



New Acland Coal Mine: Stage 3 Project

Revised Project Overview

November 2012

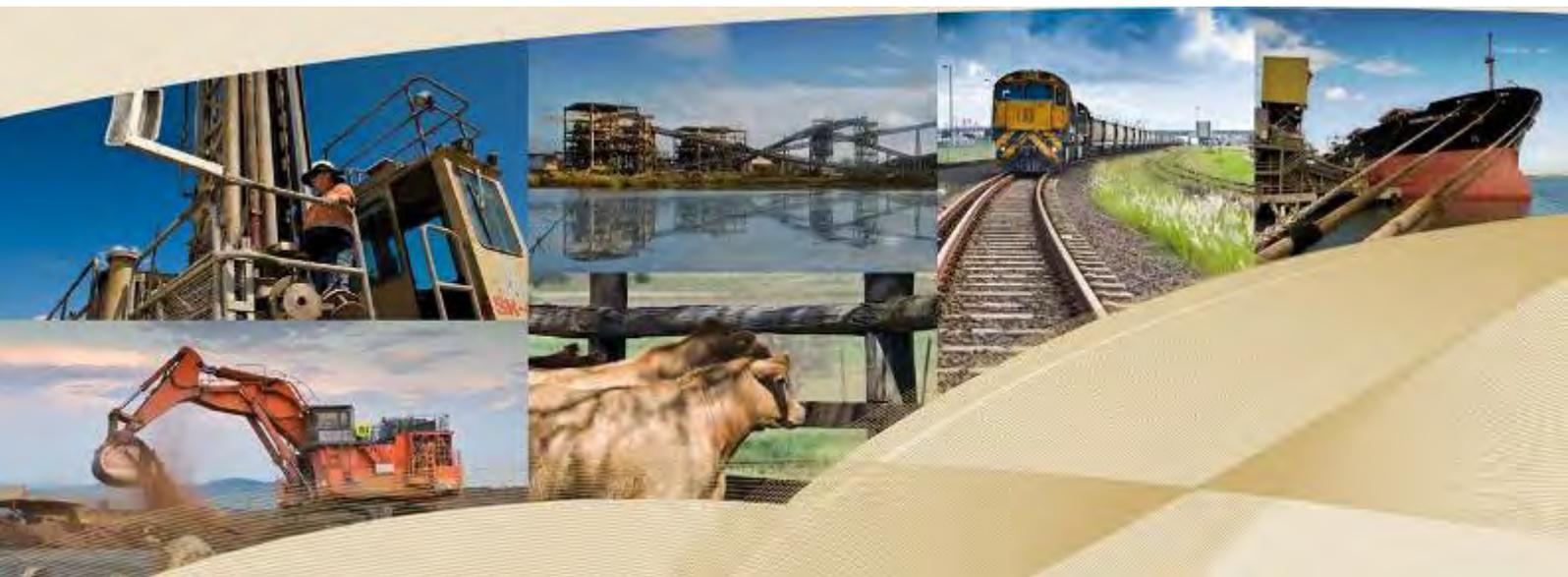


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ABBREVIATIONS

The following abbreviations have been used in this document:

adb	air dried basis
CHPP	Coal Handling and Preparation Plant
DEHP	Department of Environment and Heritage Protection
DSDIP	Department of State Development, Infrastructure and Planning
EA	Environmental Authority
EIS	Environmental Impact Statement
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EP Act	<i>Environmental Protection Act 1994</i>
EPC	Exploration Permit for Coal
FTE	Full Time Equavalent
JRLF	Jondaryan Rail Loadout Facility
MLA	Mining Lease Application issued pursuant to the <i>Mineral Resources Act 1989</i>
ML	Mining Lease issued pursuant to the <i>Mineral Resources Act 1989</i>
m ³ pt	meters cubed per tonne
Mt	Million tonnes
Mtpa	Million tonnes per annum
NAC	New Acland Coal Pty Ltd
NHG	New Hope Group
QR	Queensland Rail
RoM	Run-of-Mine
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
SEWPAC	Department of Sustainability, Environment, Water, Population and Communities
SP Act	<i>Sustainable Planning Act 2009</i>
TRC	Toowoomba Regional Council
tph	tonnes per hour

EXECUTIVE SUMMARY

The New Acland Coal Mine Stage 3 Project (the Project) was declared 'a significant project' requiring an Environmental Impact Statement (EIS) under the *State Development and Public Works Organisation Act 1971* (Qld) by Queensland's Coordinator General (CoG) in May 2007. New Acland Coal Pty Ltd (NAC), a New Hope Group (NHG) company, submitted the Project's EIS in November 2009.

Since that time, the NHG has closely liaised with the State Government throughout 2010 and 2011 in the preparation of the supplementary EIS. More recently, the State Government has clearly underscored the importance of taking steps to further reduce impacts of the Project. Equally, Government has confirmed to the NHG the importance of considering the significant employment and economic benefits of the existing New Acland operation and the Project. To that end, the NHG has developed a revised project description for the Project.

In revising the Project, the NHG has actively responded to the comments and concerns raised by Government and other stakeholders. In summary, the revised Project includes a reduction in the active area of Mining Lease Application (MLA)50232 Project area from 5 069 hectares (ha) to 3 163 ha and a reduction in the disturbance footprint by 2 304 ha through the avoidance of the southern areas from MLA50232. It also limits mining around Acland and includes a buffer zone around Lagoon Creek. This has resulted in a reduction in throughput from 10 Mtpa to a maximum of 7.5 Mtpa, and extends the life of mine to approximately 2029 rather than 2042 under the original proposal.

NAC will conduct the revised Project within MLA50232 by only seeking 'surface rights' for mining over the planned new operational footprint (yellow boundaries depicted in Figure 2). NAC will not possess the legal right to conduct mining activities within all other areas of MLA50232 without obtaining further statutory approval under the *Mineral Resource Act 1989*.

The revised Project also reduces the potential strategic cropping land impact by 446 ha, with 427 ha of potential SCL to be disturbed rather than 873 ha. The revised Project includes no mining in the Sabine area and a reduction in the number of out-of-pit dumps from four to two. No final land voids will remain at mine closure, instead final pits will be partially backfilled and re-profiled into depressed landforms. There will be no diversion of Lagoon Creek, no closure of Acland and therefore no requirement to relocate the Acland War Memorial, Tom Doherty Park or heritage items from the Acland No.2 Colliery. The Jondaryan Rail Loadout Facility will be relocated away from near the township to a remote site on MLA50232.

The estimated capital cost of the revised Project is \$700 million. The revised Project will provide an annual \$530 million injection into the south-east Queensland economy and \$8 billion over the life of the mine.

The revised Project is expected to provide the following benefits.

- A significant contribution will be made to the State's economy and additional employment opportunities will be provided. The revised Project will directly employ up to 220 people during the peak construction phase and approximately 400 employees and 170 full time equivalent (FTE) contractors during the peak operational phase. In addition, there will be opportunities for local employment in construction, transport and the supply of goods and services.
- Significant capital will be invested to facilitate full production and further expenditure on replacement capital will occur over the life of the revised Project.

- The increased industrial activity in the region will generate wealth for many sectors of the local and regional economies. Oakey and the surrounding regional communities are expected to receive significant economic benefits over the life of the revised Project.
- Efficiencies will be provided by capitalising on existing infrastructure located at the Mine.

The EIS will present the revised Project and describe the measures that will be undertaken to prevent or mitigate any potential adverse impacts on the environment, including impacts on water resources (surface water and groundwater), land resources, air quality (including greenhouse gases), noise and vibration, cultural heritage (including indigenous and non-indigenous), and flora and fauna of conservation significance. The EIS will also address the potential for social impacts and present mitigation strategies to manage any potentially adverse impacts if required. A Social Impact Management Plan (SIMP) will be developed for the revised Project.

1 INTRODUCTION

The New Acland Coal Mine Stage 3 Project (the Project) was declared 'a significant project' requiring an Environmental Impact Statement (EIS) under the *State Development and Public Works Organisation Act 1971* (Qld) by Queensland's Coordinator General (CoG) in May 2007. The New Hope Group (NHG) submitted the Project's EIS in November 2009.

A 'referral application' for the Project was lodged with the then Department of Environment and Water (DEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in April 2007. The Project was deemed a 'controlled action' under the EPBC Act (Reference EPBC 2007/3423) by the DEW in May 2007, in relation to Sections 18 and 18A – listed threatened species and communities.

Since that time, the NHG has closely liaised with the State and Commonwealth governments throughout 2010 and 2011 in the preparation of the supplementary EIS. More recently, the State Government has clearly underscored the importance of taking steps to further reduce impacts of the Project. Equally, Government has confirmed to the NHG the importance of retaining the significant employment and economic benefits of the existing New Acland operation and the Project.

To that end, the NHG has developed a revised project description for the Project. In revising the Project, the NHG has actively responded to the comments and concerns raised by Government and other stakeholders during the EIS process. The NHG understands the importance of properly securing its social licence to operate the expanded operation, and has made significant changes to the Project. The revised Project takes into account circumstances occurring since the significant project declaration in 2007. These include submissions raising concerns around environmental issues such as noise, air quality, vibration, the transport of coal, the diversion of Lagoon Creek and local heritage issues. Consequently, the NHG has sought to address these matters, which are more fully referred to below.

On 9 November 2012, the Commonwealth Department of Sustainability, Environment, Water, Population and Communities made a decision to accept a 'project variation' under Section 156B of the EPBC Act. The revised Project will be assessed under the bilateral agreement with the State.

2 THE PROPONENT

The Project Proponent is New Acland Coal Pty Ltd (NAC), which is a fully owned subsidiary of New Hope Corporation Pty Ltd and part of the NHG.

The NHG has a highly successful record in the development and management of world-class open cut coal operations. In Queensland, the NHG owns and operates the Jeebropilly and New Oakleigh Mines near Ipswich and has coal resources of over one billion tonnes in Queensland. The New Acland reserve is typical of the Walloon coal measures and is found in a multiple thin seam configuration. The attractive stripping ratios will enable NAC to utilize its proven expertise in thin seam mining and Walloon coal beneficiation to produce a high quality, domestic and export coal product. Further information concerning the revised Project can be obtained from:

Project Manager – New Acland Project
New Acland Coal Pty Ltd, PO Box 47, Ipswich, Qld 4305

Tel +61 7 3418 0500
Fax +61 7 3418 0355
Email aclandinfo@newhopecoal.com.au

Further information about the revised Project can be obtained from: www.aclandproject.com.au

3 NATURE OF THE PROJECT

The revised Project involves the extension and operation of the existing New Acland Mine (the Mine), increasing production from 4.8 Mtpa up to 7.5 Mtpa of thermal product coal. The revised Project will involve a conventional truck and shovel operation, with a mine life until approximately 2029.

The revised Project will continue to produce a moderate, in-situ ash content coal, with a calorific value between 6 000 and 6 850 (adb) kcal/kg energy for the domestic and export markets. Coal exports provide a significant contribution to the Queensland economy. The relatively low sulphur content of Queensland coals helps to ensure that sulfur dioxide emissions are minimized in combustion processes. The key objectives of the revised Project are to:

- establish and operate a sustainable and profitable coal mine;
- upgrade the existing Coal Handling and Preparation Plant (CHPP) and mining operation that minimises adverse impacts on the surrounding physical and social environments;
- construct and operate a mine that complies with all relevant statutory obligations and continues to improve operations to ensure best practice environmental management;
- construct, design and operate a mine that does not compromise environmental and social indicators and standards;
- make efficient use of current infrastructure, with upgrades and expansions for the required capacity increase;
- reduce the disturbance of the environment by minimising the requirements for road and rail construction and by the use of areas already disturbed for storage and handling facilities; and
- use similar proven strategies to those adopted at the Mine, for example:
 - + salvage and stockpiling of topsoil,
 - + early and progressive rehabilitation of disturbed areas,
 - + use of recycled water as the main water supply,
 - + protection of water quality by appropriate management systems, and
 - + adoption of appropriate landform designs to ensure sustainability and planning for a nominated final land use.

The revised Project reserves has been extensively tested by way of drilling, geophysical logging, ground geophysics, geotechnical, hydrogeological and geochemical investigations by New Hope Exploration.

