Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6941/2024/1
Works approval holder	Fenix Beebyn Pty Ltd
ACN	671 632 321
Registered business address	Level 33, Mia Yellagonga Tower 3 1 Spring Street PERTH WA 6000
DWER file number	DER2024/000235
Duration	27/11/2024 to 26/11/2027
Date of issue	27/11/2024
Premises details	Beebyn-W11 Project Legal description - Mining Lease M51/869 and Miscellaneous Lease L20/92 WELD RANGE WA 6640 As defined by the Premises map in Schedule 1

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed design / production capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	2,000,000 tonnes per annum
Category 6: Mine dewatering	520,000 tonnes per annum

This works approval is granted to the works approval holder, subject to the attached conditions, on 27 November 2024, by:

Sonya Poor
Digitally signed by Sonya Poor
Date: 2024.11.27 09:30:36 +08'00'

SENIOR ENVIRONMENTAL OFFICER, INDUSTRY REGULATION
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
27/11/2024	W6941/2024/1	Works approval for 2,000,000 tonnes per annum semi-mobile crushing and screening plant and mine dewatering to a Water Storage Dam of up to 520,000 tonnes per annum.

Interpretation

In this works approval:

(a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct or install the infrastructure or equipment;

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

(c) at the corresponding infrastructure location

as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Semi-mobile crushing and screening plant	• Primary crusher unit - jaw crusher; • Scalping screen installed ahead of the primary crusher; • Secondary crusher unit - cone crusher or impactor; • Closed screening circuit; • Elevated stacker arrangement; • Misting sprays on conveyor loading belt and discharge points; • Conveyor belt loading points will be fitted with skirting seals and dust box covers; • Conveyor belt head pulleys will be fitted with head chutes; and • Water truck for dust suppression is to be fitted with dribble bars to minimise spray drift near vegetation areas.	Labelled as “Crushing and Screening” depicted in Schedule 1, Figure 2 and Figure 3.
2.	Diesel, hydrocarbon and chemical reagent storage	• Bunded containment areas (surrounding hydrocarbon and chemical storage) to have a minimum capacity of 110% of the largest container stored within it; • A concrete apron must be installed at the refuelling bay; • Refuelling and fuel delivery inlets to be constructed on impervious aprons to contain any potential spills or drips; and • Alarm system must be installed on the oily water separator to warn of failure.	Labelled as “Fuel Storage Washbay Workshop” depicted in Schedule 1, Figure 2.
3.	Water Storage Dam	• Constructed as per conceptual design drawings as depicted under Schedule 2, Figure 4 and Figure 5; • Storage capacity of 11,800 m^3;	Labelled as “Water Storage Dam” in Schedule 1, Figure 2.

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		• Lined with a 1.5 mm thick HDPE liner with a permeability of 1 x $1x10^{-9}$ m/s or less and must be secured around the crest of the dam; • Liner trenched in 500 mm; • Floating switch swing arm; • Rope safety netting; • Spillway with rock protection on the downstream batter; • Installation of a 1.8 m high fence to prevent stock and native fauna access; and • Installation of a volumetric flow meter on the outlet pipe.	
4.	Dewatering Pipelines	• Pipeline to be constructed with HDPE class PN10 with a diameter of 110 mm; • Construction of v-drains along entire dewatering pipeline, sufficient to contain the flow in a 110 mm line for 24 hours at 12 L/s; • Pipelines must not be directly buried; and • Pipelines must be fitted with a telemetry system and/or automatic cut outs in the event of pipe failure.	Labelled as "Dewatering Pipeline" in Schedule 1, Figure 2.
5.	In-pit dewatering equipment	• Installation of a Godwin HL110M dewatering pump.	N/A
6.	Bioremediation facility	The bioremediation cell must be constructed: • At least 10 m above the groundwater table; • Over an area of no more than 20 m x 20 m; • On at least 300 mm of compacted clay material liner to provide a sealed containment dam with a permeability of ≤ $1x10^{-9}$ m/s; • With a 500 mm impermeable bund on all three sides of the cell to separate external runoff from the cell; • So that the final floor level has a gradient sufficient to enable surface water and leachate to drain to a suitably lined sump; and • Of a drive over impermeable bund on the fourth side of the cell capable of containing leachate.	Labelled as "Waste Dump Bioremediation Area" as depicted in Schedule 1, Figure 2.
7.	Stormwater Management System	• Installation of perimeter drainage and earthen bunding around the Water Storage Dam to contain and direct stormwater runoff to a collection sump.	Not shown.

