



Licence number	L8644/2012/1
Licence holder	Big Bell Gold Operations Pty Ltd
ACN	090 642 809
Registered business address	Level 6 197 St Georges Terrace PERTH WA 6000
DWER file number	2012/002162-1
Duration	27/08/2012 to 26/08/2027
Date of amendment	08/09/2023
Premises details	Cue Gold Operations – Tuckabianna Project Mining Tenements: M20/55, M20/108, M20/111, M20/176, M20/183, M20/195, M20/208 and M20/247 CUE WA 6640 As depicted in Schedule 1

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: premises on which – a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; b) Tailings from metallic or non-metallic ore are reprocessed; or c) Tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam	1,400,000 tonnes per annual period
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore	1,700,000 tonnes per annual period
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewage waste) is stored, reprocessed, treated or irrigated	1,000,000 tonnes per annual period
Category 64: Class II putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the Landfill Waste Classification and Waste Definitions 1996, is accepted for burial.	500 tonnes per annual period

This amended Licence is granted to the Licence Holder, subject to the attached conditions, on 8 September 2023, by:

Alana Kidd

**Manager, Resource Industries
Regulatory Services**

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

[L8644/2012/1](#)

[Date of Amendment: 08/09/2023](#)

Licence History

Date	Reference number	Summary of changes
23/08/2012	L8644/2012/1	New application for licence – Category 6
18/10/2012	L8644/2012/1	Licence amendment to add Category 5.
14/03/2012	L8644/2012/1	Licence amendment to remove monitoring bore.
21/05/2015	L8644/2012/1	Licence amendment to include the Julies Reward in-pit TSF.
05/05/2016	L8644/2012/1	Licence amendment to remove mining tenements and relevant monitoring conditions on those tenements. Licence updated to version 2.9.
16/11/2017	L8644/2012/1	Transfer of Licence to Big Bell Gold Operations Pty Ltd.
17/10/2018	L8644/2012/1	Amendment Notice 1 to include the Jaffa's Folly and Caustons pits as additional dewatering discharge locations.
11/12/2019	L8644/2012/1	Amendment to include a category 64 Class II putrescible landfill, consolidation of the licence by incorporating changes made under Amendment Notice 1, and assessment of the seepage issues at the TSF2.
23/11/2020	L8644/2012/1	Amendment to increase the licence limit for sulphate and TDS in bore TBS3, remove groundwater monitoring point JMB003. Addition of improvement conditions for management of seepage from TSF2. Removal of conditions regarding construction of putrescible waste dump.
21/10/2022	L8644/2012/1	Amendment to increase the height of the Tuckabianna Tailings Storage Facility 2 (TSF2) by an additional 5 metres and receive up to 500,000 tonnes per annum of dewatering discharge wastewater from an offsite premises into the Friars Pit.
08/09/2023	L8644/2012/1	Licence amendment for the following: <ul style="list-style-type: none"> An increase to category 61 – liquid waste facility production capacity from 500,000 tonnes to 1,000,000 tonnes per annual period. Removal of condition 6 and 7 related to the construction and reporting of the dewatering pipelines. Compliance report was submitted 23 March 2023, deemed partially compliant 27 March 2023 and after further information deemed compliant on 5 April 2023 advising the Licence Holder that the conditions could be removed.

Interpretation

In this Licence:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (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.

Conditions

The licence holder must ensure that the following conditions are complied with:

Emissions

- The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for specified Emissions and general Emissions described in Column 1 of Table 1 subject to the exclusions, limitations or requirements specified in Column 2 of Table 1.

Table 1: Authorised Emissions table

Column 1	Column 2
Emission type	Exclusions/Limitations/Requirements
Specified Emissions	
Discharge of tailings to the Julies Reward Pit and TSF2	Subject to compliance with Conditions 2, 3, 4 and 5
Discharge of mine dewatering wastewater to Friars, Tuckabiana West, Jaffa's Folly and Caustons pits	Subject to compliance with Conditions 2, 3, 4 and 5
Putrescible and inert waste to landfill	Subject to compliance with Condition 4
General Emissions (excluding Specified Emissions)	
Emissions which arise from the Primary Activities set out in Schedule 2	<p>Emissions excluded from General Emissions are:</p> <ul style="list-style-type: none"> Unreasonable Emissions; or Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or Discharges of Waste in circumstances likely to cause Pollution; or Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or Emissions or Discharges which do not comply with an Approved Policy; or Emissions or Discharges which do not comply with a prescribed standard; or Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental Protection (<i>Unauthorised Discharges</i>) Regulations 2004.

Discharge of emissions

2. The Licence Holder must ensure that the emissions specified in Table 2 are discharged only at the corresponding discharge point location.

Table 2: Emission discharge points

Emission	Discharge point name and location Schedule 1: Map of emission discharge points
Wastewater from dewatering of the Caustons, Tuckabianna West, Jaffa's Folly and Julies Reward pits	Friars pit Tuckabianna West pit Jaffa's Folly pit Caustons pits
Wastewater from dewatering of mined pits at <i>EP Act</i> Licence L8978/2016/1 (Comet Project)	Friars pit Used for dust suppression for roads and cleared areas only
Tailings	Julies Reward Pit TSF2

Emission discharge limits

3. The Licence Holder must ensure that the limits specified in Table 3 are not exceeded.

Table 3: Emission discharge limits

Emission	Discharge points	Limit
Tailings	Julies Reward Pit TSF 2	Combined total of 1,400,000 tonnes per annual period
Dewatering wastewater	Friars pit Tuckabiana West pit Jaffa's Folly pit Caustons pit	Combined total of 1,700,000 tonnes per annual period.
	Friars pit	1,000,000 tonnes per annual period

Infrastructure and equipment

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

Table 4: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Pipelines containing environmentally hazardous substances	<ul style="list-style-type: none"> Equipped with automatic cut-outs in the event of a pipe failure; or Provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. 	Not applicable
TSF2	A minimum total freeboard of 0.5 m (minimum operational freeboard of 0.3 m and beach freeboard of 0.2 m) is maintained	Schedule 1: Map of storage locations
Julies Reward Pit	A minimum top of embankment freeboard of 750 mm is maintained.	
Process Water Pond	<ul style="list-style-type: none"> Storage of Julies Reward Pit and TSF2 decant return water; A minimum top of embankment freeboard of 300 mm is maintained; and Lined to achieve a permeability of 10^{-9} m/s or less. 	
Landfill	<ul style="list-style-type: none"> Capacity of 500 tpa; Only putrescible waste, inert waste types 1 and 2 are disposed of at the landfill; Putrescible waste to be disposed into purpose built trenches; Maintain earthen bunding on three sides of each trench, and a roll over bund at each trench, to prevent the ingress of stormwater. Cover putrescible waste with sufficient clean fill at least monthly, to ensure that the waste is completely covered and that no waste is exposed; Windblown waste is returned to the landfill site on a regular and recurring basis, at least monthly; Waste containing asbestos must not be accepted; and A fence is maintained around the boundary of the Landfill site which is an effective barrier to livestock. 	Schedule 1: Landfill location

5. The Licence Holder shall:

- (a) undertake inspections as detailed in Table 5;
- (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 5: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Embankment freeboard	Visual to confirm required freeboard capacity is available	Daily
Mine dewater pipelines	Visual integrity	Daily

- 6.** The licence holder must;
- (a) construct and/or install all the critical containment 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 6.