4 KEY ELEMENTS OF THE PROJECT

4.1 PROJECT OVERVIEW

NAC currently operates the Mine, a 4.8 million tonnes (product coal) per annum (Mtpa) open cut coal mine on Mining Lease (ML)50170 and ML50216 within Mineral Development Licence (MDL)244, under the approval of Environmental Authority (EA) No.MIM800317705. The Mine is forecasted to deplete its reserves by 2017.

The revised Project involves the extension of the Mine to approximately 2029 with the inclusion and progressive development of two new resource areas within MLA50232, namely the Manning Vale and Willeroo resources areas. The revised Project will include mining in three new pits, namely, the Manning Vale West, Manning Vale East and Willeroo pits. The Mine is planned to operate between 6.5 Mtpa to 7.5 Mtpa dependent on economic factors.

The key elements of the revised Project are:

- continuation of the existing mining activities to progressively extend to parts of the Manning Vale and Willeroo resource areas within MLA 50232, located to the south and west of the current MLs 50170 and 50216;
- production of between 6.5 Mtpa to 7.5 Mtpa of product coal which equates to approximately 14 Mtpa Run-of-Mine (RoM) Coal;
- production of between 96 Mt to 122 Mt of product coal over the life of the revised Project;
- a construction period from 2015 to 2017, initially involving the construction of site access, a rail spur and loop, roads (including re-alignments), water management structures and additional supporting infrastructure;
- maintenance of the existing thin seam coal, open cut mining techniques and expansion of the truck and loader mining fleet;
- upgrade of the existing CHPP, RoM and product coal stockpile areas and supporting infrastructure on ML50170;
- tailings disposal within Tailings Storage Facilities (TSFs) located in-pit on Mining Lease Areas;
- progressive disposal of coarse rejects to cells within the overburden dumps;
- emplacement of two out-of-pit spoil dumps associated with the Manning Vale and Willeroo pits;
- generation of three depressed landforms at the end of mining by backfilling and re-profiling final pits;
- raw water supply from the Wetalla Wastewater Reclamation Facility (WWRF) from Toowoomba via an approved 45 km pipeline that is fully operational;
- a mine surface water management system involving various water management structures staged to accommodate the progressive development of the Mine and based on the principles of diverting clean water and capturing and reusing dirty water from disturbed areas;
- upgrades to the existing administration and heavy vehicle maintenance area on ML50170;
- relocation and potential upgrade of the power supply to the Project;
- diversion of the Jondaryan-Muldu Road around the Manning Vale resource area;
- development of a suitable 'off set' strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA50232;
- preservation of historical items within Acland;
- relocation of the Jondaryan Rail Loadout Facility (JRLF) and associated activities onto MLA50232;
- construction of a new 8 km spur rail line from Jondaryan to MLA50232;
- construction of a new Materials Handling and Train Loading Facility on MLA50232;
- relocation and potential upgrade of the existing local telecommunication network;

- continuous application of best practice environmental management based on sustainability factors and achieving the best possible environmental outcomes;
- comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and
- amendment of NAC's existing EA authorising a sustainable level of environmental harm commensurate to the revised Project's size and scope.

The revised Project will allow NAC to extend its production capacity at the Mine to meet current and future market demands for its thermal coal products. The revised Project is particularly important considering the NHG's West Moreton Operations near Ipswich will exhaust current coal reserves in approximately five years.

4.2 TENURE

4.2.1 Land

The NHG has invested significantly to secure surface rights over future development areas on MDL244, to establish buffer zones between operations and surrounding landowners and secure transport corridors. Negotiations with landowners included several strategies including outright purchase, option to purchase and compensation agreements. The majority of landowners have opted to sell their properties outright.

Since the inception of the Mine, the NHG has acquired 160 lots totalling 10 151 ha from 157 owners. The NHG owns the majority of the land required for the Mining Lease.

The Acland Pastoral Company (APC), as a NHG subsidiary, is responsible for the sustainable management of the NHG's Acland district landholdings, which generally involves the application of recognised agricultural practices outside the active mine areas.

Figure 1 depicts the extent of current NHG land ownership for the Acland district.

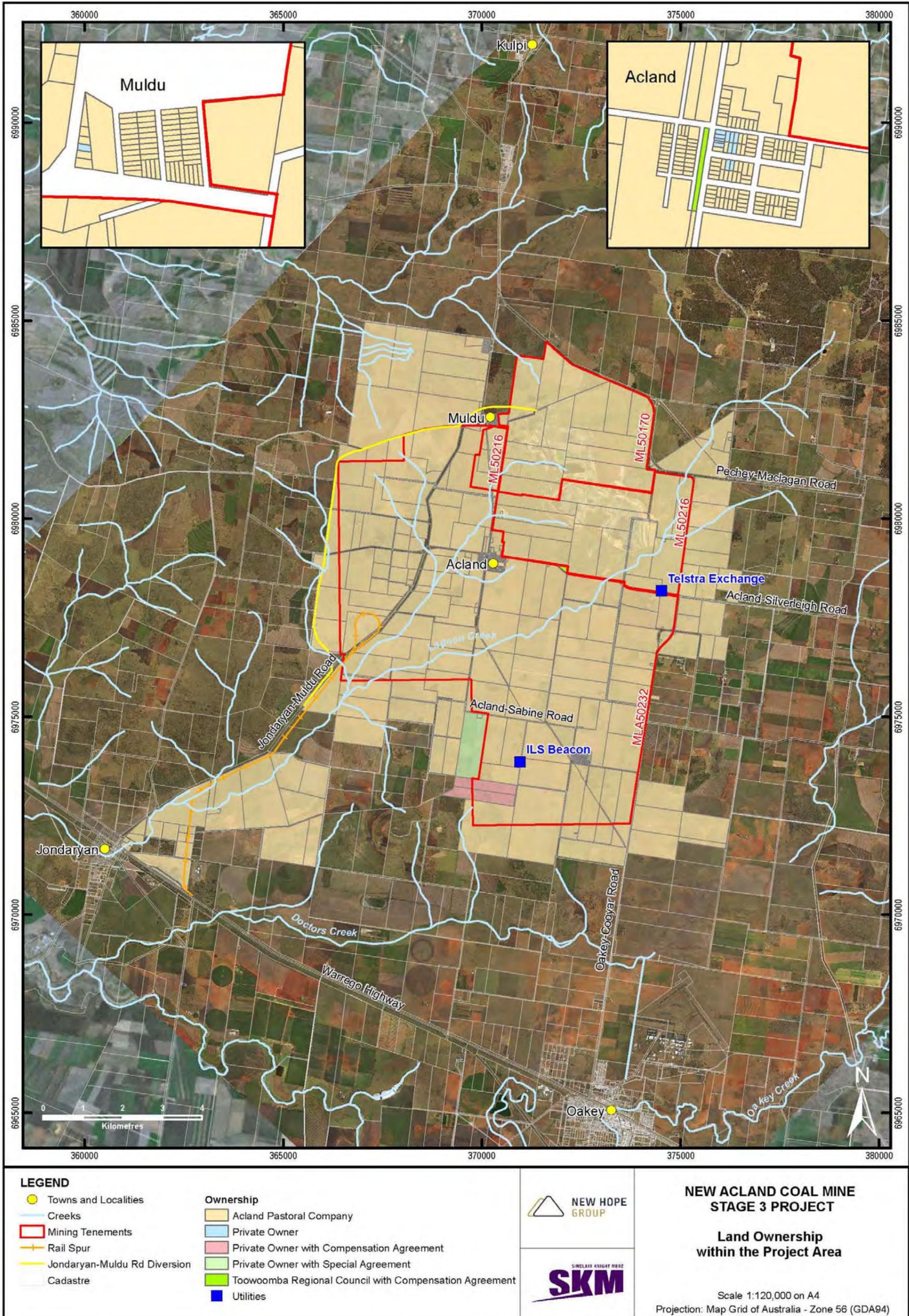


Figure 1 – NHG Acland district landholdings

4.3 MINING

NAC applied for MLA50232, on 24 April 2007. This MLA covers the majority of the remaining reserves within MDL244, including the Manning Vale and Willeroo resource areas. **Table 1** summarises the details of the Project tenements and **Figure 2** depicts the production pits in MLA50232.

Table 1 -Tenements for the Project

Tenement Number	Description	Date of Granting	Term of Mining Lease (years)	Licensee	Licensor	License to Mine
ML50170	Mining Lease: North Pit (Stage 1)	6/9/2001	30/9/2022	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	Coal Shale Clay Bentonite Kaolinite
ML50216	Mining Lease: South & Centre Pit (Stage 2)	7/12/2006	31/12/2026	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	Coal
ML50232 (MLA)	Mining Lease Application: Manning Vale Willeroo Sabine (Stage 3)	Submitted 25/5/2007 awaiting ML granting	not applicable	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	Coal
ML55005 (MLA)	Transport Corridor	Submitted	not applicable	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	NA
MDL 244	Mineral Development License	30/09/1998	30/9/2016	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	Coal
EPC919	Exploration Permit: Goombungee (Far East)	4/3/2005	3/3/2015	New Hope Exploration Pty Ltd	Department of Mines and Energy Queensland	Coal
EPP812	Exploration Permit	11/11/2004	31/12/2008 (renewal application in progress)	New Acland Coal Pty Ltd	Department of Mines and Energy Queensland	Petroleum

NAC will conduct the revised Project within MLA50232 by only seeking 'surface rights' for mining over the planned new operational footprint (grey shaded area depicted in Figure 2). NAC will not possess the legal right to conduct mining activities within all other areas of MLA50232 without obtaining further statutory approval under the *Mineral Resource Act 1989* (un-shaded areas of MLA50232 depicted in **Figure 2**).

