

PRCP schedule

Environmental Protection Act 1994

PRCP schedule P-PRCP-100938087

This is the approved form for a PRCP schedule issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

PRCP schedule: P-PRCP-100938087

PRCP schedule holder(s)

Name(s)	Registered address
SOJITZ GREGORY CRINUM PTY LTD	Central Plaza One Level 34, 345 Queen Street BRISBANE CITY QLD 4000

Location details

Location(s)
MDL133; ML1789; ML1923; ML70061; ML7007

Take effect

In accordance with section 202B of the *Environmental Protection Act 1994* (EP Act), the PRCP schedule has effect on the day the environmental authority for carrying out relevant activities on land to which the schedule relates takes effect. Pursuant to section 202C of the EP Act, a PRCP schedule continues in force until the environmental authority for the relevant activities to which the PRCP schedule relates is cancelled or surrendered, even if the resource tenure expires or is cancelled and even if the relevant environmental authority is suspended under Chapter 5, part 11 or 11A of the EP Act.



Signature

10/09/2025

Date

Jessica Johnson
Department of the Environment, Tourism, Science and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Business Centre Coal
PO Box 3028, Emerald QLD 4720
(07) 4987 9320
CRMining@detsi.qld.gov.au



Obligations under the *Environmental Protection Act 1994*

Pursuant to section 202E of the EP Act, if there is an inconsistency between an environmental authority and a PRCP schedule, the environmental authority prevails to the extent of the inconsistency.

In addition to the requirements found in the conditions of this PRCP schedule, the holder must also meet their obligations under the environmental authority, the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the EP Act:

- General environmental duty (section 319);
- Duty to notify environmental harm (section 320-320G);
- Offence of causing serious or material environmental harm (sections 437-439);
- Offence of causing environmental nuisance (section 440);
- Offence of depositing prescribed water contaminants in waters and related matters (section 440ZG);
- Offence to place contaminant where environmental harm or nuisance may be caused (section 443).

PRCP schedule

The PRCP schedule incorporates the following sections:

- Section A – Conditions of PRCP schedule
- Section B – Final site design and reference maps
- Section C – Post mining land uses
- Section D – Non-use management areas
- Section E – Appendices

Section A - Conditions of PRCP schedule

Pursuant to section 206A of the EP Act:

- It is a condition of this PRCP schedule that, in carrying out a relevant activity under the schedule, the holder must comply with a requirement stated in the environmental authority relevant to carrying out the activity; and
- It is a condition of this PRCP schedule that the holder must comply with the following matters stated in the schedule -
 - (a) each rehabilitation milestone and management milestone; and
 - (b) when each rehabilitation milestone and management milestone is to be achieved.

General conditions

PRCP1 All mining disturbance authorised under EA EPML00945013 must have an associated rehabilitation outcome provided in this PRCP schedule.

PRCP2 The holder must for each rehabilitation and improvement area, achieve the corresponding rehabilitation or management milestone criterion (milestone reference):

- a. For the cumulative area available specified in this schedule; and
- b. By the milestone completion date specified in this schedule.

PRCP3 Where land becomes 'available for rehabilitation' earlier than the date nominated in this schedule, the holder must commence rehabilitation as soon as practicable. Progressive rehabilitation commenced early under this condition must be carried out in accordance with the milestones and criteria in this schedule. The holder must notify the administering authority of the proposed change, and an amendment by agreement will be initiated to amend the dates in the schedule.

Note: reference to "earlier than the nominated date in the schedule" means a date that is greater than 1 year prior to the date nominated in the schedule.

PRCP4 Where an area achieves a rehabilitation or management milestone, the holder must continue to achieve the milestone criteria until the next milestone is achieved or surrender is approved.

PRCP5 The holder must maintain a risk register that identifies the risks to not achieving:

- a. A stable condition for post-mining land uses,
- b. Sufficient improvement for non-use management areas, and
- c. How the risks are being managed or minimised.

The risk register must be reviewed annually and include consideration of the outcomes of PRCP monitoring data.

PRCP6 The holder must carry out monitoring of the rehabilitation activities in the rehabilitation areas in accordance with:

- a. The monitoring and maintenance program described in the rehabilitation planning part for the activity Sojitz Gregory Crinum Mine PRCP version 3, 30 May 2025;
- b. Any requirement under this schedule; and
- c. As necessary to demonstrate achievement of each rehabilitation milestone or management milestone criteria.

Where there is any inconsistency between this schedule and the rehabilitation planning part the schedule criteria prevail to the extent of the inconsistency.

- PRCP7** The holder must make and keep up to date records in relation to rehabilitation activities under this schedule on:
- a. Achievement and maintenance of each rehabilitation milestone criteria of this schedule;
 - b. Rehabilitation activities and the results of those activities (including but not limited to, actions taken, date, location, methods, data collected, QA/QC, photos, waste tracking and disposal records, appropriately qualified person details and assumptions);
 - c. Maintenance of rehabilitation and the results of maintenance activities;
 - d. Monitoring of rehabilitation and the results of monitoring;
 - e. Details and results of rehabilitation trials;
 - f. Designs, drawings, specifications and any similar documents developed in accordance with good professional practice in relation to rehabilitation milestones or milestone criteria;
 - g. All documents in relation to the requirements of this schedule, including reports (e.g. site investigation report), statements (e.g. site suitability statement), certifications, assessments, investigations, inspections, audits or any similar documents developed in relation to rehabilitation milestones or milestone criteria;
 - h. Landholder agreements; and
 - i. Details of community consultation in the community consultation register relating to rehabilitation and closure activities.
- PRCP8** Records made under PRCP7 must be kept until the relevant environmental authority has been surrendered.
- PRCP9** Records made under PRCP7 must be provided to the administering authority in the specified format within 10 business days of a written request.
- PRCP10** All AQP designs, specifications, certifications, assessments and any similar documents, must:
- a. Include documented consideration of any relevant guideline or publication material, including material published by the administering authority;
 - b. Detail the boundary conditions (of any model);
 - c. Detail any assumptions made, limitations and areas of uncertainty; and
 - d. Must contain sufficient detail to allow for independent peer review and substantiation.
- PRCP11** Disturbance due to exploration and minor ancillary activities in areas not planned to be mined and not within a Rehabilitation Area in this Schedule must be rehabilitated in accordance with the provisions detailed in the '*Eligibility criteria and standard conditions for exploration and mineral development projects*' or its successor, with the exception that land must be rehabilitated to a stable condition which includes achieving the relevant post mining land use for the disturbance location as detailed in **Figure 1: Final Site Design**.
- PRCP12** Within 12 months of the approval of the PRCP schedule, the holder must submit the final landform design document certified by an AQP that ensures the final landforms will achieve the rehabilitation criteria set out within this schedule and to the satisfaction of the administering authority.
- PRCP13** Within 5 years of the approval of the PRCP schedule, the holder must provide to the administering authority for each relevant structure, an AQP prepared and peer reviewed, landform closure design report for the out of pit tailing storage facilities (TSF), which includes detailed engineering designs and a durability assessment.

- PRCP14** The out of pit TSF landform closure design report must at a minimum for each of the relevant structures, include:
- a. Design aims and objectives of final landform, including the cover system and batters;
 - b. The intended design life of the component parts of each relevant structure including the cover, plateau, batters, access points, water management, and associated monitoring network;
 - c. Quality assurance and quality control required during construction;
 - d. How the cover system achieves a performance outcome equivalent to or better than the design provided in the PRC Plan dated 30 May 2025;
 - e. How the cover system performance will be demonstrated;
 - f. How the landform achieves acceptable geotechnical and erosional stability;
 - g. How the landform achieves an acceptable water quality outcome;
 - h. How redundancy of the monitoring network has been identified and built into the final design;
 - i. How the design, including the component parts supports the achievement of the nominated PMLU;
 - j. How the design is consistent with the durability assessment;
 - k. The critical design elements and associated assessment that support the achievement of a stable condition; and
 - l. Where any assumed or inferred material properties have been used in the design or its assessment (inclusive of modelling), detailed discussion justifying why actual/measured properties were not used, how uncertainties regarding material properties may affect performance, and how those uncertainties are managed.
- PRCP15** The durability assessment required in PRCP13 must include:
- a. Specified nominated design life of the component parts of the relevant structures including the cover, plateau, batters, access points and water management features;
 - b. The systematic identification and analysis of potential failure modes for the component parts of the relevant structures (including the cover, plateau, batters, access points and water management features);
 - c. An explanation of how each failure mode has been considered in the design and designed out, to the extent practicable;
 - d. Where a failure mode could not be designed out, the control measures that are required and their residual risks;
 - e. How the design has been developed to allow for the future practical repair of the component parts of the structure, should any of the potential failure modes be realised either during or after the nominated design life; and
 - f. Details of the minimum monitoring required to detect each potential failure mode, including the type of monitoring, location/s, frequency and performance indicators, to demonstrate ongoing stability and performance in support of achieving a stable condition. This must include measurable time-based criteria to detect the development of potential failure modes.

- PRCP16** The documents required under PRCP13 (detailed in PRCP14 and PRCP15) must be independently peer reviewed. Both the AQP and independent peer reviewer must provide a certification, that the landform closure design report is fit for purpose, prepared in accordance with good professional practice and if constructed as per the landform closure design report the rehabilitated landform will achieve a stable condition in a post-closure context.
- PRCP17** The holder must, within three (3) months of providing the out of pit TSF landform closure design report and durability assessment required by PRCP13 (and as detailed in PRCP14 and PRCP15), seek to amend this PRCP schedule by application to include appropriate milestone criteria that reflect the findings and recommendations of the updated erosion assessment.
- PRCP18** Tailings must not be stored in new out of pit facilities until the requirements of Conditions PRCP13 – PRCP17 are completed.
- PRCP19** Monitoring must be conducted equivalent to or better than the monitoring type and frequency as specified in the durability assessment required in PRCP15.
- PRCP20** The currency of the landform closure design report, including the durability assessment must be maintained, and the report updated as often as necessary, to ensure that the relevant structures will achieve a stable condition that can be sustained. Where the report has been updated, the certifications provided under PRCP16 must also be provided in relation to the updates.
- PRCP21** The EA holder to provide a revised Groundwater Model Report by 10 December 2025 which includes the following:
- a. Provide the predicted groundwater elevation contours at equilibrium for major geological units with the residual voids clearly depicted;
 - b. Review the groundwater monitoring network including all Crinum bores used in developing the model to identify the strata and construction details of each bore; and
 - c. Based on the results of PRCP21(b), undertake an assessment of each bore to:
 - i. Determine the suitability of the bore to support the development of the groundwater model and justify its continual use for ongoing monitoring of groundwater levels and/or quantity; and
 - ii. Provide recommendations as to what additional monitoring bores are required (including replacement bores) to support ongoing groundwater assessment and monitoring of the site.
- PRCP22** An up to date closure groundwater and water balance model (calibrated once data becomes available) must be maintained with predictions rerun at least every five years, from the date of approval of the PRCP and within a year of any surrender application.
- PRCP23** The monitoring bores listed in **Appendix IV, Table 4: Groundwater Monitoring Bores** must be installed within 5 years following approval of the PRCP.
- PRCP24** By 10 December 2050, the end of mining groundwater level for each of the monitoring bores listed in **Appendix IV, Table 4: Groundwater Monitoring Bores** must be submitted to the administering authority.
- PRCP25** Groundwater levels for monitoring bores specified in **Appendix IV, Table 4: Groundwater Monitoring Bores** must be monitored for a minimum of 10 consecutive years starting at compliance with condition PRCP24.

