Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L9440/2024/1
Licence holder	Australian Garnet Pty Ltd
ACN	646 741 157
Registered business address	Level 3, 14 Walters Drive OSBORNE PARK WA 6017
DWER file number	DER2024/000202
Duration	16/12/2024 to 15/12/2044
Date of issue	16/12/2024
Premises details	Lucky Bay Garnet Project George Grey Drive YALLABATHARRA WA 6535 Legal description - Tenements M70/1280, G70/253, L70/215, L70/134 and L70/178 within Lot 1 on Diagram 91564, Lot 300 on Plan 60565, and Lot 1431 on Plan 251608.

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 8: Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated, or otherwise processed.	8,400,000 tonnes per annual period.

This licence is granted to the licence holder, subject to the attached conditions, on 16 December 2024, by:

Lauren Edmands
Digitally signed by Lauren Edmands
Date: 2024.12.16 09:52:21 +08'00'

A/SENIOR MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATE-WIDE DELIVERY)
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
16/12/2024	L9440/2024/1	Licence granted.

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:

General

1. The licence holder must ensure the limits specified in Table 1 are not exceeded.

Table 1: Production or design capacity limit

Category[1]	Category description[1]	Premises assessed production capacity
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated, or otherwise processed.	8,400,000 tonnes per annual period.

Note 1: Categories listed under Schedule 1 of the *Environmental Protection Regulations 1987.*

Premises operation

2. The licence holder must carry out mining and processing operations in accordance with that specified in Table 2.

Table 2: Mining and processing operations and hours of operation

Operations	Days and hours of operation
Mining operations	
Civil and earthmoving activities using mobile equipment includes but not limited to light vehicles, front-end loaders, tracked dozer, excavator, haul truck, grader, service truck, and water truck Other equipment used during mining operations are the fuel trailer, process water pond and reach stacker Topsoil and overburden removal	Monday to Saturday 7:00 AM to 7:00 PM[1] Sunday and Public Holidays 9:00 AM to 7:00 PM
Processing operations	
Processing operations includes the Central Processing Area (WCP, DSP, generators, product and ilmenite sheds) Mobile Unit Plant Production bores, pumps, and pipelines Mobile equipment used includes front-end loader, light vehicles, bobcat, crane, and bus.	Monday to Sunday (including Public Holidays) 12-hr shifts

Note 1: Mining operations may be undertaken outside of these hours of operation only for the purpose of meeting the nighttime noise monitoring required by Condition 22.

Infrastructure and equipment

3. The licence holder must ensure that the site infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Table 3: Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1	Dry Separation Plant (DSP) including the rotary dryer, baghouse, screening, and packaging.	• must not exceed the design capacity of 47 tph; and. • any contaminated surface water runoff must be contained within the plant or directed toward the drainage sumps and returned to the Process Water Pond.	Schedule 1 Maps: Figure 3
2	Wet Concentrator Plant (WCP) including the thickener and associated pumps.	• must not exceed the design capacity of 511 tph; and • any contaminated surface water runoff must be contained within the plant or directed toward the drainage sumps and returned to the Process Water Pond.	Schedule 1 Maps: Figure 3
3	Screening and Bagging Plant (SBP) (Product and Loadout Facility)	• must not exceed the design capacity of 47 tph; and • located within an enclosed shed.	Schedule 1 Maps: Figure 3
4	Heavy Metal Concentrate (HMC) Stockpile	• any contaminated surface water runoff must be diverted away from the stockpile and contained within a sump.	Schedule 1 Maps: Figure 3
5	Process Water Pond	• maximum storage capacity of 3,396 m^3; • maintain a minimum operational freeboard of 500 mm; • contains process water for reuse in the CPA; and • daily visual inspections must be undertaken to ensure integrity of HDPE liner.	Schedule 1 Maps: Figure 3
6	Turkey Nest Pond	• maximum storage capacity of 5,993.5 kL; • stores abstracted groundwater; • maintain a minimum operational freeboard of 500 mm; • water to be used for dust suppression and / or for return to the processing plant; and • daily visual inspections must be undertaken to ensure integrity of HDPE liner.	Schedule 1 Maps: Figure 2
7	Mobile Mining Unit Plant (MUP) including slurry pipelines, pumps, and conveyors.	• maintain sufficient secondary containment to completely contain any spills from pipeline leakage or breach for a period equal to the time between routine inspections; • daily visual inspections must be undertaken to ensure integrity of pipelines and identify potential spills and leaks; and • any contaminated surface water runoff must be contained.	Schedule 1 Maps: Figure 2

	Site infrastructure and equipment	Operational requirement	Infrastructure location
8	Pipelines carrying ore, clay slimes, sand tailings, and water.	• maintain sufficient secondary containment to completely contain any spills from pipeline leakage or breach for a period equal to the time between routine inspections; and • daily visual inspections must be undertaken to ensure integrity of pipelines and identify potential spills and leaks.	Schedule 1 Maps: Figure 2
9	Sand Tailings Storage Area	• storage area to not exceed 10 m in height; • use of stockpile height markers; • dimensions must be maintained at 250 m x 806 m x 10 m; • active areas must be maintained in a damp state; and • any surface water runoff must be contained within the perimeter bunds and drains.	Schedule 1 Maps: Figure 2
10	Solar Drying Ponds	• located in the Solar Drying Pond Areas, within the Sand Tailings Storage Area, and / or in Mining Voids within the Menari Mine Pit; • maintain a minimum operational freeboard of 500 mm; • pond wall height must not exceed 4 m; and • the pond floor will be built to follow natural grades; and • supernatant water will be recovered for reuse.	Schedule 1 Maps: Figures 2
11	Mining Void (Menari Mine Pit) for tailings deposition (i.e. sand tails and clay slimes)	• any contaminated surface water runoff must be diverted away from the storage area and contained.	Schedule 1 Maps: Figure 2

Emissions and discharges

Discharges to land

4. The licence holder must ensure that tailings and saline wash water produced during operational activities are deposited in accordance with the requirements specified in Table 4.

