



<b>Licence number</b>	L9013/2016/1
<b>Licence holder</b>	Spartan Resources Limited
<b>ACN</b>	139 522 900
<b>Registered business address</b>	Level 1, 41-47 Colin Street WEST PERTH WA 6872
<b>DWER file number</b>	DER2016/002214-1
<b>Duration</b>	21/12/2017 to 20/12/2037
<b>Date of issue</b>	20/12/2017
<b>Date of amendment</b>	26 June 2025
<b>Premises details</b>	Dalgaranga Gold Project Mining Lease M59/749 and Miscellaneous Licence L59/151 DAGGAR HILLS WA 6638

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed	3,000,000 tonnes per annual period
Category 5: Processing or beneficiation of metallic or non-metallic ore: (b) tailings from metallic or non-metallic ore are reprocessed	2,000,000 tonnes per annual period
Category 6: Mine Dewatering	2,500,000 tonnes per annual period
Category 85: Sewage facility	50 m <sup>3</sup> per day
Category 89: Putrescible landfill site:	400 tonnes per year

This amended licence is granted to the Licence Holder, subject to the attached conditions, on 26 June 2025 by:

## MANAGER, RESOURCE INDUSTRIES

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

## Licence history

Date	Reference number	Summary of changes
20 December 2017	L9013/2016/1	Operation of WWTP and landfill.
1 November 2018	L9013/2016/1	Operation of the gold processing plant, Gilbeys TSF, Golden Wings in-pit TSF, and the power plant.
18 August 2020	L9013/2016/1	Construction of two additional embankment raises at the Gilbeys TSF (Stage 4 and 5 raises) including additional groundwater monitoring bores.
4 May 2021	L9013/2016/1	DWER initiated amendment to amend the groundwater monitoring bore trigger values and limits for SWL at the Gilbeys TSF.
8 November 2021	L9013/2016/1	Increase Category 5 processing plant throughput from 2.8 Mt/a to 3.0 Mt/a, removal of WAD-CN limit from condition 12, removal of Gilbeys TSF for authorised tailings discharge and other administrative amendments.
29 August 2023	L9013/2016/1	Licence amendment for Care and Maintenance: <ul style="list-style-type: none"> <li>replacement of decommissioned TSF monitoring bores with newly installed bores into the Licence;</li> <li>reduce bore monitoring and laboratory testing frequency; and</li> <li>postpone the bird monitoring and bird deterrent studies associated with TSF decant pond interactions until operations recommenced.</li> </ul>
07 February 2024	L9013/2016/1	Licence amendment to: <ul style="list-style-type: none"> <li>include Category 6: Mine dewatering with a design capacity of 2,500,000 tonnes per annual period; and</li> <li>allow the discharge of mine dewater from Gilbeys pit to the surrounding environment via two discharge points.</li> </ul>
19 November 2024	L9013/2016/1	Licence amendment to construct and operate a: <ul style="list-style-type: none"> <li>New ball mill and pre-leach thickener at the existing processing plant;</li> <li>Recovery of historical tailings from the Gilbeys TSF;</li> <li>Reclaimed tailings stockpile and screening areas;</li> <li>Installation of a Paste Plant utilising recovered tailings as feedstock to provide backfill support (paste fill) at the Never-Never underground mining void; and</li> <li>New Class II landfill at the Gilbey's West WRD</li> </ul>
26 June 2025	L9013/2016/1	Licence amendment to increase tailings remining to 2 Mtpa and paste fill production of 4.1 Mtpa based on the paste plant operating 24 hours, with a day and night shift.

## 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:

### General Conditions

1. The Licence Holder must ensure the limits specified in Table 1 are not exceeded.

**Table 1: Production or design capacity limits**

Category <sup>1</sup>	Category description <sup>1</sup>	Premises production or design capacity limit
5	Processing or beneficiation of metallic or non-metallic ore: (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed	3,000,000 tonnes per annual period
5	Processing or beneficiation of metallic or non-metallic ore: (b) tailings from metallic or non-metallic ore are reprocessed	2,000,000 tonnes per annual period
6	Mine dewatering	2,500,000 tonnes per annual period

Note 1: *Environmental Protection Regulations 1987*, Schedule 1.

### Infrastructure and equipment (construction)

2. The Licence Holder must:
  - (a) construct and/or install the infrastructure and/or equipment;
  - (b) in accordance with the corresponding design and construction / installation requirements; and
  - (c) at the corresponding infrastructure location;
 as set out in Table 2.

**Table 2: Design and construction / installation requirements**

Infrastructure	Design and construction / installation requirements	Infrastructure location
Gilbeys pit dewater pipes	HDPE Telemetry installed on inflow and outflow points	As depicted in Schedule 1: Maps: Figure 8
Gilbeys pit discharge point	Flow meters installed at the start of the pipeline and discharge points A and B  A velocity reducing structure designed to reduce velocity and prevent erosion when dewater is released	As depicted in Schedule 1: Maps: Figure 8 and 9

Infrastructure	Design and construction / installation requirements	Infrastructure location
Ball mill Pre-leach thickener	Incorporated into the Processing Plant infrastructure as shown in Schedule 1: Figure 3	As depicted in Schedule 1: Figure 1 and Figure 3
Gilbeys TSF reclaim cells	Earthworks undertaken as detailed in Schedule 1: Figure 12  Minimum 50 m off-set from the TSF south-eastern embankment upstream toe, and a minimum of 10 m off-set from upstream embankment toes on all other sides of the TSF  V-drains and collection sumps installed in accordance with design details shown in Schedule 1: Figure 12 and Figure 14	As depicted in Schedule 1: Maps: Figure 1, Figure 12, Figure 13 and Figure 14
Tailings stockpile 1 and screening area  Tailings stockpile 2 and screening area	Clay liner base compacted to achieve a permeability of $1 \times 10^{-9}$ m/s or less.  Constructed with a 3% gradient directed to drive-in sumps.  Clay liner covered with a drainage oxide waste rock with a minimum thickness of 0.5 m  Minimum 1.0 m high earthen windrows installed around stockpile areas	As depicted in Schedule 1: Figure 1 and Figure 11
Paste Plant	Maximum design capacity of 2,000,000 tonnes per annum.  Consists of the following infrastructure: <ul style="list-style-type: none"> <li>• Surge hopper and associated belt feeders transporting tailings to paste mixer</li> <li>• 400 tonne binder silo and screw feeder transferring binder to paste mixer</li> <li>• Raw water storage tank</li> <li>• Paste mixer receiving tailings, cement and water to produce paste fill</li> <li>• Borehole and pipeline to transfer paste fill to Never-Never underground mine voids</li> <li>• Control room, including live viewing of the paste plant and underground areas</li> </ul>	As depicted in Schedule 1: Figure 1 and Figure 11

3. The Licence Holder must operate the Gilbeys pit dewatering infrastructure, ball mill, pre-leach thickener, Gilbeys TSF reclaim cells, paste plant, and tailings stockpile and screening areas in accordance with conditions of this Licence, following submission of the compliance document required under Condition 19.

## Infrastructure and equipment (operation)

4. The Licence Holder must ensure that the site infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained in good working order and operated in accordance with the corresponding operational requirement set out in Table 3.

**Table 3: Infrastructure and equipment operational requirements**

Site infrastructure and equipment	Operational requirements	Infrastructure location
Gilbeys TSF reclaim cells	<p>Remining of tailings to occur within the area as depicted in Schedule 1: Figure 12.</p> <p>Earthworks sequencing for cells 1 to 7 as detailed in Schedule 1: Figure 12.</p> <p>Maintain a minimum 50 m off-set from the TSF south-eastern embankment upstream toe, and a minimum of 10 m off-set from upstream embankment toes on all other sides of the TSF.</p> <p>Maximum remining depth of 5.0 m.</p> <p>V-drains and collection sumps maintained and operated at each cell for the collection and removal of all surface water.</p> <p>A minimum 500 mm freeboard is maintained at collection sumps.</p> <p>All collected surface water transferred to the process water pond.</p> <p>Record monthly quantity of tailings removed from the Gilbeys TSF each month.</p>	As depicted in Schedule 1: Maps: Figure 1, Figure 12, Figure 13 and Figure 14
Tailings stockpile 1 and screening area Tailings stockpile 2 and screening area	Maintain earthen windrows, catchment swales and drive-in sumps for the collection and removal of surface water runoff from stockpiles and hardstand areas.	As depicted in Schedule 1: Maps: Figure 1 and Figure 11
Paste plant	<p>A total of up to 4,100,000 tonnes per annum of paste fill transferred via borehole to Never-Never underground mining voids for use in stabilising hanging walls.</p> <p>Record the quantities of pasted tailings transferred to underground mining voids each month.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 11
Stormwater management	<p>Stormwater from the:</p> <ul style="list-style-type: none"> <li>- dry processing area (ore stockpiles and dry crushing plant);</li> <li>- wet plant pad (milling, CIL, metal recovery, and refining and reagent areas); and</li> <li>- mine contractor area not contained in bunding, directed to the Sedimentation Pond by cut off drains.</li> </ul>	As depicted in Schedule 1: Maps: Figure 1 and Figure 2

