



Works Approval

Works approval number	W6912//2024/1
Works approval holder	IGO Cosmos Pty Ltd
ACN	111 599 323
Registered business address	Suite 4, Level 5 85 South Perth Esplanade SOUTH PERTH WA 6151
DWER file number	DER2024/000036
Duration	11/04/2025 to 11/04/2030
Date of issue	11/04/2025
Premises details	Cosmos Nickel Operation – Tailings Storage Facility 3 Goldfields Highway SIR SAMUEL WA 6437 Legal description - Mining tenements L36/118, L36/159, L36/171, L36/172, M36/127, M36/212, M36/365, M36/371, M36/375, M36/376, M36/377, M36/441, M36/659 and part of M36/180 and M36/349 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which— (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	1.1 million tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 11 April 2025, by:

Manager, Resource Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
11/04/2025	W6912/2024/1	Works approval granted.

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 the critical containment infrastructure;
 - (b) in accordance with the corresponding design and construction requirements; and
 - (c) at the corresponding infrastructure location, as set out in Table 1.

Table 1: Critical containment infrastructure design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	TSF3 starter embankment – Stage 1	<ol style="list-style-type: none"> 1. To be constructed in accordance with Schedule 1, Figures 3 and 5 2. Footprint not to exceed 10 hectares 3. Footprint of TSF3 to be stripped to the ferricrete horizon 4. WMP1 liner removed 5. Crest height to a maximum of RL 484 m 6. Downstream slope of 1V:3H 7. Minimum 6-metre wide embankment crest with an inwardly graded crossfall of 2% 8. 300mm rock armouring of the downstream embankment 9. Downstream toe-drains installed at the foot of the eastern and western embankments 10. Underdrainage system to be constructed in accordance with Schedule 1, Figure 2 consisting of: <ol style="list-style-type: none"> a. a slotted sub-soil toe drain (Megaflo 300 or similar) along the upstream embankment; and b. slotted sub-soil finger drains (Megaflo 170 or similar) extending 20m from the toe drain to the decant area; and c. HDPE collection pipes directed to 	As depicted in Schedule 1, Figure 1.

	Infrastructure	Design and construction requirements	Infrastructure location
		<p>the decant tower.</p> <ol style="list-style-type: none"> 11. Decant tower and floating turret decant return system to be constructed 12. Decant return water pipelines to direct to the processing plant 13. Tailings delivery and decant water pipelines are to be: <ol style="list-style-type: none"> a. equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or b. equipped with automatic cut-outs in the event of a pipe failure; and c. Provided with a secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. 	
2.	TSF3 raise – Stage 2	<ol style="list-style-type: none"> 1. To be constructed in accordance with Schedule 1, Figure 4 and 5 2. Crest height to a maximum of RL 486.5 3. Downstream slope of 1V:3H 4. Minimum 6-metre wide embankment crest with an inwardly graded crossfall of 2% 5. 300mm rock armouring of the downstream embankment 6. Decant tower and floating turret decant return system to be reinstated 	As depicted in Schedule 1, Figure 1.

Compliance reporting

2. The works approval holder must within 30 calendar days of the Critical Containment Infrastructure identified by condition 1 being constructed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.

3. The Critical Containment Infrastructure Report required by condition 2 must include as a minimum the following:
 - (a) certification by a suitably qualified engineer that each item of critical containment infrastructure or component thereof, as specified in condition 1,

has been built and installed in accordance with the requirements specified in condition 1;

- (b) as constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, as specified in condition 1;
- (c) photographic evidence of the installation of the infrastructure; and
- (d) 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 critical containment infrastructure identified in condition 6:
 - (a) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 2 meets the requirements of that condition; or
 - (b) where at least 40 business days have passed after the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 2 has been submitted to the CEO.

5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 6 (as applicable):
 - (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.	TSF3 – Stage 1	1) A minimum 500mm freeboard is to be maintained. 2) Operating decant pond size to be no more than 15% of the TSF surface area 3) Daily inspections to occur to check for adequate freeboard and integrity of embankments 4) Daily inspections to occur of associated pipelines to check integrity of pipelines 5) No discharge of water is allowed to WMP8	As depicted in Schedule 1, Figure 1.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		during operation of TSF3	
2.	TSF3 raise – Stage 2	1) A minimum 500mm freeboard is to be maintained. 2) Operating decant pond size to be no more than 15% of the TSF surface area 3) Daily inspections to occur to check for adequate freeboard and integrity of embankments. 4) Daily inspections to occur of associated pipelines to check integrity of pipelines 5) No discharge of water is allowed to WMP8 during operation of TSF3	As depicted in Schedule 1, Figure 1.

