

# Works Approval

Works approval number W6971/2024/1

Works approval holder Big Bell Gold Operations Pty Ltd

**ACN** 090 642 809

Level 6, 200 St Georges Terrace Registered business address

PERTH WA 6000

**DWER file number** DER2024/000466

**Duration** 24/12/2024 to 23/12/2028

Date of issue 24/12/2024

Meekatharra Gold Operations

**Premises details** Bluebird Gold Mine

MEEKATHARRA WA 6642

Legal description -

G51/9, L51/18, L20/75, L51/51, L51/78, L51/79, M20/12, M20/45, M20/68, M20/70, M20/71, M20/73, M20/77, M20/107, M20/214, M20/219, M20/249, M20/421, M51/6, M51/12, M51/31, M51/33, M51/35, M51/39, M51/53, M51/62, M51/75, M51/92, M51/96, M51/132, M51/190, M51/199, M51/200, M51/203, M51/209, M51/211, M51/233, M51/236, M51/237, M51/254, M51/320, M51/321, M51/374, M51/393, M51/437, M51/438, M51/439, M51/440, M51/459, M51/483, M51/485, M51/486, M51/491, M51/492, M51/493, M51/494, M51/495, M51/504, M51/523, M51/524, M51/539, M51/569, M51/572, M51/575, M51/581, M51/654, M51/668, M51/669, M51/670, M51/671, M51/672, M51/757, M51/762, M51/784, M51/788, M51/793, M51/794, M51/795, M51/819,

M51/820, M51/824, M51/834

As shown in the Premises map in Schedule 1.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which –	2,950,000 tonnes per annual period
(a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or	(including up to 450,000 tonnes of tailings slurry from the Bluebird Paste Plant)
<ul><li>(b) tailings from metallic or non-metallic ore are reprocessed; or</li><li>(c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.</li></ul>	T dote T lamy

This works approval is granted to the works approval holder, subject to the attached conditions, on 24 December 2024, by:

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

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

# Works approval history

Date	Reference number	Summary of changes
24/12/2024	W6971/2024/1	Works approval granted.

# Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

# Works approval conditions

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

# **Construction phase**

## Infrastructure and equipment

- **1.** The works approval holder must:
  - (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 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	GNHIPTSF	<ul> <li>layout and constructed as detailed in Schedule 1 maps: Figures 2, 3, and 4;</li> </ul>	Schedule 1 maps: Figures
		storage design capacity of 1.22 Mt;	2, 3, and 4
		<ul> <li>provide a minimum operational pit wall freeboard of 0.5 m and a minimum total freeboard of 2.0 m (including a 1.5 m stormwater depth);</li> </ul>	
		<ul> <li>designed to contain a 1 in 100-year 72-hour rainfall event, whilst maintaining an operational freeboard of a minimum of 0.5 m;</li> </ul>	
		<ul> <li>install and construct a spigot initially along the west wall of the IPTSF adjacent to the Great Northern Highway;</li> </ul>	
		<ul> <li>install a decant pump and associated infrastructure located at the pit central ramp from the northern wall of the GNHIPTSF to remove surface water and to pump return water back to the Processing Plant for reuse; and</li> </ul>	
		<ul> <li>decant pump must be stationed on a mobile trailer to ensure the decant pump moves up the ramp as the tailings and water levels rise.</li> </ul>	
2.	Combined GNHIPTSF and	<ul> <li>layout and constructed as detailed in Schedule 1 maps: Figures 2, 3, and 5;</li> </ul>	Schedule 1 maps: Figures
	BEIPTSF	<ul> <li>combined storage capacity of 17 Mm<sup>3</sup>;</li> </ul>	2, 4, and 5
		<ul> <li>provide a minimum operational pit wall freeboard of 0.5 m.</li> </ul>	
3.	Tailings discharge pipeline and return water pipeline	<ul> <li>install large diameter HDPE pipelines from the Processing Plant and connected by a spur line to the main pipeline to the GNHIPTSF;</li> <li>equipped with telemetry systems along pipelines to</li> </ul>	Schedule 1 maps: Figure 4

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		allow for the detection of leaks and failures; and	
		<ul> <li>install and construct containment bunds that comprise of suitable mine waste with a minimum height of 0.5 m to sufficiently contain any spill or leak for a period equal to the time between routine inspections.</li> </ul>	
4.	Bluebird Paste Plant and	<ul> <li>layout and constructed as detailed in Schedule 1 maps: Figures 6 and 7;</li> </ul>	Schedule 1 maps: Figure
	associated infrastructure	<ul> <li>install and construct a dust suppression system;</li> </ul>	2, 6, and 7
		<ul> <li>paste plant sized for a maximum production capacity of 100 m<sup>3</sup>/hr;</li> </ul>	
		<ul> <li>paste plant reagents and hydrocarbons to be stored and handled in areas contained within bunded areas that comply with AS1940-2004 and AS1692-2006;</li> </ul>	
		<ul> <li>paste plant reagents to be stored in container sheds and / or enclosed systems to prevent the generation of dust;</li> </ul>	
		<ul> <li>reclaimed Bluebird North TSF tailings to be placed on a ROM pad and enclosed within a perimeter bund to prevent run-off from leaving the area; and</li> </ul>	
		<ul> <li>stormwater diversion infrastructure to be constructed to divert surface water flows around the paste plant operating area.</li> </ul>	

#### **Compliance reporting**

- 2. The works approval holder must within 60 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **3.** The Environmental Compliance Report required by condition 2, must include as a minimum the following:
  - (a) certification by a suitably qualified person that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

### **Bore Construction requirements**

**4.** The works approval holder must design, construct, and install groundwater monitoring bores in accordance with the requirements specified in Table 2.

