



PROJECT CHINA STONE

Land Use

5

CONTENTS

5	Land Use	5-1
5.1	Introduction	5-1
5.2	Regulatory Requirements	5-1
5.2.1	State Requirements	5-1
5.2.2	Regional Planning Framework	5-2
5.2.3	Local Planning Framework	5-2
5.3	Description of Surrounding Area	5-3
5.3.1	Regional Land Use	5-3
5.3.2	Surrounding Land Use	5-3
5.3.3	Sensitive Receptors	5-4
5.4	Description of the Project Site	5-5
5.4.1	Natural Features	5-5
5.4.2	Zoning	5-5
5.4.3	Land Ownership	5-6
5.4.4	Current Land Use	5-6
5.4.5	Native Title	5-7
5.5	Sensitive Environmental Areas	5-7
5.6	Land Use Compatibility	5-7

Tables

Table 5-1	Sensitive Receptors
Table 5-2	Land Ownership and Land Use Within and Adjoining the Project Site
Table 5-3	Potential Impacts on Land Use Within the Project Site

Figures

Figure 5-1	Galilee Basin State Development Area
Figure 5-2	Regional Planning Setting
Figure 5-3	Land Use
Figure 5-4	Land Ownership within the Project China Stone Site

5 LAND USE

5.1 INTRODUCTION

This section of the Environmental Impact Statement (EIS) provides an overview of land use planning provisions, land use and land ownership relevant to Project China Stone (the project).

5.2 REGULATORY REQUIREMENTS

The regulatory requirements discussed in the following section are applicable to land use on the project site.

5.2.1 State Requirements

Sustainable Planning Act 2009

The *Sustainable Planning Act 2009* (SP Act) provides the framework for Queensland's planning and development assessment system. Under the provisions of the SP Act, the project is considered an exempt development as it will be located within a mining lease authorised by the *Mineral Resources Act 1989*. No approvals under the SP Act are, therefore, required for the project.

State Planning Policy 2014

The Queensland *State Planning Policy 2014* (SPP) is a statutory planning instrument designed to identify land uses that are of interest to the state. The SPP was designed to assist local governments when preparing or amending local planning schemes or assessing development applications. The SPP describes 16 state interests under five broad themes. Of particular relevance to the project are the following state interests:

- Communities and housing supply;
- Agriculture (including priority agricultural areas, strategic cropping areas and strategic environmental areas);
- Mining and extractive areas (including key resource areas);
- Biodiversity;
- Water quality;
- Cultural heritage;
- Safety and hazards; and
- State transport infrastructure including aviation facilities and ports.

The SPP is not applicable to the project as the project is an exempt development under the SP Act. In addition, Queensland Government mapping shows the project is not located within an area of state interest. However, the SPP has been used as a guidance document to address potential environmental impacts arising from the project. The impacts of the project on the state interests discussed within the SPP are discussed in relevant sections of the EIS.

Galilee Basin State Development Area

The Galilee Basin State Development Area (GBSDA) was declared in July 2014 to facilitate the development of the Galilee Basin. The GBSDA comprises two multi-user rail corridors connecting the Galilee Basin to the Port of

Abbot Point (Figure 5-1). Land use and infrastructure planning and development within the GBSDA is controlled by the Galilee Basin state development scheme.

The project site is located to the north-west and beyond the boundaries of the GBSDA. However, the off-site component of the project rail line is likely to extend into the GBSDA. The off-site rail would be subject to separate environmental assessment and approval.

5.2.2 Regional Planning Framework

Regional Planning Interests Act 2014

The Queensland *Regional Planning Interests Act 2014* (RPI Act) and the associated *Regional Planning Interest Regulation 2014* (RPI Regulation) identifies and manages areas of Queensland that are of regional interest. These areas include:

- Priority agricultural areas;
- Priority living areas;
- Strategic cropping areas (formally strategic cropping land); and
- Strategic environmental areas.

A development approval is required when a proposed activity is located within an area of regional interest. The Queensland Government mapping of these areas shows the project is not located within an area of regional interest. The RPI Act is, therefore, not applicable to the project.

Mackay, Isaac and Whitsunday Regional Plan, 2012

The project site is located within the Mackay, Isaac and Whitsunday (MIW) Region. The *Mackay, Isaac and Whitsunday Regional Plan 2012* (MIW Regional Plan) (Department of Local Government and Planning, 2012) is a statutory document under the SP Act that provides the framework for growth and development in the MIW region and builds on the vision and content of the previous non-statutory *Whitsunday Hinterland and Mackay Regional Plan 2006*. It outlines the desired outcomes for the region and the principles, policies and programs needed to achieve these outcomes over the next 20 years. These outcomes are designed to help achieve protection of the state interests defined under the SPP.

