SARAJI EAST MINING LEASE PROJECT

Environmental Impact Statement

Chapter 4
Land Use and Tenure

Table of Contents

4.0 Land use and tenure 4-1
4.1 Introduction 4-1
4.2 Existing environment 4-1
4.2.1 Land tenure and ownership 4-1
4.2.2 Resource tenements 4-3
4.2.3 Existing land uses 4-3
4.2.4 Utilities and services 4-9
4.2.5 Transport and infrastructure 4-10
4.2.6 Native title 4-12
4.2.7 Protected areas 4-14
4.2.8 Regional planning interests 4-14
4.3 Relevant planning instruments 4-17
4.3.1 State Planning Policy 4-17
4.3.2 Mackay, Isaac and Whitsunday Regional Plan 4-24
4.3.3 Local planning schemes 4-28
4.4 Potential impacts and mitigation measures 4-40
4.4.1 Agricultural land use and values 4-40
4.4.2 Residential and other sensitive land uses 4-40
4.4.3 Utilities and services 4-41
4.4.4 Transport infrastructure 4-41
4.4.5 Native title 4-41
4.5 Summary and conclusions 4-41

List of Figures

Figure 4-1 Land tenure 4-2
Figure 4-2 Land use and homesteads 4-8
Figure 4-3 Existing infrastructure 4-11
Figure 4-4 Native title and indigenous land use agreements 4-13
Figure 4-5 Planning features 4-16

List of Tables

Table 4-1 Surrounding homesteads 4-1
Table 4-2 Prerequisite tenements for the Project 4-3
Table 4-3 QLUMP land use classes (DES, 2016) 4-7
Table 4-4 Native title surrounding the Project 4-12
Table 4-5 ILUAs relevant to the Project 4-12
Table 4-6 Regional planning interests 4-14
Table 4.7 Relevant state interest policies and assessment benchmarks under the SPP 4-18
Table 4-8 Desired Regional Outcomes relevant to the Project 4-25
Table 4-9 Assessment against relevant strategic outcomes of the Isaac Regional Planning Scheme 2021 4-28

4.0 Land use and tenure

4.1 Introduction

BM Alliance Coal Operations Pty Ltd (BMA) is seeking approval to develop the Saraji East Mining Lease Project (the Project) involving a single-seam underground mine and supporting infrastructure on Mining Lease Application (MLA) 70383 and MLA 70459 adjacent to, and accessed through, the existing open cut mine void within Mining Lease (ML) 1775.

This chapter of the Environmental Impact Statement (EIS) provides an assessment of the existing and proposed land use and tenure associated with the Project, including the suitability of the proposed land use and applicable land use constraints. It also identifies and assesses the potential impacts of the Project on both existing and likely future land uses and details management and mitigation methods.

The assessment provided within this chapter is, in part, reliant on current Certificates of Title (May 2018) provided by BMA.

4.2 Existing environment

4.2.1 Land tenure and ownership

Land tenure is the means of identifying who has the right to use and occupy land in accordance with varying degrees of ownership (DNRM, 2009). Land tenure within Queensland is administered under the *Land Act 1994*.

The underlying land tenure is freehold and leasehold with various easement encumbrances as shown in Figure 4-1. Underlying tenure and ownership within the Project Site are detailed in Table 3-5 within **Chapter 3 Project Description**.

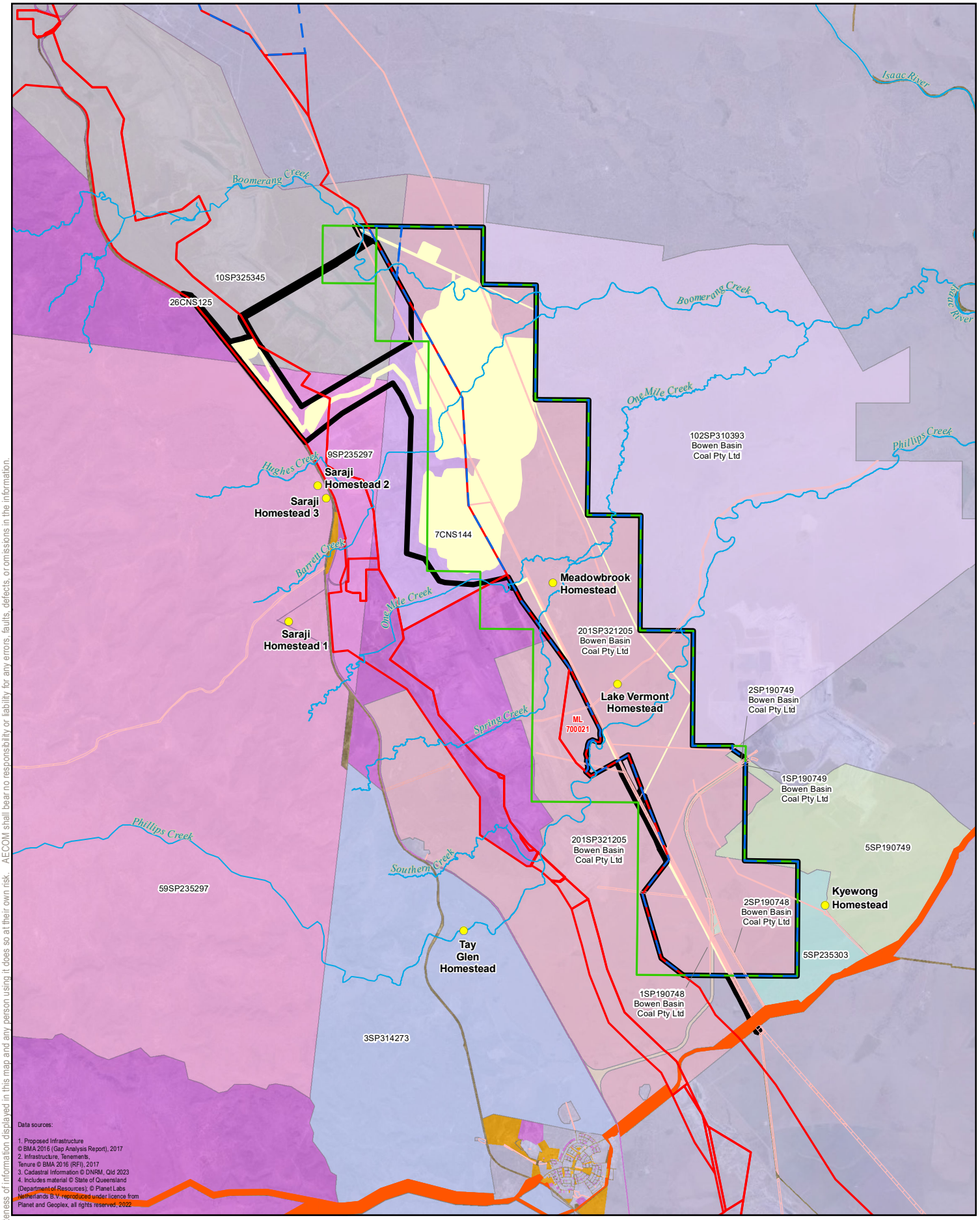
Easements intersect the Project Site across both freehold and leasehold areas. The easements generally protect stock routes and accommodate infrastructure such as water pipelines, electricity infrastructure and railways. Easements demonstrate a right or interest on the property that is registered against the title.

There are two homesteads located on freehold land within the Project Site (Lake Vermont Homestead and Meadowbrook Homestead) owned by BMA. Five additional homesteads surround the Project Site. The homestead location and ownership are described in Table 4-1 and depicted in Figure 4-1.

BMA has agreements in place the owners of Saraji Homestead 2 and Saraji Homestead 3 managing interactions with mining activities at Saraji Mine. Homesteads with conduct and compensation agreements in place for potential dust or noise nuisance impacts arising from mining operations are not considered sensitive receptors but identified and considered in assessments for completeness. Prior to construction commencing on ML, MLA and off-lease areas, BMA will obtain consent from parties holding a lawful interest in land impacted by the works, secure appropriate land tenure arrangements (e.g. easements), and obtain relevant permits and approvals.

Table 4-1 Surrounding homesteads

Homestead	Property details	Owner
Meadowbrook Homestead	201SP321205	BHP Coal Pty Ltd Central Queensland Coal Associates Joint Venture (CQCA JV)
Lake Vermont Homestead	201SP321205	BHP Coal Pty Ltd CQCA JV
Tay-Glen Homestead	3SP235303	Private landholder
Saraji Homestead 1	59SP235297	Private landholder
Saraji Homestead 2	59SP235297	Private landholder
Saraji Homestead 3	59SP235297	Private landholder
Kyewong Homestead	5SP235303	Private landholder



LEGEND

- Project Site
- Project Footprint
- Exploration Permit Coal (EPC)
- Mining Lease (ML)
- Mining Lease Application (MLA)
- Homestead
- Watercourse
- Stock route

Land Tenure

- Easement
- Freehold
- Leasehold
- Reserve

Lot and plan boundary

- 102SP310393
- 10SP325345
- 1SP190748
- 1SP190749
- 201SP321205
- 26CNS125
- 2SP190748
- 2SP190749
- 3SP314273
- 59SP235297
- 5SP190749
- 5SP235303
- 7CNS144
- 9SP235297

N

Figure 4-1
Land Tenure

Environmental Impact Statement
Saraji East Mining Lease Project

0 0.5 1 2
Kilometres

Scale: 1:158,094 (when printed at A4)

Projection: Map Grid of Australia - Zone 55 (GDA94)

BMA
BHP Mitsubishi Alliance

DATE: 13/06/2023 VERSION: 9

4.2.2 Resource tenements

Current resource tenements

Resource tenements authorised under the *Mineral Resources Act 1989* (MR Act) within the Project Site, include ML, MLA and exploration permits for coal (EPC) as illustrated in Figure 3-3 within **Chapter 3 Project Description**.

Exploration tenements allow the holder to undertake activities required to identify the quality and quantity of a resource prior to extraction. Production tenements allow the holder to extract the resource in alignment with the relevant approvals. As such, exploration tenements are typically (but not always) granted over much larger areas than production tenements. An exploration permit authorises entry to land to use advanced exploration methods to determine the presence of minerals, for any mineral to which the exploration permit applies (Queensland Government, 2017). Activities that are normally undertaken under an exploration permit include geophysical surveys, drilling, sampling and testing of materials.

The Project is located adjacent to the existing Saraji Mine, which BMA currently operates on ML 1775, ML 70142, ML 1784, ML 1782, ML 2360, ML 2410, ML 70294, ML 70298, ML 70328 and ML 700021 under Environmental Authority (EA) Permit: EPML00862313.

Proposed resource tenements

Two new MLs are required to allow for the development of the Project which is located outside of the existing Saraji ML area. The proposed mining tenement (MLA 70383) commences from the eastern boundary of ML 1775. MLA 70459 is required for the proposed infrastructure and transport corridor.

The Project Site consists of existing mining tenure applications: MLA 70383 and MLA 70459, underlying pre-requisite EPC 837 and EPC 2103, and Saraji Mine tenure ML 1775, ML 70142 and ML 1782. Application is being made for mining leases, MLA 70383 and MLA 70459 held by BHP Coal Pty Ltd and CQCA JV, which overly prerequisite tenements EPC 837 and EPC 2103 held by the CQCA JV, which are listed in Table 4-2.

Table 4-2 Prerequisite tenements for the Project

Tenement	Holder	Overlying tenement	Status	Date granted/ lodged	Expiry date
EPC 837	CQCA J V	MLA 70383 and MLA 70459	Granted	20/10/2003	19/10/2027
EPC 2103	CQCA J V	MLA 70459	Granted	12/10/2010	11/10/2027

Overlapping resource tenements

Overlapping MLA 70383 and MLA 70459 are two Authority to Prospect (ATP), being ATP 1103 and ATP 814. ATP 1103 is managed by Arrow Energy on behalf of Arrow CSG Pty Ltd, ACL Energy Pty Ltd and CH4 Pty Ltd. ATP 814 is held by Eureka Petroleum Pty Ltd (Blue Energy). ATP 1103 has associated Potential Commercial Area (PCA) 144 and PCA 262, while ATP 814 has assigned PCA 199. PCA's allow the resource holder additional time to hold the ATP area for future resource commercialisation purposes.