Table 2: Infrastructure requirements - groundwater monitoring bores

Infrastructure	Design, construction, and installation requirements	Monitoring bore location(s)	Timeframe
GNHMB1 and GNHMB2	Bore design and construction:  Designed and constructed in accordance with Minimum construction requirements for water bores in Australia 4th Ed. (National Uniform Drillers Licensing Committee (NUDLC), 2020).  Bore screens must target the part, or parts, of the aquifer most likely to be affected by contamination. Where temporary / seasonal perched features are present, bores must be nested, and the perched features individually screened.	Schedule 1 maps: constructed developed (purged), and determined to be operationa by no later than 30 calendar	
	Logging of borehole: Soil samples must be collected and logged during the installation of the monitoring bores. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.		days prior to tailings deposition in GNHIPTSF.
	Bore construction log:  Bore construction details must be documented within a bore construction log to demonstrate compliance with NUDLC 2020. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-		
	level measurements, and the elevations of the ground surface protective installations.  Bore development:  All installed monitoring bores must be developed after drilling to remove fine sand, silt, clay, and any drilling mud residues from around the bore screen to ensure the hydraulic functioning of the bore. A detailed record should be kept of bore development activities and included in the bore construction log.		
	Installation survey: The vertical (top of casing) and horizontal position of each monitoring bore must be surveyed and subsequently mapped by a suitably qualified surveyor.		
	Bore network map:  A bore location map (using aerial image overlay) must be prepared and include the location of all monitoring bores in the monitoring network and their respective identification numbers.		

Note 1: Refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on bore screen depth and length.

#### **Bore compliance reporting**

- 5. The works approval holder must, within 60 calendar days of the monitoring bores being constructed, submit to the CEO a bore construction report evidencing compliance with the requirements of condition 4.
- 6. The works approval holder must within 30 days of the monitoring bores in Table 2 being constructed, conduct baseline sampling in accordance with Section 7.2.3 of Assessment of Site Contamination NEPM for parameters outlined in Table 8.

# **Environmental commissioning phase**

### **Environmental commissioning requirements**

- 7. The works approval holder may only commence environmental commissioning of an item of infrastructure identified in condition 5 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.
- **8.** Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 3 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration.

#### **Table 3: Environmental commissioning requirements**

	Infrastructure	Commissioning requirements	Authorised commissioning duration
1.	GNHIPTSF pipelines, spigot, decant pump, and telemetry	<ul> <li>testing of the pipelines and spigot for operational functionality and potential leaks;</li> <li>testing the operational use of the decant pump; and</li> <li>testing the operational use of telemetry for any potential faults.</li> </ul>	For a period not exceeding 30 calendar days in aggregate.
2.	Bluebird Paste Plant and associated infrastructure	<ul> <li>testing of paste plant components;</li> <li>testing of dust suppression system; and</li> <li>testing of the pipelines for operational functionality and potential leaks.</li> </ul>	For a period not exceeding 30 calendar days in aggregate.

9. During environmental commissioning and time limited operations, the works approval holder must ensure that the emission(s) specified in Table 4, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s)

Table 4: Authorised discharge points during environmental commissioning and time limited operations

Emission	Discharge point	Discharge point location
Tailings from the Processing Plant	GNHIPTSF (and BEIPTSF when combined) via spigot located along the perimeter	Schedule 1 maps: Figure 3
Cement-tailings slurry from the Bluebird Paste Plant	Bluebird underground mine via tailings steel pipeline	Schedule 1 maps: Figure 2

#### Monitoring during environmental commissioning

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

### **Environmental commissioning reporting**

- 11. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 3.
- **12.** The works approval holder must ensure the Environmental Commissioning Report required by condition 11 of this works approval includes the following:
  - (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of tailings deposited;
  - (b) the ambient groundwater monitoring results recorded in accordance with condition 10;
  - (c) a summary of the environmental performance of each item of infrastructure or equipment as constructed or installed, which at a minimum includes records detailing the:
    - (i) commissioning of the infrastructure; and
    - (ii) testing of the infrastructure.
  - (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
  - (e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

## Time limited operations phase

#### **Commencement and duration**

- **13.** The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1:
  - (a) where the item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by conditions 2 and 3; and
  - (b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 8, the Environmental Commissioning Report for that item of infrastructure as required by conditions 11 and 12 has been submitted by the works approval holder.
- **14.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 15:
  - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 13 for that item of infrastructure; or
  - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 14(a).

#### **Time limited operations requirements**

**15.** During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed Table 5 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 5.

