



<b>Licence number</b>	L8345/2009/3
<b>Licence holder</b>	Greenstone Resources (WA) Pty Ltd
<b>ACN</b>	100 341 599
<b>Registered business address</b>	Suite 4, Level 3 83-85 South Perth Esplanade, SOUTH PERTH WA 6151
<b>DWER file number</b>	DER2021/000125
<b>Duration</b>	04/05/2021 to 03/05/2041
<b>Date of issue</b>	04/05/2021
<b>Date of amendment</b>	20/02/2025
<b>Premises details</b>	King of the Hills Gold Mine (KOTH) LEONORA WA 6438  Legal description - Part of mining tenements M37/67, M37/76, M37/90, M37/201, M37/222, M37/248, M37/330, M37/410, M37/429, M37/449, M37/451, M37/457, M37/547, M37/548, M37/572, M37/573, M37/574 and M37/1105  As defined by the premises boundary in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations</i> 1987)	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	6,000,000 tonnes per annual period
Category 6: Mine dewatering	1,000,000 tonnes per annual period
Category 52: Electric power generation	Up to 27.7 MW in aggregate
Category 54: Sewage facility	146.5 m <sup>3</sup> /day
Category 89: Putrescible landfill site	Less than 5,000 tonnes per annual period

Department of Water and Environmental Regulation

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

**MANAGER, RESOURCE INDUSTRIES  
INDUSTRY REGULATION (STATE-WIDE DELIVERY)**

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

## Licence history

Date	Reference number	Summary of changes
04/05/2009	L8345/2009/1	New licence application.
04/05/2013	L8345/2009/2	Licence re-issue.
7/04/2016	L8345/2009/2	Licence transfer and conversion to new format.
19/01/2017	L8345/2009/2	Licence amendment to correct discharge points and include Category 12 as prescribed activity.
12/01/2018	L8345/2009/2	Amendment Notice 1 issues to change ownership to Greenstone Resources (WA) Pty Ltd.
12/04/2019	L8345/2009/2	Amendment Notice 2 issued to allow for an increase in Category 12 from 63,000 tonnes to 200,000 tonnes per annum and extend expiry date by 12 months.
14/04/2020	L8345/2009/2	Amendment Notice 3 issued to extend expiry date by 12 months.
04/05/2021	L8345/2009/3	Licence reissued in new licence format and details of Amendment Notice 1, 2 and 3 included.
16/08/2022	L8345/2009/3	Licence amendment to: <ul style="list-style-type: none"> <li>remove existing category 12: screening etc. of material;</li> <li>amend the prescribed premises boundary; and</li> <li>incorporate operations of category 54: sewage facility and category 89: putrescible landfill sites, these facilities were approved for construction under works approval W6413/2020/1.</li> </ul>
16/05/2023	L8345/2009/3	Department issued mass amendment notice to change the reporting requirements of the following: <ul style="list-style-type: none"> <li>Reporting date for Environmental Report on 31/10/2023 and biennially thereafter; and</li> <li>Reporting date of AACR on 31/10/2023 and annually thereafter.</li> </ul>
29/06/2023	L8345/2009/3	Licence amendment to: <ul style="list-style-type: none"> <li>change reporting requirements of the Environmental Report from biennially to annually due to changes in risk rating of the premises; and</li> <li>authorise operation of: <ul style="list-style-type: none"> <li>Category 5 Stage 6 (RL 429.0 m) TSF 4 Cells A and B;</li> <li>Category 5 Processing plant and associated infrastructure; and</li> <li>Category 52 Stage 1 Electric power generation</li> </ul> </li> </ul>

Date	Reference number	Summary of changes
		plant.
02/10/2023	L8345/2009/3	Licence amendment to authorise the operation of Category 5 TSF 5 Stage 1 (RL 413.0 m).
20/02/2025	L8345/2009/3	<p>Licence amendment for the:</p> <ul style="list-style-type: none"> <li>• transfer of the remaining TSF 5 embankment lifts construction and operational requirements from works approval W6426/2020/1 and operate to a maximum height of RL 445 m (category 5);</li> <li>• inclusion of a tyre landfill in the North WRL (category 89);</li> <li>• disposal of concrete footings (inert waste) in an additional landfill adjacent to the North WRL (category 89); and</li> <li>• inclusion of the TSF 4 Stage 7 embankment lift from works approval W6891/2024/1.</li> </ul>

## 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 must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

**Table 1: Infrastructure and equipment requirements**

Site infrastructure and equipment	Operational requirements	Infrastructure location
Gold Processing Plant infrastructure consisting of: <ul style="list-style-type: none"> <li>• Run of Mine (ROM) pad;</li> <li>• Primary and secondary crusher with associated stockpile and reclaim areas;</li> <li>• Grinding circuit;</li> <li>• Carbon in leach (CIL) and absorption circuit; and</li> <li>• Elution and gold recovery circuit.</li> </ul>	Water sprays maintained on crusher tipping areas.	As shown in Schedule 1, Figure 1.  Layout of processing plant in accordance with Figure 2.
Process and Raw water ponds	a) Constructed and compacted oxide or clay material; b) Lined with 1.0 mm HDPE; and c) Can contain a 1% AEP 72hr rain event and operational freeboard of 0.3 m maintained at all times. d) Visual markers installed along embankments for freeboard monitoring.	As shown in Schedule 1, Figure 2.
TSF 4	a) Each cell operating pond maintained to allow minimum 0.5 m total freeboard (including the allowance for a 1% AEP 72hr rain event); b) Visual markers installed along embankments for freeboard monitoring; and c) Maximum operational height of TSF 4 embankment (Stage 7) is RL 433.0 m.	As shown in Schedule 1, Figure 1.
TSF 5	a) Operating pond maintained to allow minimum 0.5 m total freeboard (including the allowance for a 1% AEP 72hr rain event); b) Visual markers installed along	As shown in Schedule 1, Figure 1.  VWP and SP

Site infrastructure and equipment	Operational requirements	Infrastructure location
	embankments for freeboard monitoring; c) Monthly monitoring of Vibrating Wire Piezometers (VWP) and Standpipe Piezometers (SP); and d) Maximum operational height of TSF 5 embankment is RL 445.0 m.	shown in Schedule 1, Figure 8.
Tailings and return water pipelines	a) Located above ground within earth-bunded corridors with scour pits or sumps; b) Maintain and operate the isolation valves; and c) Maintain and operate the flow and leak detection sensors.	As shown in Schedule 1, Figure 3.
Dewatering pipelines	a) Maintain and operate telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or b) Maintain and operate automatic cut-outs in the event of a pipe failure; or c) Be provided with secondary containment sufficient to contain any spill for a period equal to the time between daily inspections.	As shown in Schedule 1, Figure 6.
Surface water management system	a) Diversion bunds maintained to divert surface water flows around processing plant area; b) Stormwater to be managed so contaminated or potentially contaminated stormwater is captured in separate sediment control ponds; c) Contents of potentially contaminated stormwater to either be recovered and re-used in processing or treated as required; and d) Both sediment drainage ponds to be maintained to withhold a 1% AEP 72hr rain event.	As shown in Schedule 1, Figure 1.  Layout of stormwater infrastructure as shown in Schedule 1, Figure 2.
Gas generators <ul style="list-style-type: none"> <li>within enclosed building;</li> <li>exhaust stacks minimum 8.5 m above ground level.</li> </ul> <u>3 x Jenbacher J620, 3.36 MW gas generators</u> <ul style="list-style-type: none"> <li>internal diameter of at least 500 mm;</li> </ul>	a) Must be maintained to be fit for purpose; and b) Must be tuned using exhaust NO <sub>x</sub> emissions to ensure optimal efficiency and emissions performance every 2,000 hours of operating.	Located within the "Power Station" as shown in Schedule 1, Figure 1.

Site infrastructure and equipment	Operational requirements	Infrastructure location
<p>(Labelled as EP03 to EP05 in Figure 4)</p> <p><u>4 x Jenbacher J624 4.4 MW gas generators</u></p> <ul style="list-style-type: none"> <li>internal diameter of at least 600 mm;</li> </ul> <p>(Labelled as EP06 to EP09 in Figure 4)</p>		
<p>Diesel generators</p> <p>2 x Cummins QXS15-G8 diesel generators</p> <ul style="list-style-type: none"> <li>exhaust stacks minimum 3.5 m above ground level;</li> <li>stacks have mufflers installed; and</li> <li>generators self-bunded.</li> </ul>	<p>a) Must be maintained to be fit for purpose; and</p> <p>b) May only be used for power station start-up, to support demand during maintenance of gas generators and during emergencies.</p>	<p>Located within the "Power Station" as shown in Schedule 1, Figure 2.</p> <p>Labelled as EP01 and EP02 in Figure 4.</p>
1 x 20,000 L lubrication oil storage tank	<p>a) All bunding to be maintained to prevent leakage to subsurface soil.</p>	<p>Located within the "Power Station" as shown in Schedule 1, Figure 2.</p> <p>Layout of power station in accordance with Figure 4.</p>
1 x 20,000 L waste oil tank		
1 x 68,000 L diesel storage tank		
Transformer		
Oil-water separator		
WWTP	<p>a) All sewage storage and treatment tanks, vessels, pipelines and conveyance infrastructure must be maintained so they are impermeable and free of leaks and defects;</p> <p>b) WWTP must be capable of storing a minimum of two consecutive days of effluent;</p> <p>c) Maintain standby pumps for emergencies;</p> <p>d) Maintain fencing and compound bunding around perimeter of WWTP;</p> <p>e) Sludge must be contained within sealed tanks prior to removal by a licensed controlled waste carrier for disposal within the waste rock dump (WRD) or disposal to an appropriately authorised facility; and</p> <p>f) Spills of wastewater or chemicals outside of a tanks, vessels and pipelines must be contained and cleaned-up as soon as</p>	<p>'WWTP' as shown in Schedule 1, Figure 5</p> <p><b>Error! Reference source not found..</b></p>