- PRCP26** Groundwater levels must not fall below the end of mining groundwater level as a result of activities authorised by the EA or the 10 year period for monitoring required by condition PRCP24 must restart.
- PRCP27** Prior to commencing land disturbance to the Crinum Creek Diversion, the holder must submit to the administering authority an AQP prepared and peer reviewed Functional Diversion Design Report, compliant with the latest versions of the Guideline: Works that interfere with water in a watercourse for a resource activity—watercourse diversions authorised under the *Water Act 2000* (Watercourse Diversion Guideline) and the PRCP guideline (ESR/2019/4964).
- PRCP28** The Functional Diversion Design Report must align with the PMLU identified in the PRCP schedule and demonstrate that the diversion alignment and final landform design will achieve a stable condition.
- PRCP29** Within 18 months, the EA holder must submit to the administering authority, a flood susceptibility and risk assessment prepared and certified by an AQP for Ramp 4 which considers the flood risks during at least the 0.1% AEP and PMF flood events. The assessment must confirm that any flooding of Ramp 4 will not result in:
- a. High or irreversible impacts to the final rehabilitated landform or the receiving environment under extreme events; and
 - b. Impacts on the final rehabilitated landform or residual voids under extreme events (up to and including PMF) that are significantly different to impacts to the surrounding environment exposed to the flood.
- PRCP30** Within six (6) months of the approval of the PRCP schedule, the holder must provide to the administering authority an updated subsidence ponding assessment that:
- a. meets the requirements of section 3.6.4 for subsidence in the PRCP guideline, including:
 - i. A description of the mitigation measures employed to reduce the extent of subsidence ponding and cracking and associated impacts (e.g. vegetation dieback);
 - ii. How these measures will be reflected in the milestone criteria;
 - b. Includes the vegetation/habitat impacts caused from subsidence ponding;
 - c. Includes evidence that water quality in the subsidence ponds will support a stock watering for grazing PMLU;
 - d. A figure of existing and proposed residual ponding in the final landform (after mitigation measures are employed);
 - e. The locations where water will be retained due to subsidence and incision and erosion to creeks is observed or predicted; and
 - f. Rehabilitation methodology for the ponding areas, creek incision and erosion.

END OF CONDITIONS

Definitions

Appropriately qualified person (AQP)	means a person who has professional qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods or literature.
Activity (EP Regulation)	includes that part, if any, of an activity relating to the following— (a) preparing a place for the activity before carrying out the activity; (b) rehabilitating a place after it has been used for carrying out the activity.
BioCondition	refers to the <i>BioCondition Assessment Manual</i> (Eyre, T.J., Kelly, A.L, Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2015)) and <i>BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2</i> (Queensland Herbarium, Department of Science, Information Technology, Innovation and Arts, Brisbane) or later versions thereof.
Contaminants	can be a gas, liquid or solid; or an odour; or an organism (whether alive or dead), including a virus; or energy, including noise, heat, radioactivity and electromagnetic radiation; or a combination of contaminants.
Hostile material	means material that will negatively impact water quality and stability or vegetation growth.
Flood stress	is the pressure on structures from rapid water rise, erosion, and saturation during extreme floods, risking instability.
Growth media	is defined as all soil and soil-like material that will support the final vegetation cover. This includes the topsoil and subsoil where these materials are applied independently. Where the topsoil is incorporated into the underlying subsoil/spoil, topsoil refers to the depth of incorporation and the remaining depth is regarded as subsoil. The total depth of growth media is nominally considered to be the effective plant root zone
Gully	A gully is a channel excavated by water; more than 0.3 m deep.
Independent AQP	is an AQP who is a third party, being independent of the PRCP schedule holder, and has not previously provided advice on the matter the subject of the review.
Independently peer reviewed	means a peer reviewer who is a third-party to the PRCP schedule holder and the AQP whose report is being reviewed and substantiated. The peer reviewer shall also be an AQP and documentation provided must contain sufficient detail to allow for independent technical review and substantiation and provide and justify site-specific landform performance (SMART) criteria.
Potentially acid forming (PAF)	means material with either a Net Acid Producing Potential of greater than 5 kg of H ₂ SO ₄ /tonne or a Net Acid Generation oxidation pH of less than 4.5 (pH unit).
Registered Professional Engineer of Queensland (RPEQ)	means a person who is an RPEQ under the provisions of the <i>Professional Engineers Act 2002</i> and has demonstrated competency and relevant experience for the nominated subject matter.

Rehabilitation activity	means any activity that the holder is required to carry out in relation to this PRCP schedule.
Relevant material	includes: i. Final landform design report; ii. Durability assessment/ report; iii. "As Constructed" report; iv. All monitoring data; v. Assessment of monitoring data; vi. All maintenance records; and vii. Modelling and technical assessments.
Relevant structure	To be defined during the assessment and listed here. Typically includes TSF and higher risk structures, including WRDs.
Stable	in relation to land, means landform dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of environmental context, geotechnical stability, settlement and consolidation allowances, bearing capacity (trafficability), erosion resistance and geochemical stability with respect to seepage, leachate and related contaminant generation.
Stabilised	means one or both of the following conditions apply: no evidence of sediment movement; sides and/or floors of erosion form are revegetated (Australian Soil and Land Survey Field Handbook Third Edition).
Stable condition	see section 111A of the <i>Environmental Protection Act 1994</i> .
Suitably qualified and experienced person (SQP)	for performing a regulatory function under chapter 7, part 8 (Contaminated Land) of the EP Act or another function prescribed under a regulation, means a person who— (a) has qualifications and experience relevant to performing the function; and (b) if a regulation prescribes an organisation for this paragraph—is a member of the organisation.
Vegetative groundcover	Means plants, plant litter, tree leaf litter, twigs and woody debris capable of protecting the soil surface from erosion

