Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence Number	L9369/2023/1
Licence Holder	Iluka Rare Earths Pty Ltd
ACN	654 487 662
Registered business address	Level 17, 240 St Georges Terrace PERTH WA 6000
File Number	DER2022/000702
Duration	12/04/2023 to 11/04/2031
Date of Issue	12 April 2023
Date of Amendment	28 October 2024
Premises details	Eneabba Rare Earths Refinery Brand Hwy ENEABBA WA 6518 Legal description – Mining Tenement M70/821 and part of State Agreement Tenure M267SA As depicted in Schedule 1 and as defined by the coordinates in Schedule 2.

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.	18,600,000 tonnes per annual period
Category 63: Class I inert landfill site: premises on which waste (as determined by referenced to the waste type set out in the document entitled “Landfill Waste Classification and Waste Definitions 1996” published by the CEO and as amended from time to time) is accepted for burial.	10,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 28 October 2024 by:

Michael Greenslade
Digitally signed by Michael Greenslade
Date: 2024.10.28 15:15:06 +08'00'

MANAGER, PROCESS INDUSTRIES
An officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

Licence history

Date	Reference number	Summary of changes
12/04/2023	L9369/2023/1	Licence issued. Consolidated conditions relating to operational requirements and monitoring from: • Eneabba Phase 1 infrastructure previously authorised under L5646/1994/10 for a mineral sands recovery plant constructed under works approval W6251/2019/1. These operations are transferred onto this licence due to changes in sublease area meaning the infrastructure falls within boundary of this licence premises boundary; and • W6548/2020/1 for the Phase 2 infrastructure including the processing plant, stockpiling, handling and storing of products.
22/02/2024	L9369/2023/1	• Licence amendments to: ○ Allow the combined disposal of 'sand and clay slimes' and 'process water' into an existing mine void (West Dam), which is currently only authorised to store process water; and ○ Construct and operate: – a new pipeline to facilitate the transport of tailings from the Concentrator plant to the West Dam; and – a new pipeline to facilitate the transport of decant water from the West Dam to the WSP process water tank. • Department initiated administrative amendments to: ○ Rename the existing ‘process water pond’ to ‘WSP process water pond’; ○ Rename the ‘process water dam’ back to its original name ‘West Dam’; ○ Remove duplication within regulatory requirements; ○ Update format and appearance of the licence; and ○ Correct clerical mistakes and unintentional errors.
28/10/2024	L9369/2023/1	Licence amendment for the authorisation to process the following additional process streams: • Yellow Dam TSF excavated material; and • Other heavy mineral material from within the premises (Yellow Dam South, SSC Cons – 120 Mine Void).

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:

Premises operation

1. The licence holder must ensure that all thickener underflow, tailings, clay slimes disposal, vehicle washdown, process water and decant water pipelines are:

(a) equipped with automatic cut-outs in the event of a pipe failure; or

(b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections; or

(c) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures.

2. The licence holder must ensure that the containment infrastructure listed in Table 1 is maintained and operated in accordance with the corresponding infrastructure description and/or operational requirements set out in Table 1.

3. The licence holder must ensure that materials listed in Table 1 are only discharged into the corresponding infrastructure and location as specified in that table.

Table 1: Containment infrastructure

No.	Infrastructure	Material	Infrastructure description and/or operational requirements	Infrastructure location
1.	North Gas Pit TSF	Combine sand and clay slimes	(a) Must be constructed as an erosion resistant, non-polluting structure which is stable in the long term; (b) Water levels maintained at least 1 m below the tops of the pit wall in mine void disposal areas; and (a) Used as an alternative tailings disposal void in the future.	As depicted in Figure 4, Schedule 1.
2.	East Tailings Dam	Combined sand and clay slimes	(a) Must be constructed as an erosion-resistant, non-polluting structure which is stable in the long term; (b) Decant water to be transported to the WSP process water-tank; and (c) Water levels to be maintained at least 1 m below the top of the wall;	As depicted in Figure 4, Schedule 1.
3.	Eneabba Monazite Pit (EMP)	Rare Earth HM	Must be immediately covered after deposit.	As depicted in Figure 4, Schedule 1.
4.	WSP process water pond	Surface/stormwater runoff from the Wet Separation Plant area.	a) Overflow pipeline to West Dam located 0.5m from the top of the pond; b) Lined with 1.0 mm HDPE liner.	As depicted in Figure 5, Schedule 1.

No.	Infrastructure	Material	Infrastructure description and/or operational requirements	Infrastructure location
5.	West Dam	• Process water from concentrator, • Combined sand and clay slimes, • Surface/stormwater runoff from the Concentrator Plant area and overflow of the WSP process water pond.	a) Must be constructed as an erosion-resistant, non-polluting structure which is stable in the long term; b) Water levels to be maintained at least 1 m below the top of the wall; and c) Decant water to be transported to the WSP process water tank.	As depicted in Figure 4, Schedule 1.

4. The licence holder must ensure that the premises infrastructure and equipment listed in 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

No.	Site infrastructure and equipment	Operational requirement	Infrastructure and equipment location
Wet Separation Plant (WSP)			
1.	Mobile screening unit (in-pit)	Design capacity: 800 tph	As depicted in Figure 4, Schedule 1.
2.	Feed stockpile area	(a) Must be constructed with overburden material or similar and track rolled with a dozer; and (b) Dimensions: 45 m x 40 m	As depicted in Figure 5 of Schedule 1.
3.	Feed hopper and conveyor	None specified	As depicted in Figure 5 of Schedule 1.
4.	Oversize screen		As depicted in Figure 5 of Schedule 1.
5.	Wet vibrating screen		As depicted in Figure 5 of Schedule 1.
6.	2 x Desliming cyclones	Design capacity of 60 tph	As depicted in Figure 5 of Schedule 1, within 'Wet Separation Plant' area.
7.	Thickener tank	Design capacity of 15 tph (slimes)	As depicted in Figure 5 of Schedule 1.
8.	Product concentrate storage area	(a) Dimensions: 40 m x 40 m; and (b) Must be equipped with a sub-surface drainage system comprising drainage pipework, aggregate, geofabric and clean fill sand	As depicted in Figure 5 of Schedule 1.
9.	Wet Separation Plant area - general	Must be equipped to contain all surface water runoff from the process plant area to within the operational footprint, for return to the WSP process water pond.	As depicted in Figure 5 of Schedule 1.

