Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L4680/1988/13
Licence holder	FMR Investments Pty Ltd
ACN	009 411 349
Registered business address	Level 2, 2 Hardy Street SOUTH PERTH WA 6151
DWER file number	2013/003899-1
Duration	01/11/2015 to 31/10/2034
Date of issue	22/10/2015
Date of amendment	20/01/2025
Premises details	Greenfields Processing Site Part mining tenement M15/1836 and Lot 102 on Plan 40393 Great Eastern Highway COOLGARDIE WA 6429

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**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; (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	1,400,000 tonnes per annual period

This amended licence is granted to the licence holder, subject to the attached conditions, on 20 January 2025, by:

Christine Pustkuchen
Digitally signed by Christine Pustkuchen
Date: 2025.01.20 09:29:24 +08'00'

MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
09/09/2002	L4680/1988/8	Licence re-issue
30/09/2003	L4680/1988/9	Licence re-issue
01/11/2004	L4680/1988/10	Licence re-issue
26/10/2007	L4680/1988/11	Licence re-issue
01/11/2010	L4680/1988/12	Licence re-issue
22/10/2015	L4680/1988/13	Licence re-issue
8/12/2017	L4680/1988/13	Amendment notice 1: amendment to allow the construction of embankment raise to TSF3 Cells A, B and C by 2.5m
19/09/2019	L4680/1988/13	Amendment notice 2: amendment to allow the construction of an embankment raise to TSF3 Cells A, B and C to a height of RL400m
23/07/2020	L4680/1988/13	Licence amendment to amalgamate Amendment Notice 1 and Amendment Notice 2 into the licence document and to allow the construction and operation of an embankment raise to TSF3 cells A, B and C by 2.5m to an embankment height of RL 402.5m.
09/08/2022	L4680/1988/13	Licence amendment to allow the construction and operation of an embankment raise to TSF3 Cells A to a height of RL 405.0m (Stage 4).
05/09/2022	L4680/1988/13	Licence amendment to allow the construction and operation of an embankment raise to TSF3 Cells B and C to a height of RL 405.0m (Stage 7).
28/03/2023	L4680/1988/13	Licence amendment to allow the operation of TSF4 Stage 1 embankment to a height of RL 396.5m.
03/11/2023	L4680/1988/13	Licence amendment to allow the operation of TSF4 Stage 1 embankment to a height of RL 402.5m. DWER-initiated amendment to assess and regulate environmental risks associated with TSF closure and rehabilitation.
26/04/2024	L4680/1988/13	Licence amendment to allow the construction and operation of TSF4 Stage 2 and 3 embankments to a height of RL405.5 m and RL 408.0 m respectively.
20/01/2025	L4680/1988/13	Licence amendment to allow the construction and operation of TSF3 Cell A (Stage 5), Cell B (Stage 8), and Cell C (Stage 8) to a height of RL 407.7 m. CEO-initiated amendment to include additional monitoring seepage monitoring bores at TSF4, as per seepage management plan.

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:

Infrastructure and equipment

1. The licence holder is authorised to:

(a) construct embankment raises for the infrastructure listed in Table 1 to the construction height; and

(b) operate the infrastructure listed in Table 1 to the operating height,

as specified in Table 1.

Table 1: Staged construction and operating heights for infrastructure

Infrastructure	Embankment stage	Construction height (m RL)	Operation height (m RL)[1]
TSF3 Cell A	Stage 5	407.7	407.7
TSF3 Cell B	Stage 8	407.7	407.7
TSF3 Cell C	Stage 8	407.7	407.7
TSF4	Stage 3	408.0	408.0

Note 1: The licence holder must submit an Environmental Compliance Report for an embankment stage as required by condition 25 prior to commencing operation of that embankment stage.

2. The licence holder must ensure that all pipelines containing environmentally hazardous materials are either:

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

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

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

3. The licence holder must only discharge the material specified in Table 2 into the containment infrastructure at the specified infrastructure location in accordance with the infrastructure requirements specified in Table 2.

Table 2: Containment infrastructure requirements

Containment infrastructure	Material	Containment infrastructure requirement	Containment infrastructure location
• TSF1; • TSF2.	Tailings	1. Lined with in-situ clay; 2. Decommissioned TSF with no tailings deposition authorised.	Labelled as ‘TSF1’ and ‘TSF2’, as shown in Schedule 1: Maps, Figure 2.
• TSF3 Cell A; • TSF3 Cell B; • TSF3 Cell C.	Tailings	1. Lined with in-situ clay to limit seepage to groundwater. 2. Seepage recovery bores MB302, MB304 and MB305 must be maintained. 3. Underdrainage and downstream toe drain must be	Labelled as ‘TSF3 Cell A’, ‘TSF3 Cell B’ and ‘TSF3 Cell C’, as shown in Schedule 1: Maps, Figure 2.

Containment infrastructure	Material	Containment infrastructure requirement	Containment infrastructure location
		maintained. 4. Seepage sumps S4, S5, S11 and S15 must be maintained.	
TSF4	Tailings	1. Lined with in-situ clay to limit seepage to groundwater; and 2. Seepage recovery bores SB401 and SB402 must be maintained. 3. Underdrainage sump must be maintained.	Labelled as 'TSF4', as shown in Schedule 1: Maps, Figure 2.
Process water pond	Return (decant) water	1. Lined with HDPE.	Labelled as 'Process Water Pond', as shown in Schedule 1: Maps, Figure 4.
Return water pond	Tailings seepage	1. Lined with HDPE.	Labelled as 'Return Water Pond', as shown in Schedule 1: Maps, Figure 4.
Stormwater diversion channel	Stormwater	1. Stormwater diversion channels must be maintained.	Labelled as 'Stormwater Diversion Channel', as shown in Schedule 1: Maps, Figure 4.

4. The licence holder must manage the containment infrastructure specified in Table 3 such that a minimum top of embankment freeboard is maintained as specified in Table 3.

Table 3: Freeboard requirements

Containment infrastructure	Freeboard requirements
TSF3 Cell A	At least: • Total freeboard of 700 mm; or • Sufficient freeboard to contain a 1-in-100-year storm event for 72 hours, whichever is greater.
TSF3 Cell B	
TSF3 Cell C	
TSF4	
Process Water Pond	At least: • Total freeboard of 500 mm; or • Sufficient freeboard to contain a 1-in-100-year storm event for 72 hours, whichever is greater.
Return Water Pond	

5. The licence holder must manage TSFs such that:

(a) a seepage collection and recovery system must be provided and used to capture seepage from the TSF;

(b) seepage must be returned to the TSF supernatant pond or re-used in process;

(c) the supernatant pond on the TSF must not exceed 15% of the total surface area in its respective cell; and

(d) the supernatant pond must be maintained around the decant pump within each

cell and be kept at least 60 m away from the perimeter embankments at all times.

6. The licence holder must:

(a) undertake inspections as detailed in Table 4;

(b) 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

(c) maintain a record of all inspections undertaken.

Table 4: Inspection of Infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Twice daily
Return water lines	Visual integrity	Twice daily
TSF embankment operational freeboard	Visual to confirm required operational freeboard of 300 mm is available	Daily
TSF embankment integrity	Visual inspection for signs of erosion, embankment cracking, damp or wet areas on batter slopes or toe areas.	Daily
TSF supernatant ponds	Visual inspection of size and location.	Daily
TSF stormwater diversion channels	Visual integrity	Daily

7. The licence holder must ensure that each item of infrastructure or equipment specified in Table 5 is designed and constructed in accordance with the requirements specified in Table 5. The licence holder must construct and/or install the infrastructure listed in Table 5 in accordance with:

(a) the corresponding design and construction requirements; and

(b) at the corresponding infrastructure location.

as set out in Table 5.

Table 5: Design and construction requirements

Item	Infrastructure	Design and construction requirement	Infrastructure location
1	TSF4 Stage 2 embankment raise	• Embankment must be constructed to a maximum height of RL 405.5 m; • Embankment must be constructed in accordance with Figure 5 and Figure 7 Schedule 2: Construction drawings, including: ○ Constructed using compacted dried tailings for upstream construction method; ○ Tailings material used for construction of embankment must be within range of -2% / +2% of OMC, determined in accordance with AS 1289.5.1.1; ○ Compacted tailings layer must have a density ratio greater than 95% of SMDD;	Labelled as 'TSF4', as shown in Schedule 1: Maps, Figure 2.