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed 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 engineer that the items of infrastructure or components thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

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

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

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1, where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.

5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 6:

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).

Time limited operations requirements and emission limits

6. During time limited operations, the works approval 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 during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Semi-mobile crushing and screening plant	• No more than 2,000,000 tonnes per annum; • Water misting sprays must be operated throughout the plant and on the conveyor belt, scalping screen and material discharge points when in operation (excluding times when rainfall is sufficient to suppress dust); • Undertake daily visual inspections of skirting seals and dust box covers located on the conveyor belt and any repairs required undertaken within 48 hours; • Undertake daily visual inspections of head chutes on head pulleys and any repairs required undertaken within 48 hours; • Mobile water carts shall be maintained on site during site operations; • Ensure no visible dust generated from the primary activities (crushing and screening of iron ore) crosses the boundary of the premises; • Undertake weekly visual inspections of dust present on foliage of vegetation and species health around the crushing and screening plant, dewatering pipeline and Water Storage Dam; • If dust deposition is observed on foliage of vegetation and impacts to species health is identified during visual inspections, further controls for managing dust are required to be implemented, including but not limited to: (a) additional application of water from onsite water carts; (b) crushing and screening plant to be placed into idle; or (c) application of dust suppression agents. • If the application of the additional dust management controls specified above are not preventing dust generated from the primary activities from impacting on the foliage of vegetation and species health, operation of the crushing and screening plant must be ceased; and • Record volumes of all material processed through the crushing and screening plant.	Labelled as “Crushing and Screening” as depicted in Schedule 1, Figure 2 and as shown in Figure 3.
2.	Water Storage Dam	• A minimum freeboard of 500 mm is to be maintained at all times; • Maintain integrity of the 1.5 mm HDPE liner on	As depicted in Schedule 1, Figure 4 and

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		the Water Storage Dam; and • Maintain integrity of the dam fence to prevent entry of livestock and native fauna.	Figure 5.
3.	Dewatering Pipelines	• Undertake weekly visual inspections of the dewatering pipelines to ensure pipework is located within v-drains and check for damage, ruptures and/or leaks; and • Flow meter to be maintained on pipeline discharge point to measure cumulative volumes (tonnes or m^3) of mine dewater discharged.	Labelled as "Dewatering Pipeline" in Schedule 1, Figure 2.
4.	In-pit dewatering equipment	• Undertake weekly inspections of below ground sumps and twice daily during periods of high rainfall.	N/A
5.	Diesel, hydrocarbon and chemical reagent storage	• Ensure bunded areas (surrounding hydrocarbon and chemical storage) have a minimum capacity of 110% of the largest container stored within it; • Refuelling and fuel delivery shall occur on impervious aprons to contain any potential spills or drips; • Spill kits must be retained on site, for use in the event of a hydrocarbon or chemical spill, and used by personnel trained in spill response and clean up; • Ensure collection sump and bunded hydrocarbon and chemical storage areas are maintained through regular inspections to prevent overflowing of contaminated stormwater; • Undertake weekly inspections of fuel storage area; and • Any hydrocarbon contaminated water taken from the Fuel Storage Washbay Workshop area must be treated in the oily water separator before being discharged to the Water Storage Dam.	Labelled as "Fuel Storage Washbay Workshop" depicted in Schedule 1, Figure 2.
6.	Bioremediation facility	• All non-biodegradable rags, absorbent pads and other rubbish to be removed to an appropriately Licensed facility; • Only hydrocarbon contaminated material generated on the premises is accepted for treatment in the facility; • Ensure material is deposited to a maximum depth of 300 mm, spread evenly and scarified to promote aerobic activity; and • Record quantity of all material deposited to bioremediation cells.	Labelled as "Waste Dump Bioremediation Area" as depicted in Schedule 1, Figure 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
7.	Stormwater Management System	• Potentially contaminated stormwater to be captured and prevented from being released in the environment; • Ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater; and • Ensure perimeter drainage and earthen bunding around the plant area for containing contaminated stormwater runoff is maintained and • Ensure the sump for collection of contaminated stormwater/sedimentation runoff is regularly inspected to remove excess sediment and prevent overflowing.	Not shown.