Overlying petroleum tenements held by other resource authority holders will be subject to the provisions of the *Mineral and Energy Resources (Common Provisions) Act 2014*. Where ATP 1103 or ATP 814 are converted to Petroleum Leases, coordination arrangements will be negotiated with the relevant companies as a prerequisite for developing both the coal and gas resources and securing the grant of MLA 70383 and MLA 70459.

No licenses or permits are held by BMA or others for geothermal activities or greenhouse gas activities within the Project Site.

4.2.3 Existing land uses

The Project is located within a rural area containing land mainly used for livestock grazing (refer to Plate 4-1). Areas of cropping activity are located to the southeast of the Project Site. The area is sparsely populated with two homesteads located within the Project Site (Meadowbrook and Lake Vermont) and four homesteads to the west of the Project Site (Saraji Homestead 1, Saraji Homestead 2, Saraji

Homestead 3, and Tay-Glen) (refer to Plate 4-2). Kyewong Homestead is located to the east of the Project Site.

The Project Site directly abuts the existing BMA Saraji Mine to the west. The Saraji open cut coal mine has been operational since 1974 and extends approximately 30 kilometres (km) from the north to the south, with a width averaging more than 4 km (refer to Plate 4-3). The existing Saraji Mine is serviced by various elements of infrastructure, including the Goonyella railway line, Saraji Road (Saraji Road), and the Burdekin Pipeline (Plate 4-4).

Plate 4-1 Cattle grazing in the vicinity of the Project

Plate 4-2 Meadowbrook Homestead

Plate 4-3 Existing Saraji Mine

Plate 4-4 Existing land use and utilities (Saraji Road, Goonyella railway line, water pipelines)

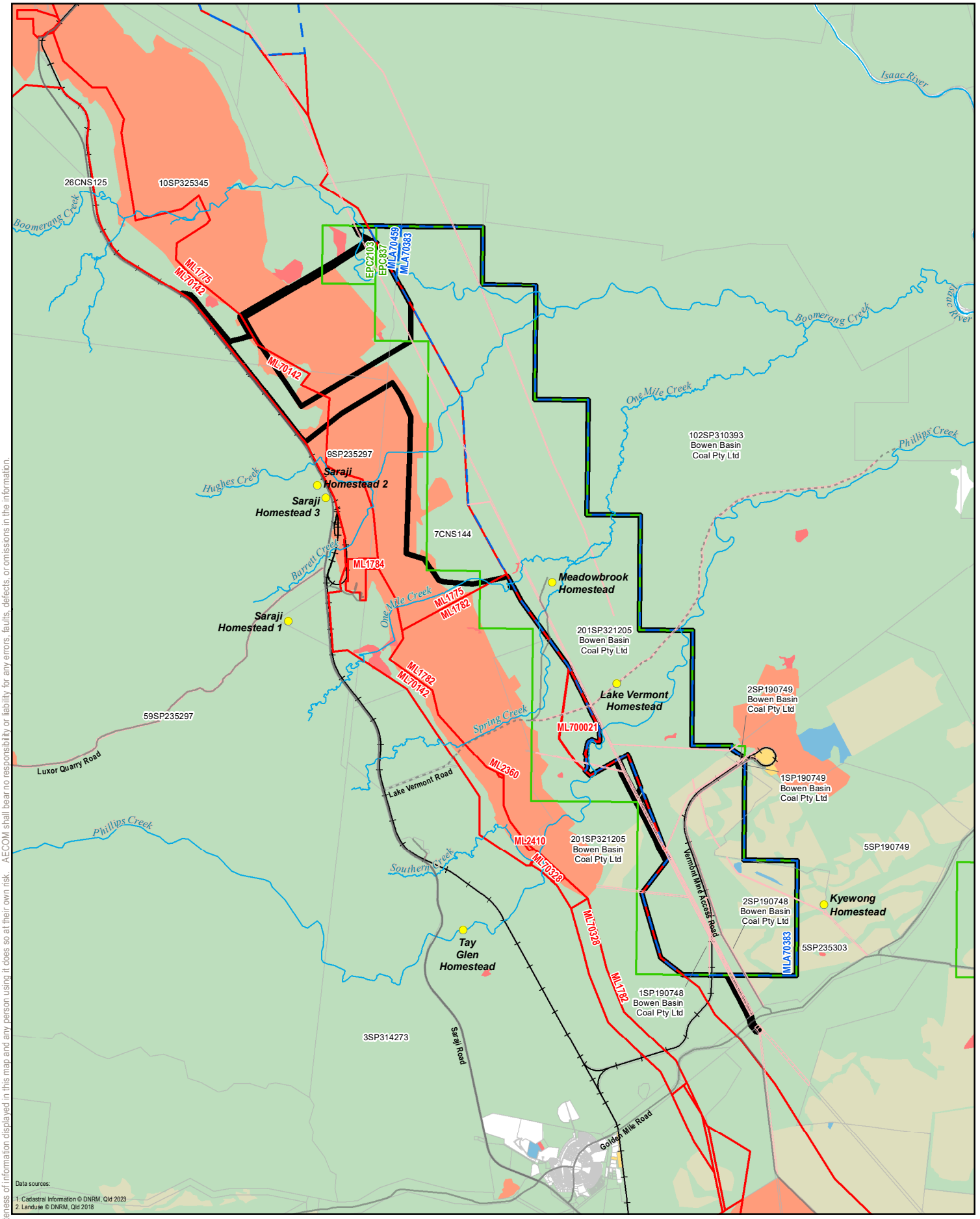
Queensland Land Use Mapping Program

The assessment considered the Queensland Land Use Mapping Program (QLUMP). QLUMP assesses and mapped land use patterns and changes across the State according to the Australian Land Use and Management (ALUM) Classification, which has six primary land use classes, 32 secondary land uses, and 63 tertiary land uses classes.

Current land uses within the Project Site as per QLUMP classifications are presented in Figure 4-2 (Queensland Government, 2013). The land use types present within the Project Site are identified in Table 4-3 in accordance with the QLUMP classifications (primary and secondary).

Table 4-3 QLUMP land use classes (DES, 2016)

Primary land use	Primary land use definition	Secondary land use	Secondary land use definition
Production from relatively natural environments	Land that is subject to relatively low levels of intervention and not used more intensively because of its limited capability. The structure of the native vegetation generally remains intact despite deliberate use. Where the native vegetation structure is, for example, open woodland or grassland, the land may be grazed.	Grazing native vegetation	Land uses based on grazing by domestic stock on native vegetation where there has been limited or no deliberate attempt at pasture modification.
Intensive uses	Land uses that involve high levels of interference with natural processes, generally in association with closer settlement. The level of intervention may be high enough to completely remodel the natural landscape - the vegetation, surface-water and groundwater systems, and the land surface.	Mining	Includes mines, quarries, tailings and extractive industry not in use.
Water	Water features are important for natural resources management and as points of reference in the landscape. However, the inclusion of water is complicated because it is normally classified as a land cover type. At the secondary level, the classification identifies water features, both natural and artificial. Tertiary classes relate water features to intensity of use.	Reservoir/dam	A body of water collected and stored behind a constructed barrier for some specific use. Includes: reservoir, water storage-intensive use/farm dams and evaporation basin.
Conservation and natural environments	Land that has a relatively low level of human intervention which is formally reserved by government, legal or administrative for conservation purposes. Areas may have multiple uses, but nature conservation is the prime use.	Other minimal use	Areas of land that are largely unused but may have ancillary uses which may be a deliberate decision. The land may be available for use but remain ‘unused’ for various reasons.
Production from dryland agriculture and plantations	Land that is used principally for primary production, based on dryland farming systems. Native vegetation has largely been replaced by introduced species through clearing, the sowing of new species, the application of fertilisers or the dominance of volunteer species. The range of activities includes plantation forestry, pasture production for stock, cropping and fodder production, and a wide range of horticultural production.	Cropping	Land that is under cropping. Land under cropping at the time of mapping may be in a rotation system, so that at another time the same area may be, for example, under pasture.



LEGEND

- Project Site
- Exploration Permit Coal (EPC)
- Mining Lease (ML)
- Mining Lease Application (MLA)
- Watercourse
- Existing Railway
- Homestead
- Private Access Road
- Public Road
- Lot boundary
- Easement

QLUMP Secondary Land Use

- Other minimal use
- Grazing native vegetation
- Cropping
- Utilities
- Transport and communication
- Mining
- Reservoir/dam

N

Figure 4-2
Land Use and Homesteads

Environmental Impact Statement
Saraji East Mining Lease Project

0 0.5 1 2
Kilometres

Scale: 1:158,094 (when printed at A4)

Projection: Map Grid of Australia - Zone 55 (GDA94)

BMA
BHP Mitsubishi Alliance

DATE: 13/06/2023 VERSION: 9

4.2.4 Utilities and services

Water distribution infrastructure

BMA operates a water pipeline network in Central Queensland servicing its mines, landholders and towns. The existing Eungella Water Pipeline Company (EWPC) Southern Extension Water Pipeline supplies water to the nearby Lake Vermont Mine. The EWPC pipeline will be relocated and reconnected into a new infrastructure and transport corridor to minimise any potential impacts of subsidence. To facilitate the EWPC pipeline relocation, BMA will obtain consent from all parties holding a lawful interest in land impacted by the works, secure appropriate land tenure arrangements (e.g. easements) and obtain relevant permits and approvals. Some relevant agreements are already in place.

BMA holds contractual rights to approximately 10,000 mega litres per year (ML/yr) of water from the Burdekin Pipeline (owned by SunWater) as a supply source for BMA operations in the vicinity of Moranbah. In addition, BMA has a water allocation of 6,200 ML/yr from the Eungella Dam that is also available for use in BMA operations in the vicinity of Moranbah. In securing its water rights, BMA has allowed for the current and potential future use of water from these sources at the Saraji Mine and for growth options associated with MLA 70383.

Water transport associated with the Project will utilise and, where necessary, enhance the existing BMA water pipeline network connecting Saraji Mine to other BMA mines to the north and south.

Boreholes

Registered groundwater bores are located within the Project Site (refer to Figure 4-3).

Electricity infrastructure

Two powerlines intersect the Project Site (refer to Figure 4-3):

- 132 kilovolt (kV) Powerlink.
- 66 kV Saraji Mine powerline (Ergon supply – Dysart).

Bulk electricity demand will be supplied by the existing Ergon Supply – Dysart 66 kV powerline to Saraji Mine and a new co-aligned 66 kV powerline connection will be constructed. Saraji Mine currently has an authorised maximum demand of 43 megawatts (MW). The current maximum demand of the mine is 26 MW – 30 MW.

The existing 132 kV powerline, which is owned and operated by Powerlink, will be relocated to the eastern transport and infrastructure corridor within the MLA. A number of transformers will be required to reduce the voltage in order to supply other mine infrastructure.

To facilitate the proposed electricity infrastructure works, BMA will obtain consent from all parties holding a lawful interest in land impacted by the works, secure appropriate land tenure arrangements (e.g. easements) and obtain relevant permits and approvals. BMA will consult with Energy Queensland and Powerlink to ascertain interests and delivery requirements for the proposed electricity infrastructure.

Telecommunications infrastructure

There are no existing telecommunications towers within the Project Site (refer to Figure 4-3).

The telecommunications network will be managed by extending the services from the existing Saraji Mine through to the Project Site via the existing service corridor. Telecommunications will be controlled and monitored through the Project control room located on site or from a centrally located facility in Brisbane.

4.2.5 Transport and infrastructure

Road infrastructure

The Saraji Road runs along the western edge of the Project Site (refer to Figure 4-3). Saraji Road is a sealed, two lane road and is under the jurisdiction of Isaac Regional Council (IRC) (i.e. local road). Access to the Mine Infrastructure Area (MIA) and the Coal Handling and Processing Plant (CHPP) will require a new intersection onto the Saraji Road. Additionally, an internal access road within the proposed transport and infrastructure corridor will be required to link the proposed worker's accommodation village to Lake Vermont Road or any replacement that may be required should Saraji Mine operations lead to its closure in the future. The Peak Downs Highway (State-controlled) is located approximately 30 km north-west of the Project Site.

The proposed road works will intersect with roads managed by IRC and Queensland Department of Transport and Main Roads (DTMR). To facilitate these works, BMA will consult with the relevant entities and obtain the necessary permits and approvals as required.