Table 4: Discharges to land requirements

Emission	Requirements	Location
Sand tailings from the WCP and DSP	Must be: • temporarily stockpiled at the sand tailings storage area; OR • deposited directly into the mined void using cyclone stackers.	Schedule 1 Maps: Figure 2

Emission	Requirements	Location
Clay slimes from the thickener	Must be pumped as a thickened slurry to: • solar drying ponds; OR • deposited directly into solar drying ponds within the mined void.	Schedule 1 Maps: Figure 2
Saline wash water	• saline wash water from the rinsing of final garnet concentrate must be transferred to the Process Water Pond.	Schedule 1 Maps: Figure 3
Tailings cyclone stackers discharge (decant water)	• water discharged from the cyclone stackers must be discharged to the Process Water Pond; and • water must be received from the Process Water Pond and returned to the processing plant for reuse.	Schedule 1 Maps: Figures 2 and 3

5. The licence holder must immediately remove and dispose off-site any liquid resulting from spills or leaks of chemicals including fuel, oil, or other hydrocarbons, or other collected waste material whether inside or outside the low permeability compounds, by a licensed carrier to a licensed landfill facility.

6. The licence holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the premises.

Emissions to air

7. The licence holder must ensure that waste emitted to air from the DSP during operational activities is emitted in accordance with the requirements specified in Table 5.

Table 5: Emissions to air requirements

Emission point and source	Emission point height (m)	Pollution control equipment	Location
DSP – rotary dryer stack (Baghouse 1)	3 (minimum)	Pulse jet fabric filter (baghouse) or equivalent	Schedule 1 Maps: Figure 3
DSP – rotary dryer stack (Baghouse 2)			

Dust

8. The licence holder must implement the requirements / management actions list in Table 6 for each control specified in that table.

Table 6: Dust control requirements and management actions

Control	Requirements / management actions
Topsoil stripping	• must be scheduled to avoid periods of high winds from unfavourable directions relative to off-site receptors (including George Grey Drive); • where there is a risk of dust affecting off-site receptors, must conduct when soil conditions are moist; and • must cease / suspend topsoil stripping operations during high wind conditions where there is a risk of dust impacting on off-site receptors.

Control	Requirements / management actions
Material handling	Must implement loading and unloading procedures to ensure that dust emissions from material handling is minimised.
Water carts / sprays	• water cart/s to be used within the premises; • must ensure an adequate supply of water is available onsite at all times to assist in dust mitigation; • must operate when discernible levels of dust are generated from ground surfaces on the premises and there is a risk of dust affecting off-site receptors; • must apply proactively subject to weather forecasting over a 24-hour period; and • must ensure that any water used on the premises for dust suppression does not impact on the health of native vegetation.

Dust suppressant	• types of dust suppressants must be used include, but are not limited to;
	  ○ groundwater;
	  ○ polymer emulsion;
	  ○ chemical stabilisers;
	  ○ hydromulch;
	• must apply proactively to overburden / topsoil stockpiles;
	• must apply dust suppressant polymer to all unsealed roads likely to cause dust lift-off;
	• must apply proactively to the Sand Tailings Storage Area; and
	• must apply proactively subject to visual inspection and weather forecasting over a 24-hour period with the onsite weather station.

Stockpiles	• use of water carts where required; • use of chemical stabilisers, polymer emulsion, or hydromulch to reduce dust emissions on all stockpiles when material is not being used for long periods; • limiting stockpiles numbers and size on the premises; and • orientation and shape of stockpiles constructed to minimise impact of prevailing winds.
Cessation of activities	• must cease an activity causing visible levels of dust where dust management measures have not prevented dust lift-off and there is a risk of dust affecting off-site receptors; and • monitor and undertake visual inspection and weather forecasting over a 24-hour period with the onsite weather station.

Vehicle movement and transportation	• design and implement a Traffic Management Plan:
	  ○ reduction in trafficable areas;
	  ○ clearly defined parking bays with the parking area covered in gravel or sealed;
	  ○ temporary use of a polymer chemical product for unsealed roads;
	  ○ reduce speed limits on the premises and on access routes;
	  ○ frequent trafficable roads to be sealed where applicable.

Control	Requirements / management actions
Open areas / laydown pads	• laydown pads to be covered in gravel where practicable; and • rehabilitation of disturbed area where possible; and • open areas for short-term operational purposes must be bunded off, and where practicable treated with a polymer chemical product with no further access allowed until the area is required again.

Noise

9. The licence holder must implement the requirements / management actions listed in Table 7 for each control specified in that table.

Table 7: Noise control requirements and management actions

Control	Requirements / management actions
Heavy earthmoving equipment (front-end loaders, dozer, excavator)	• must use the quietest equipment reasonably available; • motors must be located in enclosed housings with sound-absorbing materials; mufflers used to manage exhaust noise; and baffles / loures used to control fan noise; • must use broadband reversing alarms (e.g., squawkers / quackers) on all earthmoving equipment instead of standard single frequency 'beepers'; and • mobile equipment must be equipped with flashing lights (to replace alarms) after dusk when headlights are in use.
MUP	• must be located in the Menari Mine Void below the natural ground level at all times whilst operating; and • maintain the location of the MUP as a minimum 1 km distance from the nearest sensitive receptor.