Table 5: Infrastructure and equipment requirements during time limited operations

	Infrastructure and equipment	Operational requirements	Infrastructure location
1.	GNHIPTSF	<ul> <li>production capacity not to exceed 2,950,000 tonnes per annual period;</li> </ul>	Schedule 1 maps: Figure
		<ul> <li>maintain and operate a minimum operational pit wall freeboard of 0.5 m and a minimum total freeboard of 2.0 m (including a 1.5 m stormwater depth) above a 1 in 100-year 72-hour rainfall event;</li> </ul>	2
	maintain and operate the spigot at the appropriate location;		
		<ul> <li>maintain and operate the decant pump at the central ramp location from the northern wall of the TSF;</li> </ul>	
		<ul> <li>maintain and operate the decant pump on a mobile trailer to ensure the decant pump moves up the ramp as the tailings and water levels rise;</li> </ul>	
		<ul> <li>decant water pumped via the return water pipeline back to the Processing Plant for reuse; and</li> </ul>	
		<ul> <li>maximum operating height of 429.0 mAHD.</li> </ul>	
2.	Combined	production capacity not to exceed 2,950,000	Schedule 1

	Infrastructure and equipment	Operational requirements	Infrastructure location
	GNHIPTSF and	tonnes per annual period;	maps: Figure
	BEIPTSF	<ul> <li>maintain and operate a minimum operational pit wall freeboard of 0.5 m and a minimum total freeboard of 2.0 m (including a 1.5 m stormwater depth) above a 1 in 100-year 72-hour rainfall event;</li> </ul>	2
		<ul> <li>maintain and operate the spigot at the appropriate location;</li> </ul>	
		<ul> <li>maintain and operate the decant pump at the central ramp location from the northern wall of the TSF;</li> </ul>	
		<ul> <li>maintain and operate the decant pump on a mobile trailer to ensure the decant pump moves up the ramp as the tailings and water levels rise;</li> </ul>	
		<ul> <li>decant water pumped via the return water pipeline back to the Processing Plant for reuse; and</li> </ul>	
		maximum operating height of 464.5 mAHD.	
3.	Tailings discharge pipeline and return water pipeline	<ul> <li>maintain and operate the telemetry systems in the vent of a pipe failure; and</li> </ul>	Schedule 1 maps: Figure
		<ul> <li>maintain the integrity of the secondary containment (bunds) to contain any spill for a period equal to the time between routine inspections.</li> </ul>	2
4.	Bluebird Paste	water truck must be used for dust suppression;	Schedule 1
	Plant and associated infrastructure	maintain and operate the dust suppression system;	maps: Figure 2
		<ul> <li>production capacity not to exceed 450,000 tonnes per annual period;</li> </ul>	L
		<ul> <li>maintain and operate paste plant at the maximum production capacity of 100 m³/hr;</li> </ul>	
		<ul> <li>paste plant reagents and hydrocarbons to be stored and handled in areas contained within bunded areas that comply with AS1940-2004 and AS1692-2006;</li> </ul>	
		<ul> <li>maintain the perimeter bund around the reclaimed Bluebird North TSF tailings placed on the ROM pad to prevent run-off from leaving the area; and</li> </ul>	
		<ul> <li>maintain and operate the stormwater diversion infrastructure to be constructed to divert surface water flows around the paste plant operating area.</li> </ul>	

# **Monitoring requirements**

- 16. The works approval holder must ensure that all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
- 17. Where specified actions in conditions, the works approval holder must 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.

- 18. The works approval holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this works approval is calibrated in accordance with the manufacturer's specifications and the requirements of the works approval.
- 19. The works approval holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.
- **20.** The works approval holder must record the results of all monitoring activity required by conditions 10 and 21.

### **Monitoring during time limited operations**

**21.** The works approval holder must monitor the groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 6.

Table 6: Monitoring of ambient concentrations during commissioning and time limited operations

Monitoring point reference and location	Parameter	Limit	Units	Frequency	Averaging period	Method (sampling and analysis)						
GNHMB1 and	Standing water level <sup>1</sup>	-	mAHD	At least once prior to	Spot sample	AS/NZS 5667.1						
GNHMB2 (Great Northern	рН	>6.0 to ≤9.0	pH unit	environmental commissioning.  Monthly during environmental commissioning and time limited operations.		and AS/NZS 5667.11						
Highway In-pit TSF)	Electrical conductivity	-	μS/cm			In field						
As shown in Schedule 1 maps: Figure 8	Total dissolved solids (TDS)	-	mg/L commis and time limited			non-NATA accredited analysis permitted						
	Aluminium (Al)	-				AS/NZS 5667.1 and						
	Antimony (Sb)	-										
	Arsenic (As)	0.5				AS/NZS 5667.11						
	Bismuth (Bi)	-				5007.11						
	Calcium (Ca)	-				Ву а						
	Cadmium (Cd)	-				NATA accredited						
	Chloride (CI)	-				laboratory						
	Chromium (Cr)	-										
	Copper (Cu)	0.5										
	Fluoride (F)	-										
	Iron (Fe)	-										
	Lead (Pb)	-										
	Magnesium (Mg)	-										

Monitoring point reference and location	Parameter	Limit	Units	Frequency	Averaging period	Method (sampling and analysis)
	Manganese (Mn)	-				
	Mercury (Hg)	-				
	Nickel (Ni)	1.0				
	Nitrite Nitrogen (NO <sub>2</sub> as N)	-				
	Nitrate Nitrogen (NO <sub>3</sub> as N)	-				
	Potassium (K)	-				
	Selenium (Se)	-				
	Sodium (Na)	-				
	Sulphur (S)	-				
	Sulfate (SO <sub>4</sub> )	-				
	Tellurium (Te)	-				
	Thallium (TI)	-				
	Zinc (Zn)	20				
	Weak acid dissociable cyanide (WAD)	0.5				

Note 1: Standing water level shall be determined prior to collection of water samples.