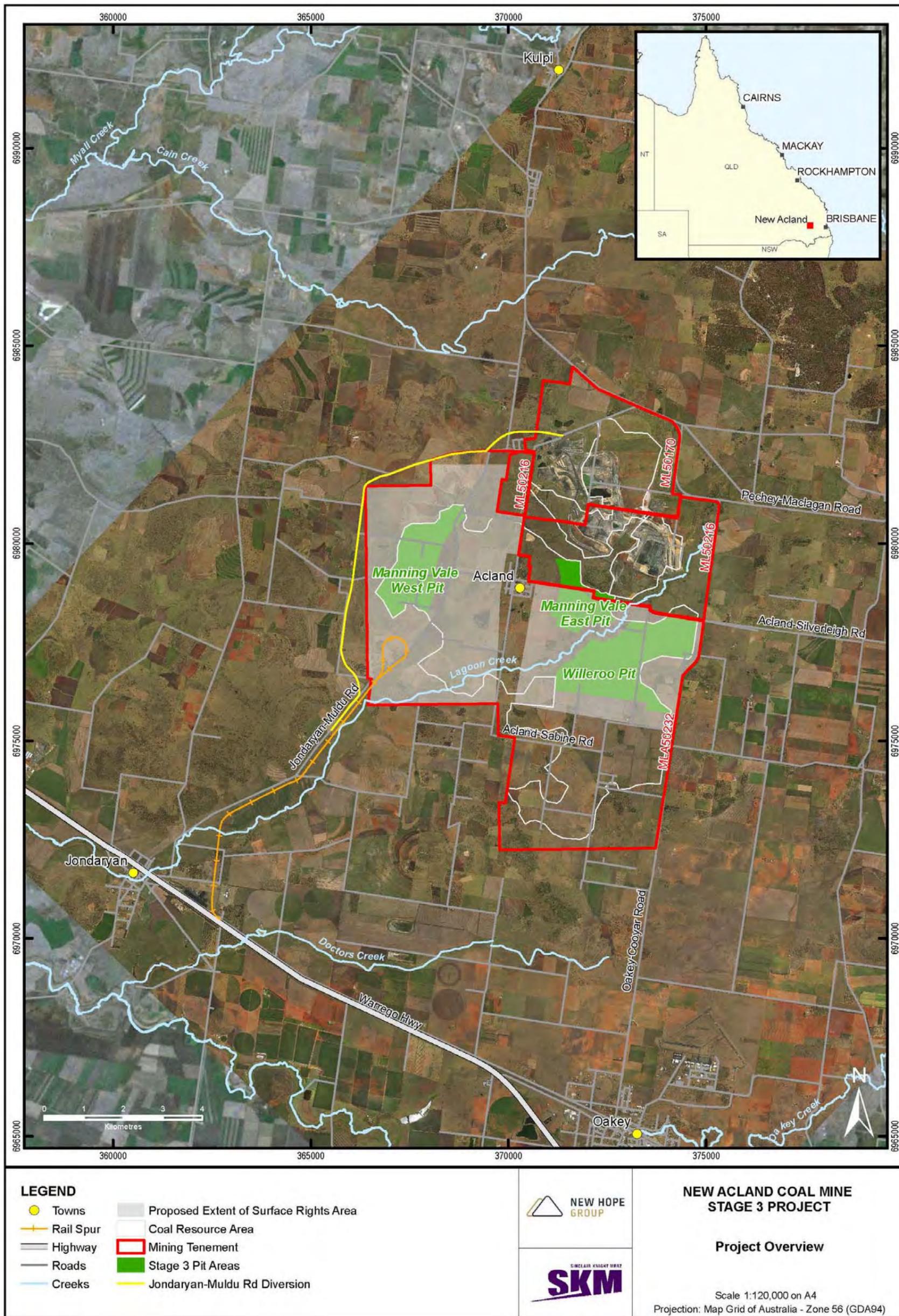


Figure 2 – NHG Acland Mining Lease Area

4.4 MINE PLANNING AND DESIGN

4.4.1 Resource Characterisation

MDL244 is located in the northwest of the Moreton Basin over the northerly trending Kumbarilla Ridge which separates the Moreton and Surat Basins. Although the Kumbarilla Ridge is considered to structurally separate the Moreton Basin from the Surat Basin, the Walloon Coal Measures of the Moreton Basin are laterally continuous with those of the Surat Basin. The Moreton Basin represents an eastern lobe of the Mesozoic Great Artesian Basin (GAB).

The major coal bearing unit within MDL244 is referred to by NAC as the Acland-Sabine Sequence. The coal seams of the Acland-Sabine Sequence occur at a similar stratigraphic position within the Walloon Coal Measures as the Ebenezer Sequence which is currently being mined by the NHG at Jeebropilly and New Oakleigh Coal Mines, near Ipswich. The Acland-Sabine Sequence and the Ebenezer Sequence both occur in the lower coal bearing unit of the Walloon Coal Measures. The principle coal seam which is economically important to the Project is the Acland-Sabine Sequence, which typically comprises 20 m to 30 m of alternating coal and non-coal rocks of which approximately half comprises coal.

Table 2 details the stratigraphy of the Walloon Coal Measures, as they occur in the revised Project area.

Table 2 - Stratigraphy of the Walloon Coal Measures in the Project Area

Coal Sequences	Thickness (m)	Lithology and Comments
Waipanna	>40	Mainly thickly bedded sandstone with argillaceous matrix fining upwards to interbedded fine sandstone and mudstone.
	<75	Predominantly thinly bedded fine sandstone. At least four extremely banded coaly intervals are present. The lowest interval is named the A seam and reaches 6 m in thickness but is of poor quality and banded. All coal seams in this unit exhibit rapid lateral facies changes.
	28 - 35	Medium to coarse sandstone units up to 10 m thick fining upward to interbedded fine sandstone, siltstone and mudstone.
Acland/Sabine	30 - 60	Predominantly thinly bedded fine sandstone to mudstone. Contains eight laterally persistent coal seam groups. Acland Interval up to 18 m of banded coal, divisible into A, B, C, D, E, F, G, H and J coal seam groups. Three high gamma claystones (BB, LAG, LGM) have been recognised throughout the Acland area, and are considered to be time stratigraphic markers.
	35	Mainly thick sandstone, thin interbeds of fine sandstone, siltstone and mudstone.
Balgowan	30	Medium to fine grained sandstone fining up to mudstone and massive mudstone with minor thin fine sandstone interbeds. This unit contains numerous thin coal seams. Persistent gamma markers can be used for correlation purposes.
	>40	Thickly bedded sandstone fining upward sequences to interbedded fine sandstone and mudstone.

4.4.2 Resource Utilisation

The revised Project will not impact on other coal, gas or mineral resources in the region surrounding the Mine. No coal seam methane is known to occur in the revised Project area at the depths at which NAC operate and no significant geological features associated with potential coal seam methane production exist. Economic and production factors will ensure that the revised Project will be developed to maximise the 'net project value' for NAC.

4.4.3 Coal Mining Methodology

The mining method utilised by the revised Project has been modelled on the mining method currently employed at the Mine. Initially, top soil is removed primarily for the purposes of rehabilitation followed by overburden drilling and blasting. From this point, a new box-cut will be developed, with the overburden being dumped within an out-of-pit spoil dump or used to backfill an existing void. Coal mining commences once sufficient overburden is removed to expose the coal seams and involves working a number of blocks in conjunction with one another to develop a staggered pattern in relation to the vertical coal seam horizons. The number of blocks required for coal production depends on the productivity requirement of that particular mine pit. Once enough floor area is available in the mine pit, spoil dumping then commences in-pit allowing progressive backfilling of the void as mining progresses across the resource area. A generalised pictorial representation of the mining process is provided in **Figure 3**.

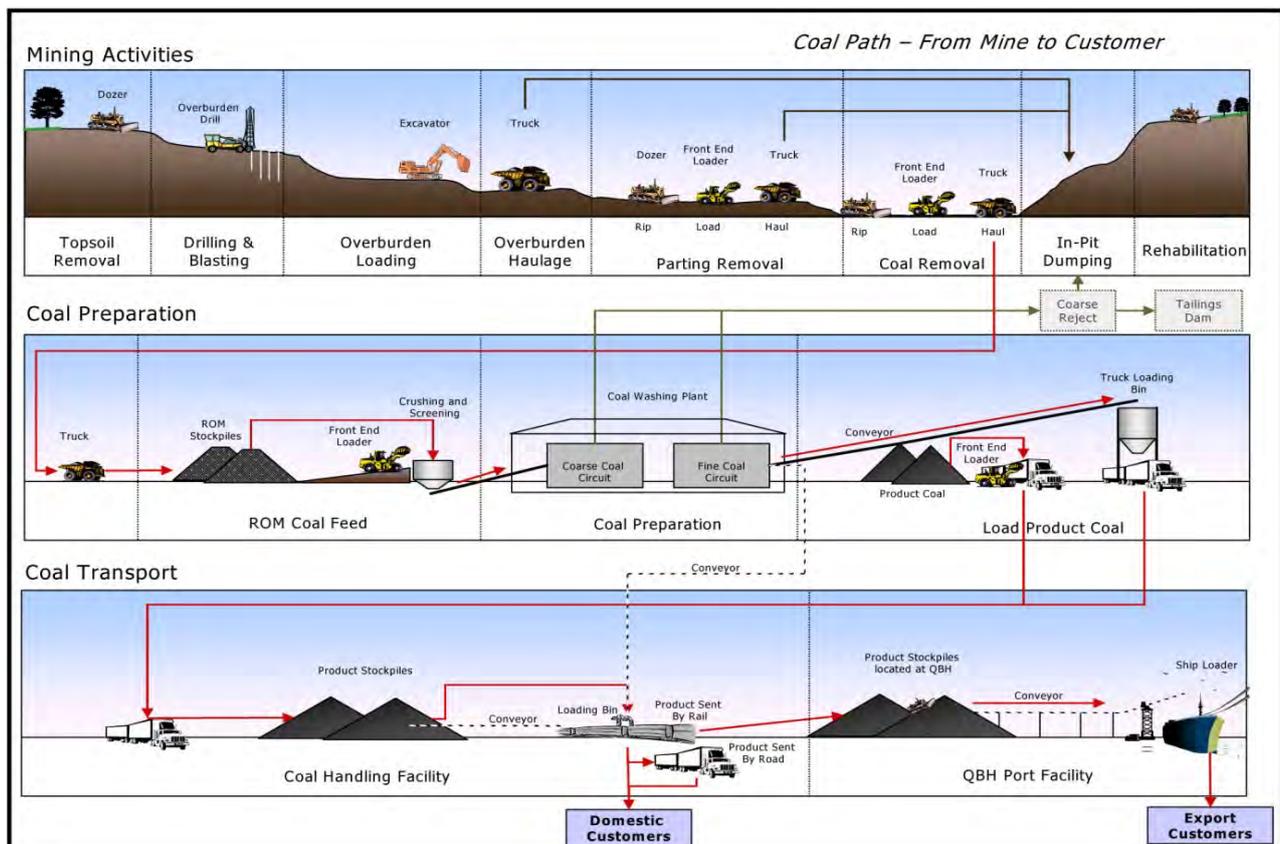


Figure 3 - Project Overview – Mining, Coal Preparation and Transport Operations

All topsoil is stripped and directly returned to current progressive rehabilitation areas behind the active mine pit area or stockpiled for future rehabilitation purposes. All overburden is normally mined utilising excavators and on rare occasions, spare loader capacity is also used to assist with overburden removal. Thick interburden partings greater than 2 m in thickness are also removed by excavators. When the partings reduce in thickness to below 2 m, loaders are specifically utilised. Loaders are engaged exclusively to mine the coal seams.

4.4.4 Mine Schedules

The revised Project involves the continued development of the Mine on ML50170 and ML50216 and the progressive commissioning of two additional resource areas within MLA50232. These resource areas are

known as Manning Vale and Willeroo. The two resource areas will be developed sequentially and combined with the current operations will supply up to 7.5 Mtpa of saleable product coal.

Table 3 outlines an indicative schedule for mining related activities on MLA50232.

Table 3 - Indicative Schedule for Mining related activities on MLA 50232

Year	Activity
2015	Environmental and mining approvals (Federal & State)
2015-2017	Cultural Heritage clearance Road closure applications Construction of the rail spur from Jondaryan and a rail loop within the mining lease Construction of site access and roads (including re-alignments) Construction of water management structures Construction of the additional supporting infrastructure Gradual employment of additional workers
2016	Mining commences within the Manning Vale reserve area (box-cut and out-of-pit dump construction)
2016	Mining commences within the Willeroo reserve area (box-cut and out-of-pit dump construction)

No significant quantities of additional construction materials are required for the revised Project. Sufficient clay and basaltic materials are available from existing and new areas on-site for the construction of haul roads and other related infrastructure requirements such as water management structures. Some minor quantities of specialist materials may be required for construction and operational purposes and would be sourced off-site on an as required basis and delivered under the appropriate transport arrangements.

The revised Project's life of mine schedule for years 2015, 2017, 2019, 2021, 2023, 2025, 2029 and 2035, is shown in **Figures 4 to 11**.

The main amendments to the mine schedule from the revised Project are as follows.

- The mine plan has reduced in time frame from 'life of mine' to a 25 year plan.
- The Sabine deposit which is the southernmost reserve area closest to the township of Oakey has been removed from the mine plan.
- Mining operations will be closely monitored and managed to satisfy noise, vibration and air quality constraints at Acland.
- There will be no diversion of Lagoon Creek as a result of the revised mine plan.
- Once the reserves within the Glen Roslyn pits of the Stage 2 area are exhausted, mining will then commence within the new Mining Lease Area at the incrementally expanded production rate of up to a maximum 7.5 Mtpa.