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

Table 3: Authorised discharge points

Emission	Discharge points	Discharge point location
Tailings	TSF3	As shown in Schedule 1, Figures 3 and 4.

Monitoring during time limited operations

8. The works approval holder must monitor the groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 4.

Table 4: Monitoring of ambient concentrations during time limited operations

Monitoring location	Parameter	Trigger level	Limit	Units	Monitoring frequency
MB08, MB09, MB10, MB14, MB15, MB16, MB17, MB21, MB22.	Standing Water Level	6	4	mbgl	Weekly
	pH	-	-	-	Once during time limited operations
	Electrical conductivity @ 25°C	-	-	µS/cm	
	Metals and metalloids: As, Cd, Cr, Co, Cu, Hg, Pb, Ni, Se, Sb, Zn.	-	-	mg/L	

9. During time limited operations, the works approval holder must ensure that mounding of the groundwater table does not exceed the limit specified in Table 4 at the corresponding monitoring locations specified in the table.

Compliance reporting

10. 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 30 calendar days before the expiration date of the works approval, whichever is the sooner.

- 11.** The works approval holder must ensure the report required by condition 10 includes the following:
- (a) a summary of the time limited operations, including timeframes and amount of material processed;
 - (b) a summary of the groundwater monitoring results obtained during time limited operations under condition 8, including any investigation or actions taken under condition 9.
 - (c) a review of performance and compliance against the conditions of this works approval; and
 - (d) 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)

- 12.** 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.
- 13.** 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) monitoring programmes undertaken in accordance with condition 8; and
 - (d) complaints received under condition 12.
- 14.** The books specified under condition 13 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
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 <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
critical containment infrastructure	means the items of infrastructure listed in condition 1.
Critical Containment Infrastructure Report	means a report to satisfy the CEO that works of critical containment infrastructure have been constructed in accordance with the works approval.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> 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.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i> .
HDPE	high density polyethylene
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 engineer	means a person who holds a Bachelor of Engineering degree recognised by Engineers Australia
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.

Term	Definition
waste	has the same meaning given to that term under the EP Act.
WMP	water management pond
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).

