



<b>Works approval number</b>	W5651/2014/1
<b>Works approval holder</b>	Black Cat (Paulsens) Pty Ltd
<b>ACN</b>	657 781 194
<b>Registered business address</b>	Level 3 52 Kings Park Road WEST PERTH WA 6005
<b>DWER file number</b>	DER2014/000773-1
<b>Duration</b>	25/08/2014 to 24/08/2029
<b>Date of issue</b>	28/09/2023
<b>Premises details</b>	Paulsen's Gold Operation Nanutarra-Munjina Road PARABURDOO WA 6754 Mining Lease M08/99 and M08/196 as depicted in Schedule 1

<b>Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)</b>	<b>Assessed production or design capacity</b>
Category 5: Processing or beneficiation of metallic or non-metallic ore	500,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 28 September 2023, by:

**A/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
21/08/2014	W5651/2014/1	Works approval granted.
15/05/2019	W5651/2014/1	Amendment Notice 1 Extension of the expiry date.
28/09/2023	W5651/2014/1	Transfer Works Approval to Black Cat (Paulsens) Pty Ltd, extend expiry date, remove references of the Premises being in care and maintenance, and update to current formatting and to include conditions for Paulsens TSF stage 8 and 9 (already approved but yet to be constructed).

## 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 construct and/or install the infrastructure listed in Table 1, in accordance with;
  - (a) the corresponding design and construction requirement or installation requirement; and
  - (b) at the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,
 as set out in Table 1.

**Table 1: Design and construction or installation requirements**

Infrastructure	Design and construction or installation requirements	Infrastructure location	Timeframe
Tailings delivery and pipelines	<ul style="list-style-type: none"> <li>• Pipelines contained within defined bunded pipeline corridors to contain pipeline leaks equal to the time between routine inspections.</li> <li>• The pipelines will be fitted with a telemetry system to monitor pressure deviations and activate automatic shutdown and/or diversion of tailings flow if a leak were to occur.</li> </ul>	N/A	Installed throughout: Stage 8 Stage 9
Spigots	<ul style="list-style-type: none"> <li>• Located along the perimeter embankments.</li> <li>• At a maximum of approximately 20 m centres.</li> <li>• Valves on each spigot to allow them to open and close as required.</li> </ul>	N/A	Installed throughout: Stage 8 Stage 9
Transient return water pipeline	N/A	N/A	During Stage 1: Initial construction

2. 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 locations; as set out in Table 2.

**Table 2: Critical containment infrastructure design and construction requirements**

	Infrastructure	Design and construction requirements	Infrastructure location
1	Paulsens Tailings Storage Facility	<ul style="list-style-type: none"> <li>• Constructed within M08/196 and M08/99;</li> <li>• Maximum storage capacity of 5,604,350 tonnes (3,502,720 m<sup>3</sup>) of tailings material;</li> <li>• Maximum storage area of 39.9 hectares;</li> <li>• Constructed to provide a minimum 0.3 m freeboard; including a minimum contingency freeboard of 500 mm to allow for:               <ul style="list-style-type: none"> <li>○ 1:100 year ARI 72 hour period</li> <li>○ 1:10 year ARI wet season run-off</li> <li>○ 1:100 year design extreme storm event, above the normal operating pond.</li> </ul> </li> </ul>	Schedule 1: Figure 2 Figure 4 Figure 7 Figure 10
2	Embankment raise	<ul style="list-style-type: none"> <li>• Refer to condition 3, Table 3 for staged lift heights;</li> <li>• 210.15 RL maximum height;</li> <li>• Embankment crest width 5.5 m;</li> <li>• Downstream slope 3.3<sub>H</sub>:1<sub>V</sub> and upstream slope 2<sub>H</sub>:1<sub>V</sub>;</li> <li>• At lateral embankment extensions, cut-off trenches are tied in to the existing cut-off trench and excavated to refusal in weathered rock;</li> <li>• Embankment crests graded at 2 % to the upstream side to facilitate surface water drainage to the tailings beach;</li> <li>• Erosion protection provided to the downstream faces of embankments,</li> <li>• A 55 cm high windrow is required at the downstream edge of the crest;</li> <li>• Upstream raising embankments are to be constructed using tailings and rockfill;</li> <li>• Borrow pits a minimum distance of 25 m from the embankment toe and excavated to a maximum depth of 2 m.</li> </ul>	Figure 5 Figure 8 Figure 11
3	Spillway	<ul style="list-style-type: none"> <li>• Overflow capacity to accommodate for a 1:1000 AEP storm event;</li> <li>• Flow capacity of 4.0 m<sup>3</sup>/s;</li> <li>• Comprises a 300 mm deep and 20 m wide channel.</li> <li>• Spillway invert corresponds to or is higher than the cumulative storm storage and freeboard contingency elevation for each construction stage.</li> <li>• The stage 8 and 9 spillway locations comprise cuts of up to 1.7 m in natural ground.</li> </ul>	Figure 6 Figure 9

3. The works approval holder is authorised to construct embankment raises for the Paulsens Tailings Storage Facility to the construction height as specified in Table 3.

**Table 3: Staged construction heights for the Paulsens Tailings Storage Facility**

Stage	Raise amount (m)	Maximum embankment crest height (m)	Beach / embankment Crest elevation RL (m AHD)	Perimeter embankment length (m)	Reference drawings
8	1.5	16.35	208.65	1675	Figure 5 Figure 11
9	1.5	17.85	210.15	1700	Figure 8 Figure 11

4. The works approval shall ensure that all material used for the recovery, removal, and/or disposal of environmentally hazardous materials is stored in an impermeable container prior to disposal at an appropriately authorised facility.

### Compliance reporting

5. The works approval holder must within 60 days of each item of infrastructure required by condition 1 being constructed:
- undertake an audit of their compliance with the requirements of condition 1; and
  - prepare and submit to the CEO an audit report on that compliance
6. The Environmental Compliance Report required by condition 5, must include as a minimum the following:
- certification by a suitably qualified engineer that the items of infrastructure as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.
7. The works approval holder must within 60 calendar days of the Critical Containment Infrastructure identified by condition 2 and the stage identified by condition 3 being constructed:
- undertake an audit of their compliance with the requirements of conditions 2 and 3; and
  - prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.
8. The Critical Containment Infrastructure Report required by condition 7 must include as a minimum the following:
- certification by a suitably qualified engineer that each item of critical containment infrastructure or component thereof, as specified in condition 2 and the stage identified by condition 3, has been built and installed in accordance with the requirements specified in conditions 2 and 3;

- (b) as constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, and the stage identified by condition 3, as specified in conditions 2 and 3;
- (c) photographic evidence of the installation of the infrastructure;
- (d) be signed by a person authorised to represent the works approval holder and contain the printed name and position of that person; and
- (e) monitoring data indicating the baseline ambient environmental conditions at the premises prior to and immediately following construction of the item(s) of infrastructure.

## Environmental commissioning phase

### Environmental commissioning requirements and emission limits

9. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 1 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with conditions 5 and 7 of this works approval.
10. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 4 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration.

**Table 4: Environmental commissioning requirements**

Infrastructure	Commissioning requirements	Authorised commissioning duration
Paulsens Tailings Storage Facility	Stage 8: Subject to completing the requirements of conditions 5 and 7.	For a period not exceeding 30 calendar days in aggregate.
	Stage 9: Subject to completing the requirements of conditions 5 and 7.	
Spigots	Subject to completing the requirements of condition 5 for the pipelines and spigots.	

11. During environmental commissioning, the works approval holder must ensure that the emission(s) specified in Table 5, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

**Table 5: Authorised discharge points during commissioning**

Emission	Discharge point	Discharge point location
Tailings	Paulsens Tailings Storage Facility via spigots located along the perimeter	As shown in Schedule 1, Figure 2.

## Monitoring during environmental commissioning

12. The works approval holder must monitor the groundwater during environmental commissioning for concentrations of the identified parameters in accordance with Table 6.

**Table 6: Monitoring of ambient concentrations during environmental commissioning**

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method	
					Sampling	Analysis
PMB1 <sup>1</sup> PMB2 <sup>1</sup>	Standing Water Level (SWL) <sup>2</sup>	mbgl	Once prior to tailings deposition and once after	Spot sample	Spot sample in accordance with AS/NZS 5667.11	In-field
PMB3 PMB3A	pH	pH units				
PMB4 PMB5 PMB6 PMB6A PMB7 PMB8 PMB9 PMB9A PMB10 PMB11	Total Dissolved Solids (TDS)  <u>Major Anions and Cations</u> Copper (Cu) Arsenic (As) Chromium (Cr) Aluminium (Al) Cadmium (Cd) Iron (Fe) Manganese (Mn) Nickel (Ni) Selenium (Se) Zinc (Zn) Lead Pb) Antimony (Sb) Cobalt (Co) Thallium (Tl) Weak Acid Dissociable Cyanide (WADCN) Total Nitrogen Total Phosphorus Sulfate (SO <sub>4</sub> ) Fluoride (F) Mercury (Hg) Total Cyanide (CN)	mg/L			NATA accredited laboratory	

Note 1: When groundwater is present.