Monitoring

General

10. The licence holder must ensure that monthly monitoring is undertaken at least 15 days apart.

11. The licence holder must ensure that quarterly monitoring is undertaken at least 45 days apart.

12. The licence holder must ensure that all monitoring equipment used in the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications.

Process monitoring

13. The licence holder must undertake monitoring of the processes listed in Table 8, for the corresponding parameter and in the units specified in that table.

Table 8: Process monitoring requirements

Process description	Parameters	Units	Frequency
Overburden removal	Volume of overburden removed	m^3	Monthly
Processing of ore	Volume of ore processed through the WCP		
	Volume of HMC produced		

Process description	Parameters	Units	Frequency
Tailings deposition	Volume and location of sand tailings deposited		
	Volume and location of clay slimes deposited		
Process water returned to the CPA	Volume of processing water returned to the CPA		

Ambient air quality and noise monitoring

14. The licence holder must undertake ambient air quality monitoring at the locations and for the parameters listed in Table 9, in the corresponding units and at the frequency specified in that table.

Table 9: Monitoring of ambient air quality

Monitoring point reference	Parameter	Unit[1]	Averaging period	Target	Frequency	Method
To be determined – near R1 and a background location	Deposited dust	g/m^2/month	Monthly	4g/m^2/month (maximum); 2g/m^2/month above background levels	Monthly	In accordance with AS/NZS 3580.10.1
PM_{10} high volume sampler To be determined – at or near R1)[1]	PM_{10}	µg/m^3	24 hours	50	Sample collected every sixth day for a period of 12 months starting from licence issue date. Sampler time clock set from midnight to midnight.	In accordance with AS/NZS 3580.9.6
	Major ions Calcium	µg/m^3	24 hours	-		In accordance with AS/NZS 3580.9.15
	Magnesium			-		
	Potassium			-		
	Sodium			-		
	Sulfate			-		
	Metals / metalloids Aluminium			10		
	Arsenic			0.03		
	Barium			-		
	Boron			-		
	Cadmium			0.03		
	Chromium (III)			0.5		
	Chromium (IV)			0.3		
	Cobalt			0.1		
	Copper			1		

Monitoring point reference	Parameter	Unit[1]	Averaging period	Target	Frequency	Method
PM_{10} high volume sampler To be determined – at or near R1)[1]	Iron	µg/m^3	24 hours	-	Sample collected every sixth day for a period of 12 months starting from licence issue date. Sampler time clock set from midnight to midnight.	In accordance with AS/NZS 3580.9.15
	Lead			-		
	Lithium			-		
	Manganese			0.15		
	Mercury			-		
	Molybdenum			12		
	Nickel			0.14		
	Selenium			-		
	Thallium			-		
	Thorium			-		
	Titanium			-		
	Uranium			-		
	Vanadium			1		
	Zinc			-		
	Respirable crystalline silica[2]			10		X-Ray Diffraction by NATA accredited lab

Note 1: The monitoring location is to be sited as per AS/NZS 3580.1.1

Note 2: PVC filter papers are required for Respirable Crystalline Silica analysis.

15. The licence holder must undertake noise monitoring at the locations and for the parameter listed in Table 10, in the corresponding units and at the frequency specified in that table.

Table 10: Noise monitoring schedule

Monitoring point reference	Parameter	Units	Averaging period	Frequency
Eastern Noise Monitor and Western Noise Monitor Schedule 1 Maps: Figure 4	$L_{AS\ 90,\ 30min}$	dB	Continuous[1] logging with 30-minute averages	3 days per month[2,3]
	$L_{AS\ 10,\ 30min}$			
	$L_{Aeq\ (20Hz\text{-}500Hz),\ 30\ min}$			

Note 1: Availability ≥90% of the measurement intervals on a monthly basis.
Note 2: During period outside of 3d/month continuous monitoring to continue at monitoring point where mining activities most closely approach residential receptors. Continuous monitoring means a minimum of 22 days/month.
Note 3: Continuous monitoring is required to commence within 7 days, if requested by the CEO in response to a noise complaint from a member of the public. To continue until issue is resolved and approval given by the CEO.

16. The licence holder must record the results of all monitoring activities required by conditions 14 and 15.

17. Where any limit in Table 9 is exceeded, the licence holder must investigate, undertake management actions, and record the cause of the exceedance.

18. Where the monitored ambient noise levels required by Table 10 indicates an exceedance of an assigned level specified in Table 1, Regulation 8 of the *Environmental Protection (Noise) Regulations 1997*, the licence holder must undertake an investigation of the exceedance, including but not limited to:

(a) the root cause analysis of the exceedance; and

(b) any common or contributory factors for the exceedance.

Ambient groundwater monitoring

19. The licence holder must ensure that:

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

(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

(c) all laboratory samples are to be submitted to and tested by a laboratory with current NATA accreditation for the parameter being measured, unless indicated otherwise in the relevant table.

20. The licence holder must undertake monitoring of ambient groundwater quality at the locations and for the parameters listed in Table 11, in the corresponding units over the averaging period and at the frequency specified in that table.