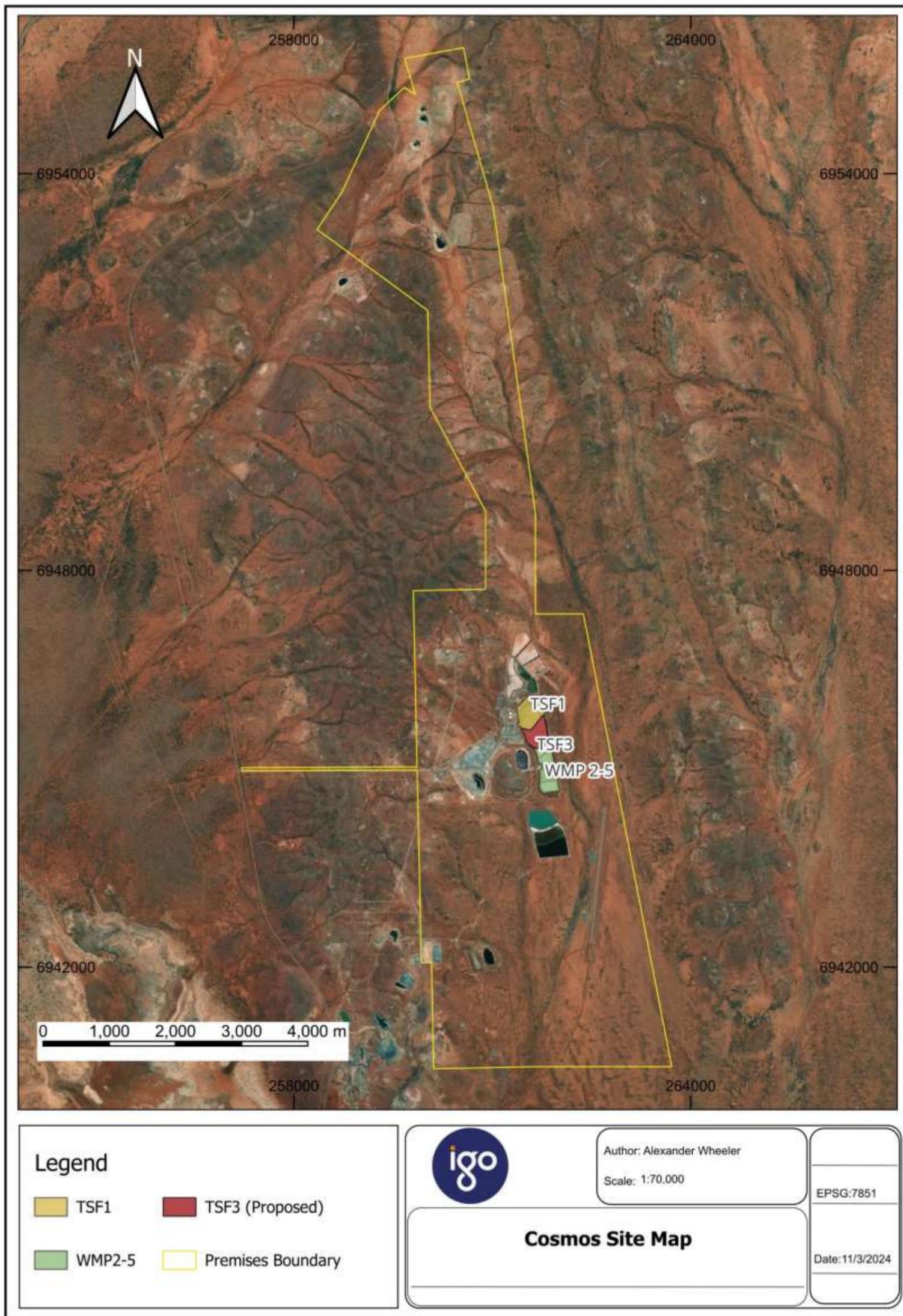


Figure 1: Map of the boundary of the prescribed premises

