^3 per day of treated effluent to be applied to the designated irrigation area; and	Schedule 1

Site infrastructure and equipment	Operational requirement	Infrastructure location
	• Irrigation must be managed to prevent ponding and pooling of effluent on the ground.	
Solid waste facility	• Paste plant with capacity to produce 876.000m^3 of paste fill per year; • Hard stand area to store 20,000 tonnes of material; • Sprinkler system to control dust emissions during when the plant is operational; • Dust suppression cover; and • Sump for the disposal of reject materials	Schedule 1

6. The licence holder shall ensure all vehicle washdown areas consist of hard stand area to allow the containment of wastewater. Wastewater shall be directed through a fuel/oil trap prior to discharge into a lined facility.

7. The licence holder shall ensure that all pipelines containing environmentally hazardous substances are either:

(a) bunded; or
(b) equipped with automatic cut-outs and alarm system to arrest flow and announce any pipe failure.

8. The licence holder shall ensure that where pipelines are bunded, the bunds are adequately constructed to ensure they are not breached during a spill.

Waste Processing

9. The licence holder shall only allow waste to be accepted on to the Premises if:

(a) it is of a type listed in Table 3;
(b) the quantity accepted is below any limit listed in Table 3; and
(c) it meets any specification listed in Table 3.

Table 3: Waste acceptance

Waste	Quantity Limit	Specification[1]
Tailings	876,000 tonnes per annual period	None specified
Sewage	80 m^3/day	Accepted through sewer inflow(s) only
Clean fill	2,500 tonnes per annual period	None specified
Inert Waste Type 1		

Waste	Quantity Limit	Specification[1]
Putrescible waste		
Inert Waste Type 2		Tyres and plastic only

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004.*

10. The licence holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 9 it is stored in a quarantined storage area or container and removed from the Premises to an appropriately authorised facility as soon as practicable.

11. The licence holder shall manage the effluent storage ponds in a manner such that:

(a) stormwater run-off resulting from roof and site drainage does not cause erosion of outer pond embankments;

(b) stormwater shall only be discharged to the ponds in a controlled manner (eg piped) such that erosion of pond embankments or overtopping does not occur;

(c) extreme rainfall events do not cause overtopping of the ponds;

(d) there is no discernable seepage loss from the ponds; and

(e) vegetation (emergent or otherwise) shall be prevented from growing in the pond wastewaters or on the inner pond embankments of all ponds.

12. The licence holder shall ensure that decant water and/or effluent are only discharged into containment cells and/or dams or ponds with the relevant infrastructure requirements and at the locations specified in Table 4.

Table 4: Containment infrastructure

Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements
C1	Dry tailings storage pad for the solid waste facility	1000 tonnes or more per year of materials sourced from off-site	All dry tailings accepted onsite are stored on an established hardstand area consisting of waste rock and road base. Sprinklers used for dust suppression.
C2	Reject product dams (2) for the solid waste facility	Rejects and stormwater collected from solid waste facility area	Compacted clay lined and a minimum top of embankment freeboard of 300mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained.

Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements
C3	Secondary containment for the reject product dams	Reject sump material	Lined with compacted clay and a minimum top of embankment freeboard of a 300mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained.
C4	Sump for spills and rejects from batch plant	Batch plant washdown	Concrete lined sump with a minimum top of embankment freeboard of 300mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained.

13. The licence holder shall dispose of collected screenings, grit and floating debris from the treatment plant to a landfill licensed to receive this specific class of waste.

14. The licence holder shall ensure that wastes accepted onto the landfill are only subjected to the process(es) set out in Table 5 and in accordance with any process limits described in that table.