As the project is an exempt development under the provisions of the SP Act, the MIW Regional Plan does not apply to the project. However, the MIW Regional Plan has been used as a guidance document to address social, planning and development issues that may arise from the project, where relevant. The social impacts of the project are discussed in Section 18 – Socio-Economic Impact Assessment.

5.2.3 Local Planning Framework

The project site is located at the north-western edge of the Isaac Local Government Area (Isaac LGA) (Figure 5-2). The Isaac LGA consists of the former shires of Belyando, Nebo and Broadsound collectively, and development within the Isaac LGA is controlled by the provisions of the existing planning schemes developed for these former shires. Within the Isaac LGA, the project site is located within the area defined under the *Planning Scheme for Belyando Shire 2008*.

The project site is also located close to the southern boundary of the Charters Towers LGA (Figure 5-2). The Charters Towers LGA consists of the former Charters Towers City Council and the Dalrymple Shire Council. Development within the Charters Towers LGA is controlled by the provisions of the existing planning schemes developed for these former Councils. The site is located in proximity to the area defined under the *Planning Scheme for the Dalrymple Shire 2006* (within the Charters Towers LGA).

Under the provisions of the SP Act, local planning schemes are required to be considered during the development assessment process. However, as previously discussed, the project is considered an exempt development under the provisions of the SP Act and, therefore, the local planning schemes do not apply to the project.

5.3 DESCRIPTION OF SURROUNDING AREA

5.3.1 Regional Land Use

The project is located in the MIW region, at the north-western edge of the Isaac LGA and in proximity to the southern boundary of the Charters Towers LGA. The region has predominantly been a cattle grazing area since the mid-1800s. Agricultural activities have largely been constrained by unreliable permanent water sources and regional climatic conditions. However, pastoralism has been, and continues to be, a major focus in the region.

Grazing activities have co-existed with mining, particularly for coal, copper and gold. Coal resources were discovered during the mid-1800s and considerable thermal coal deposits are known to exist in the Galilee Basin. The remote location of the Galilee Basin has previously precluded the development of large-scale mining and associated infrastructure. However, due to increased global demand for thermal coal, mining exploration has been increasingly undertaken within the region.

There are currently no operating mines in the Galilee Basin. Six projects (including the project) are currently seeking approval or have recently gained approval in the Galilee Basin. Four of these projects are located in the southern Galilee Basin near the township of Alpha, which is over 120 km to the south of the project site (Figure 5-1). These are:

- Kevin's Corner Coal Project (Mining Lease Application (MLA) 70425): proposed 30 Million tonnes per annum (Mtpa) (product) open cut and underground coal mine. It is located approximately 125 km to the south of the project site;
- Alpha Coal Project (MLA 70426): proposed 30 Mtpa (product) open cut coal mine which includes a proposed rail line linking the site to Abbot Point. It is located approximately 140 km to the south of the project site;
- Galilee Coal Project (Northern Export Facility) (MLA 70454): proposed 40 Mtpa (product) underground and open cut coal mine which includes a proposed rail line linking the site to Abbot Point. It is located approximately 160 km to the south of the project site; and
- South Galilee Coal Project (MLA 70453): proposed 17 Mtpa (product) open cut and underground coal mine. It is located approximately 200 km to the south of the project site.

The project site is very remote, with the closest urban centres being Charters Towers, which is approximately 285 km by road to the north, and Clermont, which is approximately 260 km by road to the south-east (Figure 5-1). Townsville, Mackay and Emerald are the nearest regional centres to the project site and are located approximately 425 km north, 500 km east and 325 km south, respectively. The project site is accessible via the Gregory Developmental Road which is a two-lane sealed and unsealed road running from Georgetown in the north, through Charters Towers and south to Clermont. There are no towns along the 350 km stretch of the Gregory Developmental Road between Charters Towers and Clermont; only a roadhouse and service station known as Belyando Crossing.

5.3.2 Surrounding Land Use

Land use surrounding the project site is predominantly cattle grazing and resource exploration (Figure 5-3). Land use is discussed in the following sections.

Grazing

The primary land use within the project site and surrounding area is cattle grazing.

Government mapping shows there are no priority agricultural areas, strategic cropping areas or strategic environmental areas within the project site. There is also no Agricultural Land Classification Class A or B within the project site.