Table 11: Groundwater monitoring schedule

Monitoring sites	Parameter	Unit	Trigger	Limit	Averaging period	Frequency
Production bore PB1, PB2, PB4, and PB5 Schedule 1 Maps: Figure 5	Standing water level (SWL)[1,2]	m AHD	0.2 mbgl	1 mbgl	Spot sample	Monthly
Monitoring bore MB2, MB3, MB4, MB5, MB8, MB9, MB10, MB12, and MB13 Schedule 1 Maps: Figure 5	pH[1]	pH	-	-		
	Electrical conductivity[1]	µS/cm	-	-		
	Redox potential[1]	mV	-	-		
	Major ions Calcium bicarbonate	mg/L	-	-		Quarterly
	Calcium		-	-		
	Chloride		-	-		
	Magnesium		-	-		
	Potassium		-	-		
	Sodium		-	-		
	Sulfate		-	-		

Monitoring sites	Parameter	Unit	Trigger	Limit	Averaging period	Frequency
Monitoring bore MB2, MB3, MB4, MB5, MB8, MB9, MB10, MB12, and MB13 Schedule 1 Maps: Figure 5	Total Dissolved Solids	mg/L	-	-	Spot sample	Quarterly
	Metals and metalloids Aluminium		-	-		
	Arsenic		-	-		
	Chromium (as CRVI)		-	-		
	Chromium (as total)		-	-		
	Cobalt		-	-		
	Copper		-	-		
	Iron		-	-		
	Mercury		-	-		
	Nickel		-	-		
	Selenium		-	-		
	Thallium		-	-		
	Uranium		-	-		
	Zinc		-	-		

Note 1: In-field non-NATA accredited analysis permitted.
Note 2: SWL to be determined prior to the collection of other samples.

21. Upon exceeding the bore groundwater trigger value set in accordance with condition 20 (above), where the exceedance is attributed to the licence holder's activities, the licence holder must commence groundwater recovery within two months to limit any potential mounding effects to within one metre of the natural ground level.

Specified actions

Noise assessment

22. The licence holder must retain the services of a person qualified and experienced in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants to:

(a) undertake assessment of noise emissions of mining operations during nighttime occurring from the premises;

(b) review of the predicted noise levels with daytime and nighttime mining operations, taking into consideration potential penalty for tonality, variation in operation and weather conditions;

(c) compile and submit to the licence holder within 90 calendar days, a report in accordance with condition 23.

23. A report pursuant to condition 22(c) must include:

(a) details and the results of the investigation undertaken pursuant to condition 22(a); and

(b) details and the results of the review on the predicted noise levels with daytime and nighttime mining operations occurring on the premises, against the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997* undertaken pursuant to condition 22(b).

24. The licence holder must submit to the CEO the report prepared pursuant to condition 22(c) within 14 calendar days of receival.

25. Where an assessment pursuant to condition 22(a) indicates that the noise emissions do not comply with the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997*, the licence holder must:

(a) within 30 calendar days of receiving the report pursuant to condition 22(c) prepare a plan which must include a set timeframe for action, detailing all measure to ensure there is no further contravention of the *Environmental Protection (Noise) Regulations 1997*; and

(b) immediately action and provide to the CEO a copy of the plan prepared pursuant to condition 23(a).

Dust assessment

26. The licence holder must retain the services of a person qualified and experienced in the area of environmental ambient air monitoring and assessment to prepare an ambient air / dust monitoring assessment report. The report should be submitted to the CEO, 12 months after the commencement of monitoring from 20 January 2025:

(a) investigate for crystalline silica in ambient air to monitor potential impacts to offsite human receptors and develop mitigation measures;

(b) undertake ambient air / dust monitoring analysis from six to 12 months of data collected and provide an interpretation and assessment of the data; and

(c) undertake dust deposition analysis and provide an interpretation and assessment of the data.

27. The licence holder must prepare a revised dust management plan and submit the plan to the CEO, 12 months after the commencement of monitoring from 20 January 2025:

(a) include specifications of the particle and meteorological monitoring instrument(s) used as well as calibration, maintenance, and operational requirements in the Dust Management Plan (DMP);

(b) revise the Trigger Action Response Plan framework in the DMP once six months of ambient monitoring is collected and form appropriate quantitative trigger values;

(c) revise the DMP to include regular data review including a focus on worst-case summer conditions; and

(d) revise the DMP to include an assessment of data collection efficiency, identification of trends and QA/QC checks.

Records and reporting

Records

28. 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.

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

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

(b) the works conducted in accordance with condition 3 of this licence;

(c) any maintenance of infrastructure that is performed in the course of complying with condition 3 of this licence;

(d) monitoring programmes undertaken in accordance with conditions 13, 14, 15, and 20 of this licence; and

(e) complaints received under condition 26 of this licence.

30. The books specified under condition 27 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.

Reporting

31. 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 30 September each year.

The licence holder must prepare an Environmental Report that provides information in accordance with:

(c) Table 12 for the preceding annual period, and

(d) submit that Environmental Report to the CEO by 30 September each year.

Table 12: Environmental reporting requirements

Condition	Requirement
13, Table 8	Summary of the monthly and total volumes during the annual period for the following: • volume of overburden removed; • volume of ore processed through the WCP; • volume of HMC produced; and • volumes and location of sand tailings and clay slimes disposed on the premises.
14, Table 9, 16, and 17	Dust monitoring results to be provided to the CEO, must include, but not limited to: • the dates at which monitoring was undertaken; • all raw monitoring data in a tabulated form highlighting exceedances; • cumulative time-series graphs in Microsoft excel or similar format for each monitoring site; and • an assessment and interpretation of the dust monitoring results, any exceedances and the management actions undertaken.
15, Table 10, 16, and 18	Noise monitoring results to be provided to the CEO, must include, but not limited to: • the dates at which monitoring was undertaken; • all raw monitoring data in a tabulated form highlighting exceedances; • cumulative time-series graphs in Microsoft excel or similar format for each monitoring site; and • an assessment and interpretation of the noise monitoring results, any exceedances and the management actions undertaken.
20, Table 11 and 21	Ambient groundwater monitoring results to be provided to the CEO, must include, but not be limited to: • the dates at which monitoring was undertaken; • all raw monitoring data, for each parameter in a tabulated form; • cumulative time-series graphs in Microsoft excel or similar format for each production / monitoring bore for SWL and those parameters resulting in exceedances; • provide details and actions undertaken on groundwater recovery where a production / monitoring bore SWL exceeded the trigger value; and • an assessment and comparison against previous monitoring data, ANZG 2018 guidelines values and highlighting any exceedances.
28	Summary of any complaints during the annual period and any action/s taken.
-	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/s taken.