Item	Infrastructure	Design and construction requirement	Infrastructure location
		○ Design slopes of 1(V):2(H) upstream and 1(V):3(H) downstream for the northern and eastern perimeter embankments, and 1(V):3(H) upstream for the southern perimeter embankment; ○ At least 500 mm thick mine waste capping on downstream slope of northern and eastern perimeter embankments; ○ Embankment crest with 2% cross-falls towards the upstream side and windrows (at least 500 mm high) at the downstream side; • Decant structure and underdrainage tower must be constructed in accordance with Figure 8 of Schedule 2: Construction drawings, including: ○ Constructed using materials specified in Figure 8 for centreline construction method; ○ Decant and underdrainage tower accessway must have windrows (at least 500 mm high) on both sides, with breaks on low side for surface water runoff; ○ Decant tower and underdrainage tower raised with slotted concrete pipes (nominally 1.8 m diameter) and surrounded by select filter rock; • Dust must be managed by using water carts to wet down work areas.	
2	Stage 3 upstream embankment lift and decant raise for TSF4	• Construction of the Stage 2 upstream embankment lift must be completed prior to commencing construction of this Stage 3 upstream embankment lift; • Embankment must be constructed to a maximum height of RL 408.0 m; • Embankment must be constructed in accordance with Figure 5 and Figure 7 of Schedule 2: Construction drawings, including: ○ Constructed using compacted dried tailings for upstream construction method; ○ Tailings material used for construction of embankment must be within range of -2% / +2% of OMC, determined in accordance with AS 1289.5.1.1; ○ Compacted tailings layer must have a density ratio greater than 95% of SMDD; ○ Design slopes of 1(V):2(H) upstream and 1(V):3(H) downstream for the northern and eastern perimeter embankments, and 1(V):3(H) upstream for the southern perimeter embankment; ○ At least 500 mm thick mine waste capping on downstream slope of northern and eastern perimeter embankments;	

Item	Infrastructure	Design and construction requirement	Infrastructure location
		○ Embankment crest with 2% cross-falls towards the upstream side and windrows (at least 500 mm high) at the downstream side; • Decant structure and underdrainage tower must be constructed in accordance with Figure 8 of Schedule 2: Construction drawings, including: ○ Constructed using materials specified in Figure 8 for centreline construction method; ○ Decant and underdrainage tower accessway must have windrows (at least 500 mm high) on both sides, with breaks on low side for surface water runoff; ○ Decant tower and underdrainage tower raised with slotted concrete pipes (nominally 1.8 m diameter) and surrounded by select filter rock; • Dust must be managed by using water carts to wet down work areas.	
3	Stage 5 upstream embankment lift TSF3 Cell A	• Embankment must be constructed to a maximum height of RL 407.7 m; • Embankment must be constructed in accordance with Figure 9, Figure 10 (Cell A), Figure 11 and Figure 12 (Cell B and Cell C) of Schedule 2: Construction drawings, including: ○ Constructed using compacted dried tailings for upstream construction method; ○ Tailings material used for construction of embankment must be within range of -2% / +2% of OMC, determined in accordance with AS 1289.5.1.1; ○ Compacted tailings layer must have a density ratio greater than 95% of SMDD; ○ Design slopes of 1(V):2(H) at upstream embankments, 1(V):3(H) at downstream perimeter embankments, and 1(V):1.5(H) at Cell C northern embankment; ○ Design slopes of 1(V):1.5(H) at Cell A-B and Cell B-C dividing embankment; ○ At least 500 mm thick mine waste capping on downstream slope perimeter embankments, except Cell C northern embankment; ○ Embankment crest with 2% cross-falls towards the upstream side and windrows (at least 500 mm high) at the downstream side; • Decant structure and underdrainage tower must be constructed in accordance with Figure 11 (Cell A) and Figure 13 (Cell B and C) of Schedule 2: Construction drawings, including: ○ Constructed using materials specified in	Labelled as 'TSF3 Cell A, C and C', as shown in Schedule 1: Maps, Figure 2
4	Stage 8 upstream embankment lift TSF3 Cell B		
5	Stage 8 upstream embankment lift TSF3 Cell C		

Item	Infrastructure	Design and construction requirement	Infrastructure location
		Figure 11 (Cell A) or Figure 13 (Cel B and C) for centreline construction method; ○ Decant and underdrainage tower accessway must have windrows (at least 500 mm high) on both sides, with breaks on low side for surface water runoff; ○ Decant tower and underdrainage tower raised with slotted concrete pipes (nominally 1.8 m diameter) and surrounded by select filter rock; • Dust must be managed by using water carts to wet down work areas.	

8. The licence holder must not depart from the requirements specified in Table 5, except:

(a) where such departures are minor in nature and do not materially change or affect the infrastructure; or

(b) where such departure improves the functionality of the infrastructure and does not increase the risks to public health, public amenity, or the environment; and

(c) if condition 8(a) applies, then the licence holder must provide the CEO with a list of departures and demonstrate that these have not increased the risk to public health, public amenity or the environment.

Monitoring

9. The licence holder must ensure that:

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

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

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

10. The licence holder must ensure that:

(a) weekly monitoring is undertaken in each weekly period such that there are at least four days in between the days on which samples are taken in successive weeks;

(b) monthly monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months; and

(c) quarterly monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.

11. The licence holder must record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.

12. 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 and the requirements of the licence.

13. 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

14. The licence holder must undertake the monitoring in Table 6 according to the specifications in Table 6.

Table 6: Process monitoring

Process description	Parameter	Units	Frequency	Method
Tailings deposition	Volumes of tailings deposited into the TSF(s)	Tonnes	Continuous via a flow meter	None specified
Water recovery	Volumes of water recovered from the TSF(s)			
	Volumes of seepage recovered by seepage recovery bores (MB302, MB304, MB305, SB401, SB402)			
	Volumes of seepage recovered by seepage sumps (S4, S5, S11, S15)			

Ambient environmental quality monitoring

15. The licence holder must monitor the groundwater and supernatant pond(s) for concentrations of the parameter listed in Table 7:

(a) at the corresponding monitoring location;

(b) for the corresponding averaging period;

(c) at no less than the corresponding frequency;

(d) in the corresponding unit; and

(e) must not exceed the corresponding target and/or limit;

as set out in Table 7.

Table 7: Monitoring of ambient groundwater quality and supernatant pond

Monitoring point reference and location	Parameter	Units	Target	Limits	Averaging periods	Frequency
TSF3 Monitoring bores: • MB301; • MB303; • MB306; • MB307; • MB308; • MB309; • MB310; • MB311;	Standing water level[1]	mbgl	6	4	Spot sample	Monthly[3]

Monitoring point reference and location	Parameter	Units	Target	Limits	Averaging periods	Frequency
• MB312. TSF4 Monitoring bores: • MB401; • MB402; • MB403. • MB404 As depicted in Schedule 1: Maps: Figure 2 and detailed in Schedule 3: Monitoring bore and piezometer details: Table 12.						
TSF3 Monitoring bores: • MB301; • MB303; • MB306; • MB307; • MB308; • MB309; • MB310; • MB311; • MB312. TSF3 Seepage recovery bores: • MB302; • MB304; • MB305.	pH[2]	pH units	-	-		Quarterly
	Total dissolved solids[2]	mg/L	-	-		
	Weak acid dissociable cyanide		-	0.5		
	Dissolved metals and metalloids: • Arsenic (As); • Cadmium (Cd); • Copper (Cu); • Chromium (Cr); • Iron (Fe); • Lead (Pb); • Magnesium (Mg); • Mercury (Hg); • Nickel (Ni); • Zinc (Zn)		-	-		
TSF4 Monitoring bores: • MB401; • MB402; • MB403. • MB404 As depicted in Schedule 1: Maps: Figure 2	Major ions: • Calcium (Ca); • Chloride (Cl); • Potassium (K); • Sodium (Na).					

Monitoring point reference and location	Parameter	Units	Target	Limits	Averaging periods	Frequency
and detailed in Schedule 3: Monitoring bore and piezometer details: Table 12.						
Supernatant pond of any active TSF cell	Total dissolved solids[2]	mg/L	-	-	Spot sample	Weekly

Note 1: Standing water level shall be determined prior to the collection of other water samples.
Note 2: In-field non-NATA accredited analysis permitted.
Note 3: Monitoring of this parameter will be fortnightly if the target is exceeded, until exceedances are no longer observed.

Records and reporting

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

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

(b) the time and date of the complaint;

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

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

17. 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 60 calendar days after the end of that annual period, an Annual Audit Compliance Report in the approved form.

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

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

(b) the works conducted in accordance with condition 7 of this licence;

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

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

(e) complaints received under condition 16 of this licence.

19. The books specified under condition 18 must:

(a) be legible;

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

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

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

20. The licence holder must:

(a) prepare an environmental report that provides information in accordance with the requirements set out in Table 8 for the preceding two annual periods; and

(b) submit that environmental report to the CEO by no later than 60 calendar days after the end of every second annual period.

Table 8: Environmental Report requirements

Condition or Table	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 11	Any relevant process, production or operational data	None specified
Condition 14	Process monitoring	None specified
Condition 15	Ambient groundwater monitoring	A tabulated summary of results, including: • any target or limit exceedances; • raw data provided in an accompanying Microsoft Excel spreadsheet file; • interpretation of results and comparison against historical data; and • discussion of groundwater mounding (if present), its extent and measures proposed to address it.
Condition 17	Compliance	Annual Audit Compliance Report (AACR)
Condition 16	Complaints summary	None specified

21. The licence holder must submit the information in Table 9 to the CEO according to the specifications in Table 9.

Table 9: Non-annual reporting requirements

Condition or Table	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
Condition 15	Copies of original monitoring reports submitted to the licence holder by third parties	Not applicable	Within 14 days of the CEO's request.	As received by the licence holder from third parties.

22. The licence holder must within 60 calendar day of an item of infrastructure required by condition 7 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 7; and

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

23. The licence holder must ensure the Environmental Compliance Report required by condition 22:

(a) are certified by a suitably qualified professional engineer stating that each item of infrastructure specified in condition 7, Table 5 has been constructed or completed in accordance with the conditions of the licence;

(b) include the records of all construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with the reasons why the modifications were necessary;

(c) include copies of the as-built drawings for the embankment earthworks and pipework; and

(d) be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company.

24. A suitably qualified professional engineer or geotechnical specialist must audit and review the active cell of the TSF on an annual basis. An audit review report must:

(a) review of the past performance of the TSF;

(b) validate the current design of the TSF;

(c) examine water management at the TSF;

(d) include a monthly water balance for the TSF;

(e) review the results of monitoring;

(f) outline deficiencies identified in the audit and include measures to address them; and

(g) be submitted to the CEO.

