Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6949/2024/1
Works approval holder	Dampier (Plutonic) Pty Ltd
ACN	131 670 963
Registered business address	Level 1, 30 Richardson Street WEST PERTH WA 6005
DWER file number	DER2024/000283
Duration	22/11/2024 to 21/11/2027
Date of issue	22/11/2024
Date of amendment	01/10/2025
Premises details	Marymia Gold Project – K2 Project Mining Tenements M52/183 and M52/233 MEEKATHARRA WA 6642

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	Assessed production / design capacity
Category 6: Mine dewatering	500,000 tonnes per year

This works approval is granted to the works approval holder, subject to the attached conditions, on 01 October 2025, by:

Sonya Poor
Digitally signed by Sonya Poor
Date: 2025.10.01 09:09:32 +08'00'

MANAGER, RESOURCE INDUSTRIES
Officer delegated under section 20
of the Environmental Protection Act 1986

Works approval history

Date	Reference number	Summary of changes
22/11/2024	W6949/2024/1	Works approval granted.
26/03/2025	W6949/2024/1	Department initiated amendment to update terminology of 'v-notch earthen drains' and 'earthen bunded pipeline corridor' to 'v-notch earthen bunds'.
01/10/2025	W6949/2024/1	Department initiated administrative amendment in line with the Ministers Decision to Appeal, Appeal Number 059 of 2024.

Interpretation

In this works approval:

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

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

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

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

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

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

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

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

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

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct and/or install the infrastructure and/or equipment;

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

(c) at the corresponding infrastructure location; and

(d) within the corresponding timeframe,

as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
1.	Initial dewatering bore K2 Pit	• Existing dedicated surface 305 mm diameter dewatering bore, which intersects the lower underground workings.	Schedule 1: Maps, Figure 2	Prior to the submittal of the Environmental Compliance Report required by conditions 3 and 4.
2.	Pipeline from K2 Pit to K1 Pit	• Single HDPE pipeline with a nominal diameter of 160 mm to 200 mm; • Pipeline to be constructed above ground to facilitate inspections and maintenance; • Leak detection system fitted, consisting of: - Two flow meters, one at K2 pit (A) and one at the edge of K1 pit (B); - Telemetry stand connected to each flow meter; - A Programable Logic Controller (PLC) mounted to the pump. The PLC will perform flow meter calculation (A = B) or compare the flow rate at A to the flow rate at B; and - Automatic shut-down system should variances be detected that indicate a potential leak or in relation to communications being lost between flow meters. • Pipeline inside v-notch earthen bunds (unless the pipeline is buried at road crossings) to prevent the spread of any spills should a leak		

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		occur and to prevent vehicle collision with the pipeline.		
3.	K1 Pit	• 5 m freeboard; and • Baseline groundwater monitoring to be completed prior to commissioning as per Schedule 2, Table 10.		

2. The works approval holder must use water carts to manage dust lift-off from active construction areas to protect the environment by preventing and, where that is not possible, minimising dust emissions that may cause pollution or environmental harm.

Compliance reporting

3. The works approval holder must within 7 calendar days of an item of infrastructure or equipment required by condition 1, Table 1 being constructed and/or installed:

(a) undertake an audit of their compliance with the requirements of condition 1, Table 1; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

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

(a) certification by a suitably qualified person that the items of infrastructure or component(s) thereof, as specified in condition 1, Table 1, have been constructed in accordance with the relevant requirements specified in condition 1, Table 1;

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

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

Environmental commissioning phase

Environmental commissioning requirements and emission limits

5. The works approval holder may only commence environmental commissioning of an item of infrastructure identified in condition 6 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with conditions 3 and 4 of this works approval.

6. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:

(a) In accordance with the corresponding commissioning requirements; and

(b) For the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

	Infrastructure	Commissioning requirements	Authorised commissioning duration
1.	Initial dewatering bore K2 Pit	Maintenance of: • Existing dedicated surface 305 mm diameter dewatering bore which intersects the lower underground workings.	Four weeks
2.	Pipeline from K2 Pit to K1 Pit	Maintenance of: • Single high density polyethene (HDPE) pipeline with a nominal diameter of 160 mm to 200 mm; • Telemetry and an automatic shutdown (as per the specifications in Table 1); and • V-notch earthen bunds - to be inspected at least once per day if pumping is occurring and once per shift once mining operations commence.	
3.	K1 Pit	Maintenance of: • 5 m freeboard; • Baseline groundwater monitoring to be completed prior to commissioning as per Table 10; and • Discharge point and freeboard to be inspected once per week if pumping is occurring.	