Resource Exploration and Mining

Resource exploration has been ongoing in the Galilee Basin since the mid-1800s, with an increase in coal exploration in recent years. The project site is surrounded by mining exploration tenements and figures showing the location of these tenements are provided in Section 4 – Project Description.

The Carmichael Coal Mine and Rail Project (CCM&RP) is a proposed 60 Mtpa (product) open cut and underground coal mine which includes a proposed rail line linking the mine site to Abbot Point. The proposed Carmichael Mine site adjoins the project site to the south-east (Figure 5-3). The CCM&RP is currently in the approval phase.

Residences

As previously stated, the project site is remote. The nearest settlement to the project site is Belyando Crossing (population of approximately 5 people), which is located approximately 140 km by unsealed property access roads to the east of the project site (Figure 5-1).

The Moonmoo Homestead (receptor R1) is the nearest rural residence and is located 7 km to the west of the project site (Figure 5-3). A number of other isolated rural residences have been identified as sensitive receptors for the project and are discussed in Section 5.3.3.

The CCM&RP operations accommodation camp (receptor R7) is also planned to be located approximately 28 km south-east of the project site (Figure 5-3) and, once constructed, will house non-resident mine workers.

Recreation

Lake Buchanan is located approximately 20 km to the north-west of the project site (Figure 5-3). The land around the lake is predominantly used for grazing. Despite being located on private property, Lake Buchanan is utilised by the local community for recreational activities such as water-skiing, camping and picnics. There is a restricted area (RA) 385 (reference 43403) around Lake Buchanan which excludes mining and exploration tenements under the *Mineral Resources Act 1989*. The project will not impact on this restricted area.

Wilandspey Conservation Park is located approximately 25 km to the east of the project site (Figure 5-3). The park was created in 1970 and covers 5,200 ha. Wilandspey Conservation Park is used for outdoor recreational activities, tourism and for the preservation of natural ecosystems.

The Blackwood National Park and Nairana National Park are located more than 50 km to the east of the project site (Figure 5-2) and used for outdoor recreation activities and conservation. Epping Forest National Park is also located approximately 65 km to the south-east of the project site but is a scientific national park and is closed to the public.

Commercial

Belyando Crossing provides a number of services to the surrounding community including a caravan park, roadhouse, rest stop and hotel. It is the only fuel stop along the Gregory Developmental Road between Charters Towers and Clermont.

5.3.3 Sensitive Receptors

Sensitive receptors that have been identified in the vicinity of the project site include a number of isolated rural residences and the proposed CCM&RP accommodation village. Sensitive receptors are listed in Table 5-1 and illustrated in Figure 5-3. These receptors are representative of the nearest residences to the project site in the region.

Air quality, noise and visual amenity impacts on sensitive receptors have been assessed and the results are summarised in Section 15 – Air Quality, Section 16 – Noise and Vibration and Section 17 – Visual Amenity.

Table 5-1 Sensitive Receptors

REF NO.	LOCATION
R1	Moonoomoo Homestead
R2	Dooyne Outstation
R3	Carmichael Homestead
R4	Old Hyde Park Homestead (unoccupied)
R5	Bowie Homestead
R6	Hyde Park Homestead
R7	Carmichael Coal Mine and Rail Project Proposed Accommodation Village
R8	Doongmabulla Homestead
R9	Ulcanbah Homestead
R10	Kyong Homestead
R11	Scott Homestead
R12	Ronlow Park Homestead
R13	Bulliwallah Homestead
R14	Moray Downs Homestead
R15	Yarrowmere Homestead

5.4 DESCRIPTION OF THE PROJECT SITE

5.4.1 Natural Features

The project site comprises approximately 20,000 ha of well vegetated land, with low-lying scrub in the south and east and a densely vegetated ridgeline, known as Darkies Range, running north to south through the western portion of the site (Figure 5-3).

Vegetation mapping indicates that the south-eastern portion of the site is characterised by flat to undulating plains with sandy loam soils that support large expanses of savannah woodlands. These sand plains graduate to elevated sandstone ranges to the north and west of the project site that support low Eucalyptus woodlands and shrublands. The project site itself is relatively dry and is characterised by ephemeral drainage lines, two seasonal wetlands and artificial farm dams.

5.4.2 Zoning

The project site is located within the former shire of Belyando. The zoning provisions detailed in the applicable planning scheme indicates that the land within and surrounding the project site is zoned 'rural'. There is also a small protected area, labelled as a 'water body (swamp)' on the project site. This water body is consistent with the location of the Northern Seasonal Wetland, identified during the aquatic ecology assessment. The project impacts on this wetland are discussed in Section 10 – Aquatic Ecology.