7. During time limited operations, the works approval holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3: Authorised discharge points

	Emission	Discharge point	Discharge point location	Authorised discharge volume
1.	Mine dewater discharge from W11 pit mining operations	Water Storage Dam	Labelled as “Water Storage Dam” in Schedule 1, Figure 2.	520,000 tonnes per annum
2.	Hydrocarbon contaminated soil	Bioremediation cell	Labelled as “Waste Dump Bioremediation Area” in Schedule 1, Figure 2.	N/A

Monitoring during time limited operations

8. The works approval holder must monitor emissions during time limited operations in accordance with the requirements specified in Table 4.

Table 4: Emissions and discharge monitoring during time limited operations

Discharge Point	Monitoring location	Parameter	Frequency	Units	Averaging period	Method
Water Storage Dam (dewatering pond)	Water Storage Dam discharge point	Cumulative discharge volume	Monthly	kL	Continuous while discharging	Flow metering device
		pH[1]	Quarterly	pH units	Spot sample	AS/NZS 5667.1 AS/NZS 5667.10
		Electrical Conductivity at 25°C[1]		µS/cm		
		Total Dissolved Solids		mg/L		
		Total Recoverable Hydrocarbons				
		Arsenic Manganese Cadmium Chromium Molybdenum Nickel Selenium Zinc				

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

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

10. The works approval holder must ensure that 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.

11. The works approval holder must record the results of all monitoring activity required by condition 8.

Compliance reporting

12. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.

13. The works approval holder must ensure the report required by condition 12 includes the following:

(a) a summary of the time limited operations, including timeframes and amount of material processed;

(b) monitoring data required by condition 8;

(c) a summary of the environmental performance of all infrastructure as constructed or installed,

(d) environmental monitoring data recorded during weekly visual inspections for observing dust deposition on foliage of vegetation and impacts to species health as required by condition 6 that includes an assessment of any deterioration in the presence and/or quality of vegetation;

(e) a review of performance and compliance against the conditions of the works approval; and

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

Records and reporting (general)

14. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.

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

(a) the works conducted in accordance with condition 1;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 6;

(c) complaints received under condition 14.

16. The books specified under condition 15 must:

(a) be legible;

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

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

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

Definitions

In this works approval, the terms in Table 5 have the meanings defined.

Table 5: Definitions

Term	Definition
ACN	means Australian Company Number.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samplings.
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.
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.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
HDPE	means High Density Polyethylene.
monthly period	means a monthly monitoring period where monitoring is undertaken at least 15 days apart.
NATA	means the National Association of Testing Authorities, Australia.