No.	Site infrastructure and equipment	Operational requirement	Infrastructure and equipment location
10.	WSP process water tank	None specified.	As depicted in Figure 5 of Schedule 1.
11.	Vehicle wash down bay	None specified.	As depicted in Figure 5 of Schedule 1.
Concentrator			
12.	Concentrator general	(a) Mineral sands concentrate (~90 % monazite content) stored in containers on-site for future refining; (b) Heavy mineral concentrate (~35 % zircon, ~50 % ilmenite) and sand/clay tailings stockpile contained in concrete bunker containment area with runoff drained and recirculated into process circuit; (c) Process up to 350 ktpa of Rare Earth HM/monazite and/or South Secondary Concentrator Middlings (SSC Mids), Yellow Dam TSF material or other HM material[1] from within the premises; (d) Deposition of clay/sands tailings into existing mined out voids; (e) Water cart used for dust suppression; (f) Traffic management plan and restricted speeds (average 5 product trucks/day); (g) Site inspections following heavy rainfall events; (h) Daily inspections of pipelines whilst operating; (i) Clay/sand tailings deposited after reduction in moisture level; and (j) Daily inspections of bulk chemical storage.	As depicted in Figure 6 of Schedule 1.
13.	Constant Density (CD) storage tanks	None specified.	As depicted in Figure 6 of Schedule 1.
14.	Flotation and filtration circuit		As depicted in Figure 6 of Schedule 1.
15.	Wet gravity circuit		As depicted in Figure 6 of Schedule 1.
16.	Concentrator Process Water tank	None specified.	As depicted in Figure 6 of Schedule 1.
17.	Sumps	None specified.	Located within “Concentrator” area as depicted in Figure 6 of Schedule 1.

Note 1: Such as material from Yellow Dam south, or SSC Cons – 120 Mine Void

5. The licence holder must undertake inspections as detailed in Table 3, and

(a) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and

(b) maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure requirements

No.	Scope of inspection	Type of inspection	Frequency of inspection
1.	Thickener underflow, tailings, clay slimes disposal, vehicle washdown, process water and decant water pipelines.	Visual integrity and leak assessment	Daily, whilst operating
2.	West Dam	Assessment of: (a) water levels; (b) condition of walls; and (c) pump operational characteristics.	Daily, whilst operating
3.	Eneabba Monazite Pit	Assessment of: (a) cover condition; and (b) condition of walls.	
4.	East Tailings Dam	Assessment of: (a) water levels; (b) condition and functionality of the decant pond; (c) condition and functionality of the decant pond; (d) condition of walls; and (e) pump operational characteristics.	
5.	WSP Process water pond	Assessment of: (a) water levels; (b) condition of walls; and (c) pump operational characteristics.	
6.	Any other infrastructure	Visual integrity and leak assessment.	

6. The licence holder must only dispose waste on the premises if:

(a) it is of a type listed in Table 4;

(b) the quantity is below any quantity limit listed in Table 4; and

(c) it meets any specification listed in Table 4.

Table 4: Authorised waste types

Waste type	Quantity limit tonnes/year	Specification
Inert Waste Type 1	10,000 (combined)	(a) Industrial, non-recyclable waste only, including construction and demolition wastes such as building materials, vent bags, non-recyclable packaging, etc.; (b) Solid waste only; (c) Waste generated from Iluka Eneabba and Rare Earths operations and constructions activities only; and (d) Contaminants must comply with CT1 criteria.
Special Waste Type 1		

7. The licence holder must ensure that wastes disposed on the Premises are only subjected to the processes set out in Table 6 and in accordance with any process limits described in that table.

Table 5: Waste processing requirements

Waste type	Process	Process limits
Inert waste type 1	Disposal of waste by burial	(a) Shall only take placed within the, the '250 dam' and the 'East Nursery Dam', as depicted in Figure 2 of Schedule 1; and (b) No waste shall be burnt
Special waste type 1		(a) Must be separated from other wastes for disposal; (b) Disposal must occur in a discrete asbestos disposal area within the 'East Nursery Dam' and the '250 dam' as depicted in Figure 2 of Schedule 1; (c) Must be covered with a layer of at least 2 metres of soil as soon as practicable and no later than the end of the working day that it was disposed; (d) A permanent record must be maintained of all disposal locations; and (e) Must not be disposed within 2 metres of the final landform surface of the pit.

8. The licence holder must ensure that sufficient cover is applied and maintained on landfilled wastes in accordance with Table 6.

Table 6: Waste cover requirements

Waste type	Material	Timescale
Inert waste type 1	Clean fill or soil	(a) At least Monthly; and (b) Waste with the potential to become windblown must be covered as soon as practicable after deposit.

9. The licence holder must ensure that material types specified in Table 7 processed on the Premises are only subjected to the processes subject to the corresponding process limits and/or specifications.

Table 7: Materials processing requirements

Material type	Process	Process limits
Rare Earth HM	Processing through WSP via a wet-vibrating screen and desliming cyclones	Maximum of up to 350,000 tonnes per annum of material processed
Processing of South Secondary Concentrator Middlings (SSC Mids); or Processing of Heavy Mineral Sands material[1] from within the prescribed premises as shown in Figure 1; or Yellow Dam TSF material (excavated from W6641/2022/1 premises boundary)		Maximum of up to 350,000 tonnes per annum of material processed

Note 1: Such as material from Yellow Dam south, or SSC Cons – 120 Mine Void

Emissions

10. The licence holder must implement the controls specified in Column 1 of Table 8 in accordance with the actions/ requirements specified in Column 2 of Table 8.

Table 8: Dust controls

Column 1	Column 2
Control	**Actions/Requirements**
Dust suppression	(a) Must operate water carts when discernible levels of dust are generated from ground surfaces on the Premises; (b) Must apply proactively to unsealed operational areas associated with MSRP (e.g. in the mining area, roadways, loading areas and process plant area); and (c) Must ensure that any water used on the premises for dust suppression does not impact on the health of native vegetation.
Mining	Must progressively remove overburden sheeting in the EMP in a manner that limits the area exposed to dust generation.
Stockpiles	(a) Monazite feed must be stockpiled within the Eneabba Monazite Pit and regularly sprayed with water from water carts to control visible dust; (b) WSP feed material should be placed at the feed stockpile area fitted with a sprinkler system for watering the feed material and must operate during dry, windy conditions; (c) Mineral concentrate final product must be stockpiled within a bunker containment area; and (d) Any spilled feed/product material must be removed regularly from the process plant area and returned to the stockpile(s).
Material handling	Must implement loading and unloading procedures to ensure that dust emissions from material handling is minimised (e.g. minimise drop heights).
Traffic	(a) Must adhere to site speed limits and designated roads; and (b) Must operate a vehicle wash down bay and ensure trucks loaded with finished product are washed prior to leaving the area

11. The licence holder must ensure that fugitive emissions are managed in accordance with the parts of the document specified in Table 9.