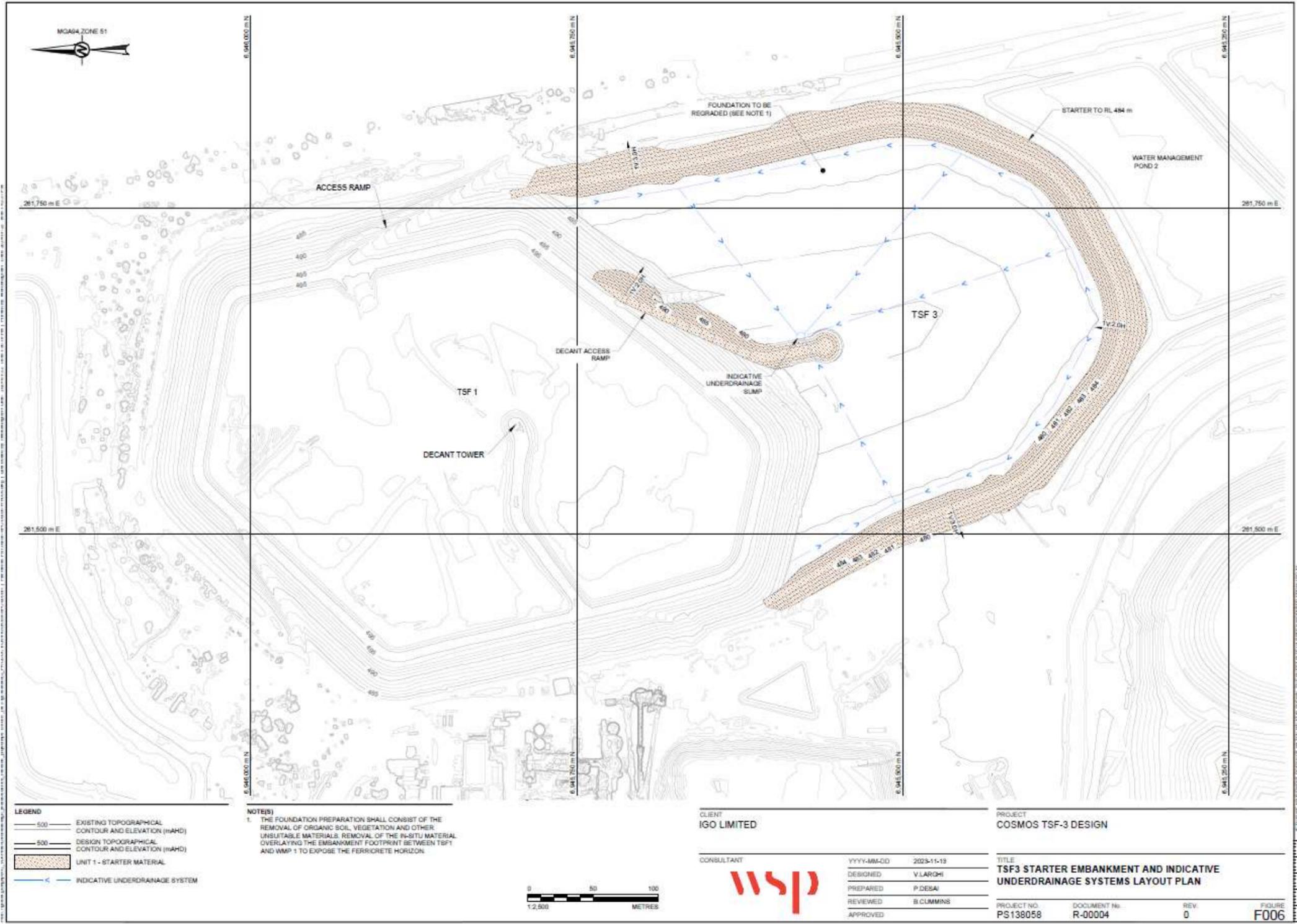


Figure 2: Underdrainage design and starter embankment

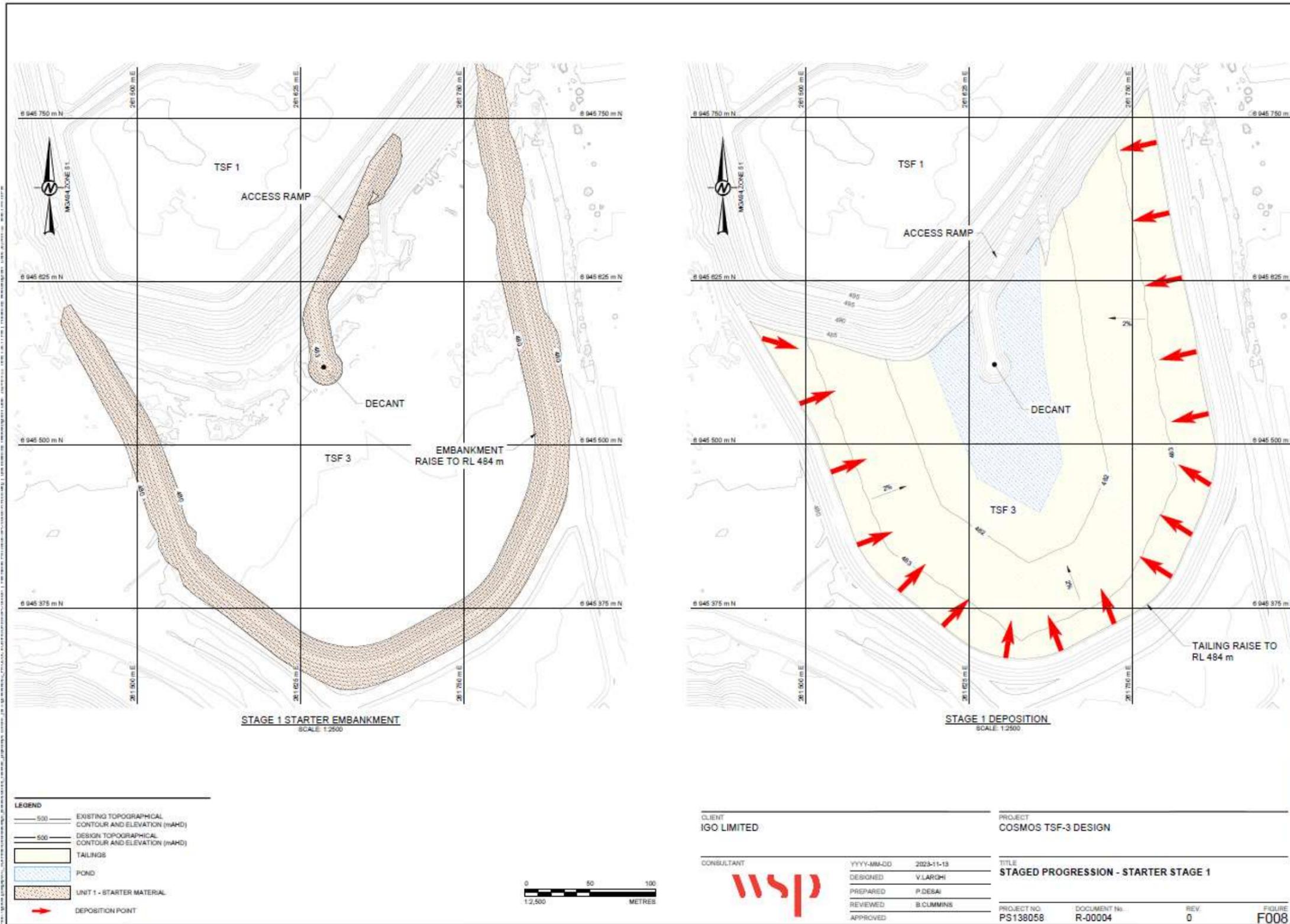