7. During environmental commissioning, the works approval holder must ensure that the emissions from the discharge point listed in Table 3 do not exceed the corresponding limit when monitored in accordance with condition 8.

Table 3: Emissions and discharges limits during environmental commissioning

	Discharge point	Parameter	Limit
1.	K1 Pit	• Volume of mine dewatering water.	80,000 tonnes (commissioning period runs for up to four weeks based on equipment pumping rate of 30 L/s)

Monitoring during environmental commissioning

8. The works approval holder must monitor emissions and discharges during environmental commissioning in accordance with Table 9 in Schedule 2 and record the results of all monitoring activity.

9. The works approval holder must monitor the groundwater during environmental commissioning in accordance with Table 10 in Schedule 2 and record the results of all monitoring activity.

10. The works approval holder must submit to the CEO an Environmental Commissioning Report within 60 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 1.

11. The works approval holder must ensure the Environmental Commissioning Report required by condition 10 of this works approval includes the following:

(a) A summary of the environmental commissioning activities undertaken, including timeframes and amount of mine dewatering water discharged;

(b) A summary of discharge monitoring obtained during environmental commissioning under condition 8.

(c) A summary of ambient groundwater monitoring results obtained during environmental commissioning under condition 9.

(d) A summary of the environmental performance of all infrastructure as constructed or installed (as applicable);

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

(f) Where conditions have not been met, measures proposed to address compliance, together with timeframes for implementing the proposed measures.

Time limited operations phase

Commencement and duration

12. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 upon the submission of the report required by conditions 3 and 4.

13. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 14:

(a) For a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 12 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 13(a).

Time limited operations requirements and emission limits

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

Table 4: Infrastructure and equipment requirements during time limited operations

	Site Infrastructure and equipment	Operational requirements	Infrastructure location
1.	Initial dewatering bore K2 Pit	Maintenance of: • Existing dedicated surface 305 mm diameter dewatering bore which intersects the lower underground workings.	Schedule 1: Maps, Figure 2
2.	Pipeline from K2 Pit to K1 Pit	Maintenance of: • Single high density polyethene (HDPE) pipeline with a nominal bore of 160 mm to 200 mm; • Telemetry and an automatic shutdown (as per the specifications in Table 1); • V-notch earthen bunds - to be inspected at least once per day if pumping is occurring and once per shift once mining operations commence.	
3.	K1 Pit	Maintenance of: • 5 m freeboard; • Baseline groundwater monitoring to be completed prior to commissioning as per Table 10; and • Discharge point and freeboard to be inspected once per week if pumping is occurring.	

15. During time limited operations, the works approval holder must ensure that the emissions specified in Table 5 are discharged only from the corresponding discharge points and only at the corresponding discharge point locations.

Table 5: Authorised discharge points

	Emission	Discharge point	Discharge point location
1.	Mine dewatering water from K2 Pit and underground	K1 Pit	Schedule 1: Maps, Figure 2

16. During time limited operations, the works approval holder must ensure that the emissions from the discharge point listed in Table 6 do not exceed the corresponding limits when monitored in accordance with condition 20.

Table 6: Emissions and discharges limits during time limited operations

	Discharge point	Parameter	Limit
1.	K1 Pit	Volume of mine dewatering water	500,000 tonnes (time limited operation period runs for up to 180 days)

Monitoring during time limited operations

17. Where specified in conditions, the works approval holder must ensure that:

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

(b) Quarterly monitoring is undertaken at least 45 days apart.

18. 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 and the requirements of the Australian/New Zealand Standard AS/NZS5667.1, AS/NZS 5667.10 and/or AS/NZS 5667.11 (as relevant).

19. The works approval 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.

20. The works approval holder must monitor emissions and discharges during time limited operations in accordance with Table 9 in Schedule 2 and record the results of all monitoring activity.

21. The works approval holder must monitor the groundwater during time limited operations in accordance with Table 10 in Schedule 2 and record the results of all monitoring activity.

22. Where monitoring bores specified in condition 21 are found to be inoperable, the works approval holder must design, construct, and install replacement groundwater monitoring wells in accordance with the requirements specified in Table 7.