Table 9: Management plans

Management plan reference	Parts	Date of document
Dust Management Plan	(a) 5.0 Implementation Strategy and Management Actions – Table 1 Summary of Management Actions for Dust; and (b) 6.0 Monitoring – Table 2 Summary of Dust Monitoring Program.	June 2022

Monitoring (general)

12. The licence holder must undertake monitoring of the West Dam, during operations of the concentrator flotation circuit, for the parameters listed in Table 10, in the corresponding units, over the corresponding averaging period and at the corresponding frequency set out in Table 10.

Table 10: Monitoring of process water quality

Monitoring location[1]	Parameter	Units	Averaging period	Frequency
Inflow into West Dam	pH	–	Spot sample (in field)	Daily
	Total acidity	mg/L	Spot sample (laboratory)	Monthly
	Total alkalinity (as CaCO3)	mg/L	Spot sample (in-field or laboratory)	
	Dissolved oxygen		Spot sample (in-field)	Weekly
	Electrical conductivity	µS/cm		
	Temperature	°C		

Monitoring location[1]	Parameter	Units	Averaging period	Frequency
West Dam[1] (Refer to Figure 3 of Schedule 1)	pH	-	Spot sample (in field)	Daily
	Total acidity	mg/L	Spot sample (laboratory)	Monthly
	Total alkalinity (as CaCO3)	mg/L	Spot sample (in-field or laboratory)	
	Dissolved oxygen		Spot sample (in-field)	Weekly
	Electrical conductivity	µS/cm		
	Temperature	°C		

Note 1: The spatial distribution of sampling locations, and sampling depth at each location, must be sufficient to demonstrate the variation in both a horizontal and vertical direction across the entire process water dam.

13. The licence holder must take remedial actions if process water quality entering the West Dam, as measured in accordance with condition 12, is recorded at a pH <7 at the inflow sampling location in Table 10, based on three or more consecutive daily measurements.

14. The licence holder must ensure that the remedial actions specified within condition 13 include at least one of the following:

(a) dosing with lime slurry or similar (acid neutralisation); or

(b) an aeration system within the process water dam; or

(c) an alternative remedial action approved in writing by the CEO.

15. The licence holder must undertake the monitoring in Table 11 according to the specifications in that table.

Table 11: Bird monitoring requirements

Monitoring point	Parameter	Frequency	Averaging period[2]	Method
West Dam	Number and species (if able to be identified at time of inspection) of bird interacting[1] with the West Dam	Daily	Spot sample	Visual inspection

Note 1: 'Interacting' means birds that are in contact with the pond water (eating, drinking, swimming, or foraging etc.)
Note 2: denotes minimum averaging period, however anecdotal sightings of any birds interacting with the pond should also be recorded where possible.

16. The licence holder must record the results of all monitoring activity required by conditions 12, 15, 21 and 22.

17. The licence holder must ensure that:

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

(b) all surface water sampling is conducted in accordance with AS/NZS 5667.6;

(c) all groundwater sampling is conducted in accordance with AS 2531 and AS/NZS 5667.11; and

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

18. The licence holder must ensure that:

(a) monthly monitoring is undertaken at least 15 days apart;

(b) quarterly monitoring is undertaken at least 45 days apart; and

(c) annual monitoring is undertaken at least 9 months apart.

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

20. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Process monitoring

21. The licence holder must undertake monitoring of the parameters for the process listed in Table 12, in the corresponding units and the frequency specified in that table.

Table 12: Process monitoring

Process description	Parameter	Units	Frequency
Processing of Rare Earth HN	Amount of material processed through the WSP	tonnes	Annual
Processing of SSC Mids	Amount of material processed through the WSP	tonnes	Annual
Processing of Yellow Dam TSF material	Amount of material processed through the WSP	tonnes	Annual
Processing of other HM material from within the prescribed premises[1].	Amount of material processed through the WSP (categorised by material)	tonnes	Annual
Secondary process disposal	Amount and location of sand tailings and clay slimes disposed on the premises	tonnes	Monthly

Note 1: Such as material from Yellow Dam south, or SSC Cons – 120 Mine Void

Ambient environmental monitoring

22. The licence holder must undertake monitoring of ambient groundwater quality at the locations and for the parameters listed in Table 13, in the corresponding units, over the averaging period and at the frequency set out in that table.

Table 13: Monitoring of ambient groundwater concentrations

Monitoring well location	Parameter[3]	Unit	Frequency	Averaging period
• EM90 • EM91 • EM78 • EM83 • EM84	Standing water level (SWL)[1,2]	mAHD mbgl	Quarterly	Spot sample
	pH[1]	-		
	Electrical conductivity (EC) @ 25°C[1]	µS/cm		
	Major ions: bicarbonate, calcium, carbonate, chloride, magnesium, potassium, sodium, sulfate, total dissolved solids[1]	mg/L		

Monitoring well location	Parameter[3]	Unit	Frequency	Averaging period
• EM90 • EM91 • EM78 • EM83 • EM84	Metals and metalloids: aluminium, arsenic, cadmium, chromium (as CrVI and total Cr), cobalt, copper, iron, mercury, nickel, radium (as R-226 and R-228), radon, selenium, thallium, uranium (as U-238), vanadium, zinc, thorium (as Th-228 and Th-232)	mg/L	Annually	Spot sample
• EM97S, EM97D • EM98S, EM98D • EM94S, EM94D • M95S, EM95D	Standing water level (SWL)[1,2]	mAHD mbgl	Quarterly	Spot sample
	pH[1]	pH units		
	Electrical conductivity (EC) @ 25°C[1]	µS/cm		
	Total dissolved solids[1] (TDS)	mg/L		
	Temperature			
	Major ions: alkalinity, bicarbonate, calcium, carbonate, chloride, magnesium, potassium, sodium, sulfate, total dissolved solids[1]	mg/L		
	Metals and metalloids: aluminium, arsenic, boron, cadmium, chromium (as CrVI and total Cr), cobalt, copper, iron, manganese, mercury, nickel, radium (as R-226 and R-228), radon, selenium, thallium, uranium, (as U-238), vanadium, zinc, thorium (as Th-228 and Th-232)	µg/L	Quarterly	
	Ammonia, nitrate, nitrite, Total Kjeldahl Nitrogen [TKN], Total Phosphorus and Orthophosphate [as PO4])	mg/L	Quarterly	

Note 1: In-field, non-NATA accredited analysis permitted.
Note 2: SWL to be determined prior to the collection of other samples
Note 3: Level of detection is required to be sufficient to enable a comparison with the Australian and New Zealand Guidelines for Fresh & Marine Water Quality (ANZ 2018).

Records and reporting

23. The licence holder must ensure that all information and records required by the licence:

(a) be legible;

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

(c) except for records listed in condition 23(d), be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and

(d) for those following records, be retained until the expiry of the licence and any subsequent licence:

(i) off-site environmental effects; or

(ii) matters which affect the condition of the land or waters.