25. The licence holder must ensure that the parameters listed in Table 10 are notified to the CEO in accordance with the notification requirements of Table 10.

Table 10: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form
Condition 15, Table 7	Breach of any target/limit specified in the licence	Any emergency incident / unplanned discharge event	None specified
		Non-compliances	AACR
-	Notification of care and maintenance status	Within seven days of the decision to enter care and maintenance status	None specified
-	Intention to resume normal operations from care and maintenance status	At least 30 days before operations recommence.	None specified
Condition 6, Table 4	Any evidence of potential for the structural integrity of the tailings storage facility to be compromised such as: • erosion or cracking of embankment or internal wall; or	Within 24 hours of identification of any potential for the structural integrity of the tailings storage facility to be	None specified

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form
	• damp or wet areas on batter slopes or toe areas.	compromised, notify the CEO.	

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with section 72 of the EP Act.

Decommissioning and closure

26. The licence holder must:

(a) prepare a revised Mine Closure Plan in accordance with requirements set out in the Mine Closure Plan Guidance, as defined in Table 11; and

(b) submit that Mine Closure Plan to the CEO by no later than 60 calendar days after the end of the annual periods in the following calendar years: 2026, 2029, 2032.

27. The licence holder must:

(a) undertake decommissioning and rehabilitation of all mining-related landforms and disturbances in a progressive manner, where practicable;

(b) to ensure that they are safe, stable, non-polluting, integrated with the surrounding landscape and in a state capable of supporting self-sustaining, functional ecosystems; and

(c) in accordance with the most recent revised Mine Closure Plan required by condition 26.

Definitions

In this licence, the terms in Table 11 have the meanings defined.

Table 11: Definitions

Term	Definition
ACN	Australian Company Number.
Active TSF / Cell	means any tailings storage facility or cell that is receiving tailings or is included in FMR Investment Pty Ltd's TSF Operational Manual and/or tailings deposition schedule.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12-month period commencing from 1 August until 31 July of the immediately following year.
AS 1289.5.1.1	means the Australian Standard AS 1289.5.1.1 *Methods of testing soils for engineering purposes, Method 5.1.1: Soil compaction and density tests – Determination of the dry density/ moisture content relation of a soil using standard compactive effort.*
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 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters.*
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
CEMS	means Continuous Emission Monitoring System.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed in accordance with the Licence.

Term	Definition
environmentally hazardous materials	means any liquors or slurries (solid and liquids in solution) that are either alkaline, acidic, saline, toxic or have the potential to cause environmental harm if released to the environment.
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA).
HDPE	means high density polyethylene.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
mbgl	means metres below ground level.
Mine Closure Plan Guidance	means the most recent version of the *Guidelines: Mine Closure Plan Guidance – How to prepare in accordance with Part 1 of the Statutory Guidelines for Mine Closure Plans*, published by the Department of Mines, Industry Regulation and Safety.
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.
OMC	means optimal moisture content at which the SMDD is achieved.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following

Term	Definition
	year, 1 January to 31 March.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
SMDD	means Standard Maximum Dry Density, as per AS 1289.5.1.1 for testing of a representative material sample of that to be compacted in the field.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
suitably qualified professional 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 geotechnical engineering, or is otherwise approved by the CEO to act in this capacity.
TSF	Tailing storage facility.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