Site infrastructure and equipment	Operational requirements	Infrastructure location
Sedimentation pond	<p>Accepts stormwater from the:</p> <ul style="list-style-type: none"> <li>- dry processing area (ore stockpiles and dry crushing plant);</li> <li>- wet plant pad (milling, CIL, metal recovery, and refining and reagent areas); and</li> <li>- mine contractor area not contained in bunding.</li> </ul> <p>25,000 m<sup>3</sup> capacity.</p> <p>Able to accept water from the Process water pond by plant site drainage network.</p> <p>Pipeline installed for transfer of water to the process water pond.</p> <p>A minimum 300 mm freeboard maintained.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 2
Process water pond	<p>Accepts Gilbeys TSF reclaim cell water.</p> <p>Accepts TSF decant return water.</p> <p>Accepts overflow from the Raw water pond and water transferred by pipeline from the Sedimentation Pond.</p> <p>10,000 m<sup>3</sup> capacity.</p> <p>Lined with 1.5 mm HDPE.</p> <p>A minimum 300 mm freeboard maintained.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 3
Raw water pond	<p>Accepts mine dewater from Gilbeys pit, Sly Fox pit and Golden Wings pit, and bore water.</p> <p>6,000 m<sup>3</sup> capacity.</p> <p>Lined with 1.5 mm HDPE.</p> <p>Fitted with a level control system.</p> <p>Overflow by HDPE spillway to the Process water pond.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 3
Gilbeys pit and Golden Wings pit dewater pipes	<p>HDPE.</p> <p>Fitted with flow meters and telemetry.</p> <p>Situated within bunded open trenches to contain spillage.</p>	As depicted in Schedule 1: Maps: Figure 8
Tailings slurry pipes and pumps Decant return lines and pumps.	<p>HDPE.</p> <p>Situated within bunded open trenches to contain spillage.</p> <p>Fitted with flow meters and telemetry.</p>	As depicted in Schedule 1: Maps: Figure 1
Gilbeys TSF seepage interception trench	<p>A maintained and bunded TSF seepage interceptor trench to accumulate seepage into a sump.</p>	As depicted in Schedule 1:

Site infrastructure and equipment	Operational requirements	Infrastructure location
	Freeboard of seepage interceptor trench to be maintained at >1.5 m at all times.	Maps: Figure 7 – Gilbeys TSF seepage interception trench
Golden Wings in-pit TSF	<p>Tailings deposition no more than 0.5 mBGL.</p> <p>Maintenance of decant pond as far away from walls as practically possible.</p> <p>Gas guns, kites and/or similar bird deterrent technology to be used to deter birds from interacting with the TSF decant pond.</p> <p>TSF surface is managed to prevent dust lift off.</p>	As depicted in Maps: Figure 1
Golden Wings in-pit TSF pontoon mounted pump	Pontoon mounted pump at the southeastern side of the pit for recovery of decant water.	-
Golden Wings in-pit TSF spigots for tailing deposition	Single spigot points located along the western and northern perimeter of the pit for subaerial deposition.	-
WWTP - Extended aeration returned activated sludge process (EA-RAS) treatment plant	<p>Capacity 50 m<sup>3</sup>/day.</p> <p>Level float sensors and alarms on the raw storage water tank and irrigation storage tank; inflow and irrigation tank discharge magnetic flow meters; and visual alerts for aerator, storage /balance tank and irrigation tank.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 6
WWTP Evaporation Ponds 1 and 2	<p>Storage of treated wastewater from the WWTP and brine from the village reverse osmosis plant.</p> <p>Lined with 1.5 mm HDPE.</p> <p>Minimum freeboard of 300 mm maintained.</p>	As depicted in Schedule 1: Maps: Figure 1 and Figure 6
Landfills	<p>Located within a Waste Rock Dump.</p> <p>Located on the higher levels of the Waste Rock Dump (&gt;5 m) to prevent stormwater runoff entering a landfill trench.</p> <p>Shall be fenced.</p> <p>Putrescible landfill trenches shall be no more than 20 m in length, no more than 5 m deep and bunded on three (3) sides with an earthen bund to a minimum height of 2 m.</p> <p>'Industrial' trench 36 m in length, and no more than 5m deep.</p>	<p>Waste Rock Dumps located as depicted in Schedule 1:</p> <p>Maps: Figure 1</p>



## Emissions and discharges

5. The Licence Holder must ensure that the emissions specified in Table 4 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

**Table 4: Authorised discharge points**

Emission	Discharge point	Discharge point location
Tailings	Golden Wings in-pit TSF	Golden Wings in-pit TSF - As shown in Schedule 1, Figure 1.
Tailings paste fill	Never-Never underground mine voids via transfer borehole located at the Paste Plant	As shown in Schedule 1, Figure 1.
Mine dewater (Brackish) from Gilbeys pit	Discharge point A and B	As shown in Schedule 1, Figure 8.

## Specified actions

6. The Licence Holder must ensure that wastes accepted onto the landfill are processed in accordance with the requirements set out in Table 5.

**Table 5: Waste processing**

Landfill	Process requirements and limits <sup>1</sup>
Waste <sup>1</sup>	<p>Clean fill, Putrescible Waste, Inert Waste Type 1 and Inert Waste Type 2 accepted only.</p> <p>No more than 400 tonnes per year of all waste types cumulatively shall be disposed of by landfilling.</p> <p>Waste shall be buried within a defined trench.</p> <p>Putrescible waste shall be buried separately from all other waste types.</p> <p>The 'Industrial' trench shall be used for burial of Clean Fill, Inert Waste Type 1 and Inert Waste Type 2 (excluding tyres) only.</p> <p>Tyres shall be buried in a separate trench and contain less than 1,000 tyres.</p> <p>Any waste that has been blown outside the active landfill area shall be returned to the tipping area on a weekly basis.</p>

Note 1: Waste types as defined in the Landfill Definitions.

7. The Licence Holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 6.

**Table 6: Cover requirements**

Landfill	Cover requirements
Waste cover <sup>1</sup>	<p>Waste cover shall be a dense, incombustible material.</p> <p>Waste in putrescible trenches totally covered once per week or as soon as practicable after deposit, with no waste left exposed. Final cover to be at least 1 m.</p> <p>'Industrial' trench to be covered within three months of the final waste load. Final cover to be at least 1 m.</p> <p>Enough cover material shall be stored and readily available at any one time for the tipping area to be covered at least twice.</p>

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

**8. The Licence Holder must:**

- (a) undertake inspections as detailed in Table 7;
- (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 with each daily inspection record signed by the responsible person.

**Table 7: Inspection of infrastructure**

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
TSF freeboard and decant pond	Visual to confirm: <ul style="list-style-type: none"> <li>• Required freeboard capacity is available; and</li> <li>• Location of decant pond relative to pit walls.</li> </ul>	Daily
Gilbeys TSF seepage interception trench	Visual inspection to confirm containment capacity	Daily
Dewatering pipelines	Visual integrity	Daily

Scope of inspection	Type of inspection	Frequency of inspection
Gilbeys TSF reclaim cells	Visual inspection to confirm all surface water run-off is captured in v-drain before discharging to collection sumps	Daily
Gilbeys TSF reclaim cells - collection sumps	Visual inspection to confirm a minimum 500 mm freeboard is maintained	Daily
Paste Plant above ground discharge infrastructure	Visual integrity	Daily when operational

## 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 surface water sampling is conducted in accordance with AS/NZS 5667.4;
- (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- (d) 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) monthly monitoring is undertaken at least 15 days apart; and
- (b) quarterly monitoring is undertaken at least 45 days apart.

11. The Licence Holder must undertake the groundwater monitoring in Table 8 according to the specifications in that table and not exceed the corresponding limits in that Table.