Site infrastructure and equipment	Operational requirements	Infrastructure location
	they occur, if safe to do so.	
Irrigation Spray field	<ul style="list-style-type: none"> <li>a) Area of WWTP Sprayfield must be at least 4.75 ha;</li> <li>b) Maintain fence around entire perimeter and ensure spray drift does not extend beyond perimeter fence;</li> <li>c) Flow meter must be maintained on the WWTP outlet to the WWTP Sprayfield to monitor volumes discharged to WWTP Sprayfield;</li> <li>d) Spray irrigator to be maintained to ensure no blockages to allow even and effective spray production and ensure mobility, stopping and cutoff mechanisms are functioning as per manufacturer specifications;</li> <li>e) Irrigation managed to prevent ponding and pooling of effluent on the ground surface of the irrigation discharge area; and</li> <li>f) Irrigation operations must not occur during significant rainfall events.</li> </ul>	'WWTP Sprayfield' as shown in Schedule, Figure 5.
Tarmoola Pit <sup>1</sup>	N/A	As shown in Schedule 1, Figure 6.
Galahad Pit		
Tyre storage areas at workshops and stores	<p>Tyres must be stored as follows:</p> <ul style="list-style-type: none"> <li>a) No obstruction to fire protection equipment or any related signage.</li> <li>b) Tyres stacked on their sides or if stored upright on their treads, within a bunded area.</li> <li>c) No more than 99 tyres stored at any one time.</li> <li>d) The tyre storage area is at least 6 m away from any combustible material, wall, building or fence.</li> <li>e) Individual tyre stacks area are separated at 6 m from each other and do not exceed 100 m<sup>2</sup> in area and 3 m in height.</li> </ul>	Not depicted.
Tyre disposal in North WRL landfill, Landfill Area (Class II), and Landfill General Area (Class II)	<p>Tyres must be buried as follows<sup>2</sup>:</p> <ul style="list-style-type: none"> <li>a) In the North WRL, further than 100 m from the final WRL batter toes and 5 m from the final top surface.</li> <li>b) Approximately 500 tyres per year.</li> <li>c) Burial under a final soil cover of not less</li> </ul>	As shown in Schedule 1, Figures 1 and Figure 5.



Site infrastructure and equipment	Operational requirements	Infrastructure location
	<p>than 500 mm.</p> <p>d) In batches of no more than 1,000 whole tyres separated from each other by at least 100 mm of soil.</p> <p>e) Ensures that the drainage, safety, soil erosion and soil stability is controlled.</p> <p>f) Covered by the end of the working day so that the waste was deposited with enough waste rock to prevent the spread of fire and harboring of disease vectors.</p> <p>g) Tyre burial locations must be surveyed and recorded.</p>	

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

Note 2: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

2. The licence holder must ensure that any saline dewatering effluent used for dust suppression is applied in a manner that avoids damage to surrounding native vegetation.
3. The licence holder must manage the infrastructure in Table 1 such that a minimum top-of-embankment freeboard of 300 mm or a 1 in 100 year / 72-hour rain event (whichever is greater) is maintained.
4. The licence holder must:
  - (a) undertake inspections as detailed in Table 2;
  - (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 2: Inspection of infrastructure**

Scope of inspection	Type of inspection	Frequency of inspection
Power station storage tanks bunding	Visual integrity	Monthly
WWTP and associated infrastructure (tanks, pipelines, pipeline bunding, flow meters, alarm system (audio and visual) and tank freeboard.	Visual integrity	Weekly
Irrigation system valves, pumps, pipelines and other fittings	Visual integrity	Weekly
Tailings delivery pipelines	Visual integrity	Twice daily
Return water pipelines	Visual integrity	Twice daily
TSF embankment freeboard	To confirm required freeboard capacity is	Daily

Scope of inspection	Type of inspection	Frequency of inspection
	available	
Tailings storage decant pond	To confirm size and location	Daily

## Emissions and discharges

5. The licence holder must ensure that the emission types specified in Table 3 are discharged from the corresponding discharge point and only at the corresponding discharge point location.

**Table 3: Authorised discharge points**

Emission type	Discharge point	Discharge point location
<b>Category 5: ore processing or beneficiation</b>		
Deposition of tailings	Deposited sub-aerially through spigots located on embankment	TSF 4; and TSF 5 as shown in Schedule, Figure 1.
<b>Category 6: mine dewatering</b>		
Mine dewater from onsite sources	Tarmoola Pit <sup>1</sup> (open pit)	'North Pit' and 'South Pit' as shown in Schedule 1, Figures Figure 5 and Figure 6.
	Galahad Pit	'Galahad Pit' as shown in Schedule 1, Figures Figure 5 and Figure 6.
<b>Category 54: sewage facility</b>		
Treated effluent sourced from the WWTP	Sprinklers located within WWTP Sprayfield	'WWTP Sprayfield' as shown in Schedule 1, Figure 5.
<b>Category 52: electric power generation</b>		
PM, SO <sub>2</sub> , CO and NO <sub>x</sub>	Gas generators EP03-EP09	'Power station' as shown in Schedule 1, Figure 1.

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

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6. The licence holder must ensure that where waste types produced on the premises are not taken offsite for lawful use or disposal, they are managed in accordance with the requirements in Table 4.

**Table 4: Management of wastes**<sup>1; 2 and 3</sup>

Waste type	Quantity limit	Disposal location
<ul style="list-style-type: none"> <li>Clean fill</li> <li>Inert waste type 1 (including concrete footings)</li> <li>Uncontaminated fill</li> <li>Putrescible wastes</li> <li>Inert waste type 2 (tyres only)</li> </ul>	Less than 5,000 tonnes per annual period	'Landfill Area (Class II)' and 'Landfill General Area (Class II)' as shown in Schedule 1, Figure 5.  'North WRL Tyre Landfill' and 'WRL Industrial Landfill' as shown in Schedule 1, Figure 1.

Note 1: Requirements for the management of wastes are set out in the *Environmental Protection (Rural Landfill) Regulations 2002*.

Note 2: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 3: Additional requirements for the acceptance of controlled waste (including tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

## Monitoring

### General

7. The licence holder must ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
  - all laboratory samples are submitted to and tested by a laboratory with current National Association of Testing Authorities (NATA) accreditation for the parameters being measured.
8. The licence holder must ensure that:
- quarterly monitoring is undertaken at least 45 days apart;
  - six monthly monitoring is undertaken at least 5 months apart; and
  - annual monitoring is undertaken at least 9 months apart.

### Emissions and discharge monitoring

9. The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

**Table 5: Monitoring of emissions to land**

Emission point reference	Parameter	Units	Frequency
Tarmoola Pit <sup>1</sup>	Volume of mine dewater discharged to containment structure	kL	Annually
Galahad Pit			

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

**Process monitoring**

10. 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
Tailings deposition	Volumes of tailings deposited into the TSF 4 and TSF 5	Tonnes	Continuous
	Volumes of water recovered from TSF 4 and TSF 5		

11. The licence holder must undertake the monitoring in Table 7 according to the specifications in Table 7.

**Table 7: Emissions and discharge monitoring**

Discharge point location	Monitoring location	Parameters <sup>1</sup>	Units	Limit	Frequency	Sampling method
<b>Category 54: sewage facility</b>						
'WWTP Sprayfield' as shown in Schedule 1, Figure 5.	Flow meter	Cumulative volume of wastewater discharged to WWTP Sprayfield	m <sup>3</sup> /day	–	Continuous	–
		<i>Escherichia coli</i> bacteria (E. coli)	cfu/100 ml	1,000	Quarterly	Spot sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	WWTP outlet	Total coliforms	mg/L			
		Biochemical oxygen demand (BOD <sub>5</sub> )		20		
		Total suspended solids (TSS)		30		
		Total Nitrogen		30		
		Total Phosphorus		8		
		Free Chlorine		0.2-2.0		
		pH <sup>1</sup>	pH units	6.5-8.5		

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

12. The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

**Table 8: Monitoring of ambient groundwater**

Emission point reference	Parameter	Units	Trigger level	Limit level	Frequency	Method
<u>TSF4 monitoring bores:</u>  MBH1(S); MBH1(D); MBH2(S); MBH2(D); MBH3(S); MBH3(D); MBH6; MBH7; MBH14; MBH15; MBH17; MBH19; MBH21; and MBH23.	Standing water level <sup>1</sup> (SWL)	mbgl	6 mbgl	4 mbgl	Quarterly	Spot sample, in accordance with AS/NZS 5667.11
	pH <sup>1</sup>	pH unit	-	-		
	Electrical conductivity <sup>1</sup> (EC)	µS/cm	-	-		
	Total dissolved solids (TDS)	mg/L	-	-		
	Weak acid dissociable cyanide (WAD CN)		-	0.5 mg/L		
	<u>Dissolved metals and metalloids:</u> Arsenic (As), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Copper (Cu), Iron (Fe), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Zinc (Zn).		-	-		
	<u>Major ions:</u> Calcium (Ca), Carbonate (CO <sub>3</sub> ), Chloride (Cl), Magnesium (Mg), Potassium (K), Sodium (Na), Sulphate (SO <sub>4</sub> ).		-	-		
<u>TSF5 monitoring bores:</u>  MB20-1(S); MB20-1(D); MB20-2(S); MB20-2(D); MB20-3(S); MB20-3(D); MB20-4(S); MB20-4(D); MB20-5(S); MB20-5(D); MB20-6(S); MB20-6(D); MB20-7(S); MB20-7(D); MB20-8; MB20-9 and MB20-10.						