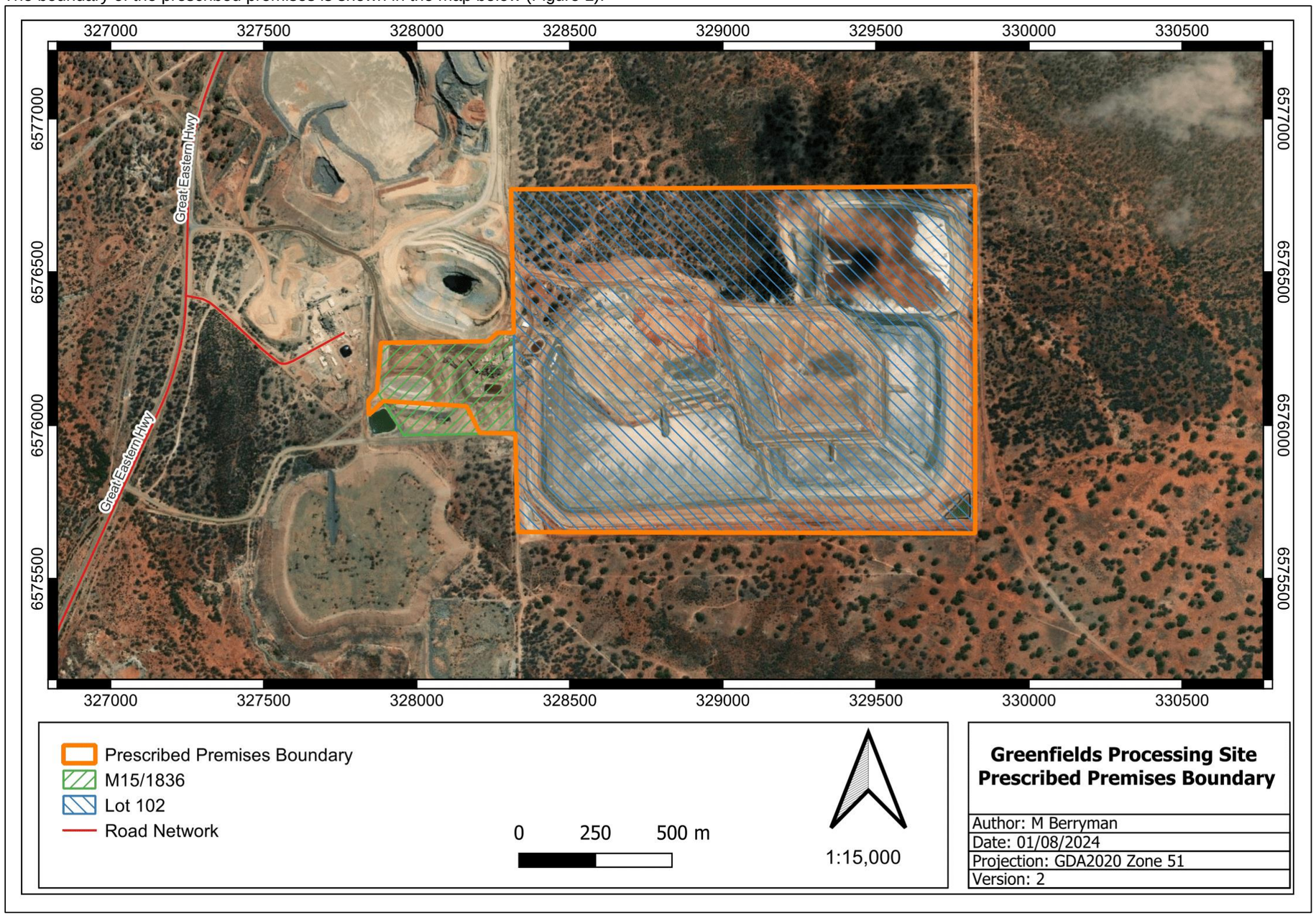

Figure 1: Map of the boundary of the prescribed premises

Map of monitoring locations

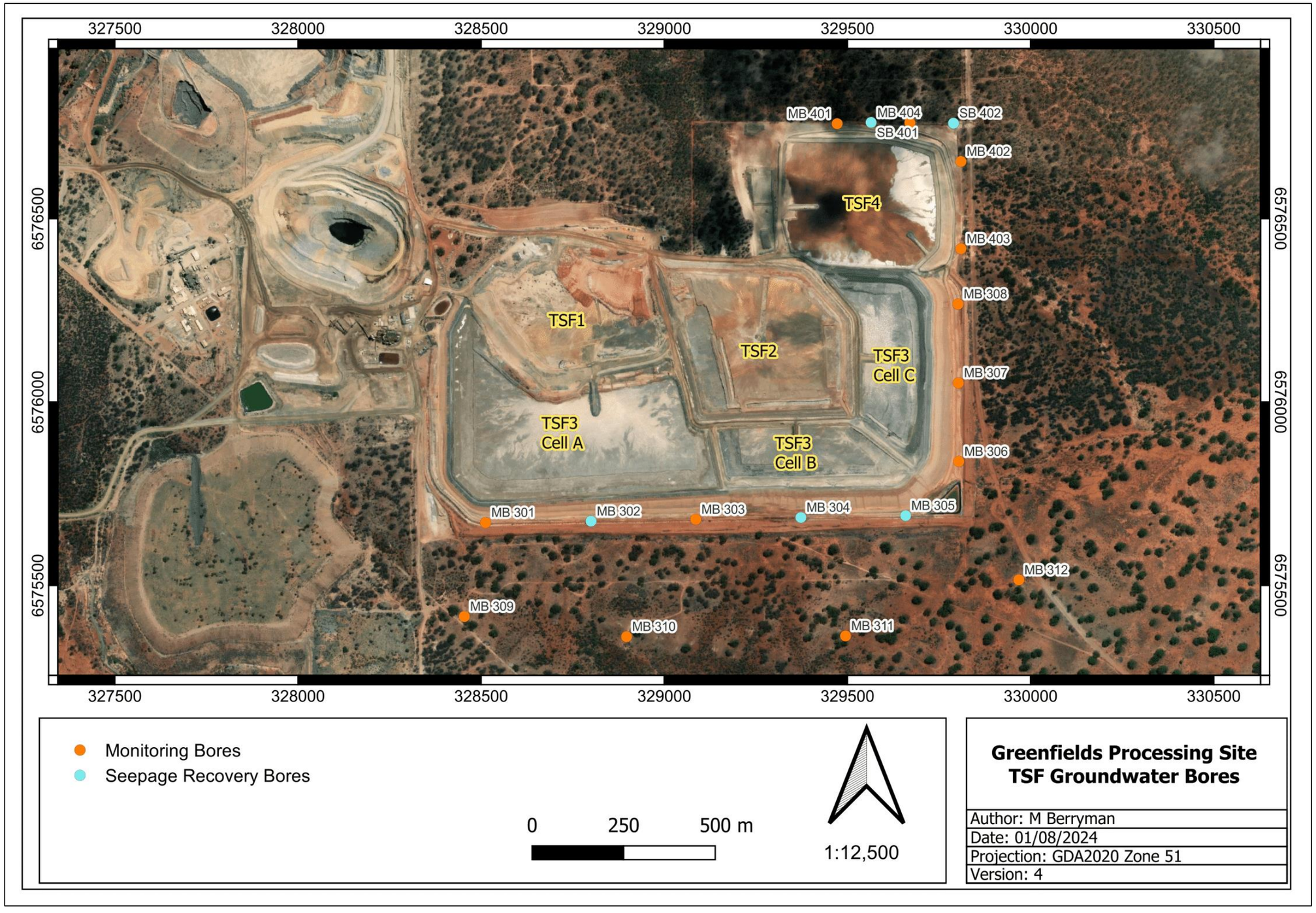

Figure 2: Location of groundwater monitoring bores surrounding the TSF

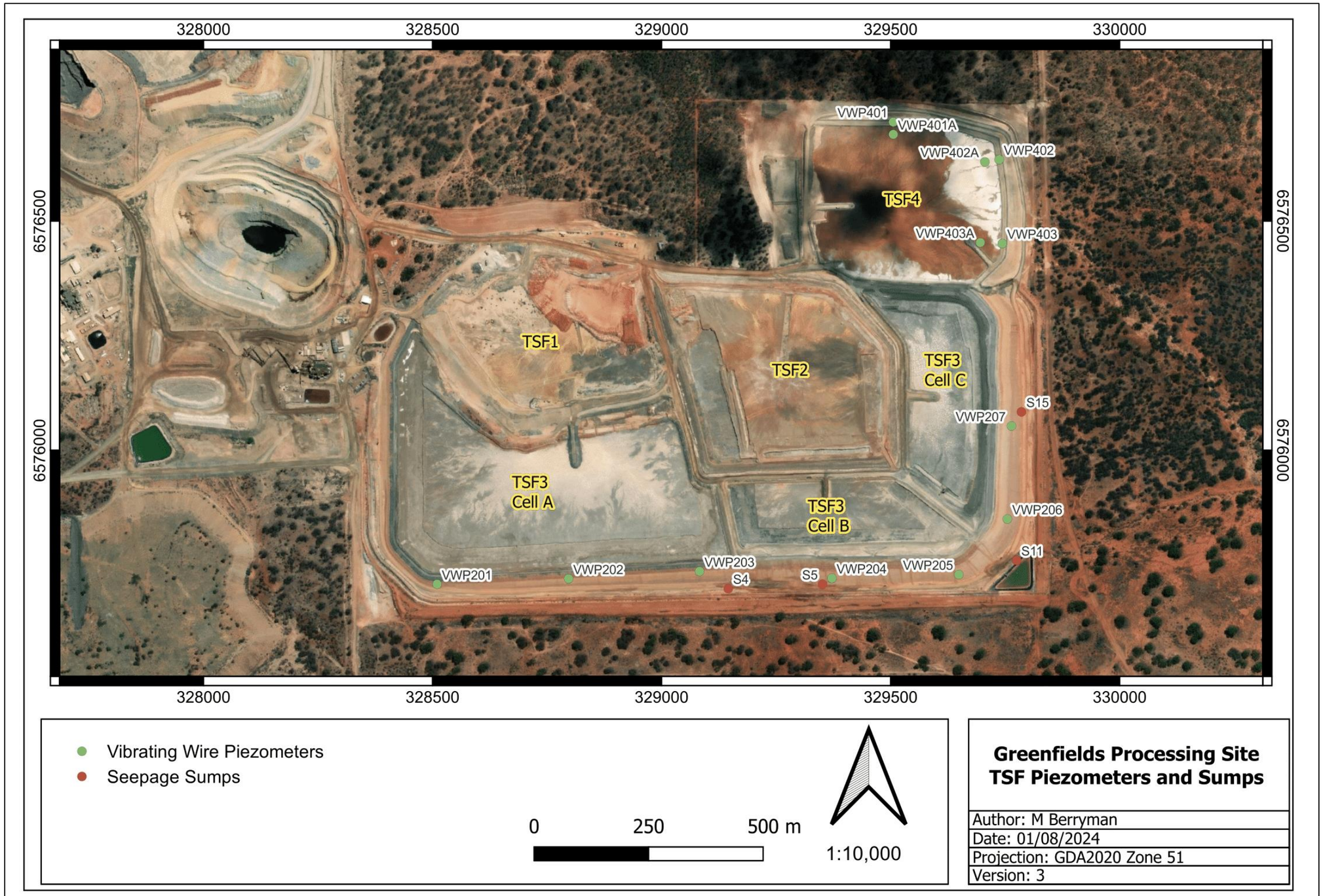

Figure 3: Vibrating wire piezometer and seepage sump locations surrounding the TSF

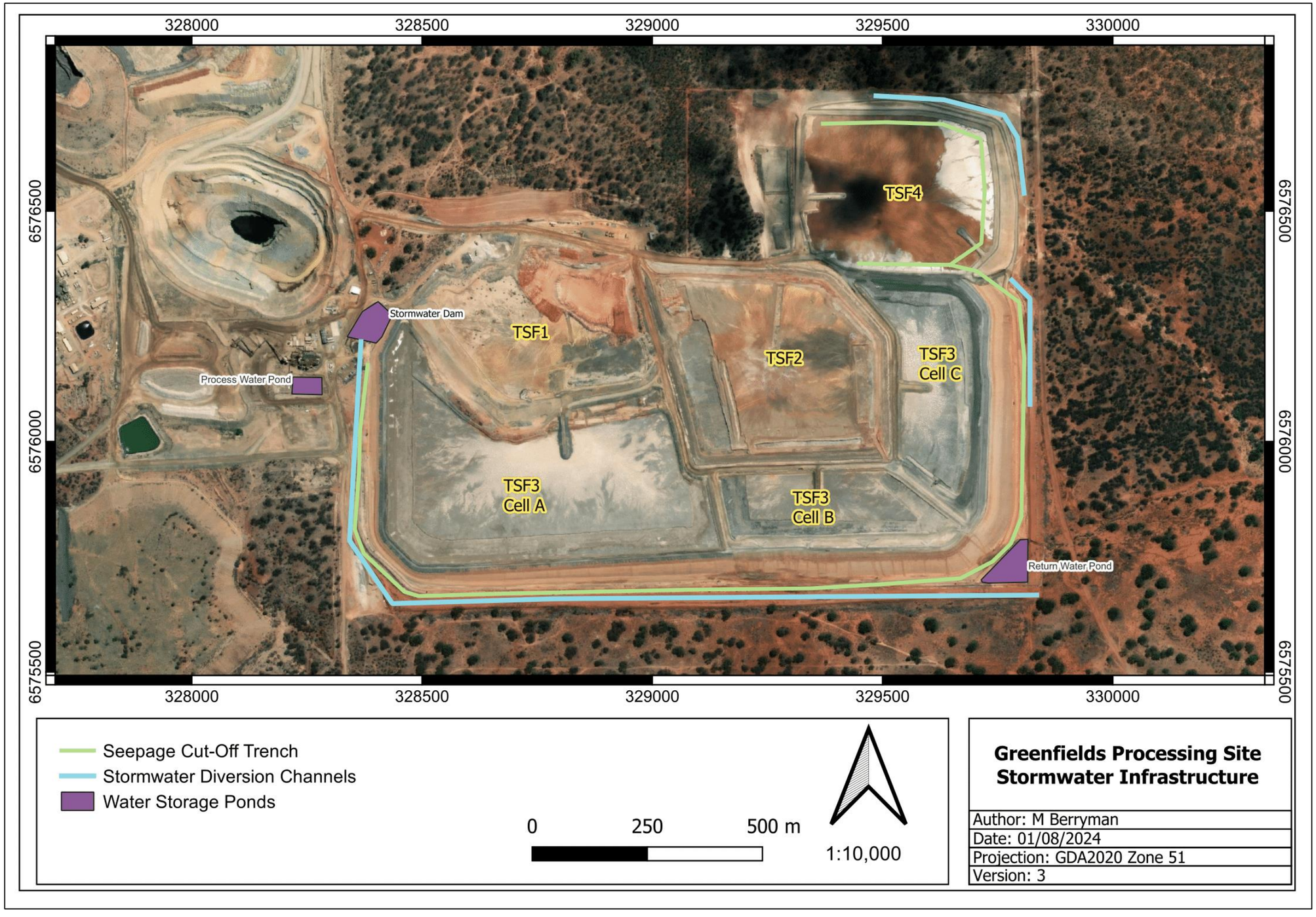

Figure 4: Location of seepage cut-off trench, stormwater diversion channel, and water storage infrastructure