Definitions

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

Table 13: Definitions

Term	Definition
ACN	Australian Company Number
AHD	Australian Height Datum
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 30 September until 1 October of the same year.
AS/NZS 3580.1.1	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.1.1 *Methods for sampling and analysis of ambient air. Part 1.1: Guide to siting air monitoring equipment.*
AS/NZS 3580.10.1	means the recent version and the relevant parts of the Australian Standard AS 3580.10.1 *Methods for sampling and analysis of ambient air – Determination of particulate matter – deposited matter – gravimetric method.*
AS/NZS 3580.9.6	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.9.6 *Methods for sampling and analysis of ambient air. Method 9.6: Determination of suspended particulate matter – PM_{10} high volume sampler with size selective inlet – Gravimetric method.*
AS/NZS 3580.9.15	means the recent version and the relevant parts of the Australian Standard AS/NZS 3580.9.15 *Methods for sampling and analysis of ambient air – Part 9.15: Determination of suspended particulate matter – Particulate metals high or low volume sampler gravimetric collection – Inductively coupled plasma (ICP) spectrometric method.*
AS/NZS 5667.1	means the recent version and the relevant parts of the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*
AS/NZS 5667.11	means the recent version and relevant parts of the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*
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.

Term	Definition
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.
DSP	Dry Separation Plant
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)
$g/m^2/month$	grams per square metre per month
HDPE	High density polyethylene
high wind	means high wind conditions rating 7 or greater on the Beaufort Windforce Scale (i.e., wind speeds 50 km/h or greater).
HMC	Heavy Mineral Concentrate
kL	kilolitre
$L_{AS\ 90,30min}$ and $L_{AS\ 10,30min}$	means the A-weighted equivalent noise level which is exceeded for more than 90% and 10%, respectively, of the time over 30 minutes with the sound level meter set to 'Slow' time weighting.
$L_{Aeq(20Hz-500Hz),30min}$	means the A-weighted equivalent level between 20 Hz and 500 Hz (one-third octave bands inclusive) averaged over 30 minutes.
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.
m	metres
m^3	cubic metres
mbgl	metres below ground level

Term	Definition
mg/L	milligrams per litre
mm	millimetres
monthly period	means a one-month period commencing from first day of a month until the last day of the same month.
MUP	Mining Unit Plant
mV	millivolt
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.
QA/QC	quality assurance and quality control
SBP	Screening and Bagging Plant
spot sample	means a discrete sample representative of the time and place at which the sample is taken.
SWL	Standing water level
tph	tonnes per hour
µg/m^3	microgram per cubic metre
µS/cm	microsiemens per centimetre
waste	has the same meaning given to that term under the EP Act.
WCP	Wet Concentrator Plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