Table 7: Infrastructure requirements – groundwater monitoring wells

Infrastructure	Design, construction, and installation requirements	Monitoring well location(s)	Timeframe
Monitoring well network for K1 Pit	Well design and construction: • Designed and constructed in accordance with relevant standards: ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores[1]; and • Well screens must target the part, or parts, of the aquifer most likely to be	Schedule 1: Maps, Figure 2	Must be constructed, developed (purged), and determined to be operational with 6 months of discharges occurring to K1

Infrastructure	Design, construction, and installation requirements	Monitoring well location(s)	Timeframe
	affected by contamination[2].		Pit
	Logging of borehole: • Soil samples must be collected and logged during the installation of the monitoring wells; • A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726; and • Any observations of staining / odours or other indications of contamination must be included in the bore log.		
	Well construction log: • Well construction details must be documented within a well construction log to demonstrate compliance with ASTM D5092/D5092M-16. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.		
	Well development: • All installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log.		
	Installation survey: • The vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.		

Note 1: Suitable alternative standard: Minimum construction requirements for water bores in Australia 4th Ed. (National Uniform Drillers Licensing Committee (NUDLC), 2020).
Note 2: refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on well screen depth and length.

23. The works approval holder must, within 60 calendar days of the monitoring wells being constructed, submit to the CEO a well construction report evidencing compliance with the requirements of condition 22.

Compliance reporting

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

25. The works approval holder must ensure the report required by condition 24 includes the following:

(a) A summary of the time limited operations, including timeframes and amount of mine dewatering water discharged;

(b) A summary of calibration records obtained during time limited operation under condition 18;

(c) A summary of discharge monitoring obtained during time limited operations under condition 20;

(d) A summary of ambient groundwater monitoring results obtained during time limited operations under condition 21;

(e) A summary of the environmental performance of all infrastructure as constructed or installed (as applicable);

(f) A review of performance and compliance against the conditions of the works approval; and

(g) Where conditions have not been met, measures proposed to address compliance, together with timeframes for implementing the proposed measures.

Records and reporting (general)

26. 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.

27. 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, Table 1;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 1, 6, and 14;

(c) monitoring programmes undertaken in accordance with conditions 8, 9, 18, 20 and 21; and

(d) complaints received under condition 26.

28. 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 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 8 have the meanings defined.

Table 8: Definitions

Term	Definition
Australian Standard Geotechnical Site Investigations AS1726	means the Australian Standard AS1762 *Geotechnical site investigations,* as amended from time to time.
AS/NZS 5667	means the Australian Standard AS/NZS 5667
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 samples.
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.
ASTM D5092/D5092M-16	means the ASTM international standard for *Standard practice for design and installation of groundwater monitoring wells (Designation: ASTM D5092/D5092M-16),* as amended from time to time.
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).
HDPE	High density polyethylene

Term	Definition
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
suitably qualified	means a person who: (a) holds a relevant tertiary academic qualification; (b) has a minimum of five years of experience working in the relevant area/field of expertise; and (c) holds membership in a relevant professional body.
SWL	means standing water level.
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.
Total CN	Total Cyanide
WAD-CN	Weak Acid Dissociable Cyanide
waste	has the same meaning given to that term under the EP Act.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