**Table 8: Groundwater monitoring**

Monitoring point and reference locations	Parameter	Trigger	Limit	Units	Averaging period	Frequency	Method
<u>Groundwater bores</u> (As depicted in Schedule 1 Maps: Figure 4) IMB05 IMB06 IMB07 IMB08	Standing water level (SWL) <sup>1 2</sup>	3.5	Not less than 2.5	mBGL	Spot sample	Quarterly during normal operations	AS/NZ 5667.1 AS/NZS5667.11
	pH <sup>1 2</sup>	-	-	pH units		During Care and Maintenance: 6 monthly field monitoring and	
	Electrical Conductivity (EC) <sup>2</sup>			mS/cm			

## Department of Water and Environmental Regulation

Monitoring point and reference locations	Parameter	Trigger	Limit	Units	Averaging period	Frequency	Method
IMB09 IMB10 IMB11  <u>Golden Wings in-pit TSF groundwater bores</u> As depicted in Schedule 1 Maps: Figure 4 and Figure 5) Shallow bores: <ul style="list-style-type: none"> <li>• MBWS01</li> <li>• MBWS02</li> <li>• MBWS03</li> <li>• MBWS04</li> </ul>	Total dissolved solids (TDS)	-	-	mg/L		annual laboratory testing for all parameters in bores	
	Weak acid dissociable cyanide (WAD-CN)	-	<0.5				
	Aluminium (Al)	-	-				
	Arsenic (As)	-	-				
	Antimony (Sb)	-	-				
	Cadmium (Cd)	-	-				
	Chromium (Cr) (V1)	-	-				
	Chromium (Cr) Total	-	-				
	Cobalt (Co)	-	-				
	Copper (Cu)	-	-				
	Iron (Fe)	-	-				
	Mercury (Hg)	-	-				
	Nickel (Ni)	-	-				
	Selenium (Se)	-	-				
	Thallium (Tl)	-	-				
	Zinc (Zn)	-	-				
	Bicarbonate (HCO <sub>3</sub> )	-	-				
	Calcium (Ca)	-	-				
	Chloride (Cl)	-	-				
	Potassium (K)	-	-				
	Magnesium (Mg)	-	-				
	Sodium (Na)	-	-				
	Sulfate (SO <sub>4</sub> )	-	-				
<u>Golden Wings in-pit TSF groundwater bores</u> As depicted in	Standing water level (SWL) <sup>1 2</sup>	3 mBGL and 5 mBGL		mBGL			
	pH <sup>1 2</sup>	-	-	pH units			

## Department of Water and Environmental Regulation

Monitoring point and reference locations	Parameter	Trigger	Limit	Units	Averaging period	Frequency	Method
Schedule 1 Maps: Figure 1 and Figure 5)	Electrical Conductivity (EC) <sup>2</sup>			mS/cm			
MBIWL01	Total dissolved solids (TDS)	-	-	mg/L			
MBIWL02	Weak acid dissociable cyanide (WAD-CN)	-	-				
MBIWL03							
MBIWL04							
MBIWL05	Aluminium (Al)	-	-				
MBIWL06	Arsenic (As)	-	-				
MBIWL07	Antimony (Sb)	-	-				
MBIWL08	Cadmium (Cd)	-	-				
MBIWL09	Chromium (Cr) (V1)	-	-				
MBIWL10	Chromium (Cr) Total	-	-				
	Cobalt (Co)	-	-				
	Copper (Cu)	-	-				
	Iron (Fe)	-	-				
	Mercury (Hg)	-	-				
	Nickel (Ni)	-	-				
	Selenium (Se)	-	-				
	Thallium (Tl)	-	-				
	Zinc (Zn)	-	-				
	Bicarbonate (HCO <sub>3</sub> )	-	-				
	Calcium (Ca)	-	-				
	Chloride (Cl)	-	-				
	Potassium (K)	-	-				
	Magnesium (Mg)	-	-				
	Sodium (Na)	-	-				
	Sulfate (SO <sub>4</sub> )	-	-				

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

Note 2: During Care and Maintenance as reported to the Department for Care and Maintenance having commenced and ceased.

12. The Licence Holder must undertake the decant water monitoring in Table 9 according to the specifications in that table and not exceed the corresponding limit in that Table.

**Table 9 Decant water monitoring**

Monitoring point and reference locations	Parameter	Units	Averaging period	Frequency	Method
Decant (supernatant) pond of Golden Wings in-pit Tailings Storage Facility (As depicted in Schedule 1 Maps: Figure 1)	Weak acid dissociable cyanide (WAD-CN)	mg/L	Spot sample	<ul style="list-style-type: none"> <li>Monthly during operations of the TSF; or</li> <li>During Care and Maintenance - six monthly</li> </ul>	AS/NZ 5667.1 AS/NZS 5667.4
	pH <sup>1</sup>	pH units			

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

13. The Licence Holder must record the results of all monitoring required by Condition 11 Table 8, Condition 12 Table 9, Condition 15 Table 11 and Condition 16 Table 12.
14. The Licence Holder must, in the event of a parameter in Condition 11 Table 8 being equal to or less than the corresponding trigger value specified in that condition, undertake the management actions specified in Table 10 that correspond with the relevant parameter and corresponding monitoring location within the corresponding timeframe.

**Table 10: Management actions**

Monitoring location	Parameters	Management actions	Timeframe
Groundwater monitoring bores IMB05 IMB06 IMB07 IMB08 IMB09 IMB10 IMB11 (As depicted in Schedule 1 Maps: Figure 1 and Figure 4)	SWL	(a) Activate the relevant groundwater recovery bore(s) as depicted in Schedule 1 Maps: Figure 4. (b) Investigate the cause(s) as to why the groundwater level(s) at the Gilbeys TSF are increasing. (c) Take relevant action(s) to minimise the likelihood of future increases in the groundwater level(s) at the Gilbeys TSF.	Management actions to commence within 30 days after becoming aware that the parameter in Condition 11 Table 8 is equal to or less than the corresponding trigger value.  The management actions are to continue until the parameter in Condition 11 Table 8 is greater than the corresponding trigger value.
Golden Wings in-pit TSF groundwater bores As depicted in Schedule 1 Maps: Figure 1 and Figure 5)	SWL	If the lower trigger level is exceeded, ground-based geophysical investigations must be carried out to determine the full spatial extend and depth of groundwater contamination	Management actions to commence within 30 days after becoming aware that the parameter in Condition 11 is equal to or less than

Monitoring location	Parameters	Management actions	Timeframe
MBIWL01 MBIWL02 MBIWL03 MBIWL04 MBIWL05 MBIWL06 MBIWL07 MBIWL08 MBIWL09 MBIWL10		that has been caused by seepage from the TSF.	the corresponding trigger value.  The management actions are to continue until the parameter in Condition 11 Table 8 is greater than the corresponding trigger value.

15. The Licence Holder must undertake the monitoring in Table 11 according to the specifications in that table.

**Table 11: Bird monitoring requirements**

Monitoring point	Parameter	Frequency	Averaging period <sup>2</sup>	Method
TSF decant pond	Number and species (if able to be identified at time of inspection) of bird interacting <sup>1</sup> with the TSF decant pond	Daily <u>or</u> Weekly - during Care and Maintenance	Spot sample	Visual inspection

Note 1: 'Interacting' means birds that are in contact with the pond water (eating, drinking, swimming, or foraging etc.)

Note 2: denotes minimum averaging period, however anecdotal sightings of any birds interacting with the pond should also be recorded where possible.

16. The Licence Holder must undertake photo monitoring in Table 12 according to the specifications in that table and record and investigate results.

**Table 12: Monitoring of vegetation health**

Monitoring point	Parameter	Frequency	Sampling Method
As depicted in Schedule 1: Maps: Figure 10	Vegetation health	Each discharge point/points – Baseline (prior to commencing) + every 4 weeks during discharge campaign  Impact Points – Baseline + every 8 weeks during discharge campaign  Control Points – Baseline + Spot (if impacts detected in impact areas)	Photo monitoring from set GPS position

17. The Licence Holder must undertake an investigation into quantifying the level of risk to birds from exposure to the TSF decant pond and assess the feasibility of bird deterrent

technology in accordance with the document titled 'GNT Resources, Dalgaranga Gold Project, Proposal to:1. Quantify the level of risk to birds from exposure to mine tailings water 2. Assess the feasibility of bird deterrent technology for application to mining' by Cooe Pty Ltd and dated 10/6/2021.

## Notification

18. The Licence Holder must immediately after becoming aware of any breach of any limit specified in the licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
- (a) which condition was not complied with and a copy of the corresponding data and previous trigger level data (if applicable);
  - (b) the time and date when the non-compliance occurred;
  - (c) if any environmental impact has occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;
  - (d) the details and result of any investigation undertaken into the cause of the non-compliance;
  - (e) what action(s) has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
  - (f) what action(s) will be taken and the date by which it will be taken to prevent the non-compliance, including monitoring undertaken to ensure compliance is met and there is and no environmental impact.
19. The Licence Holder shall ensure that the parameters listed in Table 13 are notified to the CEO in accordance with the notification requirements of the table.

**Table 13: Notification requirements**

Condition of table (if relevant)	Parameter	Notification requirement	Format of form
-	Recommencing start-up of operations (after a period of Care and Maintenance)	At least 90 days prior recommencing operations	None specified
Condition 3	<p>The Licence Holder must:</p> <ul style="list-style-type: none"> <li>(a) undertake an audit of their compliance with the requirements of Condition 2; and</li> <li>(b) prepare and submit to the CEO and Environmental Compliance Report on that compliance.</li> </ul> <p>The Environmental Compliance Report must include as a minimum the following:</p> <ul style="list-style-type: none"> <li>(a) certification by a suitably qualified engineer that certifies that the works were constructed in accordance with the construction requirements specified in Table 2;</li> <li>(b) as constructed plans and photographic evidence; and</li> </ul>	Within 30 days of the completion of construction	None specified



	(c) be signed by a person authorised to represent the Licence Holder and contain the printed name and position of that person.		
--	--	--	--

## Records and reporting

- 20.** 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 maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Condition 4 Table 3 of this Licence;
  - (c) monitoring undertaken in accordance with Condition 11 Table 8, Condition 12 Table 9, Condition 15 Table 11 and Condition 16 Table 12 of this licence;
  - (d) complaints received under Condition 22 of this Licence; and
  - (e) quantity of tailings recovered in accordance with Condition 4 Table 3, and quantity of paste fill discharged in accordance with Condition 5, Table 4.
- 21.** The books specified under Condition 20 must: 5
- (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.
- 22.** 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.
- 23.** 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 31 December an Annual Audit Compliance Report in the approved form.