24. 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 31 March in each year, an annual audit compliance report in the approved form.

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

Annual environmental report

26. The licence holder must submit to the CEO, by 31 March in each year, an annual environmental report for the preceding annual period which includes, but is not limited to:

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

(b) a summary of the process monitoring required by condition 21;

(c) monitoring reports required by conditions 12, 15, 21 and 22;

(d) a summary of any complaints received and management actions taken for each complaint; and

(e) a summary of any environmental incidents and any action(s) taken.

27. The licence holder must ensure the report required by condition 26 includes:

(a) an appraisal and trend analysis of the results against any baseline data and previous monitoring results; and

(b) time-series figures for all monitoring data, with axes presented on relevant scales.

Definitions

In this licence, the terms in Table 14 have the meanings defined.

Table 14: Definitions

Term	Definition
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).
ACN	means Australian Company Number
Acid Sulfate Soils Management Plan	means the document title 'Acid Sulfate Soils Management Plan – Midwest Operations – Eneabba Monazite Disposal Site', prepared by RPS Group for Iluka Resources Limited and dated August 2015
AHD	means Australian Height Datum
annual period	means a 12 month period commencing from 1 January until 31 December in the same year
AS 3580.1.1	means the Australian Standard AS 3580.1.1 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment*
AS 3580.10.1	means 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 5667.1	means 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 5667.6	means the Australian Standard AS/NZS 5667.6 Water Quality – Sampling – Guidance on sampling of rivers and streams
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters
ASS	means acid sulfate soils, being soils or sediments which contain iron sulfides and/or other sulfidic minerals that have previously been oxidised to produce sulfuric acid (Actual Acid Sulfate Soils) or soils or sediments which contain iron sulfides and/or other sulfidic minerals that have not been oxidised (Potential Acid Sulfate Soils)
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 the Chief Executive Officer of the Department. 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
condition	means a condition to which this licence is subject under s.62 of the EP Act
CT1 criteria	means the contaminate threshold (CT) values for a Class I landfill, as per Table 3 of the landfill definitions
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
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or CEO to the licence holder in writing and sent to the licence holder's address for notifications, as described at the front of this licence, in relation to: a) compliance with the EP Act or this licence; b) the Books or other sources of information maintained in accordance with this licence; or the Books or other sources of information relating to Emissions from the Premises
discharge	has the same meaning given to that term under the EP Act
DWER	means the Department of Water and Environmental Regulation
Dust Management Plan	means the document titled 'Dust Management Plan – Eneabba Operations', prepared by Iluka Resources and dated April 2018
emission	has the same meaning given to that term under the EP Act
EMP	means the (Eneabba) Monazite Pit, defined in the Premises Map in Schedule 1
EMRP	Means the Eneabba Monazite Recovery Project
Environmental Harm	has the same meaning given to that term under the EP Act
EP Act	means the *Environmental Protection Act 1986* (WA)
EP Regulations	means the *Environmental Protection Regulations 1987* (WA)
HDPE	means high density polyethylene
HM	means heavy mineral

Term	Definition
Iluka Mid West Operations	means the Narngulu Synthetic Rutile Plant, Narngulu Mineral Separation Plant and Eneabba Mineral Sands Mine
Iluka South West Operations	means the North Capel dry plant and synthetic rutile plant, the Capel dry mill and the Tutunup South mine
Inert Waste Type 1	has the same meaning given to that term in the Landfill Definitions and means a non-hazardous, non-biodegradable (half-life greater than 2 years) waste containing contaminant concentrations less than Class I landfill acceptance criteria but excluding paper and cardboard and materials that require treatment to render them inert (e.g. peat, acid sulfate soils)
landfill definitions	means the document entitled 'Landfill Waste Classification and Waste Definitions 1996' published by the CEO and as amended from time to time
licence	refers to this document, which evidences the grant of a licence by the CEO under s.57 of the EP Act, subject to the Conditions
licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence
m	metres
mbgl	metres below ground level
Rare Earth HM	means monazite-rich mineral produced at the company's licensed mineral separation plants at Narngulu and North Capel
MSP	refers to (Narngulu) Mineral Separation Plant
MSRP	refers to Mineral Sands Recovery Project – which includes conveyor, mobile screening unit and de-sliming cyclones
NATA	National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the map 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 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in the same year
SSC Mids	South Secondary Concentrator Middlings
Special Waste Type 1	has the same meaning given to that term in the landfill definitions and means waste which contains asbestos and asbestos cement products
spot sample	means a discrete sample representative of the time and place at which the

Term	Definition
	sample is taken
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 the area of engineering or is otherwise approved by the CEO to act in this capacity.
SWL	Standing Water Level
tph	tonnes per hour
TSF	means an engineered containment pond or dam used to store tailings
TSP	Total Solid Particulates
µS/cm	means microsiemens per centimetre
WSP	Wet Separation Plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