Section B - Final site design and reference maps

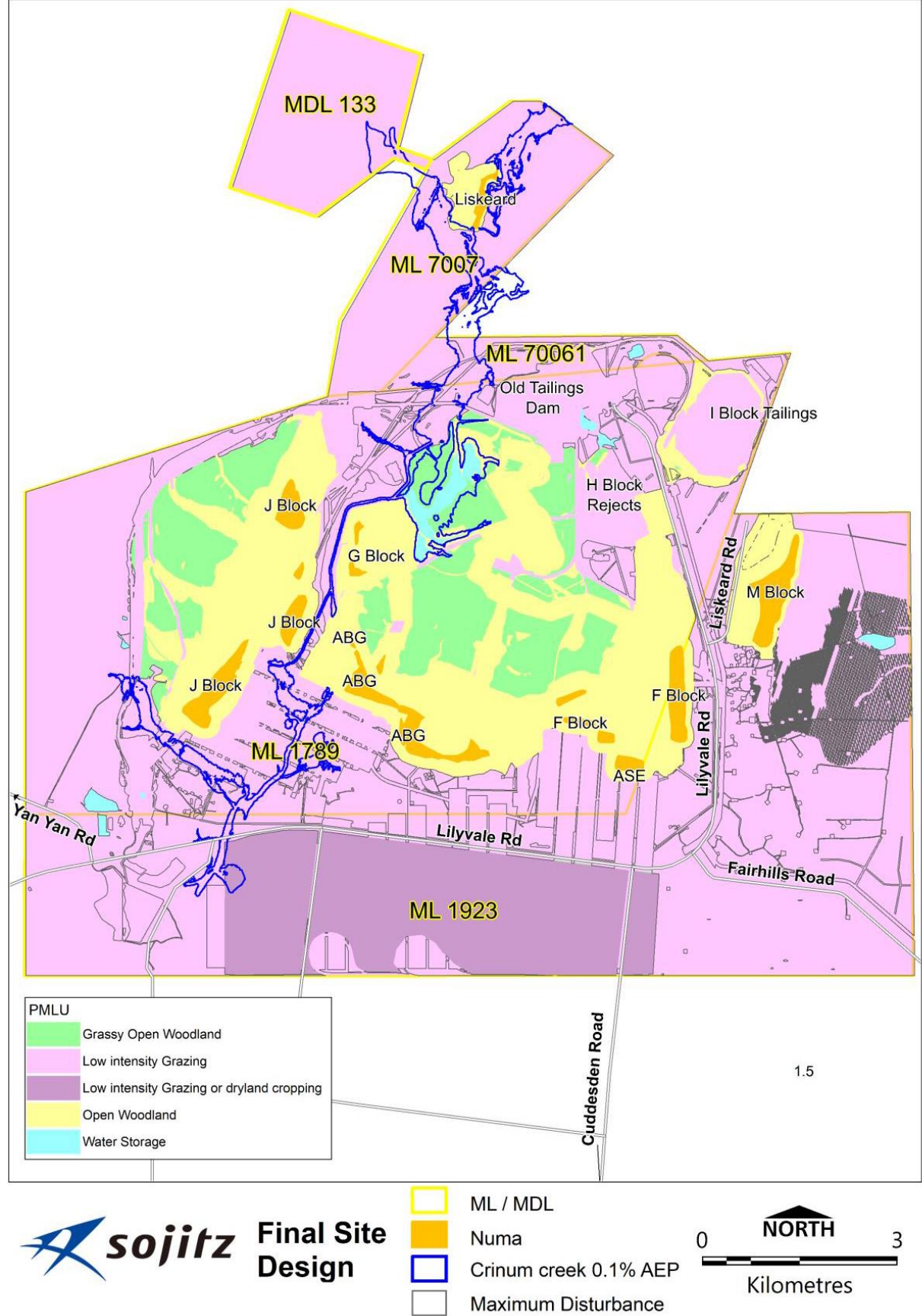


Figure 1: Final Site Design

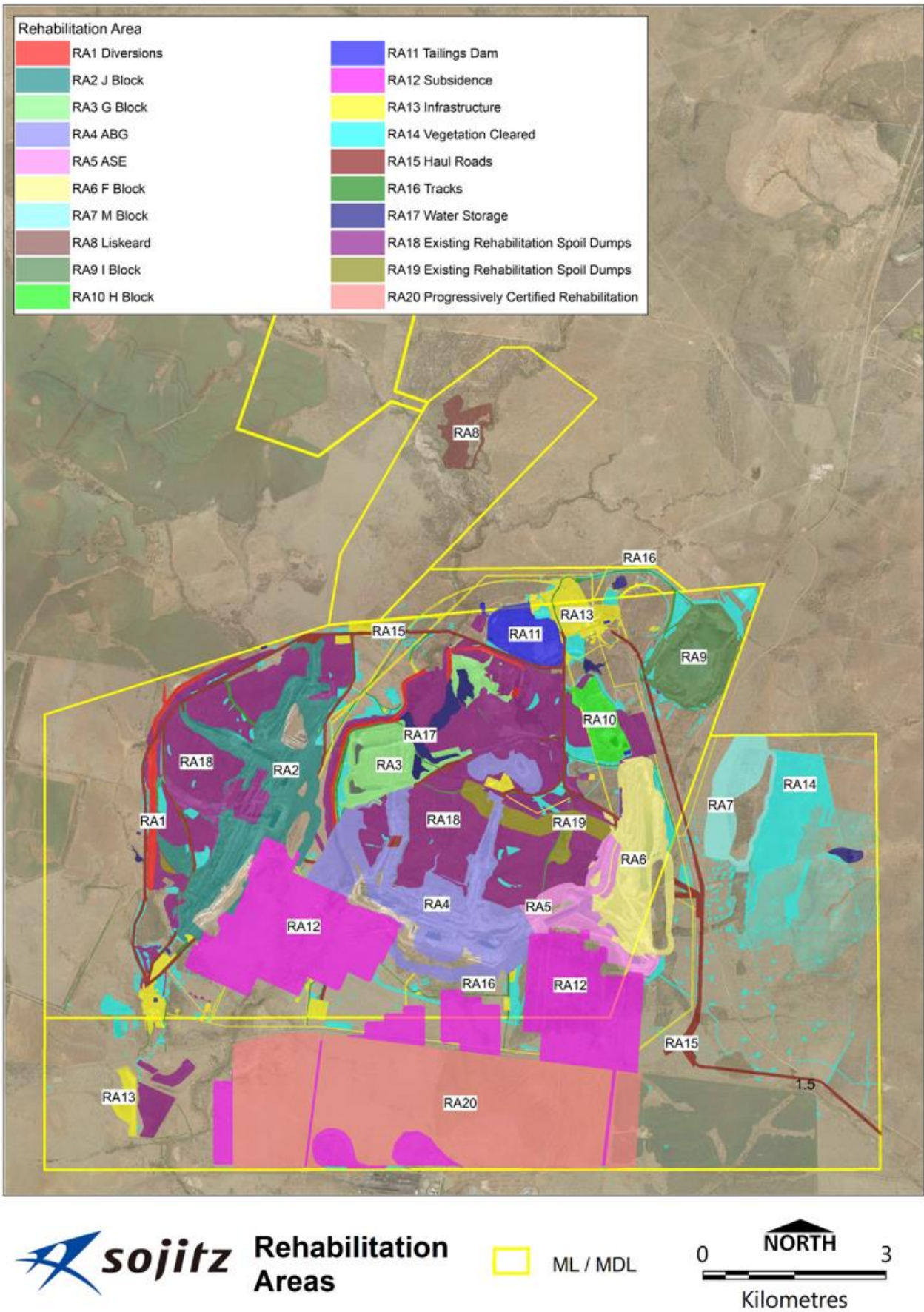
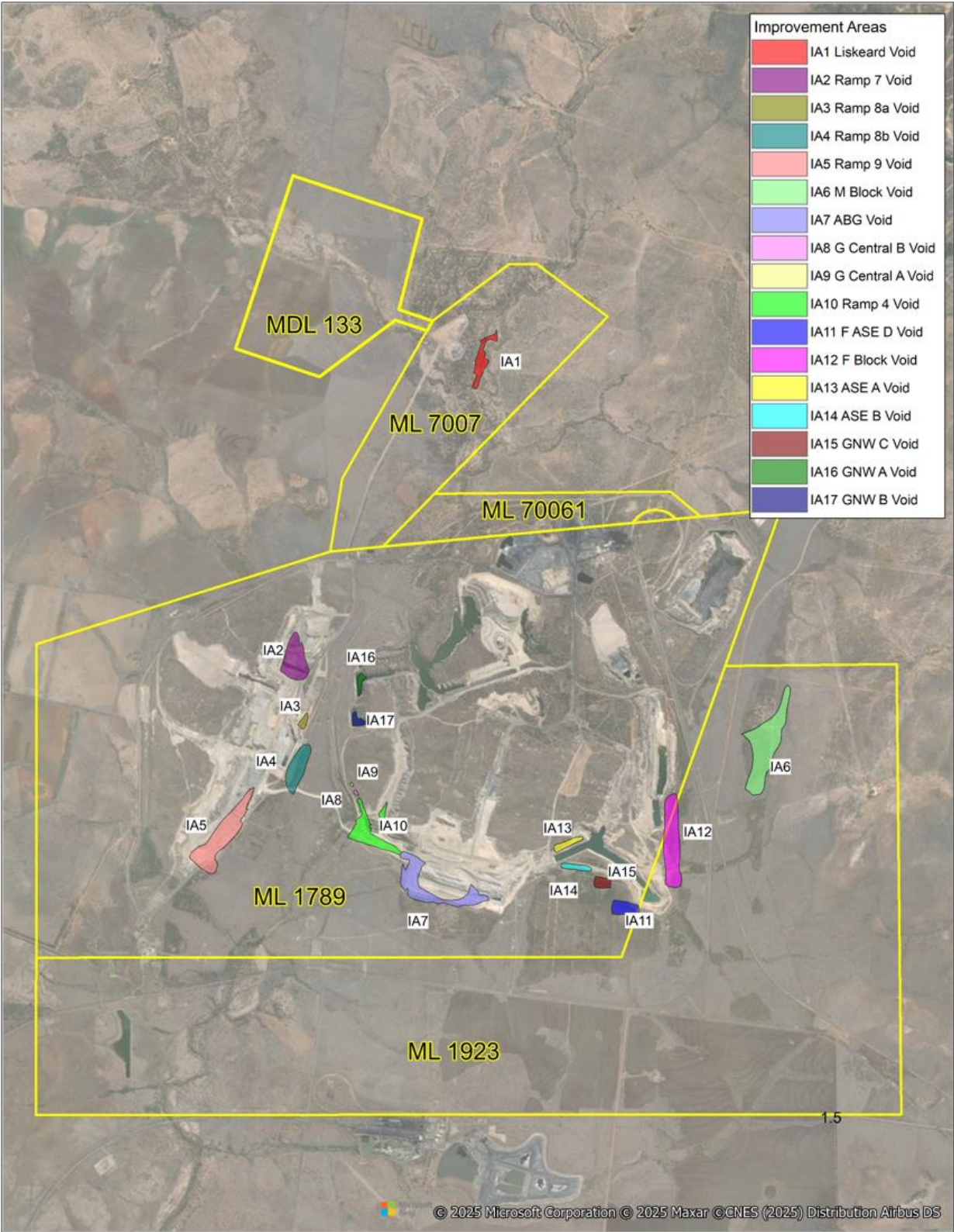


Figure 2: Rehabilitation Areas



ML / MDL



Figure 3: Improvement Areas

Section C – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)										
Rehabilitation area				RA1 – Diversions						
Relevant activities				Diversions						
Total rehabilitation area size (ha)				75.5						
Commencement of first milestone: RM1				14/03/2035						
PMLU				Open Woodlands						
Date area is available	14/03/2035									
Cumulative area available (ha)	75.5	75.5	75.5							
Milestone completed by	10/12/2035	10/12/2040	10/20/2050							
Milestone Reference	Cumulative area achieved (ha)									
RM1	75.5									
RM5	75.5									
RM6	75.5									
RM7		75.5								
RM8			75.5							

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)										
Rehabilitation area	RA2 - J Block									
Relevant activities	Infrastructure area, spoil dump, low wall, high wall									
Total rehabilitation area size (ha)	424.8									
Commencement of first milestone: RM1	1/01/2035									
PMLU	Open Woodlands									
Date area is available	1/01/2035	1/01/2035	10/02/2050	22/04/2050						
Cumulative area available (ha)	2.0	424.8	424.8	424.8	424.8	424.8	424.8			
Milestone completed by	10/12/2035	10/12/2053	10/12/2053	10/12/2053	10/12/2054	10/12/2059	10/12/2069			
Milestone Reference	Cumulative area achieved (ha)									
RM1	2.0									
RM2	2.0									
RM3		424.8								
RM4			424.8							
RM5				424.8						
RM6					424.8					
RM7						424.8				
RM8							424.8			

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)										
Rehabilitation area				RA3 - G Block						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				167.4						
Commencement of first milestone: RM3				12/01/2035						
PMLU				Open Woodlands						
Date area is available	12/01/2035									
Cumulative area available (ha)	167.4	167.4	167.4	167.4	167.4					
Milestone completed by	10/12/2050	10/12/2052	10/12/2053	10/12/2058	10/12/2068					
Milestone Reference	Cumulative area achieved (ha)									
RM3	167.4									
RM4		167.4								
RM5		167.4								
RM6			167.4							
RM7				167.4						
RM8					167.4					

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)										
Rehabilitation area				RA4 - ABG Pit						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				510.6						
Commencement of first milestone: RM3				19/05/2035						
PMLU				Open Woodlands						
Date area is available	19/05/2035	10/12/2037	10/12/2040							
Cumulative area available (ha)	510.6	510.6	510.6	510.6	510.6	510.6				
Milestone completed by	10/12/2037	10/12/2040	10/12/2041	10/12/2042	10/12/2047	10/12/2057				
Milestone Reference	Cumulative area achieved (ha)									
RM3	510.6									
RM4		510.6								
RM5			510.6							
RM6				510.6						
RM7					510.6					
RM8						510.6				

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)										
Rehabilitation area				RA5 - ASE Pit						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				138.0						
Commencement of first milestone: RM3				28/02/2038						
PMLU				Open Woodlands						
Date area is available	28/02/2038									
Cumulative area available (ha)	138.0	138.0	138.0	138.0	138.0					
Milestone completed by	10/12/2039	10/12/2041	10/12/2042	10/12/2047	10/12/2057					
Milestone Reference	Cumulative area achieved (ha)									
RM3	138.0									
RM4		138.0								
RM5		138.0								
RM6			138.0							
RM7				138.0						
RM8					138.0					