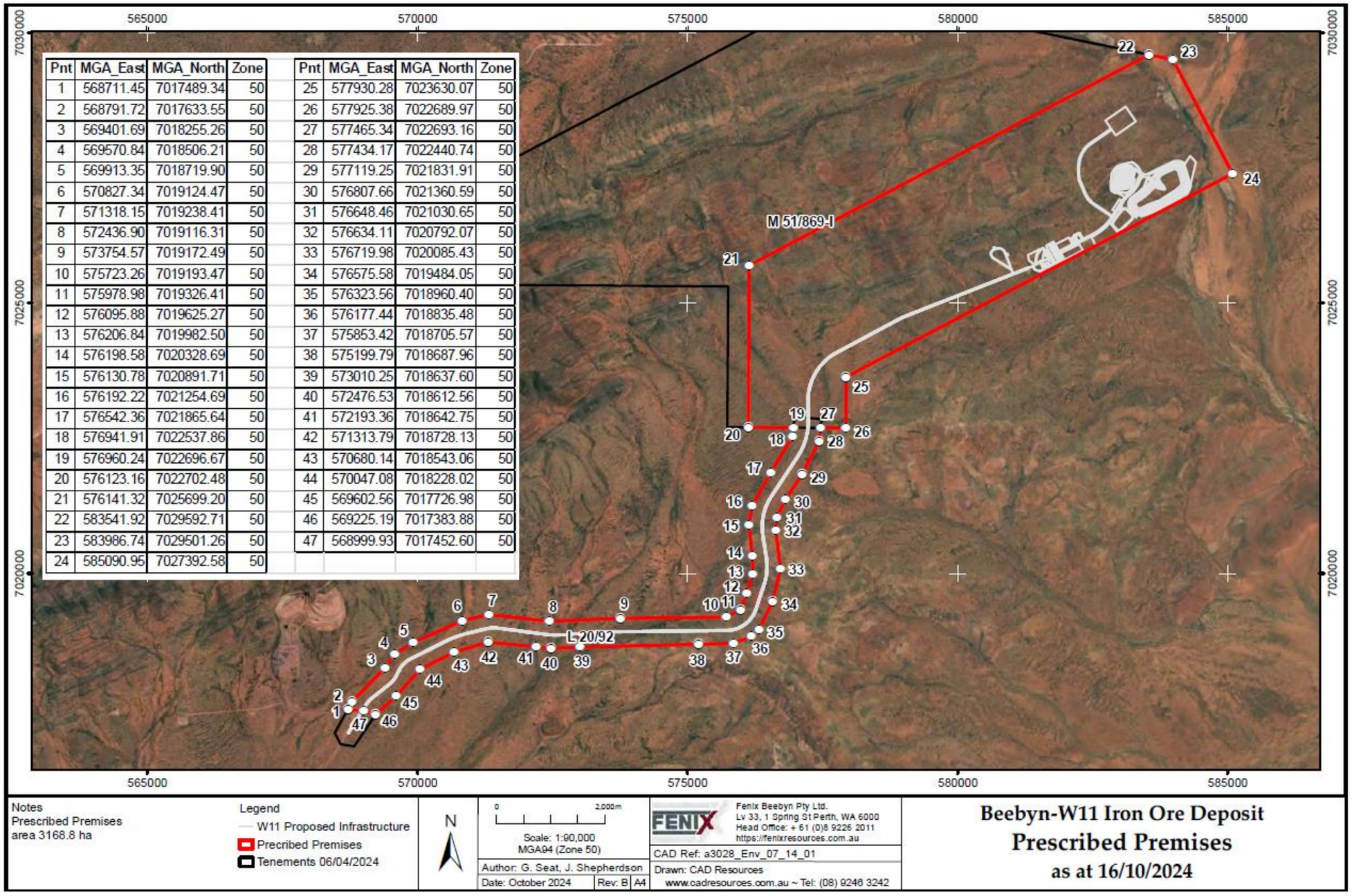
Term	Definition
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
premises	the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September and 1 October to 31 December, and in the following year 1 January to 31 March.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
suitably qualified engineer	means a person who: (a) holds a Bachelor of Engineering recognised by the Institute of Engineers; (b) has a minimum of five years' experience working a supervisory area of structural or mechanical engineering; and (c) Is employed by an independent third party external to the Works Approval Holder's business or is otherwise approved in writing by the CEO to act in this capacity.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
µS/cm	means microsiemens per centimeter.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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



Pnt	MGA_East	MGA_North	Zone
1	568711.45	7017489.34	50
2	568791.72	7017633.55	50
3	569401.69	7018255.26	50
4	569570.84	7018506.21	50
5	569913.35	7018719.90	50
6	570827.34	7019124.47	50
7	571318.15	7019238.41	50
8	572436.90	7019116.31	50
9	573754.57	7019172.49	50
10	575723.26	7019193.47	50
11	575978.98	7019326.41	50
12	576095.88	7019625.27	50
13	576206.84	7019982.50	50
14	576198.58	7020328.69	50
15	576130.78	7020891.71	50
16	576192.22	7021254.69	50
17	576542.36	7021865.64	50
18	576941.91	7022537.86	50
19	576960.24	7022696.67	50
20	576123.16	7022702.48	50
21	576141.32	7025699.20	50
22	583541.92	7029592.71	50
23	583986.74	7029501.26	50
24	585090.95	7027392.58	50