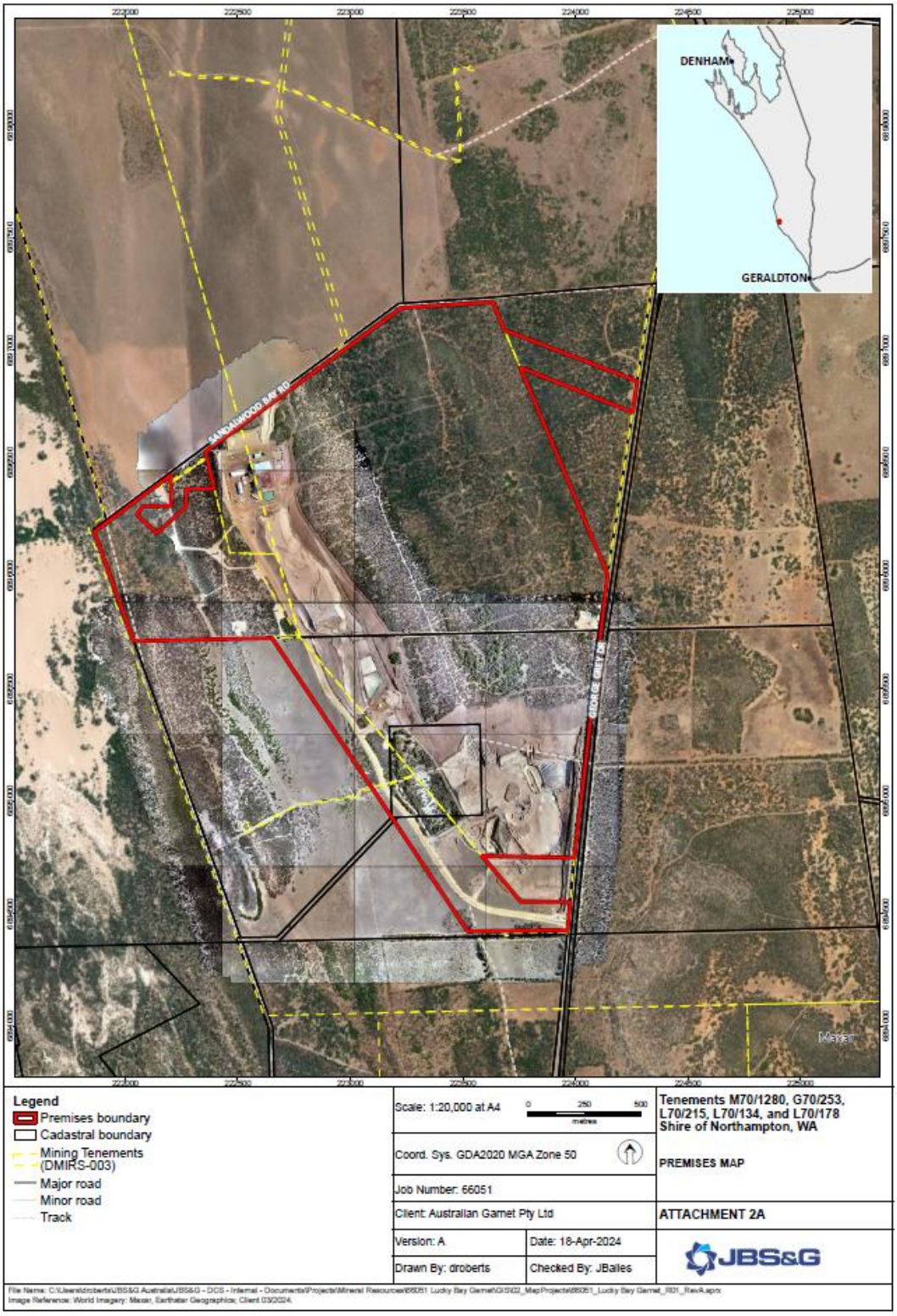

Figure 1: Map of the boundary of the prescribed premises

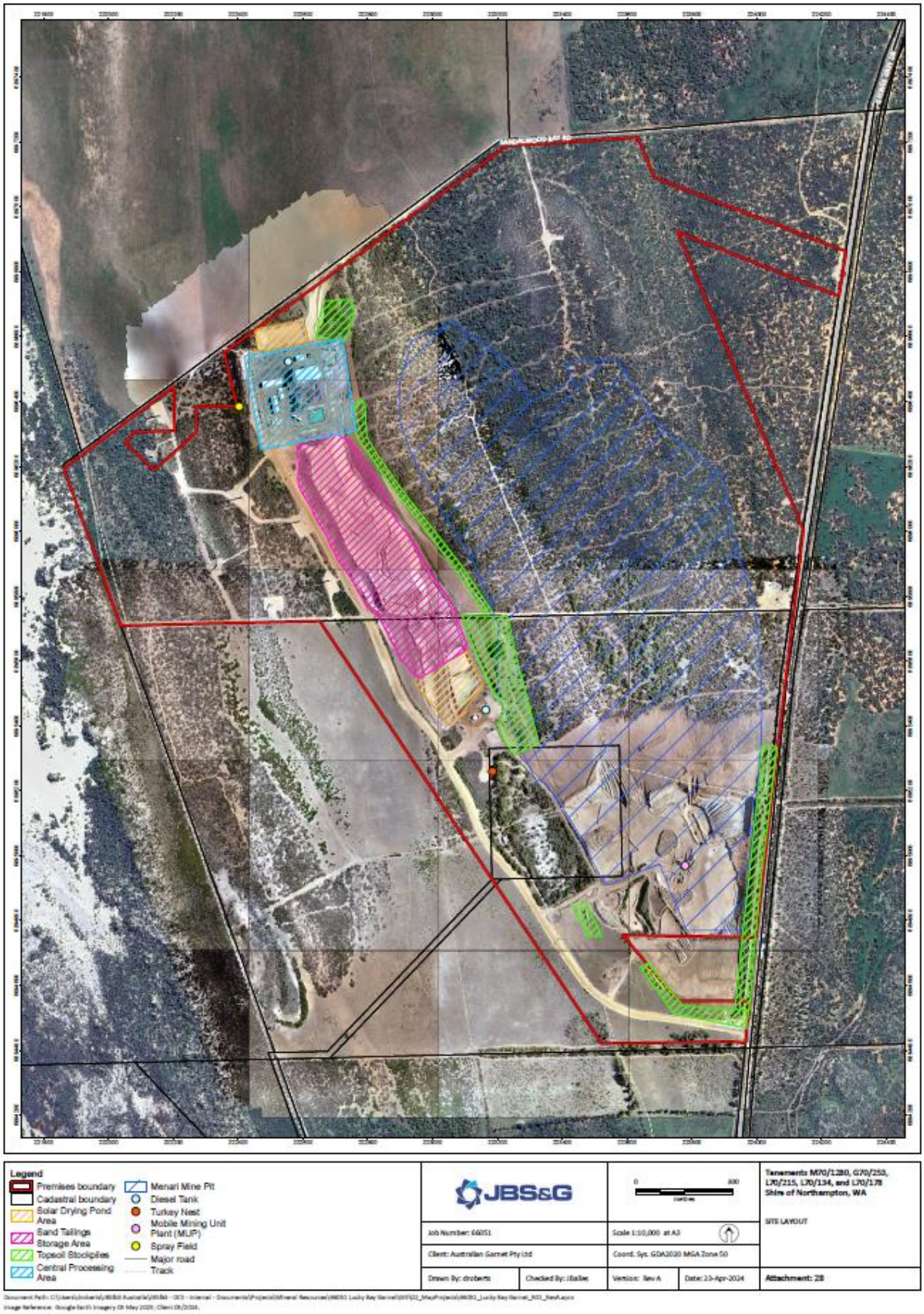

Figure 2: Map of the site layout