5.4.3 Land Ownership

Land ownership within and adjoining the project site is shown in Figure 5-4 and described in Table 5-2. The project site is located on three parcels of crown land, leased by three separate lessees. There are an additional two parcels of land that adjoin the site. The proponent has commenced discussions with all affected landowners in relation to obtaining access to the land for the project. It is estimated that one family of two people reside outside the project site on land directly affected by the project.

Table 5-2 Land Ownership and Land Use Within and Adjoining the Project Site

REF. NO.	REGISTERED LOT AND PLAN	REGISTERED OWNER	REGISTERED LESSEES / TRUSTEES	LAND USE
1	Lot 2493 Plan PH 771	Crown Land	Lessee: Brian Allan Corbett Lorraine Ellen Corbett	Grazing
2	Lot 3978 Plan PH 772	Crown Land	Lessee: Coovin Pastoral Company Pty Ltd (as Trustee)	Grazing
3	Lot 662 Plan PH 1491	Crown Land	Lessee: Adani Mining Pty Ltd	Grazing Coal Mining
4	Lot 5158 Plan PH 991	Crown Land	Lessee: Pathmont Pty Ltd (as Trustee)	Grazing
5	Lot 1 Plan AY 31	Crown Land	Lessee: Brian Allan Corbett Lorraine Ellen Corbett	Grazing

5.4.4 Current Land Use

Existing land use within the project site has been constrained by its remote location, limited built infrastructure and regional climatic conditions. Cattle grazing and resource exploration are the primary land uses within the project site (Figure 5-2).

Grazing

The project site is traversed by a number of unsealed farm access tracks. Other minor farm infrastructure present includes various stock fences and farm dams. There are no easements on the site.

Stock Route

A stock route (U398BELY01) traverses the southern part of the project site from south-west to north-east (Figure 5-4). The stock route is managed by the Department of Natural Resources and Mines and the Isaac Regional Council. The proponent will liaise with the Department of Natural Resources and Mines, the Isaac Regional Council and affected landowners in relation to the management and possible realignment of the stock route, as necessary.

Exploration Activities

The proponent has undertaken exploratory drilling since 2008. Unsealed exploration tracks and other minor infrastructure have been constructed on the project site in accordance with existing exploration approvals. The proponent's exploration activities are discussed in Section 4 – Project Description.

There are also underlying petroleum exploration tenements that are held by third parties. Figures showing the location of these tenements are provided in Section 4 – Project Description. The proponent's exploration program has determined that the coal seams within the project site are essentially devoid of gas. The holders of the overlapping petroleum exploration tenements confirmed in writing, prior to the lodgement of the project MLAs, that they have no objection to the MLAs.

5.4.5 Native Title

The project site includes land that may be subject to native title and is within the Wangan and Jagalingou People's registered native title claim application (Claim No. QC04/6; Federal Court No. QUD85/04). The proponent will negotiate with the Wangan and Jagalingou People, the registered Native Title claimants, in accordance with the requirements of the *Native Title Act 1993* (Commonwealth).

5.5 SENSITIVE ENVIRONMENTAL AREAS

The following sensitive environmental areas have been identified on the project site:

- Areas or features identified as Matters of State Environmental Significance pursuant to the Queensland *Environmental Offsets Regulation 2014*:
 - One Of Concern Regional Ecosystem (RE), namely: RE 10.10.3: *Eucalyptus drepanophylla* open-woodland on sandstone ranges;
 - One wetland mapped as a wetland of High Ecological Significance (termed HES wetland) in the Department of Environment and Heritage Protection's map of referrable wetlands;
 - Remnant riparian vegetation associated with ephemeral drainage lines; and
 - Four threatened and/or special least concern fauna species, namely the Squatter Pigeon (southern subspecies) (*Geophaps scripta scripta*), Black-throated Finch (white-rumped subspecies) (*Poephila cincta cincta*), Koala (*Phascolarctos cinereus*) and Short-beaked Echidna (*Tachyglossus aculeatus*).
- One near threatened fauna species, namely the Common Death Adder (*Acanthophis antarcticus*) listed under the NC Act;
- Areas or features identified as Matters of National Environmental Significance pursuant to the EPBC Act *Environmental Offsets Policy* (SEWPaC 2012):
 - Three threatened fauna species, namely the Squatter Pigeon (southern subspecies), Black-throated Finch (white-rumped subspecies) and Koala; and
 - Three migratory species, namely the Eastern Great Egret (*Ardea modesta*), Rainbow Bee-eater (*Merops ornatus*) and Satin Flycatcher (*Myiagra cyanoleuca*).