Stock route network

The *Land Protection (Pest and Stock Route Management) Act 2002* establishes Queensland's stock route network. The Queensland stock route network is used for moving stock, pasture for emergency agistment and long-term grazing. Stock routes are classified based on their significance to the transportation of stock and their connectivity. Classification routes include primary, secondary, minor or unused. Stock routes have no specific title or tenure from the underlying road reserve and are managed by local governments and the Queensland Department of Resources (DOR). Stock routes are illustrated on Figure 4-1.

A secondary stock route (405ISAA) is in the south of the Project Site where the Project's powerline is proposed. Extension of a powerline will intersect the stock route (405ISAA). If required, BMA will liaise with the IRC and DOR regarding management and mitigation strategies for the temporary closure of the stock route during construction.

Rail

The Lake Vermont rail spur encroaches into the Project Site. The spur is part of the Goonyella system. The Goonyella system is an electrified train system located in central Queensland, which services the Bowen Basin coal region. The corridor connects to export terminals at Hay Point in Mackay and Abbot Point in Bowen. The system hauls coal for a range of coal mining companies, including BMA.

Coal from the Project will be transported along the existing Goonyella rail system (also referred to as the Norwich Park Branch Railway) that currently runs along the western boundary of the Saraji Mine ML 70142 (refer to Figure 4-3). Refer to **Chapter 14 Transport** for further detail.

Air

Dysart airport is located approximately 11 km south of the Project Site. The airport is privately owned by BMA and as at April 2022, is only open to the Royal Flying Doctor Service and Medivac flights.

Moranbah airport, which will be used to transport commuting personnel for the Project, is located approximately 35 km northwest of the most northern extent of the Project Site. The airport is operated by BMA and services an average of 36 fights each week to Brisbane and Townsville.

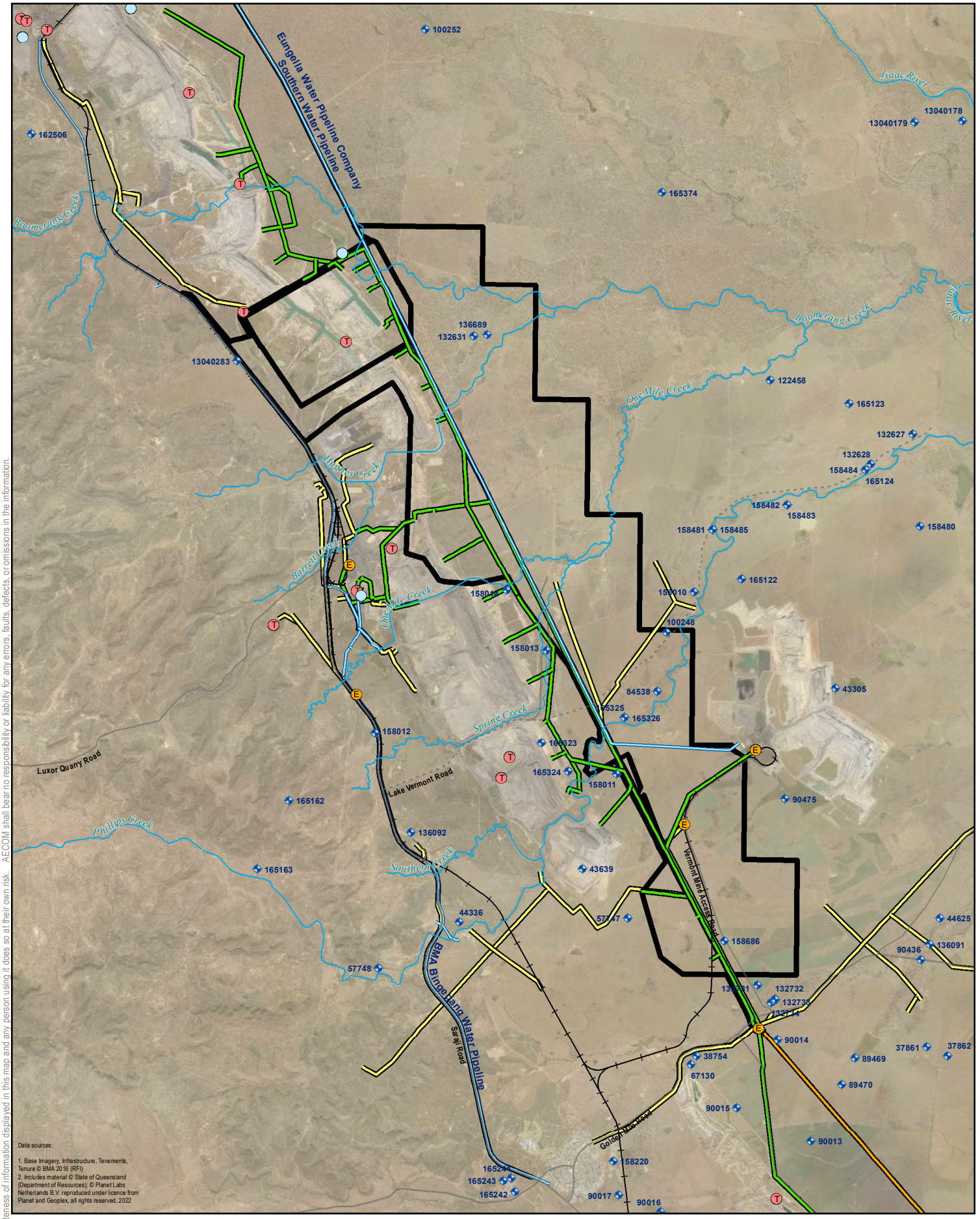
A helipad located near the Project Site is shown in Figure 4-3.

Port/sea

The nearest port to the Project Site is Hay Point Coal Terminal.

Product coal from the Project will be exported to international markets via either:

- Hay Point Coal Terminal, located approximately 155 km north east of the Project Site and 40 km south of Mackay. The Hay Point Coal Terminal commenced operations in the 1970s and is owned and operated by BMA.
- Abbot Point Coal Terminal, located approximately 261 km north of the Project Site and 25 km north of Bowen on the Central Queensland Coast.



Data sources:

1. Base Imagery, Infrastructure, Tenements, Tenure © BMA 2016 (RFI)
2. Includes material © State of Queensland (Department of Resources); © Planet Labs Netherlands B.V. reproduced under licence from Planet and Geoplex, all rights reserved, 2022

LEGEND

- Project Site
- Watercourse
- Water Pipeline
- Private Access Road
- Public Road
- Existing Railway
- Substation
- Telecommunications Tower
- Helipad
- Registered Groundwater Bore

Existing Powerlines

- 132kV
- 66kV
- <66kV

N

Figure 4-3
Existing Infrastructure

Environmental Impact Statement
Saraji East Mining Lease Project

0 0.5 1 2
Kilometres

Scale: 1:158,094 (when printed at A4)

Projection: Map Grid of Australia - Zone 55 (GDA94)

BMA
BHP Mitsubishi Alliance

DATE: 13/06/2023 VERSION: 9

4.2.6 Native title

Native title is the recognition by the Commonwealth and State Governments of the laws, rights and interests over land and water possessed by Indigenous people in Australia, under their traditional laws and customs.

Where native title has not been previously extinguished, it is necessary to comply with the requirements of the *Native Title Act 1993* (NT Act) (Cwth) prior to the granting of appropriate tenure.

A search of the National Native Title Tribunal (NNTT) online Native Title Vision mapping did not identify any claims or determinations over the Project Site. BMA considers that the mining lease application area is over land tenure that is not subject to native title as indicated in the MLA 70383 and MLA 70459.

A native title determination area (non-exclusive) is located adjacent to the Project Site (refer to Figure 4-4). The determination was made by the Barada Barna People under Tribunal Number QCD2016/007. On 29 June 2016 it was determined that native title exists in parts of the determination area (refer to Table 4-4).

Table 4-4 Native title surrounding the Project

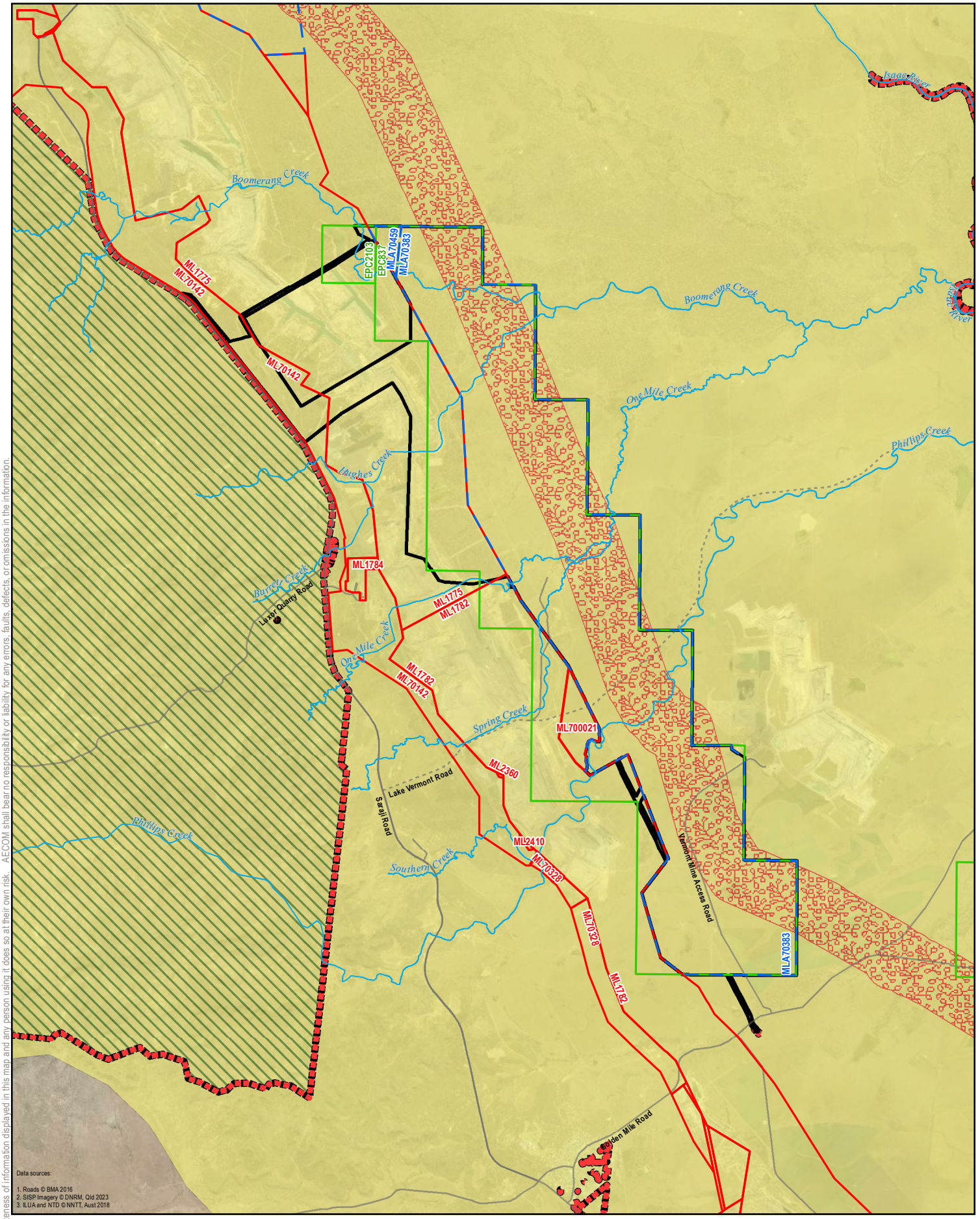
Party name	Tribunal and Federal Court number	Determination outcome and date
Barada Barna People	QCD2016/007 QUD380/2008	Native title exists (non-exclusive) on 29 June 2016 in parts of the determination area

Indigenous land use agreements

Indigenous land use agreements (ILUA) overlap the Project Site. These are illustrated in Figure 4-4 and presented in Table 4-5.