Table 6: Critical containment infrastructure design and construction / installation requirements

Infrastructure	Design and construction / installation requirement	Infrastructure location
<p>TSF2 embankment raise – Stage 1</p>	<ul style="list-style-type: none"> • Layout and constructed as specified in Figures 1, 3, and 4 of Schedule 3. • Construction authorised to embankment height of RL482.5 m. • Constructed to provide a total freeboard of a minimum of 0.5 m (minimum operational freeboard of 0.3 m and beach freeboard of 0.2 m). • Designed to contain a 1 in 100-year annual exceedance probability (AEP) 72-hour rain event, while maintaining a total freeboard of a minimum of 0.5 m • Embankment constructed from dried tailings sourced from the TSF2 basin. • Construction of the embankment shall be supervised by a suitably qualified geotechnical engineer. • Tailings to be discharged from the embankment via spigots with erosion protection placed beneath each spigot location. • Maintain a decant tower at the center of the TSF2 that is constructed from slotted reinforced concrete pipe segments surrounded by a waste rock filter; • Decant tower to be fitted with pump/s for the recovery of return water prior to pumping back to the process water dam/pond at the Tuckabianna Processing Facility. • Raise the perimeter toe drain bund to a minimum height of 470.28 mAHD on the northern boundary of TSF2, and to a minimum height of 469.06 mAHD on the western and southern boundaries 	<p>Schedule 1: Map of storage locations</p>
<p>TSF2 embankment raise – Stage 2</p>	<ul style="list-style-type: none"> • Layout and constructed as specified in Figures 2, 3, and 4 of Schedule 3. • Construction authorised to embankment height of RL485.0 m. • Constructed to provide a total freeboard of a minimum of 0.5 m 	<p>Schedule 1: Map of storage locations</p>

Infrastructure	Design and construction / installation requirement	Infrastructure location
	<p>(minimum operational freeboard of 0.3 m and beach freeboard of 0.2 m).</p> <ul style="list-style-type: none"> • Designed to contain a 1 in 100-year annual exceedance probability (AEP) 72-hour rain event, while maintaining a total freeboard of a minimum of 0.5 m. • Embankment constructed from dried tailings sourced from the TSF2 basin. • The construction of the embankment shall be supervised by a suitably qualified geotechnical engineer. • Tailings to be discharged from the embankment via spigots with erosion protection placed beneath each spigot location. • Maintain a decant tower at the center of the TSF2 constructed from slotted reinforced concrete pipe segments surrounded by a waste rock filter; • Decant tower to be fitted with pump/s for the recovery of return water prior to pumping back to the process water dam/pond at the Tuckabianna Processing Facility. 	
Vibrating wire piezometers (VWPs)	<ul style="list-style-type: none"> • Constructed as shown in Schedule 3: Figure 5 • VWPs installed on each perimeter embankment of the TSF2 and one VWP on the western embankment of TSF1. 	Schedule 3: Figure 5
Tailings discharge pipeline and return water pipelines	<ul style="list-style-type: none"> • Constructed according to Australian Standards AS/NZS 2033, 4129, 4130 and 4131 for polyethylene pipes; • Tested prior to operation: hydro-testing, calibration of flow meters and pressure transmitters; <p>AND</p> <ul style="list-style-type: none"> • Equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or • Equipped with automatic cut-outs in the event of a pipe failure; or 	Schedule 1: Map of storage locations

Infrastructure	Design and construction / installation requirement	Infrastructure location
	<ul style="list-style-type: none"> • Provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. 	

7. The licence holder must within 30 calendar days of the Critical Containment Infrastructure identified by condition 6 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 6; and
 - (b) 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:
 - (a) certification by a suitably qualified geotechnical engineer that each item of critical containment infrastructure or component(s) thereof, as specified in condition 6, has been built and installed in accordance with the requirements specified in condition 6;
 - (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 6;
 - (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.

Monitoring

9. The Licence Holder shall ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
 - (d) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.
10. The Licence Holder shall ensure that:
 - (a) monthly monitoring is undertaken at least 15 days apart;
 - (b) quarterly monitoring is undertaken at least 45 days apart, and
 - (c) annual monitoring is undertaken at least 9 months apart.
11. The Licence Holder shall ensure that all monitoring equipment used on the Premises

to comply with the conditions of this Licence is calibrated in accordance with the manufacturer’s specifications and the requirements of the Licence.

12. The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Monitoring of point source emissions to groundwater

13. The Licence Holder shall during dewatering discharge operations, undertake the monitoring as detailed in Table 7 according to the specifications in Table 7.

Table 7: Monitoring of point source emissions to groundwater

Monitoring point reference	Parameter	Units	Frequency
Discharge into the Friars, Tuckabiana West, Jaffa’s Folly and Caustons pits as shown in Schedule 1: Map of monitoring locations	Total Dissolved Solids (TDS) ¹	mg/L	Quarterly
	pH ¹	pH units	Quarterly
	Arsenic (As)	mg/L	Annually
	Cadmium (Cd)		
	Chromium (Cr)		
	Copper (Cu)		
	Lead (Pb)		
	Manganese (Mn)		
	Mercury (Hg)		
	Molybdenum (Mo)		
	Nickel (Ni)		
	Selenium (Se)		
	Zinc (Zn)		
	Total Recoverable Hydrocarbons (TRH)		
	Standing water level (SWL) in pits	mbgl	Quarterly
Volumes of dewatering wastewater discharged into disused mining pits	m ³ /day	Continuous	

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

Process monitoring

14. The Licence Holder shall undertake the monitoring as detailed in Table 8 according to the specifications in Table 8.

Table 8: Process monitoring

Monitoring point reference	Parameter	Units	Frequency
Julies Reward Pit TSF2	Volumes of tailings deposited	m ³	Continuous
Julies Reward Pit TSF2	Volumes of water recovered	m ³	Continuous

Ambient environmental quality monitoring

15. The Licence Holder shall undertake the monitoring specified in Table 9 and Table 10, and record and investigate the exceedance of any limit specified.

Table 9: Monitoring of ambient groundwater quality

Monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
TBS2, TBS3, TBS4, TBS5, JMB001, JMB002, JMB004, JMB005, JMB006 and JMB008 as shown in Schedule 1: Map of monitoring locations	Arsenic (As)	None specified	mg/L	Spot sample	Quarterly
	Cadmium (Cd)				
	Calcium (Ca)				
	Chromium (Cr)				
	Cobalt (Co)				
	Copper (Cu)				
	Lead (Pb)				
	Molybdenum (Mo)				
	Potassium (K)				
	Sodium (Na)				
	Selenium (Se)				
	Vanadium (V)				
	Zinc (Zn)				
	Total acidity				
	WAD Cyanide				
Bicarbonate (HCO ₃ ⁻)					
pH ¹	pH units				
Standing water level (SWL).	None specified	mbgl	Quarterly. To be determined prior to collection of water samples		
TBS2, TBS4, TBS5, JMB001, JMB002, JMB004, JMB005, JMB006 and JMB008 as shown in Schedule 1: Map of monitoring locations	Sulphate (SO ₄)	2,000	mg/L		Quarterly
	TDS	4,000			
TBS3 as	Sulphate (SO ₄)	3,000	mg/L		

Monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
shown in Schedule 1: Map of monitoring locations	TDS	5,000			

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

Table 10: Monitoring of ambient vegetation quality

Monitoring point reference	Parameter	Requirements	Method	Frequency
TQ02, TQ03, TQ04 and TQ07 as shown in Schedule 1: Map of monitoring locations	Vegetation health (i.e. decline in vegetation or change in composition)	The Licence Holder shall on a quarterly basis: (i) take photographic images; (ii) provide a general environmental description of the site; and (iii) record any changes to vegetation health or composition.	Visual inspection and photographs	Quarterly

Records

- 16.** 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 4 of this licence;
 - inspection and monitoring programmes undertaken in accordance with conditions 5, 8, 9 and 10 of this licence; and
 - complaints received under condition 18 of this licence.
- 17.** The books specified under condition 16 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.
- 18.** 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;

- (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.