## Department of Water and Environmental Regulation

24. The Licence Holder shall submit to the CEO an Annual Environmental Report by 31 December, in each year. The report shall contain the information listed in Table 14 in the format or form specified in that table for the annual period.

**Table 14: Annual Environmental Report**

Condition	Parameter	Format or form <sup>1</sup>
-	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 1	Amount of tailings processed Volume of mine dewater discharged from Gilbeys pit to the environment	None specified
Condition 4 Table 3	Amount of tailings material reclaimed from the Gilbeys TSF	None specified
Condition 5 Table 4	Amount of paste fill discharged to Never-Never underground mine voids	None specified
Condition 6 Table 5	Locations of landfills opened and closed Amount of waste disposed, by waste type	None specified
Condition 11 Table 8	Groundwater monitoring data (groundwater levels and groundwater quality) including an assessment and description of trends and impacts	Include all historical records presented in tabular and graphical format (excel format)
Condition 12 Table 9	Monitoring of decant water	To include historical records presented graphically with an interpretation of data
Condition 15 Table 11	Bird monitoring data	None specified
Condition 16 Table 12	Vegetation health monitoring	None specified
Condition 18	Description of limit exceedances	None specified
Condition 22	Complaints summary	None specified
Condition 23	Compliance	Annual Audit Compliance Report (AACR) form downloadable from the Department's website

- 25.** The Licence Holder must submit to the CEO by 24 months after the resumption of normal operations (no further Care and Maintenance) a report that details the outcome of the investigation required by Condition 17. The Report must contain but not be limited to:
- (a) A summary of bird monitoring data acquired over the 24-month study;
  - (b) A risk assessment, supported by site monitoring data, on the impact to birds from WAD-CN in the TSF decant pond;
  - (c) Details on the feasibility of using cameras equipped with artificial intelligence (AI) to support the bird monitoring program;
  - (d) Details on the feasibility of using AI managed bird deterrent systems and comparison of these methods to traditional time-based bird deterrence systems;
  - (e) An assessment of bird behaviour and response to any bird deterrence systems implemented; and
  - (f) Commitments, including timeframes, as to what controls will be implemented as a result of this study to manage the determined level of risk to birds from WAD-CN within the TSF decant pond.

## Definitions

In this licence, the terms in Table 15 have the meanings defined.

**Table 15: Definitions**

Term	Definition
ACN	Australian Company Number.
Annual Period	means a 12 month period commencing from 1 November until 31 October.
Annual Compliance Audit 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).
AI managed bird deterrent systems	means systems that include (but not limited to): <ul style="list-style-type: none"> <li>- traditional bird deterrent systems triggered by cameras equipped with artificial intelligence to detect birds; and</li> <li>- technology using cameras equipped with artificial intelligence to recognise bird species and emit species specific bird sounds to modify bird behaviour.</li> </ul>
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 5667.4	means the Australian Standard AS/NZS 5667.4 <i>Water Quality – Sampling – Guidance on sampling from lakes, natural and manmade</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.
CEO	means Chief Executive Officer of the Department. “submit to / notify the CEO” (or similar), means either: <div style="margin-left: 40px;"> Director General  Department administering the <i>Environmental Protection Act 1986</i>  Locked Bag 10  Joondalup DC WA 6919 </div> or: <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Clean Fill	as defined in the Landfill Definitions.
Compliance Report	means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.

## Department of Water and Environmental Regulation

Term	Definition
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.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
Freeboard	The distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
HDPE	High Density Polyethylene.
Inert Waste Type 1	As defined in the Landfill Definitions.
Inert Waste Type 2	As defined in the Landfill Definitions.
Inspector	An inspector appointed by the CEO in accordance with s.88 of the EP Act.
Landfill definitions	<i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)</i> .
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the specified conditions contained within.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
mBGL	means metres below ground level
Mtpa	Million Tonnes Per Annum
NATA	means the National Association of Testing Authorities, Australia;
Pollution	has the same meaning given to that term under the EP Act.
Premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the Figure 1 in Schedule 1 to this licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Putrescible Waste	As defined in the Landfill Definitions.

## Department of Water and Environmental Regulation

Term	Definition
Quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December.
RL	means Reduced Level.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Spot sample	means a discrete sample representative at the time and place at which the sample is taken.
SWL	means standing water level.
tpa	means tonnes per annum
Traditional time-based bird deterrent systems	means deterrents such as loud noises or laser beams set on a random preprogrammed pattern.
TSF	means tailings storage facility.
waste	has the same meaning given to that term under the EP Act.
Waste type	waste types identified in the Landfill Definitions, or in Schedule 1 of the Controlled Waste Regulations (as applicable).
WWTP	Wastewater treatment plant.

---

**END OF CONDITIONS**



## Schedule 1: Maps

Premises boundary depicted in green.