Note 2: SWL shall be determined prior to collection of other water samples.

13. The works approval holder must record the results of all monitoring activity required by condition 12.

## Environmental commissioning reporting

14. 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 4.

- 15.** The works approval holder must ensure the Environmental Commissioning Report required by condition 14 of this works approval includes the following:
- (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of tailings processed;
  - (b) the ambient concentrations monitoring results recorded in accordance with condition 13;
  - (c) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed (as applicable), which at minimum includes records detailing the (for example):
    - (i) environmental commissioning of the infrastructure; and
    - (ii) testing the infrastructure.
  - (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
  - (e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

## Time limited operations phase

### Commencement and duration

- 16.** The works approval holder may only commence time limited operations for an item of critical containment infrastructure identified in condition 2:
- (a) where the infrastructure does require commissioning, the Environmental Commissioning Report for that item of infrastructure as required by condition 14 has been submitted to the CEO; and
  - (b) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 7 meets the requirements of that condition.
- 17.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 18 (as applicable):
- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 16 (as applicable) 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 a licence or licence amendment is granted before the end of the period specified in condition 17(a).

### Time limited operations requirements and emission limits

- 18.** During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 7 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 7.



**Table 7: Infrastructure and equipment requirements during time limited operations**

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1	Paulsens Tailings Storage Facility	<p>Maintain at all times at least a 300mm freeboard.</p> <p>Undertake daily visual inspection at a minimum for the following:</p> <ul style="list-style-type: none"> <li>(a) tailings delivery pipelines;</li> <li>(b) return water lines;</li> <li>(c) tailings deposition;</li> <li>(d) ponding on the surface of the TSF;</li> <li>(e) internal embankment freeboard; and</li> <li>(f) toe drains and silt trap for any leakage.</li> </ul> <p>A daily log book is kept of all visual inspections for the TSF and pipelines.</p>	Figure 2

19. During time limited operations, the works approval holder must ensure that the emission specified in Table 8, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

**Table 8: Authorised discharge points**

Emission	Discharge point	Discharge point location
Tailings	Paulsens Tailings Storage Facility via spigots located along the perimeter	As shown in Schedule 1, Figure 2.

### Monitoring during time limited operations

20. The works approval holder must monitor the groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 9.

**Table 9: Monitoring of ambient concentrations during time limited operations**

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method	
					Sampling	Analysis
PMB1 <sup>1</sup> PMB2 <sup>1</sup>	Standing Water Level (SWL) <sup>1</sup>	mbgl	Quarterly	Spot sample	Spot sample in accordance with AS/NZS 5667.11	In-field
PMB3 PMB3A	pH	pH units				
PMB4 PMB5	Total Dissolved Solids (TDS)	mg/L				
PMB6 PMB6A PMB7	<u>Major Anions and Cations</u> Copper (Cu) Arsenic (As) Chromium (Cr)					NATA accredited laboratory

Monitoring location	Parameter	Unit	Frequency	Averaging period	Method	
					Sampling	Analysis
PMB8	Aluminium (Al)					
PMB9	Cadmium (Cd)					
PMB9A	Iron (Fe)					
PMB10	Manganese (Mn),					
PMB11	Nickel (Ni)					
	Selenium (Se)					
	Zinc (Zn)					
	Lead Pb)					
	Antimony (Sb)					
	Cobalt (Co)					
	Thallium (Tl)					
	Weak Acid					
	Dissociable					
	Cyanide (WADCN)					
	Total Nitrogen					
	Total Phosphorus					
	Sulfate (SO4)					
	Fluoride (F)					
	Mercury (Hg)					
	Total Cyanide (CN)					

Note 1: When groundwater is present.

Note 2: SWL shall be determined prior to collection of other water samples.

## Compliance reporting

21. 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.
22. The works approval holder must ensure the report required by condition 21 includes the following:
  - (a) a summary of the time limited operations, including timeframes and amount of tailings processed;
  - (b) a summary of ambient monitoring results obtained during time limited operations under condition 20;
  - (c) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable), which includes records detailing the:
    - (i) tailings delivery pipelines;
    - (ii) return water lines;
    - (iii) tailings deposition;
    - (iv) ponding on the surface of the TSF;
    - (v) internal embankment freeboard; and
    - (vi) toe drains and silt trap.
  - (d) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and
  - (e) 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)

- 23.** 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.
- 24.** 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 conditions 1, 2 and 3;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition conditions 1, 2 and 3;
  - (c) monitoring programmes undertaken in accordance with condition 20; and
  - (d) complaints received under condition 23.
- 25.** The books specified under condition 24 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 10 have the meanings defined.

**Table 10: Definitions**

Term	Definition
Act	means the <i>Environmental Protection Act 1986</i> .
AEP	Annual Exceedance Probability.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water quality - sampling - guidance on sampling groundwater.
annual period	a 12 month period commencing from 1 April until 31 March in the following year.
ARI	Average Recurrence Interval.
books	has the same meaning given to that term under the EP Act.

Term	Definition
CEO	means Chief Executive Officer for the purpose of correspondence means:  Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919  <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Condition	a condition to which this works approval is subject under section 62 of the EP Act.
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.
environmentally hazardous material	means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm.  Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines, Industry Regulation and Safety.
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.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure has been constructed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
NATA	means the (Australian) National Association of Testing Authorities.
Premises	means the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map

<b>Term</b>	<b>Definition</b>
	(Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
Quarterly	October, January, April, July.
Schedule 1	means Schedule 1 of this Works Approval unless otherwise stated.
Stage 8 TSF lift	means construction of the next 1.5 metre embankment raise to 16.35 metres above ground level.
Stage 9 TSF lift	means construction of the final 1.5 metre embankment raise to 17.85 metres above ground level.
suitably qualified	means a person who: <ul style="list-style-type: none"> <li>(a) holds a relevant tertiary academic qualification;</li> <li>(b) has a minimum of five years of experience working in the relevant area of expertise; and</li> <li>(c) hold membership in a relevant professional body.</li> </ul>
TSF	Tailings storage facility.
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.
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.

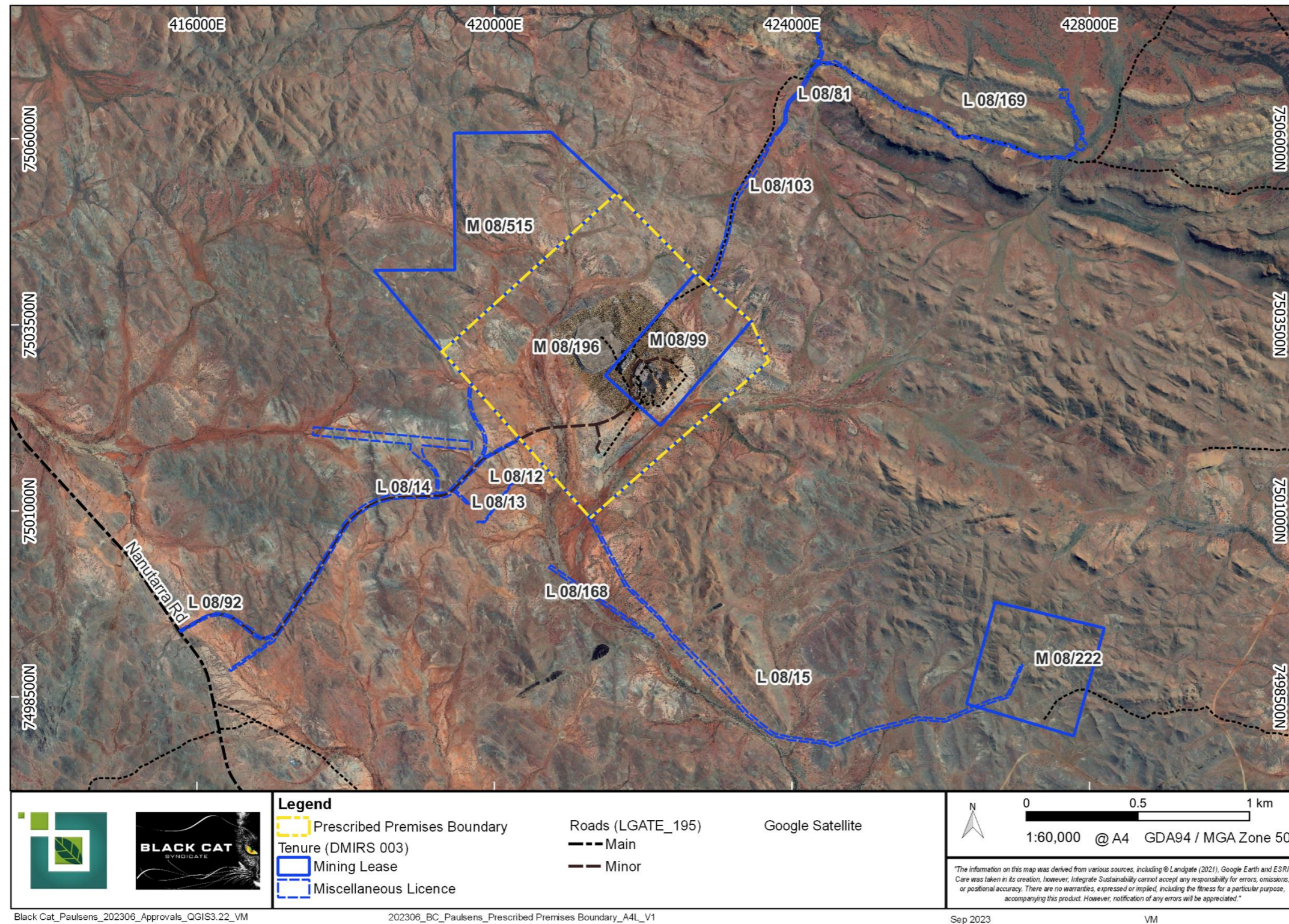
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**END OF CONDITIONS**