Reporting

19. The Licence Holder must submit to the CEO by no later than 90 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 11, and which provides information in accordance with the corresponding requirement set out in Table 11.

Table 11: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 7	Specified monitoring of point source emissions to groundwater	GR1
Table 8	Process monitoring	None specified
Table 9	Monitoring of ambient groundwater quality and limit exceedances	GR2
Table 10	Monitoring of ambient vegetation quality	None specified
Condition 18	Complaints summary	None specified

Note 1: Forms are in Schedule 2

20. The Licence Holder shall ensure that the Annual Environmental Report also contains:

- (a) an assessment of the information contained within the report against previous monitoring results and Licence limits; and
- (b) a list of any original monitoring reports submitted to the Licence Holder from third parties in the reporting period and make these reports available on request.

21. 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 90 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

Notifications

22. The Licence Holder shall ensure that the parameters listed in Table 12 are notified to the CEO in accordance with the notification requirements in Table 12.

Table 12: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution.	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
Conditions 3 and 15	Breach of any limit specified in the Licence.	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act.

Note 2: Forms are in Schedule 2

Definitions

In this licence, the terms in Table 13 have the meanings defined.

Table 13: Definitions

Term	Definition
ACN	Australian Company Number
AEP	means annual exceedance probability
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 January until 31 December each year.
ANZECC	means the most recent version and relevant parts of the <i>Australian and New Zealand Environment guidelines for fresh and marine water quality Volume 1 – 3</i> (Australian and New Zealand Environment and Conservation Council, Agriculture and Resource Management Council of Australia and New Zealand).
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> .
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained.
books	has the same meaning given to that term under the EP Act.
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the 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: info@dwer.wa.gov.au
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.

Term	Definition
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
Inert waste Type 1 and Type 2	means waste as defined in the document titled 'Landfill Waste Classification and Waste Definitions' 1996 (As amended December 2009).
Landfill	means a site used for disposal of solid material (i.e., is spadeable) by burial in the ground that is licensed as a landfill under the <i>Environmental Protection Act 1986</i> and as defined in the document 'Landfill Waste Classification and Waste Definitions' 1996 (As amended December 2009).
Licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
Licence Holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
mbgl	metres below ground level.
m ³	cubic metres
m ³ /d	cubic metres per day.
mg/L	milligrams per litre
mtpa	million tonnes per annum
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.
Occupier	has the same meaning given to that term under the EP Act.
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 in Schedule 1 to this licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.
Putrescible waste	means the organic component of the waste stream which can be decomposed by microbial action and become putrid and likely to cause obnoxious odours and attract (scavenging) birds or animals; putrescible waste includes food wastes or wastes of animal or vegetable origin.

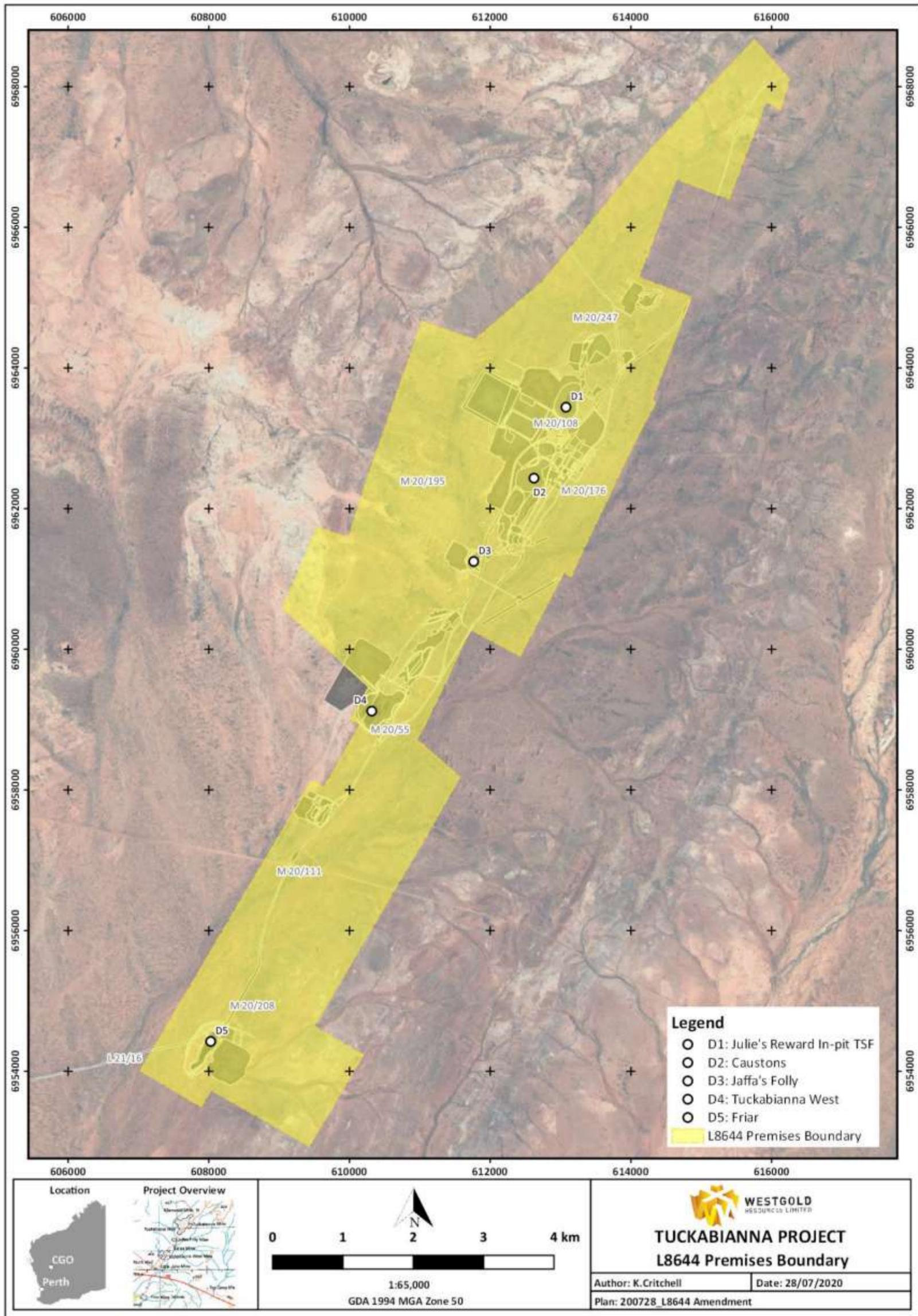
Term	Definition
quarterly	means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December.
Risk Event	as described in Guidance Statement: <i>Risk Assessment</i> .
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	Means Schedule 2 of this Licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TSF	means Tailings Storage Facility.
TSF2	means Tuckabianna Tailings Storage Facility 2
Waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