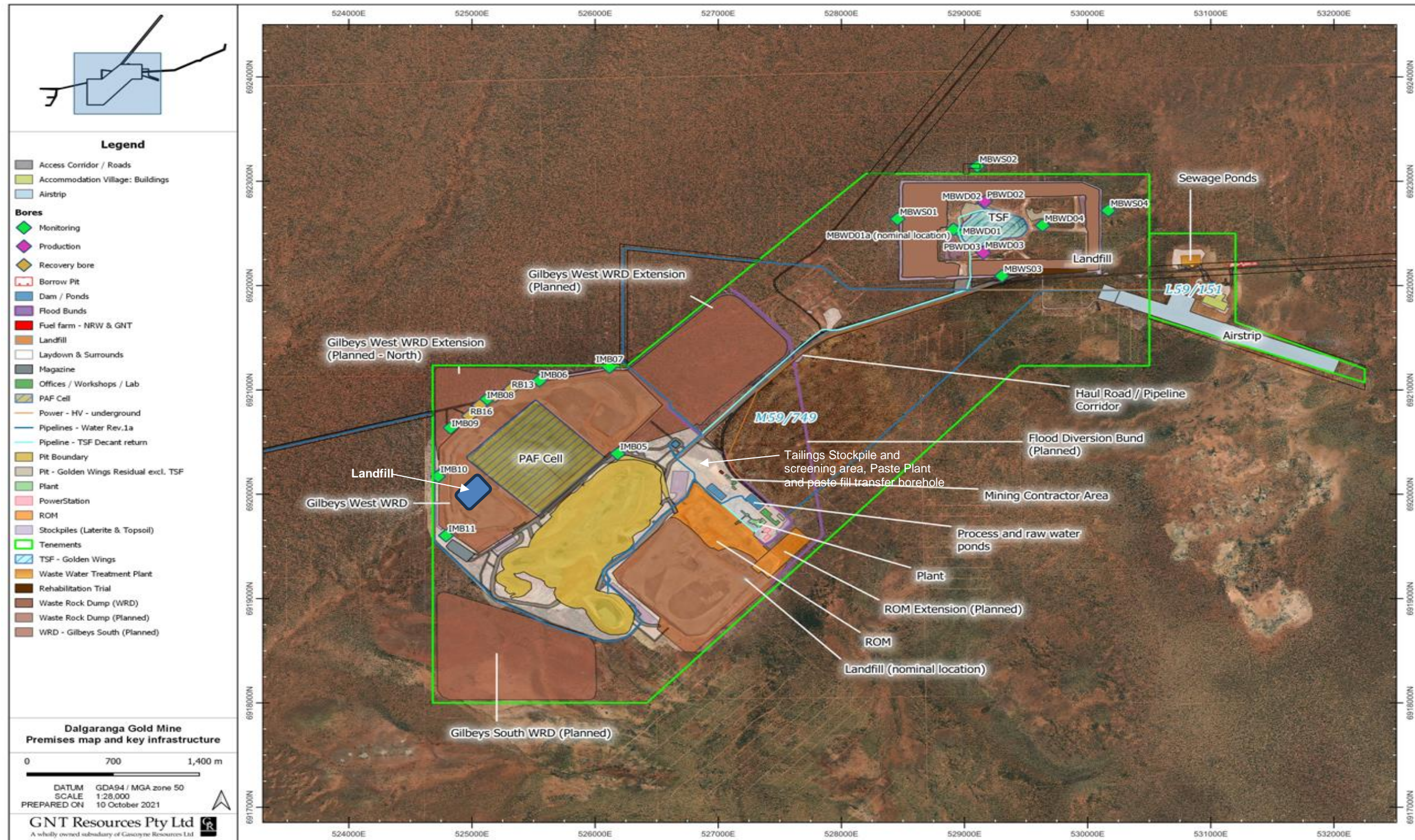


Figure 1: Premises map and key Infrastructure



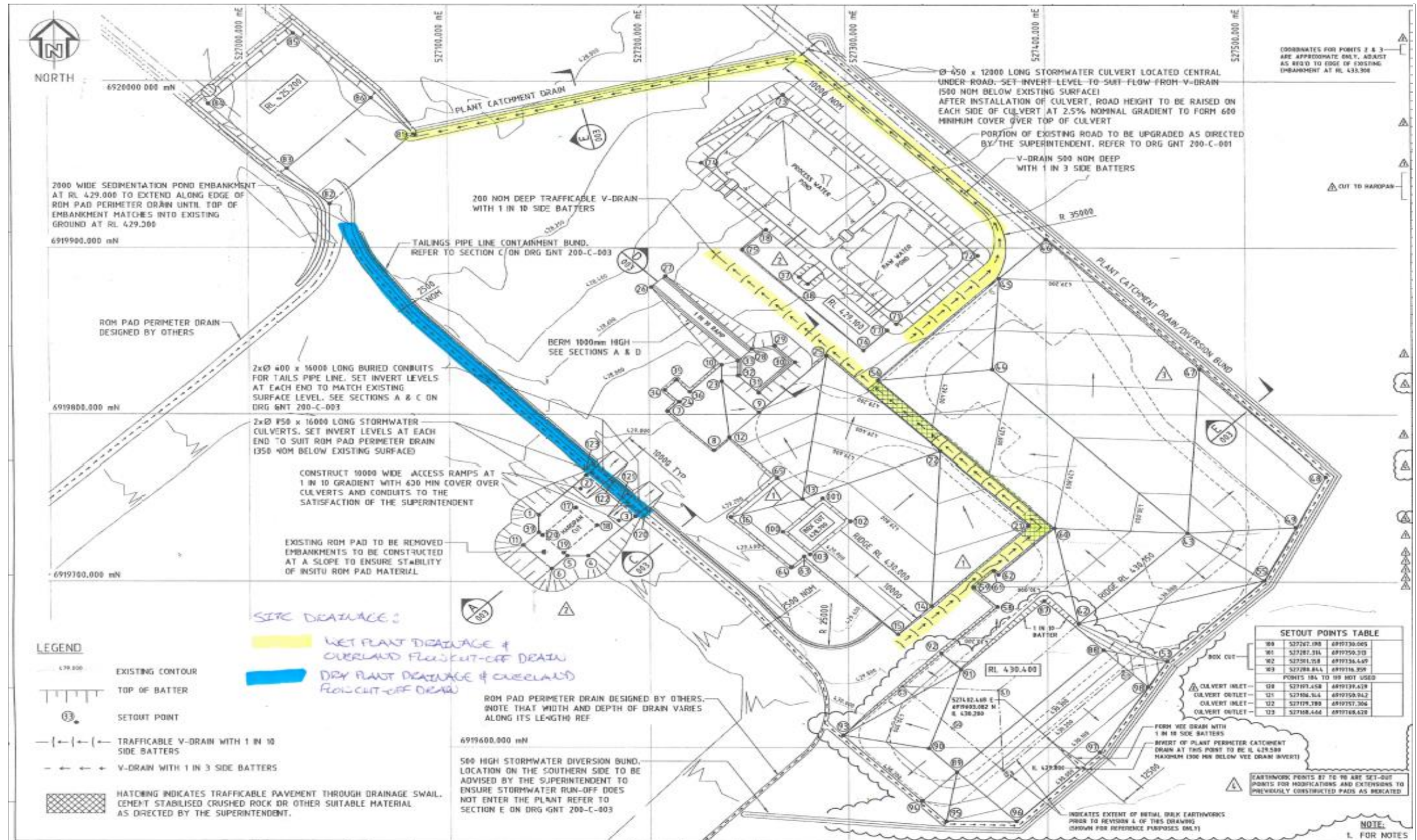


Figure 2: Site drainage layout









Figure 4: Gilbeys TSF groundwater monitoring bores





Figure 5: Golden Wings in pit groundwater monitoring bores