Figure 3: Stage 1 starter embankment and deposition points

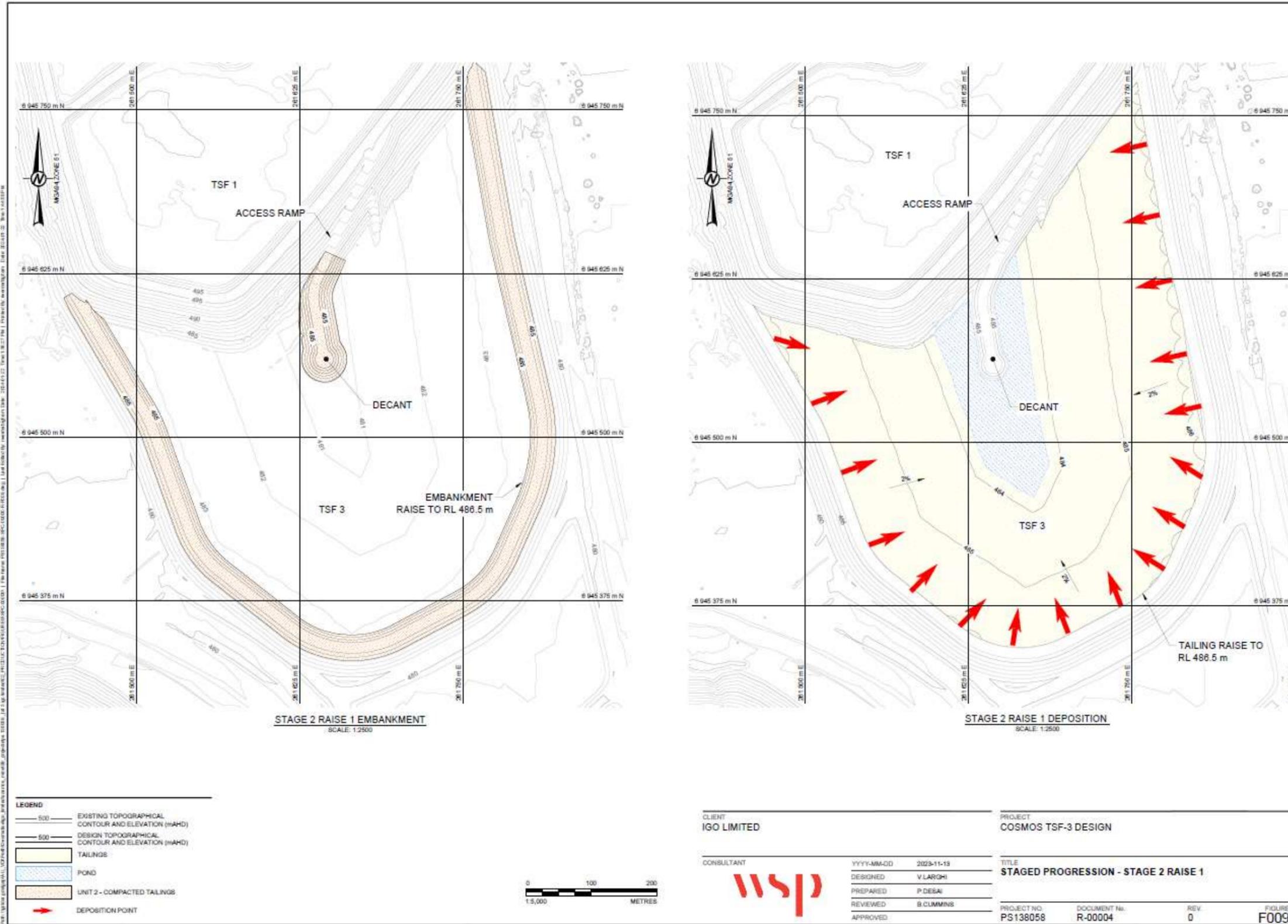