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

13. In the event that the trigger level for standing water level is exceeded in any of the bores listed in Table 8, the licence holder must submit a seepage management plan to the CEO within 3 months of the exceedance occurring. The management plan must include installation of fit-for-purpose<sup>1</sup> seepage recovery bores, including justification for the number of bores and locations (as determined by a suitably qualified hydrogeologist).

Note 1: Monitoring bores should be kept separate from seepage recovery to ensure continuity and

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reliability of monitoring data. Conversion of monitoring bores into seepage recovery bores will therefore not be accepted.

- 14.** The licence holder must undertake monitoring of the water balance for TSF 4 and TSF 5 each monthly period during operations, and as a minimum, record the following information:
- (a) site rainfall;
  - (b) evaporation rate;
  - (c) decant water, toe drainage and recovery bore (if applicable) volumes;
  - (d) volume of tailings deposited;
  - (e) volume of water in tailings;
  - (f) percentage (%) of solids in tailings; and
  - (g) calculated seepage losses.

### Management actions for limit exceedances

- 15.** The licence holder must, in the event of a parameter in condition 11 exceeding the corresponding limit specified in that condition, undertake the management actions that correspond with the corresponding monitoring location within the corresponding timeframe as specified in Table 9.

**Table 9: Management actions required in the event of limit exceedance**

Monitoring location	Management action	Timeframe
WWTP outlet	<ul style="list-style-type: none"> <li>• Investigate cause of exceedance; and implement corrective actions. Resample within 14 calendar days, if the exceedance is confirmed in follow up sample;</li> <li>• Submit a report to the CEO within 14 calendar days.</li> </ul>	Management actions to commence immediately upon being notified of the exceedance and to continue for the duration of the exceedance.

- 16.** The licence holder must include the following information in the report referred to in condition 15 in relation to any exceedances of any of the limits identified in that condition:
- (a) the nature, volume, and characteristics of the emission(s);
  - (b) the time and date when the exceedance occurred;
  - (c) whether any environmental impact occurred as a result of the exceedance and, if so, what that impact was and where the impact occurred;
  - (d) the details of the management action(s) taken pursuant with condition 15 in response to the exceedance;
  - (e) the details and result of the investigation undertaken into the cause of the exceedance; and
  - (f) the details of any action or specified measures that have been taken, or will be taken, to prevent the exceedance occurring again and for the purpose of minimising the likelihood of pollution or environmental harm.

## Records and reporting

- 17.** 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:
- the name and contact details of the complainant, (if provided);
  - the time and date of the complaint;
  - the complete details of the complaint and any other concerns or other issues raised; and
  - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- 18.** The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - prepare and submit to the CEO by no later than 31 October of each year an Annual Audit Compliance Report (AACR) in the approved form.
- 19.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- the calculation of fees payable in respect of this licence;
  - any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
  - monitoring programmes undertaken in accordance with conditions 9, 10, 11, 12 and 14 of this licence; and
  - complaints received under condition 17 of this licence.
- 20.** The books specified under condition 19 must:
- be legible;
  - if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - be retained by the licence holder for the duration of the licence; and
  - be available to be produced to an inspector or the CEO as required.
- 21.** The licence holder must:
- prepare an Environmental Report that provides information in accordance with Table 10 for the preceding annual period; and
  - submit that Environmental Report to the CEO by 31 October each year.

**Table 10: Environmental reporting requirements**

Condition	Requirement
Summary	<ul style="list-style-type: none"> <li>product produced;</li> <li>tailings deposited;</li> <li>tailings density (solid vs water content); and</li> </ul>

Condition	Requirement
	<ul style="list-style-type: none"> <li>volume of mine dewater discharge.</li> </ul>
7	Record of waste type and total volumes of waste disposed in all landfill facilities.
9	Tabulated monitoring data of mine dewater discharges including the volume discharged at each discharge point.
10	Tabulated monitoring data of process volumes associated with tailings deposition and return decant water from TSF 4 and TSF5.
11	<u>WWTP monitoring</u> <ul style="list-style-type: none"> <li>volumes of treated wastewater discharged to the WWTP Sprayfield.</li> <li>treated wastewater monitoring data tabulated and graphical form including the sampling date.</li> <li>tabulated quarterly and annual loadings of nitrogen, phosphorus and BOD<sub>5</sub> applied to the WWTP Sprayfield, including an explanation of the basis for determining the loading rates.</li> <li>an assessment and interpretation of the data, including comparison to historical trends.</li> </ul>
12	<u>TSF 4 and TSF 5 groundwater monitoring</u> The results to be provided, but not limited to the following: <ul style="list-style-type: none"> <li>the dates at which monitoring was undertaken;</li> <li>the raw monitoring data, for each parameter in tabulated form;</li> <li>cumulative time-series graphs in Microsoft Excel or similar format for each monitoring bore for standing water level in mbgl and those parameters resulting in exceedances; and</li> <li>include an assessment and comparison against the ANZG 2018, baseline data and previous monitoring results.</li> </ul>
14	Provide the following: <ul style="list-style-type: none"> <li>results of the monthly water balance monitoring in tabulated form and as cumulative time-series graphs in Microsoft Excel or similar format for each monitoring parameter;</li> <li>a summary of the water balance results; and</li> <li>revise and calibrate the water balance where there is a concern of seepage losses and revise the decant operations for the management of water levels.</li> </ul>



## Specified actions

### Critical Containment Infrastructure and Equipment

- 22.** The licence 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(s)
- as set out in Table 11.

**Table 11: Critical containment infrastructure design and construction requirements**

	Infrastructure	Design and construction requirements	Infrastructure location
1.	TSF 5 general requirements	Storage area of 100 ha. Constructed to provide a minimum of 0.5 m total freeboard (including an allowance for 1% AEP 72-hour rain event) above the normal operating pond.	As shown in Schedule 1, Figure 1.
2.	TSF 5 embankment lifts Stages 2 to 7	<p>Embankment lifts are to be constructed to the following maximum crest level heights:</p> <ul style="list-style-type: none"> <li>• Stage 2 – RL 420.5 m (7.5 m height);</li> <li>• Stage 3 – RL 428 m (7.5 m height);</li> <li>• Stage 4 – RL 433 m (5 m height);</li> <li>• Stage 5 – RL 437 m (4 m height);</li> <li>• Stage 6 – RL 441 m (4 m height); and</li> <li>• Stage 7 (final) – RL 445 m (4 m height).</li> </ul> <p>Embankment lifts are to be constructed in accordance with design specifications (i.e. embankment construction material, cross fall, and bunding), as depicted in Schedule 1, Figures 10 and 11.</p> <p>Rock ring decant and decant accessway must be raised in accordance with design specifications, as depicted in Schedule 1, Figure 11.</p> <p>Visual marker must be installed along the embankments for freeboard monitoring.</p> <p>Water cart must be used for dust suppression during construction activities, when required.</p>	As shown in Schedule 1, Figures 10 and 11.

- 23.** The licence holder must within 90 calendar days of the critical containment infrastructure identified in condition 22 being constructed:
- (a) undertake an audit of their compliance with the requirements of condition 22; and
  - (b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.
- 24.** The Critical Containment Infrastructure Report required by condition 23 must include as a minimum the following:
- (a) certification by a suitably qualified geotechnical or civil engineer that each item of critical containment infrastructure or component thereof, as specified in condition 22, has been built and installed in accordance with the requirements specified in condition 22;

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- (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 22;
- (c) photographic evidence of the installation of the infrastructure; and
- (d) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

## Definitions and abbreviations

In this licence, the terms in Table 12 have the meanings defined.