Table 5: Waste processing

Waste Type(s)	Process	Process limits 1, 2
All	Disposal of waste by landfilling	No waste shall be temporarily stored or landfilled within 35 metres from the boundary of the Premises. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m. The licence holder shall manage the landfill site in such a manner that: (i) wastes are placed within a defined trench or within an area enclosed by earth bunds; (ii) a suitable barrier is installed and well maintained to prevent windblown waste leaving the disposal area; (iii) a sign is erected and maintained at the entrance to the premises of the landfill site which clearly states the types of materials that can be accepted; and (iv) no waste is to be burnt and firefighting gear is readily available which is suitable for extinguishing any accidental or malicious fires.
Inert Waste Type 2 - Tyres	Disposal of waste by landfilling	Tyres shall only be disposed of in the active tip face of the Lanfranchi Waste Rock Dump and landfilled: (a) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 40 cubic metres of tyres reduced to pieces; or (b) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 1,000 whole tyres.
Putrescible Waste	Receipt, handling and disposal by	

Waste Type(s)	Process	Process limits 1, 2
Clean Fill Inert Waste Type 1	landfilling	Shall only be disposed within the landfill area shown on the Landfill Area Map in Schedule 1 (Figure 1)

Note 1: Requirements for landfilling tyres are set out in Part 6 of the Environmental Protection Regulations 1987.
Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

15. The licence holder shall manage the landfilling activities to ensure:

(a) the size of the tipping face is kept to a minimum and not larger than 30 m in length;
(b) waste is placed and compacted to ensure all faces are stable and capable of retaining cover material.

16. The licence holder shall ensure that cover is applied to waste in accordance with Table 6 and that sufficient stockpiles of cover are maintained on site at all times.

Table 6: Cover requirements

Waste Type	Material	Depth	Timescales
Putrescible Wastes Inert Waste Type 1	Inert and incombustible material	Sufficient to ensure the waste is completely covered and that no waste is exposed	Fortnightly or as soon as practicable after deposit and prior to compaction
Inert Waste Type 2[1]	Inert waste type 1 or soil	100mm	

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987.*

17. The licence holder shall take all reasonable and practical measures to ensure that no wind-blown waste escapes from the Premises and that wind-blown waste is collected on at least a monthly basis and returned to the tipping area.

Emissions and Discharges

18. The licence holder shall immediately recover, or remove and dispose of spills of untreated wastewater outside an engineered containment system.

19. The licence holder shall:

(a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the premises; and
(b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises.

20. The licence holder shall ensure where saline water is used for dust suppression, damage to surrounding vegetation is avoided.

21. The licence holder must ensure that the emissions specified in Table 7, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 7: Authorised discharge points

Emission	Discharge point	Discharge point location
Treated waste water	Sprinklers within the irrigation field	Irrigation field as shown in Schedule 1: Maps; Figure 3

22. The licence holder must ensure that emissions from the discharge point listed in Table 8: Emission and discharge limits for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 23.

Table 8: Emission and discharge limits

Discharge point	Parameter	Limit
Irrigation field	Biological Oxygen Demand	20 mg/L
	Total Dissolved Solids	1425 mg/L
	Electrical Conductivity at 25°C	2500 µS/cm
	pH	6.5 to 8.5
	Total Nitrogen	30 mg/L
	Total Phosphorus	8 mg/L
	E. Coli	1000 cfu/100mL
	Residual free chlorine	0.2 to 2.0 mg/L

Monitoring

Discharge monitoring

23. The licence holder must monitor emissions in accordance with the requirements specified in Table 9 and record the results of all such monitoring.

Table 9: Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
Irrigation Field	Flow meter	Volume	Continuous	Cumulative daily	kL/day	N/A
	Effluent pipeline	*E. Coli*	Six-monthly period[2]	Spot sample	cfu/100mL	AS/NZS 5667.10
		Biological Oxygen Demand			mg/L	
		Total Dissolved Solids				

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method
		Total Nitrogen				
		Total Phosphorus				
		Residual Free Chlorine				
		Electrical Conductivity at 25°C			µS/cm	
		pH[1]			pH units	

Note 1 – non-NATA *in situ* testing permitted

Note 2 – 6 monthly monitoring is undertaken such that there is at least 5 months in between the days on which sampling is taken

24. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for relevant parameters, unless otherwise specified in Table 9.

Monitoring of inputs and outputs

25. The licence holder shall undertake the monitoring in Table 10 according to the specifications in that table.

Table 10: Monitoring of inputs and outputs

Input/Output	Parameter	Units	Averaging period	Frequency
Sewage – Inlet flow	Volumetric flow rate (cumulative)	m^3/day	Monthly	Continuous
Treated waste water – discharge to irrigation field	Volumetric flow rate (cumulative)	m^3/day	Monthly	Continuous
Waste Inputs	Inert Waste Type 1, Inert Waste Type 2, Clean Fill, Putrescible Waste	m^3 (where no weighbridge is present	N/A	Monthly based on landfill trench surveys
	Tailings waste			Each load arriving at the Premises
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises

Records and reporting

26. 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) monitoring programmes undertaken in accordance with condition 23 and 25 of this licence; and

(c) complaints received under condition 29 of this licence.