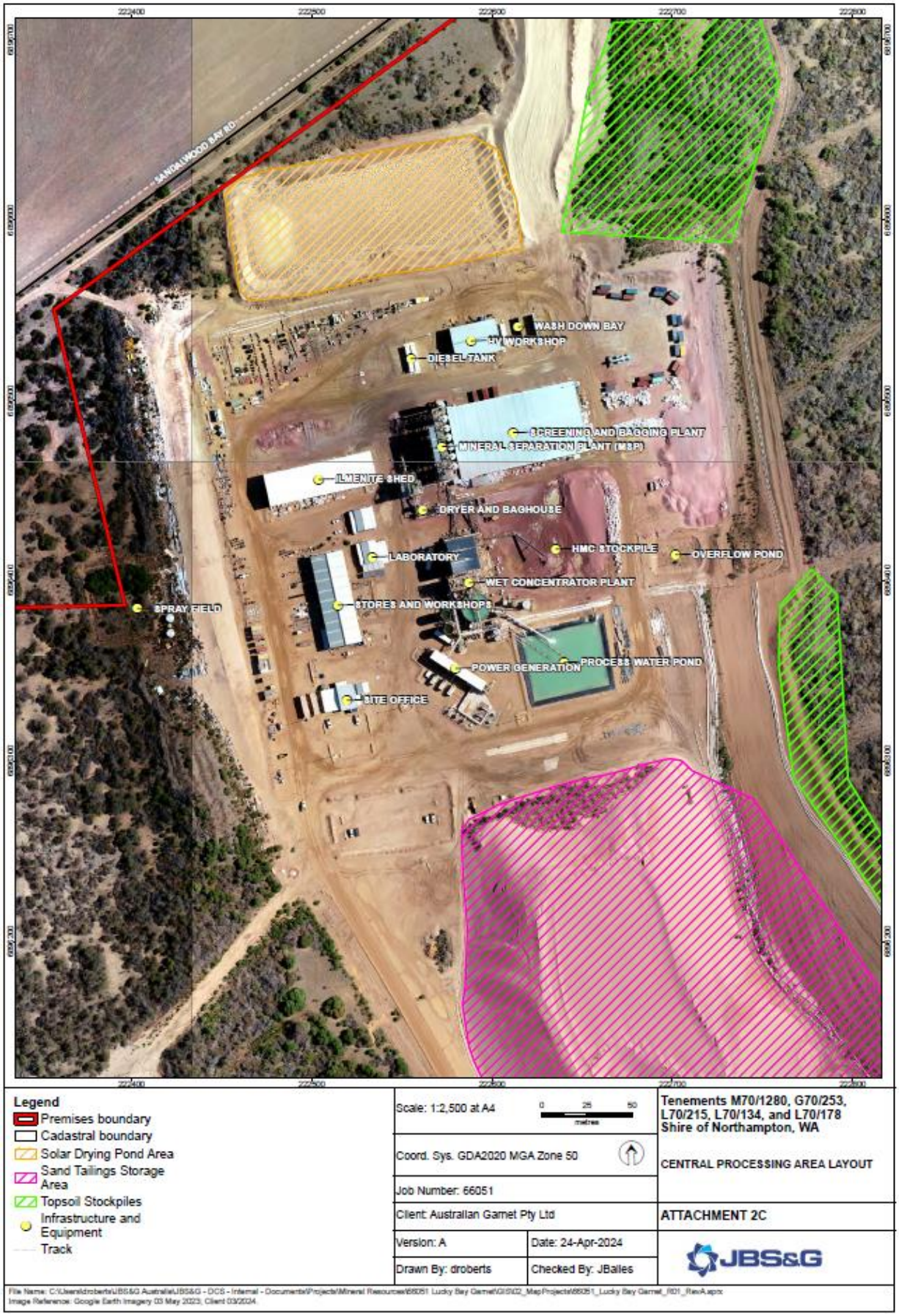

Figure 3: Map of the Central Processing Area layout

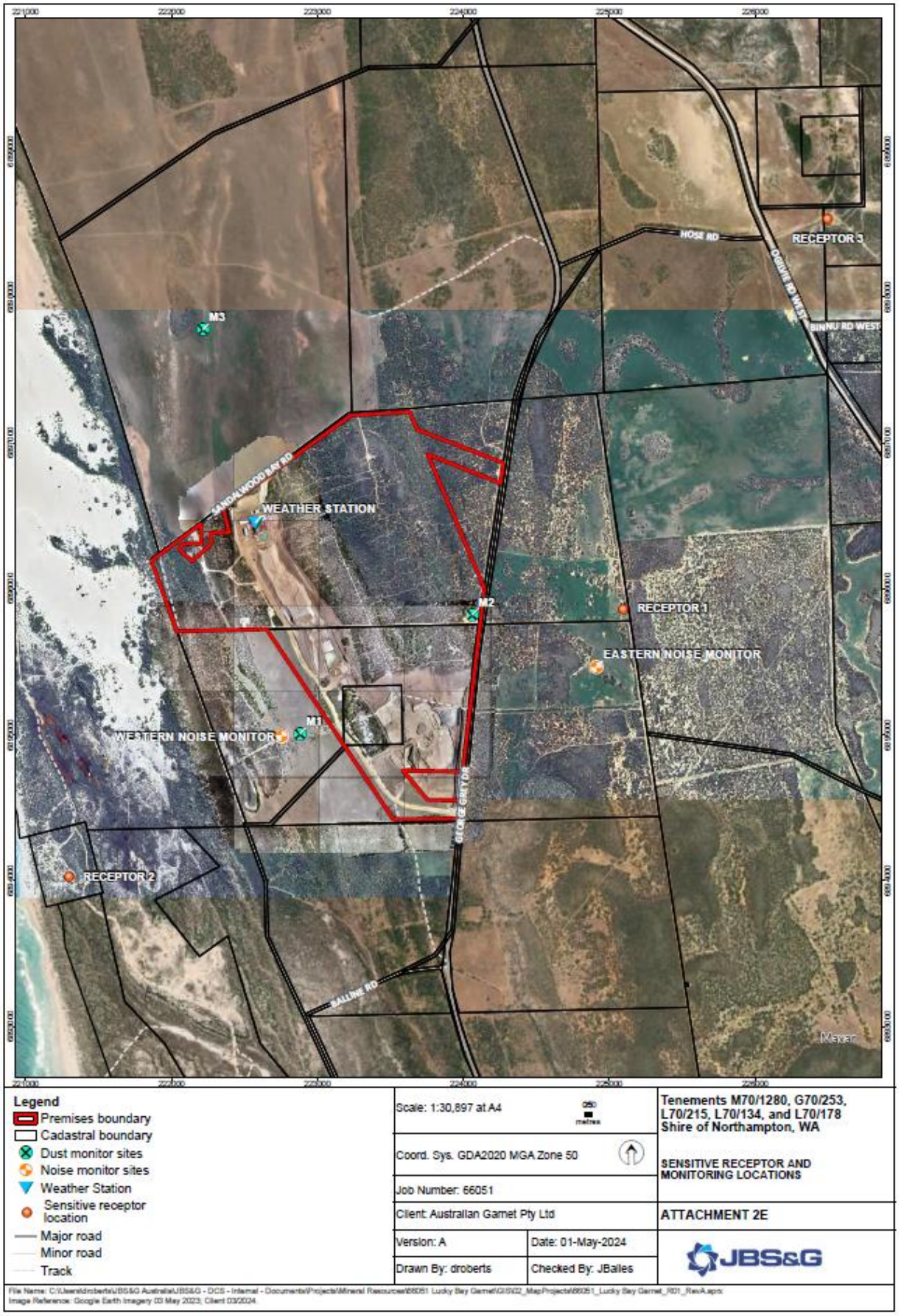