New Acland Project - 2015

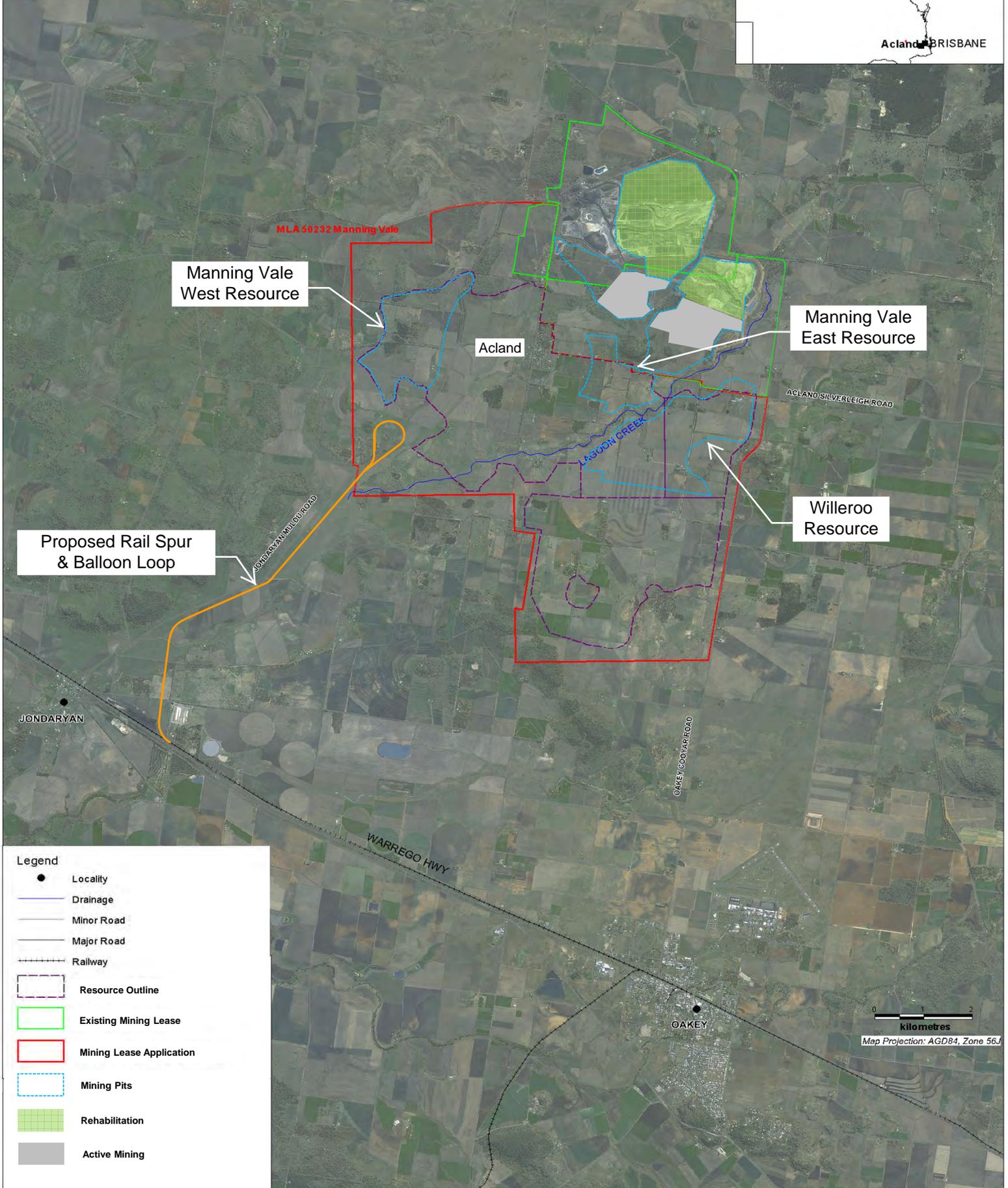


Figure 4 - Mining Schedule

New Acland Project - 2017

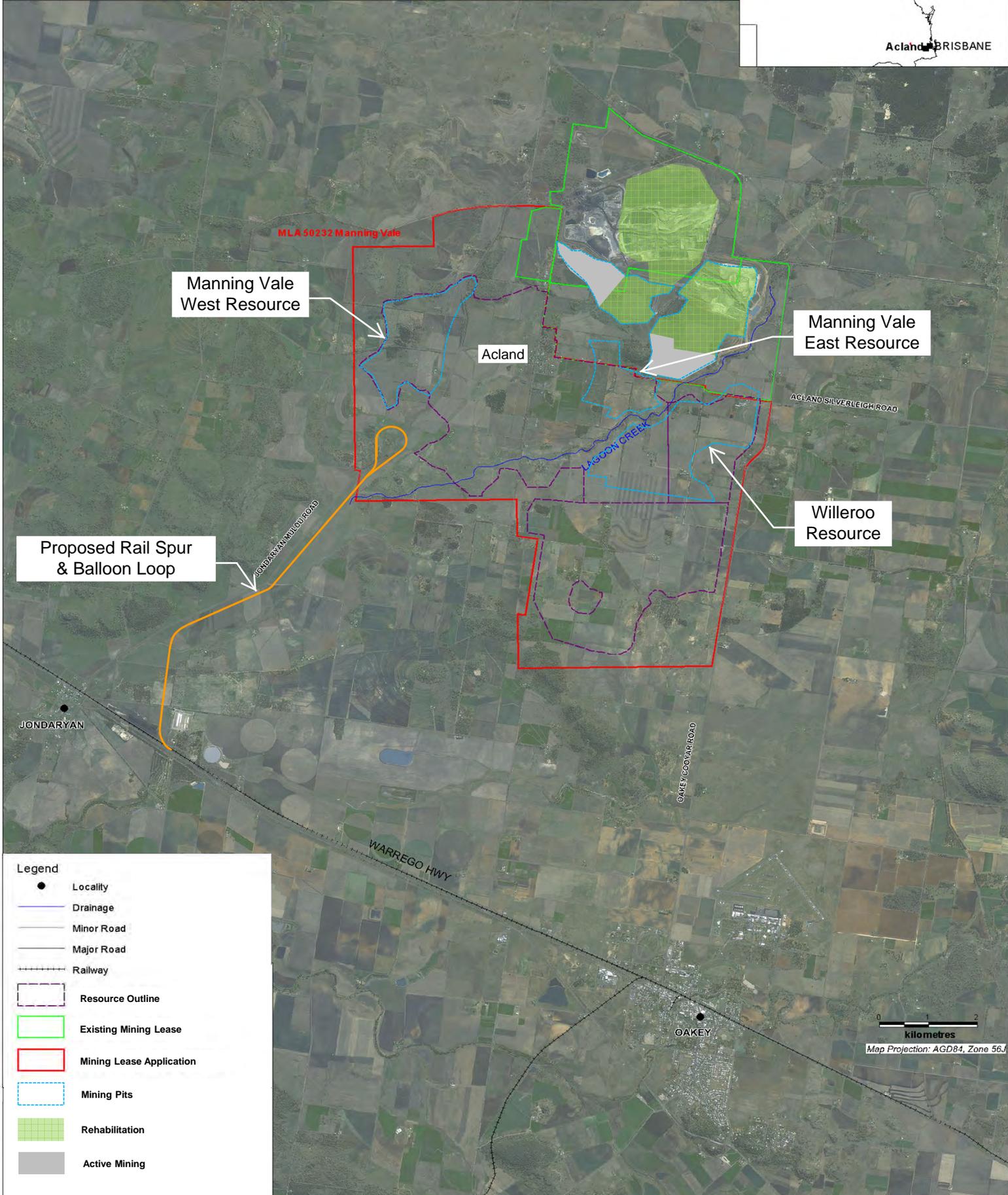
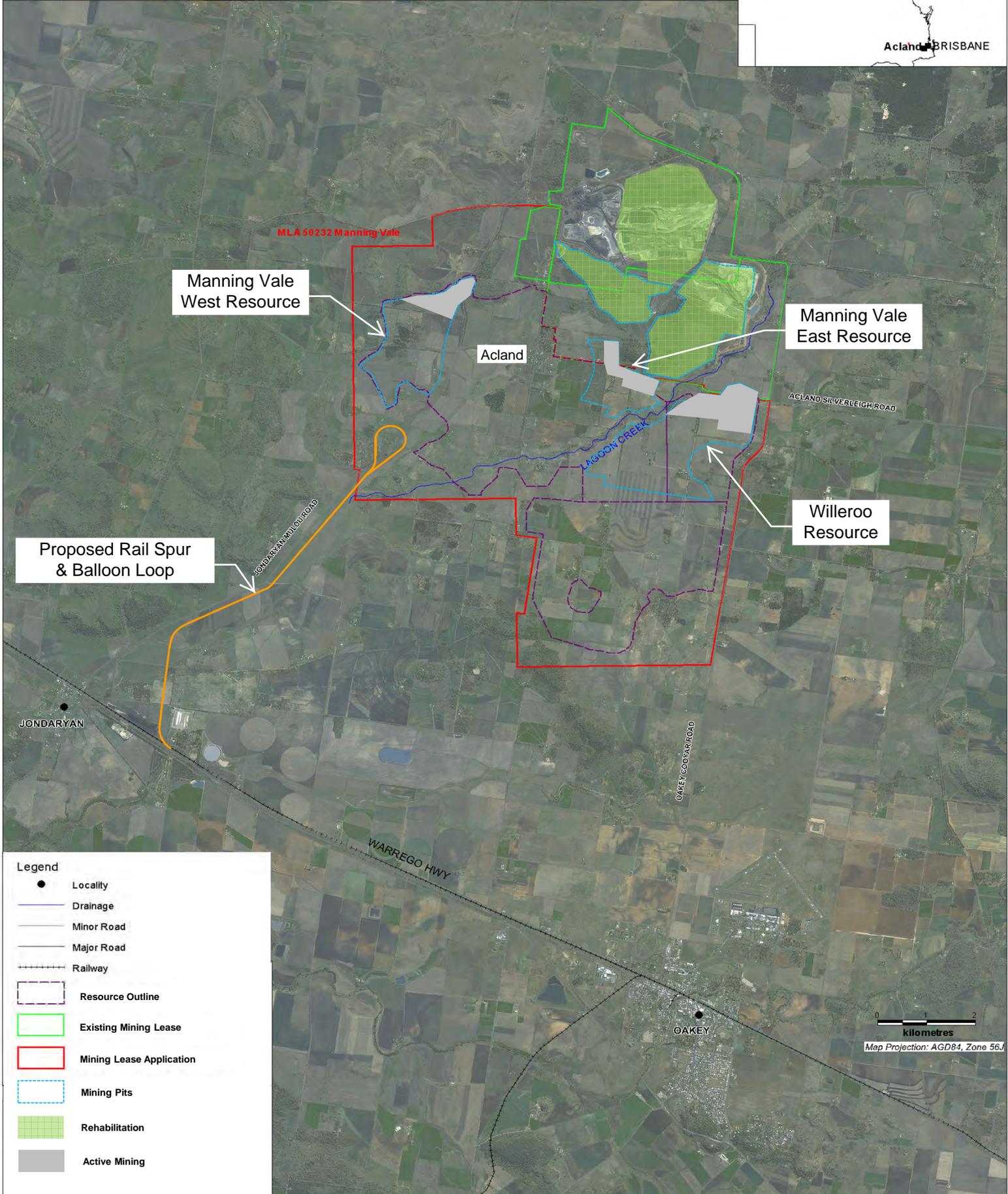


Figure 5 - Mining Schedule

New Acland Project - 2019



Legend

- Locality
- Drainage
- Minor Road
- Major Road
- +—+ Railway
- Resource Outline
- Existing Mining Lease
- Mining Lease Application
- Mining Pits
- Rehabilitation
- Active Mining