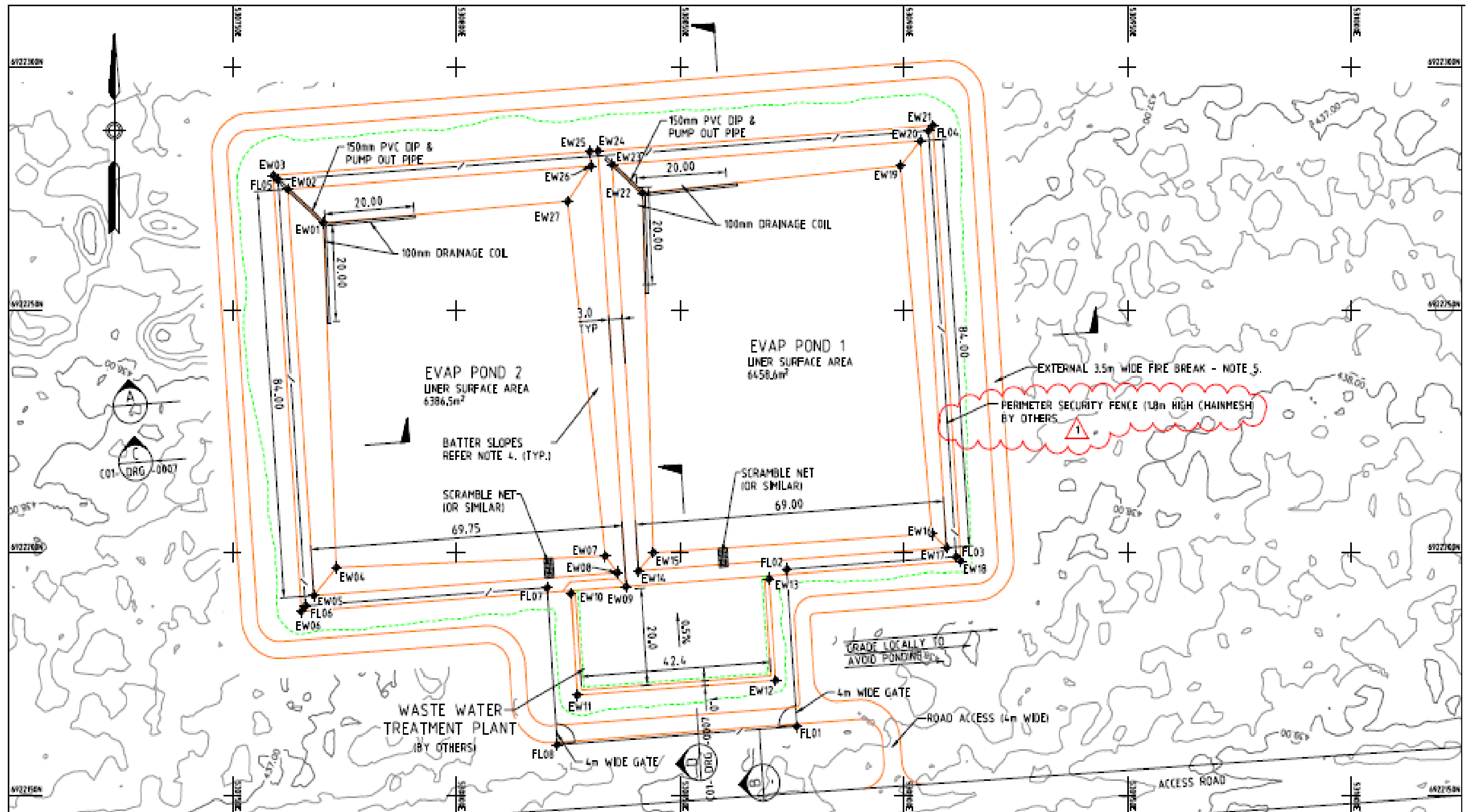


Figure 6: WWTP and Evaporation Ponds 1 and 2



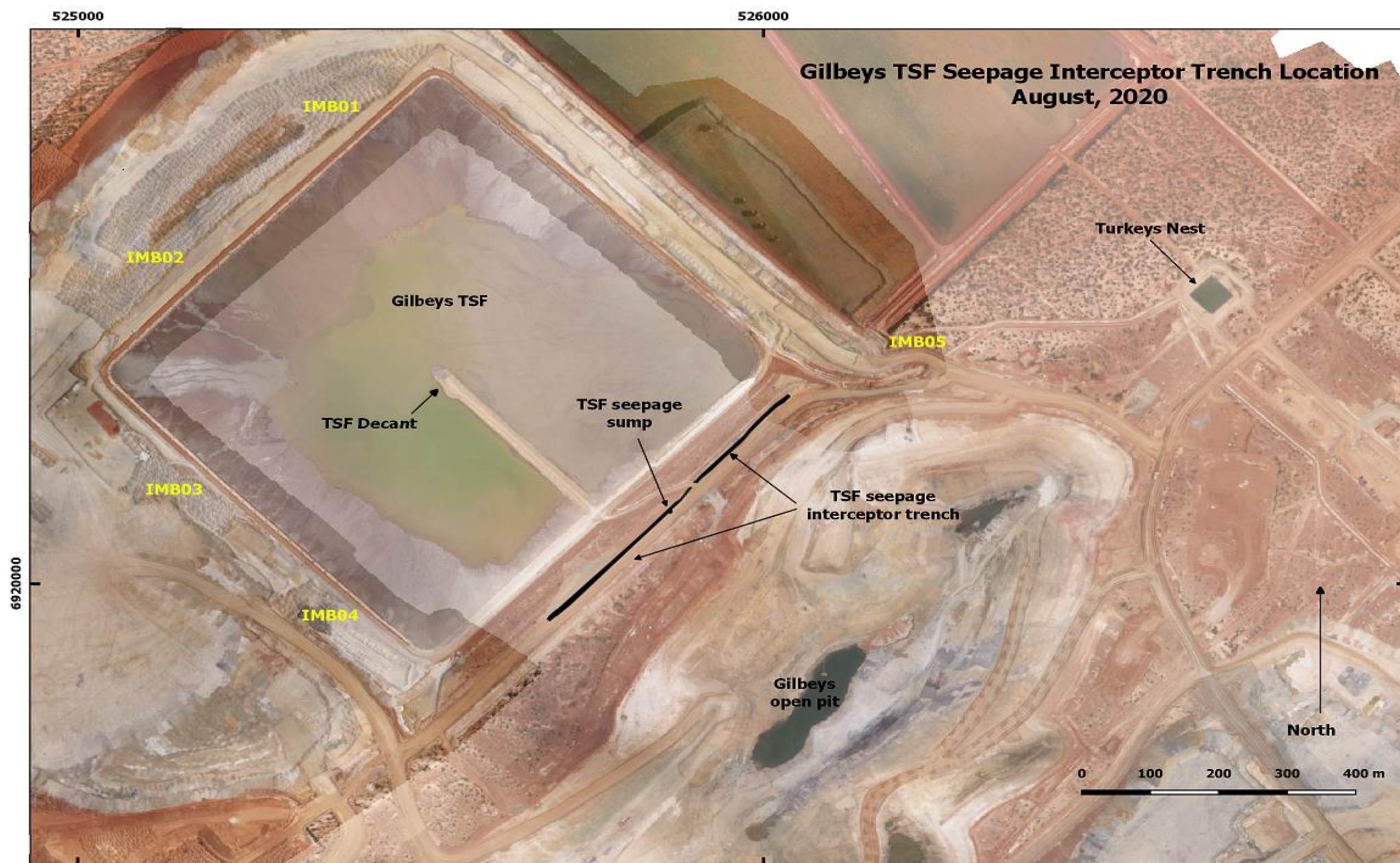


Figure 7: Gilbeys TSF seepage interception trench



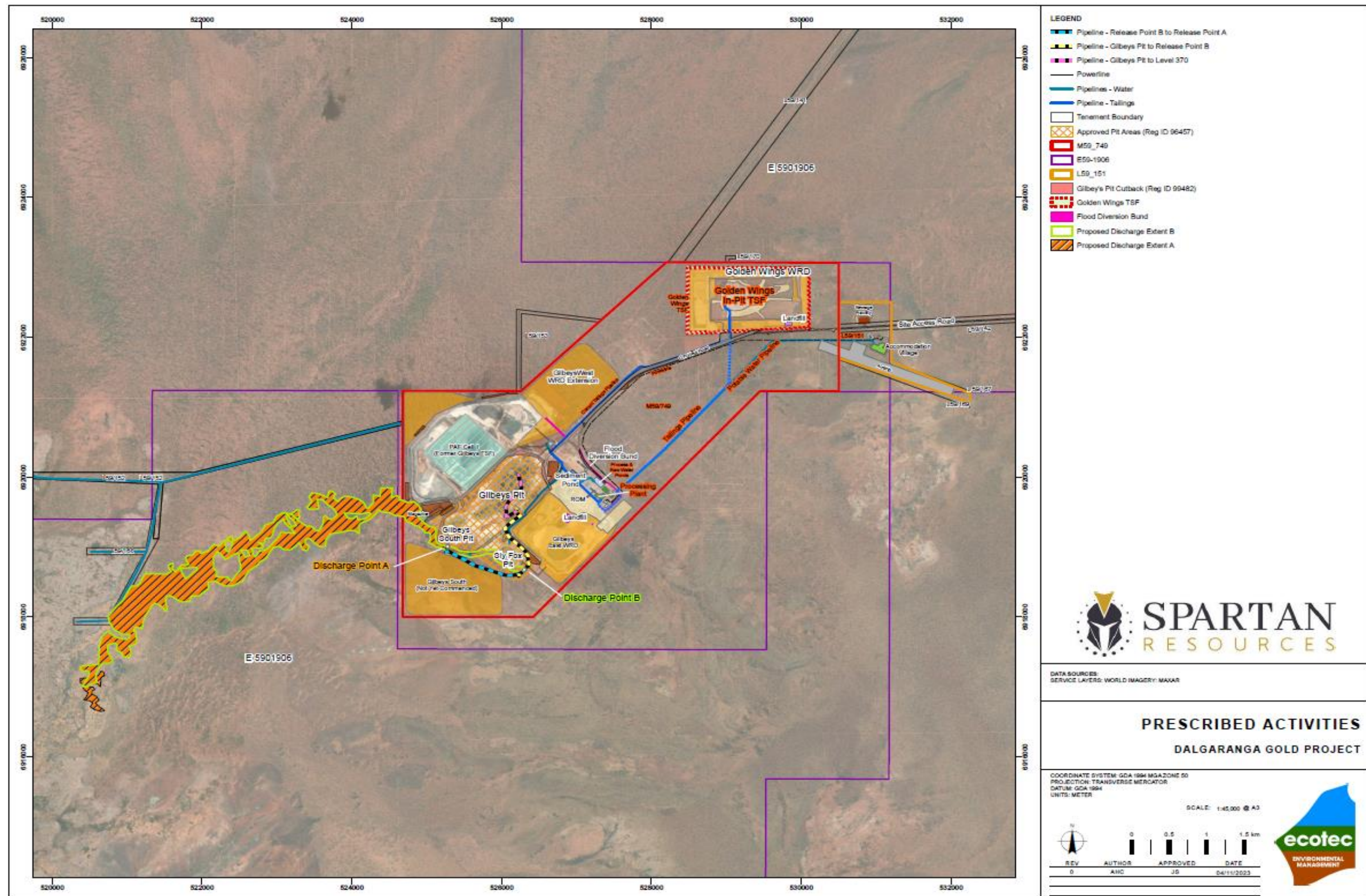