These environmentally sensitive areas and features identified within the project site are described in detail in Section 9 – Terrestrial Ecology, Section 10 – Aquatic Ecology and Section 11 – Matters of National Environmental Significance, as well as in the *Terrestrial Ecology Report* (Appendix F) and *Aquatic Ecology and Stygofauna Report* (Appendix G). The project has been designed to minimise effects on these sensitive environmental areas. Relevant project design, management and mitigation measures are discussed in these sections.

5.6 LAND USE COMPATIBILITY

The development of the project is compatible with the current surrounding land uses which include grazing, mining exploration and future mining development. Although there will be a change to the rural character of the region, the project will not have a significant impact on the surrounding rural residences or recreation areas in terms of air quality, noise, aesthetic impacts and community values. These impacts are discussed further in Section 15 – Air Quality, Section 16 – Noise and Vibration, Section 17 – Visual Amenity and Section 18 – Socio-Economic Impact Assessment.

Considering the remote location of the project site, it is unlikely any land adjacent to the project site would need to be rezoned in the future for uses that would be constrained by the project.

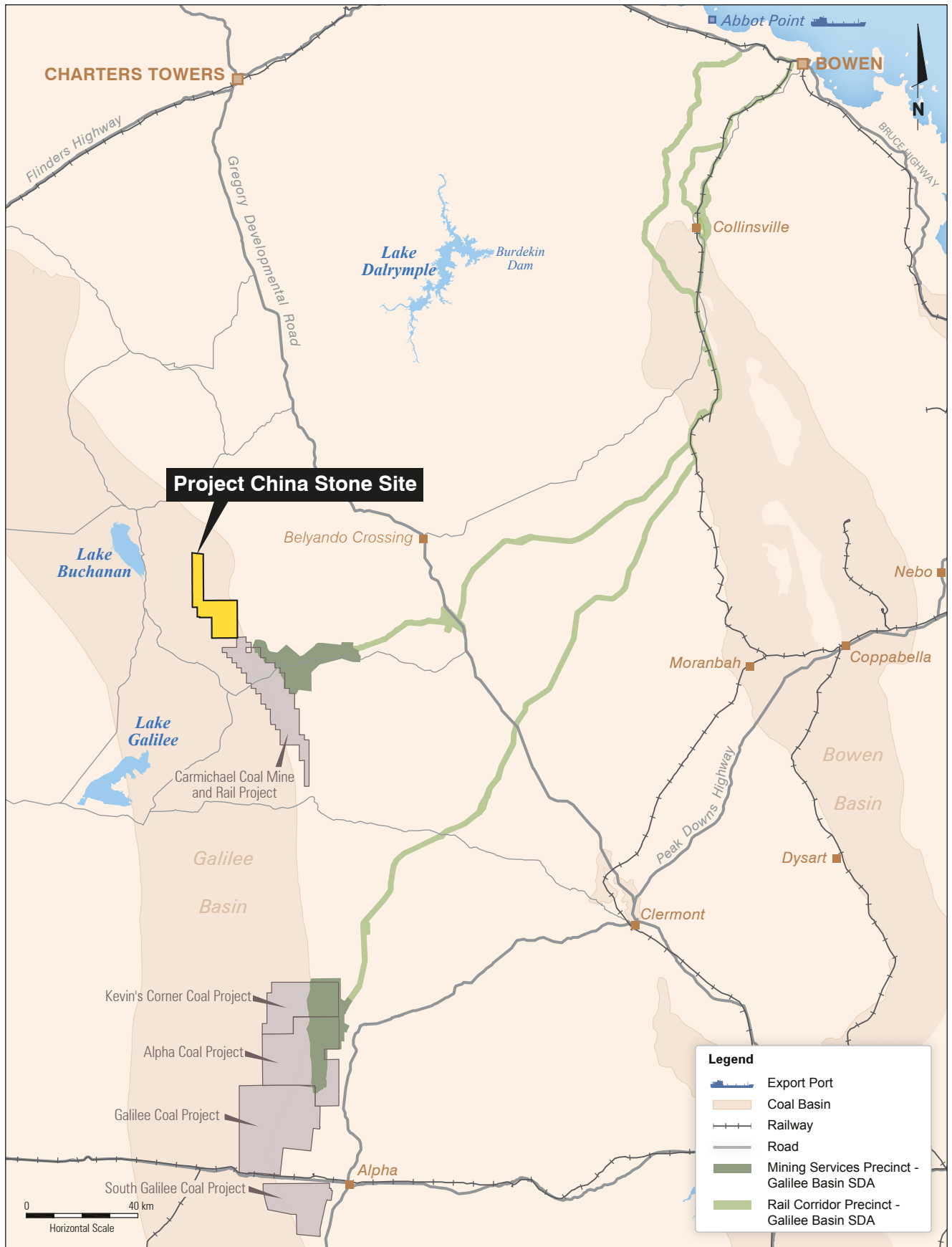
Timber resources or quarry materials are not currently proposed to be taken, disturbed or used for purposes other than mining within the boundaries of the proposed mining lease, or outside of the proposed mining lease as part of the project.