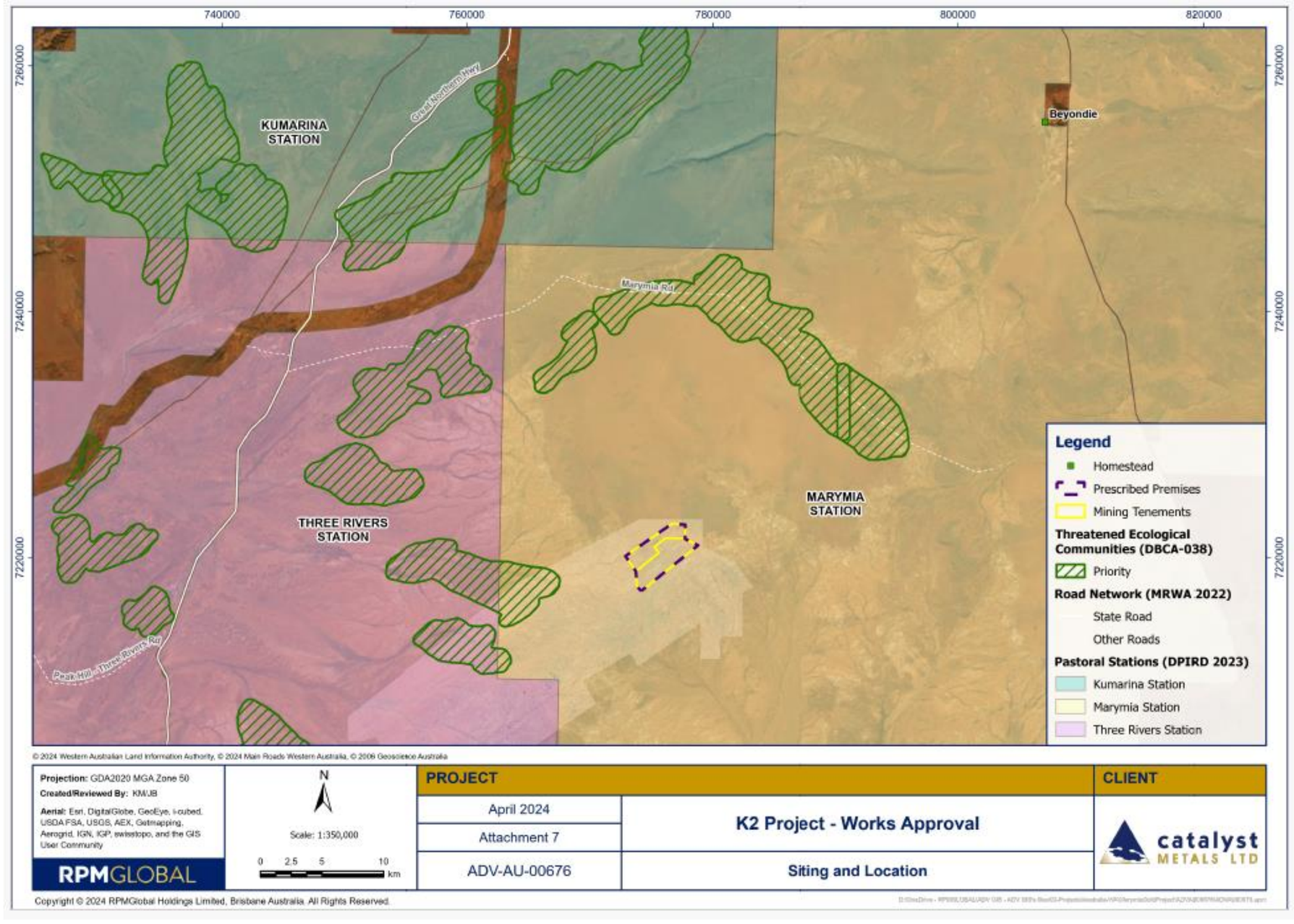

Figure 1: Map of the boundary of the prescribed premises

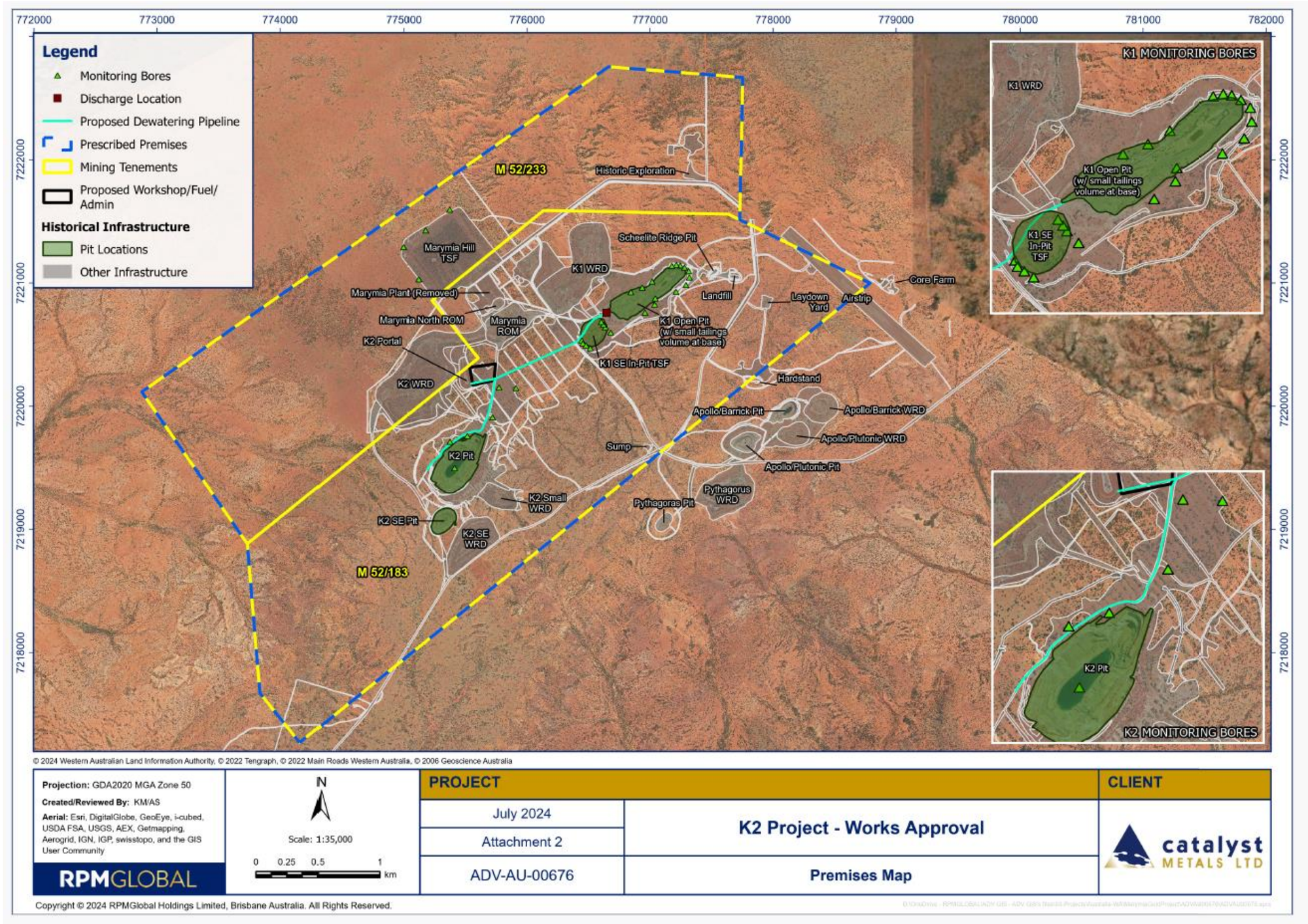

Figure 2: Infrastructure Locations

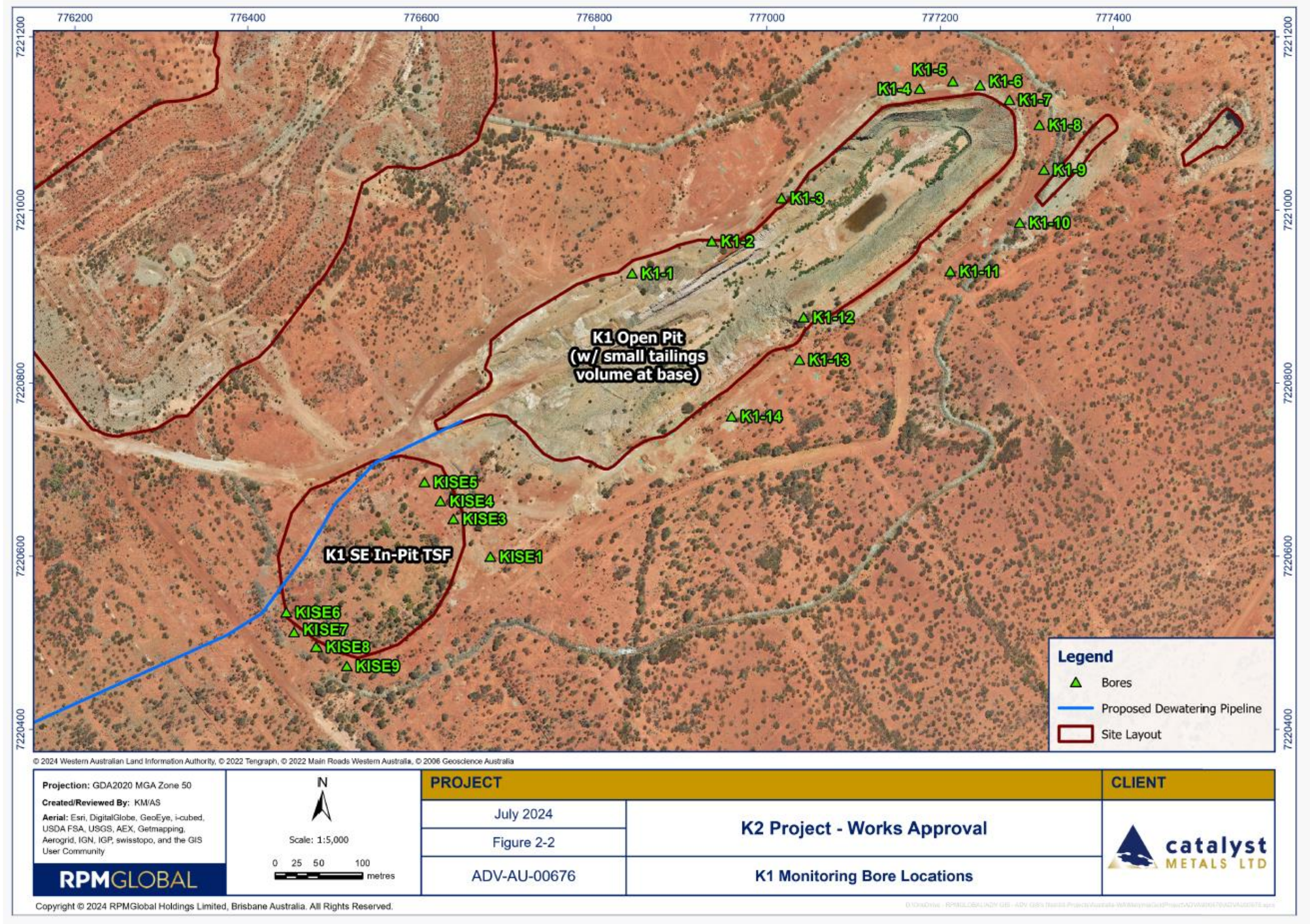

Figure 3: K1 Pit Groundwater Monitoring Bore Locations (Note K2 Pit Monitoring Bore is shown in Figure 2)

Schedule 2: Monitoring

Table 9: Emissions and discharges monitoring

Discharge and Monitoring Location	Parameter	Unit	Frequency	Averaging Period	Method	
					Sampling	Analysis
K1 Pit – dewatering discharge to pit (Location depicted in Figure 2)	Volumetric flow rate (cumulative)	kL	Continuous (flowmeter)	Monthly	N/A	N/A
	pH[1]	pH units	Monthly (while dewatering)	Spot sample	AS/NZS 5667.1 AS/NZS 5667.10	Tested by a laboratory with current NATA accreditation [1] In-field non-NATA accredited analysis permitted
	Electrical conductivity[1]	µS/cm				
	Total dissolved solids	mg/L				
	Total suspended solids					