Figure 8: Discharge Point A and B and Gilbey's pit pipelines



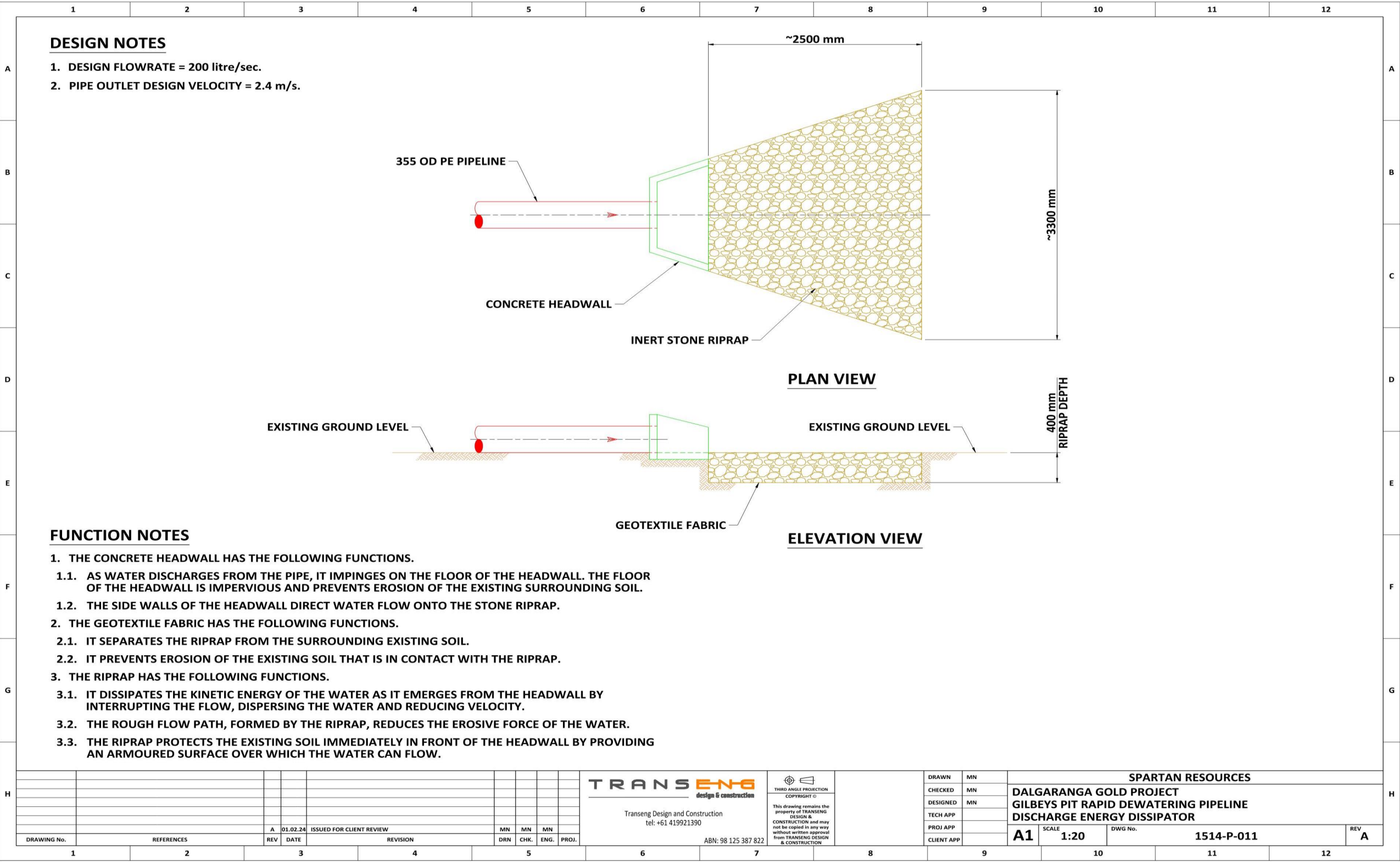


Figure 9: Erosion prevention infrastructure



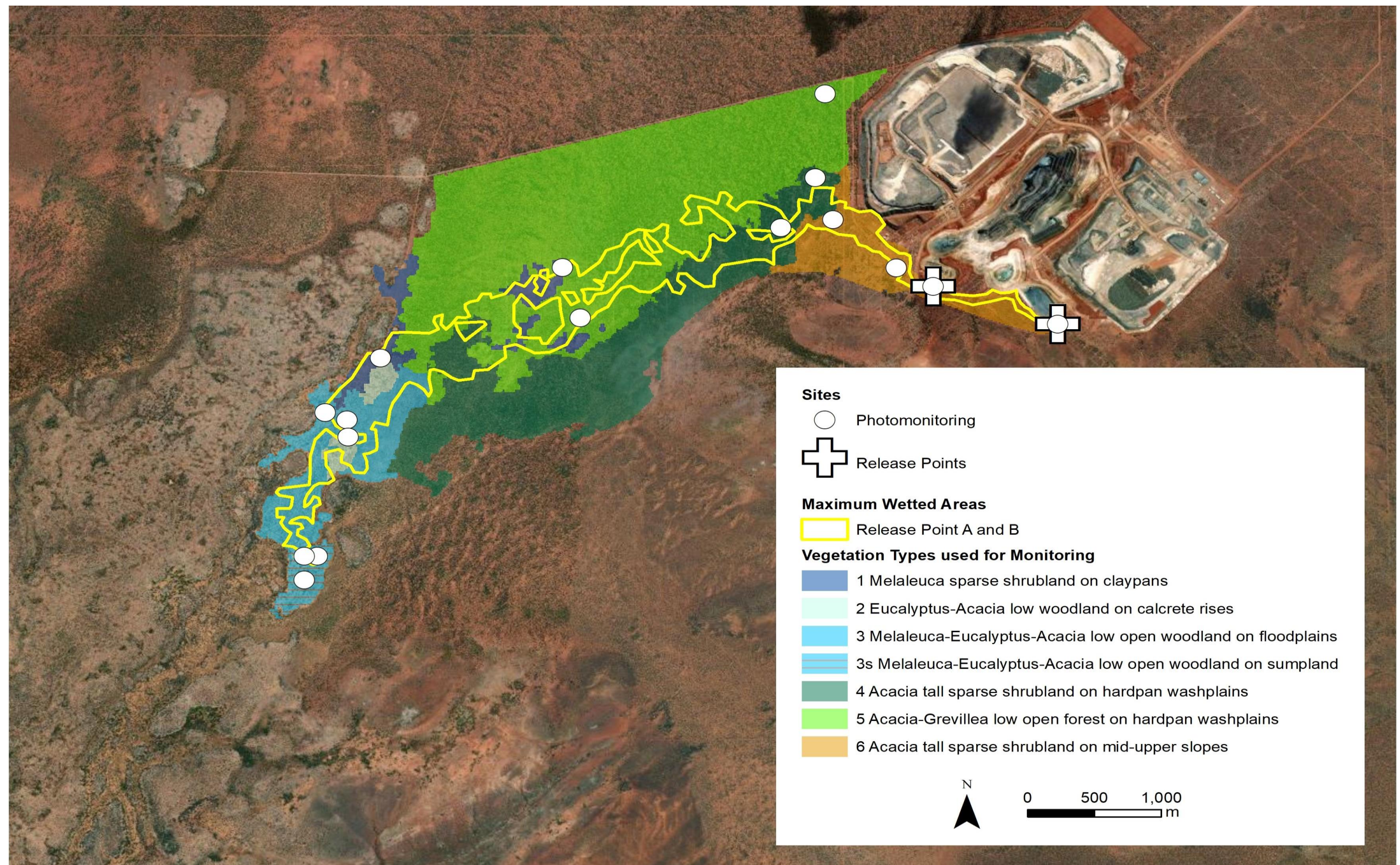


Figure 10: Locations of Vegetation Monitoring



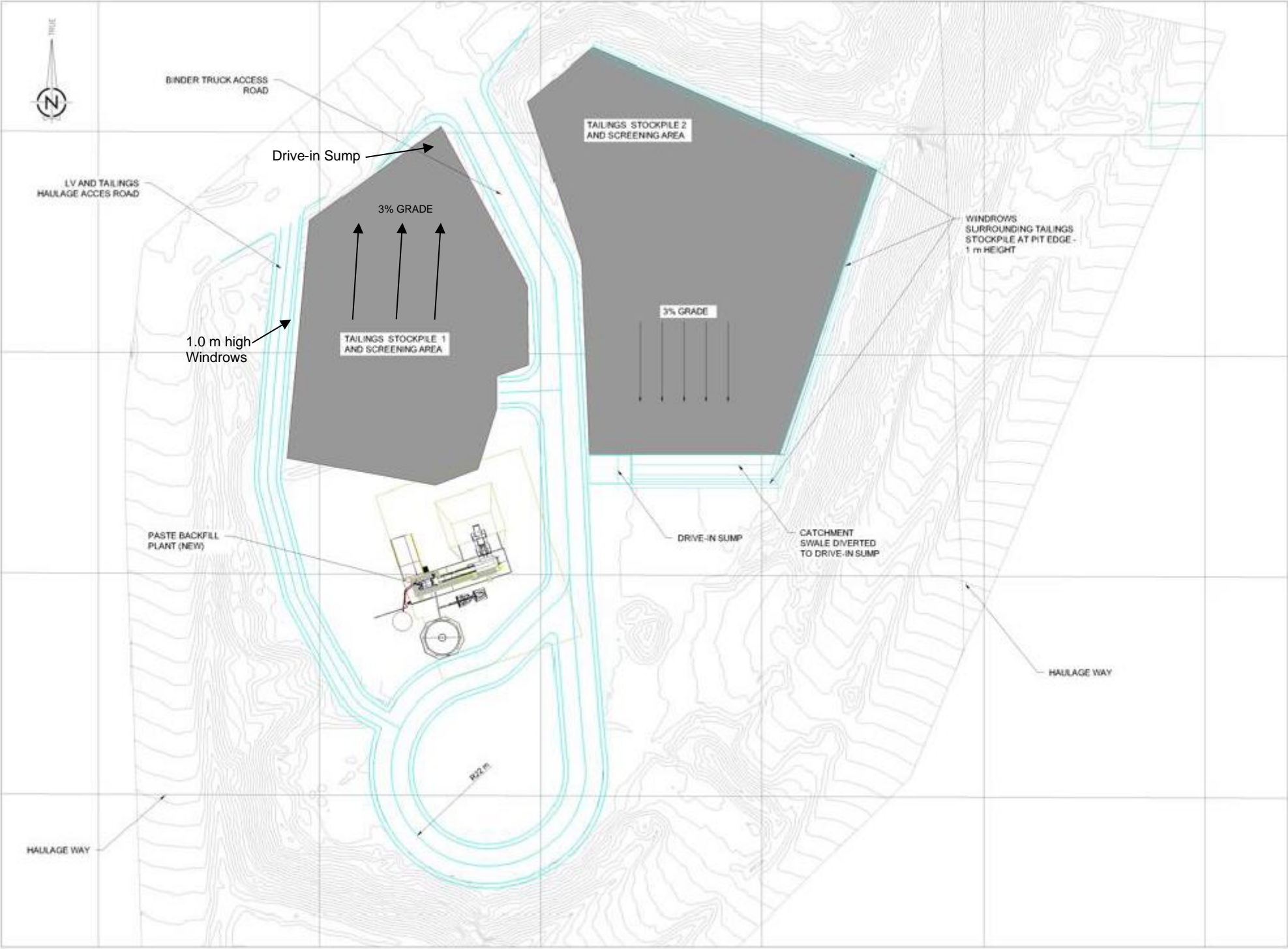