**Table 12: Definitions and abbreviations**

Term	Definition
ACN	means Australian Company Number.
AEP	means Annual Exceedance Probability.
AHD	means Australian Height Datum.
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 September until 31 August of the immediately following year.
ANZG 2018	means the most recent version and relevant parts of the Australian and New Zealand Governments guidelines for fresh and marine water quality (Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia). Available at <a href="http://www.waterquality.gov.au/anz-guidelines">www.waterquality.gov.au/anz-guidelines</a> .
AS 1940	means <i>Australian Standard 1940/2004: The storage and handling of flammable and combustible liquids</i> , as amended from time to time.
AS 4323.1:1995	means <i>Australian Standard 4323.1:1995: Stationary source emissions, selection of sampling positions</i> , as amended from time to time.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> .
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water quality - Sampling Guidance on sampling of waste waters</i> .
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i> .
books	has the same meaning given to that term under the EP Act.
Category / categories	means categories of prescribed premises as set out in Schedule 1 of the <i>Environmental Protection Regulations 1987</i> (WA) (EP Regulations).
CEO	means Chief Executive Officer of the department. “submit to / notify the CEO” (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>

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Term	Definition
Clean fill	has the meaning defined in the Landfill Definitions.
CO	means Carbon Monoxide.
cfu/100 mL	means number of colonies counted per 100 millilitres.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (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.
E. coli	<i>Escherichia coli</i> bacterial.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
ha	means hectare.
HDPE	means high density polyethylene.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
kL	means kilolitre.
Landfill Definitions	means the document titled "Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)" published by the Chief Executive Officer of the Department of Water and Environmental Regulation (as amended from time to time).
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.
m	means metre.
mbgl	means metres below ground level.
mg/L	means milligrams per litre.
m <sup>3</sup>	means cubic metre.
m <sup>3</sup> /day	means cubic meter per day.

Term	Definition
mm	means millimetre.
MW	means power output (electricity generated) in megawatts.
N/A	means Not Applicable.
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.
NO <sub>x</sub>	means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide.
O <sub>2</sub>	means Oxygen.
pH	means pH unit.
PM	means particulate matter.
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.
Putrescible waste	has the meaning defined in the Landfill Definitions.
RL	means Reduced Level.
significant rainfall event	a significant rainfall event is defined based on the Bureau of Meteorology website for the location of Leonora Airport. A significant rainfall event has been based on Intensity Frequency Duration (IFD), being 24 hours rainfall duration at 20% Annual Exceedance Probability (AEP). Note that a 20% AEP is equivalent to a 4.48 Annual Recurrence Interval (ARI).
SO <sub>2</sub>	means Sulphur Dioxide.
Suitably qualified hydrogeologist	means a person who: <ul style="list-style-type: none"> <li>a) holds a qualification in hydrogeology, geology, engineering or equivalent from a recognised educational institution; and</li> <li>b) has a minimum of three years of experience working in the field of hydrogeology.</li> </ul>
Suitably qualified geotechnical or civil engineer	means a person who: <ul style="list-style-type: none"> <li>a) holds a relevant tertiary academic qualification related to geotechnical or civil engineering; and</li> <li>b) has a minimum of three years of experience working in the field of geotechnical and or civil engineering.</li> </ul>
six monthly	means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year.

Term	Definition
SP	means standpipe piezometer.
TSF	means Tailings Storage Facility.
Uncontaminated fill	has the meaning defined in the Landfill Definitions.
µS/cm	means microsiemens per centimetre.
VWP	means vibrating wire piezometer.
waste	has the same meaning given to that term under the EP Act.
waste type	means waste types identified in the Landfill Definitions, or in Schedule 1 of the Controlled Waste Regulations (as applicable).
WRD	means Waste Rock Dump.
WRL	means Waste Rock Landform.
WWTP	means wastewater treatment plant.

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**END OF CONDITIONS**



## Schedule 1: Maps

### Premises map

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

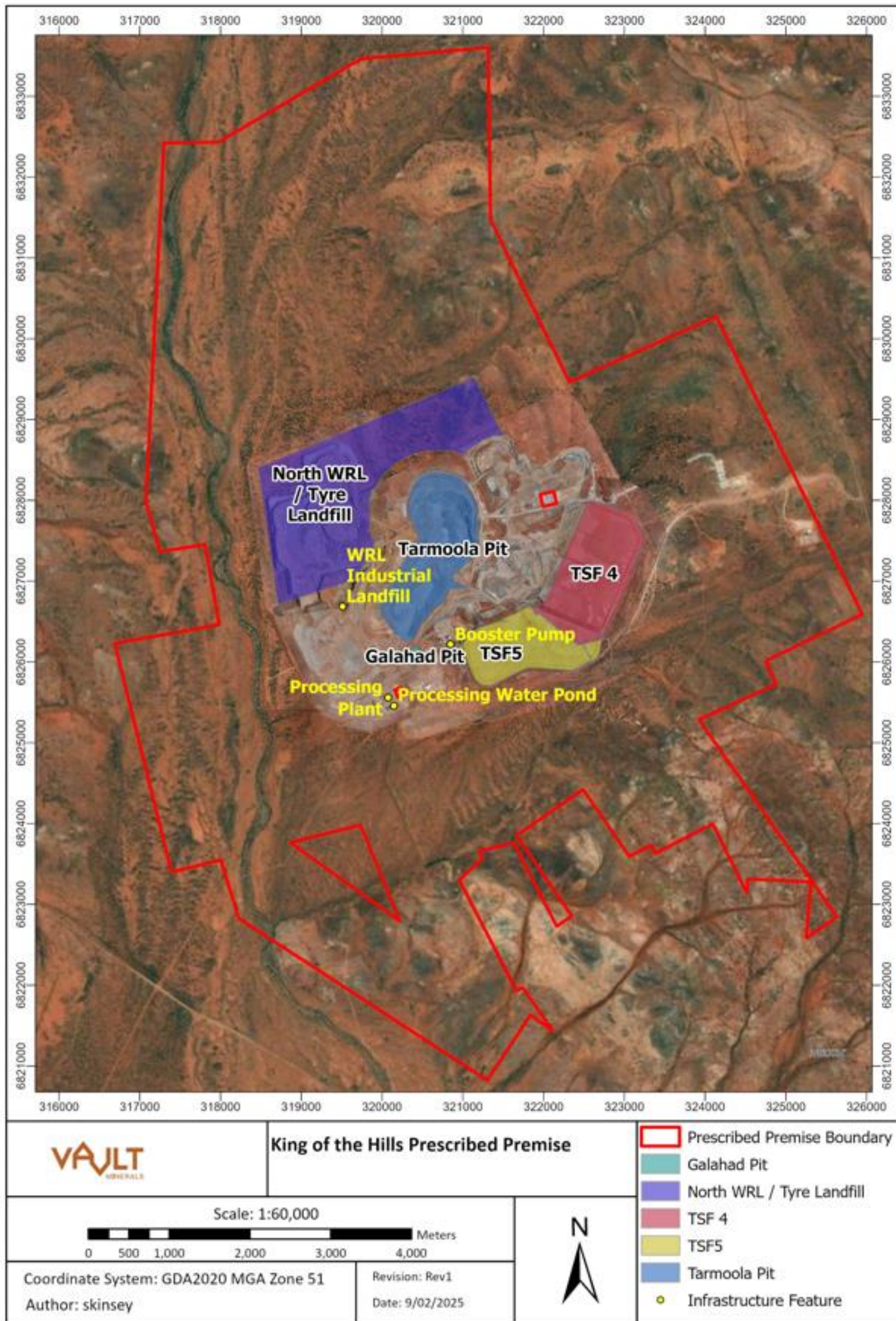


Figure 1: Map of the boundary of the prescribed premises and site layout of the main infrastructure