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)										
Rehabilitation area				RA6 - F Block						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				250.6						
Commencement of first milestone: RM3				3/07/2037						
PMLU				Open Woodlands						
Date area is available	3/07/2037									
Cumulative area available (ha)	250.6	250.6	250.6	250.6	250.6	250.6				
Milestone completed by	10/12/2050	10/12/2054	10/12/2056	10/12/2057	10/12/2062	10/12/2072				
Milestone Reference	Cumulative area achieved (ha)									
RM3	250.6									
RM4		250.6								
RM5			250.6							
RM6				250.6						
RM7					250.6					
RM8						250.6				

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)										
Rehabilitation area				RA7 - M Block						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				132.4						
Commencement of first milestone: RM3				21/09/2044						
PMLU				Open Woodlands						
Date area is available	21/09/2044									
Cumulative area available (ha)	132.4	132.4	132.4	132.4						
Milestone completed by	10/12/2048	10/12/2049	10/12/2054	10/12/2064						
Milestone Reference	Cumulative area achieved (ha)									
RM3	132.4									
RM4	132.4									
RM5		132.4								
RM6		132.4								
RM7			132.4							
RM8				132.4						

(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)										
Rehabilitation area				RA8 - Liskeard Pit						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				60.5						
Commencement of first milestone: RM3				28/12/2039						
PMLU				Open Woodlands						
Date area is available	28/12/2039									
Cumulative area available (ha)	60.5	60.5	60.5	60.5	60.5					
Milestone completed by	10/12/2040	10/12/2041	10/12/2042	10/12/2047	10/12/2057					
Milestone Reference	Cumulative area achieved (ha)									
RM3	60.5									
RM4	60.5									
RM5		60.5								
RM6			60.5							
RM7				60.5						
RM8					60.5					

(RA9) Rehabilitation area 9

Post-mining land uses (PMLU)										
Rehabilitation area				RA9 - I Block						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				181.3						
Commencement of first milestone: RM3				7/01/2040						
PMLU				Open Woodlands						
Date area is available	7/01/2040									
Cumulative area available (ha)	181.3	181.3	181.3	181.3	181.3					
Milestone completed by	10/12/2049	10/12/2050	10/12/2054	10/12/2059	10/12/2069					
Milestone Reference	Cumulative area achieved (ha)									
RM3	181.3									
RM4		181.3								
RM5			181.3							
RM6			181.3							
RM7				181.3						
RM8					181.3					

(RA10) Rehabilitation area 10

Post-mining land uses (PMLU)										
Rehabilitation area				RA10 - H Block						
Relevant activities				Spoil dump, low wall, high wall						
Total rehabilitation area size (ha)				69.1						
Commencement of first milestone: RM3				13/01/2048						
PMLU				Low-intensity Grazing						
Date area is available	13/01/2048									
Cumulative area available (ha)	69.1	69.1	69.1	69.1						
Milestone completed by	10/12/2050	10/12/2052	10/12/2057	10/12/2062						
Milestone Reference	Cumulative area achieved (ha)									
RM3	69.1									
RM5		69.1								
RM6		69.1								
RM7			69.1							
RM8				69.1						

(RA11) Rehabilitation area 11

Post-mining land uses (PMLU)										
Rehabilitation area				RA11 - Old Tailings Dam						
Relevant activities				Tailings disposal facility						
Total rehabilitation area size (ha)				92.8						
Commencement of first milestone: RM3				3/02/2050						
PMLU				Low-intensity Grazing						
Date area is available	3/02/2050									
Cumulative area available (ha)	92.8	92.8	92.8	92.8						
Milestone completed by	10/12/2050	10/12/2052	10/12/2057	10/12/2062						
Milestone Reference	Cumulative area achieved (ha)									
RM3	92.8									
RM5		92.8								
RM6		92.8								
RM7			92.8							
RM8				92.8						

(RA12) Rehabilitation area 12

Post-mining land uses (PMLU)										
Rehabilitation area			RA12 - Subsidence							
Relevant activities			Longwall subsidence							
Total rehabilitation area size (ha)			1112.5							
Commencement of first milestone: RM3			1/01/2035							
PMLU			Low-intensity Grazing							
Date area is available	Pre-2025	1/01/2035								
Cumulative area available (ha)	1.3	1112.5	1112.5	1112.5						
Milestone completed by	Prior to the PRCP transition	10/12/2035	10/12/2040	10/12/2045						
Milestone Reference										
RM3	1.3	1112.5								
RM6		1112.5								
RM7			1112.5							
RM8				1112.5						

(RA13) Rehabilitation area 13

Post-mining land uses (PMLU)										
Rehabilitation area				RA13 - Infrastructure						
Relevant activities				Industrial areas						
Total rehabilitation area size (ha)				274.9						
Commencement of first milestone: RM1				1/01/2040						
PMLU				Low-intensity Grazing						
Date area is available	1/01/2040	21/12/2042								
Cumulative area available (ha)	274.9	274.9	274.9	274.9	274.9	274.9				
Milestone completed by	10/12/2046	10/12/2046	10/12/2046	10/12/2047	10/12/2052	10/12/2057				
Milestone Reference	Cumulative area achieved (ha)									
RM1	274.9									
RM2	274.9									
RM3		274.9								
RM5			274.9							
RM6				274.9						
RM7					274.9					
RM8						274.9				

(RA14) Rehabilitation area 14

Post-mining land uses (PMLU)										
Rehabilitation area				RA14 - Vegetation Cleared						
Relevant activities				Vegetation cleared						
Total rehabilitation area size (ha)				669.7						
Commencement of first milestone: RM6				18/03/2035						
PMLU				Low-intensity Grazing						
Date area is available	18/03/2035									
Cumulative area available (ha)	669.7	669.7	669.7							
Milestone completed by	10/12/2035	10/12/2040	10/12/2045							
Milestone Reference	Cumulative area achieved (ha)									
RM6	669.7									
RM7		669.7								
RM8			669.7							

(RA15) Rehabilitation area 15

Post-mining land uses (PMLU)										
Rehabilitation area				RA15 - Haul Roads						
Relevant activities				Haul roads						
Total rehabilitation area size (ha)				217.1						
Commencement of first milestone: RM1				2/04/2057						
PMLU				Low-intensity grazing						
Date area is available	2/04/2057									
Cumulative area available (ha)	217.1	217.1	217.1	217.1						
Milestone completed by	10/12/2057	10/12/2058	10/12/2063	10/12/2068						
Milestone Reference	Cumulative area achieved (ha)									
RM1	217.1									
RM2	217.1									
RM3	217.1									
RM5		217.1								
RM6		217.1								
RM7			217.1							
RM8				217.1						

(RA16) Rehabilitation area 16

Post-mining land uses (PMLU)										
Rehabilitation area				RA16 - Tracks						
Relevant activities				Access tracks						
Total rehabilitation area size (ha)				76.6						
Commencement of first milestone: RM5				14/01/2035						
PMLU				Low-intensity grazing						
Date area is available	14/01/2035									
Cumulative area available (ha)	76.6	76.6	76.6							
Milestone completed by	10/12/2035	10/12/2040	10/12/2045							
Milestone Reference	Cumulative area achieved (ha)									
RM5	76.6									
RM6	76.6									
RM7		76.6								
RM8			76.6							

(RA17) Rehabilitation area 17

Post-mining land uses (PMLU)										
Rehabilitation area		RA17 - Water Storage								
Relevant activities		Water storages, dams								
Total rehabilitation area size (ha)		75.6								
Commencement of first milestone: RM9		1/01/2041								
PMLU		Water Storage								
Date area is available	1/01/2041									
Cumulative area available (ha)	75.6									
Milestone completed by	10/12/2041									
Milestone Reference	Cumulative area achieved (ha)									
RM9	75.6									

(RA18) Rehabilitation area 18

Post-mining land uses (PMLU)										
Rehabilitation area				RA18 - Existing Rehabilitation						
Relevant activities				Spoil dumps						
Total rehabilitation area size (ha)				1348.3						
Commencement of first milestone: RM7				30/06/2035						
PMLU				Grassy Open Woodlands						
Date area is available	30/06/2035									
Cumulative area available (ha)	1348.3	1348.3								
Milestone completed by	10/12/2040	10/12/2045								
Milestone Reference	Cumulative area achieved (ha)									
RM7	1348.4									
RM8		1348.3								

(RA19) Rehabilitation area 19

Post-mining land uses (PMLU)										
Rehabilitation area				RA19 - Existing Rehabilitation						
Relevant activities				Spoil dumps						
Total rehabilitation area size (ha)				89.1						
Commencement of first milestone: RM7				3/06/2040						
PMLU				Open Woodlands						
Date area is available	3/06/2040									
Cumulative area available (ha)	89.1	89.1								
Milestone completed by	10/12/2045	10/12/2050								
Milestone Reference	Cumulative area achieved (ha)									
RM7	89.1									
RM8		89.1								

(RA20) Rehabilitation area 20

Post-mining land uses (PMLU)										
Rehabilitation area	RA20 - Progressively Certified Rehabilitation									
Relevant activities	Longwall subsidence									
Total rehabilitation area size (ha)	1177.0									
Commencement of first milestone: RM8	Rehabilitation has been progressively certified by DES in 2018									
PMLU	Low-intensity Grazing and Dryland Cropping									
Date area is available										
Cumulative area available (ha)										
Milestone completed by										
Milestone Reference	Cumulative area achieved (ha)									