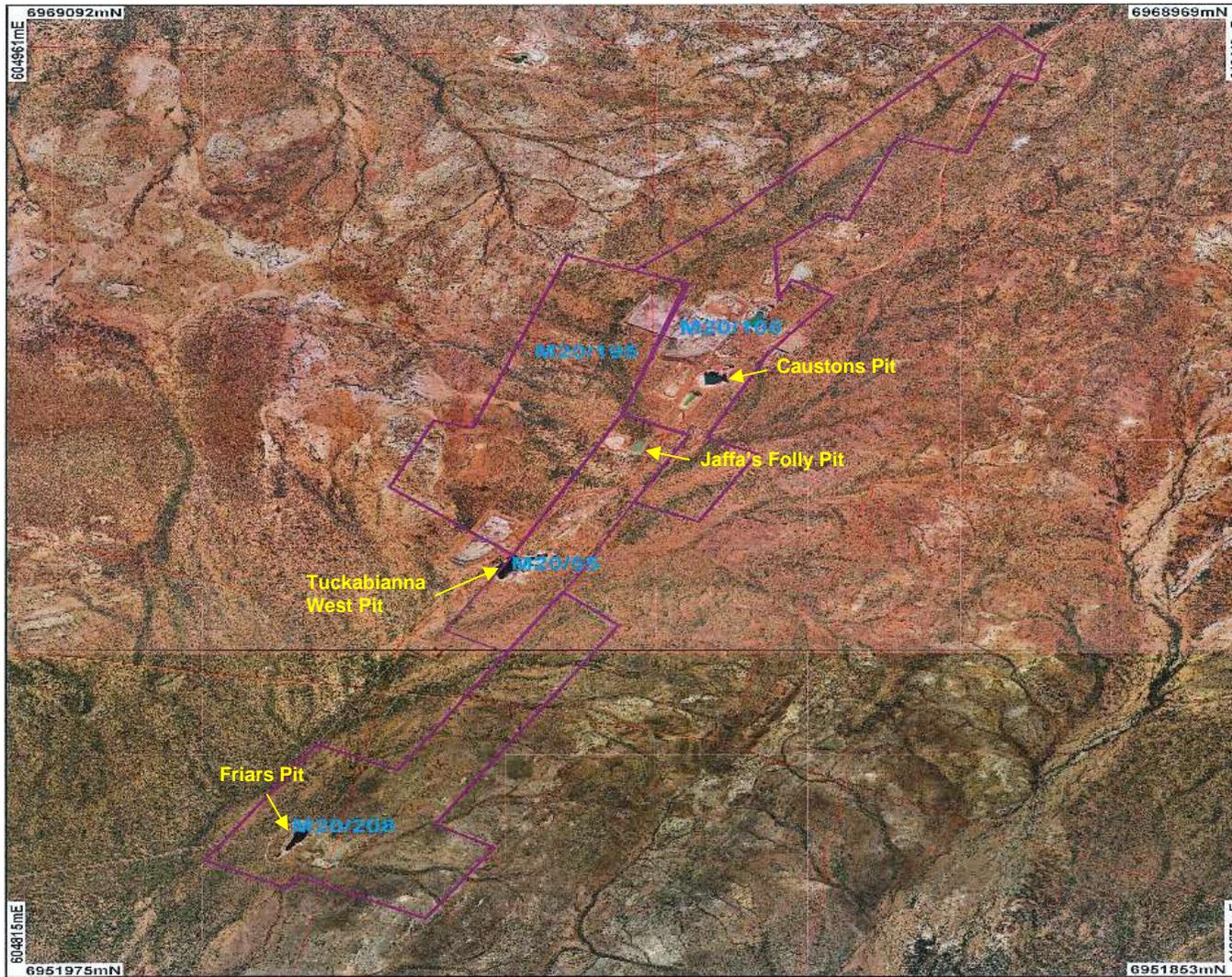
The Premises is shown in the map below. The yellow shading depicts the Premises boundary.