# Schedule 1: Maps

## Premises map

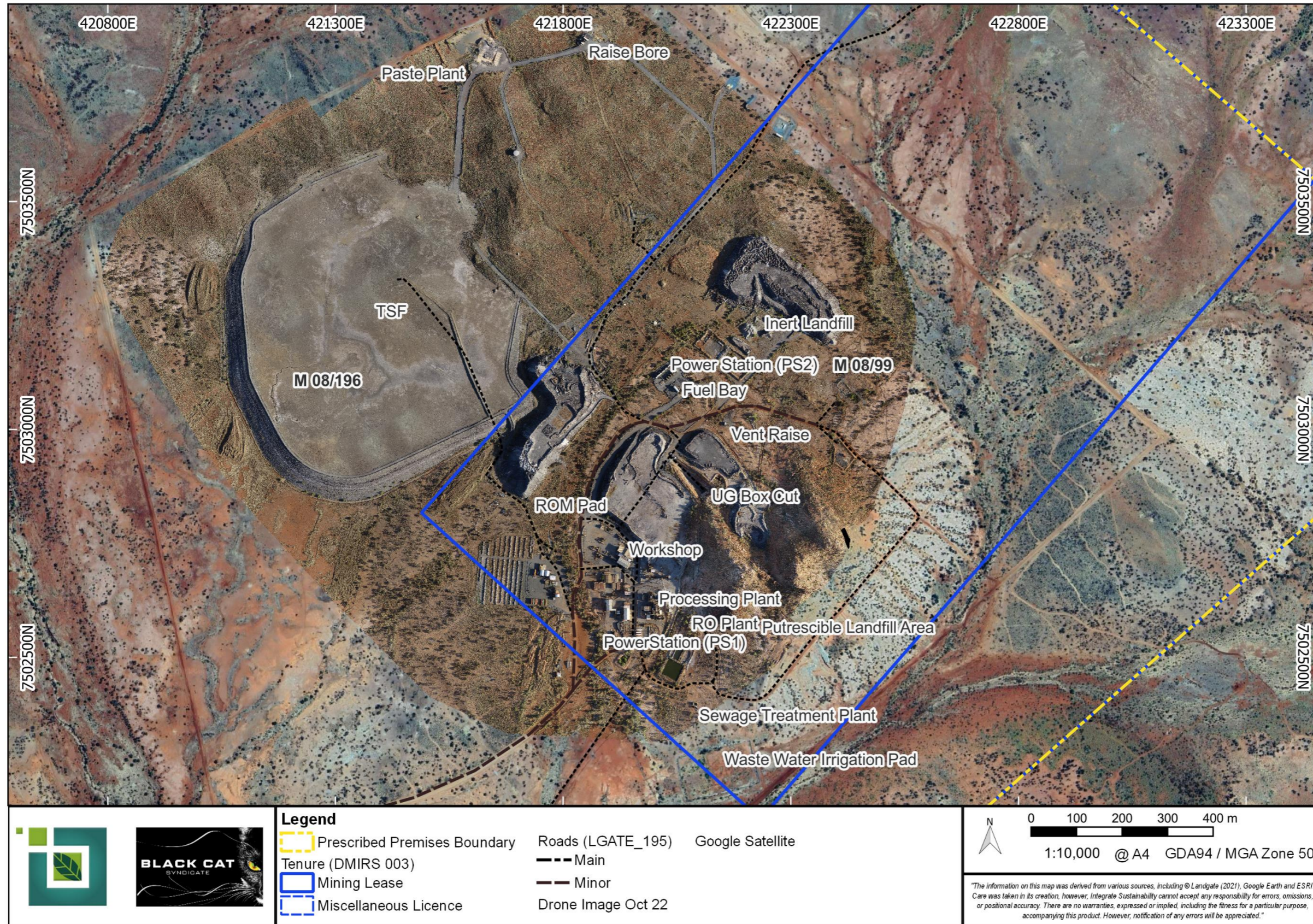
The Premises is shown in the map below (Figure 1). The yellow dotted line depicts the Premises boundary.



**Figure 1: Map of the boundary of the prescribed premises**

W5651/2014/1 (date of latest update: 28/09/2023)  
 IR-T05 Works approval template (v6.0) (September 2022)

The site layout is shown in the map below (Figure 2).



Black Cat\_Paulsens\_202306\_Approvals\_QGIS3.22\_VM

202306\_BC\_Paulsens\_Site Layout\_A4L\_V1

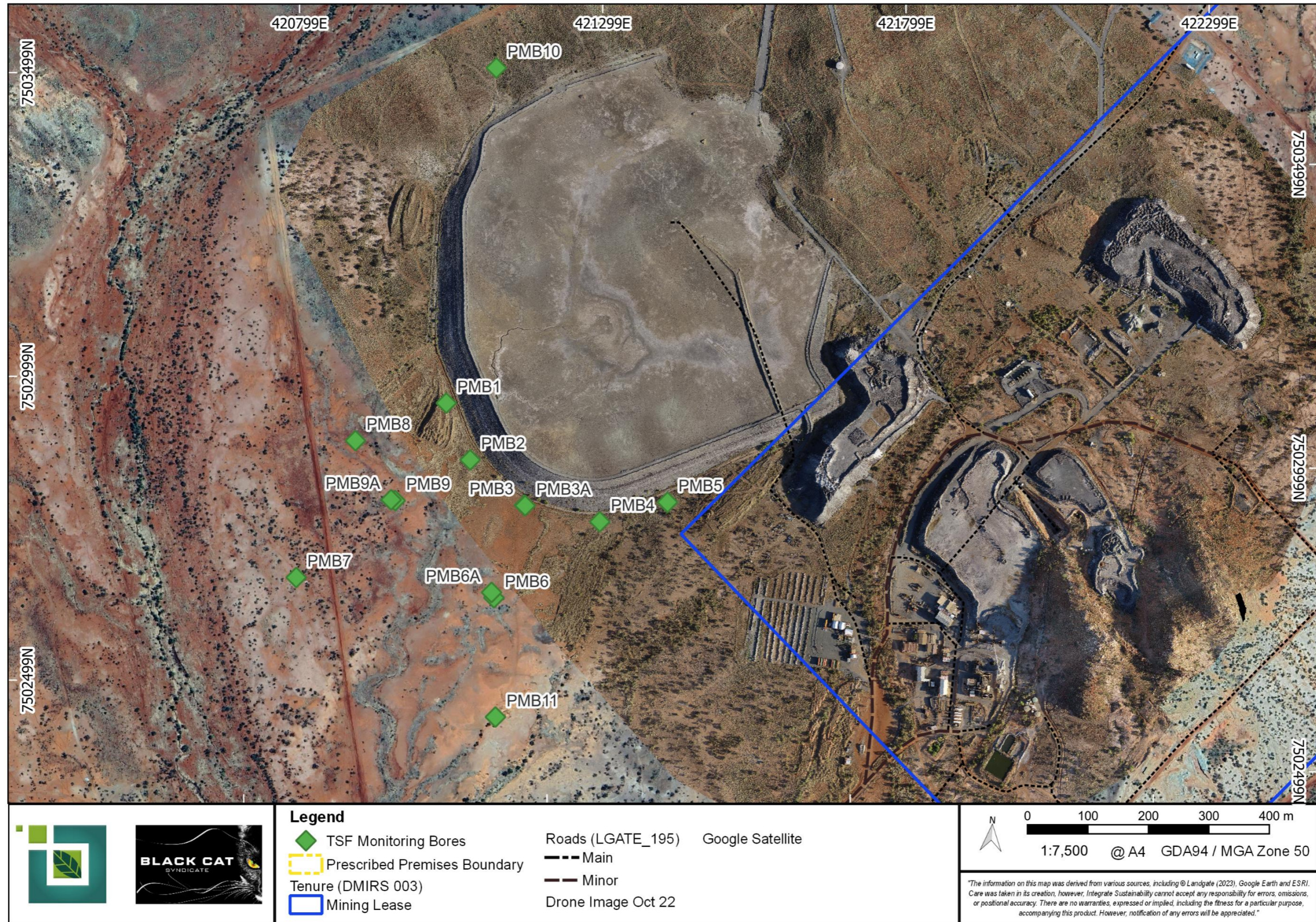
June 2023

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**Figure 2: Site infrastructure layout**

W5651/2014/1 (date of latest update: 28/09/2023)  
 IR-T05 Works approval template (v6.0) (September 2022)

The general arrangement and monitoring locations are shown in the map below (Figure 3).