	Hardness as $CaCO_3$	mg/L	Quarterly (while dewatering)	Spot sample	AS/NZS 5667.1 AS/NZS 5667.10	Tested by a laboratory with current NATA accreditation
	Sulphate as SO_4^{2-}					
	Total Alkalinity					
	Total phosphorus					
	Total nitrogen					
	Aluminium					
	Arsenic					
	Calcium					
	Cadmium					
	Chromium III					
	Iron					
	Mercury					
	Potassium					
	Magnesium					
	Manganese					

Discharge and Monitoring Location	Parameter	Unit	Frequency	Averaging Period	Method	
					Sampling	Analysis
	Sodium					
	Lead					
	Tin					
	Selenium					
	Zinc					

Table 10: Monitoring of groundwater

Monitoring Location	Parameter	Unit	Frequency	Averaging Period	Method	
					Sampling	Analysis
K1-1 K1-2 K1-3 K1-4 K1-5 K1-6 K1-7 K1-8 K1-9 K1-10 K1-11 K1-12 K1-14 As depicted in Figure 2 and 3	Standing Water Levels	mbgl	Quarterly (at least once prior to commissioning)	N/A	AS/NZS 5667.11	N/A
K1-3 K1-6 K1-9 K1-14 As depicted in Figure 2 and 3	pH[1]	pH units	Quarterly (at least once prior to commissioning)	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11	Tested by a laboratory with current NATA accreditation [1]In-field non-NATA accredited analysis permitted
	Electrical conductivity[1]	µS/cm				
	Total dissolved solids	mg/L				
	Total suspended solids					

Monitoring Location	Parameter	Unit	Frequency	Averaging Period	Method	
					Sampling	Analysis
	Hardness as $CaCO_3$	mg/L	Quarterly (at least once prior to commissioning)	Spot sample	AS/NZS 5667.1 AS/NZS 5667.11	Tested by a laboratory with current NATA accreditation
	Sulphate as SO_4^{2-}					
	Total CN					
	WAD-CN					
	Total Alkalinity					
	Total phosphorus					
	Total nitrogen					
	Aluminium					
	Arsenic					
	Calcium					
	Cadmium					
	Chromium III					
	Iron					
	Mercury					
	Potassium					
	Magnesium					
	Manganese					
	Sodium					
	Lead					
	Tin					
	Selenium					
	Zinc					