Table 4-5 ILUAs relevant to the Project

Name	Tribunal number	Date of registration
Barada Barna People/Logan Creek and Cherwell ILUA	QI2016/011	31 August 2016
QGC and Barada Barna ILUA	QI2012/062	21 September 2012
Arrow Barada Barna People LNG Project ILUA	QI2011/031	14 December 2011
Barada Barna and Ergon Energy ILUA	QI2016/008	30 August 2016
Barada Barna People and Local Government ILUA	QI2016/007	29 August 2016
Enertrade – BBKY #4 CQGP Agreement	QI2006/028	16 November 2006



LEGEND

- Project Site
- Exploration Permit Coal (EPC)
- Mining Lease (ML)
- Mining Lease Application (MLA)
- Private Access Road
- Public Road
- Watercourse

Native Title Determinations

- Barada Barna People

Indigenous Land Use Agreements

- Arrow Barada Barna People LNG Project ILUA
- Barada Barna People and Local Government ILUA
- Barada Barna and Ergon Energy ILUA
- QGC and Barada Barna ILUA
- Barada Barna People/Logan Creek and Cherwell ILUA
- Enertrade - BBKY #4 CQGP Agreement

N

Figure 4-4
Native Title and Indigenous Land Use Agreements

Environmental Impact Statement
Saraji East Mining Lease Project

0 0.5 1 2
Kilometres

Scale: 1:158,094 (when printed at A4)

Projection: Map Grid of Australia - Zone 55 (GDA94)

BMA
BHP Mitsubishi Alliance

DATE: 13/06/2023 VERSION: 8

4.2.7 Protected areas

Protected areas of Queensland represent those areas protected for the conservation of natural and cultural values and those areas managed for production of forest resources, including timber and quarry material. Under the *Nature Conservation Act 1992* (NC Act), National Parks, nature refuges, regional parks and coordinated conservation areas are all protected and preserved. .

The *Forestry Act 1959* (Forestry Act) protects state forests and timber reserves.

There are no National Parks or State Reserves within or adjacent to the Project Site. The nearest National Park is the Peak Range National Park, located approximately 44 km west of the Project Site.

4.2.8 Regional planning interests

The *Regional Planning Interests Act 2014* (RPI Act) identifies and protects areas of Queensland that are of regional interest.

Each area of regional interest is defined under the RPI Act. The RPI Act has identified each RPI based on its contribution, or likely contribution to Queensland's economic, social and environment prosperity. There are four areas of regional interests under the RPI Act and Regional Planning Interests Regulation 2014 which are detailed in Table 4-6.

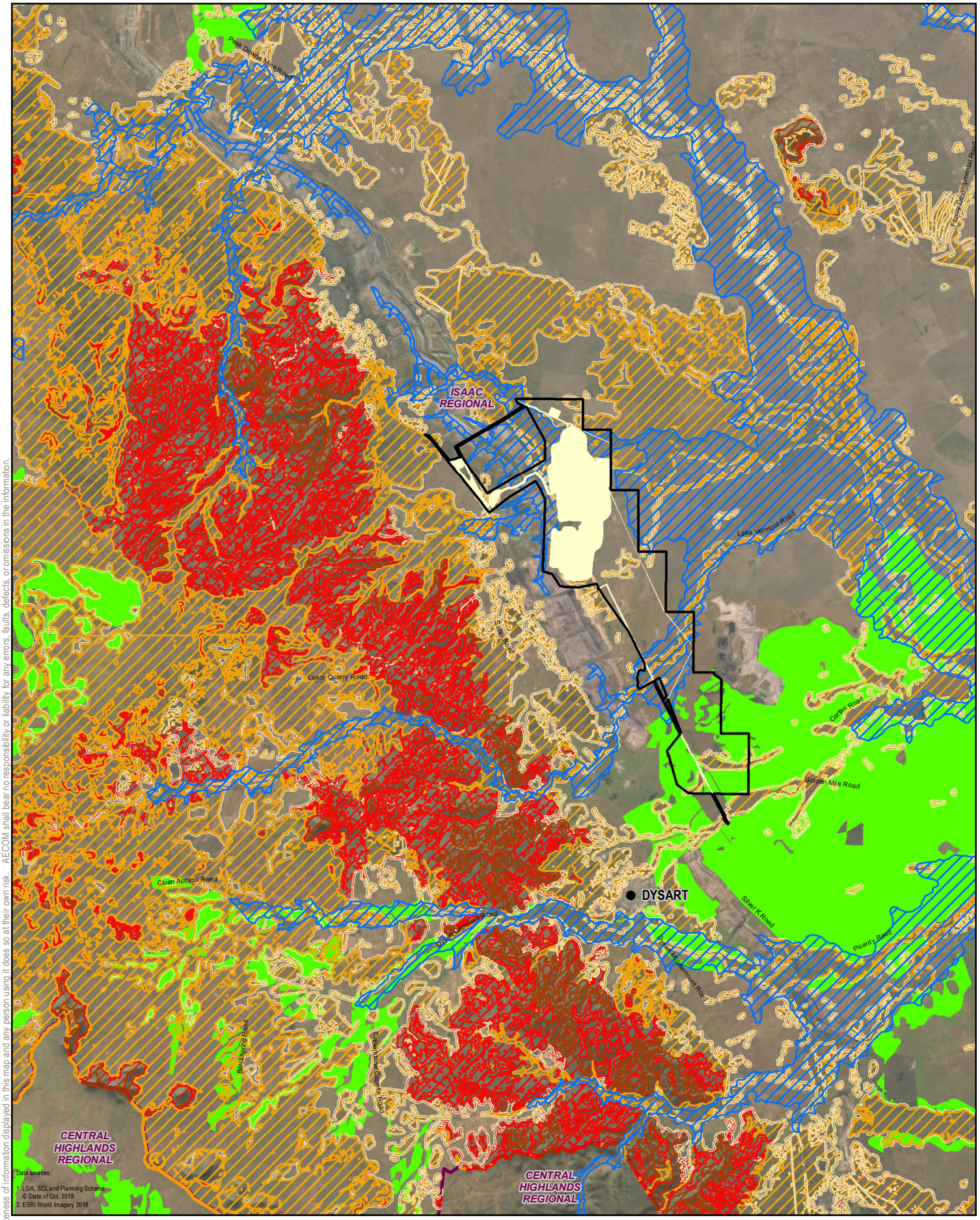
Table 4-6 Regional planning interests

Interest	Description of RPI	Relevance to the Project
Priority agricultural area (PAA)	A PAA is an area of regional interest because it contains one or more priority agricultural land uses. A priority agricultural area may also include other features such as regionally significant water sources which support the priority agricultural land uses.	No PAAs are located within or in the vicinity of the Project Site.
Priority living area (PLA)	Established to safeguard areas required for the growth of towns from incompatible resource activities.	No PLAs are located within or in the vicinity of the Project Site.
Strategic cropping area (SCA)	SCAs are areas that are highly suitable for cropping because of a combination of the land's soil, climate and landscape features.	State-mapped SCA shown on the Strategic Cropping Land (SCL) trigger map identifies areas in the southern part of the Project Site on MLA 70383. SCL assessment (GTE, 2020) verified a small portion of mapped area for potential SCA impacts and BMA has completed further government consultation and an application to secure Regional Interests Development Approval (RIDA). SCL is mapped in Figure 4-5. See below for further details.
Strategic environmental area (SEA)	Identified as containing regionally significant environmental attributes.	No SEAs are located within or in the vicinity of the Project Site.

The Project's proposed 66 kV powerline encroached within a mapped SCA on former Lot 101 on SP310393 (now part of Lot 201 on SP321205) and therefore required a Regional Interests Development Application (RIDA). BMA was granted the RIDA, subject to conditions, under the RPI Act on 18 October 2021 (Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) reference. RPI21/001) for 13.39 hectares (ha) of disturbance to verified Strategic Cropping Land (SCL). An additional 6.9 ha of disturbance area was confirmed to be non-SCL and is to be removed from the SCL trigger mapping. BMA will comply with all conditions of the RIDA.

In addition to the RIDA, BMA also sought concurrent approval from DOR to amend the SCL trigger map over the remainder of Lot 201 on SP321205 within the Project Site. The SCL trigger mapping amendment was based on field verified data and was supported by DOR. Accordingly, DOR is currently updating the publicly available SCL trigger mapping layer to reflect the extent of verified SCL and non-SCL presented through the mapping amendment process.

Further details are contained within **Appendix A-3 Approvals Framework**.



LEGEND

- Project Site
- Project Footprint
- Regional Locality
- Highway
- Major Road
- Other Road
- Local Government Areas
- RPI Act Strategic Cropping Land (SCL)
- Potential flood hazard area

Bushfire Hazard

- Very High Potential Bushfire Intensity
- High Potential Bushfire Intensity
- Medium Potential Bushfire Intensity
- Potential Impact Buffer

N

Figure 4-5
Planning Features
Environmental Impact Statement
Saraji East Mining Lease Project

0 1.25 2.5 5
Kilometres

Scale: 1:300,000 (when printed at A4)

Projection: Map Grid of Australia - Zone 55 (GDA94)

BMA
BHP Mitsubishi Alliance

DATE: 13/06/2023 VERSION: 5

Filename: \\na.aecomnet.com\lfs\APAC\Brisbane-AUBNE1\Secure\Projects\605X\605070314. Tech Work Area\4.98 GIS 2021\02_MXDs\01 Environmental Impact Statement\04 Land Use and Tenure\60507031_G117_v5_A4P_PlanningFeatures.mxd

4.3 Relevant planning instruments

Planning instruments applicable to the Project include the Queensland State Planning Policy (SPP), the Mackay, Isaac and Whitsunday Regional Plan 2012, and the Isaac Regional Planning Scheme 2021. The following sections describe the Project's compatibility with these planning instruments.

4.3.1 State Planning Policy

The SPP outlines 17 state interests that must be considered in every planning scheme across Queensland. These state interests are arranged under five broad themes:

- liveable communities and housing
- economic growth
- environment and heritage
- safety and resilience to hazards
- infrastructure.

The integration of the SPP into local planning schemes ensures that the most important state planning interests are protected and managed in a way that is relevant to every area across Queensland. The relevant state interests to the Project are assessed in Table 4.7.

Table 4.7 Relevant state interest policies and assessment benchmarks under the SPP

State interest	Comment
Agriculture – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant. 1. Agriculture and agricultural development opportunities are promoted and enhanced in important agricultural areas (IAAs). 2. Agricultural Land Classification (ALC) Class A and Class B land is protected for sustainable agricultural use by: a. avoiding fragmentation of ALC Class A or Class B land into lot sizes inconsistent with the current or potential use of the land for agriculture b. avoiding development that will have an irreversible impact on, or adjacent to, ALC Class A or Class B land c. maintaining or enhancing land conditions and the biophysical resources underpinning ALC Class A or Class B land. 3. Fisheries resources are protected from development that compromises long-term fisheries productivity, sustainability and accessibility. 4. Growth in agricultural production and a strong agriculture industry is facilitated by: a. promoting hard to locate intensive agricultural land uses, such as intensive animal industries, aquaculture, and intensive horticulture in appropriate locations b. protecting existing intensive agricultural land uses, such as intensive animal industries, aquaculture, and intensive horticulture, from encroachment by development that is incompatible and/or would compromise the safe and effective operation of the existing activity c. locating new development (such as sensitive land uses or land uses that present biosecurity risks for agriculture) in areas that avoid or minimise potential for conflict with existing agricultural uses through the provision of adequate separation areas or other measures d. facilitating opportunities for co-existence with development that is complementary to agricultural uses that do not reduce agricultural productivity (e.g. on-farm processing, farm gate sales, agricultural tourism) e. considering the provision of infrastructure and services necessary to support a strong agriculture industry and associated agricultural supply chains f. ensuring development on, or adjacent to, the stock route network does not compromise the network's primary use for moving stock on foot, and other uses and values including grazing, environmental, recreational, cultural heritage, and tourism values.	The southern extent of the Project Site overlaps land identified as IAA. Due to the existing disturbed nature of the area, it is unlikely IAA values will be lost. This area is also mapped as ALC Class A1 land. The only infrastructure proposed within this area is an overhead powerline. As outlined in section 4.2.8, BMA has obtained a RIDA approval and SCL trigger mapping amendment. The post mining land use will be an undulating landscape to be used as grazing land, consistent with the surrounding pastoral land use dominating the region.
Mining and Extractive Resources – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant. **Extractive Resources**	The Project Site does not overlap with KRAs. The Project will co-exist mutually and complement the existing extractive land uses surrounding the Project Site (i.e. Saraji Mine).