0 1 2
kilometres
Map Projection: AGD84, Zone 56J

Figure 6 - Mining Schedule

New Acland Project - 2021

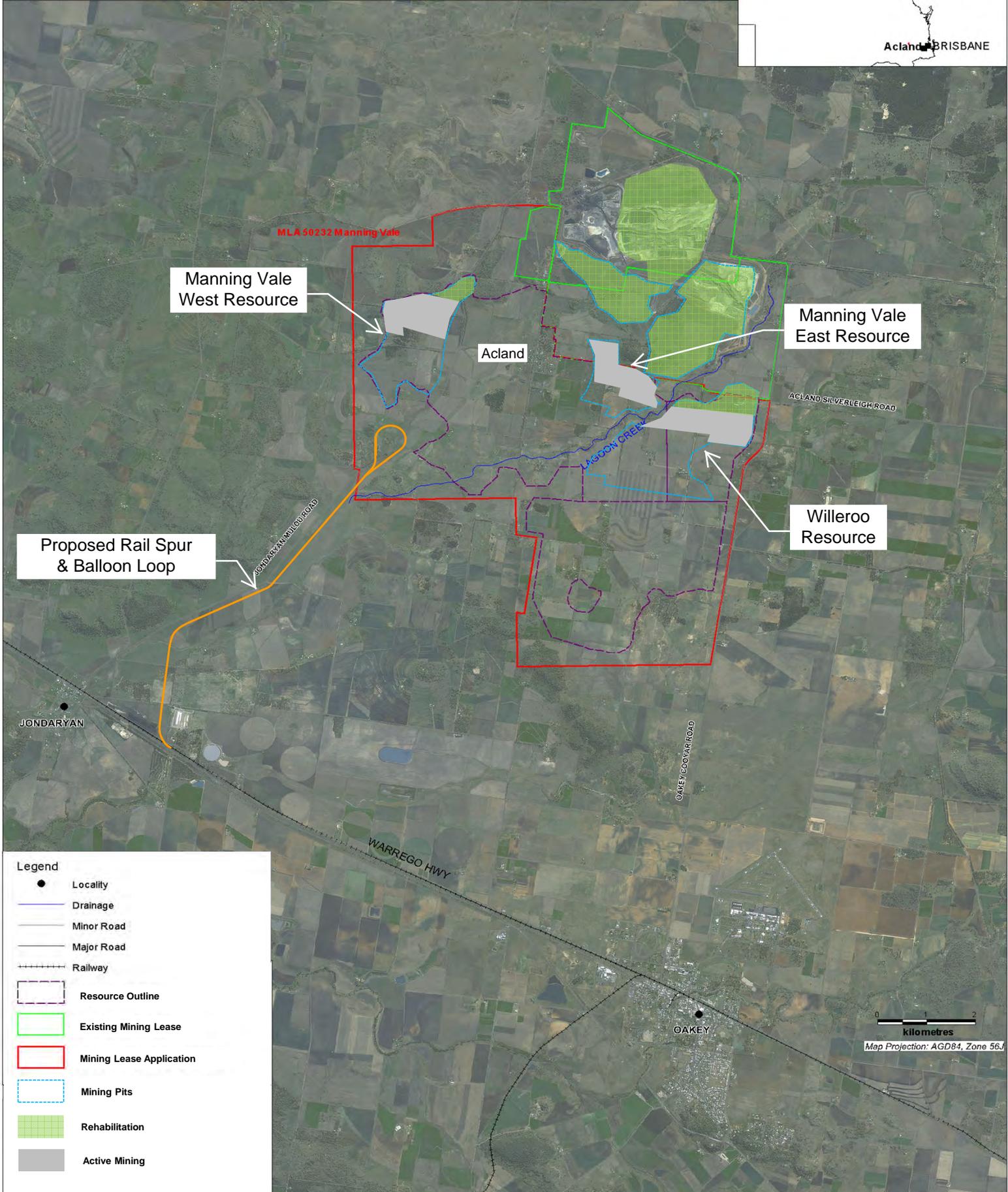


Figure 7 - Mining Schedule

New Acland Project - 2023

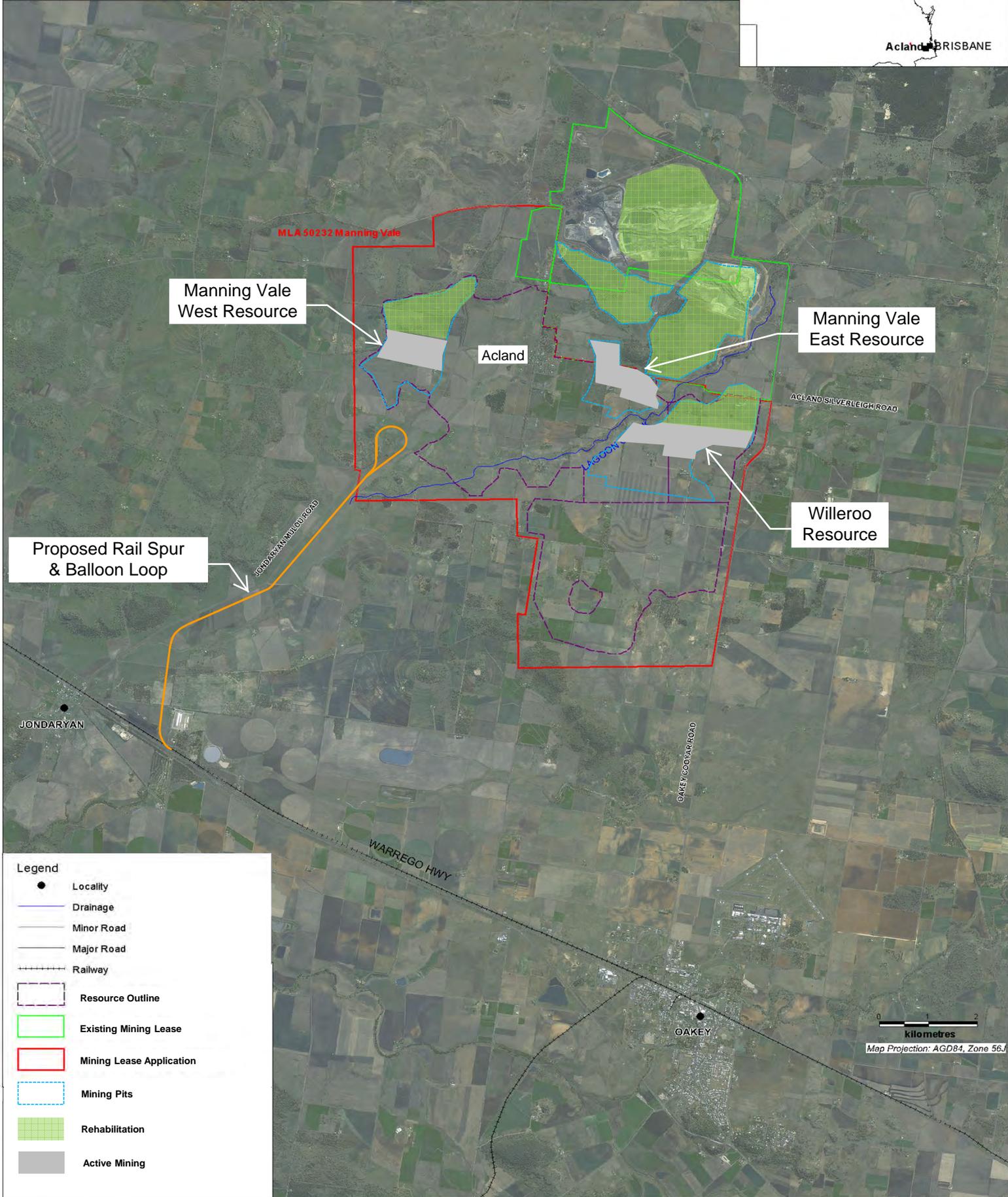
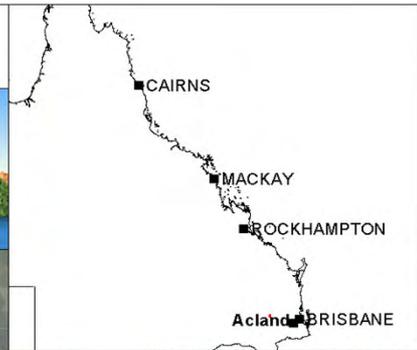