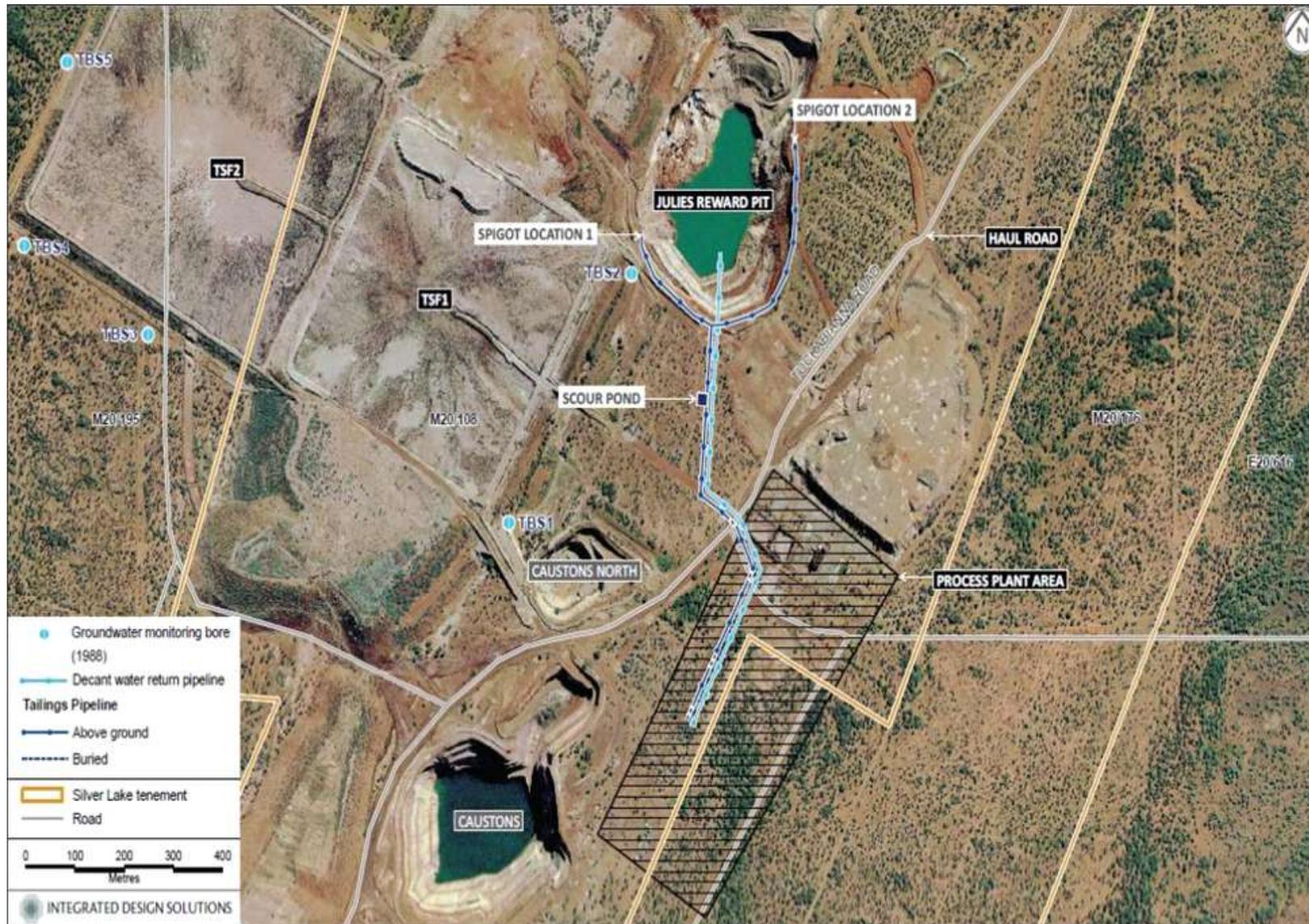
Map of emission discharge points

The location of the emission discharge points defined in Table 2.

Friars, Tuckabianna West, Jaffa's Folly and Caustons pits



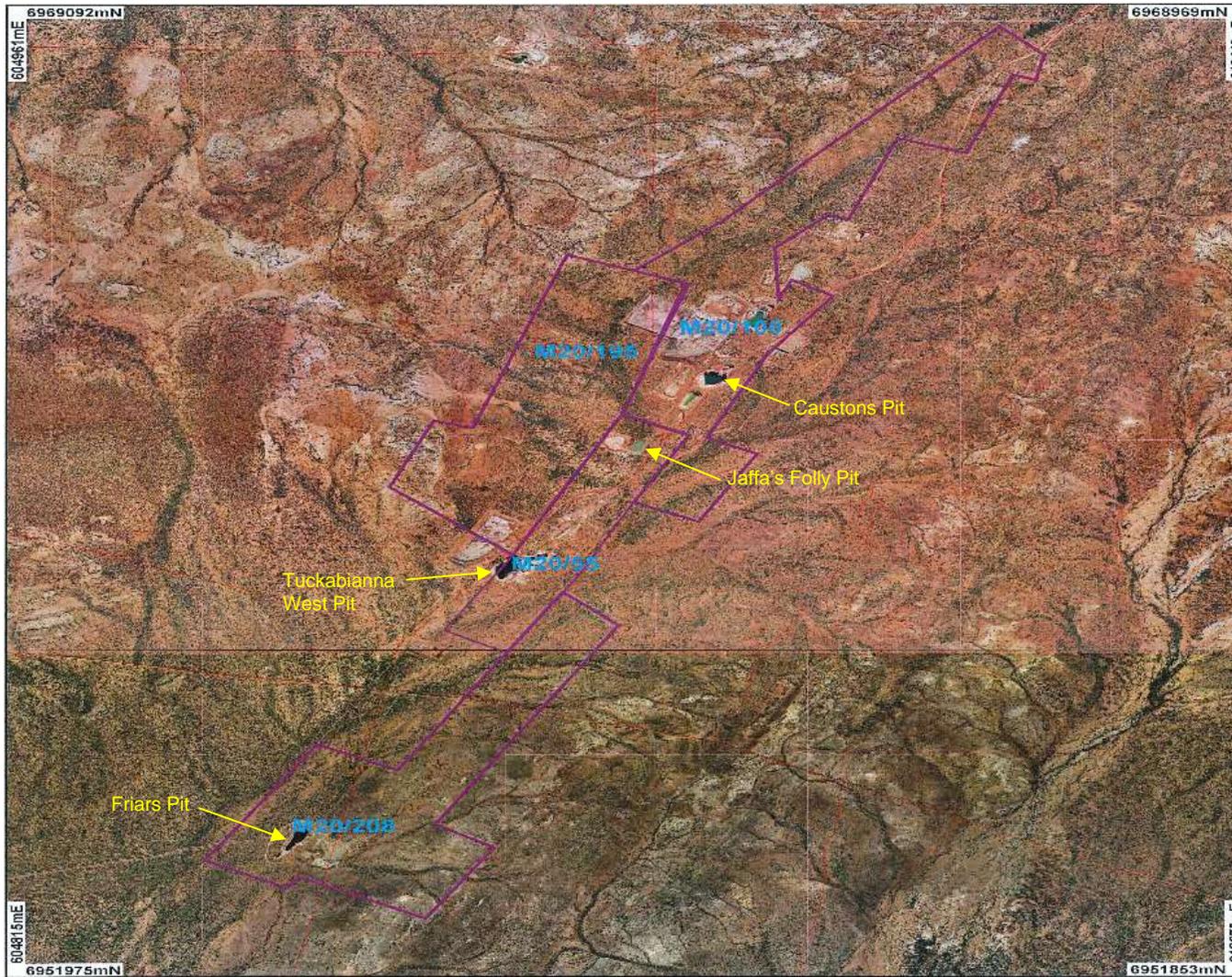
Julies Reward Pit and TSF2



Map of monitoring locations

The locations of the monitoring points defined in Table 8 is shown below.

Friars, Tuckabianna West, Jaffa's Folly and Caustons pits



The locations of the monitoring points defined in Table 8 is shown below.

TSF2 Groundwater Monitoring Bore Locations



The locations of the monitoring points defined in Table 10 is shown below.

Julies Reward Pit Groundwater Monitoring Bore Locations



The location of the monitoring points defined in Table 11 are shown below.