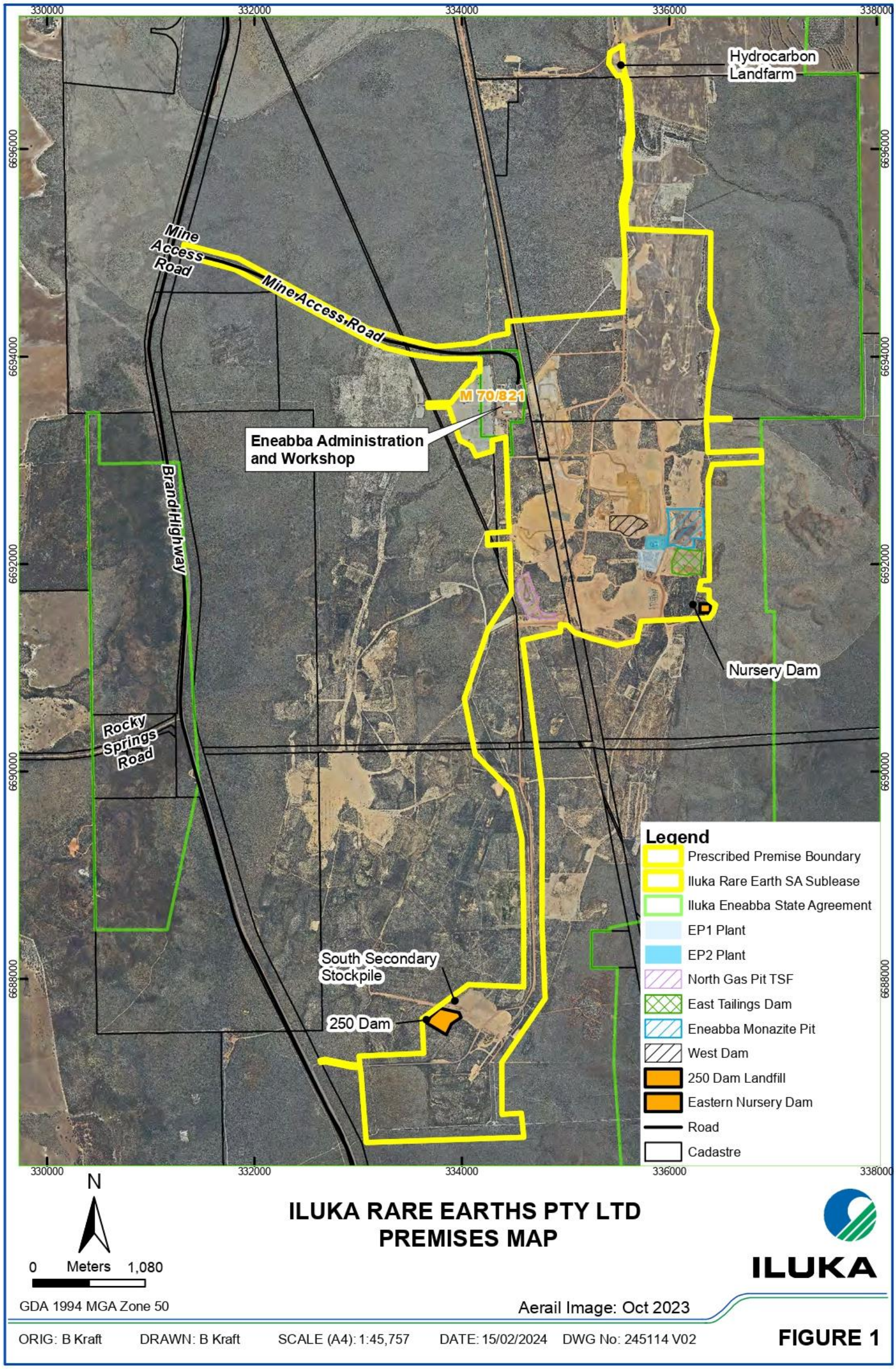

Figure 1: Map of the boundary of the prescribed premises

The location of groundwater and ambient air quality monitoring points are depicted in the map below (Figure 2), as well as the location of the mine voids authorised for tailings disposal and disposal of wastes. The shaded areas depict the extent of each void.