- **22.** The works approval holder must undertake monitoring of the water balance for GNHIPTSF and the combined GNHIPTSF and BEIPTSF each monthly period, and (as a minimum) record the following information:
  - (a) site rainfall;
  - (b) evaporation rate;
  - (c) decant water recovery volumes;
  - (d) volume of tailings deposited; and
  - (e) estimate of seepage losses.

#### **Inspections**

- **23.** The works approval holder must:
  - (a) undertake inspections during environmental commissioning and time limited operations 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.

#### **Table 7: Inspections of infrastructure**

Infrastructure	Type of inspection	Frequency
Tailings pipeline	Visual integrity	Daily
Return water pipelines		
Perimeter embankment		
Freeboard	Visual to confirm required freeboard capacity is available	

### **Compliance reporting**

- 24. The works approval holder must submit to the CEO a report on the time limited operations with 60 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is sooner.
- **25.** The works approval holder must ensure the report by condition 24 includes the following:
  - (a) a summary of the time limited operations, including timeframes;
  - (b) tailings density (solid vs water content);
  - (c) a summary of ambient groundwater monitoring results obtained during time limited operations under condition 21;
  - (d) interpretation and comparison of the results with the ANZG 2018 water quality default guideline values for livestock water supply, highlighting any exceedances:
  - (e) a summary of water balance results for GNHIPTSF and the combined GNHIPTSF and BEIPTSF in accordance with condition 22;
  - (f) a summary of the environmental performance of all infrastructure as constructed or installed, which includes records detailing the:
    - (i) operations of the infrastructure; and
    - (ii) testing of the infrastructure.
  - (g) a review of performance and compliance against the conditions of the works approval; and
  - (h) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

# Records and reporting (general)

- **26.** The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- **27.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
  - (a) the works conducted in accordance with condition 1;
  - (b) any maintenance of infrastructure that is performed in the course of complying with conditions of this works approval;
  - (c) monitoring programmes undertaken in accordance with condition 21; and
  - (d) complaints received under condition 26.
- **28.** The books specified under condition 27 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the works approval holder for the duration of the works approval; and
  - (d) be available to be produced to an inspector or the CEO as required.

# **Definitions**

In this works approval, the terms in Table 8 have the meanings defined.

**Table 8: Definitions** 

Term	Definition
ACN	means Australian Company Number.
annual period	a 12-month period commencing from 1 January until 31 December 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="https://www.waterquality.gov.au/anz-guidelines">www.waterquality.gov.au/anz-guidelines</a>
AS1692-2006	means the Australian Standard 1692-2006 – Steel tanks for flammable and combustible liquids, prepared by Committee ME-017, Australia
AS1726	means the Australian Standard 1726:1993 Geotechnical site investigations.
AS1940-2004	means the Australian Standard 1940-2004 – <i>The storage and handling of flammable and combustible liquids</i> , prepared by Committee ME-017, Australia.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.
Assessment of Site Contamination NEPM	means the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended from time and time.
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
BEIPTSF	means Bluebird East In-pit Tailings Storage Facility.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer.
	CEO for the purposes of notification means:
	Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919
	info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.

Term	Definition
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	Environmental Protection Act 1986 (WA).
EP Regulations	Environmental Protection Regulations 1987 (WA).
GNHIPTSF	means Great Northern Highway In-pit Tailings Storage Facility.
HDPE	means high-density polyethylene.
IPTSF	means In-pit Tailings Storage Facility.
m	means metre.
mAHD	means metres Australian Height Datum.
m³/hr	means cubic metre per hour.
mg/L	means milligrams per lite.
Mm	means millimetre.
Mm <sup>3</sup>	means million cubic metres.
monthly period	means a one-month period.
Mt	means million tonnes,
NATA	means 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.
NUDLC 2020	means the National Uniform Drillers Licensing Committee, 2020, Minimum construction requirements for water bores in Australia 4th Ed.
premises	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 works approval.
prescribed premises	has the same meaning given to that term under the EP Act.

Term	Definition
ROM	means run-of-mine.
TSF	means Tailings Storage Facility.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
μS/cm	means microsiemens per centimetre.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