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 With the exception of any infrastructure to remain as agreed by the landholder as evidenced by a signed landholder agreement, and with consent from the administering authority where the landholder or landowner is the EA holder, the following are complete: a) All services disconnected and removed. b) All buildings and associated infrastructure dismantled and removed offsite. c) All hardstand, concrete areas and roads (bitumen, blue metal, aggregate etc.) removed. d) All fencing that is not part of PMLU requirements removed. e) All pipelines drained and removed. f) All waste not authorised to be disposed of on-site under Environmental Authority EPML00945013 removed. g) All surface water drainage infrastructure that does have an associated watercourse or riparian ecosystem PMLU or forms part of a Non-use management area (NUMA) is removed. h) All drillholes, bores, sediment ponds and sumps are decommissioned except the bores required to comply with monitoring requirements. i) All machinery and equipment, not required for rehabilitation works removed from site. j) All dams dewatered and desilted. k) Watercourse crossings and culverts removed. 1.2 Below-ground infrastructure and services deeper than 0.5m in relation to the final landform surface may be retained provided: a) All pipelines have been drained and capped or filled with inert material; b) All below-ground infrastructure to be retained is mapped; c) The intended PMLU is not compromised; and d) There is no ongoing risk of environmental harm. 1.3 An independent AQP has certified the achievement of RM1.1 and RM1.2.
RM2	Identification, remediation and removal of contaminated land	2.1 Preliminary Site Assessment including review of previous activities to assess whether contamination has the potential to exist in a mine domain and whether further investigation is needed to be completed by a Suitably Qualified Person (SQP). 2.2 Depending on the results of RM2.1, the following actions stipulated in RM2.2 a) to c) to be completed for identified contaminated areas: a) Detailed site investigation report, as required under the <i>Environmental Protection Act 1994</i> (Qld) is completed;

		b) Contaminated and hazardous material is either remediated by on-site treatment or removed/ transported to an approved landfill for disposal and waste tracking information recorded and submitted; c) Validation testing confirms that contaminated and hazardous materials have been removed or remediated; and d) Land is removed from the Contaminated Land Register, if feasible.
RM3	Landform development and shaping	All areas 3.1 All major earthworks (including reshaping, pushing/trimming) are completed in accordance with the design specification provided by an Appropriately Qualified Person (AQP). 3.2 Constructed landform achieves design criteria for geotechnical stability, with a Factor of Safety (FOS) ≥ 1.5. 3.3 Reinstatement of natural watercourse bed, banks and drainage lines to a condition with similar characteristics to pre-mining conditions. 3.4 All landforms are shaped to be water shedding. 3.5 Hostile material is appropriately placed and located within the final landform, consistent with the relevant designs as certified by an AQP. 3.6 Erosion and sediment control systems are installed as per the construction design and verified by an AQP. 3.7 Final trim of all areas that require an even surface is completed prior to topsoil application. 3.8 The surface and groundwater monitoring network is installed and underway at locations and depths in accordance with Appendix V – Groundwater and Surface Water Monitoring Locations. RA1 (Diversions) 3.9 Landform design report must demonstrate that the landform will support the achievement of a stable condition. 3.10 Certification provided by an AQP confirms that the permanent creek diversion: a) Landform achieves geotechnical stability with a Factor of Safety ≥ 1.5; b) Is constructed to convey flow during a 0.1% AEP flood event; and c) Will allow natural non-erosive drainage on site. 3.11 Diversions constructed in accordance with the engineering designs developed by an AQP. RA2 to RA11 (Spoil dumps, high walls, low walls and Old Tailings Dam): 3.12 Landform batters profiled to a maximum slope gradient of $\leq 25\%$. 3.13 For all areas within the spoil dump that contain hostile materials as identified in RM3.5, a minimum 3m thick of benign spoil cover materials is applied to the shaped surface (applicable to RA2, RA6, RA9, RA10 and RA11).

		3.14 For all areas within the spoil dump that contain hostile materials are identified in RM3.5, a cover material placement to have maximum slope of 3% is applied to the finished surface (applicable to RA2, RA6, RA9, RA10 and RA11). 3.15 Benches installed where required to support application of rock mulch. 3.16 Shaping above long-term equilibrium high water level, with any fill below this level at angle of repose. RA12 (Subsidence) 3.17 Backfilling and sealing of declines/portal area and ventilation shafts with waste rock material in accordance with engineering designs. 3.18 An AQP has prepared an As-Constructed Report that details the works undertaken, and certifies that: a) Construction and backfilling of underground openings meets the design intent; and b) Underground opening certified as safe. 3.19 Contour banks removed/regraded from land affected by subsidence. 3.20 Survey of subsidence cracking completed to locate individual cracks (if present) and determine the method of rehabilitation required. 3.21 Subsidence cracks greater than 20 mm in width within named watercourses affected by mining have been infilled with a suitable material characterised by an Emmerson aggregate test (EAT) class: >3 as demonstrated by material testing. 3.22 Subsidence areas deep ripped at least 300mm in areas where tension cracking occurs. RA13, RA15 to RA16 (Infrastructure, Haul Roads and Tracks): 3.23 Landform profiled to a maximum slope gradient of ≤5%.
RM4	Rock mulch application	4.1 Competent basalt rock mulch is applied at a minimum of 0.5m depth to all areas with a slope gradient >5%. 4.2 Rock mulch not required for shaped areas that are ≤5% slope.
RM5	Topsoil application and deep ripping	5.1 Topsoil is applied at the following depths: a) ≥0.1m to all rock mulched areas; b) ≥0.2m to all areas with slope gradient of <5%. 5.2 Areas deep ripped on the contour at least 300mm. 5.3 Assessment of growth media characteristics and the development of an amelioration and physical treatment plan is completed by an AQP. 5.4 Ameliorant and physical treatments such as fertiliser, lime, gypsum and/or organic matter are applied as identified in RM5.3. 5.5 Following amelioration as per criteria RM5.3 and RM5.4, representative soil testing of growth media confirms: a) Emerson aggregate class ≥4; b) Soil pH between 6-9; c) Electrical conductivity (saturated extract) ≤2,000 µS/cm; and

		d) Exchangeable sodium percent (ESP%) <6%.
RM6	Seeding	All areas 6.1 Stock exclusion fencing has been established to prevent stock from grazing newly seeded areas. 6.2 Appropriate erosion controls are installed/placed and functioning as designed (as per AQP certified report) to ensure plant establishment is not significantly impacted from erosive events. 6.3 An AQP has certified the achievement of RM 6.1-6.8. Open Woodlands (RA1 to RA9) 6.4 Seeding is completed at a rate of 15kg/ha in accordance with the following seed mixes specified in Appendix II - Seed mix for open woodland: a) RA1 – Seed mix targeting regional ecosystem RE11.3.3; and b) RA2 – Seed mix targeting regional ecosystem RE11.8.5. 6.5 Additional native species consistent with the technical descriptions as per RM6.4 as recommended by an AQP can be incorporated into the seed mix specified in Appendix II-Seed mix for open woodland to meet a seeding rate of 15kg/ha. 6.6 Non-native seed must not be used for the revegetation (except when sterile cover crops are used). Low intensity Grazing (RA10 to RA16) 6.7 Seeding is completed in accordance with Appendix II -Seed mix for low intensity grazing at a seeding rate of 20kg/ha. 6.8 At least four species of 3P native pasture species and two native legumes species from Appendix II –Seed mix for low intensity grazing PMLU are applied per application area.
RM7	Achievement of surface requirements	All areas 7.1 No acid or saline seepage areas. 7.2 No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix I Table 1 – Erosion classification framework. 7.3 Any erosion present will not compromise the achievement of a PMLU to a stable condition. 7.4 Erosion requiring intervention has been remediated and does not impact achieving the PMLU. 7.5 Spoil and waste materials classified as 'extremely hostile' or 'hostile/potentially toxic' have been buried or capped with ≥3m of competent benign material and designed to shed water off the capped area (applicable to RA2, RA6, RA9, RA10 and RA11). 7.6 Species used in revegetation remain present and showing evidence of natural recruitment. Evidence of flora recruitment from rehabilitation monitoring data. 7.7 Areas of contamination have been remediated and monitored. 7.8 Invasive declared weed presence is a maximum of 5% of total vegetative groundcover confirmed by an AQP in rehabilitation monitoring. Invasive weeds must be managed as per the general biosecurity obligation and recommendations to be provided in monitoring reports.

		7.9 Corrective action arising from the routine inspections program have been undertaken to include weed control, erosion repair, livestock management. 7.10 Surface water runoff is non-polluting to receiving waters and complies with Appendix III Table 3 – Surface water quality limits. 7.11 The growth media (topsoil and subsoil) physical, chemical and biological properties does not limit vegetation cover performance or restrict the potential effective depth of rooting. 7.12 No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with erosion and sediment control and engineered drainage structures. 7.13 Temporary erosion and sediment control structures have been removed. 7.14 An AQP certifies achievement of RM 7.1-7.26. Grassy open woodland (RA18) 7.15 Groundcover of: a) >12% slopes must achieve overall ground cover $\geq 70\%$, of which $\geq 50\%$ is vegetative cover; b) $\leq 12\%$ slopes must achieve overall ground cover $\geq 50\%$, of which $\geq 50\%$ in vegetative cover; and c) Overall groundcover consists of rock, dead and alive plant matter. 7.16 The total species count must include a minimum species richness (per ha (averaged)) of: a) ≥ 3 3P grass species; b) ≥ 1 native tree species; and c) tree canopy cover of $\geq 9\%$. Open Woodland (RA1 to RA9, RA19) 7.17 Groundcover of: a) >12% slopes must achieve overall ground cover $\geq 70\%$, of which $\geq 50\%$ is vegetative cover; b) $\leq 12\%$ slopes must achieve overall ground cover $\geq 50\%$, of which $\geq 50\%$ is vegetative cover; and c) Overall ground cover consists of rock, dead and alive plant matter. 7.18 The total species count must include a minimum native species richness (per ha (averaged)) of: a) ≥ 5 grass species; b) ≥ 3 tree species; c) ≥ 5 shrub species; and d) tree canopy cover of $\geq 16\%$. Low-intensity Grazing (RA10-RA16) 7.19 Total vegetative groundcover $\geq 50\%$ vegetative ground cover comprised of ≥ 3 palatable perennial pasture species 7.20 Vegetation comprises (per hectare (averaged)): a) ≥ 3 species of 3P native pasture species; and
--	--	---

		b) ≥ 2 native legumes. 7.21 Land suitability assessment by an AQP certifies that land has achieved a post-mine land suitability class of 3 or better as defined in the 'Guidelines for Agricultural Land Evaluation in Queensland' (State Department of Queensland 2013) – subsidence cropping areas only. 7.22 Historical surface subsidence has been rectified and documented. 7.23 No ongoing surface subsidence. Tailings Storage Facilities (RA11) 7.24 Monitoring data has been collected per final landform design report and durability report. 7.25 No gully erosion present ($>300\text{mm}$). 7.26 Monitoring data and technical assessments indicate that the TSF is on a trajectory to achieve a stable condition.
RM8	Achievement of a Post Mining Land Use to a stable condition	All areas 8.1 Hazard and Safety Assessment completed by an AQP assesses hazards to be low risk with no significant increase in risk expected over time and comparable to the surrounding unmined landscape subject to the same land use. 8.2 No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix I Table 1 – Erosion classification framework. 8.3 Any erosion present will not compromise the achievement of a PMLU to a stable condition. 8.4 Rehabilitation is geotechnically stable and meets Factor of Safety (FoS) ≥ 1.5, unless an alternative is justified by an AQP. 8.5 Licenced creek diversions are geotechnically and erosionally stable, with report certified by a Registered Professional Engineer of Queensland (RPEQ) in accordance with <i>Water Act 2000</i> licence conditions 8.6 No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with erosion and sediment control and engineered drainage structures. 8.7 Spoil and waste materials classified as 'extremely hostile' or 'hostile/potentially toxic' have been buried or capped with $\geq 3\text{m}$ of competent benign material and designed to shed water off the capped area (applicable to RA2, RA6, RA9, RA10 and RA11). 8.8 No acid or saline seepage areas. 8.9 Invasive declared weed presence is a maximum of 10% of total vegetative groundcover confirmed by an AQP in annual monitoring. Invasive plan management must be managed as per the general biosecurity obligation and recommendations to be provided in annual reports. 8.10 Surface water runoff complies with Appendix III Table 3 – Surface water quality limits. 8.11 Surface water quality results monitored monthly during flow at, but not limited to, downstream locations specified in Appendix III Table 2 – Surface water monitoring locations, must not exceed the limits specified in Appendix III Table 3 – Surface water quality limits for a minimum of 5 consecutive years. 8.12 If the surface water quality exceeds criteria in RM8.11, the applicable upstream/reference site must be compared to the downstream site result; and quality result measured at a