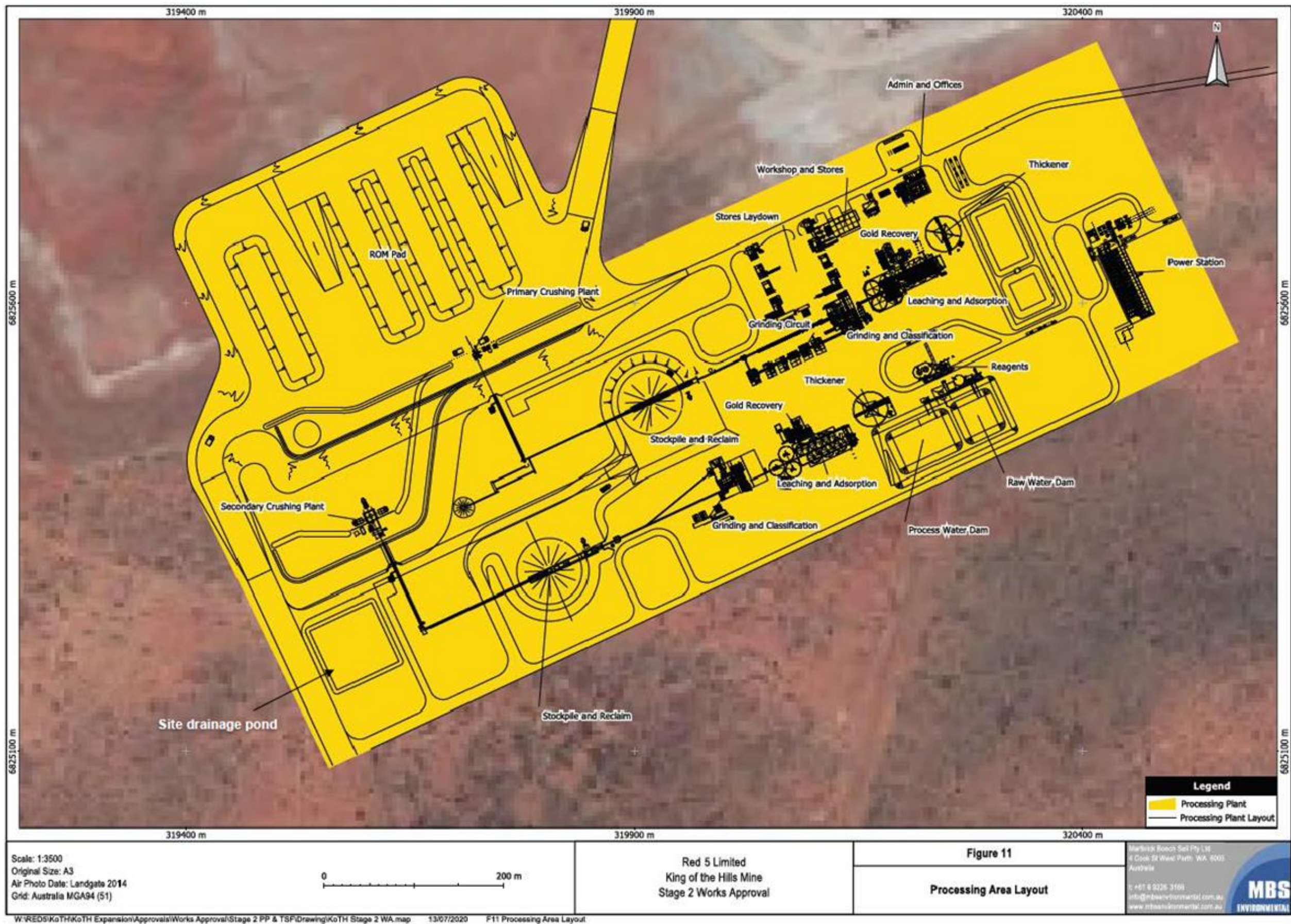


Figure 2: Processing area stormwater management infrastructure including bunding, diversion drains and 2 sediment control ponds