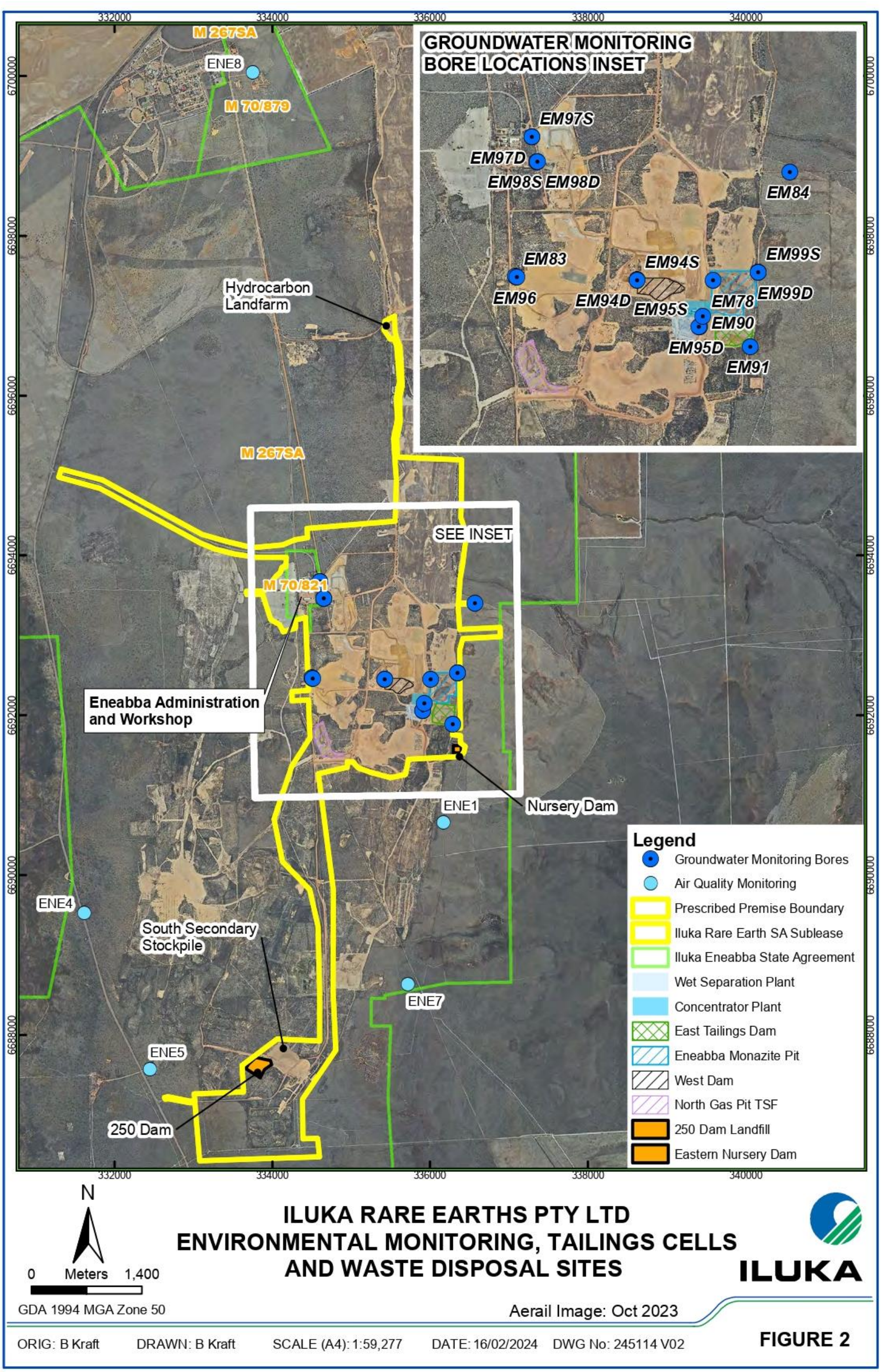

Figure 2: Environmental monitoring, tailings cells and waste disposal sites

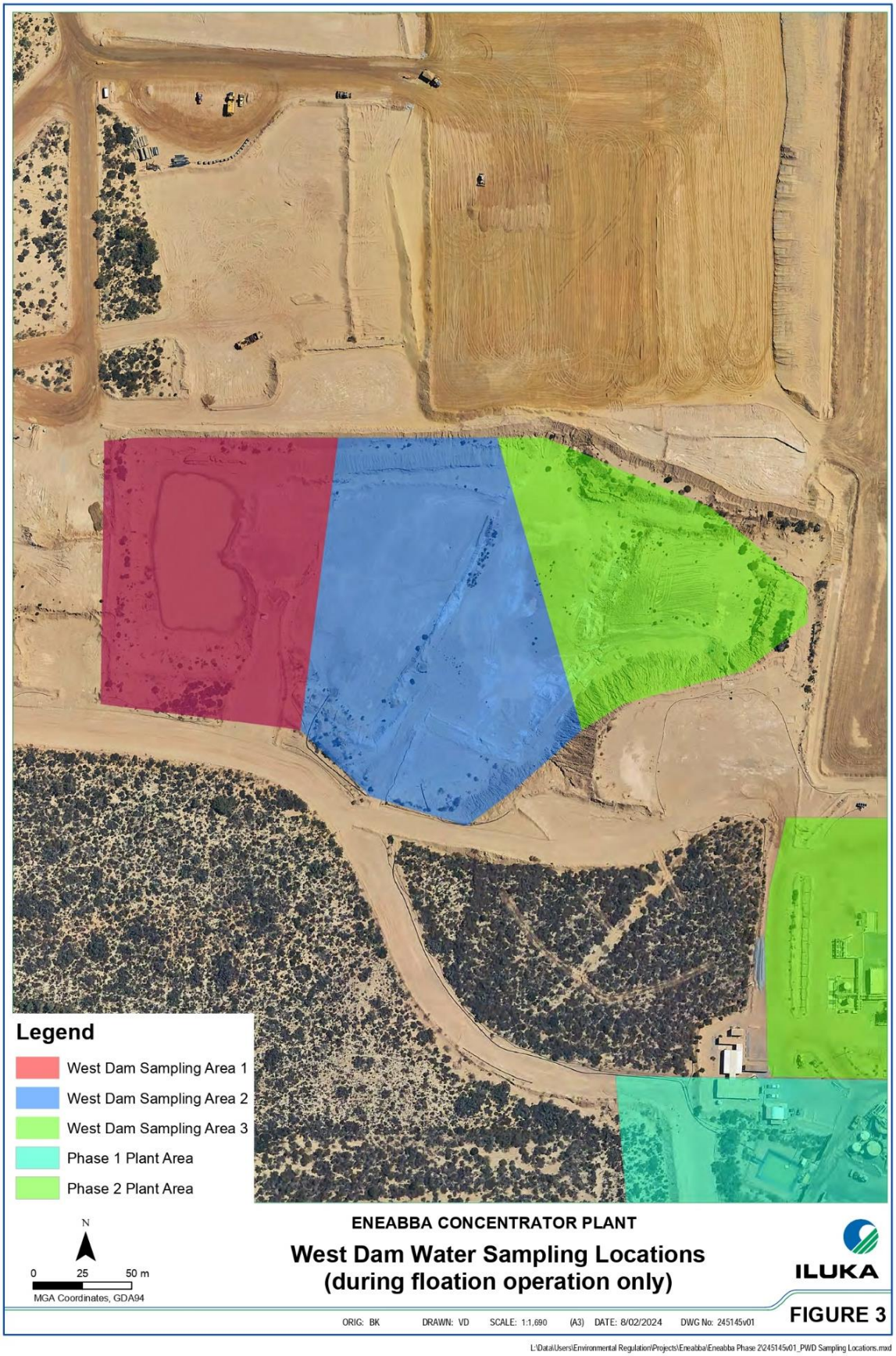

Figure 3: West Dam water sampling locations

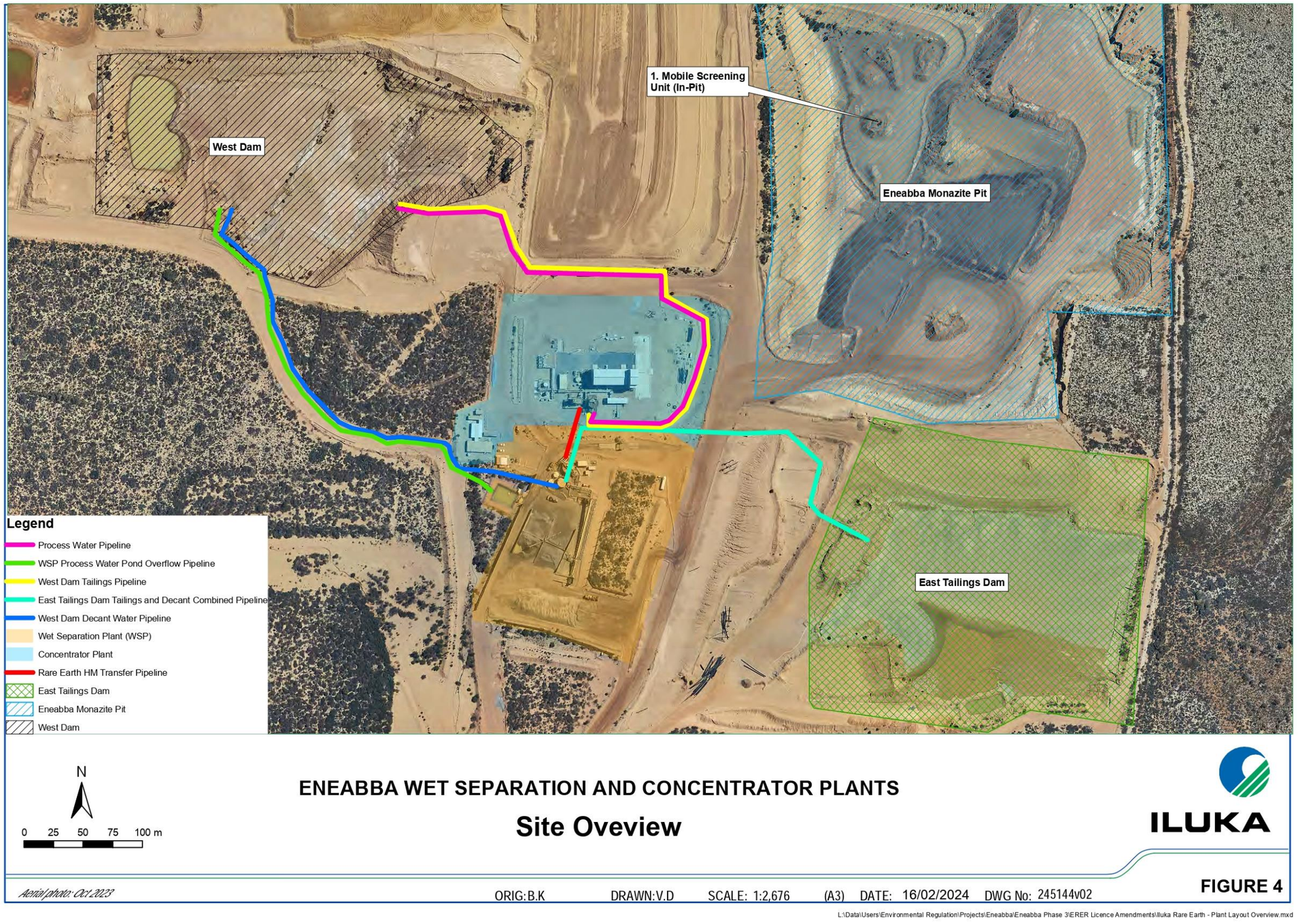

Figure 4: Site overview and premises pipeline

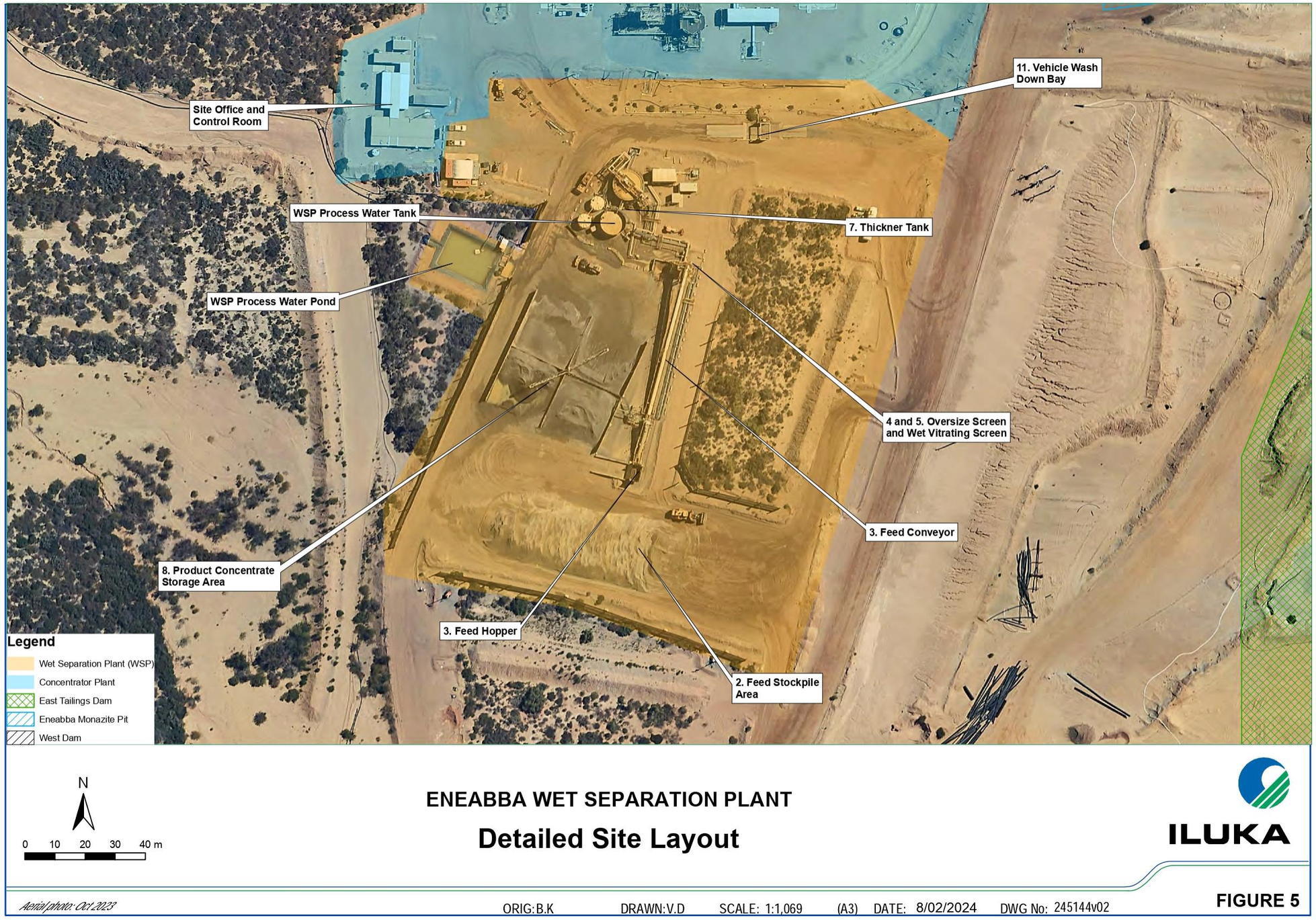

Figure 5: Infrastructure within the Wet Separation Plant area

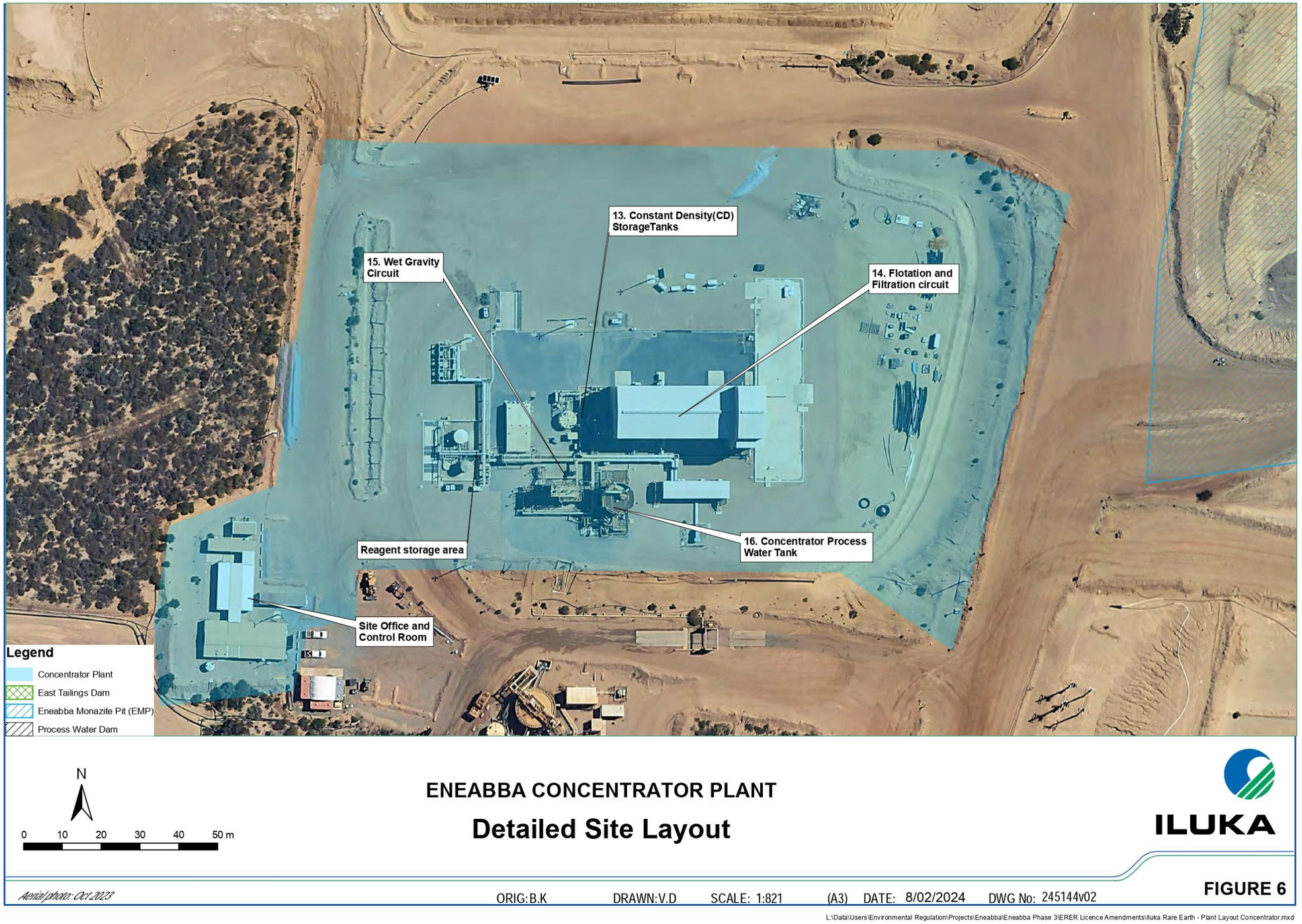

Figure 6: Infrastructure within the Concentrator Plant area

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 15.

Table 15: Premises boundary coordinates

No.	Easting	Northing
0.	334290.902	6694193.866
1.	334447.2207	6694222.895
2.	334438.7915	6694336.126
3.	335555.8423	6694425.729
4.	335573.7629	6694954.387
5.	335552.8556	6695229.169
6.	335535.3733	6695462.785
7.	335588.8558	6695707.973
8.	335572.0448	6695950.531
9.	335610.4698	6696176.278
10.	335576.848	6696613.362
11.	335543.2261	6696711.826
12.	335495.1948	6696704.621
13.	335415.9433	6696819.896
14.	335425.5495	6696930.368
15.	335545.6277	6696995.21
16.	335552.8323	6696841.51
17.	335572.0448	6696721.432
18.	335615.273	6696618.165
19.	335648.8948	6696123.443
20.	335612.8714	6695972.145
21.	335622.4776	6695674.351
22.	335576.848	6695455.809
23.	335588.8558	6695230.062
24.	336397.484	6695195.417
25.	336393.8951	6694654.808
26.	336392.3076	6694473.833