Figure 4: Stage 2 embankment raise 1 and deposition points

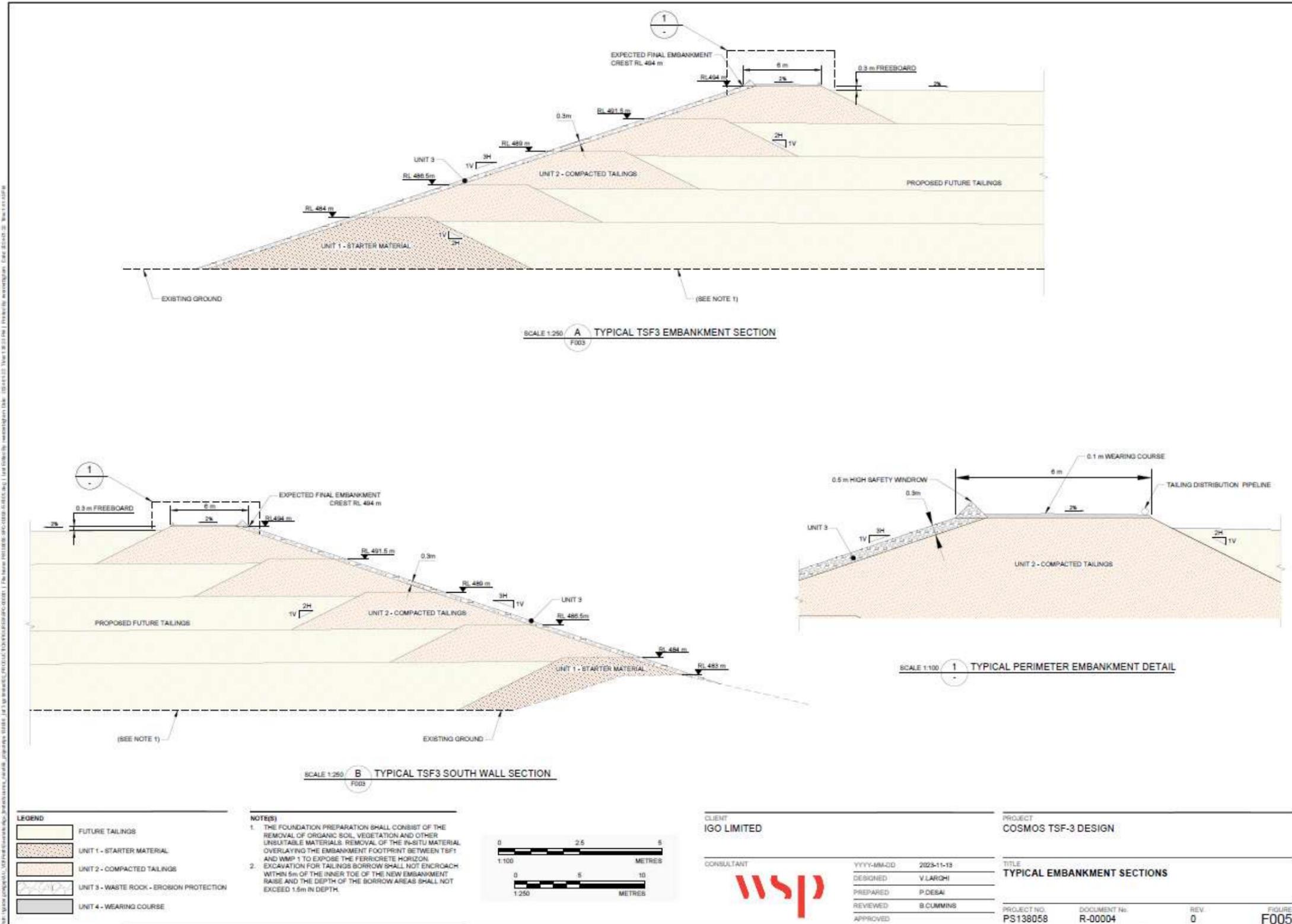