Black Cat\_Paulsens\_202306\_Approvals\_QGIS3.22\_VM

202309\_BC\_Paulsens\_TSF Bores\_A4L\_V1

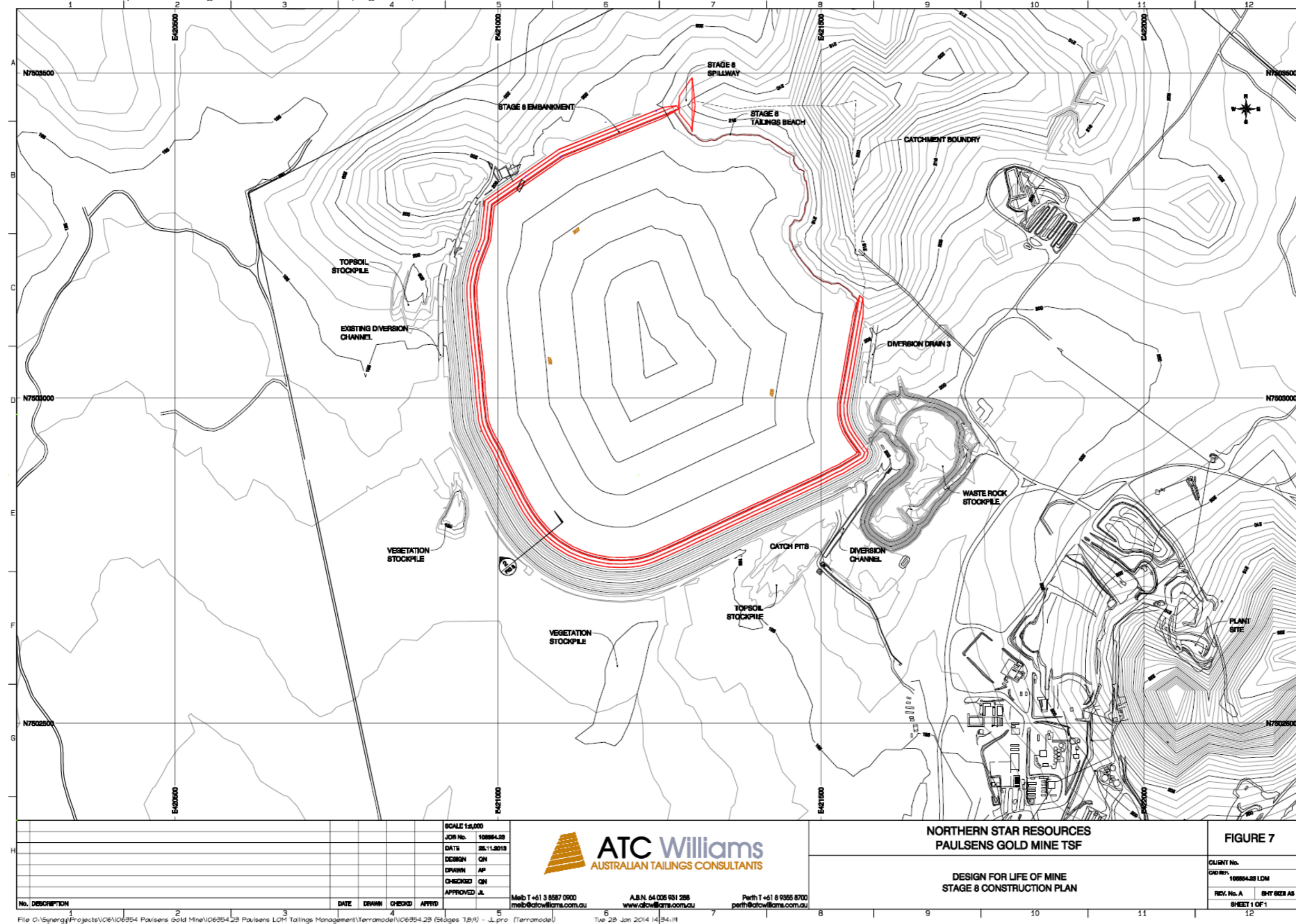
Sep 2023

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**Figure 3: General arrangement and monitoring bore locations**



The construction plan for Stage 8 is shown below (Figure 4).



SCALE 1:5,000 JOB No. 10884.03 DATE 28.11.2018 DESIGN QN DRAWN AP CHECKED QN APPROVED JL				 <b>ATC Williams</b> AUSTRALIAN TAILINGS CONSULTANTS				<b>NORTHERN STAR RESOURCES</b> <b>PAULSENS GOLD MINE TSF</b>				<b>FIGURE 7</b>			
No. DESCRIPTION DATE DRAWN CHECKD APPRD				Melb T +61 3 8387 0900 melb@atcwilliams.com.au				A.S.N. 64 036 931 288 www.atcwilliams.com.au				Perth T +61 8 9366 8700 perth@atcwilliams.com.au			
<b>DESIGN FOR LIFE OF MINE</b> <b>STAGE 8 CONSTRUCTION PLAN</b>								CLIENT No. 10884.03 LDM REV. No. A SHY 0223 AS SHEET 1 OF 1							

Figure 4: Stage 8 Construction Plan

The cross section of Stage 8 construction is shown below (Figure 5).