Table 5-3 summarises the potential impacts of the project on land use and identifies the section of the EIS that addresses each issue.

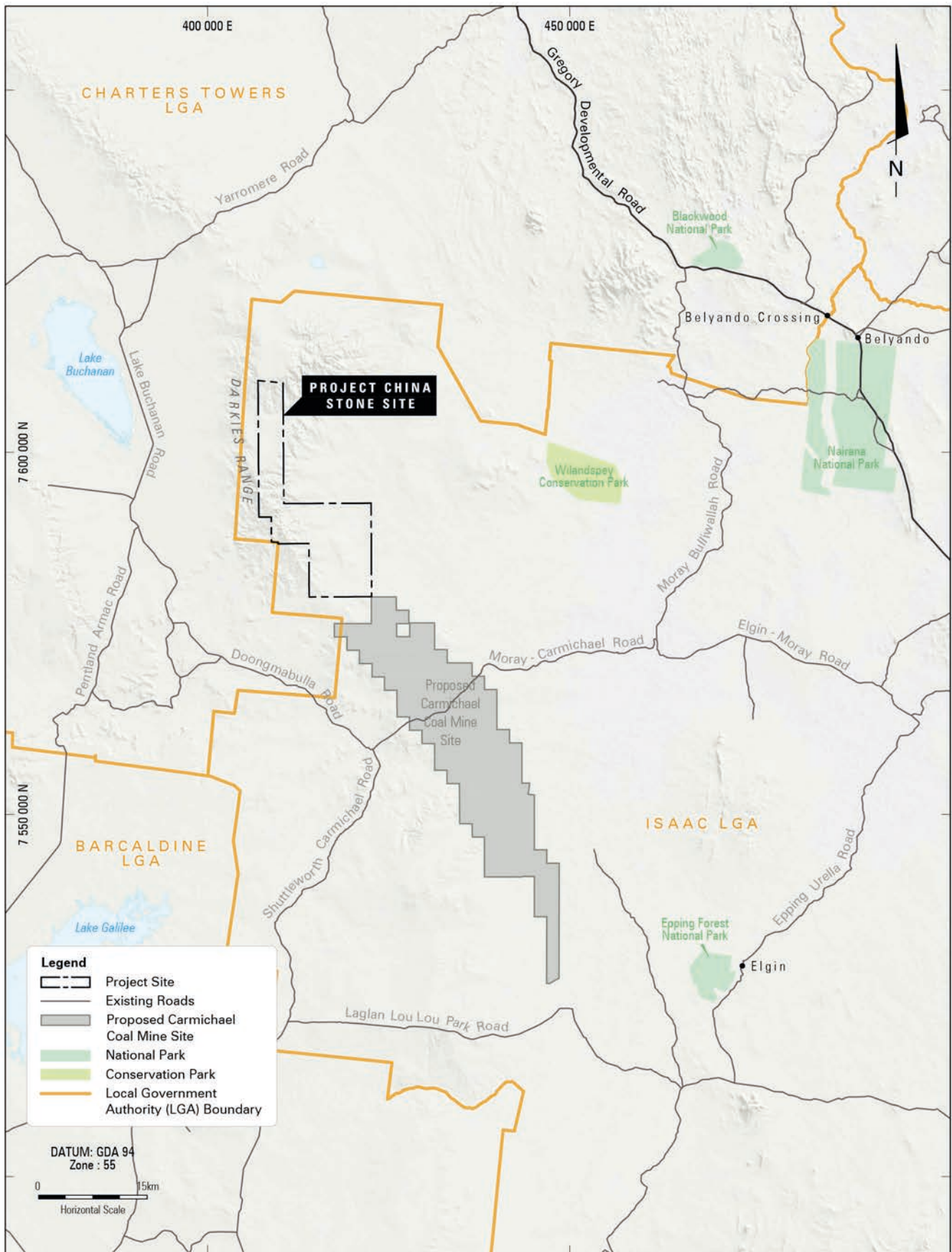
Table 5-3 Potential Impacts on Land Use Within the Project Site