		downstream site must be equal to or less than the quality result measured at the applicable upstream/reference site. 8.13 Where the surface water quality at the downstream site exceeds the upstream site result in RM8.12, an AQP must complete an assessment of the cause and risk of rehabilitation not achieving a stable condition within the schedule timeframe and: - Where there is a low risk to achieving a stable condition from the mining tenures, then no further action is to be taken; - Where there is a risk greater than low to achieve a stable condition, then an assessment of potential environment harm and any changes or rectification actions to rehabilitation activities must be determined and implemented; - The rectification measures required by RM8.13(b) must be implemented for a minimum of five years before surrender; - If RM8.13(b) is triggered, the five-year period to surrender is reset; and - The assessment/s under RM8.13(b) must be completed and provided to the administering authority within 3 months of receiving the relevant sampling results. 8.14 For a minimum of five consecutive years groundwater quality must be monitored quarterly at, but not limited to, compliance bores/locations specified in Appendix IV Table 4 – Groundwater monitoring bores, for all quality characteristics listed in Appendix IV Table 5 – Groundwater quality limits. 8.15 Groundwater quality results must not exceed the limits in Appendix IV Table 5 – Groundwater quality limits, for 3 consecutive results within a five year period. 8.16 Final landform survey confirms no built structures remain other than those that form part of a landholder agreement. 8.17 An AQP certifies achievement of RM8.1-8.37. Grassy Open Woodlands (RA18) 8.18 Groundcover of: - Overall ground cover $\geq 50\%$ (slopes $\leq 12\%$) or 70% (slopes $> 12\%$), of which 50% is vegetative cover; and - Overall ground cover consists of rock, dead and alive plant matter. 8.19 The total species count must include a minimum species richness (per ha (averaged)) of: ≥ 3 3P grass species; ≥ 1 native tree species; and - tree canopy cover of $\geq 9\%$. Open Woodlands (RA1 to RA9, RA19) 8.20 Slopes $\leq 25\%$ are capped with 0.5 m of competent rock mulch. 8.21 Slopes $\leq 10\%$ are capped with 0.5 m of competent Permian sandstone if spoil not supportable. 8.22 Slopes $\leq 3\%$ for final rehabilitated surface of coal waste disposal area. 8.23 Groundcover of: - Overall ground cover $\geq 50\%$ (slopes $\leq 12\%$) or 70% (slopes $> 12\%$), of which 50% is vegetative cover; and
--	--	---

		b) Overall ground cover consists of rock, dead and alive plant matter. 8.24 The total species count must include a minimum native species richness (per ha (averaged)): a) ≥5 grass species; b) ≥3 tree species; c) ≥5 shrub species; and d) tree canopy cover of ≥16%. <u>Low Intensity Grazing (RA10 – RA16)</u> 8.25 Total vegetative groundcover ≥50% comprised of ≥3 palatable native perennial species. 8.26 Composition of the pasture cover will be predominantly 3P with a minimum of 3 palatable perennial grasses established. 8.27 For subsided areas, rehabilitation meets land suitability class 3 in accordance with the Guidelines for Agricultural Land Evaluation in Queensland (Queensland Government 2015). 8.28 Subsidence within the rehabilitation area does not present a safety hazard in the context of the PMLU. 8.29 The rehabilitation area is safe for human access and use. 8.30 There is no cracking present in the rehabilitation area that will impact the achievement of the PMLU. 8.31 No tunnel erosion present in areas subject to subsidence. 8.32 Bed and banks of subsidence drainage structures are stable. 8.33 No bed and bank erosion within drainage structures or watercourses, as a result of or associated with subsidence or subsidence management. 8.34 No cracking or destabilisation present in bed or banks of drainage structures or watercourses, as a result of subsidence or subsidence management. <u>Dryland Cropping (RA20)</u> 8.35 100% of cultivation area (with > 1% slope) have functional contour banks. 8.36 Rehabilitation meets land suitability class 3 in accordance with the Guidelines for Agricultural Land Evaluation in Queensland (Queensland Government 2015). 8.37 An AQP certifies that land is suitable for dryland cropping activities.
RM9	Achievement of a Stable Post Mining Land Use (Water Storage)	9.1 Use of fencing or bunds to prevent access where required. 9.2 Functioning bywash with adequate flow capacity provided for water storages. 9.3 Infrastructure to be transitioned to a future landholder is deemed fit for purpose (verified by an AQP) and accepted, by signed agreement, with the future landholder. 9.4 An AQP certifies that all infrastructure to be retained onsite is safe, stable and will not cause environmental harm. 9.5 Retained dams are safe for native animals and stock access and have vegetated banks. 9.6 Water storages are geotechnically stable with FoS ≥ 1.5. 9.7 Retained water storages must meet water quality parameters that are below the trigger values for livestock drinking water defined in Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018) for a minimum of 5 years. 9.8 An AQP certifies achievement of RM9.1-RM9.8.

Section D – Non-use management areas

(IA1) Improvement area 1

Non-use management area (NUMA)										
Improvement area				IA1						
Relevant activities				Residual Voids (including ramps and benches forward of the highwall) and the setback area *The setback area refers to the area between the high wall and the closure bund						
Total size (ha)				241.1 (194.4ha of maximum residual void surface area measured at maximum water level + setback area)						
Commencement of first milestone: MM1				1/01/2054						
NUMA				Non-use management area						
Date area is available	1/01/2054	10/12/2054	10/12/2055							
Cumulative area available (ha)	241.1	241.1	241.1							
Milestone completed by	10/12/2054	10/12/2055	10/12/2065							
Milestone Reference	Cumulative area achieved (ha)									
MM1	241.1									
MM2		241.1								
MM3			241.1							

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Achievement of final landform design	1.1 An AQP confirms that the total surface area of residual voids measured at the maximum surface water level does not exceed 194.4ha. 1.2 Highwall landforms must: a) Prevent surface or seepage flow of floodwater into the void; b) Be geotechnically stable when floodwater is against the creek-side batter; c) Not be constructed with dispersive material; and d) Have maximum 25% slopes with rock for scour protection if reshaped and not left standing (weathered highwalls). 1.3 The final design for highwall landform must be completed by an AQP based on the latest flood modelling and materials data prior to construction. 1.4 Final residual voids are not subject to inundation from floodwaters up to and including the 0.1% AEP (with the exception of Liskeard (≤ 5.2ha) and Ramp 4 (≤ 2ha) where the environmental risk has been determined to be inconsequential in a flood event). 1.5 The high-wall, end-wall and low-wall achieve a FoS ≥ 1.5 within the NUMA extents. 1.6 The location of the voids and associated safety bunds does not cause instability or degradation to the land outside the NUMA. 1.7 Residual voids must not overtop up to and including the 0.1% AEP (with the exception of Liskeard (≤ 5.2ha) and Ramp 4 (≤ 2ha) where the environmental risk has been determined to be inconsequential in a flood event). 1.8 An AQP certifies achievement of MM1.1 – MM1.7.
MM2	Achievement of safety requirements	2.1 Competent safety bund or equivalent landform in place to prevent access to the residual void, at the geotechnical set-back distance outside the FoS ≥ 1.5. 2.2 The safety bund is constructed in accordance with engineering requirements and from non-weathered, non-dispersive material. 2.3 Fencing erected, where required to prevent access to the residual void, around the perimeter of the safety bund. 2.4 Fencing or bunding maintained as required to restrict public access if required due to safety concerns. 2.5 Safety signage (design in accordance with Australian standard) is erected at 100m intervals along the fence. 2.6 An AQP certifies achievement of MM2.1 – MM2.5.
MM3	Achievement of sufficient improvement	3.1 The highwall landform has been constructed in accordance with the final design. 3.2 Appropriate safety infrastructure at the geotechnical set-back distance has been installed to prevent access to the NUMA. 3.3 The residual void is safe to humans and livestock. 3.4 A permanent water cover must exist over tailings not capped with spoil. 3.5 The water level and quality in the void do not and will not cause environmental harm to the receiving environment, as demonstrated by groundwater level, quality monitoring and modelling. 3.6 An AQP demonstrates with water quality, water level and modelling data, that the residual voids act as long-term groundwater sinks post-closure, noting voids may be short-term sources to groundwater. 3.7 Voids retain flood immunity, supported by flood modelling re-run at end of life and calibrated against the final landform (with the exception of Liskeard (≤ 5.2ha) and Ramp 4 (≤ 2ha) where the environmental risk has been determined to be inconsequential in a flood event). 3.8 The residual void will not present an unacceptable risk of environmental harm. 3.9 Erosion of the landform within the NUMA area will not negatively impact on the stability of any adjacent rehabilitation areas, or their ability to sustain their PMLU. 3.10 Monitoring and maintenance of exclusion fences and bunds to be carried out to ensure they remain effective. 3.11 An AQP certifies achievement of MM3.1 – MM3.10.

END OF PRCP SCHEDULE

Section E – Appendices

Appendix I - Erosion classification framework

Table 1: Erosion classification framework.

Erosion classification	Minor	Moderate	Severe
Sheet erosion	Shallow soil deposits downslope	Partial exposure of roots; moderate soil deposits downslope	Loss of surface horizon; subsoil exposure; root exposure; substantial soil deposits downslope
Rill/gully erosion	<15 rills/transect* and <0.3m deep	15-30 rills/transect* and <0.3m deep	>30 rills/transect* and/or any >0.3m deep
Tunnel erosion	Absent	Present	Present
Mass movement	Absent	Present	Present

Source: NCST (2009) Australian Soil and Land Survey Field Handbook, 3rd edition. The National Committee on Soil and Terrain. CSIRO Publishing, Collingwood, Australia.