State interest	Comment
1. Key resource areas (KRAs) are identified, including the resource/ processing area, separation area, transport route and transport route separation area. 2. KRAs are protected by: a. maintaining the long-term availability of the extractive resource and access to the KRA b. avoiding new sensitive land uses and other incompatible land uses within the resource/ processing area and the related separation area of a KRA that could impede the extraction of the resource c. avoiding land uses along the transport route and transport route separation area of a KRA that are likely to compromise the ongoing use of the route for the haulage of extractive materials d. avoiding new development adjacent to the transport route that is likely to adversely affect the safe and efficient transportation of the extractive resource. **Mineral, Coal, Petroleum and Gas Resources** 1. The importance of areas identified as having valuable minerals, coal, petroleum and gas resources, and areas of mining and resource tenures are considered. 2. Opportunities for mutually beneficial co-existence between coal, minerals, petroleum and gas resource development operations and other land uses are facilitated. 3. The location of specified petroleum infrastructure is considered.	
Biodiversity – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant: 1. Development is located in areas to avoid significant impacts on matters of national environmental significance and considers the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). 2. Matters of state environmental significance are identified and development is located in areas that avoid adverse impacts; where adverse impacts cannot be reasonably avoided, they are minimised. 3. Matters of local environmental significance are identified and development is located in areas that avoid adverse impacts; where adverse impacts cannot be reasonably avoided, they are minimised. 4. Ecological processes and connectivity is maintained or enhanced by avoiding fragmentation of matters of environmental significance. 5. Viable koala populations in south east Queensland are protected by conserving and enhancing koala habitat extent and condition.	Impacts to Commonwealth, State and local biodiversity interests have been assessed in **Chapter 6 Terrestrial Ecology.** The design development process for the Project has adopted to avoid, minimise, mitigate and offset approach in relation to areas of environmental value.
Cultural Heritage – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant:	Impacts to cultural heritage values have been assessed in **Chapter 16 Cultural Heritage.**

State interest	Comment
1. Matters of Aboriginal cultural heritage and Torres Strait Islander cultural heritage are appropriately conserved and considered to support the requirements of the *Aboriginal Cultural Heritage Act 2003 (Qld)* (ACH Act) and the Torres Strait Islander Cultural Heritage Act 2003. 2. Adverse impacts on the cultural heritage significance of world heritage properties and national heritage places prescribed under the EPBC Act are avoided. 3. Adverse impacts on the cultural heritage significance of state heritage places are avoided. 4. Local heritage places and local heritage areas important to the history of the local government area are identified, including a statement of the local cultural heritage significance of the place or area. Development of local heritage places or local heritage areas does not compromise the cultural heritage significance of the place or area by: a. avoiding adverse impacts on the cultural heritage significance of the place or area, or b. minimising and mitigating unavoidable adverse impacts on the cultural heritage significance of the place or area. 5. The conservation and adaptive reuse of local heritage places and local heritage areas are facilitated so that the cultural heritage significance is retained.	Where there is the potential for significant impacts these have been avoided through design development. Where impacts cannot be avoided they will be suitably minimised and mitigated. Compliance with all provisions of the Project's Cultural Heritage Management Plans (CHMP) will be maintained during all Project works.
Water Quality– State Interest Policies 1. Development facilitates the protection or enhancement of environmental values and the achievement of water quality objectives for Queensland waters. 2. Land zoned for urban purposes is located in areas that avoid or minimise the disturbance to: a. High risk soils b. High ecological value aquatic ecosystems c. Groundwater dependent ecosystems d. Natural drainage lines and landform features. 3. Development is located, designed, constructed and operated to avoid or minimise adverse impacts on environmental values of receiving waters arising from: a. altered stormwater quality and hydrology b. wastewater (other than contaminated stormwater and sewage) c. the creation or expansion of non-tidal artificial waterways d. the release and mobilisation of nutrients and sediments. 4. At the construction phase, development achieves the applicable stormwater management design objectives. 5. At the post-construction phase, development: a. achieves the applicable stormwater management design objectives on-site	Water quality is addressed in **Appendix E-1 Surface Water Quality Technical Report** and **Chapter 8 Surface Water Resources**. Management measures within the water quality assessment are to achieve water quality objectives for Queensland waters. The Project will include a number of mitigation and management measures to mitigate potential adverse impacts on drinking water supply environmental values.

State interest	Comment
b. achieves an alternative locally appropriate solution off-site that achieves an equivalent or improved water quality outcome to the relevant stormwater management design objectives. 6. Development in water resource catchments and water supply buffer areas avoids potential adverse impacts on surface waters and groundwaters to protect drinking water supply environmental values.	
Natural Hazards Risk and Resilience- State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant. 1. Natural hazard areas are identified, including: a. bushfire prone areas b. flood hazard areas c. landslide hazard areas d. storm tide inundation areas e. erosion prone areas. 2. A fit-for-purpose risk assessment is undertaken to identify and achieve an acceptable or tolerable level of risk for personal safety and property in natural hazard areas. Bushfire, flood, landslide, storm tide inundation, and erosion prone areas. 3. Land in an erosion prone area is not to be used for urban purposes, unless the land is located in: a. an urban area in a planning scheme, or b. an urban footprint identified in a regional plan. 4. Development in bushfire, flood, landslide, storm tide inundation or erosion prone natural hazard areas: a. avoids the natural hazard area, or b. where it is not possible to avoid the natural hazard area, development mitigates the risks to people and property to an acceptable or tolerable level. 5. Development in natural hazard areas: a. supports, and does not hinder disaster management capacity and capabilities b. directly, indirectly and cumulatively avoids an increase in the exposure or severity of the natural hazard and the potential for damage on the site or to other properties c. avoids risks to public safety and the environment from the location of the storage of hazardous materials and the release of these materials as a result of a natural hazard d. maintains or enhances the protective function of landforms and vegetation that can mitigate risks associated with the natural hazard. 6. Community infrastructure is located and designed to maintain the required level of functionality during and immediately after a natural hazard event.	Areas of the Project Site are within mapped flood hazard areas and medium potential bushfire hazard as illustrated in Figure 4-5. The Project Site is not within a landslide hazard area, storm tide inundation area or erosion prone area. **Chapter 8 Surface Water Resources** assesses the potential for hydrology impacts. **Chapter 20 Hazards, Health and Safety** identifies mitigations for flooding and bushfire.

State interest	Comment
7. Coastal protection work in an erosion prone area is undertaken only as a last resort where coastal erosion or inundation presents an imminent threat to public safety or existing buildings and structures, and all of the following apply: a. The building or structure cannot reasonably be relocated or abandoned. b. Any erosion control structure is located as far landward as practicable and on the lot containing the property to the maximum extent reasonable. c. Any increase in coastal hazard risk for adjacent areas from the coastal protection work is mitigated. Erosion prone areas within a coastal management district: 8. Development does not occur unless the development cannot feasibly be located elsewhere and is: a. coastal-dependent development; or b. temporary, readily relocatable or able to be abandoned development; or c. essential community infrastructure; or d. minor redevelopment of an existing permanent building or structure that cannot be relocated or abandoned. 9. Development permitted in policy 8 above, mitigates the risks to people and property to an acceptable or tolerable level.	
Energy and Water Supply – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant. 1. Existing and approved future major electricity infrastructure locations and corridors (including easements and electricity substations), and bulk water supply infrastructure locations and corridors (including easements) are protected from development that would compromise the corridor integrity, and the efficient delivery and functioning of the infrastructure. 2. Major electricity infrastructure and bulk water supply infrastructure such as pump stations, water quality facilities and electricity substations, are protected from encroachment by sensitive land uses where practicable. 3. Development of major electricity infrastructure and bulk water supply infrastructure avoids or otherwise minimises adverse impacts on surrounding land uses and the natural environment. 4. The development and supply of renewable energy at the regional, local and individual scale is enabled in appropriate locations.	The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts. The existing EWPC Southern Extension Water Pipeline and existing 132 kV powerline will be relocated into a new infrastructure and transport corridor to the eastern boundary of MLA 70383 and northern boundary of MLA 70459.
Transport Infrastructure – State Interest Policies The following state interest policies must be appropriately integrated in planning and development outcomes, where relevant. All transport infrastructure: 1. Transport infrastructure and existing and future transport corridors are reflected and supported through compatible land uses. 2. Development is located in areas currently serviced by transport infrastructure, and where this cannot be achieved; development is facilitated in a logical and orderly location, form and sequence to enable cost-effective delivery of new transport infrastructure to service development.	The Project Site does not overlap any State Controlled Roads. A Traffic Impact Assessment is provided in **Chapter 14 Transport.** Safety and access has been assessed, including mitigation measures where necessary.

State interest	Comment
3. Development achieves a high level of integration with transport infrastructure and supports public passenger transport and active transport as attractive alternatives to private transport. 4. Development is located and designed to mitigate adverse impacts on development from environmental emissions generated by transport infrastructure. 5. A road hierarchy is identified that reflects the role of each category of road and effectively manages all types of traffic. State transport infrastructure: 1. Development in areas surrounding state transport infrastructure, and existing and future state transport corridors, is compatible with, or support the most efficient use of, the infrastructure and transport network. 2. The safety and efficiency of existing and future state transport infrastructure, corridors, and networks is not adversely affected by development.	

4.3.2 Mackay, Isaac and Whitsunday Regional Plan

Regional plans provide a long-term strategic direction to guide how regions will grow and respond to change over time, and ensure good planning outcomes are delivered for communities, the economy and the environment.

Whilst local governments have the primary responsibility for land use planning, the state maintains an interest in ensuring regions are sustainable, resilient and prosperous. Regional plans identify and interpret matters of state interest for a particular region and provide the strategy and direction to advance the State Planning Policy and guide its application to achieve these outcomes.

The Project Site is located within the area covering the Mackay, Isaac and Whitsunday Regional Plan (DILGP, 2012). The Regional Plan establishes a vision and direction for the region to 2031 through the provision of strategies to inform future decision making. Under the Regional Plan there are ten overarching Desired Regional Outcomes (DROs) which outline the policy framework for the region. They include:

- sustainability, climate change and natural hazards
- environment
- regional landscapes
- natural resource management
- strong communities
- strong economy
- managing growth
- urban form
- infrastructure and servicing
- transport.

Table 4-8 provides an assessment of the Project against each DRO and the respective principles.

Table 4-8 Desired Regional Outcomes relevant to the Project

Principle	Assessment of the Project against DRO
Sustainability, climate change and natural hazards	
Decision-making supports ecologically sustainable development.	**Chapter 2 Project Alternatives and Justification** outlines sustainable development principles. Decision making throughout the Project will be supported through the application of the mitigation hierarchy avoid, minimise and mitigate.
The generation of greenhouse gases is reduced through land-use planning and development design, and long-term climate change impacts are considered in planning decisions.	The Project's impact on greenhouse gas emissions and proposed mitigation measures are discussed in **Chapter 11 Air Quality and Greenhouse Gas**. The Project is considered to have a low vulnerability to climate change.
Environment	
The region's natural assets, biodiversity values and ecological services are protected, managed and enhanced to improve their resilience to the anticipated effects of climate change and other threats.	The Project will impact ecological values however this will be limited to the Project Site. Potential impacts and mitigation measures are described in **Chapter 6 Terrestrial Ecology** and **Chapter 7 Aquatic Ecology**.
The ecological health, environmental values and water quality of coastal, surface, ground waters and wetlands are protected.	The Project's impact on ecological values and how these are proposed to be mitigated are discussed in **Chapter 6 Terrestrial Ecology** and **Chapter 7 Aquatic Ecology**. Impacts from the Project on water quality are discussed in **Chapter 8 Surface Water Resources**.
The environment is protected to maintain the health and wellbeing of the community and the natural environment through effective management of air quality and noise.	The impacts of the Project on the community are discussed in **Chapter 17 Social**. Impacts from the Project in terms of air and noise are discussed in **Chapter 11 Air Quality and Greenhouse Gas** and **Chapter 12 Noise and Vibration** respectively.
Regional landscapes	
Manage and enhance the values of the regional landscape to optimise their ability to contribute to the region's liveability, lifestyle, health and economy.	**Chapter 17 Social** discusses the impacts of the Project on the community and identified how impacts will be mitigated.
Optimise multiple community benefits through coordinated planning, management and investment in regional landscape areas.	The Project will contribute significantly to the economy in terms of provision of employment. Refer to **Chapter 18 Economics**.