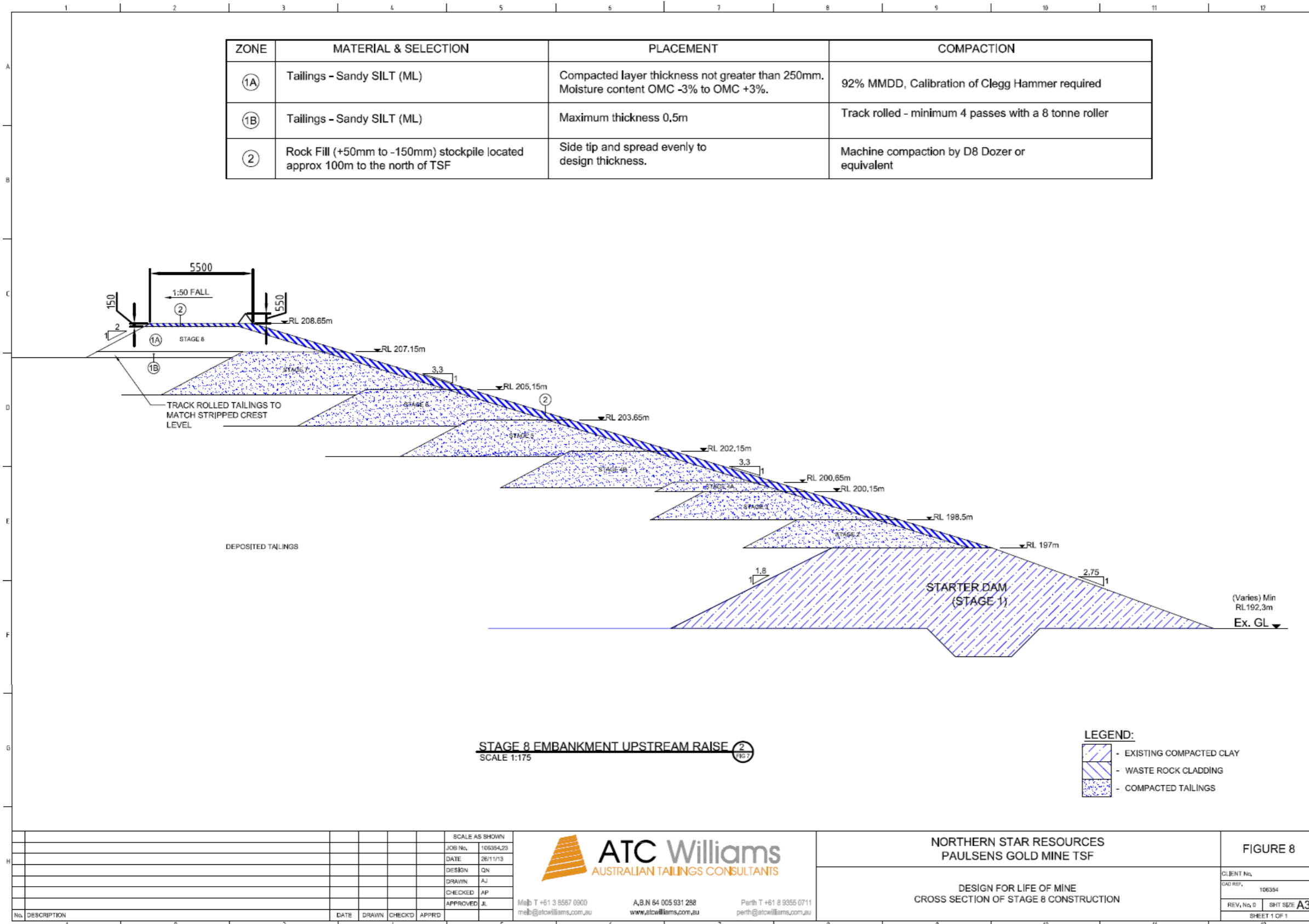


Figure 5: Cross section of Stage 8 construction

W5651/2014/1 (date of latest update: 28/09/2023)  
IR-T05 Works approval template (v6.0) (September 2022)

The Spillway plan and cross section of stage 8 construction is shown below (Figure 6).

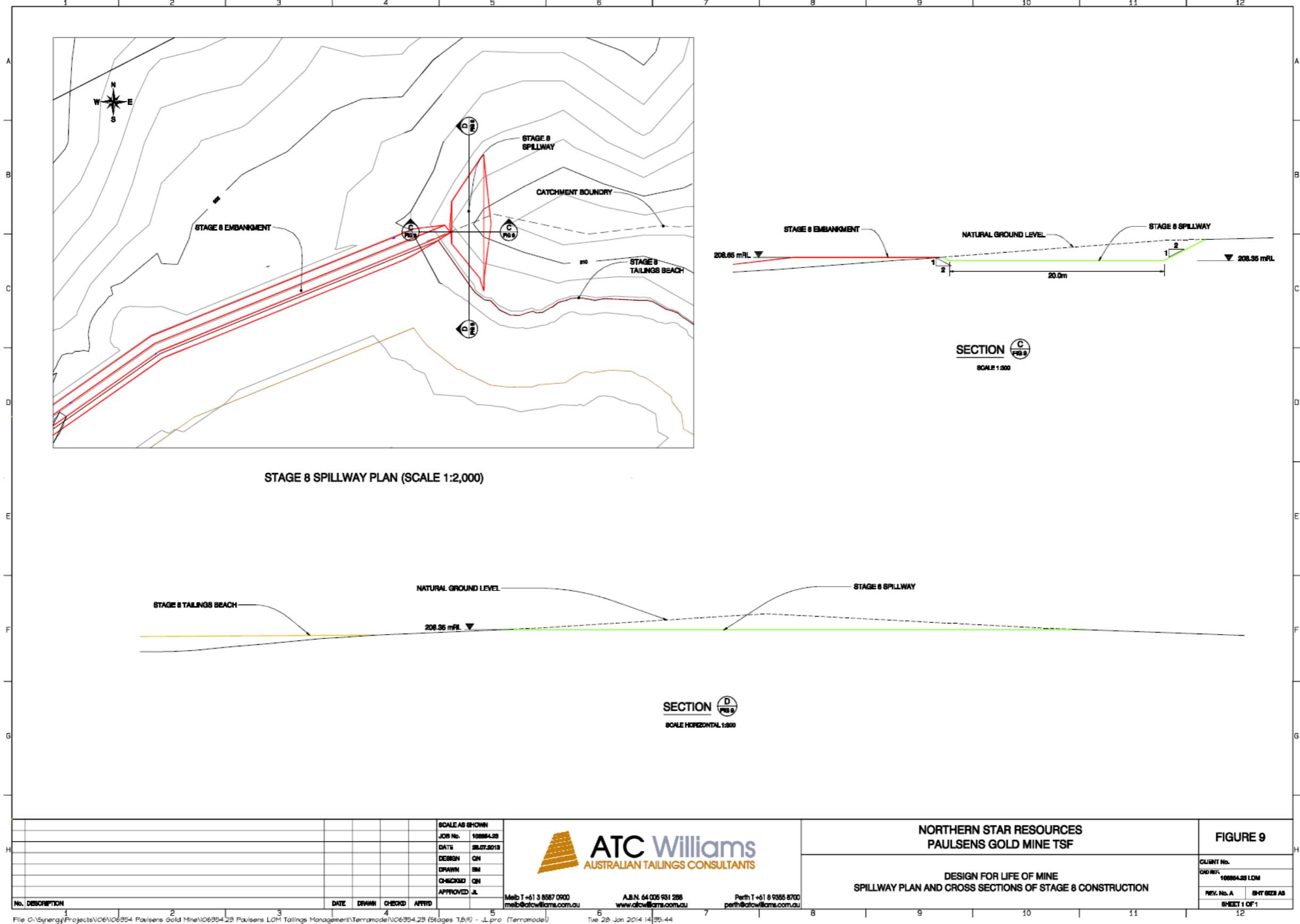


Figure 6: Spillway plan and cross section of stage 8 construction

The construction plan for Stage 9 is shown below (Figure 7).