*Transect 50 m across the contour (Source: Tongway, D. J. and Hindley, N. L. 2005. Landscape Function Analysis: Procedures for Monitoring and Assessing Landscapes. CSIRO Publishing, Canberra, Australia.)

Appendix II – Seed Mix

Seed mix for open woodland: RA1 (RE11.3.3)

Trees

Dominant: Eucalyptus coolabah.

Frequent: Eucalyptus coolabah, Acacia harpophylla, Eucalyptus tereticornis, Eucalyptus populnea, Casuarina cristata, Corymbia tessellaris, Eucalyptus camaldulensis, Acacia cambagei, Amyema congener, Amyema quandang, Eucalyptus melanophloia, Owenia acidula, Terminalia oblongata subsp. Oblongata.

Shrubs

Dominant: Acacia salicina, Eucalyptus coolabah.

Frequent: Acacia salicina, Eucalyptus coolabah, Lysiphyllum carronii, Acacia oswaldii, Atalaya hemiglauca, Cassia brewsteri, Geijera parviflora, Senna barclayana, Casuarina cristata, Eremophila mitchellii, Lysiphyllum hookeri, Melaleuca bracteata, Myoporum acuminatum, Psydrax oleifolia, Santalum lanceolatum, Terminalia oblongata subsp. Oblongata, Acacia excelsa, Acacia harpophylla, Acacia pendula, Acacia stenophylla, Alectryon diversifolius, Alectryon oleifolius, Alectryon oleifolius subsp. Elongatus, Avicennia marina, Bursaria spinosa subsp. Spinosa, Capparis lasiantha, Citrus glauca, Clematicissus opaca, Denhamia indet., Diospyros humilis, Dodonaea lanceolata, Duma florulenta, Ehretia membranifolia, Eremophila bignoniiflora, Eremophila deserti, Eucalyptus tereticornis, Excoecaria agallocha, Ficus opposita, Grewia latifolia, Notelaea macrocarpa, Pittosporum angustifolium, Psydrax forsteri, Psydrax johnsonii, Sesbania cannabina, Sesbania cannabina var. cannabina, Ventilago viminalis.

Ground

Dominant: Paspalidium caespitosum, Dinebra decipiens, Enteropogon acicularis, Cyperus gracilis.

Frequent Grasses: Enteropogon acicularis, Heteropogon contortus, Cyperus gracilis, Paspalidium caespitosum, Dinebra decipiens, Leptochloa digitata, Panicum decompositum, Sporobolus caroli, Cyperus exaltatus, Enteropogon ramosus, Eriochloa pseudoacrotricha, Eulalia aurea, Paspalidium jubiflorum, Bothriochloa bladhii subsp. Bladhii, Chloris ventricosa, Dichanthium sericeum, Dichanthium sericeum subsp. Sericeum, Eriochloa procera, Sporobolus mitchellii, Aristida leptopoda, Bothriochloa decipiens, Bothriochloa ewartiana, Chloris divaricate, Chrysopogon fallax, Cymbopogon refractus, Cyperus indet., Cyperus javanicus, Digitaria brownii, Eleocharis acuta, Eleocharis pallens, Eragrostis lacunaria,, Eriochloa crebra, Panicum laevinode, Paspalidium distans, Paspalidium gracile, Paspalidium indet., Sporobolus creber, Thellungia advena, Themeda avenacea.

Frequent Forbs: Eustrephus latifolius, Brunoniella australis, Achyranthes aspera, Basilicum polystachyon, Duma florulenta, Einadia nutans subsp. Linifolia, Eremophila debilis, Euphorbia drummondii, Rostellularia adscendens, Senna barclayana, Sida hackettiana,, Alternanthera nodiflora, Sclerolaena muricata, Abutilon oxycarpum, Boerhavia domini, Calotis cuneata, Capparis lasiantha, Euphorbia dallachyana, Glycine tabacina, Marsilea drummondii, Oxalis perennans, Rhynchosia minima, Tetragonia tetragonoides, Abutilon fraseri, Alectryon diversifolius, Alternanthera denticulata, Atriplex mueller, Boerhavia indet., Camptacra barbata, Citrus glauca, Crotalaria indet., Cyanthillium cinereum, Cymbidium canaliculatum, Enchylaena tomentosa, Euphorbia indet., Euphorbia psammogeton, Haloragis aspera, Jasminum didymium, Jasminum didymum subsp. Didymium, Jasminum didymum subsp. Racemosum, Lomandra longifolia, Maireana microphylla, Marsilea hirsuta, Melhania oblongifolia, Neptunia gracilis, Phyllanthus maderaspatensis, Rhagodia spinescens, Salsola australis,

Seed mix for open woodland: RA2 and RA9 (RE11.8.5)**Trees**

Dominant: Eucalyptus orgadophia, Corymbia erythrophloia, Eucalyptus melanophloia.

Frequent: Eucalyptus orgadophila, Eucalyptus melanophloia, Corymbia erythrophloia, Brachychiton populneus, Brachychiton rupestris, Eucalyptus albens, Eucalyptus crebra.

Shrubs

Dominant: Bursaria incana, Eucalyptus orgadophila.

Frequent: Acacia decora, Carissa ovata, Pandorea pandorana, Alectryon oleifolius subsp. Elongatus, Breynia oblongifolia, Bursaria spinosa, Cassinia quinquefaria, Eremophila mitchellii, Erythroxylum australe, Grewia latifolia, Macrozamia moorei, Myoporum acuminatum, Tephrosia rufula, Owenia acidula, Acacia pendula.

Ground

Dominant: Themeda triandra, Heteropogon contortus, Dichanthium sericeum, Aristida personata, Eremochloa bimaculata, Dichanthium queenslandicum, Panicum queenslandicum, Bothriochloa bladhii.

Frequent Grasses: Panicum effusum, Cymbopogon refractus, Aristida leptopoda, Panicum decompositum, Scleria mackaviensis, Aristida calycina, Aristida latifolia, Bothriochloa bladhii, Bothriochloa decipiens, Bothriochloa ewartiana, Chloris truncate, Chrysopogon fallax, Cymbopogon bombycinus, Cyperus gracilis, Dichanthium queenslandicum, Dinebra decipiens, Enneapogon lindleyanus, Enneapogon polyphyllus, Eriochloa pseudoacrotricha, Panicum queenslandicum, Paspalidium sp., Setaria surgens, Sporobolus caroli, Tragus australianus.

Forbs: Bruniella australis, Desmodium varians, Eremophila debilis, Glycine tabacina, Indigofera linifolia, Peripleura hispidula, Alternanthera sp., Apowollastonia spilanthis, Asperula conferta, Breynia oblongifolia, Calotis cuneata, Cheilanthes sieberi, Crotalaria medicaginea, Crotalaria montana, Dianella longifolia, Euphorbia dallachyana, Eustrephus latifolius, Galactia tenuiflora, Glycine cyrtoloba, Heliotropium brachygynae, Indigofera linnaei, Indigofera pratensis, Jasminum dianthifolium, Jasminum didymium, Lespedeza juncea, Lomandra longifolia, Melhania oblongifolia, Neptunia gracilis, Peripleura hispidula, Plantago debilis, Pterocaulon serrulatum, Rhyncosia minima, Tephrosia rufula, Vittadinia pustulata, Wahlenbergia communis, Waltheria indica.

Seed mix for low-intensity grazing: RA10 – RA16

Dichanthium spp.

Aristida spp.

Panicum spp.

Astrelia spp.

Glycine spp.

Bothriochloa ewartiana

Eriochloa crebra

Heteropogon contortus

Enneapogon truncatus

Digitaria brownii

Desmodium rhytidophyllum

Note: Dichanthium sericeum must be included in the seed mix applied for all areas to be seeded with a low-intensity grazing PMLU.

Appendix III – Surface water quality

Table 2: Surface water monitoring locations

Monitoring Locations	Receiving waters location description	Location			
		Latitude (decimal degree, GDA94)	Longitude (decimal degree, GDA94)	Location on a map	
<i>Upstream monitoring locations</i>					<i>In accordance with Appendix V</i>
MP1	Crinum Creek Upstream	640309	7439565		
MP 6	Crinum Creek upstream Liskeard	639747	7442314		
MP 4	Crossbed Creek Upstream	636974	7438584		
<i>Downstream monitoring locations</i>					
MP2	Lilyvale Waterhole	636905	7432835		
MP3	Crinum Creek Downstream	635436	7430282		
MP5	Balmoral Creek Downstream	635786	7433675		

Table 3: Surface water quality limits

Quality characteristic (units)	Limit	Comment on limit
pH	6.0 – 8.5	Theresa Creek baseflow WQO
Electrical Conductivity (µS/cm)	720	Theresa Creek baseflow WQO
Turbidity (NTU)	50	Theresa Ck and Nogoia R WQO
Sulphate (mg/L)	25	Theresa Ck and Nogoia R WQO
Fluoride (mg/L)	1.7	ANZG 2018
Aluminium - dissolved (µg/L)	55	ANZG 2018
Cobalt - dissolved (µg/L)	1.4	ANZG 2018
Copper - dissolved (µg/L)	1.4	ANZG 2018
Manganese - dissolved (µg/L)	1,900	ANZG 2018
Molybdenum - dissolved (µg/L)	34	ANZG 2018
Nickel - dissolved (µg/L)	11	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Zinc- dissolved (µg/L)	8	ANZG 2018
Total recoverable hydrocarbons (C6-C9) (µg/L)	20	
Total recoverable hydrocarbons (C10-C36) (µg/L)	100	
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes only	
Hardness (mg/L)	For interpretation purposes only	

Notes:

- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)

Appendix IV – Groundwater quality

Table 4: Groundwater monitoring bores

Monitoring Bore	Hydrogeological Unit	Location		
		Latitude (decimal degree, GDA94)	Longitude (decimal degree, GDA94)	Location on a map
Basal10	Basal Sand	645137	7430335	<i>In accordance with Appendix V</i>
Basal 3	Basal Sand	633508	7431560	
Basal9	Basal Sand	633834	7432890	
Basalt11	Basalt	634189	7433635	
Basalt5	Basalt	633518	7431546	
Permian1	Permian	646707	7430975	
Permian3	Permian	635311	7437197	
Permian4	Permian	633832	7432885	
Basal Sand North	Basal Sand	644531	7433980	
Basalt North	Basalt	644531	7433980	
Basal Sand South	Basal Sand	645611	7432480	
Basalt South	Basalt	645603	7431971	

Table 5: Groundwater quality limits

Quality characteristic (units)	Monitoring Bore	Limit	Comment on limit
pH (pH units)	All bores	7.5-8.5	Groundwater Zone 13 deep
Electrical conductivity ($\mu\text{S}/\text{cm}$)	All bores	1,950	Groundwater Zone 13 deep
Sulfate (mg/L)	All bores	70	Groundwater Zone 13 deep
Fluoride (mg/L)	All bores	0.4	Groundwater Zone 13 deep
Aluminium - dissolved ($\mu\text{g}/\text{L}$)	All bores	55	ANZG 2018
Cobalt- dissolved ($\mu\text{g}/\text{L}$)	All bores	1.4	ANZG 2018
Copper - dissolved ($\mu\text{g}/\text{L}$)	All bores	1.4	ANZG 2018
Manganese- dissolved ($\mu\text{g}/\text{L}$)	All bores	40	Groundwater Zone 13 deep
Molybdenum - dissolved ($\mu\text{g}/\text{L}$)	All bores	34	ANZG 2018
Nickel - dissolved ($\mu\text{g}/\text{L}$)	All bores	11	ANZG 2018
Selenium- dissolved ($\mu\text{g}/\text{L}$)	All bores	5	ANZG 2018
Zinc- dissolved ($\mu\text{g}/\text{L}$)	All bores	8	ANZG 2018
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	All bores	For interpretation purposes only	
Hardness (mg/L)	All bores	For interpretation purposes only	
Water level (mAHD)	All bores		

Notes:

- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection).
- Groundwater Zone 13 deep - Fitzroy groundwater: water quality objectives (aquatic ecosystem) according to water chemistry zones (refer plan WQ1310).