Principle	Assessment of the Project against DRO
Natural resource management	
The management and use of natural resources enhance community, economic and landscape values.	The Project will contribute significantly to the economy in terms of provision of employment, which will enhance local communities and the economy. Management and use of natural resources is discussed through all technical chapters of the EIS. Landscape values are discussed in **Chapter 13 Scenic Amenity and Lighting.**
Ecosystems are sustainably managed, ensuring their cultural, social, economic and environmental services and values are protected.	Ecological impacts will be limited to the Project Site noting that the design development process for the Project has adopted to avoid, minimize, mitigate and offset approach in relation to areas of environmental value. The Project's impact on ecological values and proposed mitigation measures are discussed in **Chapter 6 Terrestrial Ecology** and **Chapter 7 Aquatic Ecology**.
Mineral, petroleum and extractive resources are managed for current and future use, and their extraction, processing, transport and downstream value-adding continue to contribute to the economy.	The Project involves the production of coal from an identified resource and it will contribute significantly to the economy as discussed in **Chapter 18 Economics**.
The region's agricultural production areas are protected and sustainably managed to ensure their continuing contribution to the economy, and to mitigate the anticipated effects of climate change.	It is anticipated that the Project will not have a significant impact on current agricultural activities occurring in the vicinity of the proposed works. The Project is complementary with the current land uses of the area.
Water, as a valuable and finite regional resource, is planned and managed on a total water cycle basis.	Water resource planning and management is discussed in **Chapter 8 Surface Water Resources**.
Strong communities	
Social planning is incorporated into planning processes to manage and respond to changing communities and support community well-being and quality of life.	Members of the public and other interested parties will be consulted as a part of the EIS process. Refer to **Chapter 1 Introduction** for information on the public consultation process and **Chapter 17 Social** and **Chapter 19 Stakeholders.**
The long-term viability of resource communities is sustained by enhancing liveability, providing diverse housing and employment options and accommodating the needs of the resource sector.	**Chapter 17 Social** discusses the impacts of the Project on the community and identified how impacts will be mitigated.

Principle	Assessment of the Project against DRO
Traditional Owners and Elders are actively engaged in planning and development processes, and their connectivity with Country is understood, considered and respected.	BMA will comply with the current CHMP covering the Project Site. This CHMP also covers the existing Saraji Mine.
Strong economy	
Suitable land, infrastructure and facilities are available and managed to enable sustainable economic and employment growth in the region.	This chapter covers the land, infrastructure and facilities. **Chapter 18 Economics** discusses the economics of the Project.
The economy grows through increasing levels of human-capital and is resilient to external factors through multiple strong industry sectors that provide diverse employment opportunities.	The Project will contribute significantly to the economy in terms of provision of employment. Refer to **Chapter 18 Economics**.
Maintain existing and expand sustainable and economically viable primary industries and diversify opportunities in the region.	**Chapter 18 Economics** discusses the economic opportunities associated with the Project.
Manage mining and extractive resources to maximise economic opportunities and other community benefits, while minimising negative environmental and social impacts for present and future generations.	The Project will provide a number of opportunities for employment while minimising social impacts on the community where possible. Refer to **Chapter 18 Economics** and **Chapter 17 Social**.
Urban form	
Rural communities benefit from growth and are serviced by appropriate levels of infrastructure and support services.	Benefits to communities are discussed in **Chapter 17 Social**.
Infrastructure	
The region's waste is minimised, re-used or recycled, and promotes energy recovery.	**Chapter 15 Waste Management** identifies the waste minimisation schemes in place for the Project.

4.3.3 Local planning schemes

The *Isaac Regional Planning Scheme 2021* (the planning scheme) is the relevant local categorising instrument for the Project. The Project Site is located in the rural zone of the planning scheme. The purpose of the rural zone is to:

> *(a) provide for rural uses and activities*
>
> *(b) provide for other uses and activities that are compatible with:*
>
> *(i) existing and future rural uses and activities*
>
> *(ii) the character and environmental features of the zone*
>
> *(c) maintain the capacity of land for rural uses and activities by protecting and managing significant natural resources and processes*
>
> *(d) ensure sensitive land uses do not encroach into areas affected by hazardous levels of dust associated with mining activity.*

The planning scheme states that mining and exploration activities are to occur within rural areas.

The strategic framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs in the planning scheme area for the life of the planning scheme. For the purpose of describing the policy direction for the planning scheme, the strategic framework is structured in the following way:

- the strategic intent
- the following five themes that collectively represent the policy intent of the planning scheme:
  - liveable communities
  - diverse economy
  - protecting natural resources and the environment
  - safety from natural and other hazards
  - infrastructure for communities.

The Project is considered compliant with the strategic intent of the planning scheme. The Project will allow incremental continued eastward extension of coal operations in the resource currently being mined by the existing open cut mining operations at Saraji Mine. Located within a rural area and adjacent to compatible land uses, the Project represents a development and land use outcome that supports mining and resources sector of the region. It will produce metallurgical coal for export, generate economic development opportunities and result in increased investments and royalties for Queensland. It will also include direct and indirect opportunities for community development, education, health, social and recreational programs within the region.

The Project is considered compliant with strategic outcomes of the five themes of the planning scheme. An assessment of the Project against applicable strategic outcomes is provided in Table 4-9.

Table 4-9 Assessment against relevant strategic outcomes of the Isaac Regional Planning Scheme 2021

Strategic outcome	Assessment of Project
Liveable communities	
General	
3.3.1.1(14) Development preserves the cultural heritage values of local and state significance.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on cultural heritage values of local and state significance. Where there is the potential for significant impacts these have been avoided through design development. Where impacts cannot be avoided they will be suitably minimised and mitigated. Compliance

Strategic outcome	Assessment of Project
	with all provisions of the Project's CHMP will be maintained during all project works. The management of cultural heritage items is discussed in **Chapter 16 Cultural Heritage**.
3.3.1.1(15) Development does not diminish places or values of cultural significance to traditional owners.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on places or values of cultural significance to traditional owners. Where there is the potential for significant impacts these have been avoided through design development. Where impacts cannot be avoided, they will be suitably minimised and mitigated. Compliance with all provisions of the Project's CHMP will be maintained during all project works. The management of cultural heritage items is discussed in **Chapter 16 Cultural Heritage**.
Non-residential workforce accommodation	
3.3.1.3(2) Non-resident workforce accommodation is provided in response to a legitimate and demonstrated need.	The Project includes a proposed accommodation village to support the Project's construction. All non-local construction personnel would be accommodated in the construction accommodation village. Following the completion of construction, the construction accommodation village will be dismantled and removed from site. BMA will accommodate its non-local operational workforce in existing accommodation villages. The construction workforce will be determined by workforce planning, labour market conditions and general market conditions during detailed design. The construction workforce will be sourced locally, where possible. The social impacts and benefits of the Project are discussed in **Chapter 17 Social**.
3.3.1.3(3) Where need has been demonstrated in accordance with 3.3.1.3(2) the following applies: (i) non-resident workforce accommodation are located in areas that: A. do not result in unacceptable impacts, including cumulative impacts on established towns and communities including: • social services; • infrastructure; • built form character; • visual amenity; • economy; and B. contribute to the region's economy; and C. avoid conflicts with adjoining or nearby land; and	All non-local construction personnel will be accommodated in workforce accommodation villages, and the Project would discourage non-resident construction personnel from renting local housing, to avoid the potential to limit permanent residents' housing choices. The Project includes a proposed accommodation village to support the Project's construction. The village is proposed to have a capacity of up to 1,000 beds and be located along the eastern boundary of MLA 70383. All non-local construction personnel would be accommodated in the construction accommodation village. Following the completion of construction, the construction accommodation village will be dismantled and removed from site. BMA will accommodate its non-local operational workforce in existing accommodation villages, which is expected to include the Dysart single persons village (SPV), Buffel Park and Dysart Ausco located on a site owned by BHP Coal. The social impacts and benefits of the Project are discussed in **Chapter 17 Social**.

Strategic outcome	Assessment of Project
D. are or can be appropriately serviced with the necessary infrastructure; and E. avoid impacts on the planned orderly growth of established communities; (ii) non-resident workforce accommodation that is located within or in close proximity to an established town and community: A. is of a scale (size, extent and built form) in keeping with the character of the established community; and B. is designed to meet contemporary urban design standards so as to make a positive construction to the amenity and character of the established community; and C. provides onsite commercial services and facilities where they do not impact upon the economy of the established community; and D. is serviced by appropriate urban infrastructure; and E. provides a high level of residential amenity for its occupants and achieves best practice emergency site management, water sensitive urban design, crime prevention through environmental design (CPTED) and ecologically sustainable design; (iii) relocatable modular non-resident workforce accommodation buildings that do not meet the specific outcomes in 3.3.1.3(3)(ii)B are not located in established communities; (iv) non-resident workforce accommodation outside the region's established towns and communities: A. is located to avoid natural hazards and other hazards, and impacts upon visual amenity, infrastructure and ecologically sensitive areas; and B. provides a safe and functional living environment for its occupants, including reliable infrastructure to support essential utilities.	

Strategic outcome	Assessment of Project
Diverse economy	
Diverse rural economy	
3.4.1.1(1) Isaac Region has a strong and diverse rural economy with a mix of agricultural, animal husbandry, and complementary and value-adding activities, such as agri-tourism, associated with rural production. A wide range of activities including, grazing, cropping, horticulture, forestry, aquaculture, intensive animal industries and renewable energy facilities may occur on rural zoned land.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on grazing land or the agricultural sector. The economic impacts and benefits of the Project are discussed in **Chapter 18 Economics**.
Protecting natural resources and the environment	
Productive rural lands	
3.5.1.1(4) Important agricultural areas support high value agricultural activities in the region and are protected from fragmentation and encroachment by sensitive land uses.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on grazing land or the agricultural sector. The economic impacts and benefits of the Project are discussed in **Chapter 18 Economics**.
3.5.1.1(7) Stock routes are protected from encroachment by sensitive land uses or other development that might prevent or constrain current or future operations.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on stock routes. A secondary stock route (405ISAA) is located in the south of the Project Site where the Project's powerline is proposed. Extension of a powerline will intersect the stock route (405ISAA). If required, BMA will liaise with IRC and DOR regarding management and mitigation strategies for the temporary closure of the stock route during construction.
Extractive, mineral, gas and petroleum resources	
3.5.1.2(1) Mineral gas and petroleum resources are abundant in the region. These areas are protected from encroachment by sensitive land uses that might prevent or constrain current or future operations.	The Project will co-exist mutually and complement the existing extractive land uses surrounding the Project Site (i.e. Saraji Mine).
3.5.1.2(3) Key Resource Areas (KRAs) and their haul routes are shown on Map OM7 – Extractive Resources and Minerals Overlay Map. These areas are protected from encroachment by sensitive land uses that might prevent or constrain current or future operations.	The Project Site does not overlap with any KRAs. The Project will co-exist mutually and complement the existing extractive land uses surrounding the Project Site (i.e. Saraji Mine).
3.5.1.2(4) Extractive resource operations only occur where compatible with the intentions of the relevant zone and overlays applying to the site, and where impacts on visual amenity, the natural environment including Matters of State Environmental Significance or the	The Project will co-exist mutually and complement the existing extractive land uses surrounding the Project Site (i.e. Saraji Mine). Impacts to Commonwealth, State and local biodiversity interests have been assessed in **Chapter 6 Terrestrial Ecology**. The design development process for the Project has adopted an