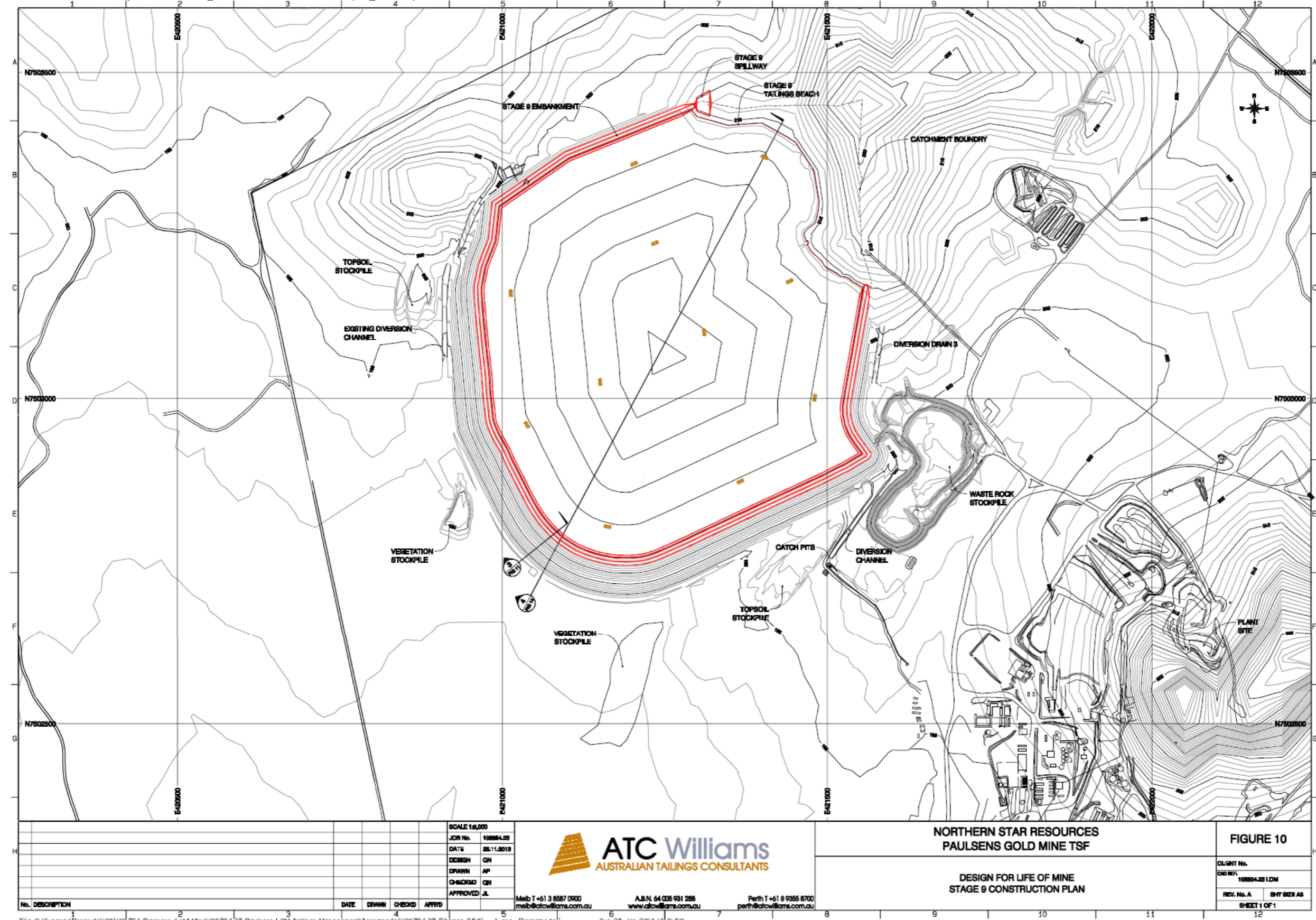
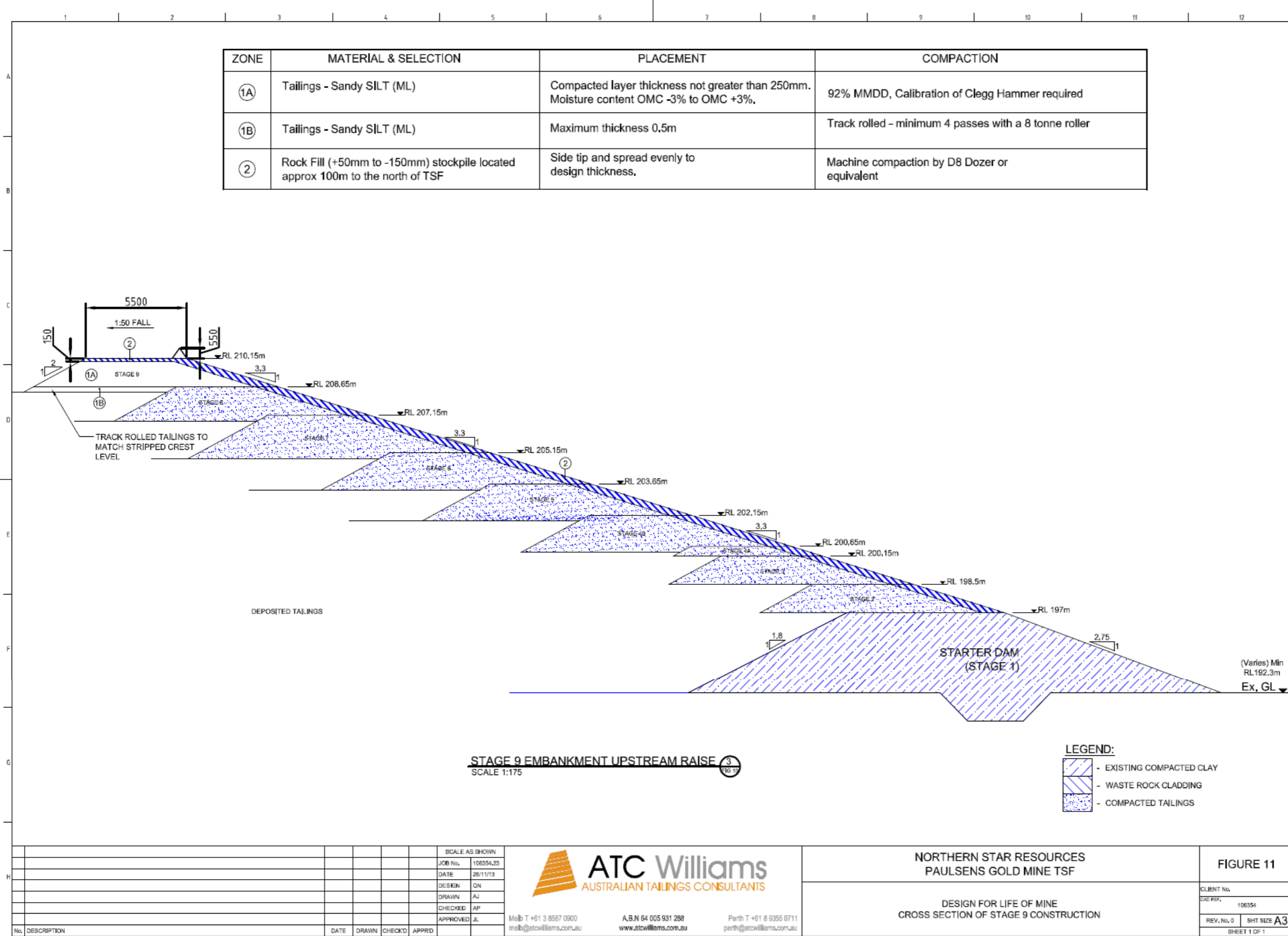


Figure 7: Stage 9 Construction Plan

The cross section of Stage 9 construction is shown below (Figure 8Figure 7)



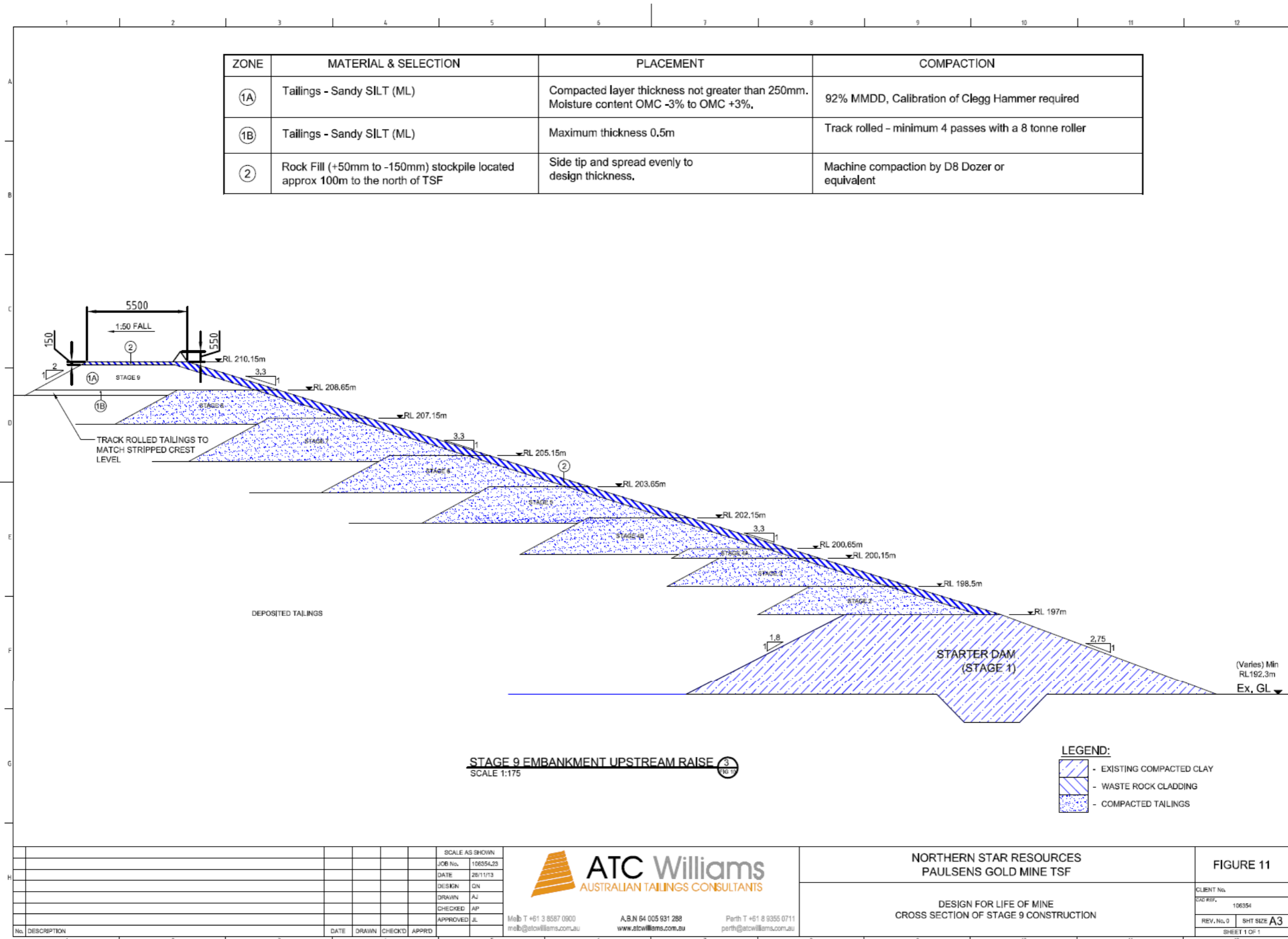


Figure 8  
 Figure 8: Cross section of Stage 9 construction

The spillway plan and cross section of Stage 9 construction is shown below (Figure 9).