Schedule 2: Construction drawings

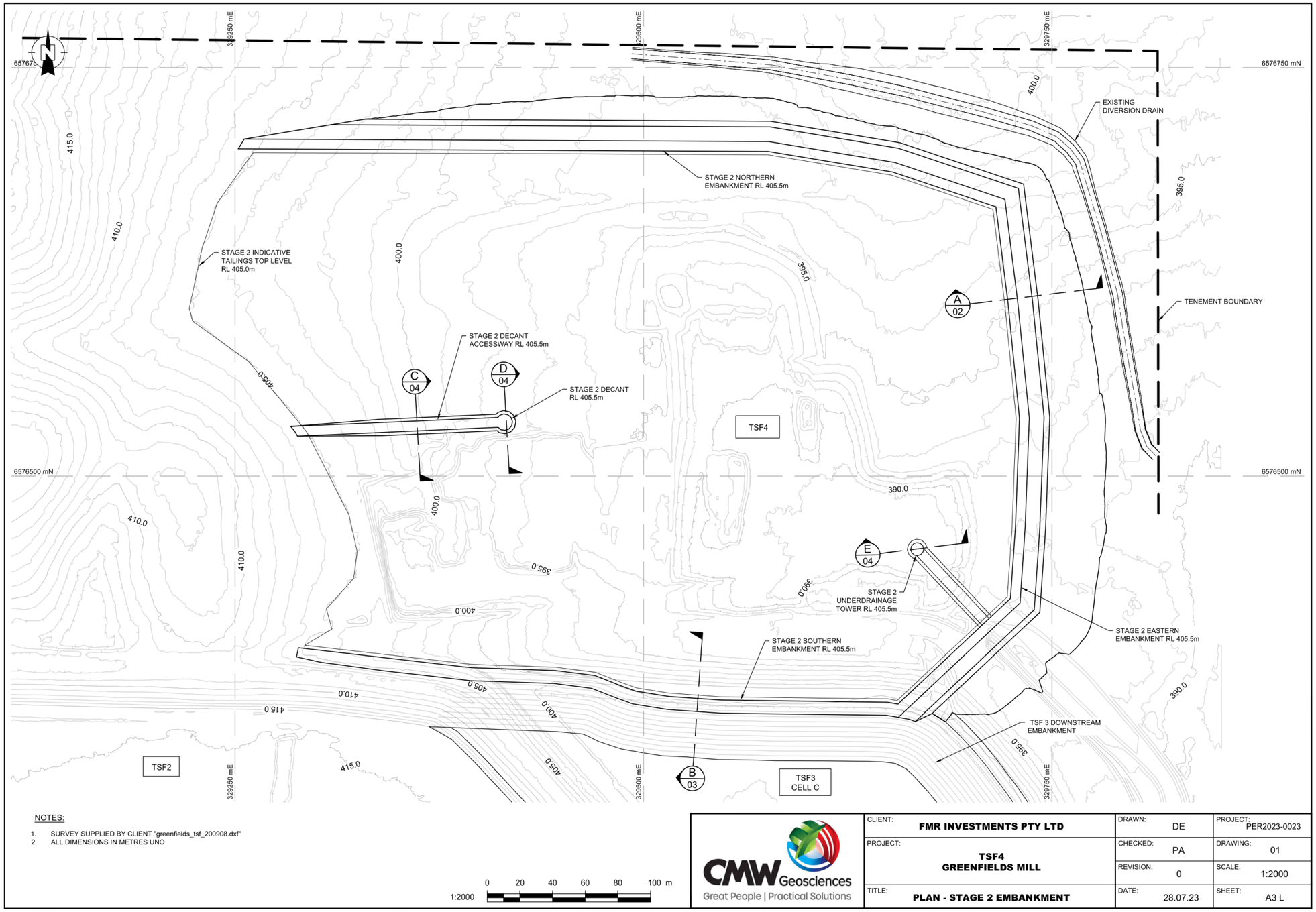

Figure 5: Design drawing for TSF4 Stage 2 embankment raise

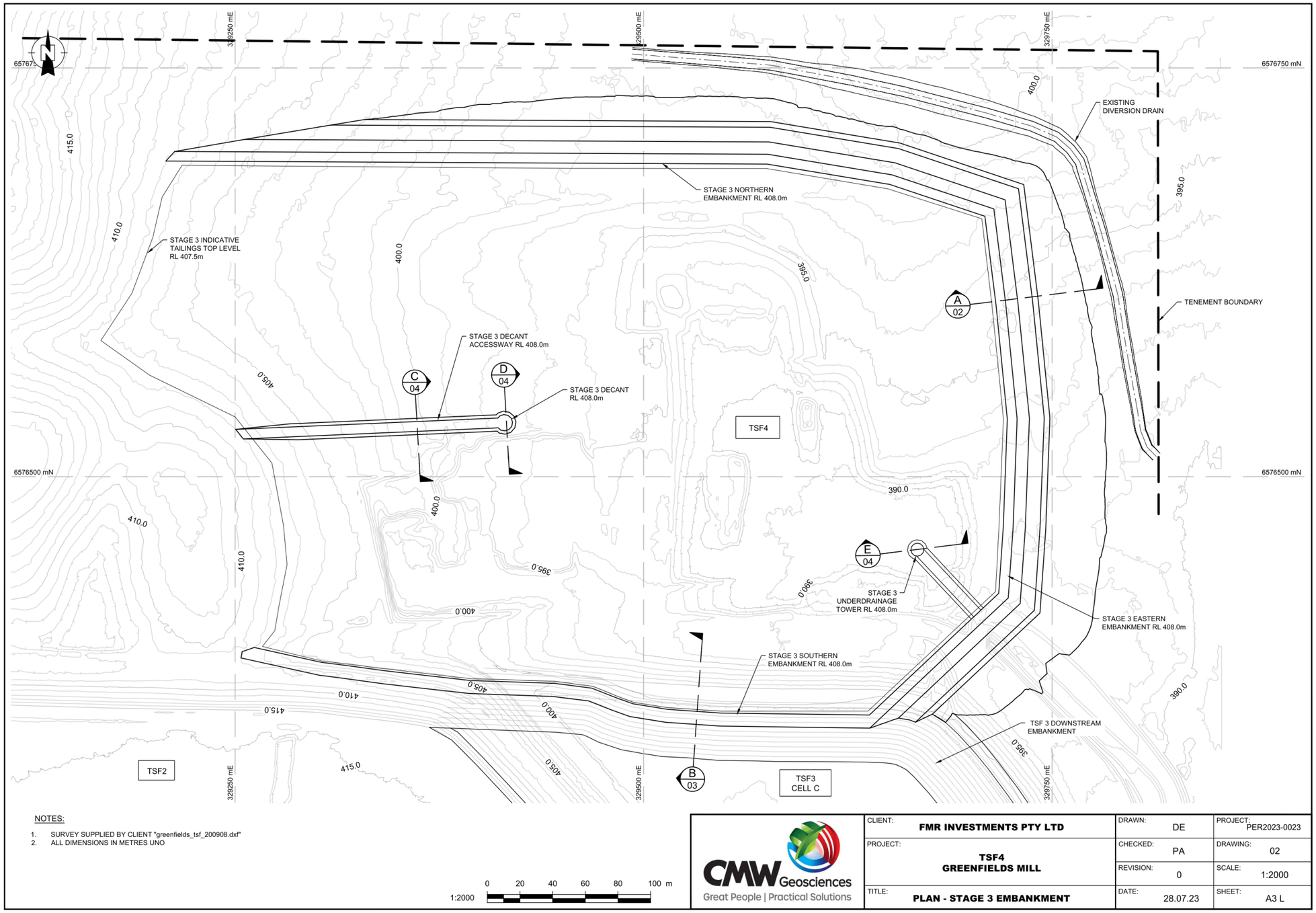

Figure 6: Design drawing for TSF4 Stage 3 embankment raise

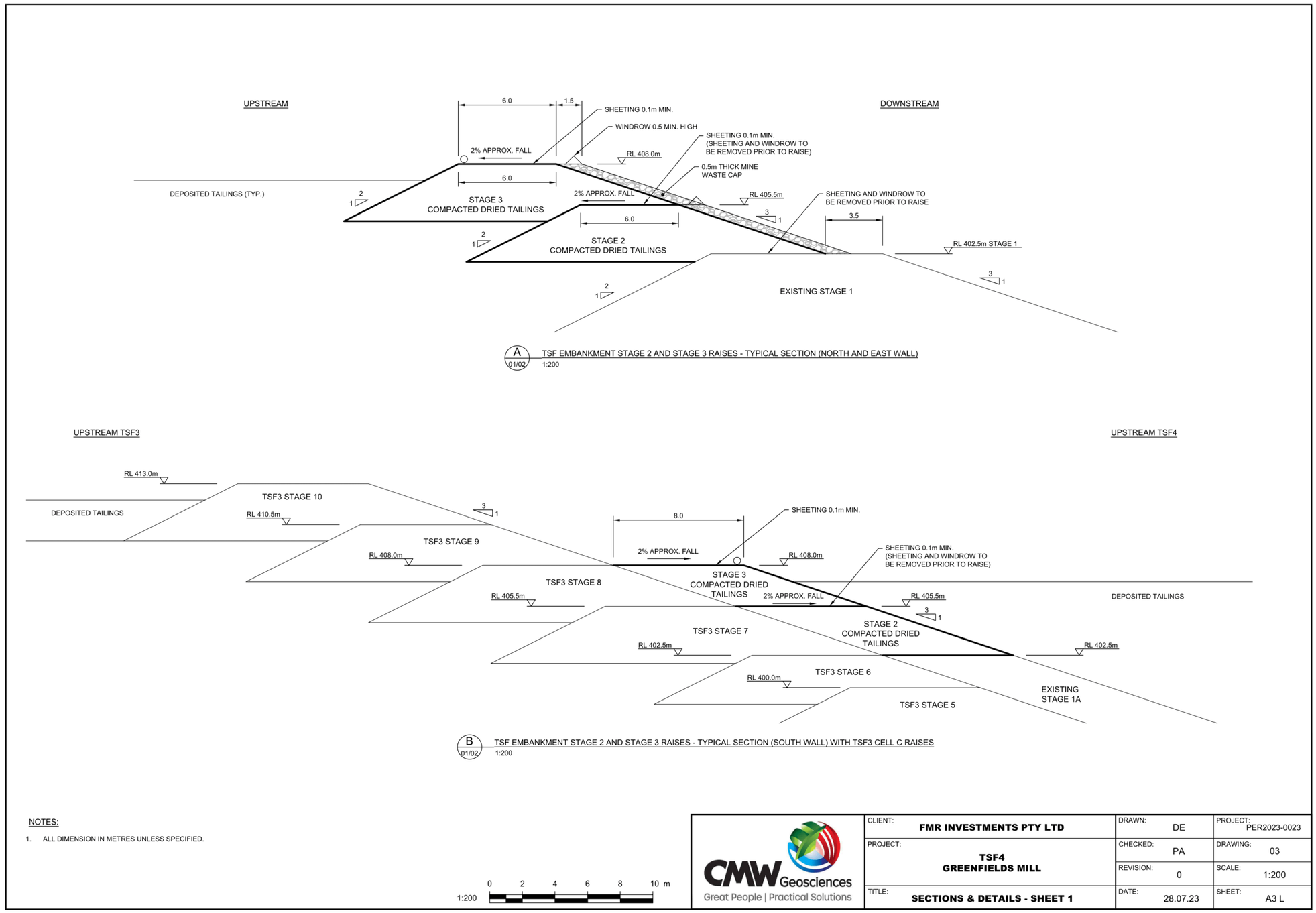

Figure 7: Design drawing (cross-section) for TSF4 Stage 2 and 3 embankment raises