27.	336460.5702	6694259.52
28.	336412.9451	6693903.919
29.	336379.6076	6693701.195
30.	336358.2875	6693404.135
31.	336582.9216	6693404.936
32.	336584.718	6693391.848
33.	336357.205	6693389.053
34.	336355.795	6693369.407
35.	336373.2575	6693074.29
36.	336887.625	6693095.718

No.	Easting	Northing
37.	336890.052	6692979.564
38.	336414.5326	6692956.815
39.	336374.845	6692809.177
40.	336378.0201	6692224.976
41.	336387.0215	6691840.725
42.	336306.5989	6691835.001
43.	336286.756	6691752.021
44.	336383.1378	6691744.833
45.	336384.1186	6691652.807
46.	336445.1297	6691606.084
47.	336428.1423	6691539.973
48.	336385.9576	6691480.278
49.	335728.99	6691448.911
50.	335687.4562	6691256.44
51.	335496.9558	6691215.165
52.	335252.4803	6691280.253
53.	335087.38	6691340.578
54.	335019.1173	6691410.428
55.	334950.8547	6691416.778
56.	334949.2672	6691348.515
57.	334585.1431	6691265.73
58.	334774.2279	6689808.785
59.	334770.8477	6688561.479
60.	334802.9213	6687808.052
61.	334382.7806	6687194.241
62.	334388.0165	6686695.976
63.	334573.1797	6686704.191
64.	334598.4557	6686472.493
65.	333080.7303	6686421.79
66.	333026.6465	6687087.696
67.	333020.2203	6687148.288
68.	332948.6914	6687147.711
69.	332683.3424	6687200.781
70.	332641.8095	6687192.128
71.	332631.4262	6687214.048
72.	332680.4581	6687224.431
73.	332952.1525	6687170.785

No.	Easting	Northing
74.	333017.9129	6687171.938