Figure 11: Reclaimed Tailings Stockpile and Paste Plant Layout



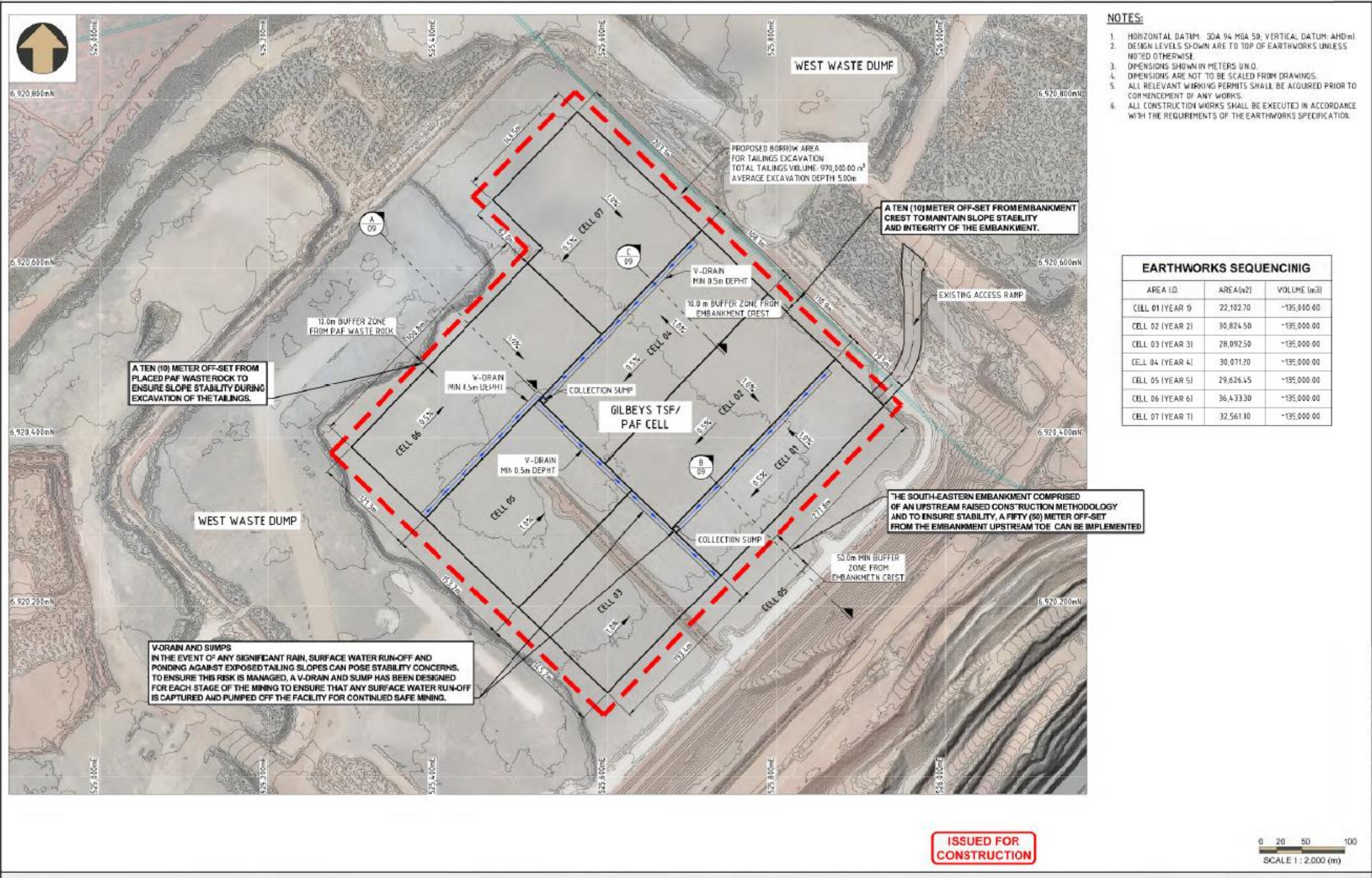


Figure 12: Gilbeys TSF reclaim cell design – plan view



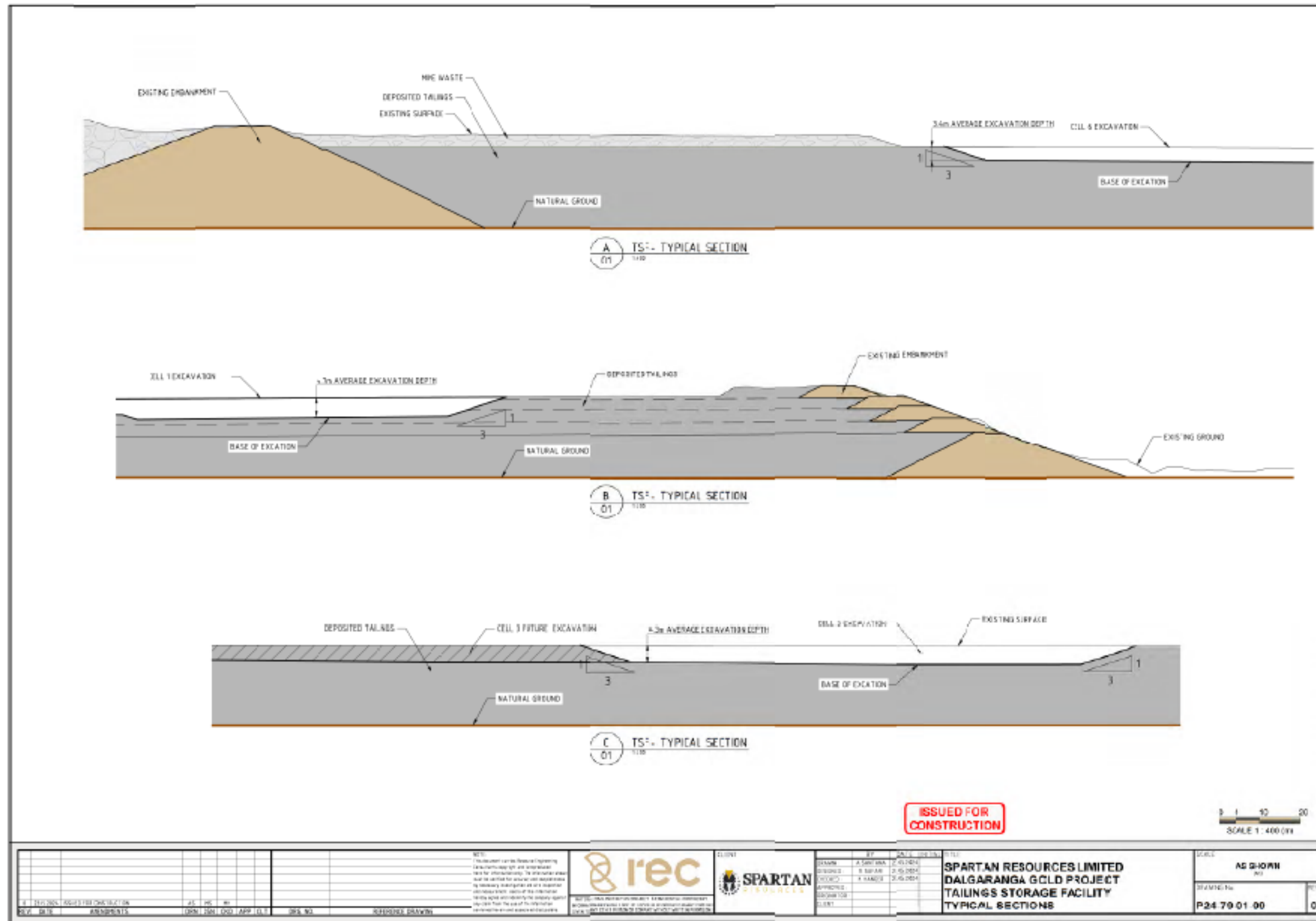


Figure 13: Gilbeys TSF reclaim cell design – typical sections