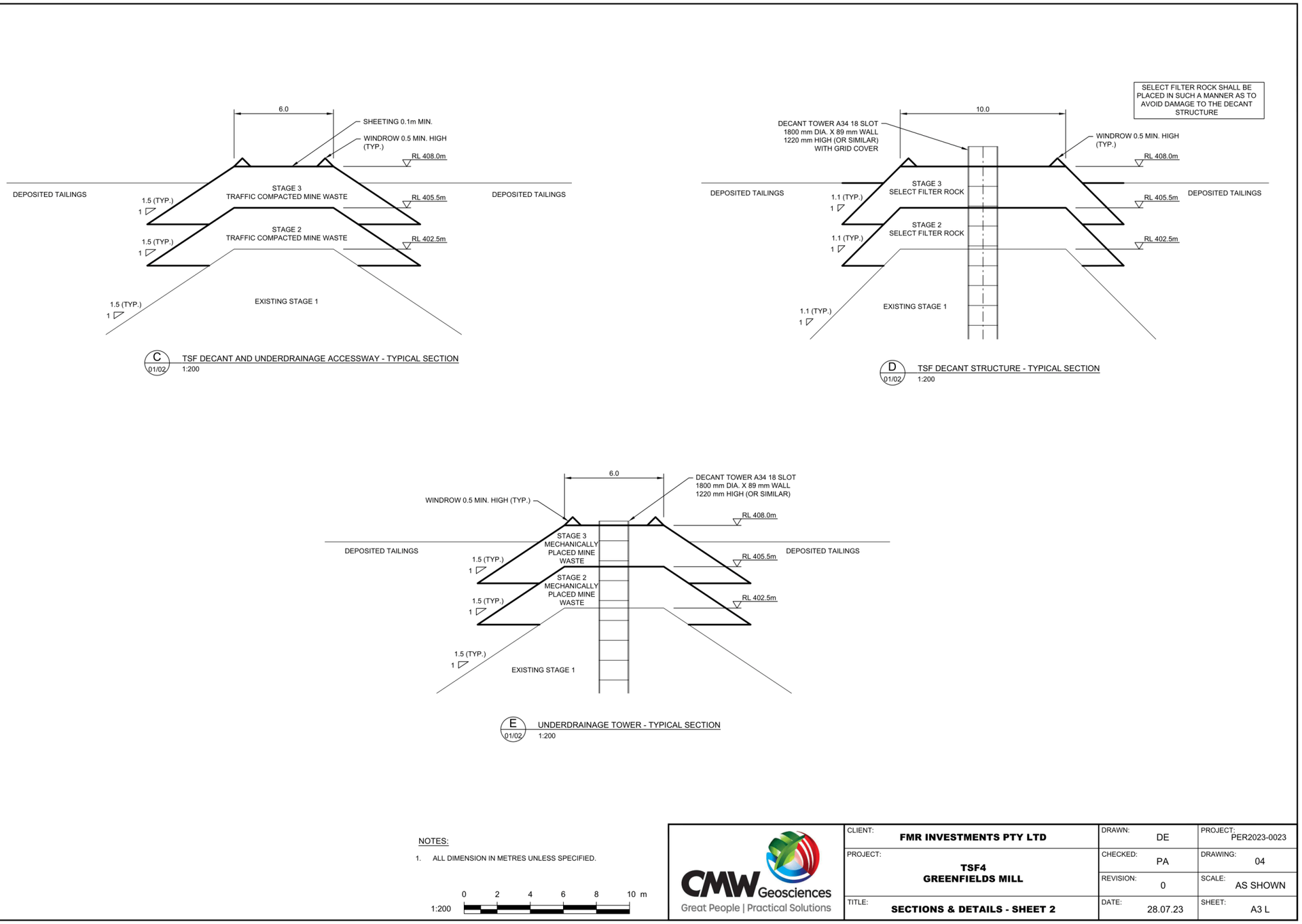

Figure 8: Design drawing for TSF4 Stage 2 and 3 embankment raises – decant structure, underdrainage tower and accessway

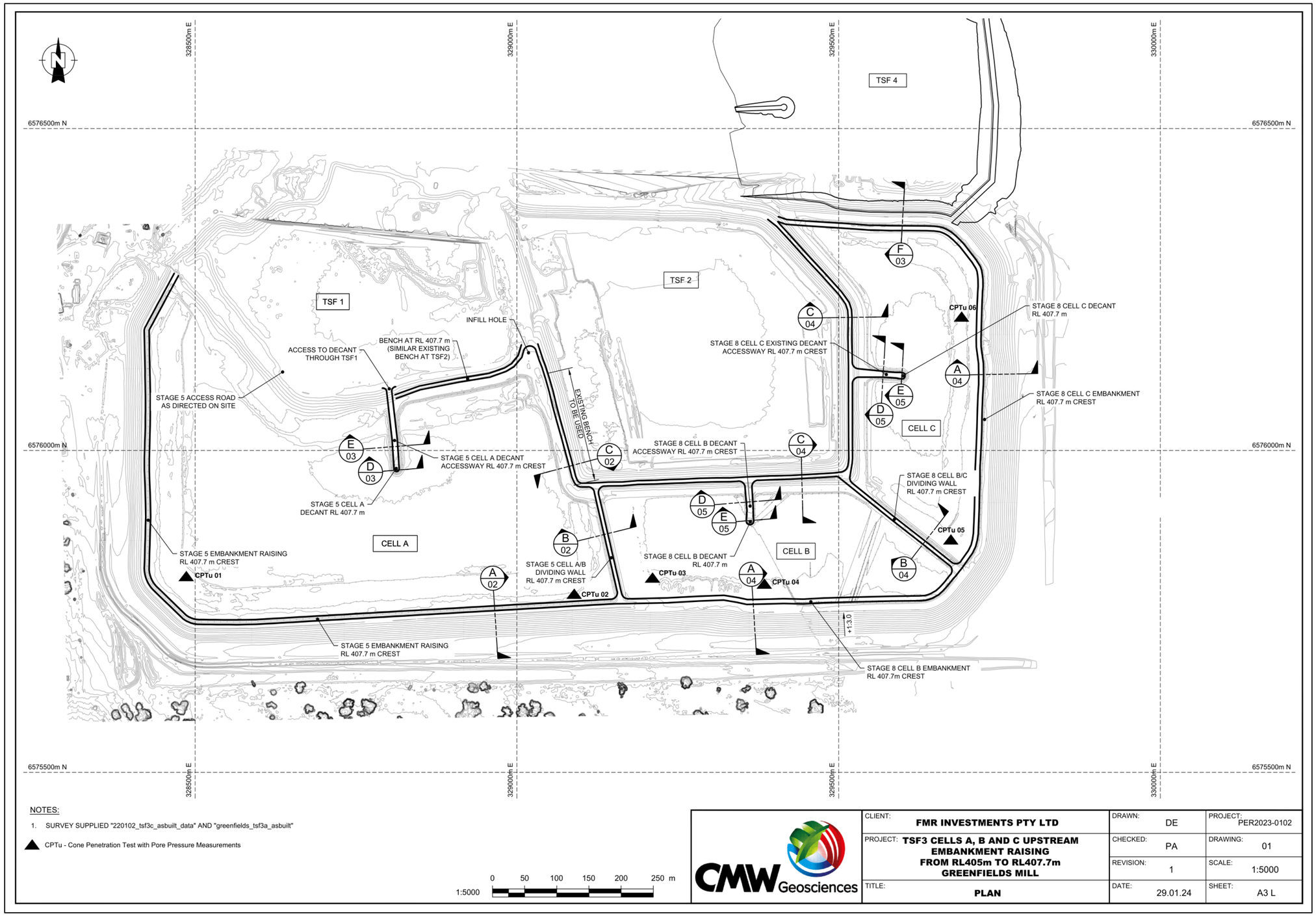

Figure 9: Design drawing for TSF3 Cell A (Stage 5), Cell B (Stage 8), and Cell C (Stage 8) embankment raise to RL 407.7 m