## **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

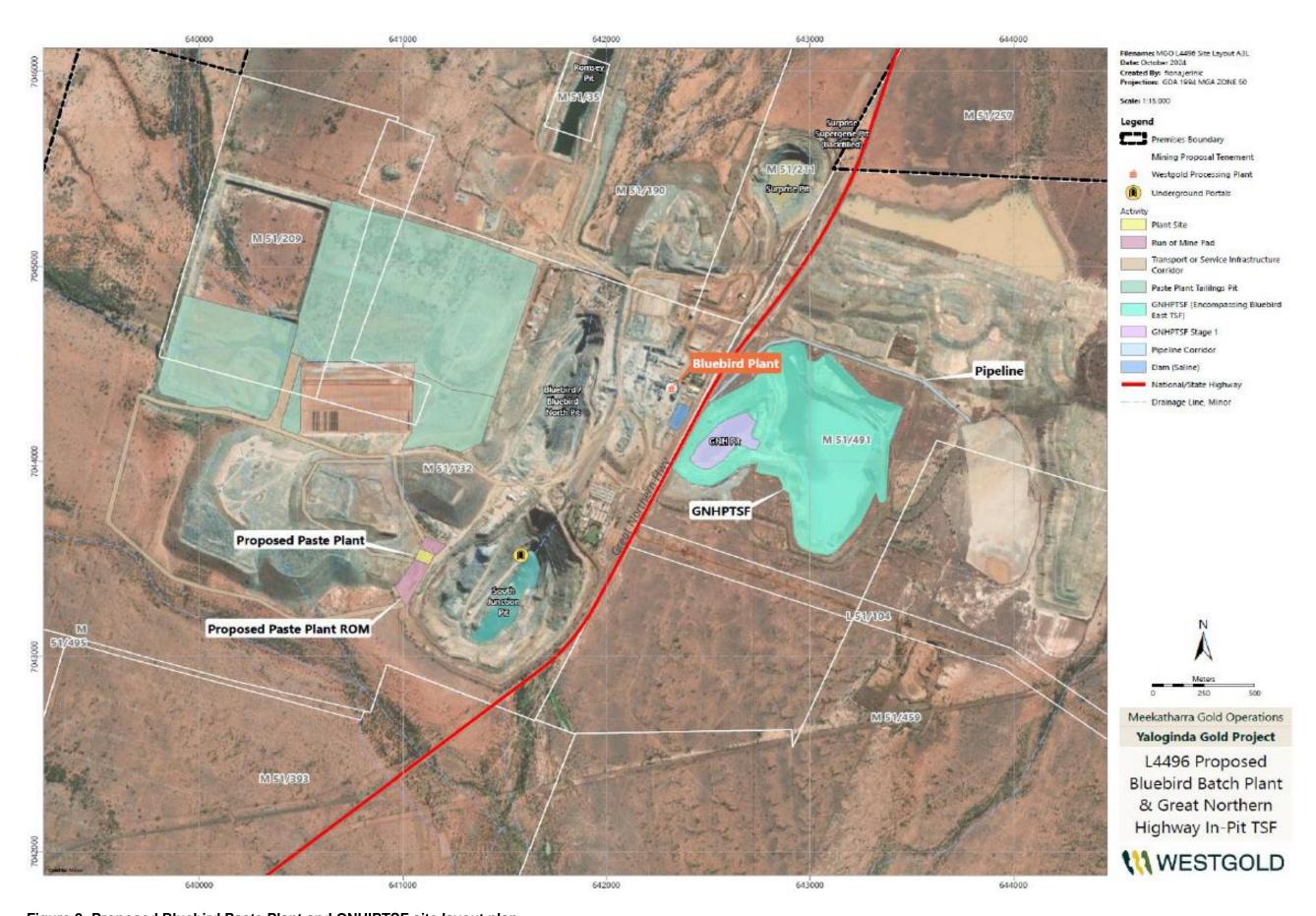


Figure 2: Proposed Bluebird Paste Plant and GNHIPTSF site layout plan