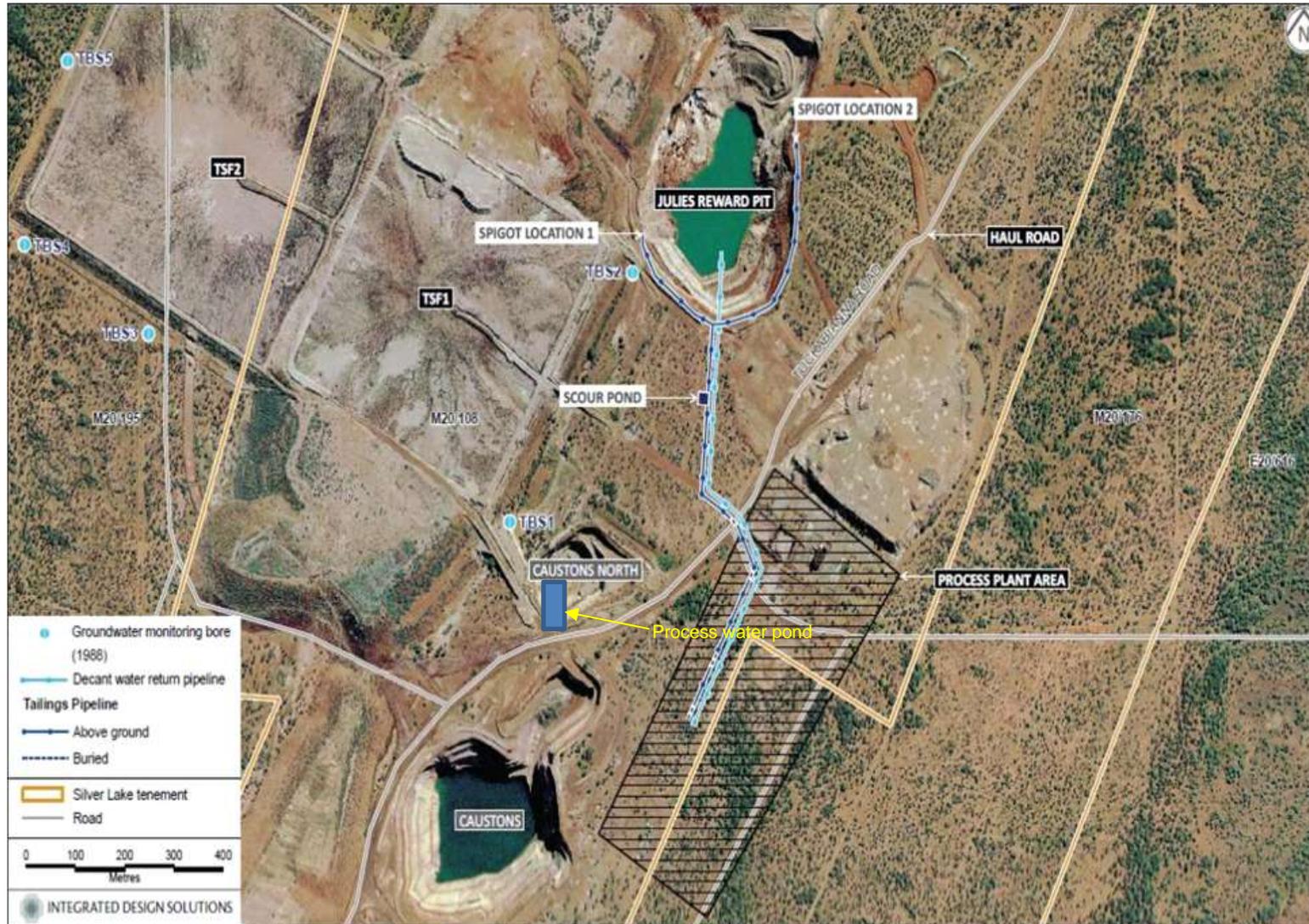
Ambient vegetation monitoring locations



Map of storage locations

The location of the storage areas defined in Table 4 are shown below.

Julies Reward Pit, Process Water Pond and TSF2



The location of the Landfill area defined in Table 4 is shown below.

Class II Landfill



Schedule 2: Reporting and Notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L8644/2012/1
 Form: GR1
 Name: Monitoring of point source emissions to groundwater

Licence Holder: Big Bell Gold Operations Pty Ltd
 Period:

Form GR: Monitoring of point source emissions to groundwater				
Emission point	Parameter	Units¹	Result	Sample date & times
Friars, Tuckabiana West, Jaffa's Folly and Caustons pits	Volumetric flow rate	m ³ /day		
	pH	pH units		
	Total Dissolved Solids (TDS)	mg/L		
	Arsenic (As)	mg/L		
	Cadmium (Cd)	mg/L		
	Chromium (Cr)	mg/L		
	Copper (Cu)	mg/L		
	Lead (Pb)	mg/L		
	Manganese (Mn)	mg/L		
	Mercury (Hg)	mg/L		
	Molybdenum (Mo)	mg/L		
	Nickel (Ni)	mg/L		
	Total Recoverable Hydrocarbons (TRH)	mg/L		
	Selenium (Se)	mg/L		
	Zinc (Zn)	mg/L		
Standing water level (SWL) in pits	mbgl			

Notes

1: All units are referenced to STP dry

Signed on behalf of Big Bell Gold Operations Pty Ltd: Date:

Licence: L8644/2012/1
 Form: GR2

Licence Holder: Big Bell Gold Operations Pty Ltd
 Period:

Name: Monitoring of ambient groundwater quality

Form GR2: Monitoring of ambient groundwater					
Emission point	Parameter	Limit	Units¹	Result	Sample date & times
TBS2, TBS3, TBS4, TBS5, JMB001, JMB002, JMB004, JMB005, JMB006 and JMB008	pH	-	N/A		
	WAD Cyanide	-	mg/L		
	Arsenic (As)	-	mg/L		
	Cadmium (Cd)	-	mg/L		
	Calcium (Ca)	-	mg/L		
	Chromium (Cr)	-	mg/L		
	Cobalt (Co)	-	mg/L		
	Copper (Cu)	-	mg/L		
	Lead (Pb)	-	mg/L		
	Molybdenum (Mo)	-	mg/L		
	Potassium (K)	-	mg/L		
	Sodium (Na)	-	mg/L		
	Selenium (Se)	-	mg/L		
	Total acidity	-	mg/L		
	Vanadium (V)	-	mg/L		
	Zinc (Zn)	-	mg/L		
Bicarbonate (HCO ₃)	-	mg/L			
SWL	-	mbgl			
TBS2, TBS4, TBS5, JMB001, JMB002, JMB004, JMB005, JMB006 and JMB008	Sulphate (SO ₄)	2,000	mg/L		
	TDS	4,000	mg/L		
TBS3	Sulphate (SO ₄)	3,000	mg/L		

Form GR2: Monitoring of ambient groundwater					
Emission point	Parameter	Limit	Units¹	Result	Sample date & times
	TDS	5,000	mg/L		

Notes

- 1: All units are referenced to STP dry
- 2: pH range to be greater than or equal to 6 and less than or equal to 9

Signed on behalf of Big Bell Gold Operations Pty Ltd: Date:

Licence: L8644/2012/1
Form: N1

Licence Holder: Big Bell Gold Operations Pty Ltd
Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Big Bell Gold Operations Pty Ltd	
Date	