Pnt	MGA_East	MGA_North	Zone
25	577930.28	7023630.07	50
26	577925.38	7022689.97	50
27	577465.34	7022693.16	50
28	577434.17	7022440.74	50
29	577119.25	7021831.91	50
30	576807.66	7021360.59	50
31	576648.46	7021030.65	50
32	576634.11	7020792.07	50
33	576719.98	7020085.43	50
34	576575.58	7019484.05	50
35	576323.56	7018960.40	50
36	576177.44	7018835.48	50
37	575853.42	7018705.57	50
38	575199.79	7018687.96	50
39	573010.25	7018637.60	50
40	572476.53	7018612.56	50
41	572193.36	7018642.75	50
42	571313.79	7018728.13	50
43	570680.14	7018543.06	50
44	570047.08	7018228.02	50
45	569602.56	7017726.98	50
46	569225.19	7017383.88	50
47	568999.93	7017452.60	50

Figure 1: Map of the boundary of the prescribed premises

The infrastructure locations within the Premises is shown in the map below (Figure 2).

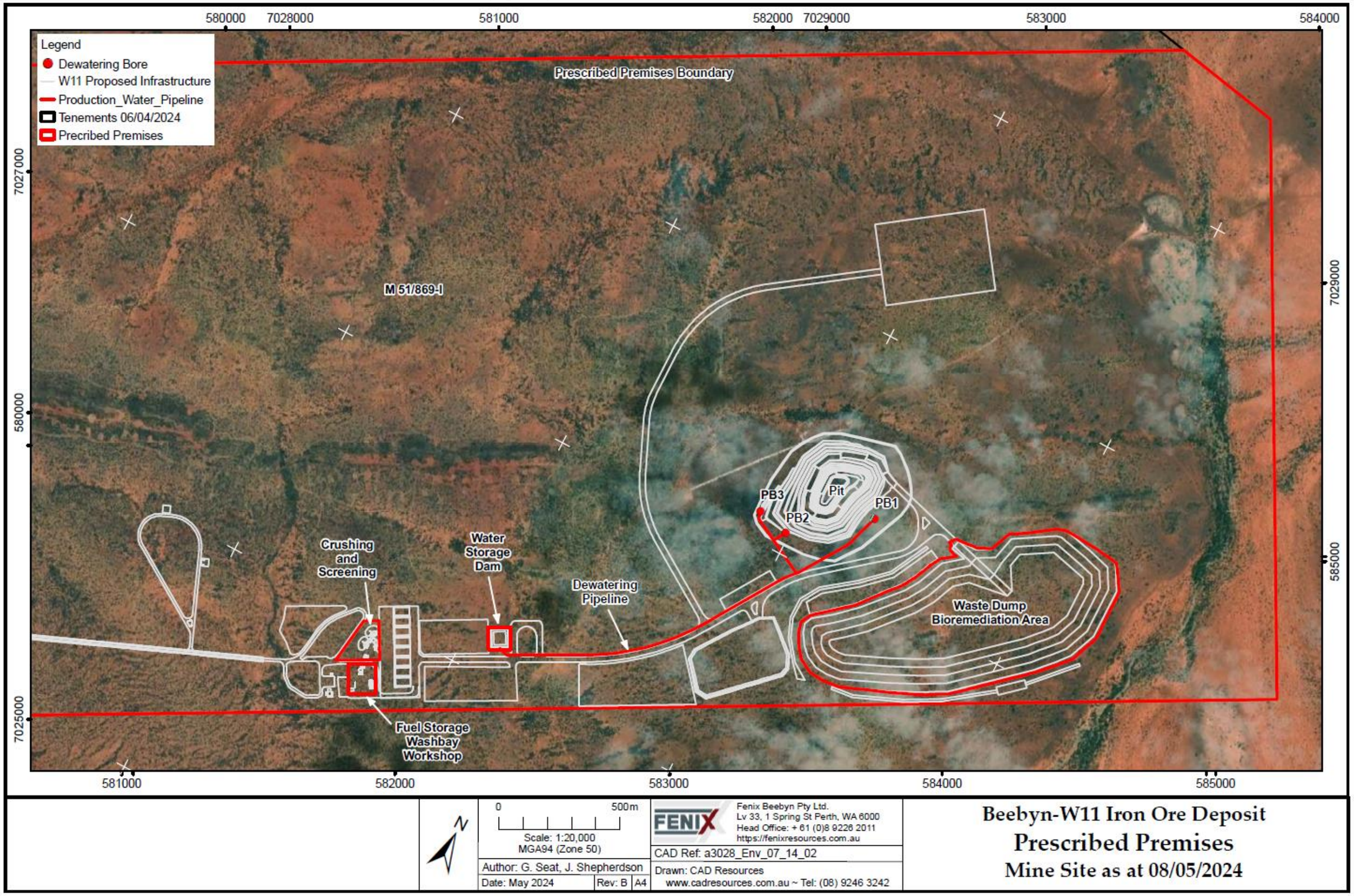


Figure 2: Site layout and infrastructure locations

Schedule 2: Construction drawings

Crushing and screening plant

The semi-mobile crushing and screening plant general arrangement is shown below (Figure 3).

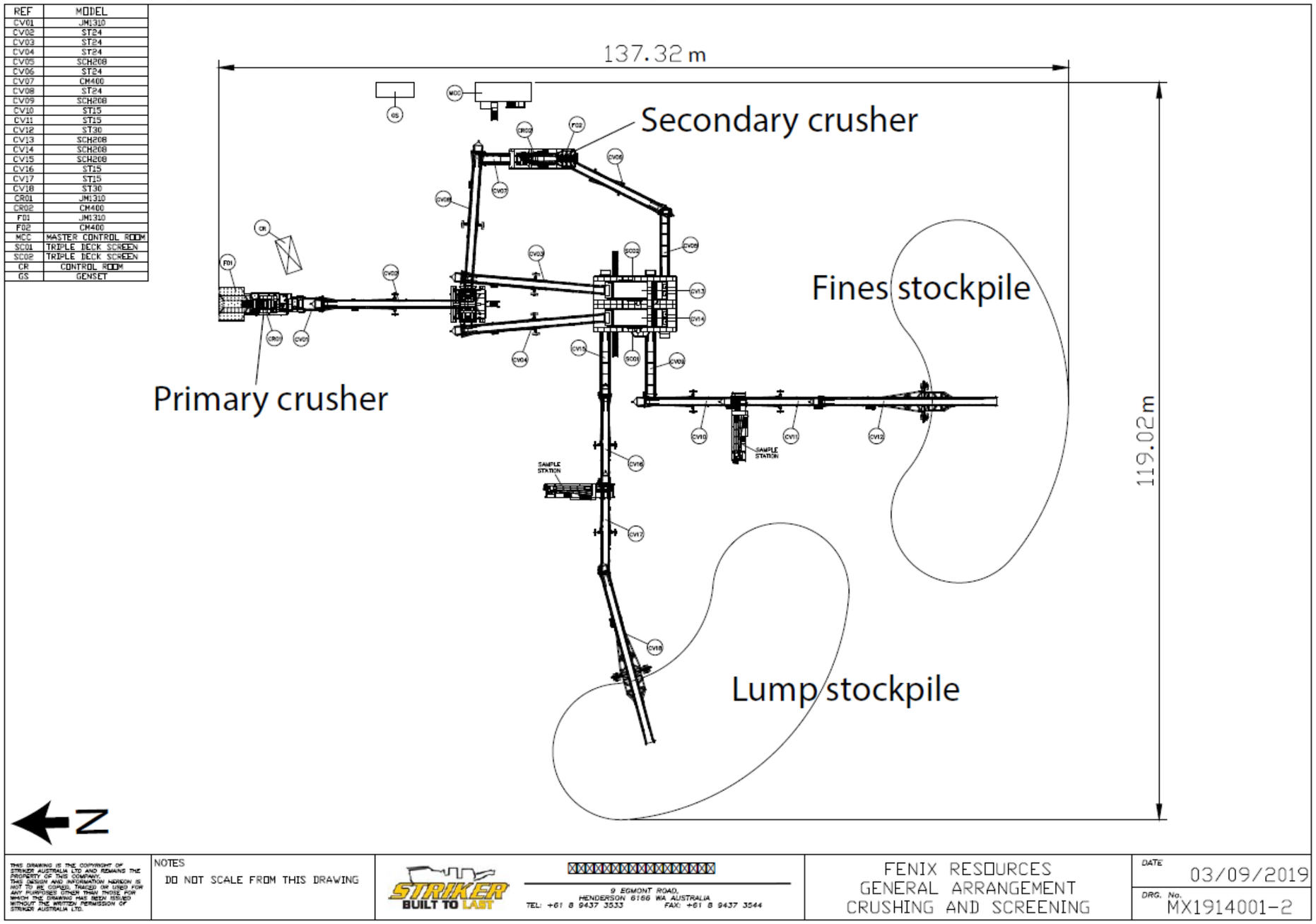


Figure 3: General arrangement of the crushing and screening plant

Water Storage Dam Conceptual Design Drawing (1 of 2)

The Water Storage Dam design is shown below (Figure 4).