Strategic outcome	Assessment of Project
safety and amenity of the surrounding area can be mitigated to an acceptable standard.	avoid, minimise, mitigate and offset approach in relation to areas of environmental value.
3.5.1.2(5) Extractive resource operations whether within a KRA or not are managed to avoid or mitigate to an acceptable standard, impacts including impacts on visual amenity, the natural environment and water quality and offsite impacts on adjoining uses caused by noise, dust, light, blasting or vibration.	The Project has assessed its potential environmental impacts on the surrounding land uses and has sought to avoid, minimise and mitigate potential environmental impacts. The Project will include a number of mitigation and management measures to mitigate potential adverse impacts on environmental values including visual amenity, the natural environment, water quality, noise, dust, light, blasting and vibration. A number of specific management plans will be prepared to address specific impacts and outline mitigation measures to be implemented during the construction and operational phase of the Project. This includes: • Weed and Pest Management Plan (construction phase only) • Rehabilitation Management Plan (construction and operational phase) • Topsoil Management Plan (construction and operational phase) • High Risk Species Management Plan (construction phase only) • Subsidence Management Plan, including vegetation health monitoring (operational phase) • Offset Management Plan (operational phase). An overarching Construction Environmental Management Plan (CEMP) will also be prepared to mitigate and manage potential impacts.
3.5.1.2(6) Resource extraction areas are progressively rehabilitated following extraction to restore the natural environment and to mitigate environmental impacts including impacts associated with dust.	BMA has developed a Rehabilitation Management Plan (RMP) for the Project, which includes rehabilitation objectives and proposed measures in consideration of the Department of Environment and Science (2018) Mined Land Rehabilitation Policy (refer **Chapter 5 Land Resources**).
Biodiversity, water quality and the natural environment	
3.5.1.3(1) Development avoids or mitigates impacts on Matters of National and State Environmental Significance and maintains a connected network of habitat areas. Where development results in a significant residual impact on these areas, the impacts are offset.	Impacts to Commonwealth, State and local biodiversity interests have been assessed in **Chapter 6 Terrestrial Ecology**. The design development process for the Project has adopted an avoid, minimise, mitigate and offset approach in relation to areas of environmental value. The Project will be subject to the EPBC Act Environmental Offsets Policy and the Queensland Environmental Offsets Framework. BMA proposes to provide land-based offsets through a staged offset strategy which will be finalised at issue of the environmental authority (mining) for the Project. The offset strategy will be based on determination of actual clearing areas as mining and associated incidental mine gas (IMG) management, and subsidence progress. This staged offset strategy will be aligned to BMA's mine planning cycle to allow accurate

Strategic outcome	Assessment of Project
	identification of actual offsets required in each stage of mining (refer **Appendix C-2 Offset Strategy**).
3.5.1.3(2) Development ensures impacts on local biodiversity values are minimised.	Impacts to Commonwealth, State and local biodiversity interests have been assessed in **Chapter 6 Terrestrial Ecology**. The design development process for the project has adopted an avoid, minimise, mitigate and offset approach in relation to areas of environmental value.
3.5.1.3(3) Development avoids the introduction or spread of pest plant and animals in the region.	Impacts to Commonwealth, State and local biodiversity interests have been assessed in **Chapter 6 Terrestrial Ecology**. The design development process for the project has adopted an avoid, minimise, mitigate and offset approach in relation to areas of environmental value.
3.5.1.3(4) Development minimises disturbances to natural topography and avoids changes to natural waterways, their bed and banks and riparian vegetation.	The Project has assessed its potential environmental impacts on the surrounding land uses and has sought to avoid, minimise and mitigate environmental impacts. The Project will include a number of mitigation and management measures to mitigate potential adverse impacts on environmental values including waterways and riparian vegetation. An overarching CEMP will also be prepared to mitigate and manage potential environmental impacts (refer **Chapter 6 Terrestrial Ecology** and **Chapter 8 Surface Water Resources**).
3.5.1.3(5) Development avoids the disturbance to areas of potential acid sulfate soil or treats disturbed soils to a standard required to neutralise impacts.	The Project has assessed its potential environmental impacts on the surrounding land uses and has sought to avoid, minimise and mitigate environmental impacts. The Project will include a number of mitigation and management measures to mitigate potential adverse impacts on environmental values including acid sulfate soils. An overarching CEMP will also be prepared to mitigate and manage potential environmental impacts (refer **Chapter 5 Land Resources**).
3.5.1.3(6) Urban stormwater is managed to mitigate impacts upon the region's waterways and their water quality.	The Project has assessed its potential environmental impacts on the surrounding land uses and has sought to avoid, minimise and mitigate environmental impacts. The Project will include a number of mitigation and management measures to mitigate potential adverse impacts on environmental values including waterways and water quality. Potential adverse impacts to surface water will be mitigated through the implementation of an Erosion and Sediment Control Plan (ESCP), to align with the principles of International Erosion Control Association (IECA) Best Practice Erosion & Sediment Control guidelines, during construction and operation of the Project. An overarching CEMP will also be prepared to mitigate and manage potential environmental impacts. Development of a water quality monitoring program is proposed, designed to measure the effectiveness of the impact mitigation measures implemented during the Project. Based on the

Strategic outcome	Assessment of Project
	implementation of recommended management and mitigation measures and validation through monitoring programs, the residual risk of the Project having adverse impacts on receiving surface water is expected to be minor (refer **Chapter 8 Surface Water Resources**).
3.5.1.3(7) The environmental values of the region's waterways are protected or enhanced, and development does not adversely impact on the quality of receiving waters, including waterways, wetlands and Great Barrier Reef waters.	The Project Site is located approximately 490 km upstream from the mouth of the Fitzroy River and subsequently, the Great Barrier Reef World Heritage Area. Detrimental impact upon this area is considered unlikely due to distance, the underground nature of the mine and the extent of controls over mine water (refer **Chapter 8 Surface Water Resources**).
3.5.1.3(8) Development does not adversely impact upon water quality within the region's water supply catchments including Theresa Creek Dam catchment, Nebo Borefields, St Lawrence Creek Weir catchment and the Burdekin Falls Regulated Dam catchment.	Water supply for the Project will be provided via the existing water network allocations supplying Saraji Mine, however the Project water management system has been designed to operate self-sufficiently with the benefits of being connected to the broader BMA network to allow water sharing where beneficial. As such, the Project is not considered to adversely impact upon water quality within the region's water supply catchments (refer **Chapter 8 Surface Water Resources**).
3.5.1.3(13) Development in or adjacent to protected areas mitigates ecological impacts on these areas.	There are no National Parks or State Reserves within or adjacent to the Project Site. The nearest National Park is the Peak Range National Park, located approximately 44 km west of the Project Site. As such, there is not expected to be a significant detrimental impact on protected areas.
Safety from natural and other hazards	
All hazards	
3.6.1.1(1) Development does not materially increase the extent or severity of natural hazards or their impacts.	Areas of the Project Site are within mapped flood hazard areas and medium potential bushfire hazard. The Project Site is not within a landslide hazard area, storm tide inundation area or erosion prone area. **Chapter 8 Surface Water Resources** assesses the potential for hydrology impacts. **Chapter 20 Hazards, Health and Safety** identifies mitigations for flooding and bushfire.
3.6.1.1(2) Exposure of people and property to hazards is avoided, or where it is not possible to avoid the hazards, the risks are mitigated to an acceptable or tolerable level.	Areas of the Project Site are within mapped flood hazard areas and medium potential bushfire hazard. The Project Site is not within a landslide hazard area, storm tide inundation area or erosion prone area. **Chapter 8 Surface Water Resources** assesses the potential for hydrology impacts. **Chapter 20 Hazards, Health and Safety** identifies mitigations for flooding and bushfire.

Strategic outcome	Assessment of Project
3.6.1.1(5) Development does not reduce the functions of landforms or vegetation in providing protection against natural hazards.	The Project has considered the impacts of potential natural hazards and will manage these hazards to minimise potential impacts to asset, health and safety to so far as is reasonably practicable. The values that have the potential to be impacted throughout the Project lifecycle will be managed in accordance with an Emergency Management Plan, engineering procedures, and relevant Australian Standards to ensure compliance with the legislative requirements (refer **Chapter 20 Hazards, Health and Safety**).
3.6.1.1(6) The cost to the public of measures to mitigate the risks of natural hazards is minimised.	The Project has considered the impacts of potential natural hazards and will manage these hazards to minimise potential impacts to asset, health and safety to so far as is reasonably practicable. The values that have the potential to be impacted throughout the Project lifecycle will be managed in accordance with an Emergency Management Plan, engineering procedures, and relevant Australian Standards to ensure compliance with the legislative requirements (refer **Chapter 20 Hazards, Health and Safety**).
3.6.1.1(7) Activities involving the manufacture or bulk storage of hazardous material are not located in hazard areas.	Chemicals stored and handled as part of construction or operations activities will be managed in accordance with the *Coal Mining Safety and Health Act 1999*, the relevant Australian Standards and the requirements of the Safety Data Sheet (SDS). SDS information will be obtained from the supplier of these chemicals and stored in an easily accessible location. Fuel storage onsite will be predominantly diesel, and storage design will comply with AS1940:2017. The Storage and Handling of Flammable and Combustible Liquids. Ignition sources will be controlled to avoid fire involving bulk fuel oil (refer **Chapter 20 Hazards, Health and Safety**).
Flood hazard	
3.6.1.2(1) Sensitive land uses avoid flood hazards, or where it is not possible to avoid the hazard, the risks are mitigated to an acceptable or tolerable level.	The potential for flooding impacts on surface infrastructure (during flooding and high rainfall events) will be mitigated by the provision of adequate pumping systems and water storages. The underground portal will be designed to 1 in 1,000 year Annual Exceedance Probability (AEP) flood immunity to mitigate inundation of the underground mine. In addition, the Project will have an Emergency Management Plan that will include preparatory measures for large flood events to minimise both environmental and health and safety risks. **Chapter 20 Hazards, Health and Safety** identifies mitigations for flooding.
Bushfire and landslide hazard	

Strategic outcome	Assessment of Project
3.6.1.4(2) Development within or near bushfire and/or landslide hazard areas incorporates appropriate siting, design and management practices to mitigate risk to an acceptable or tolerable level.	The design of the Project Site will ensure adequate emergency service access. Consideration will be given to the provision and maintenance of access where local roads can facilitate emergency access, first response firefighting, accessible and sufficient water supply for firefighting purposes and safe evacuation. **Chapter 20 Hazards, Health and Safety** identifies mitigations for bushfire.
Safety and emissions	
3.6.1.5(1) Development that is likely to generate off-site adverse impacts is adequately separated from sensitive land uses and natural receiving environments, and is protected from encroachment by sensitive land uses. Such development may include: (a) wastewater treatment and disposal facilities; (b) solid waste management sites; (c) industrial development; (d) extractive industry; (e) intensive animal industries such as feedlots; (f) high pressure gas pipelines; and (g) aquaculture.	The Project will co-exist mutually and complement the existing extractive land uses and supporting infrastructure surrounding the Project Site (i.e. Saraji Mine).
3.6.1.5(2) Development with the potential to cause harm or nuisance as a result of air, noise or odour emissions is appropriately located, designed and managed to minimise impacts upon existing sensitive land uses and natural receiving environments.	The Project will co-exist mutually and complement the existing extractive land uses and supporting infrastructure surrounding the Project Site (i.e. Saraji Mine). An overarching CEMP will also be prepared to mitigate and manage potential environmental impacts. The Project will implement emission controls of pollutants to the atmosphere and will be incorporated into the Project environmental management system. Coal dust from stockpiles will be managed by dust suppression systems such as the use of water sprays. Dust from mine traffic and maintenance vehicles on haul roads will be managed using speed controls and road watering. The Project will also focus on the use of fuel efficient mining equipment and maintaining mining equipment in good working condition to ensure particulate emissions are minimised. Noise and vibration sources from operational and maintenance work involving heavy machinery will incorporate appropriate noise mitigation equipment and devices including mufflers and acoustic barricades. Plant such as conveyors, pumps and motors will be maintained to adequate working conditions to minimise unusually loud noise. BMA will implement control measures where practical.
3.6.1.5(3)	The Project will co-exist mutually and complement the existing extractive land uses and supporting infrastructure surrounding the Project Site (i.e. Saraji Mine).