Figure 5: Cross-sectional embankment design

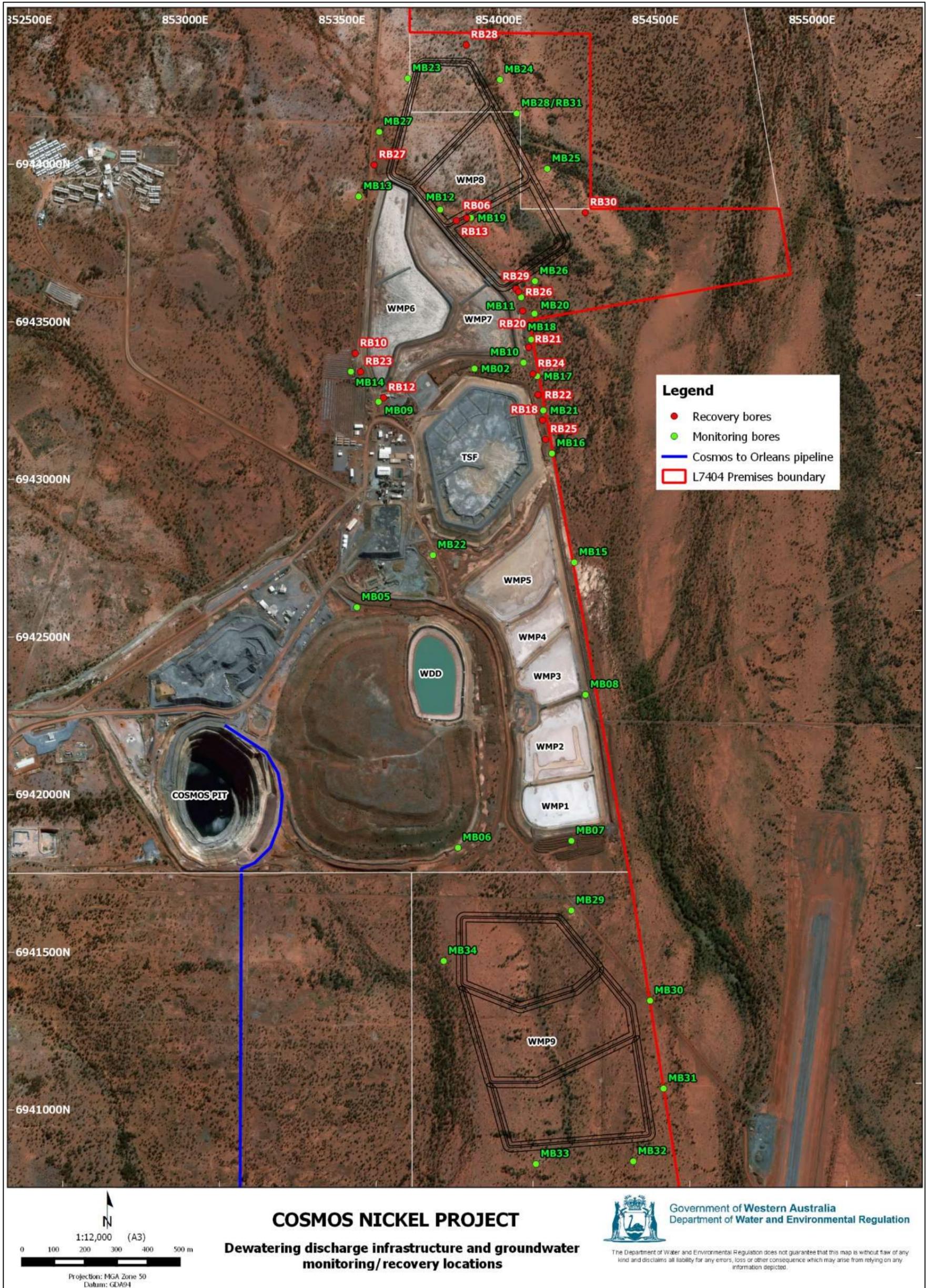


Figure 6: Monitoring bore network