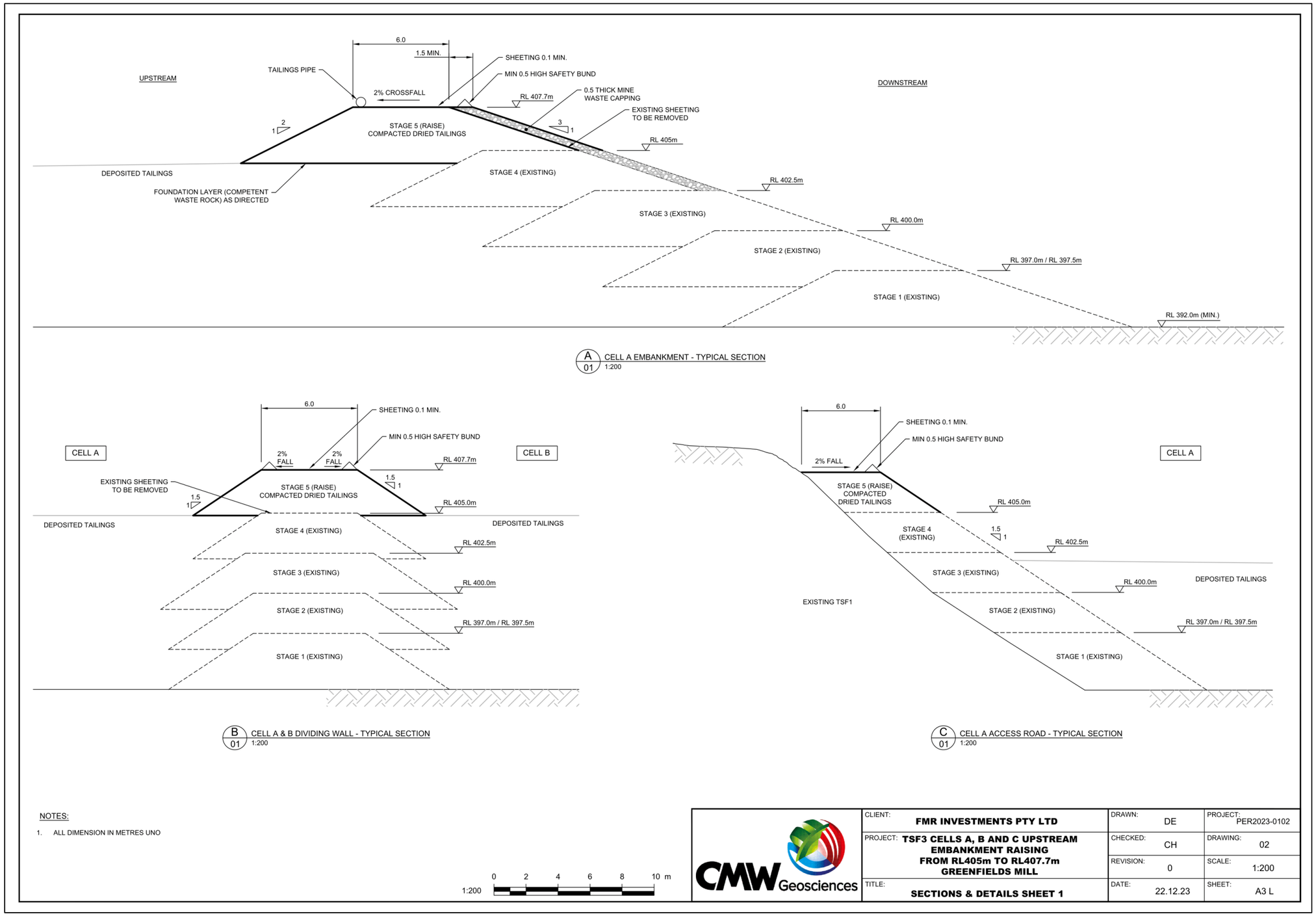

Figure 10: Design drawing (cross-section) for TSF3 Cell A Stage 5 embankment raise

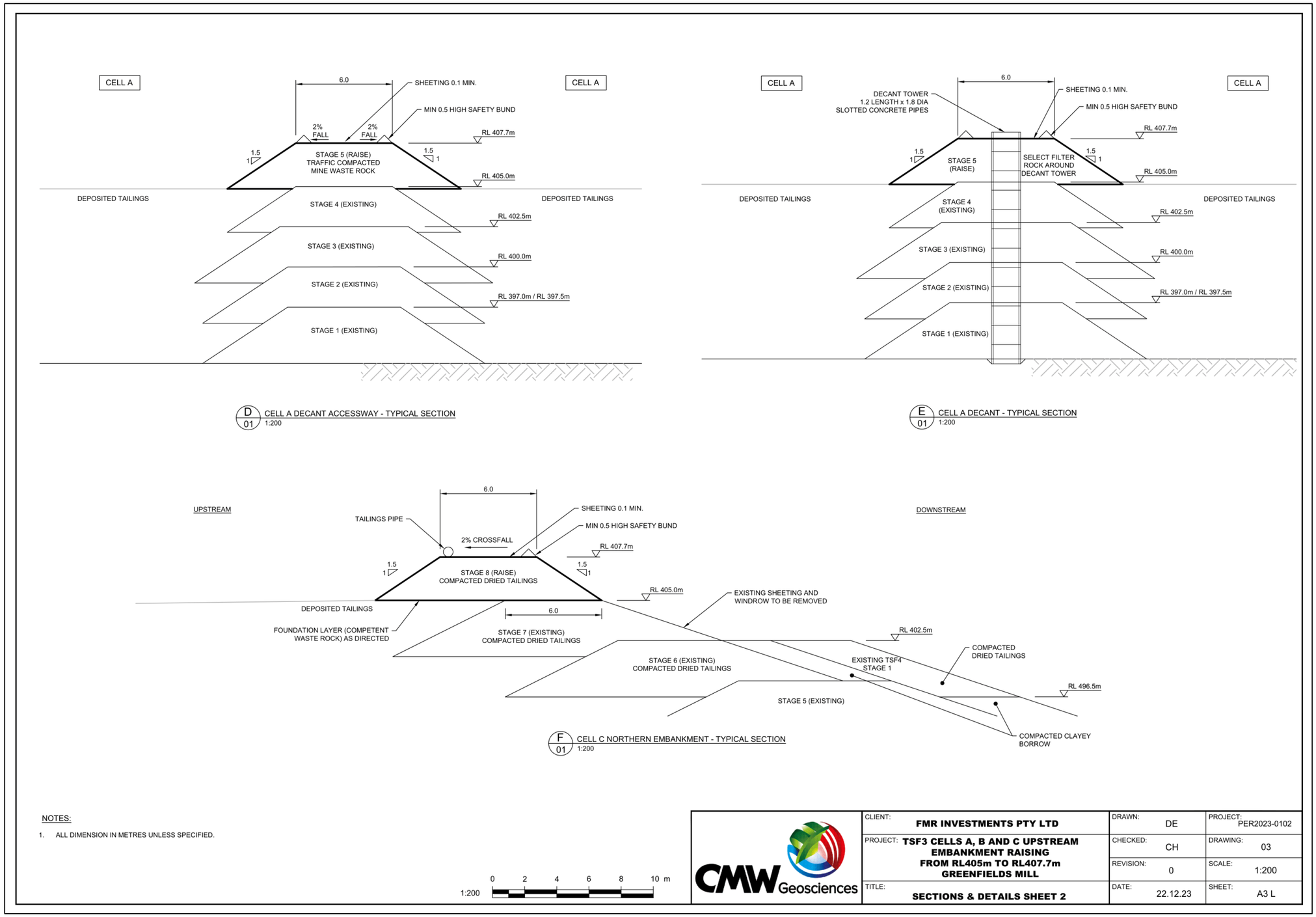

Figure 11: Design drawing (cross-section) for TSF3 Cell A Stage 5 embankment raise – decant structure and accessway and Cell C Stage 8 northern embankment raise