Strategic outcome	Assessment of Project
Development that has the potential to cause land or water contamination is located, designed and managed to minimise environmental and community health risks.	An overarching CEMP will also be prepared to mitigate and manage potential environmental impacts. Where practical, the following measures will be implemented prior to commencing Project works: • directing excavation works, spoil or topsoil storage during planned operations and remediation to avoid potentially contaminated areas • design drainage to minimise the amount of run-off occurring near, or across, potentially contaminated land • undertake an environmental assessment of potentially contaminated sites that will be impacted during the operational phase of the Project. A preliminary site investigation will be undertaken if construction activities are to be undertaken in areas where potential for contamination is identified, or on land listed on the environmental management register (EMR) or contaminated land register (CLR). If the findings of the preliminary investigation identify that contamination is significant, a detailed site investigation will be undertaken in order to assess the health and environmental risks of the contaminants. A management and remediation plan will then be developed to minimise the impact of these contaminants.
3.6.1.5(4) Development involving the use, storage and disposal of hazardous materials and hazardous chemicals, dangerous goods and flammable or combustible substances is located, designed and managed to minimise the health and safety risks to communities.	Chemicals stored and handled as part of Project construction or operations activities will be managed in accordance with the *Coal Mining Safety and Health Act 1999*, the relevant Australian Standards and the requirements of the SDS. SDS information will be obtained from the supplier of these chemicals and stored in an easily accessible location. Fuel storage onsite will be predominantly diesel, and storage design will comply with AS1940:2017 The Storage and Handling of Flammable and Combustible Liquids. Ignition sources will be controlled to avoid fire involving bulk fuel oil (refer **Chapter 20 Hazards, Health and Safety**).
Infrastructure for communities	
3.7.1.1(5) Development is undertaken in a way that minimises user demands on, and optimises available capacity and established investment in, infrastructure networks.	Due to the existing level of development on the Project Site surrounds, there is not expected to be a significant detrimental impact on the safe and efficient operation of transport networks and infrastructure. The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts. A Traffic Impact Assessment is provided in **Chapter 14 Transport**. Transport and Infrastructure safety and access have also been assessed, including mitigation measures where necessary as provided in **Chapter 14 Transport.**

Strategic outcome	Assessment of Project
3.7.1.1(8) Whole of life costs, including both establishment and ongoing operation and maintenance costs, are minimised.	Due to the highly disturbed nature of the Project Site, there is not expected to be a significant detrimental impact on the safe and efficient operation of transport networks and infrastructure. The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts. The economic impacts of the Project are discussed in **Chapter 18 Economics**.
3.7.1.1(10) On-site wastewater systems maintain human health and safety, the amenity of the immediate locality and minimise adverse impacts on water quality and the natural environment.	On-site wastewater systems will be managed in accordance with the CEMP for the Project to minimise adverse impacts on water quality and the natural environment (refer **Chapter 8 Surface Water Resources**).
3.7.1.1(11) Infrastructure corridors and sites for transport, water supply, gas pipelines and sewerage, waste, energy and telecommunications are protected from development and hazards that would undermine their safe, efficient and unencumbered operation or expansion. Key infrastructure corridors and sites are shown on Map OM11—Regional Infrastructure Overlay Map.	The Project will co-exist mutually and complement the existing extractive land uses and supporting infrastructure surrounding the Project Site (i.e. Saraji Mine). The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts.
3.7.1.1(12) Infrastructure corridors and sites are co-located wherever practicable to minimise impacts on landscapes, the natural environment and communities.	The Project will co-exist mutually and complement the existing extractive land uses and supporting infrastructure surrounding the Project Site (i.e. Saraji Mine). The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts.
3.7.1.1(13) Development does not impact upon the safe and efficient operation of the transport network, airports and aviation facilities; and the rail network within the region.	The Project is not expected to be a significant detrimental impact on the safe and efficient operation of transport networks and infrastructure. The Project has assessed its potential impacts on the surrounding land uses and has sought to avoid, minimise and mitigate impacts. A Traffic Impact Assessment is provided in **Chapter 14 Transport**. Transport safety and access have also been assessed, including mitigation measures where necessary, which are outlined in **Chapter 14 Transport**.
Social infrastructure	
3.7.1.2(1) Residents, visitors and non-resident workers have access to a network of well-located social infrastructure that meets community needs and promotes a rich and active community life.	Construction workers accommodated by BMA will have access to health facilities and service provision including, gyms, outdoor recreation space, sporting fields, sports equipment, social meeting places and barbecue facilities. BMA will work with local community organisations and the IRC to identify strategies which will increase human resources and skills available to support recreation and cultural facilities, including sporting club as these institutions work to foster community life.

Strategic outcome	Assessment of Project
	All BMA employees are eligible for company-provided accommodation options which include units, houses and workforce accommodation village accommodation. Allocation of accommodation options is determined taking into account an employee's needs, the number of dependent children and other relevant family circumstances. BMA provides significant subsidies for housing costs, and also provides an ongoing housing maintenance and upgrades program. The social impacts and benefits of the Project are discussed in **Chapter 17 Social**.
Waste management	
3.7.1.3(1) Waste management infrastructure is provided and managed to maintain the health, wellbeing and amenity of the community and the natural environment, and to minimise visual impacts.	Waste management infrastructure will be provided to maintain the health, wellbeing and amenity of the community and the natural environment. Project wastes generated from construction and operation will be managed through systematic implementation of a site-specific Waste Management and Minimisation Plan that details a program for safe reuse, recycling or disposal of each waste stream in accordance with the waste and resource management hierarchy and legislative compliance requirements (i.e. EA and waste tracking requirements) (refer **Chapter 15 Waste Management**). General wastes from the Project will be recycled and reused on site where practicable. Waste materials that are known to attract vermin will be stored and handled in a hygienic manner prior to removal by a licensed waste contractor. General wastes will be transported for disposal to a nearby landfill.
3.7.1.3(2) Development provides for the safe and efficient storage and collection of waste and recyclable materials, commensurate with the type and amount of waste generated.	Waste management infrastructure will be provided for the safe and efficient storage and collection of waste and recyclable materials. Project wastes generated from construction and operation will be managed through systematic implementation of a site-specific Waste Management and Minimisation Plan that details a program for safe reuse, recycling or disposal of each waste stream in accordance with the waste and resource management hierarchy and legislative compliance requirements (i.e. EA and waste tracking requirements) (refer **Chapter 15 Waste Management**). To prioritise segregation of wastes, waste management areas and receptacles distributed onsite will be easily identifiable, using clear signage and colour coding. Waste handling and storage will aim to control environmental impacts (such as odours, noise from transfer and transport, dust from transfer and transport, leachate from storage vessels and vermin/pests). Waste will be sorted and stored for minimum time prior to removal by a licensed contractor to a facility lawfully allowed to accept such waste. Waste generation and

Strategic outcome	Assessment of Project
	movements will be monitored, recorded and reported routinely.

4.4 Potential impacts and mitigation measures

4.4.1 Agricultural land use and values

The Project has the potential to impact on existing land uses through:

- direct loss of agricultural land
- land degradation
- contamination of land underlying the Project
- dust and noise which may affect stock.

The Project Site traverses an SCA (refer Figure 4-5), however disturbance will be minor given the nature of the powerline infrastructure. Further detail is provided in **Chapter 5 Land Resources**. As outlined in section 4.2.8, BMA has obtained a RIDA and SCL trigger mapping amendment.

MLA 70383 and MLA 70459 are predominantly used for grazing which can continue during mining outside of operational longwall panels. Conversion of these areas for mining activities will generate net economic benefits associated with the construction and operation of the mine, including increased employment and increased local business opportunities.

The Project is highly complementary with the existing Saraji Mine. The area has experienced ongoing land use change as the mine has developed over the past decades. The development of the Project will not significantly change the existing land use in the immediate area. During the operation of the mine, existing land uses such as grazing may be able to continue within the proposed mining lease in areas not directly impacted by the mine and supporting infrastructure.

Rehabilitation will be undertaken with consideration of the *Mined Land Rehabilitation Policy* (DES, 2018a) and BHP's Queensland Coal Rehabilitation Completion Criteria (BHP, 2018c). BMA will comply with the conditions of the RIDA.

Other impacts on the agricultural land uses are the potential effects of noise and dust on livestock. Noise impacts are not expected to be discernible outside the Project Site. Dust impacts associated with the Project are also predicted to be negligible outside the Project Site (refer to **Chapter 11 Air Quality and Greenhouse Gas** and **Chapter 12 Noise and Vibration**). As such, agricultural and grazing land uses surrounding the Project Site will continue and generally co-exist with the Project.

4.4.2 Residential and other sensitive land uses

Land uses that may be considered sensitive land uses and that may be impacted by the Project are homesteads and rural residences.

There are two homesteads likely to be directly impacted by the Project due to their location within the Project Site, being Meadowbrook (currently not occupied) and Lake Vermont (currently occupied). These properties are detailed in 4.2.1 and shown on Figure 4-2. When required for mining or subject to mining impacts the homesteads will be vacated.

BMA has agreements in place the owners of Saraji Homestead 2 and Saraji Homestead 3 managing interactions with mining activities at Saraji Mine. Homesteads with conduct and compensation agreements in place for potential dust or noise nuisance impacts arising from mining operations are not considered sensitive receptors but identified and considered in assessments for completeness.

Properties may be impacted by:

- dust and other windblown particulate contaminants (refer to **Chapter 11 Air Quality and Greenhouse Gas**)
- noise and acoustic intrusion (refer to **Chapter 12 Noise and Vibration**)

- reductions in visual amenity (refer to **Chapter 13 Scenic Amenity and Lighting**)
- increased vehicular traffic and associated impacts on amenity (refer to **Chapter 14 Transport**).

Studies undertaken for the EIS have indicated that, with mitigation measures in place, the Project will have low or negligible impact on the amenity of adjacent landholders and the listed sensitive receivers.

To mitigate the sensitive nature of these homesteads, BMA has purchased Lake Vermont and Meadowbrook. BMA also has compensation agreements with some of the other landowners near the Project Site to address and manage potential impacts.

4.4.3 Utilities and services

The EWPC Southern Extension Water Pipeline is to the west of the proposed activities and is not expected to be impacted by the Project. The existing pipeline will be relocated and reconnected into a new infrastructure and transport corridor along the eastern boundary of MLA 70383 and northern boundary of MLA 70459. The relocation works will be undertaken in consultation with Sunwater and will ensure continuity of water supply to the Lake Vermont Mine is maintained. A new water pipeline is also proposed in the northern extent of the Project Site to transfer water to the process water dam from mining and process activities. The existing powerlines will also be relocated into the proposed infrastructure corridor.

4.4.4 Transport infrastructure

Roads

A transport impact assessment detailing the expected traffic generation potential and associated impacts on the road network for the Project is presented within **Chapter 14 Transport**.

The state-controlled Peak Downs Highway may be impacted by the Project during the construction phase and special access provisions may need to be implemented. To address impacts, BMA will undertake consultation with DTMR and seek a Road Corridor Permit and Traffic Control Permits under the *Transport Infrastructure Act 1994* (TI Act) prior to works commencing.

The Project will require a new intersection into the Saraji Road, a local road managed and maintained by IRC, an intersection into the Lake Vermont Road, a BMA-owner (private) road and a new transportation and infrastructure corridor. Additionally, an internal access road will be constructed to provide access to Lake Vermont Road. BMA will consult with IRC to identify relevant design requirements for the intersection and ensure necessary local road permits are obtained. The proposed intersections will not affect the existing road network (refer to **Chapter 14 Transport**).

Railways

The Goonyella rail system runs along the western boundary of ML 70142 and the existing Lake Vermont QR rail spur encroaches within the Project Site. The Project will involve the construction of a new rail spur; balloon loop and signalling system to connect in with the Goonyella rail system.

The volume of coal to be transported via the network will be within Aurizon's existing approval limits. As such, no additional impacts or approvals are expected.

4.4.5 Native title

A search of the NNTT online Native Title Vision mapping did not identify any claims or determinations over the Project Site. BMA understand no further native title notification or agreements are required for the Project given the nature of the tenure underlying the Project Site as discussed in Section 4.2.6. BMA will ensure relevant Project works in ML, MLA and off-lease areas adhere to NT Act obligations and consult with relevant parties.

4.5 Summary and conclusions

This chapter has assessed the existing and proposed land uses associated with the Project. It has also assessed the suitability of the proposed land use and identified applicable land use constraints. The Project is highly complementary with the existing Saraji Mine and regional setting. The area has experienced ongoing land use change as mining has developed over past decades. The development of the Project will not significantly change the existing land use in the immediate area in the long term.

During the operation of the mine, existing land uses such as grazing may be able to continue within the proposed mining lease in areas not directly impacted by the mine and supporting infrastructure. Areas converted for mining activities will generate net economic benefits associated with the construction and operation of the mine, which include increased employment and positive secondary impacts on the local economy through increased local business opportunities. Rehabilitation will occur progressively according to the rehabilitation methods and post mining land suitability identified in Appendix K-1 Rehabilitation Management Plan. A Progressive Rehabilitation and Closure Plan will be developed prior to construction commencing and will demonstrate that the proposed Project will be rehabilitated to a safe and stable landform able to sustain post-mining land uses. Mitigation for potential land use impacts are also assessed and mitigated through **Chapter 5 (Land Resources), Chapter 11 (Air Quality and Greenhouse Gas), Chapter 12 (Noise and Vibration), Chapter 13 (Scenic Amenity and Lighting)** and **Chapter 14 (Transport).**