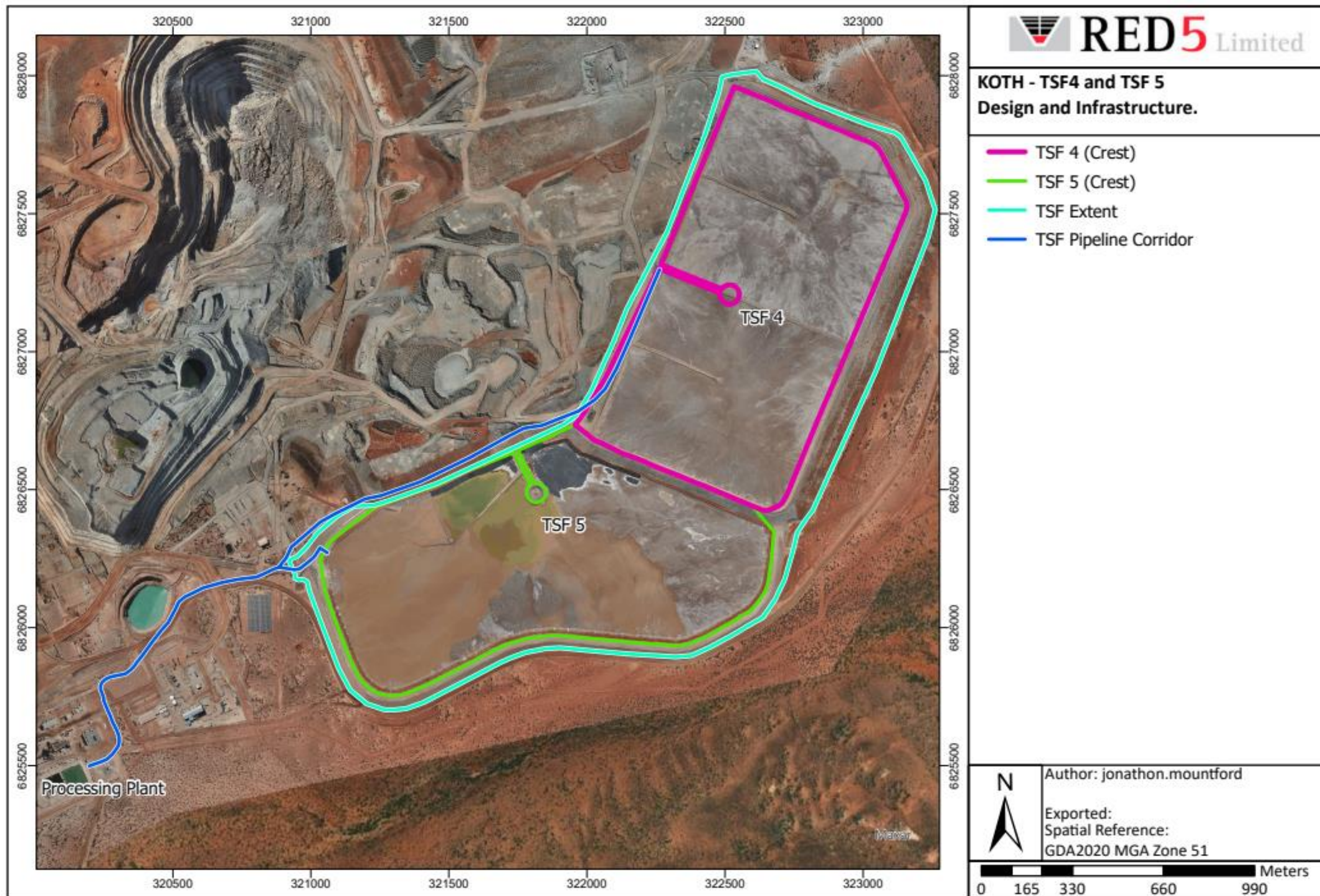


Figure 3: Tailings pipeline



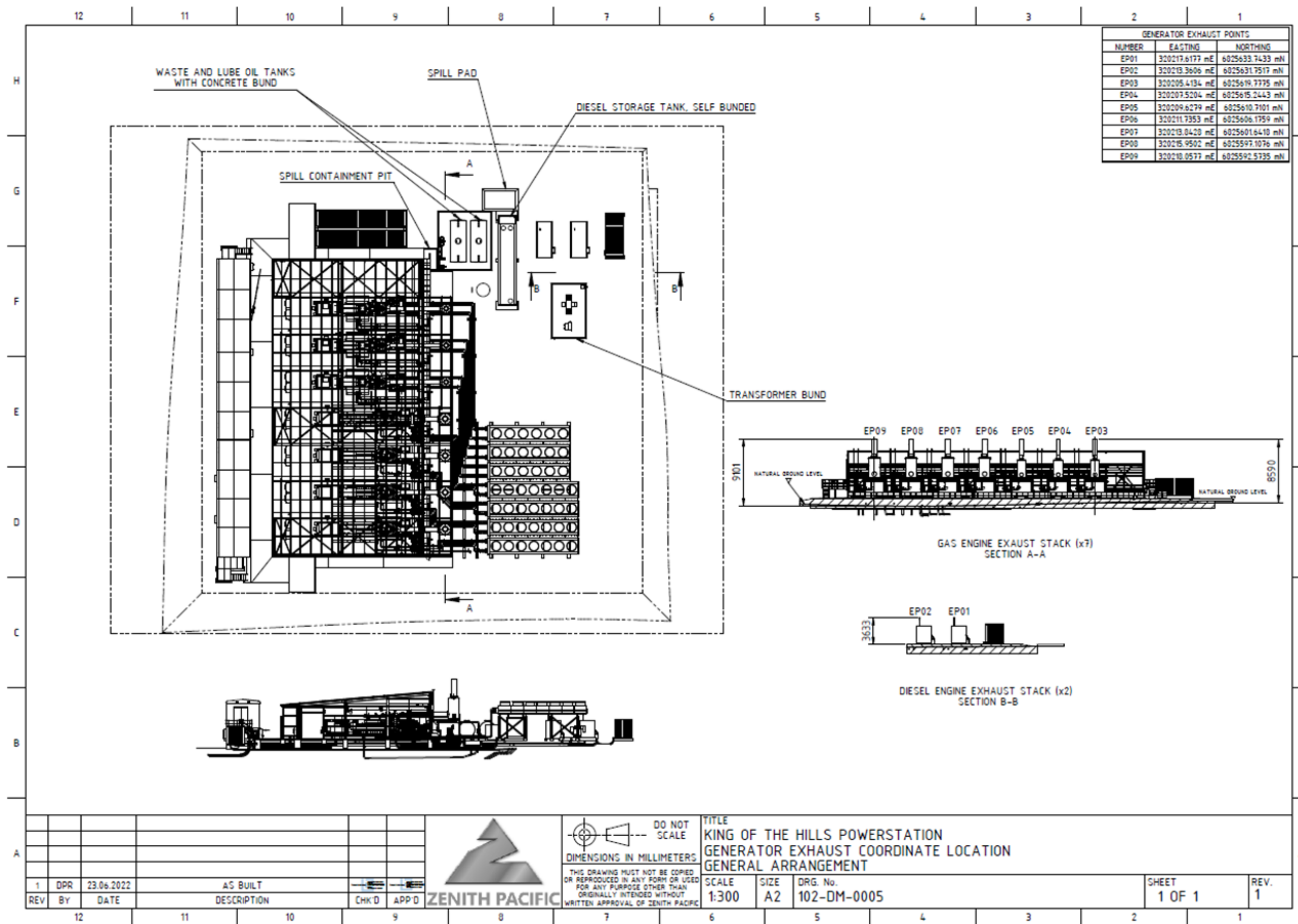


Figure 4: Power station generators layout



## Emission and discharge points

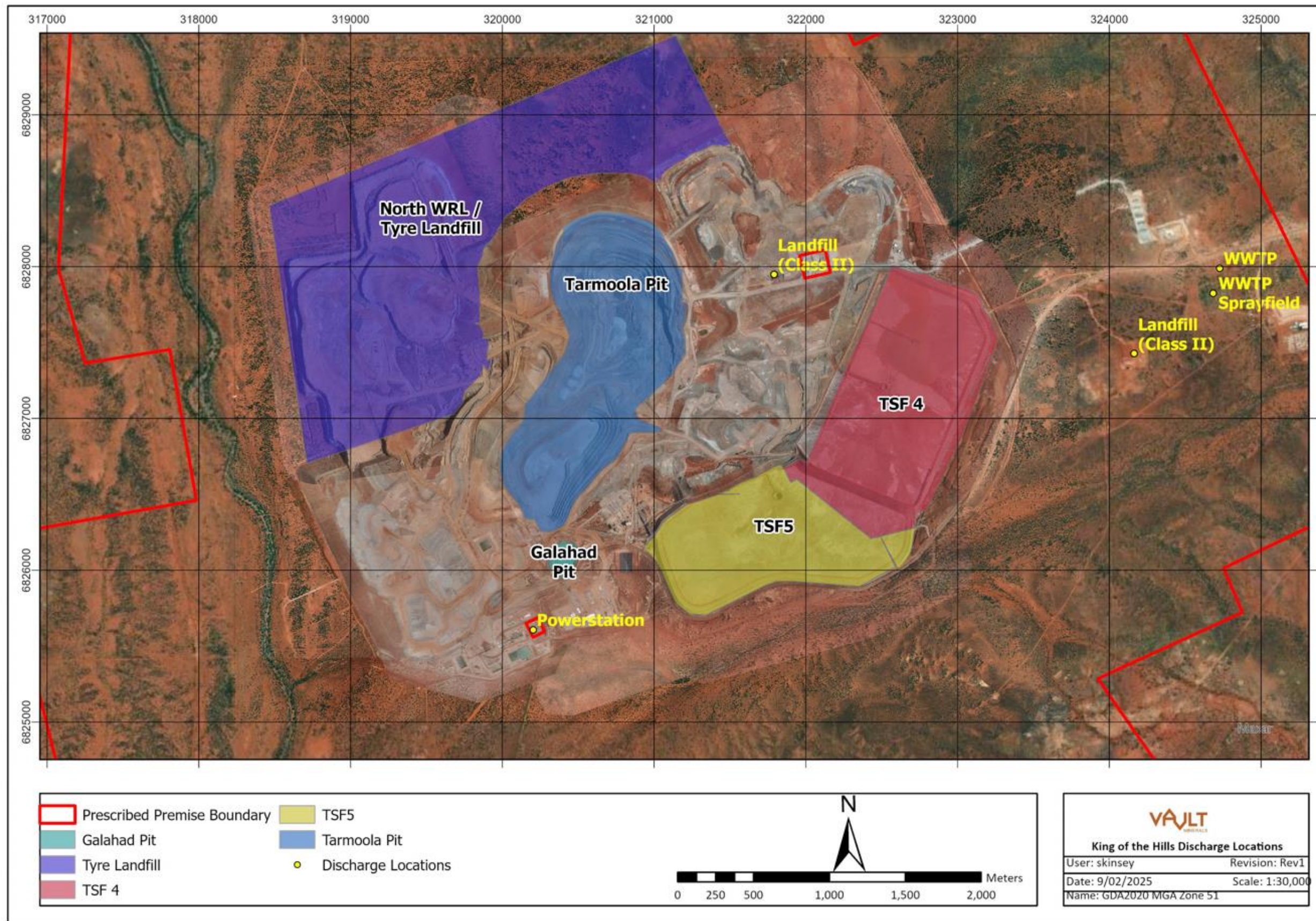


Figure 5: Authorised discharge points



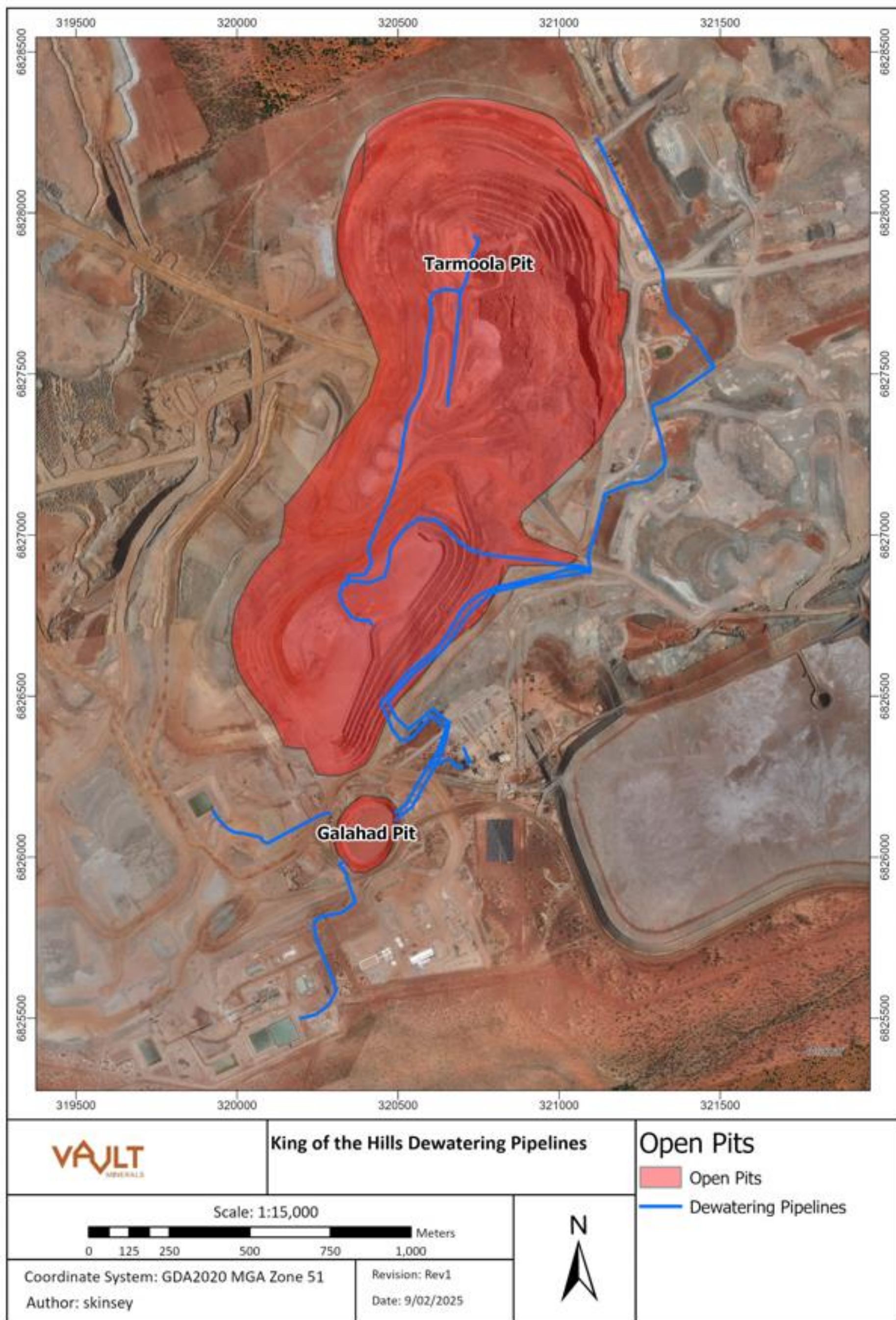