LAND USE	POTENTIAL IMPACT	EIS SECTION REFERENCE
Grazing	Loss of grazing land	Section 8 – Rehabilitation Section 18 – Socio-Economic Impact Assessment
	Introduction and/or spread of weeds	Section 9 – Terrestrial Ecology
Remnant Vegetation	Loss of remnant vegetation	Section 9 – Terrestrial Ecology
Residential	Reduced residential amenity due to	
	■ Dust	Section 15 – Air Quality
	■ Noise and blasting	Section 16 – Noise and Vibration
	■ Impacts on scenic values	Section 17 – Visual Amenity

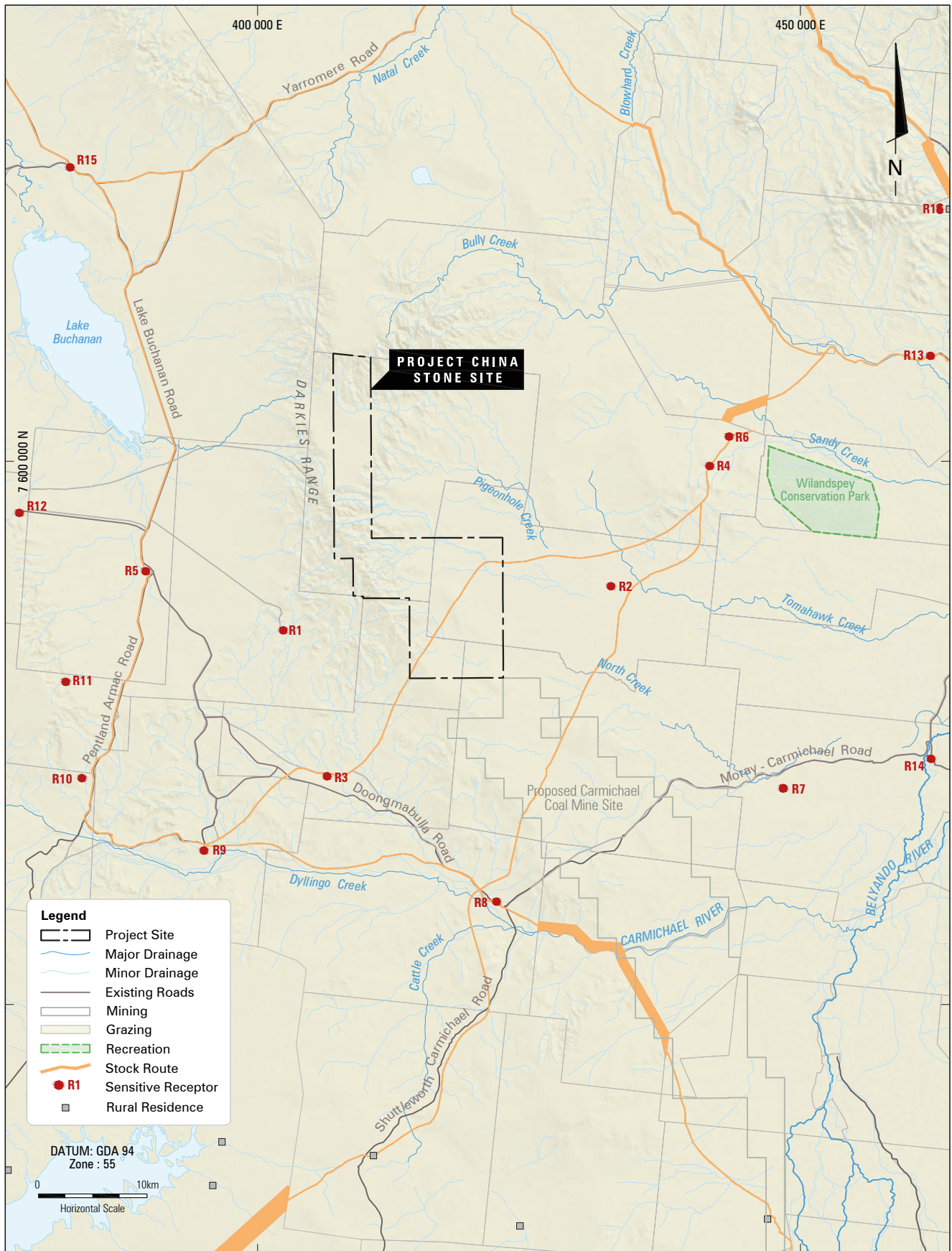
FIGURES



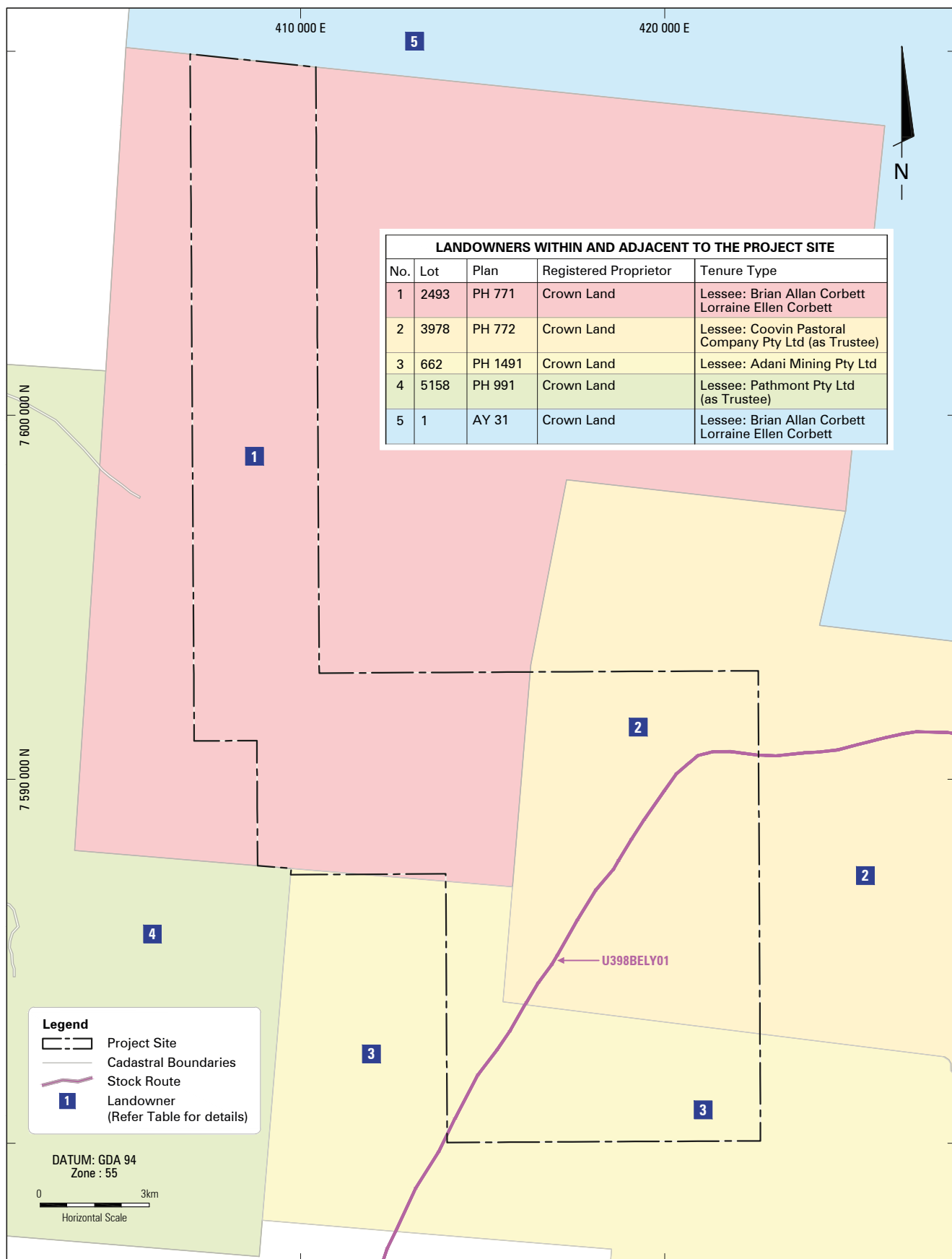
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PROJECT CHINA STONE



PROJECT CHINA STONE



PROJECT CHINA STONE

Land Ownership within the
Project China Stone Site

FIGURE 5-4