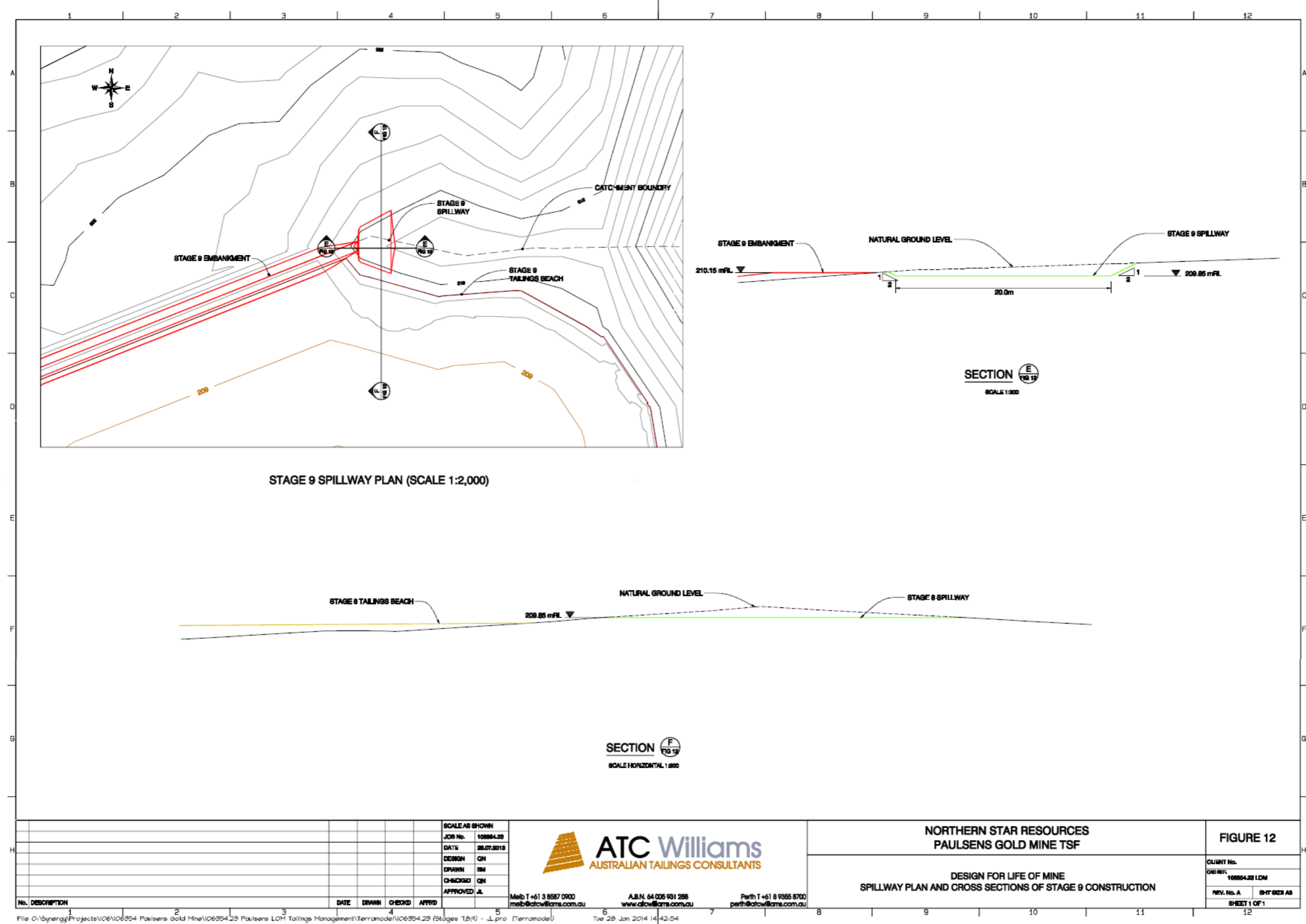
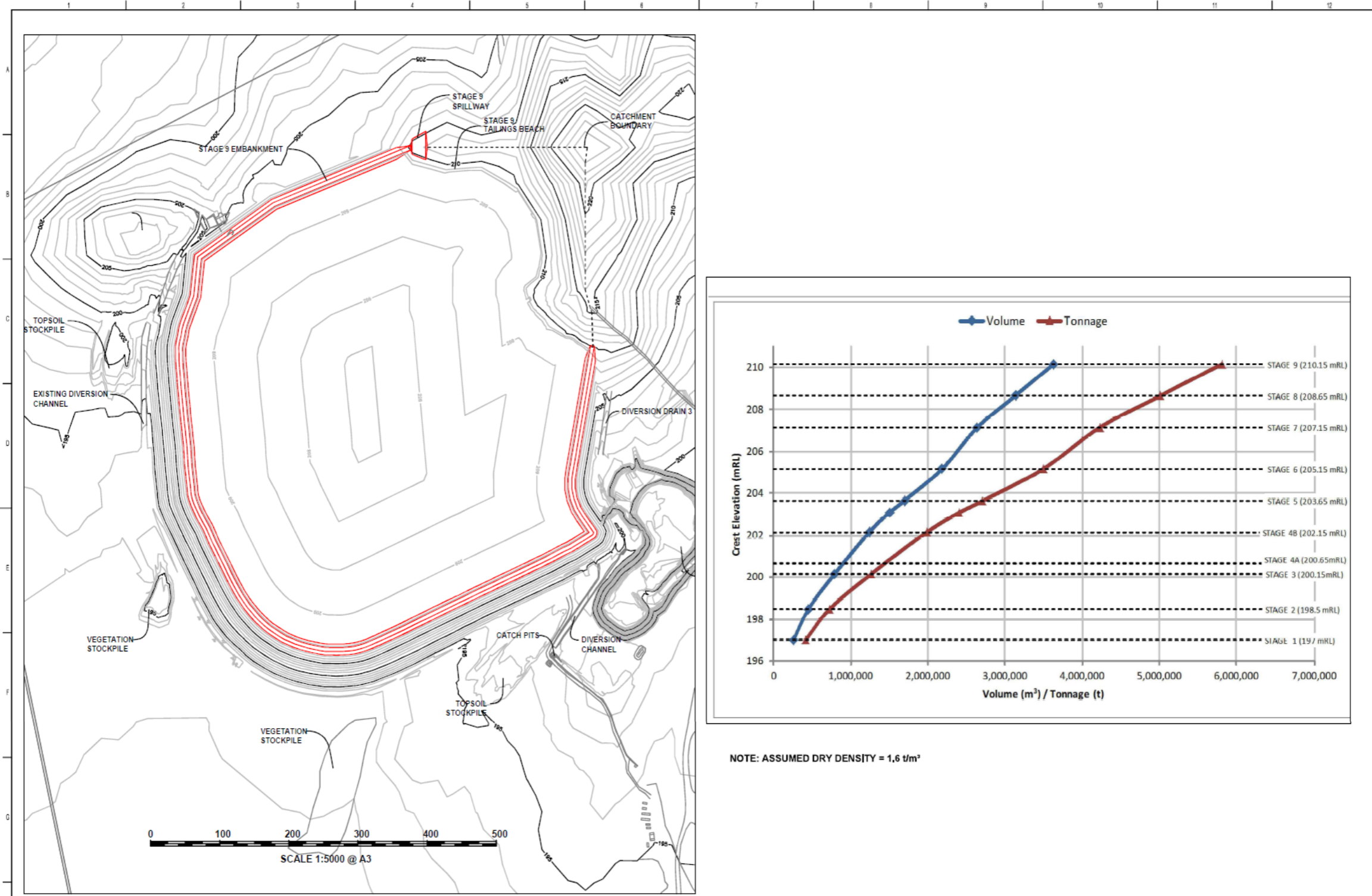


Figure 9: Spillway plan and cross section of stage 9 construction

W5651/2014/1 (date of latest update: 28/09/2023)  
 IR-T05 Works approval template (v6.0) (September 2022)

The construction plan for life of mine and storage curve is shown below (Figure 10).



NOTE: ASSUMED DRY DENSITY = 1.6 t/m³

<table border="1"> <tr> <td>SCALE AS SHOWN</td> <td></td> </tr> <tr> <td>JOB No.</td> <td>108364.23</td> </tr> <tr> <td>DATE</td> <td>28/09/14</td> </tr> <tr> <td>DESIGN</td> <td>GN</td> </tr> <tr> <td>DRAWN</td> <td>AJ</td> </tr> <tr> <td>CHECKED</td> <td>GN</td> </tr> <tr> <td>APPROVED</td> <td>JL</td> </tr> </table>				SCALE AS SHOWN		JOB No.	108364.23	DATE	28/09/14	DESIGN	GN	DRAWN	AJ	CHECKED	GN	APPROVED	JL	<p><b>ATC Williams</b> AUSTRALIAN TAILINGS CONSULTANTS</p> <p>Melb T +61 3 8587 0900 perth@atcwilliams.com.au</p> <p>A.B.N 64 005 931 288 www.atcwilliams.com.au</p> <p>Perth T +61 8 9355 8700 perth@atcwilliams.com.au</p>		<p><b>NORTHERN STAR RESOURCES PAULSENS GOLD MINE TSF</b></p> <p><b>DESIGN FOR LIFE OF MINE STAGE STORAGE CURVE</b></p>		<p><b>FIGURE 13</b></p> <table border="1"> <tr> <td>CLIENT No.</td> <td></td> </tr> <tr> <td>CAD REF.</td> <td>108364</td> </tr> <tr> <td>REV. No.</td> <td>SHT SIZE A3</td> </tr> <tr> <td></td> <td>SHEET 1 OF 1</td> </tr> </table>		CLIENT No.		CAD REF.	108364	REV. No.	SHT SIZE A3		SHEET 1 OF 1
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Figure 10: Construction plan for life of mine and storage curve.