Schedule 3: Design drawings

Figure 1: TSF2 General arrangement plan

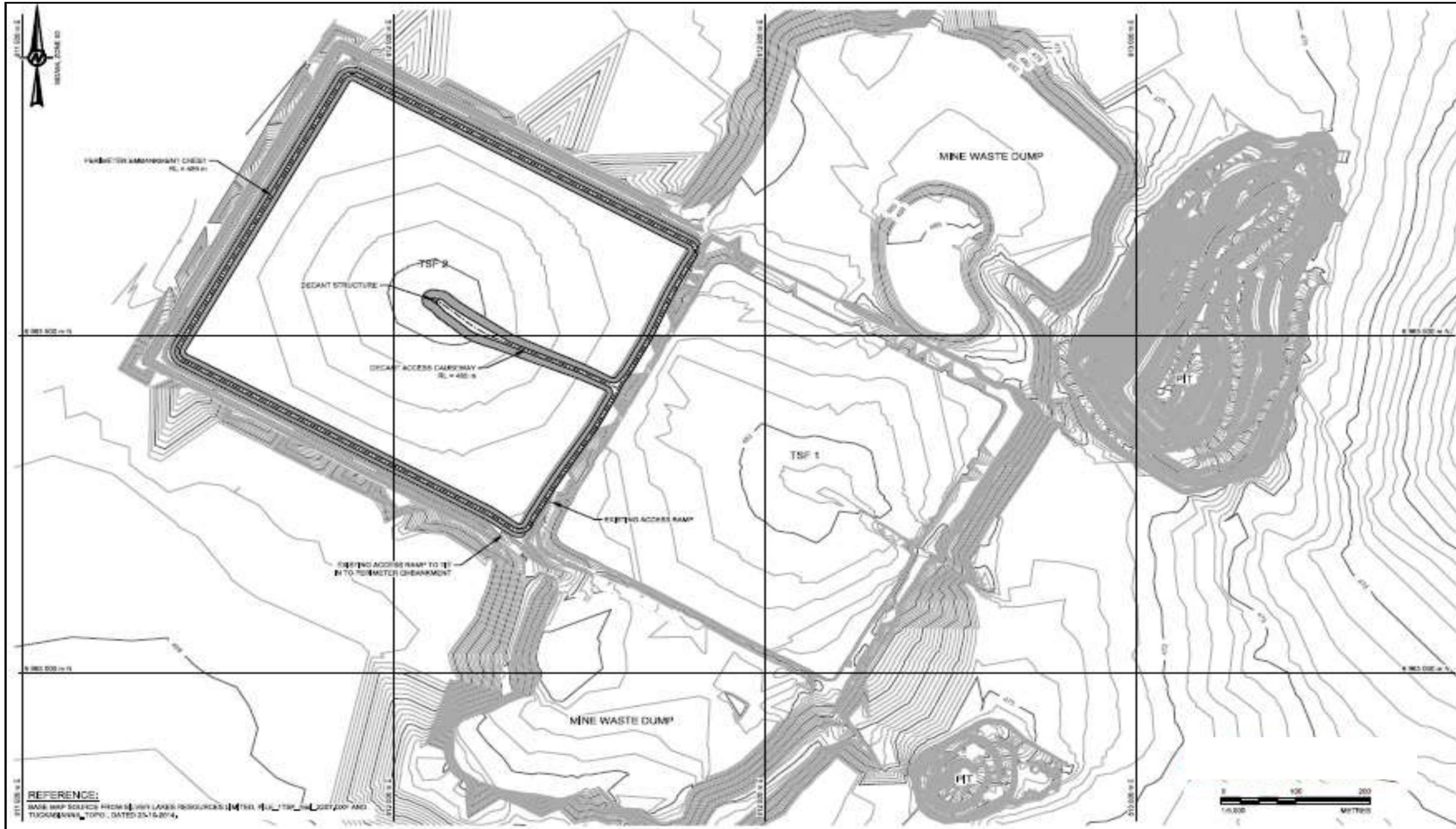


Figure 2: TSF2 - Raise 1 layout plan and setout

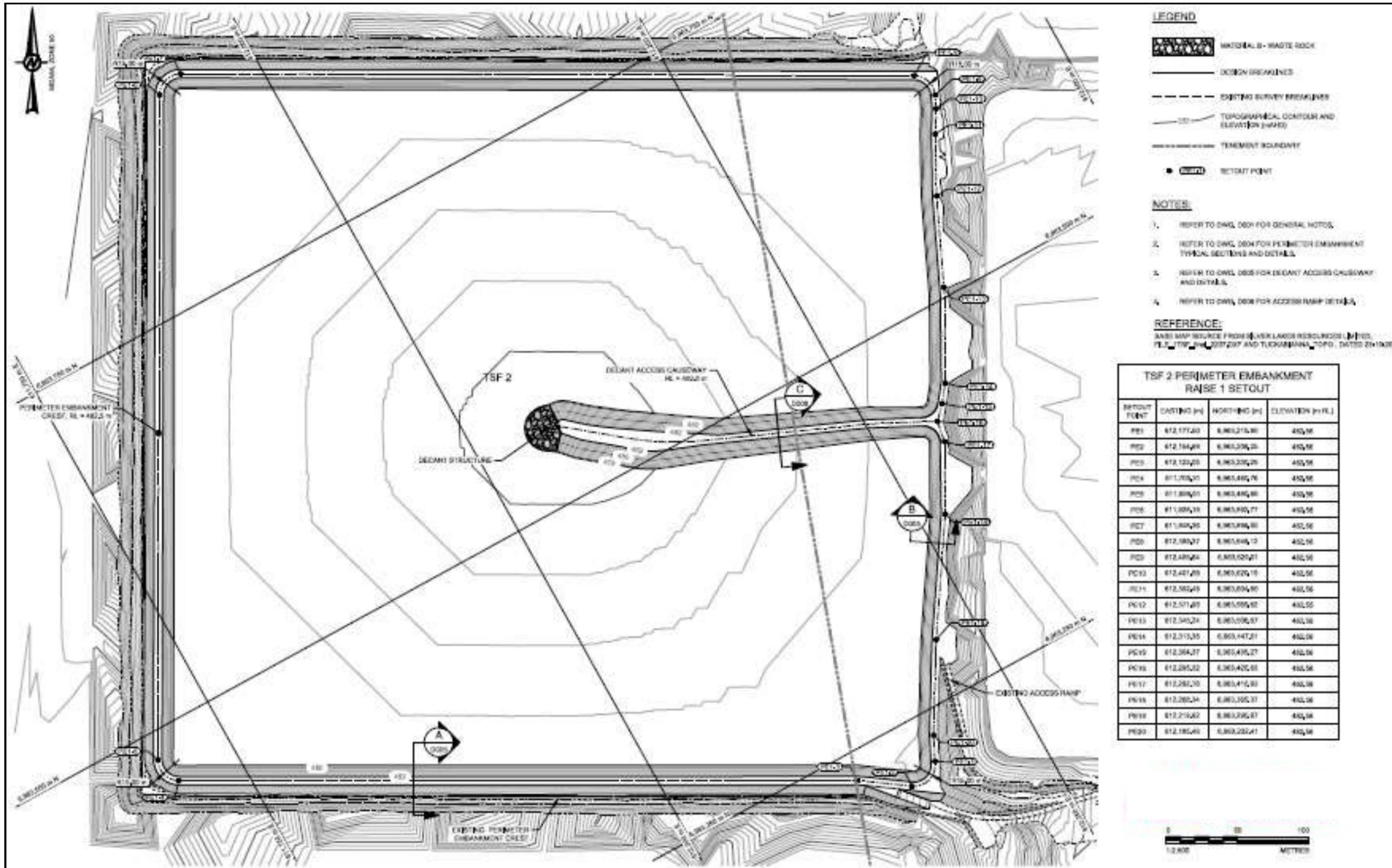