Figure 8 - Mining Schedule

New Acland Project - 2025

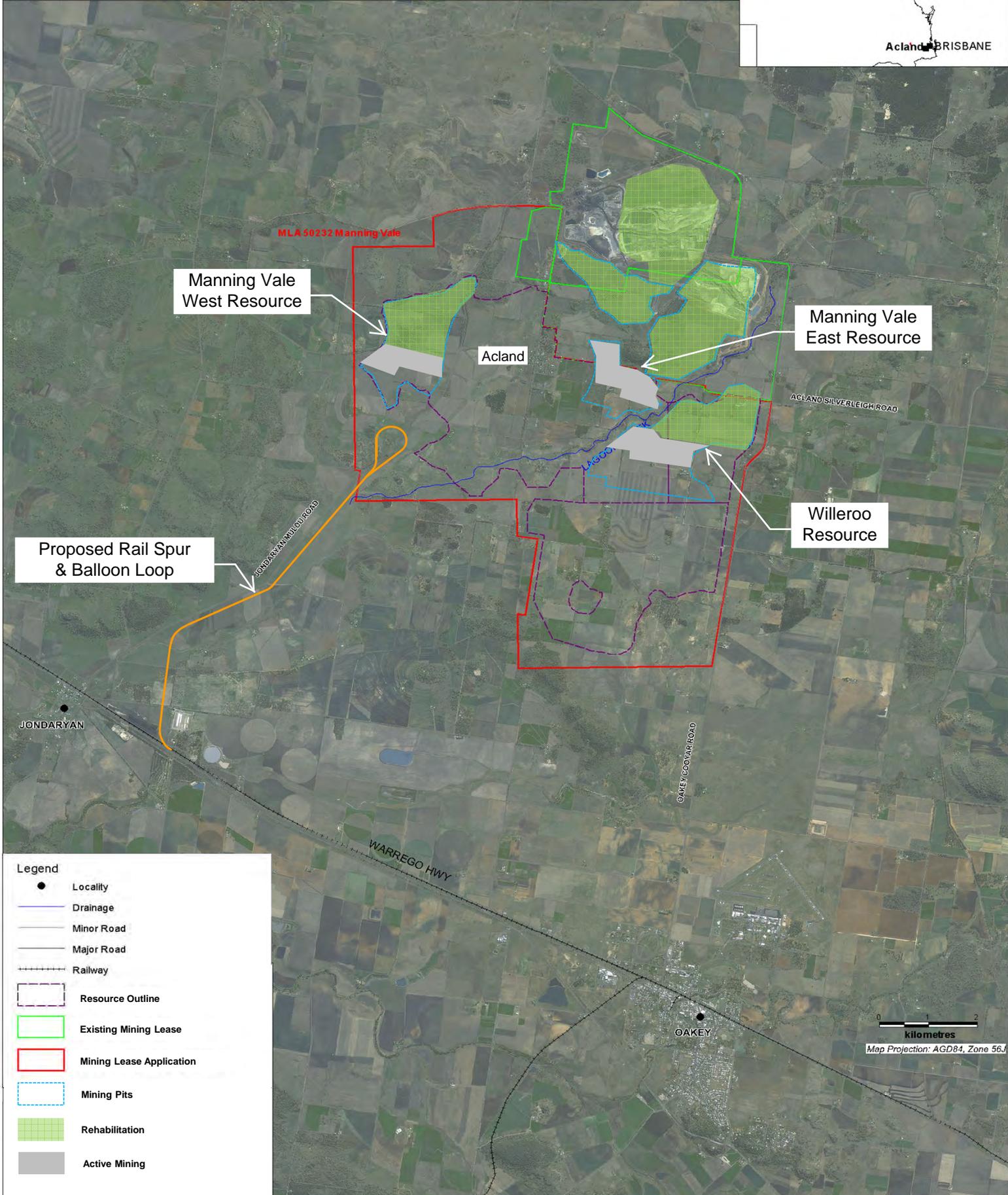


Figure 9 - Mining Schedule

New Acland Project - 2029

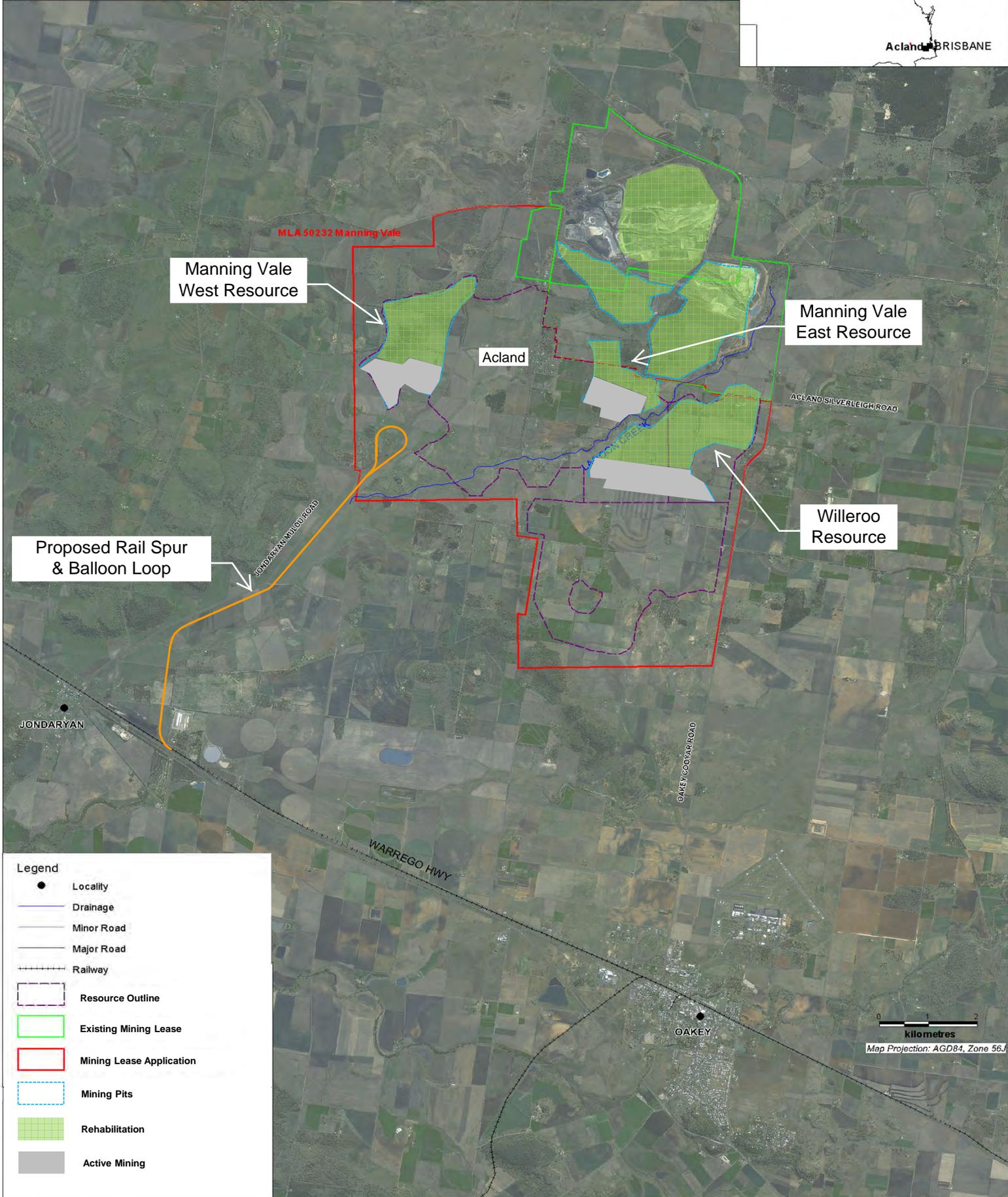
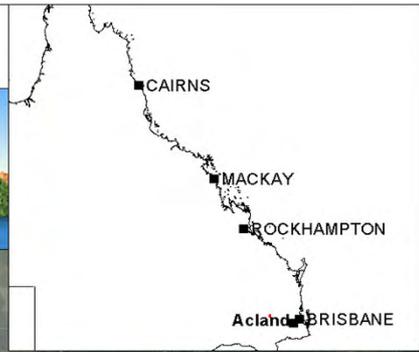


Figure 10 - Mining Schedule

New Acland Project - 2035

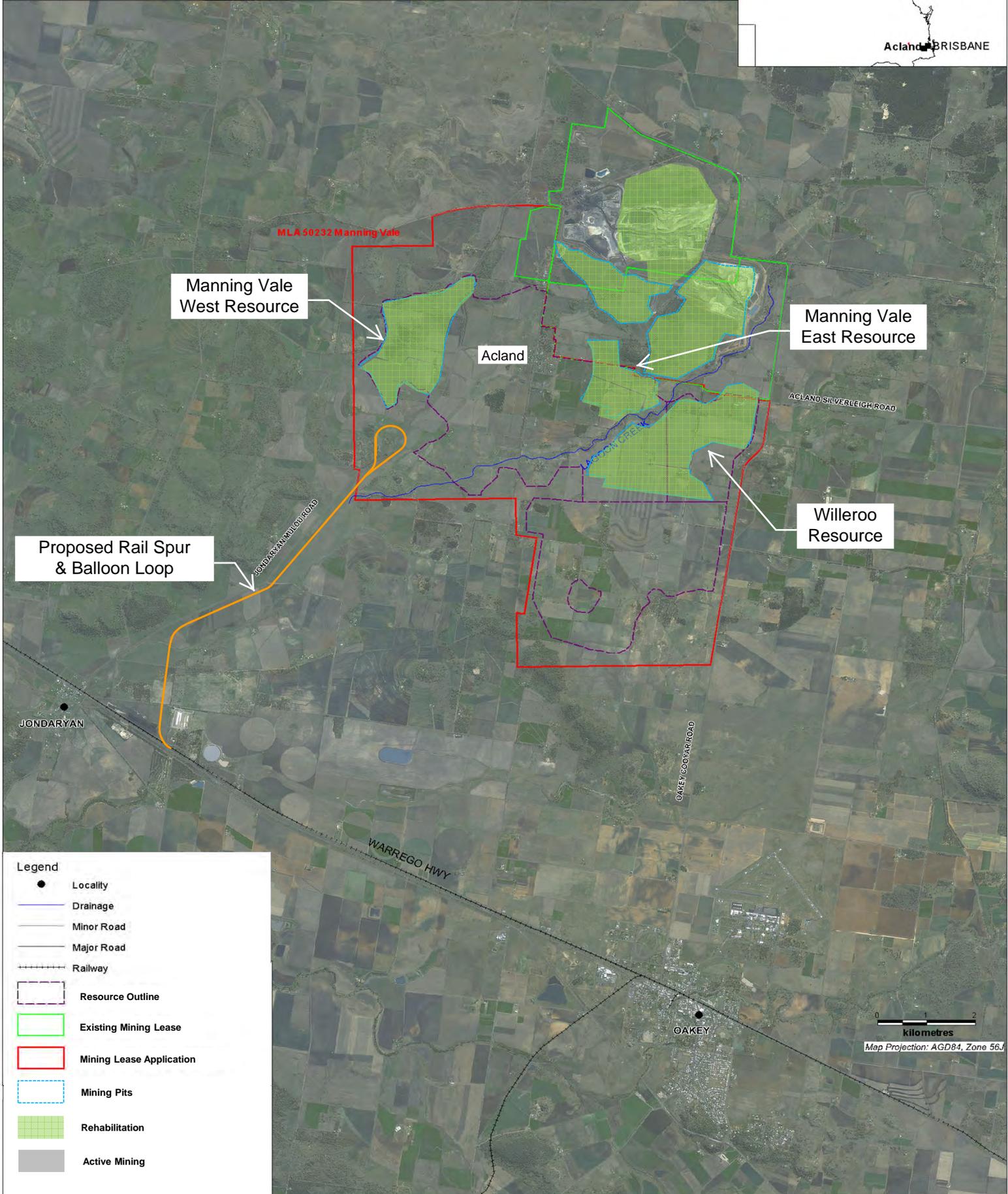


Figure 11 - Mining Schedule

4.4.5 Out-of-pit Spoil Dumps

The Project's two out-of-pit spoil dumps will be designed based on the following criteria:

- the final spoil dump slopes are battered to between 8.5 and 17 degrees slope angle based on geotechnical and final land use considerations, with a target of 8.5 degrees;
- a 10 m berm will be included at least every 20 m in dump height; and
- water management structures such as contour banks and rock-lined water ways will be constructed as required with respect to the slope length and catchment area of each spoil dump face to be treated.

4.4.6 Coal Preparation

The current CHPPs will be upgraded to account for the additional throughput, such that no new CHPP outside the current process plant precinct is required. Some additional infrastructure capital is required due to power, road and transport realignments, along with some fleet capital associated with the expansion and the higher coal ratios seen within the subsequent pits.

4.4.7 Spoil Dumps

Emplacement of two out-of-pit spoil dumps as elevated landforms containing a total material volume of approximately 56 Mm³ and will be associated with the Manning Vale and Willeroo pits on the new mining lease area. The Manning Vale East pit will utilise existing voids in Glen Roslyn Centre Pit for out of pit spoil placement, while the Willeroo pit will utilise areas on ML50216 for out-of-pit spoil dump. The mine plans will not progress into the Sabine resource and hence no out-of-pit spoil dumps will be required in the South of the resource area.

All the revised Project's elevated landforms on completion of final rehabilitation will support a sustainable final land use based on agriculture.

4.4.8 Final Landform

NAC has designed a final landform which demonstrates that no unusable void space would remain post mining. Final landform parameters for 'depressed' and 'elevated' landforms within the Project's footprint have also been assessed and will support grazing as a final land use. NAC will apply the assessment methodology to the Project and will investigate innovated measures to minimise the amount of 'depressed' and 'elevated' landforms.

4.4.9 Site Access and Haul Roads

Existing access tracks will be used for all mining operations to minimise disturbance areas. Current haul and internal service roads on ML50170 and ML50216 will either be maintained, upgraded or relocated as required. New haul and internal service roads will be constructed on an as required basis to service the revised Project's activities. Mine haul roads will follow existing design criteria subject to the requirements of the *Coal Mining Safety and Health Act 1999*.

The northern section of the Jondaryan-Muldu Road will be re-aligned to the west of the Manning Vale resource area to accommodate for mining operations in that area.