The cross section of life of mine and tailings deposition is shown below (Figure 11).

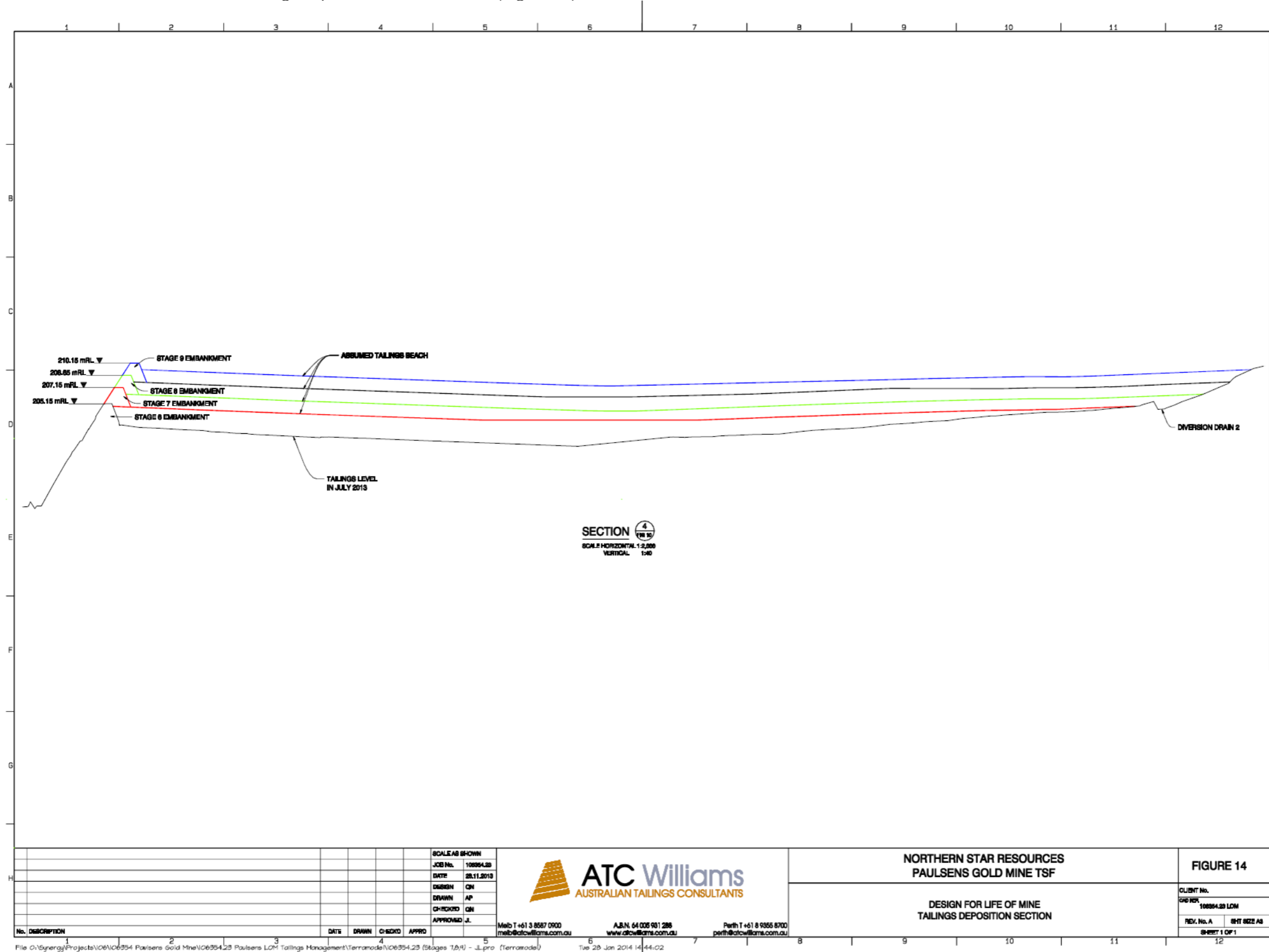
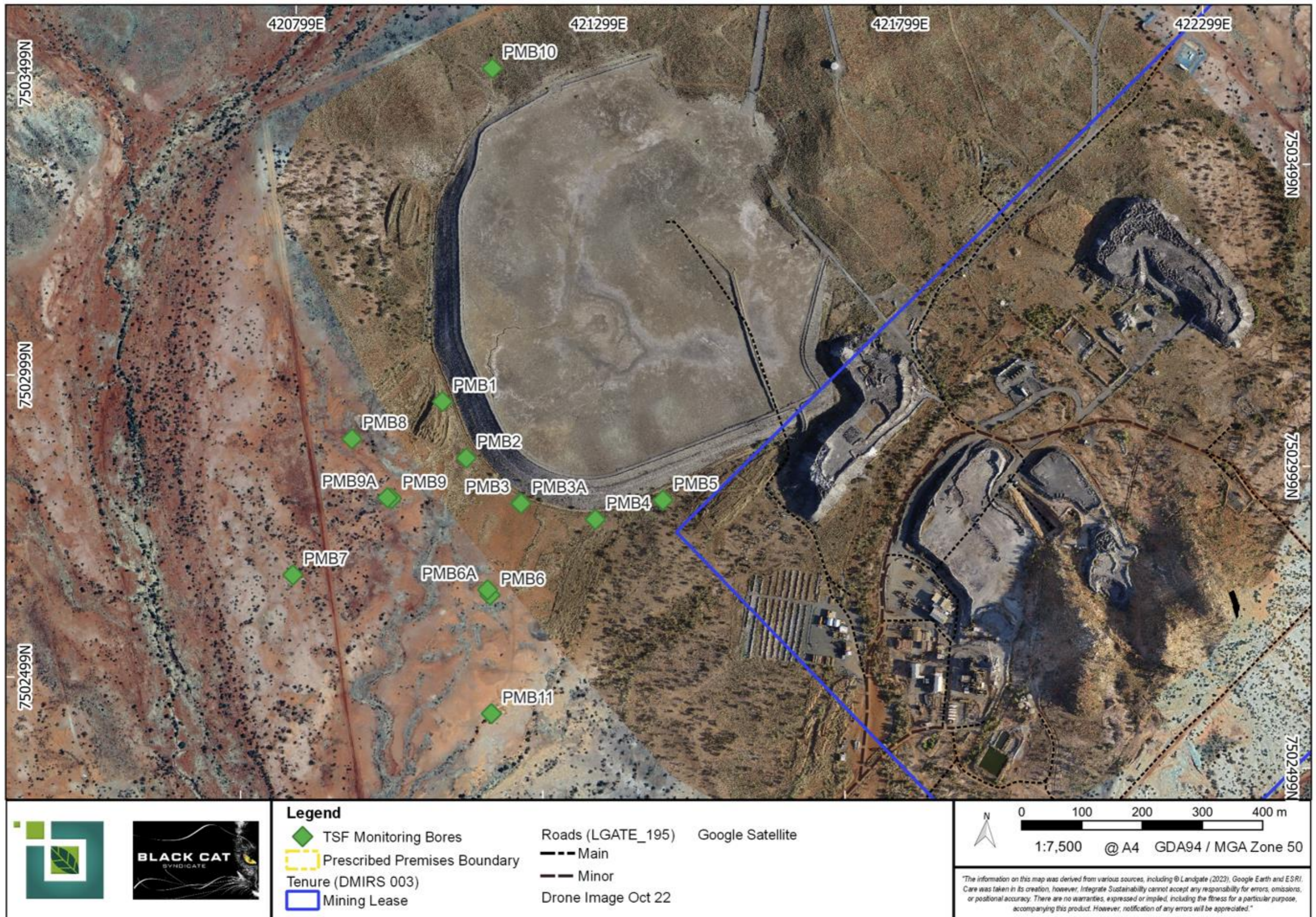


Figure 11: Cross section of life of mine and tailings deposition

W5651/2014/1 (date of latest update: 28/09/2023)  
 IR-T05 Works approval template (v6.0) (September 2022)

The production bore and TSF bore locations are shown in the map below (Figure 12).



**Figure 12: Production bore and TSF bore locations**

W5651/2014/1 (date of latest update: 28/09/2023)  
 IR-T05 Works approval template (v6.0) (September 2022)