Figure 4: Map of dust and noise monitoring site locations

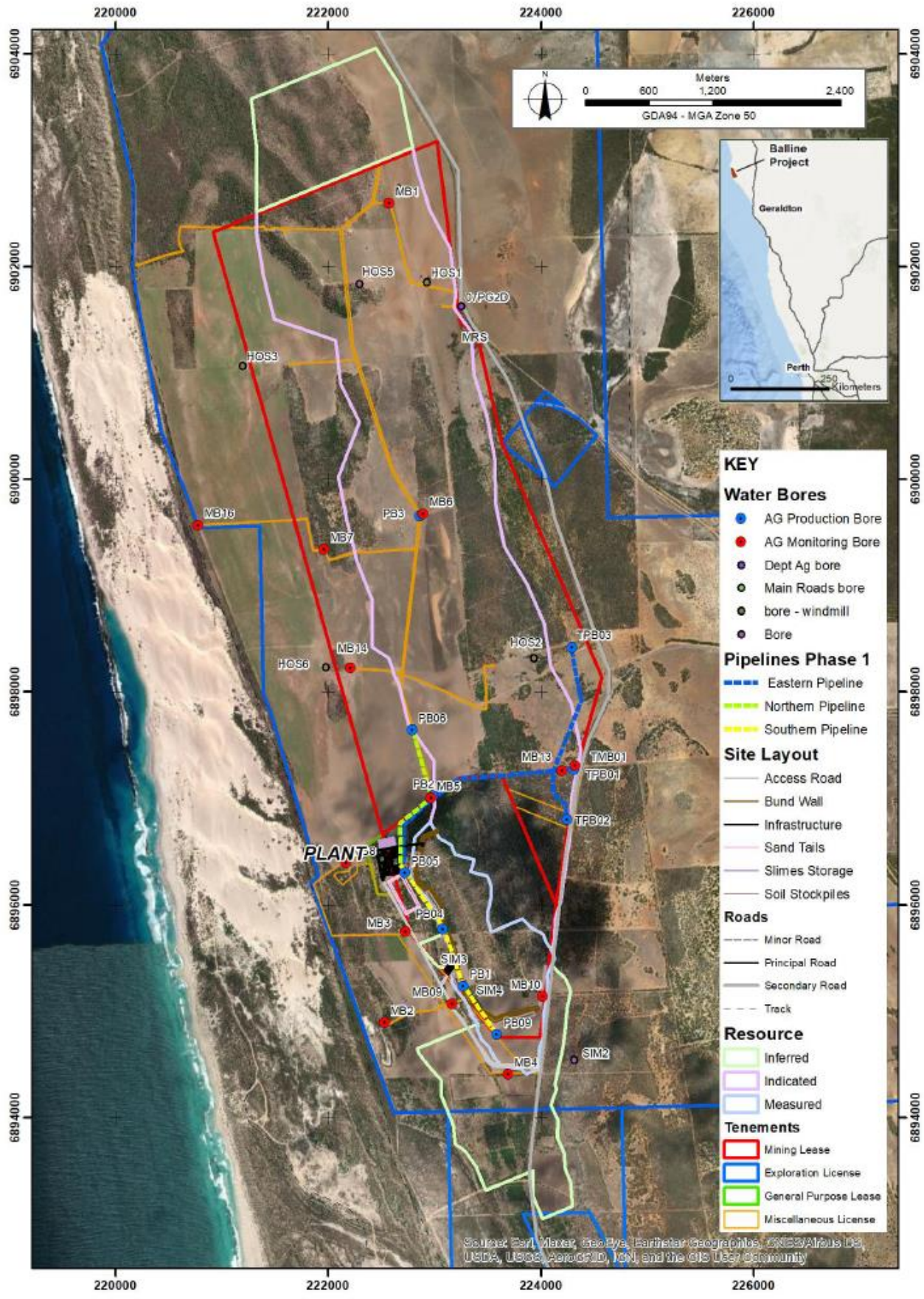

Figure 5: Map of the production bore and monitoring bore location