27. The books specified under condition 26 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 licence holder for the duration of the licence; and

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

28. The licence holder shall ensure that:

(a) any person left in charge of the Premises is aware of the conditions of the licence and has access at all times to the licence or copies thereof; and

(b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.

29. 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.

30. 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 by no later than 60 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

31. The licence holder must:

(a) Prepare an environmental report that provides the information in accordance with the requirements set out in Table 11 for the preceding two annual periods, and

(b) Submit that environmental report to the CEO by no later than 31 August 2023 and by 31 August every second year thereafter.

Table 11: Environmental Report

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
Condition 23 Table 9	(a) volume (in m^3 or kL) of treated wastewater applied daily to the irrigation area, and monthly cumulative volumes presented in table format; (b) treated wastewater monitoring data in tabulated and graphical form including the sampling date; (c) copies of laboratory sample analysis reports.
Condition 25 Table 10	Sewage – Inlet flow
Condition 25 Table 10	Volume of each type of waste disposed of to the landfill
29	Complaints summary

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (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.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
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.
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;

Term	Definition
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 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March;
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).

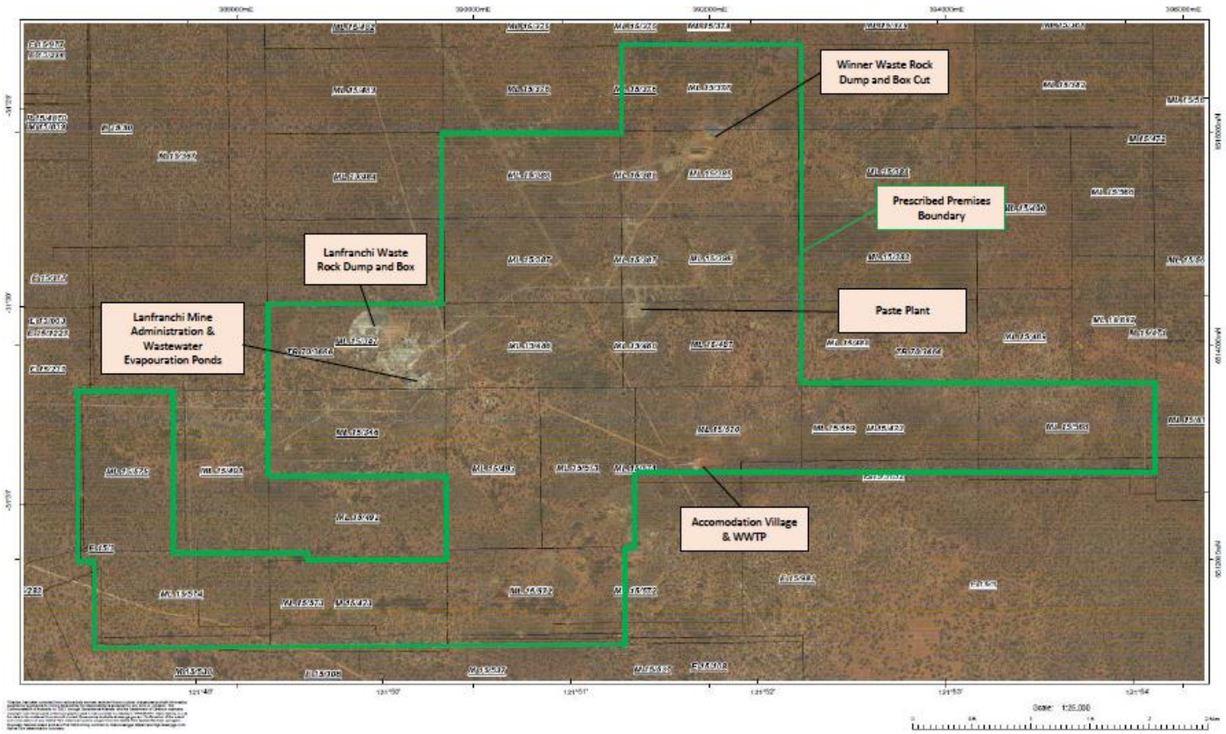

Figure 1: Map of the boundary of the prescribed premises

Landfill Area Map

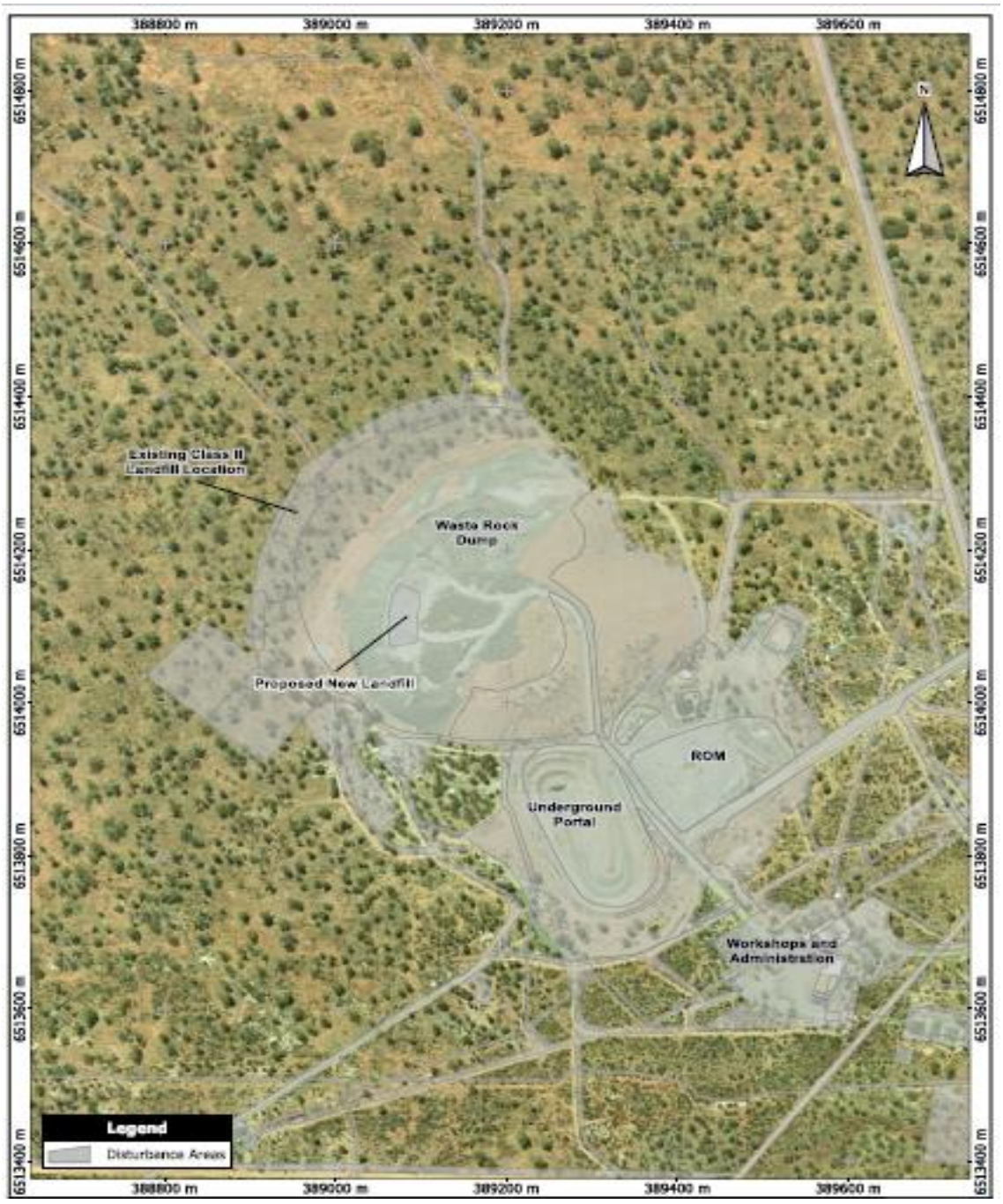

Figure 2: The Class II Landfill location defined in Table 4.

Figure 3: Irrigation Field Location