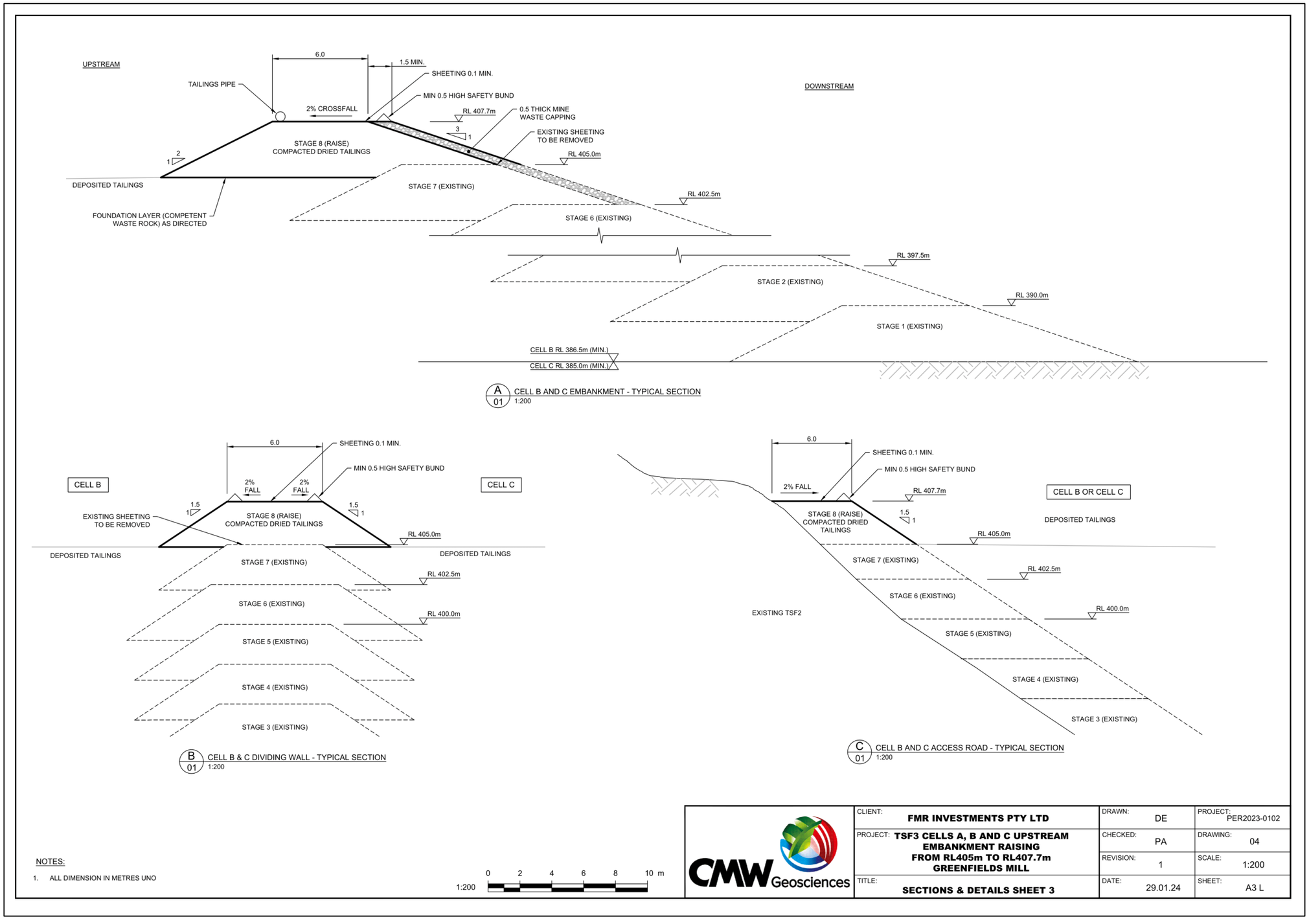

Figure 12: Design drawing (cross-section) for TSF3 Cell B and Cell C Stage 8 embankment raise

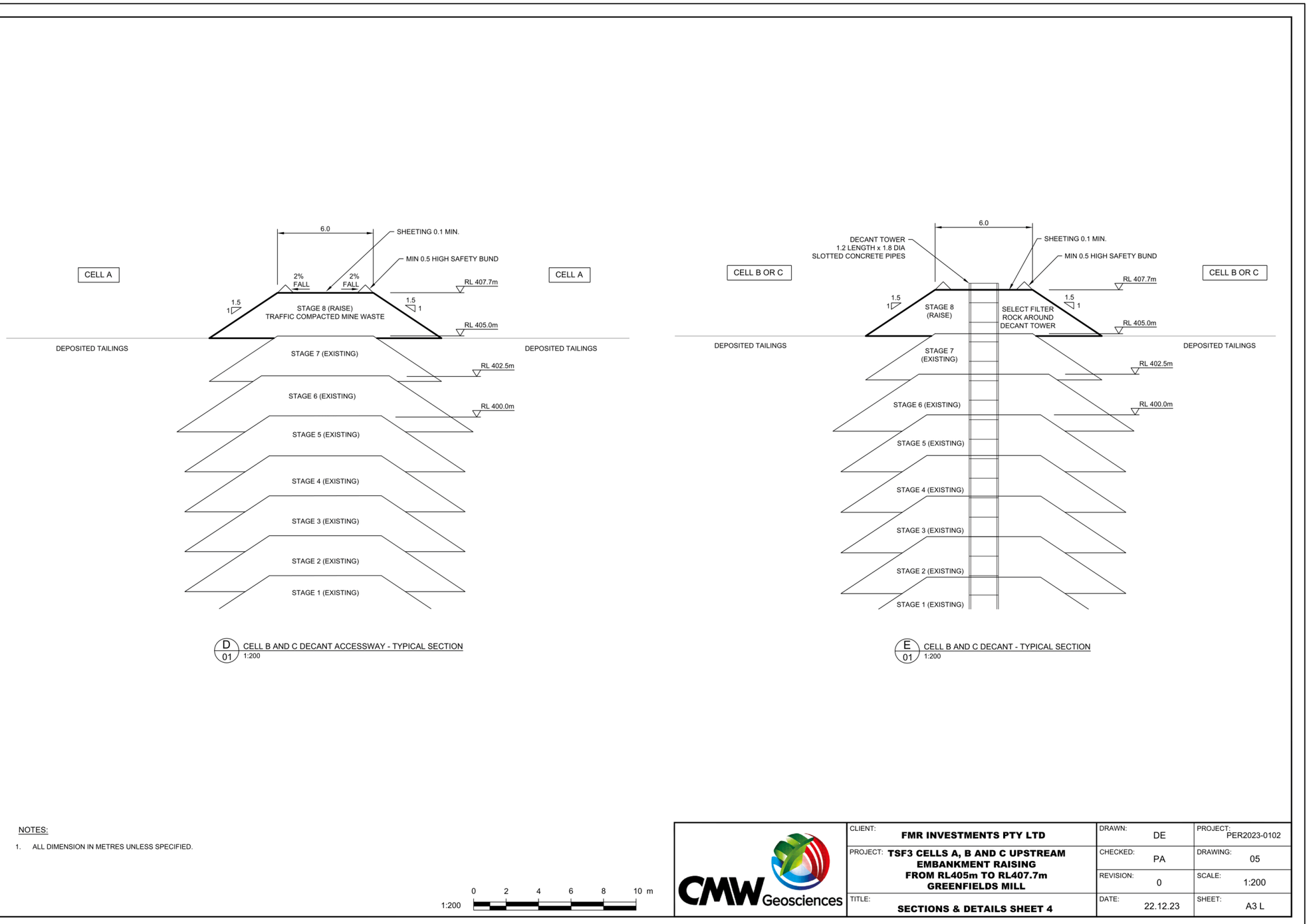

Figure 13: Design drawing (cross-section) for TSF3 Cell B and Cell C Stage 8 embankment raise – decant structure and accessway

Schedule 3: Monitoring bore and piezometer details

The location of groundwater monitoring and seepage recovery bores is defined by the coordinates in Table 12.

Table 12: Groundwater monitoring bore coordinates (GDA2020) and depths

Bore ID	Easting	Northing	Zone	Depth of bore (mbgl)
MB301	328,513	6,575,673	51	18[1]
MB302	328,801	6,575,677	51	18[1]
MB303	329,087	6,575,682	51	18[1]
MB304	329,374	6,575,687	51	25[1]
MB305	329,660	6,575,692	51	25[1]
MB306	329,805	6,575,840	51	35[1]
MB307	329,804	6,756,053	51	35[1]
MB308	329,803	6,576,269	51	35[1]
MB309	328,455	6,575,417	51	21.81
MB310	328,898	6,575,362	51	19.57
MB311	329,496	6,575,364	51	28.38
MB312	329,969	6,575,517	51	27.65
MB401	329,473	6,576,761	51	42.1
MB402	329,811	6,576,658	51	40.8
MB403	329,811	6,576,420	51	40.7
MB404	329,674	6,576,783	51	18.35
SB401	329,578	6,576,830	51	12.65
SB402	329,791	6,576,769	51	12.40

Note 1: Estimated based on initial groundwater depth as original bore construction report is unavailable.

The location of the vibrating wire piezometers is defined by the coordinates in Table 13.

Table 13: Vibrating wire piezometer (VWP) coordinates (GDA2020) and depths

Bore ID	Easting	Northing	Zone	Depth of shallow VWP (mbgl)	Depth of deep VWP (mbgl)
VWP201	328,512	6,575,710	51	7.5	23.9
VWP202	328,798	6,575,722	51	8.5	26.2
VWP203	329,085	6,575,738	51	3.0	7.5
VWP204	329,374	6,575,723	51	14.0	39.2
VWP205	329,650	6,575,731	51	14.5	40.8
VWP206	329,756	6,575,852	51	18.0	50.9
VWP207	329,765	6,576,055	51	15.0	48.7
VWP208	329,766	6,576,268	51	10.2	17.5

Bore ID	Easting	Northing	Zone	Depth of shallow VWP (mbgl)	Depth of deep VWP (mbgl)
VWP401	329,507	6,576,721	51	0.3	7.0
VWP402	329,741	6,576,636	51	0.3	13.0
VWP403	329,749	6,576,453	51	0.3	13.0