Figure 3: TSF2 - Raise 2 layout plan and setout

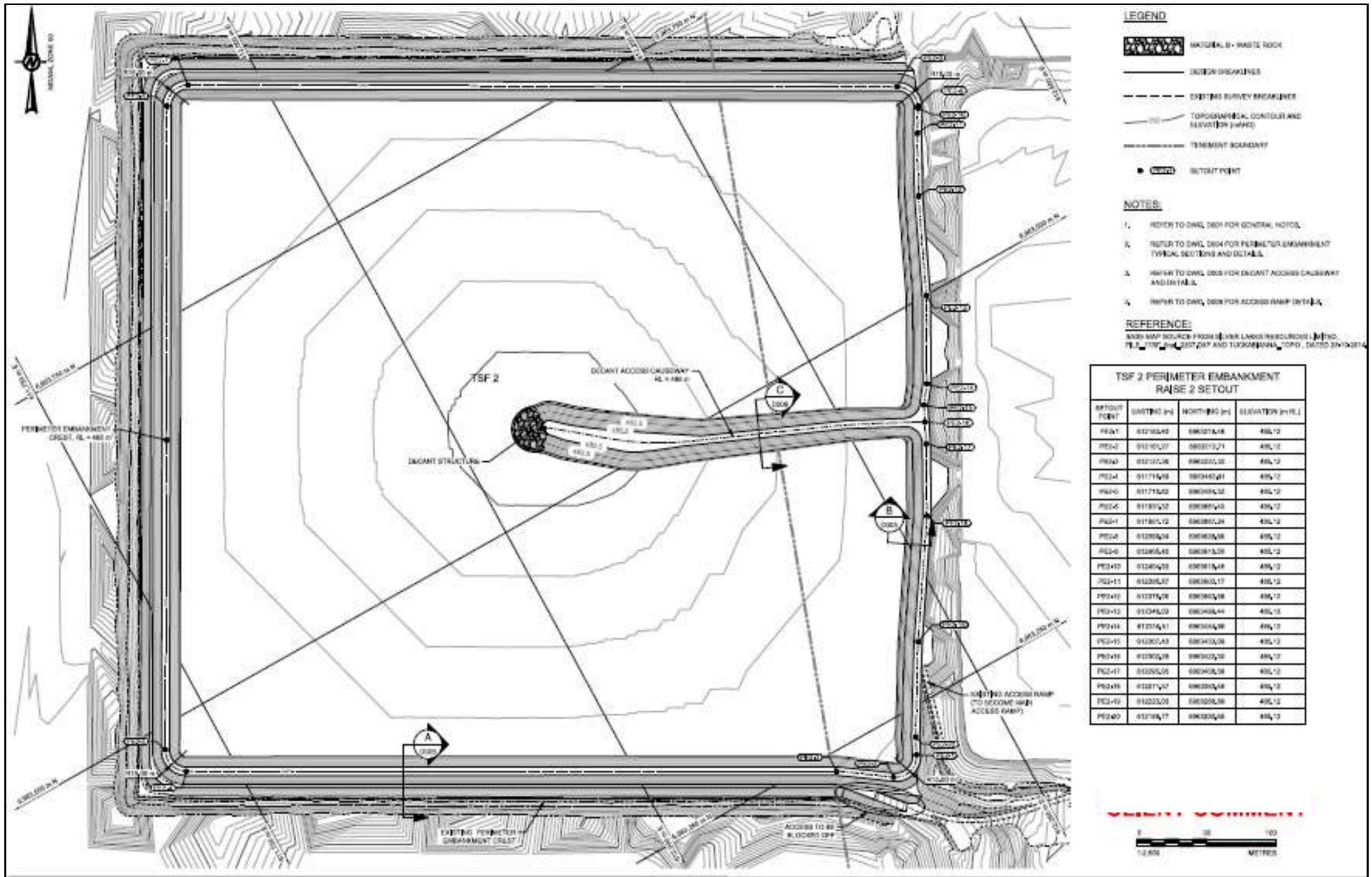


Figure 5: Decant causeway plan, sections and setout

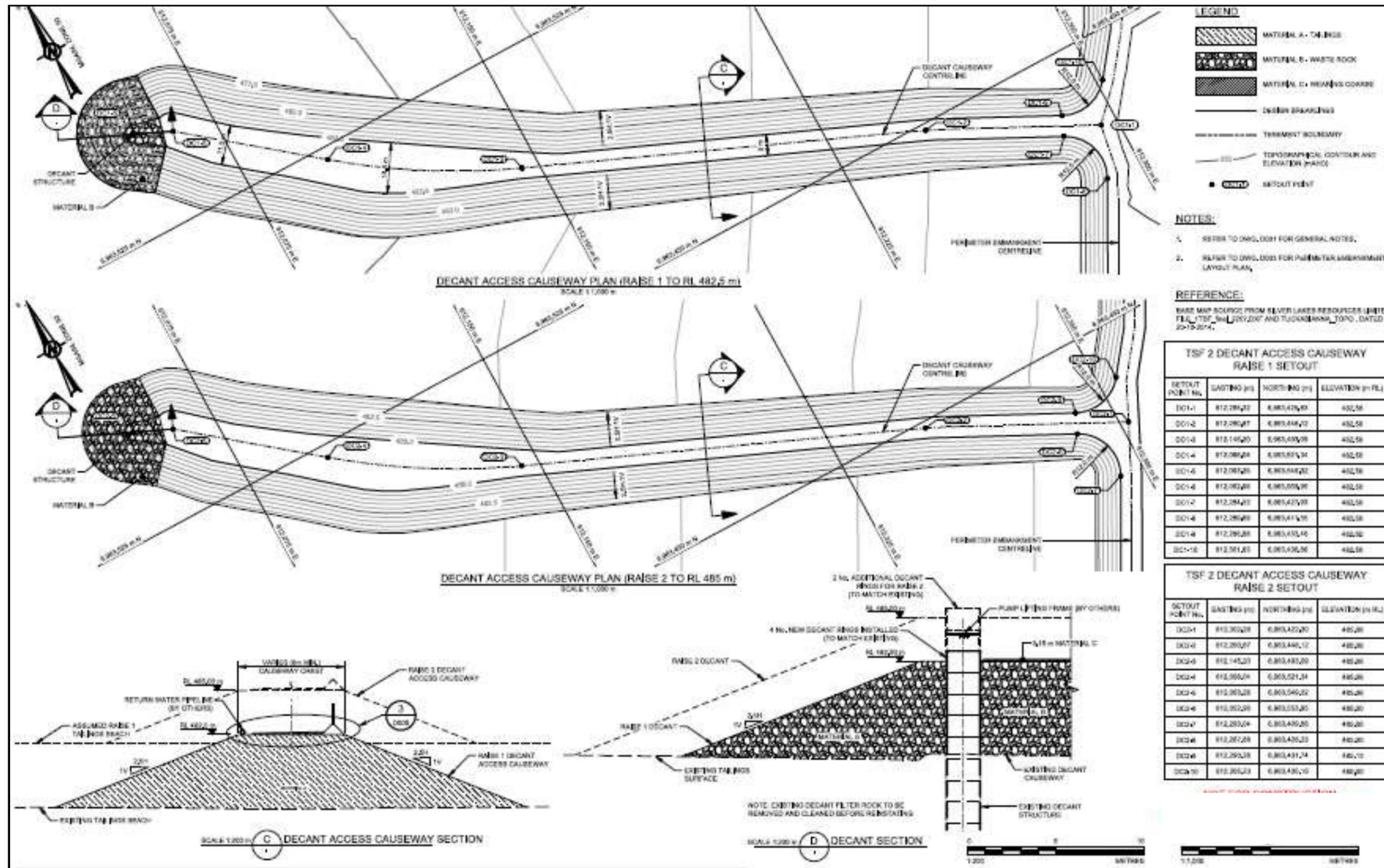


Figure 6: WVPs location and details