Figure 6: Dewatering pipelines



Monitoring locations

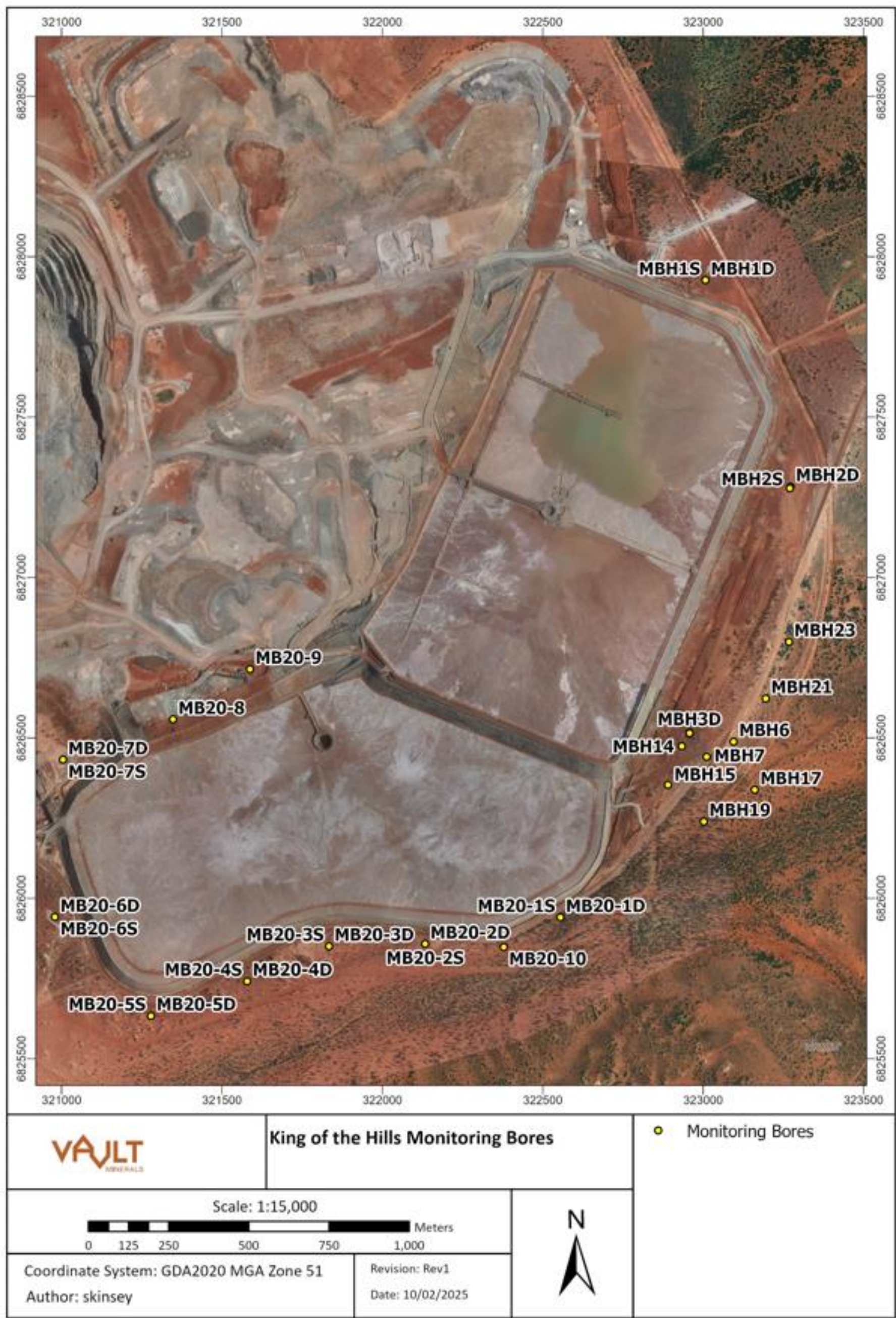


Figure 7: Location of groundwater monitoring bores



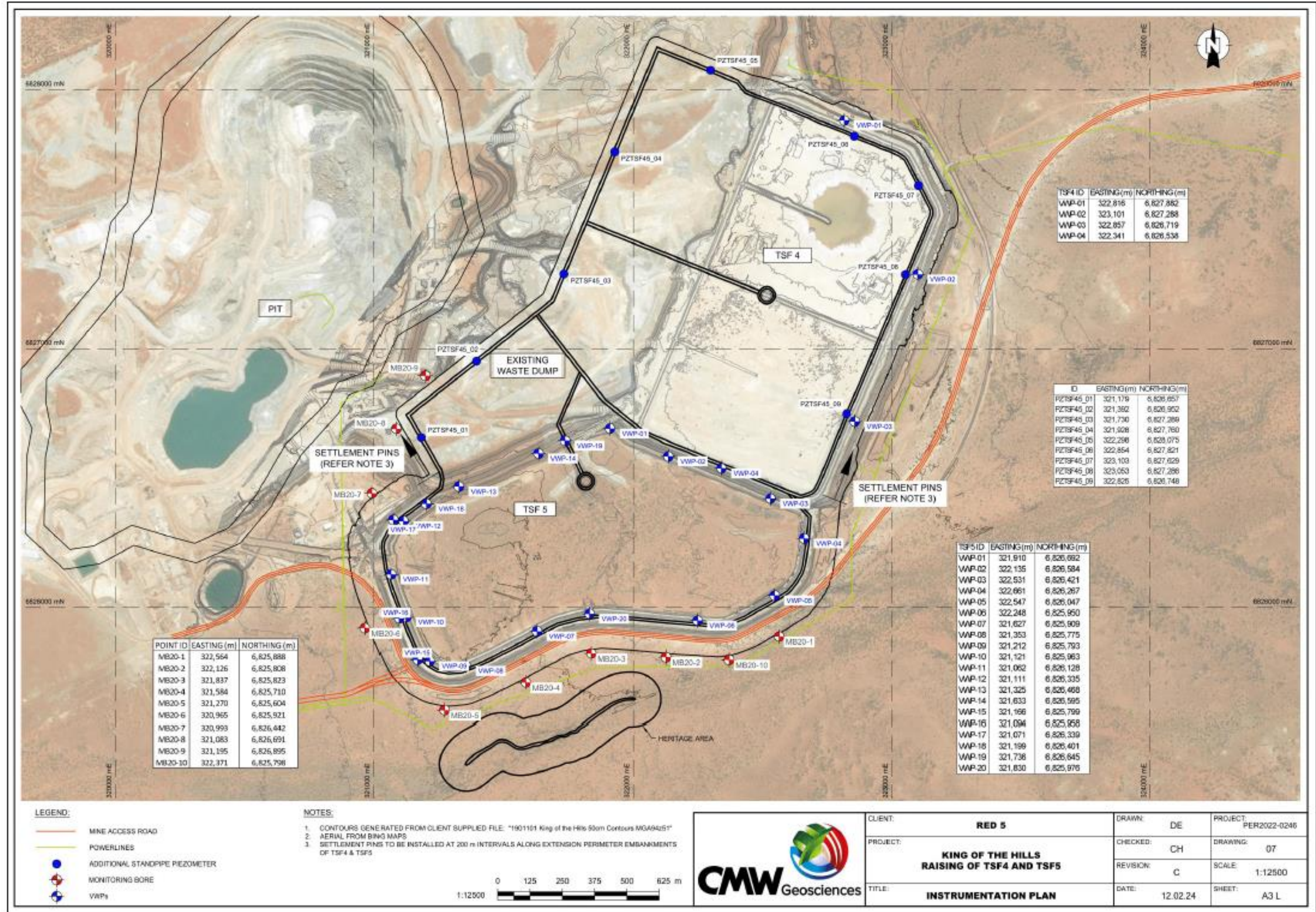


Figure 8: Location of Vibrating Wire Piezometers and Standpipe Piezometers