4.5 INFRASTRUCTURE AND TRANSPORTATION

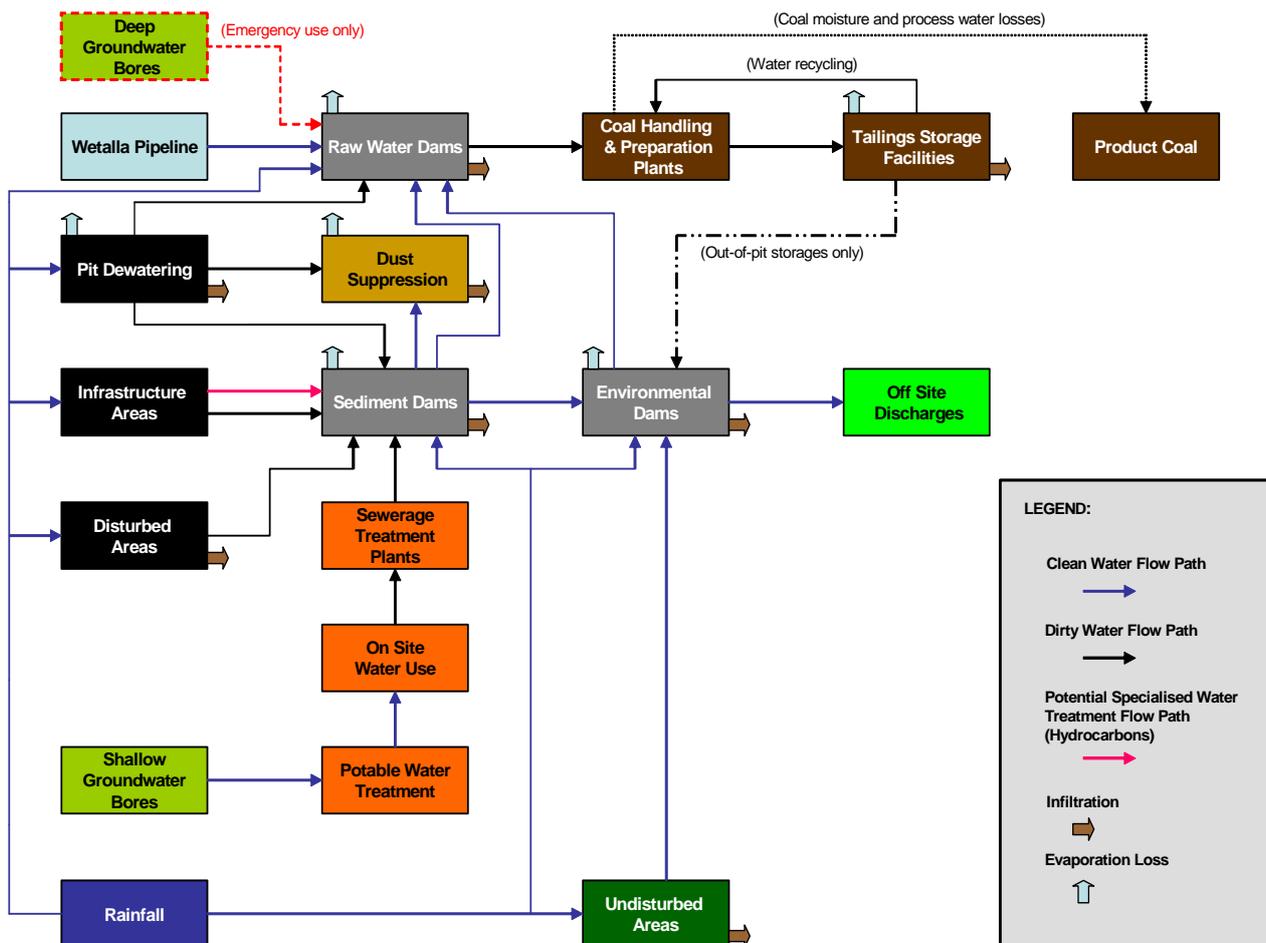
4.5.1 Water

Sufficient supply of 5 650 ML per annum (MLpa) capacity is available to meet the current demand of a nominal 2 200 MLpa and future demand of 3 300 MLpa for the increase up to 7.5 Mtpa capacity. NAC has secured a long term contract with the Toowoomba Regional Council (TRC) to purchase up to 5 500 MLpa of water from the WWRf and an agreement to receive 150 MLpa from the Oakey Reverse Osmosis Plant. The pipeline and infrastructure was constructed in 2009 and is fully operational.

Potable water is sourced from licensed groundwater bores and treated with a Reverse Osmosis Treatment Plant on-site. Current potable water use is approximately 15 MLpa. Future use is estimated to increase up to maximum 50 MLpa. In addition to potable water use, a total of 981 MLpa licensed capacity is available from the Helidon (Precipice) and Marburg (Hutton) aquifers via a series of groundwater bores. This capacity is available as an emergency water supply only, subject to successful future renewal of licenses.

The revised Project's water management system will in its initial stages operate in conjunction with the existing Mine Water Management Plan. As a result, the water management strategy will utilise existing water management infrastructure designed and constructed as part of the Mine. An overview of the water management system for the revised Project is depicted in **Figure 12**.

Figure 12 - Water Management System Overview for the Revised Project
New Acland Coal Mine – Water Management Schematic



4.5.2 Power

The Mines current 5.7 MVA demand is fed by existing 33 kV and 11 kV power lines from Oakey. The 33 kV line capacity is 14.7 MVA. The revised Project will require relocation and upgrade of the existing local power network to ensure sufficient operational capacity. High level design for up to a 7.5 Mtpa operation shows a demand of 14.5 MVA, thus the existing capacity will be sufficient. The domestic 11 kV power line which supplies Acland and the surrounding areas needs to be relocated to ensure continuity of supply for the remaining domestic and agricultural users.

The power supply to Acland will be maintained over the life of the revised Project.

4.5.3 Rail

The West Moreton Coal System operated by QR National is currently contracted to rail 4.8 Mtpa from the JRLF to Queensland Bulk Handling (QBH). A half loop is currently undergoing approval to improve the railing logistics. An investigation conducted by QR Network, namely, *2009 Coal Rail Infrastructure Master Plan*, recommended a similar solution for the Western Rail System. The most cost effective capacity increases have been identified as a balloon loop at the coal loading station, followed by passing loops on the Toowoomba Range.

NAC will relocate the JRLF and construct a new rail spur and balloon loop on MLA50232. NAC's main coal stockpiles will be maintained at the Project site and proportionately at QBH's port facilities in Brisbane. NAC will continue to evaluate its coal supply chain, and as required, will seek improvements in the system to ensure efficiency and competitiveness.

4.5.4 Port

QBH as a multi user port is a 100% owned subsidiary of the NHG. The port capacity is estimated at a nominal 12 Mtpa. Although QBH has not been required to achieve the maximum throughput capacity over an extended time period due to supply constraints, a short term throughput capacity of one million tonne per month has been achieved. Sufficient capacity exists at QBH to accommodate a maximum 7.5 Mtpa from the revised Project.

4.5.5 Telecommunications

The Mine is serviced by a fibre optic cable, telemetry communications systems and UHF radio systems. Mobile network coverage is available on the majority of the area. A Telstra Exchange is located in the future Willeroo pit area on the Acland-Silverleigh Road and services approximately 90 customers in the region. The plan is to relocate the Exchange as per the recommendation report conducted by Telstra (Report QW 5731-2).

The Department of Defence ILS Beacon is not located within the footprint of the revised Project and therefore will not be impacted.

4.5.6 Road Diversions and Closures

The current alignment of the Jondaryan-Muldu Road transverses the western portion of the Manning Vale resource area. Therefore, the Jondaryan-Muldu Road diversion is critical to allow NAC access to the western

portion of the Manning Vale resource area. The re-aligned section of Jondaryan-Muldu Road will follow existing road reserves and traverse property owned by the Acland Patrol Company (APC). The Jondaryan-Muldu Road will remain a public road under TRC control.

The majority of the road closures will be permanent. However, temporary road closures will be assigned to those roads that are to be re-established at the cessation of the revised Project. Nearly half of the original proposed road closures are streets associated with Acland. Acland is not required to be relocated as part of the Project; therefore these streets are no longer planned for closure and removal.

Permanent access to Acland will be maintained over the life of the revised Project.

4.6 WORKFORCE AND ACCOMMODATION

4.6.1 Resourcing Requirements

The revised Project at peak construction is expecting up to 220 construction workers at any one time. Apart from periodic peaks for major activities, the construction workforces will fluctuate over the proposed 30 month construction phase. Construction tasks will require skilled and unskilled labour. NAC's intention is to utilise local employment options where possible, but will also require employment from outside the region for certain specialised construction jobs.

The revised Project at a maximum production rate of 7.5 Mtpa will require approximately 400 employees and 170 FTE contractors during the peak operations phase. The Mine currently employs approximately 300 employees and 160 FTE contractors.

4.6.2 Accommodation Requirements

No construction camps will be located on-site during the construction phase of the revised Project. Generally, construction workers will be expected to source their own accommodation. NAC may provide limited accommodation for specialist contractors during the construction phase using properties it has acquired within the Acland district. The Project's staged ramp up in production may also help reduce the demand curve for additional accommodation.

Mining and construction personnel will travel to and from the site based on their specific working arrangements. Importantly, the arrival and departure times for mine and construction workers will be staggered by at least half an hour to minimise traffic and other interactions.

4.6.3 Hours of Operation

Mining activities will be conducted at the Manning Vale West and Willeroo mine pits either on a 6 day, 24 hr basis or a 7 day, 24 hr basis depending on the mining schedule and the type of mining equipment utilised. The Manning Vale East Pit will be closely monitored and managed to satisfy noise, vibration and air quality constraints at Acland and may include mitigation steps such as the reduction of mining operations during heightened sensitive periods combined with real time monitoring. In general, it is envisaged the Manning Vale East Pit will be operated on a daytime basis only for a majority of the time, unless real time monitoring of the key environmental constraints dictates otherwise. Certain mining related activities such as blasting will only be undertaken during daylight hours and not on public holidays and Sundays. The CHPP activities will be conducted on a 7 day, 24 hr basis.

4.7 DECOMMISSIONING

4.7.1 *Mine and Associated Infrastructure*

NAC in consultation with APC and other applicable parties will review all infrastructure assets towards the close of the Project and assess which structures will be retained for APC's agribusiness activities, sold for recycling or relocation or disposed of as general or regulated waste. Recycling and re-use of the revised Project's redundant infrastructure using local contractors will be promoted by NAC.

4.7.2 *Rehabilitated Land*

Rehabilitated land will be regularly monitored until monitoring data confirms successful achievement of the agreed rehabilitation performance criteria. NAC will continue this monitoring regime until the revised Project's total disturbed area is fully rehabilitated and surrender of the Project's MLs can be completed. NAC may also seek progressive 'sign off' on successfully rehabilitated parcels of land from the Department of Environment and Heritage Protection. NAC's rehabilitation activities will be designed to ensure the final agreed post mining land use and surrender of the Project's MLs are achieved.

5 DESCRIPTION OF EXISTING ENVIRONMENT

5.1 REGIONAL CONTEXT

The revised Project site is located within southeast Queensland's Darling Downs region 14 km north-northwest of Oakey within the Toowoomba Local Government Area, 35 km northwest of Toowoomba and 177 km west of Brisbane, Queensland's capital city. Toowoomba is the closest regional centre and is one of Australia's largest provincial cities with a population over 90 000 (<http://www.toowoomba.org/>). Toowoomba is the economic hub of the Darling Downs.

The Darling Downs is located within the Condamine River catchment at the headwaters of the Murray-Darling Basin and is characterised by fertile soils and a long history of agricultural development. In recent times the Darling Downs, like many agricultural regions, has experienced significant change in land use activities driven by a combination of new policy initiatives, technological developments, changing commodity markets, and broader demographic and cultural shifts.

5.2 LOCAL CONTEXT

5.2.1 *Topography*

The Project site is located within the Lagoon, Doctors and Spring Creek catchments. Lagoon Creek is grazed and cultivated up to and within the creek channel. In the upper reaches of the catchment, the terrain becomes steeper and possesses tracts of remnant vegetation. Higher, localised peaks in the Lagoon Creek catchment are also vegetated with trees. Lagoon Creek is the main local water course and is an ephemeral creek which forms a tributary of Oakey Creek, within the greater Condamine River catchment. Lagoon Creek flows roughly across the middle of the revised Project site in a northeast to southwest direction. The elevation of the surrounding area ranges from 390 m above sea level at Lagoon Creek up to 525 m above sea level on a local basaltic ridge. The Project site average is 420 m above sea level. The nearest town is Oakey.

5.2.2 *Landuse*

The revised Project site is situated on predominately grazing land common to the Darling Downs. The land uses nearby include grazing, pig farming, dairying, dryland cropping, grain storage and various rural

homestead properties. The land parcels contained within the revised Project site are predominantly freehold and leasehold tenures held by the APC. Much of the revised Project site has long been cleared of its original vegetation due to agricultural production, although localised areas of original remnant vegetation remain alongside Lagoon Creek, relic alluvial plains and upland low hills. The revised Project site has been subject to long periods of continued dry years and unreliable rainfall since the early 1990's.

5.2.3 Soils

A complex of soil types have developed on the gently undulating topography in which climate, topographical position and old sedimentary periods with more recent volcanic activity having played an important role in the formation of the soil mass. All soils are considered to be suitable for grazing on improved pastures with the exception of some on the upper slopes where steeper soil types exist. Grazing is predominately based on native pastures and also occurs on mixed farming enterprises combining grain and fodder production. A number of other minor industries including piggeries, horticulture and animal studs are present within the revised Project area due to the diversity of soils, proximity to markets and a favorable climate. Cropping for grain production is one of the largest agricultural land uses and industries within the revised Project area with cultivation for cropping and / or sown pasture carried out to some extent. Pasture lands occur throughout the Project area. Most of these areas carry native or sown grasses supporting grazing livestock. These pasture lands are (or were) the basis for a number of beef enterprises and to a lesser extent, dairy enterprises. The greatest proportion of these pasture lands is under native pasture.

5.2.4 Geology

Five aquifers exist within the revised Project site. The Quaternary Alluvial aquifer is limited in spatial extent and is likely to exist in association with Lagoon Creek. A review of bore logs from drilling undertaken as part of the baseline assessment demonstrates that there is only a minor outcrop of the Tertiary Basalt Aquifer in the northern section of the revised Project site.