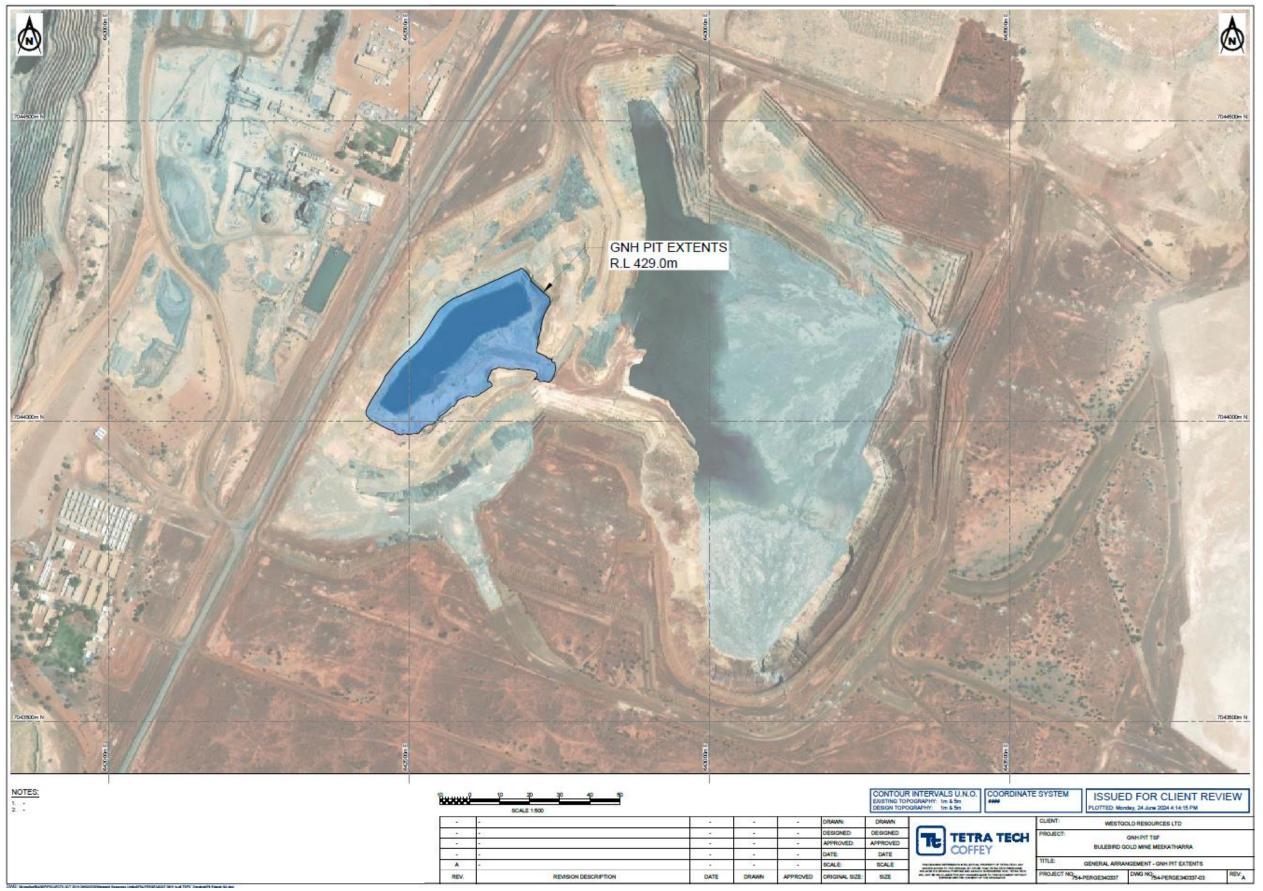


Figure 3: General arrangement – GNHIPTSF extents

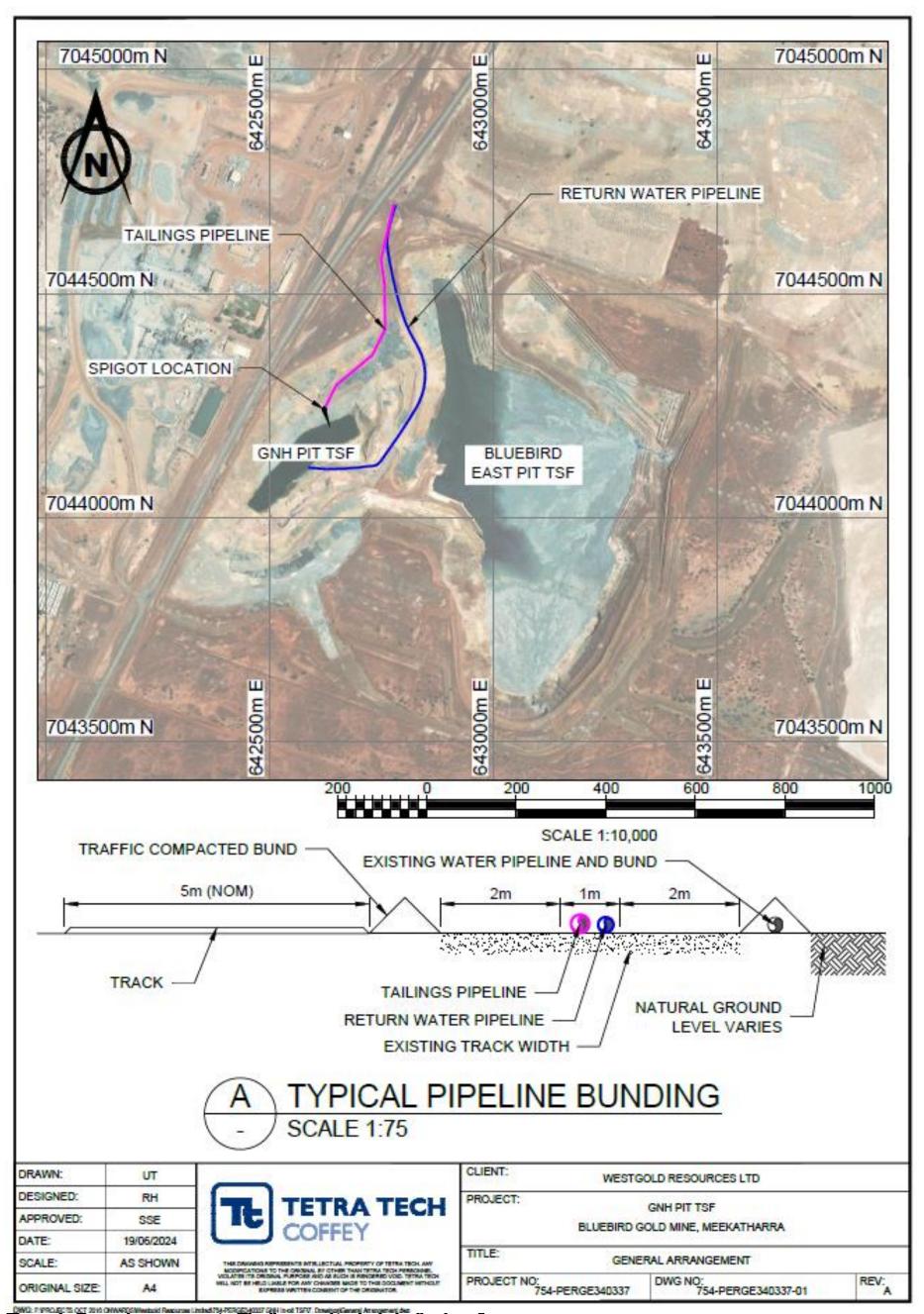


Figure 4: General