TSF 5 construction drawings

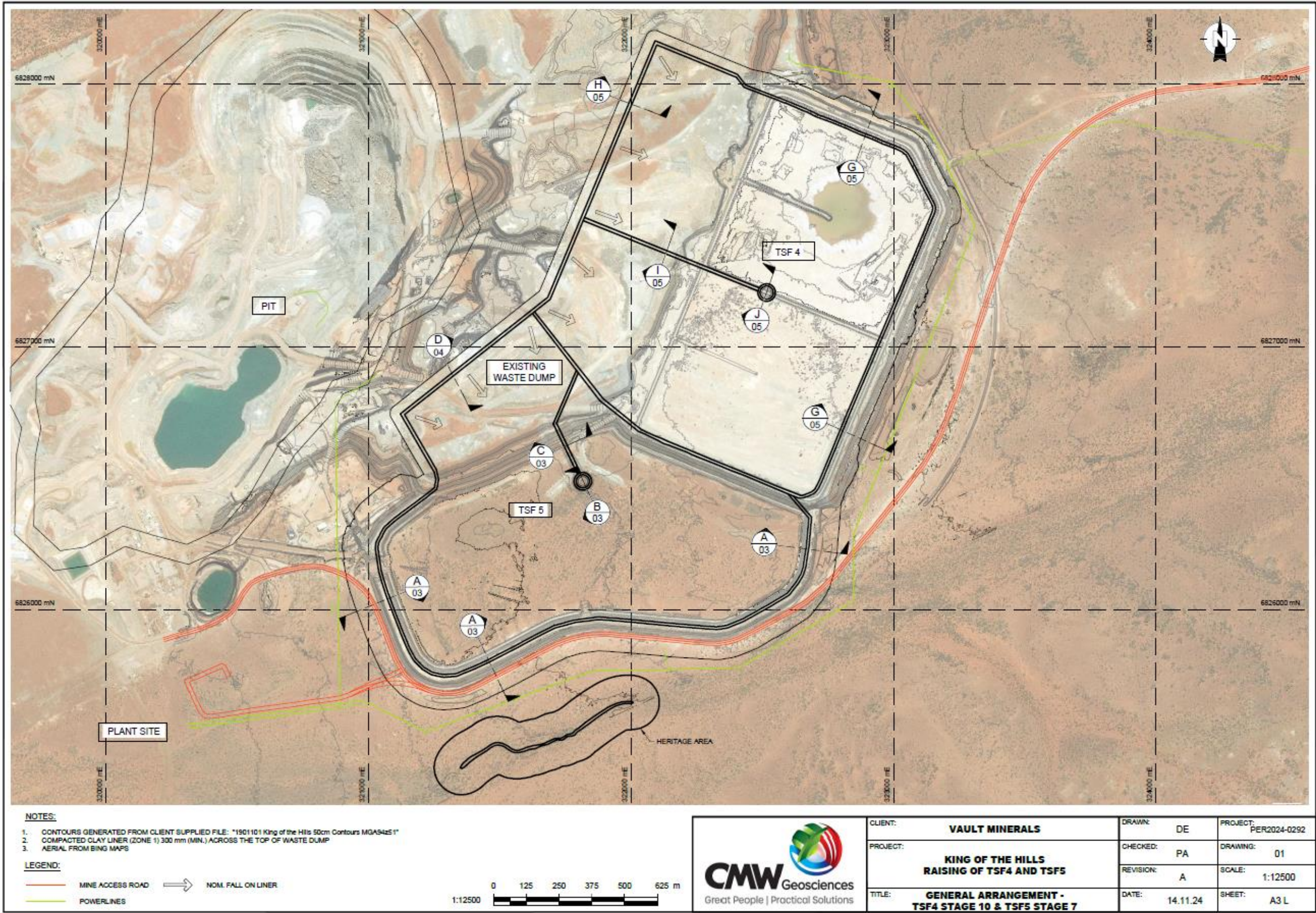


Figure 9: General arrangement – TSF 4 Stage 10 and TSF 5 Stage 7



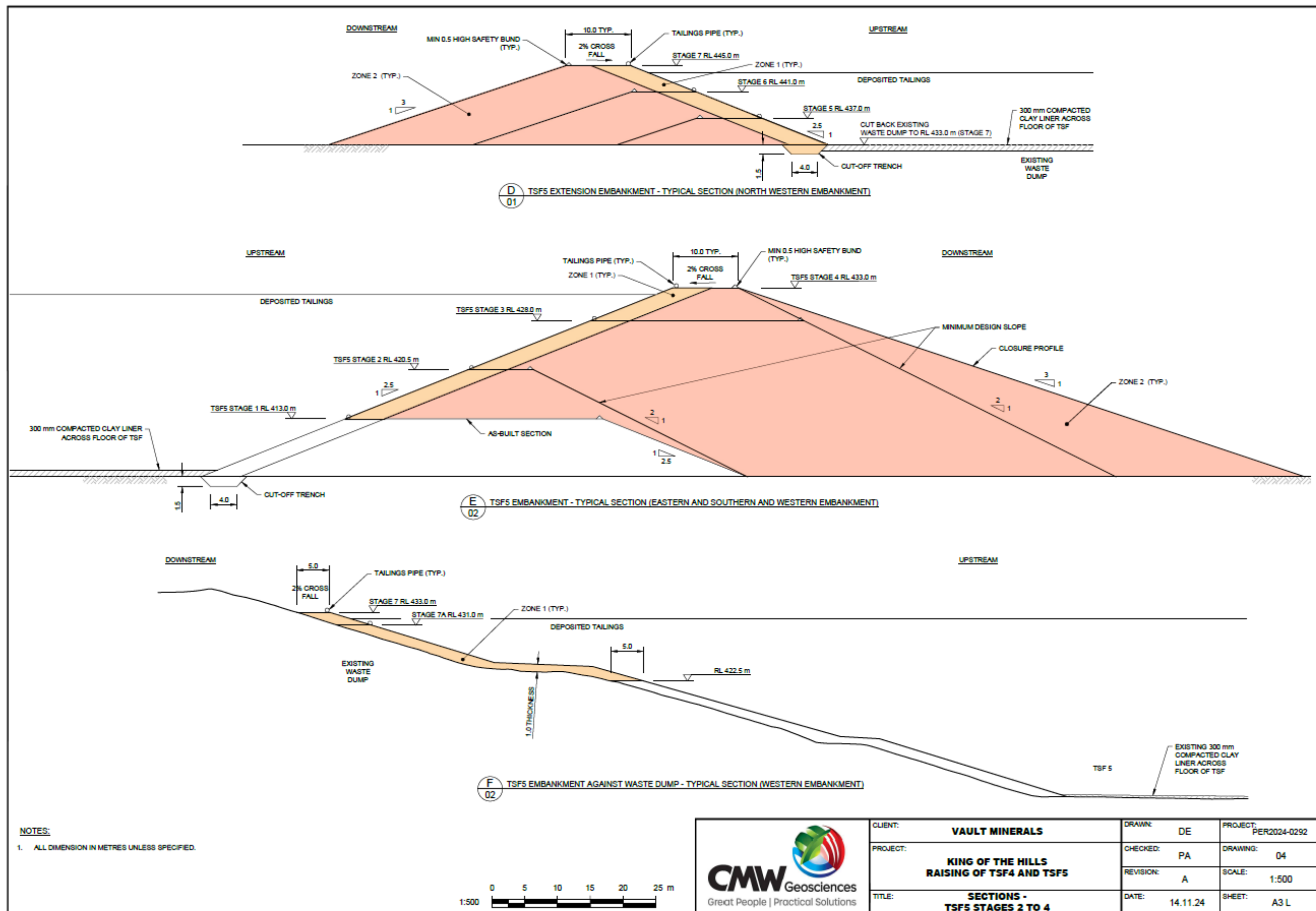


Figure 10: Sections – TSF 5 Stages 2 to 4



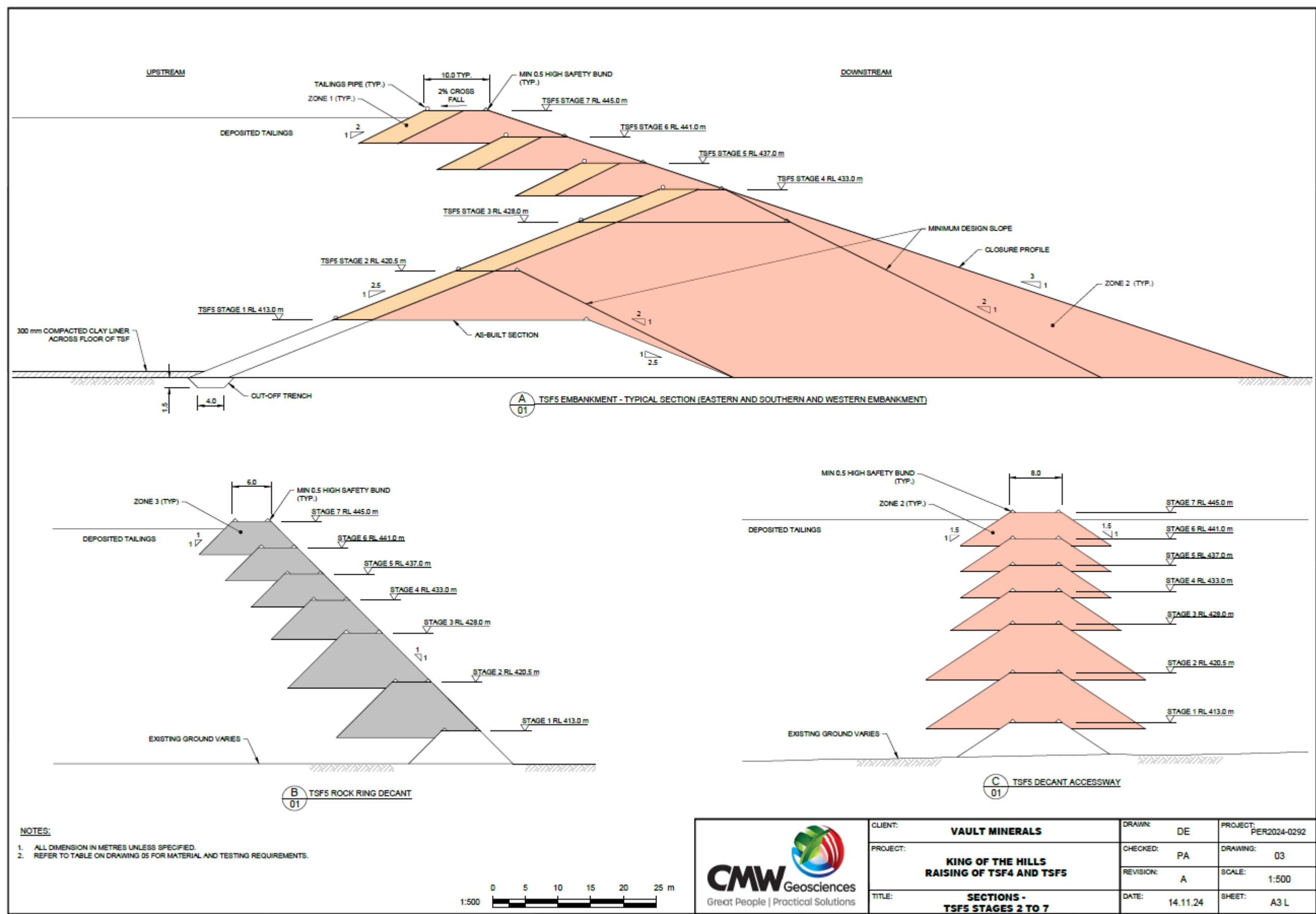


Figure 11: Sections – TSF 5 Stages 2 to 7