Appendix V – Groundwater and Surface Water Monitoring Locations

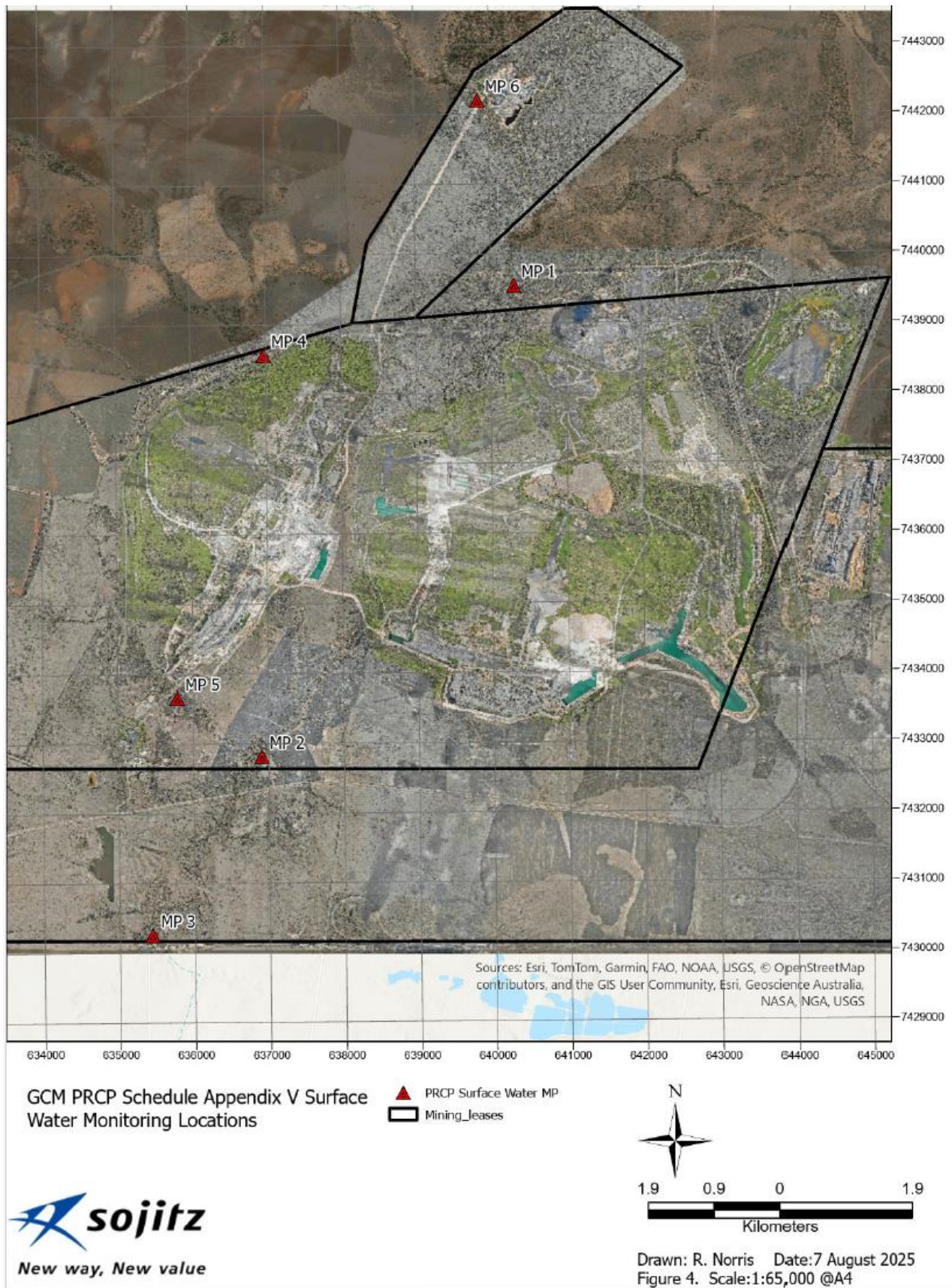
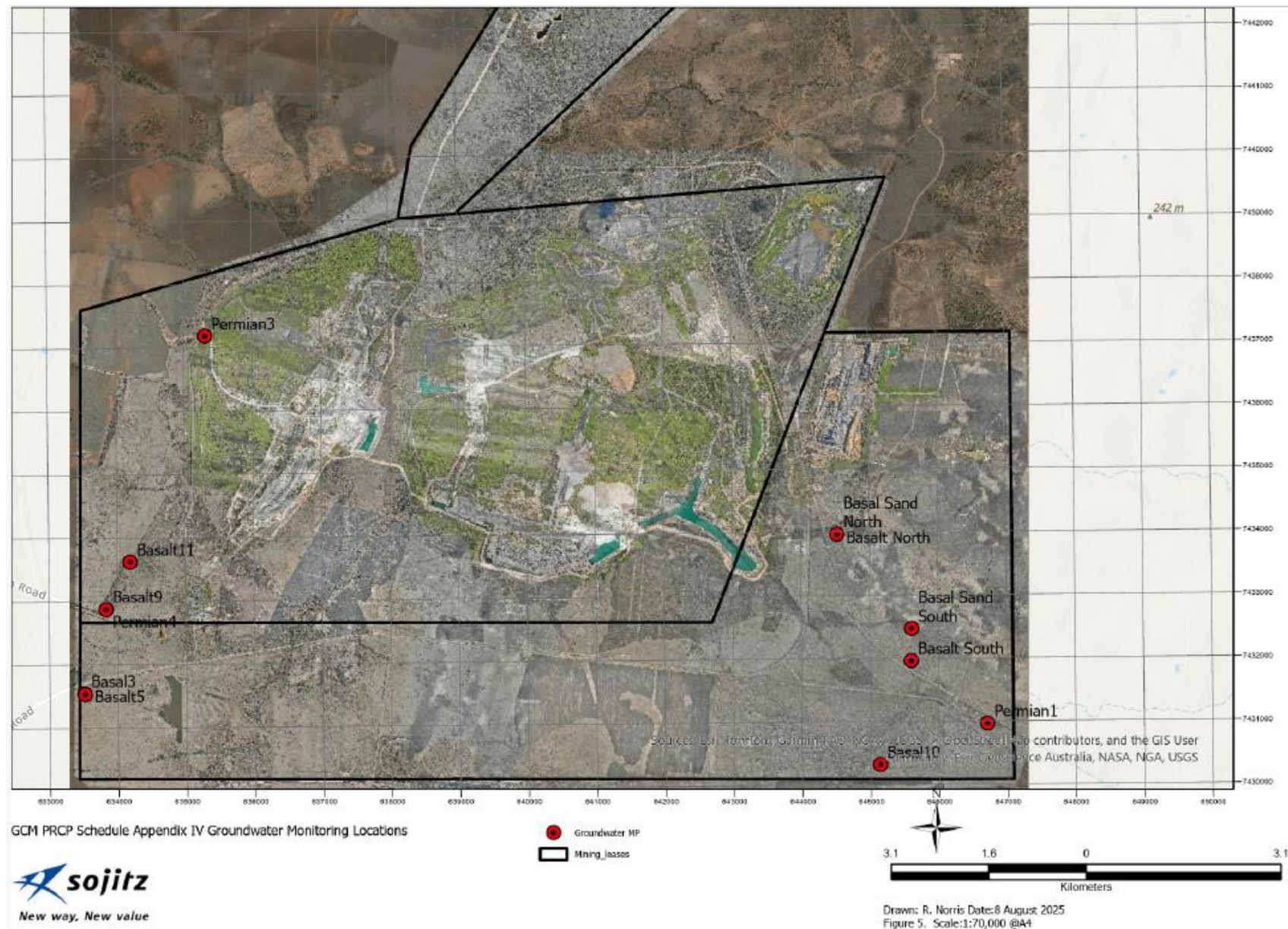


Figure 4: Surface water monitoring locations



Appendix VI – Final Void Area and Volume

Final Void	Improvement Area	Residual Void Maximum Surface Area (ha)	NUMA Maximum Surface Area including setback distance/area (ha)	Void Volume (Mm3)	Relevant Void Water Level (mRL)
M Block	IA6	16.3	57.4	2.24	188.2
J Block Ramp 7	IA2	12.1	21.0	1.30	191.9
J Block Ramp 8-A and J Block Ramp 8-B	IA3 IA4	9.3	2.1 16.2	0.87	173.8
J Block Ramp 9	IA5	27.5	38.5	5.04	167.8
F Block	IA12	8.2	33.0	0.90	193.8
ASE Block - A	IA13	7.2	4.2	0.99	176.3
ASE Block - B	IA14	12.3	3.7	2.11	176.3
ASE Block - C	IA15	3.6	4.1	0.61	176.3
ASE Block – D	IA11	7.3	8.1	1.50	176.3
ASE Block - E		2.8		0.15	176.3
G Block Central -A	IA9	45.6	0.2	10.89	167.5
G Block Central-B	IA8		0.4		
ABG Block - West	IA7	0.7	35.2	0.03	176.2
ABG Block - East		31.2		5.30	176.2
G Block North - A	IA16	2.4	2.3	0.06	183.3
G Block North - B	IA17	0.7	2.9	0.00	183.3
Ramp 4	IA10	2.0	2.1	0.17	183.1
Liskeard	IA1	5.2	10	0.19	198.1
		Total 194.4	Total 241.1		

END OF PRCP SCHEDULE