75.	333008.1302	6687257.489
76.	333634.649	6687284.829
77.	333615.9067	6687614.382
78.	334061.0371	6687943.934
79.	334597.0902	6687920.551
80.	334597.0902	6688568.679
81.	334579.1696	6689360.172
82.	334474.6327	6689817.148
83.	334128.1678	6690166.6
84.	334023.6309	6690701.231
85.	334250.2915	6691360.313
86.	334478.4138	6691719.991
87.	334460.7572	6692191.884
88.	334250.2915	6692178.33
89.	334245.8395	6692296.591
90.	334456.3225	6692310.406
91.	334451.7437	6692432.78
92.	334429.5187	6693029.84
93.	334422.6835	6693222.823
94.	334292.3532	6693188.819
95.	334294.0385	6693086.013
96.	334137.3019	6693040.509
97.	334091.7978	6693134.888

No.	Easting	Northing
98.	333980.5654	6693190.504
99.	333882.1483	6693492.36
100.	333873.7342	6693513.433
101.	333677.2806	6693509.861
102.	333672.915	6693549.945
103.	333894.7686	6693556.295
104.	334051.3496	6693746.666
105.	334098.5391	6693780.373
106.	334123.8192	6693849.472
107.	334175.24	6693852.828
108.	334175.6243	6693977.557
109.	333797.3401	6693976.615
110.	333526.6844	6694016.944
111.	333279.0339	6694077.269
112.	333082.7515	6694157.324
113.	331815.2212	6694835.624
114.	331295.1322	6694976.833
115.	331322.9527	6695080.242
116.	331843.7691	6694945.248
117.	333107.8737	6694262.381
118.	333429.5887	6694168.991
119.	333746.6365	6694094.923
120.	334130.6451	6694128.37
121.	334290.902	6694193.866