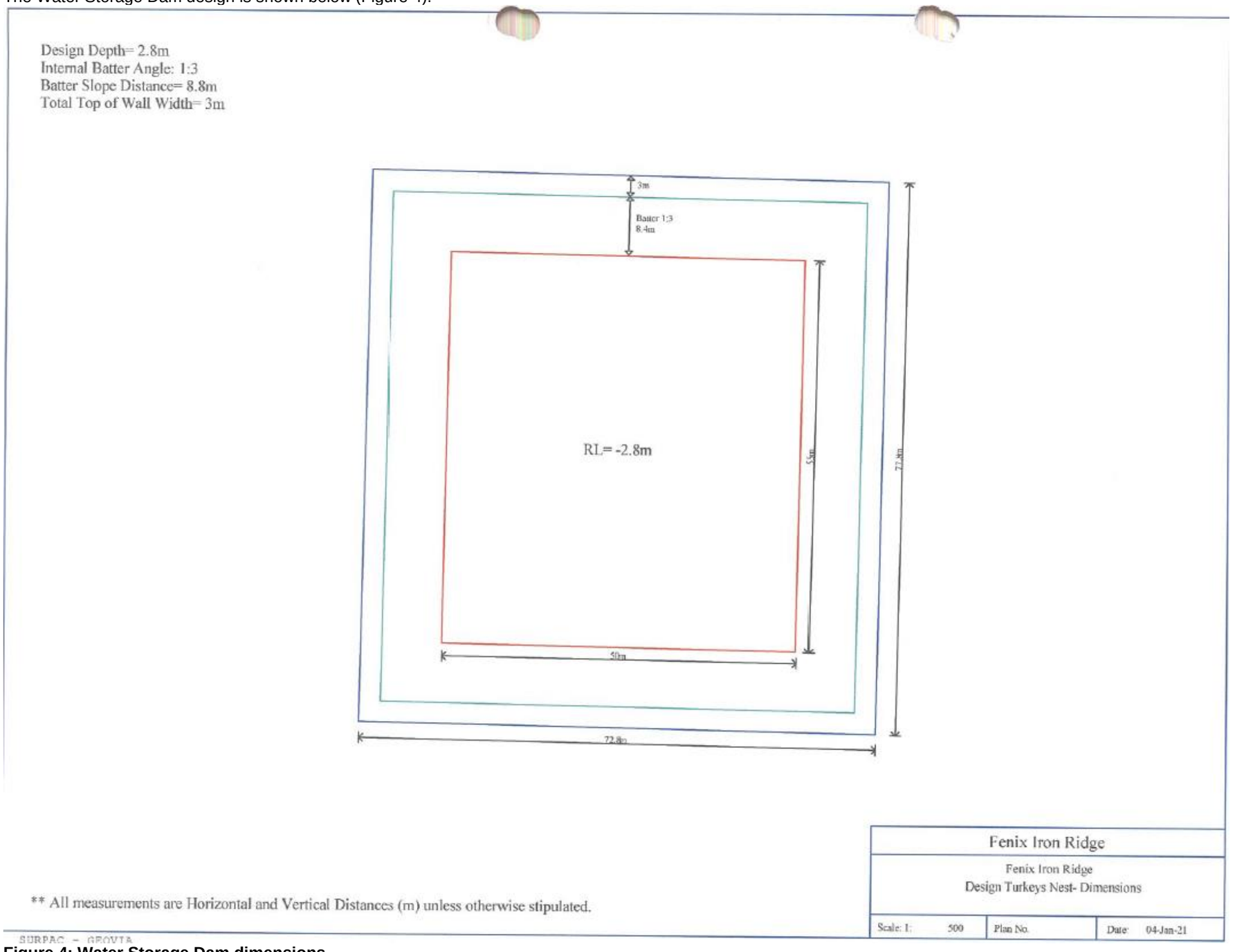


Figure 4: Water Storage Dam dimensions

Water Storage Dam Conceptual Design Drawing (2 of 2)

The Water Storage Dam design is shown below (Figure 5).