arrangement-Pipelines and typical pipeline bunding

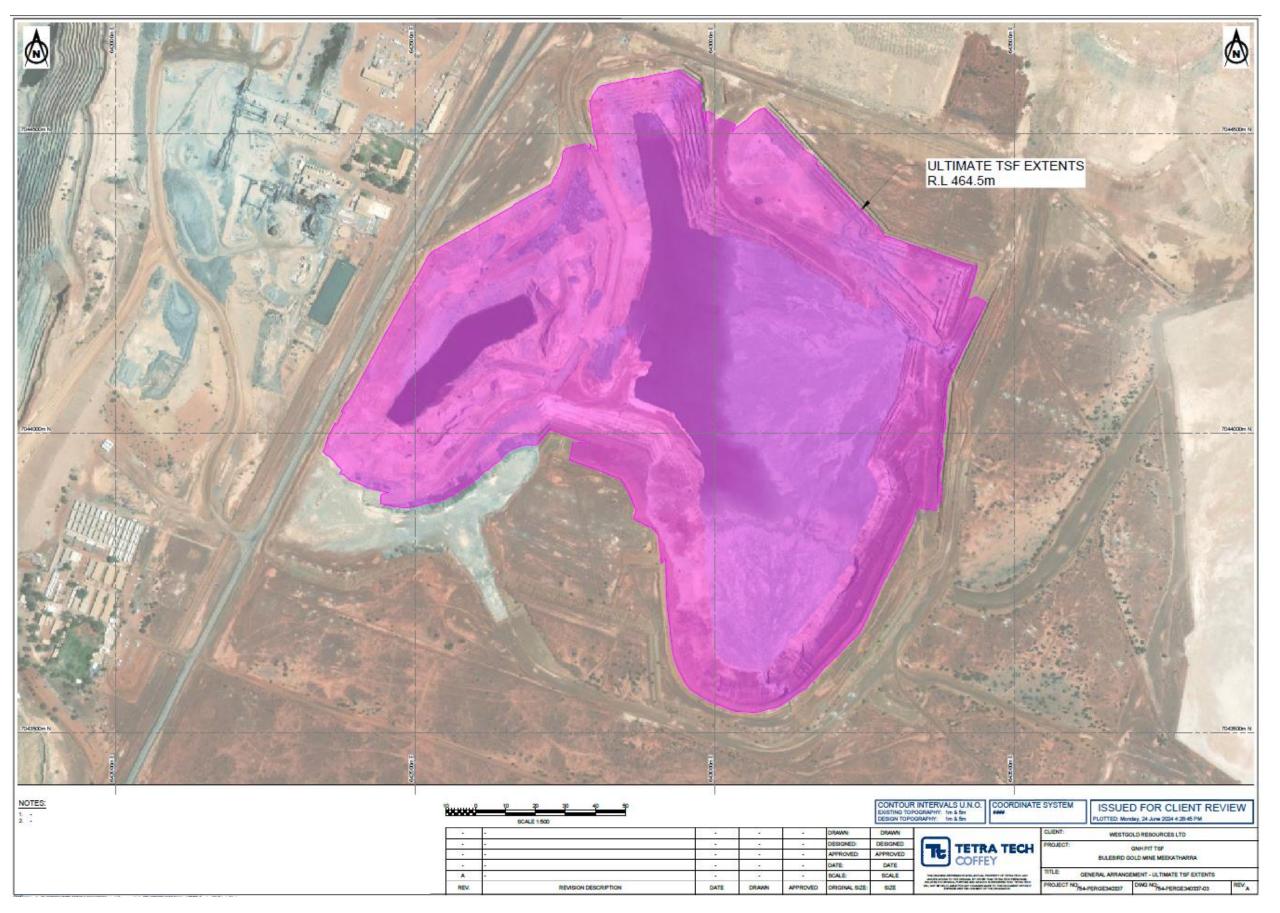


Figure 5: General arrangement – Final TSF extent of GNHIPTSF and BEIPTSF combined