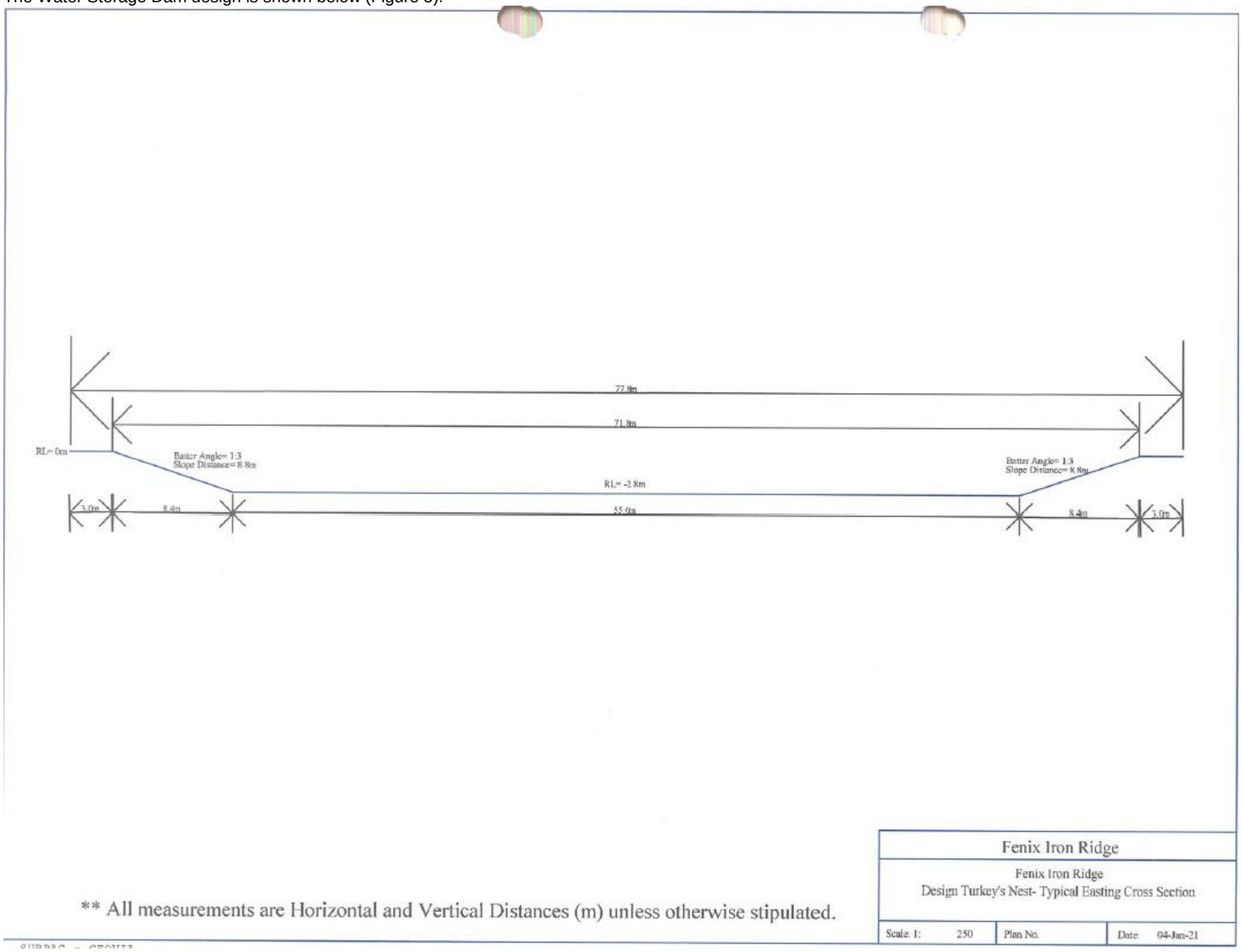


Figure 5: Water Storage Dam design