Figure 6: Bluebird Paste Plant design

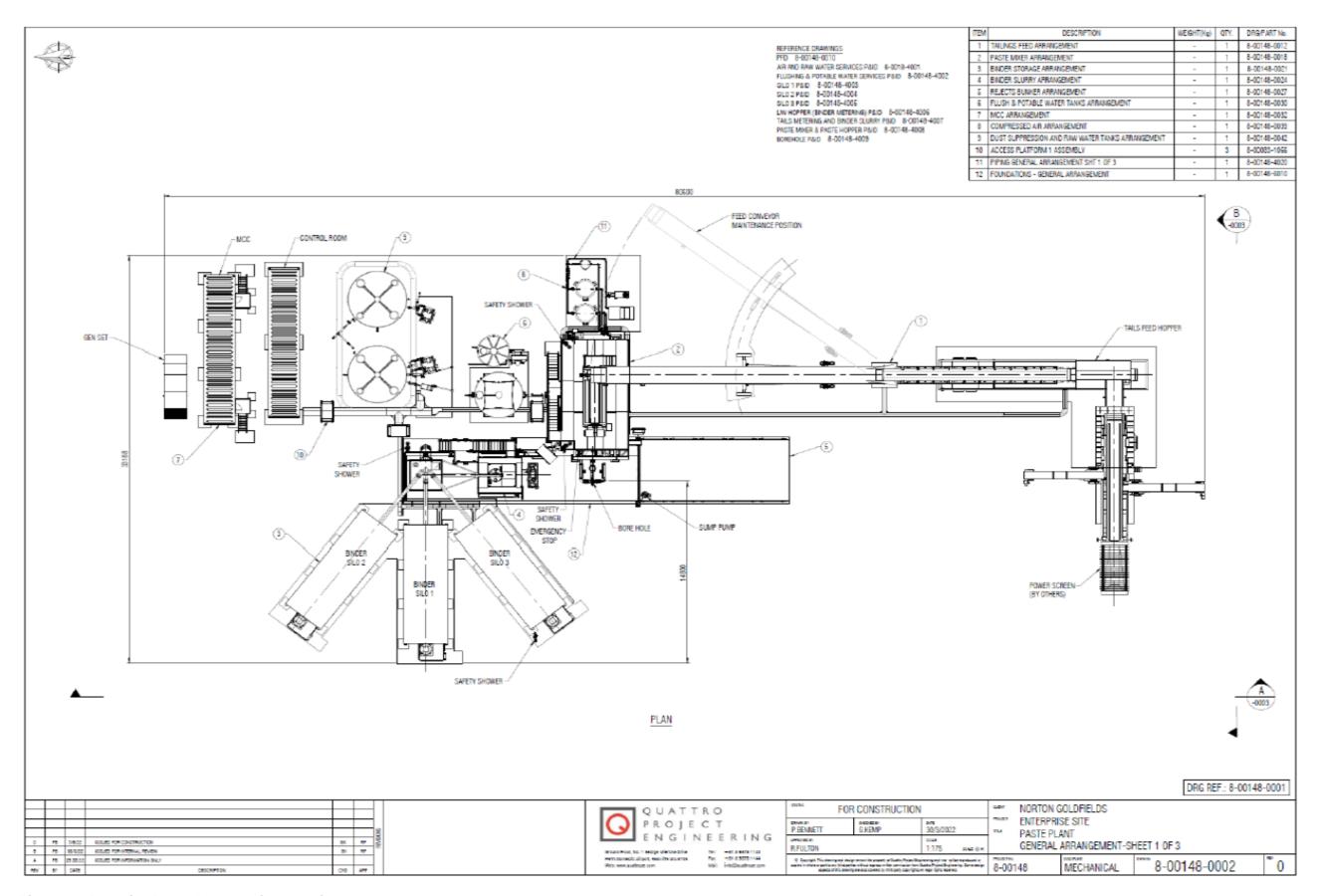


Figure 7: Bluebird Paste Plant design drawings

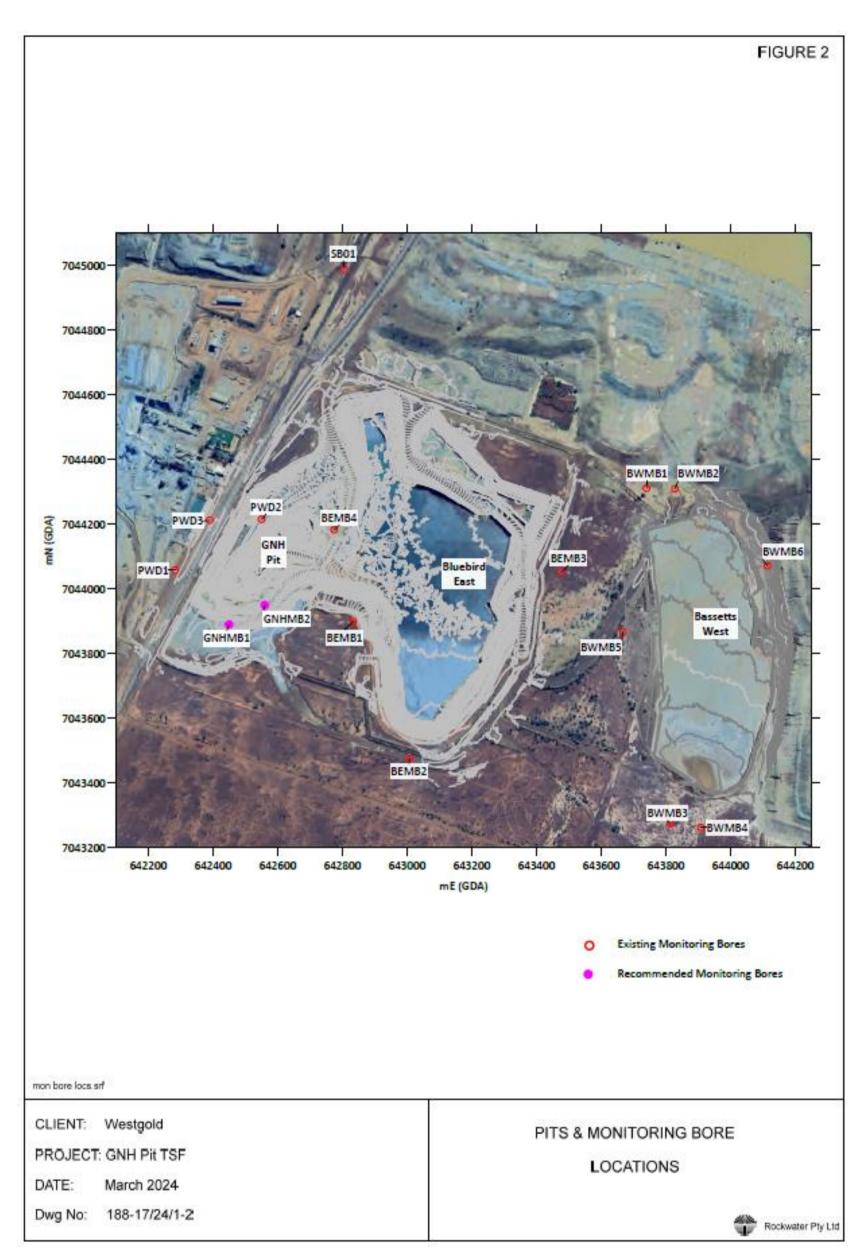


Figure 8: Groundwater monitoring bores locations around GNHPTSF and BEIPTSF. (Note: Existing monitoring bores, monitoring undertaken under licence L4496/1988/11.