The Walloon Coal Measures aquifer outcrops over much of the revised Project site. Results obtained from the pumping tests undertaken suggest that the Walloon Coal Measures aquifer is a single system with variable aquifer parameters. Results suggest that a leaky aquifer system exists with vertical movement of groundwater occurring where the confining layer is thin or absent within the Walloon Coal Measures aquifer. The Walloon Coal Measures is the major groundwater aquifer intersected by the revised Project.

The Marburg Sandstone and Helidon Sandstone aquifers are a part of the Great Artesian Basin and are the deepest semi-confined to confined aquifers underlying the revised Project site. These aquifers will not be affected by the revised Project.

5.2.5 Flora and Fauna

Most of the original vegetation has been cleared within the revised Project site due to past agriculture, grazing and mining activities. Approximately 10% of the revised Project site contains vegetation communities which can be classified as remnant or regrowth examples of specific regional ecosystem types. The balance consists of improved pasture, scattered clumps of trees and individual paddock trees.

The mapping records indicate that nine REs occurred historically within the revised Project site, namely:

- RE 11.3.1 – Brigalow (*Acacia harpophylla*) and/or belah (*Casuarina cristata*) open forest on alluvial plains.

- RE 11.3.2 – Poplar box (*Eucalyptus populnea*) woodland on alluvial plains.
- RE 11.3.17 – Poplar box woodland with brigalow and/or belah on alluvial plains.
- RE 11.3.21 – Queensland blue grass (*Dichanthium sericeum*) and/or *Astrebla* spp. grassland on alluvial plains. Cracking clay soils.
- RE 11.8.3 – Semi-evergreen vine thicket on Cainozoic igneous rocks. Steep hillsides.
- RE 11.8.5 – Mountain coolibah (*Eucalyptus orgadophila*) open woodland on Cainozoic igneous rocks.
- RE 11.9.5 – Brigalow and/or belah open forest on fine-grained sedimentary rocks.
- RE 11.9.7 – Poplar box, false sandalwood (*Eremophila mitchellii*) shrubby woodland on fine-grained sedimentary rocks.
- RE 11.9.10 – Brigalow, poplar box open forest on fine-grained sedimentary rocks.

The condition of the remnant vegetation is variable, with most areas being subjected to long-term grazing impacts, and as a consequence, present moderate to low native floral diversity. Native grassland occurs in road reserves and paddocks not subject to regular ploughing, cropping and grazing. Better quality examples of native grassland occur in lightly grazed areas.

Areas identified within the revised Project site having fauna habitat value include:

- Areas of fallen timber and scattered rocks. These habitats are typically found along road reserves and the hillocks at the south-western corner of the revised Project site.
- Grassland habitats are favoured by granivorous birds. Grasslands are common and widespread throughout pasture areas and along the edges of woodland.
- Eucalypt woodlands provide valuable habitat for a diversity of woodland birds, reptiles and arboreal mammals particularly those woodlands with high structural and floristic diversity.
- Hollow bearing trees occur in very low density and are scattered individually throughout wooded areas.

Aquatic habitat of the revised Project site comprises farm dams and in-stream habitat of Lagoon Creek. The in-stream habitat is dominated by pools with dry 'run' habitat existing between the pools. Aquatic vegetation is limited due to the ephemeral nature of the system. The riparian vegetation along Lagoon Creek is considered to be very poor with only a few trees and shrubs.

6 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

The NHG has undertaken a desktop assessment to determine the impact of the revised Project footprint of on Matters of National Environmental Significance (MNES) under the *Environment Protection and Biodiversity Act 1999* (EPBC Act).

The MNES relevant to the revised Project are:

- threatened ecological communities (sections 18 & 18A); and
- listed threatened species.

Table 4 lists the MNES that were found at within the revised Project site.

Table 4 MNES as occurring within the revised Project site

Threatened Ecological Community	EPBC Act Status
Bluegrass (<i>Dichanthium</i> spp.) dominant grasslands of the Brigalow Belt Bioregions (North and South)	Endangered
Brigalow (<i>Acacia harpophylla</i>) dominant and co-dominant)	Endangered
Listed Threatened Flora Species	EPBC Act Status
<i>Bothriochloa biloba</i> (lobed blue grass)	Vulnerable
<i>Digitaria porrecta</i> (finger panic grass)	Endangered
<i>Homopholis belsonii</i> (Belson's panic)	Vulnerable
<i>Stemmacantha australis</i> (renamed <i>Rhaponticum australe</i>) (Austral cornflower)	Endangered
Listed Threatened Fauna Species	EPBC Act Status
<i>Phascolarctos cinereus</i> (Koala)	Vulnerable
<i>Pteropus poliocephalus</i> (Grey-headed Flying-fox)	Vulnerable

7 POTENTIAL IMPACTS OF THE PROJECT

In revising the Project, the NHG has actively responded to the comments and concerns raised by Government and other stakeholders during the Project's EIS process. The NHG understands the importance of properly securing its social licence to operate, and as a consequence, has made significant changes to the former Project.

In summary, the revised Project includes a reduction in the MLA50232 Project area from 5 069 ha to 3 163 ha and a reduction in the disturbance footprint by approximately 2 304 ha through the avoidance of the southern areas from MLA50232. It also limits mining around Acland and includes a buffer zone around Lagoon Creek. These modifications have resulted in a reduction in throughput from 10 Mtpa to a maximum of 7.5 Mtpa, and have changed the life of mine to approximately 2029 rather than 2042 under the original proposal.

The revised Project also reduces the potential strategic cropping land impact by approximately 446 ha, with 427 ha of potential SCL to be disturbed rather than 873 ha. The revised Project includes no mining in the Sabine area and a reduction in the number of out-of-pit dumps from four to two. No final land voids will remain at mine closure, instead final pits will be backfilled and re-profiled into depressed landforms. There will be no diversion of Lagoon Creek, no closure of the Acland and therefore no requirement to relocate the Acland War Memorial, Tom Doherty Park or heritage items from the Acland No.2 Colliery. The JRLF will be relocated to a remote site on MLA50232.

The revised Project takes into account circumstances occurring since the 'significant project' declaration in 2007 and includes submissions on the EIS that raised concerns around environmental issues such as noise, air quality, vibration, the transport of coal, the diversion of Lagoon Creek and local heritage issues. Consequently, the NHG has sought to address these issues and concerns through the revised Project.

Table 5 presents a comparison between the original proposal (10 Mtpa proposal which is **not** proceeding) and the revised Project.

Table 5 - Revised Project Description Comparison Overview

Original Proposal NOT PROCEEDING	Revised Project CURRENT PROPOSAL	Project Amendment Register KEY DIFFERENCES
<p>NAC currently operates the New Acland Coal Mine (the Mine) at Acland, a 4.8 million tonnes (product coal) per annum (Mtpa) open cut coal mine on ML50170 and ML50216 within MDL244, under the approval of EA No. MIM800317705.</p> <p>The Project involved the staged expansion of the Mine's up to a capacity of 10 Mtpa of product coal through the inclusion and progressive development of three new resource areas within MLA 50232. The Project was expected to extend coal production at the Mine until approximately 2042.</p> <p>The key elements of the Project were:</p> <ul style="list-style-type: none"> ▪ expansion of the existing mining activities by the addition of the Manning Vale, Willeroo and Sabine resource areas within MLA50232, located to the south and west of the current ML50170 and ML50216; ▪ total production up to 10 Mtpa of product coal which equates to approximately 20 Mtpa RoM Coal; ▪ production of 279.7 Mt of product coal over the life of the Project; ▪ construction period commencing in 2010 to 2013, initially involving the construction of site access and roads (including re-alignments), water management structures and additional supporting infrastructure; 	<p>The key elements of the revised Project are:</p> <ul style="list-style-type: none"> ▪ continuation of the existing mining activities to extend to parts of the Manning Vale and Willeroo resource areas within MLA50232, located to the south and west of the current ML50170 and ML50216; ▪ nominal production rate of 6.0 Mtpa with maximum of 7.5 Mtpa of product coal from 2018 which equates to approximately 14 Mtpa Run-of-Mine (RoM) Coal; ▪ production of 96 to 122 Mt of product coal over the life of the Project; ▪ construction period commencing in 2015 to 2017, initially involving the construction of site access and roads (including re-alignments), water management structures and additional supporting infrastructure; 	<p>The amendments to the original proposal are:</p> <ul style="list-style-type: none"> ▪ Reduction in the active MLA Project area from 5,069 ha to 3,163 ha representing a 38% reduction; ▪ No mining in the Sabine Area; ▪ Reduction in throughput from 10 Mtpa to: <ul style="list-style-type: none"> ▪ Nominal 6.0 Mtpa to 2017 (maintain current operations); ▪ Nominal 6.0 Mtpa from 2018 with maximum 7.5Mtpa (incremental expansion); and ▪ Life of Mine to 2029; ▪ Reduction in disturbance footprint by 2,304ha (63%) through: <ul style="list-style-type: none"> ▪ Southern areas of MLA excluded from (10 km from Oakey); ▪ Acland's exclusion from mining; and ▪ Lagoon Creek excluded from mining (No creek diversion);

Original Proposal NOT PROCEEDING	Revised Project CURRENT PROPOSAL	Project Amendment Register KEY DIFFERENCES
<ul style="list-style-type: none"> ▪ maintenance of the existing thin seam coal, open cut mining techniques and expansion of the Mine's truck and loader mining fleet; ▪ addition of a new Coal Handling and Preparation Plant (CHPP(3)), ROM and product coal stockpile areas and supporting infrastructure on MLA50232; ▪ tailings disposal within a series of TSFs on MLA 50232 comprising an initial engineered out-of-pit TSF followed by in-pit disposal to engineered TSF's in the back filled mine pits of the current and future mine pit areas; ▪ construction of a new Raw Water Dam (RWD (3)) to supply CHPP 3; ▪ progressive disposal of coarse rejects to cells within the overburden dumps; ▪ emplacement of four out-of-pit spoil dumps containing a total material volume of 128.1 Mm³ associated with the Manning Vale, Sabine and Willeroo pits; ▪ generation of five potential final voids, comprising 560.1 ha within the total area of the Project equalling 7 347 ha; ▪ raw water supply from the Wetalla Wastewater Reclamation Facility (WWRF) from Toowoomba via a 45 km pipeline. This project was the subject of a separate EIS process under the SDPWO Act; ▪ a mine surface water 	<ul style="list-style-type: none"> ▪ maintenance of the existing thin seam coal, open cut mining techniques and expansion of the Mine's truck and loader mining fleet; ▪ upgrade to the existing Coal Handling and Preparation Plant (CHPP), RoM and product coal stockpile areas and supporting infrastructure on ML50170; ▪ tailings disposal within a series of TSFs on MLA 50232 comprising in-pit disposal to engineered TSF's in the back filled mine pits of the current and future mine pit areas; ▪ progressive disposal of coarse rejects to cells within the overburden dumps; ▪ emplacement of two out-of-pit spoil dumps as elevated landforms containing a total material volume of approximately 56 Mm³ and 170 ha associated with the Manning Vale and Willeroo pits; ▪ generation of depressed landforms at end of mining; ▪ raw water supply from the Wetalla Wastewater Reclamation Facility (WWRF) from Toowoomba via a 45 km pipeline; ▪ a mine surface water 	<ul style="list-style-type: none"> ▪ Reduction SCL impact by 446 ha (51%); ▪ 427 ha potential SCL to be disturbed; ▪ No new CHPP outside the current process plant precinct is required. Current CHPP to be upgraded; ▪ No out-of-pit tailing storage facility; ▪ No requirement for a new Raw Water Dam to supply existing and upgraded CHPP; ▪ Reduction of out-of-pit dump down to 2 instead of 4; ▪ No final voids to remain – Final mining pits to be backfilled and profiled to depressed landform to meet sustainable land-use practices;

Original Proposal NOT PROCEEDING	Revised Project CURRENT PROPOSAL	Project Amendment Register KEY DIFFERENCES
<p>management system involving various water management structures staged to accommodate the progressive development of the Mine. These water management structures will be constructed to divert clean water and capture and manage mine area runoff and mine pit water for reuse;</p> <ul style="list-style-type: none"> ▪ addition of a new administration and heavy vehicle maintenance area on MLA50232; ▪ relocation and potential upgrade of the power supply to the Project; ▪ diversion of the Jondaryan-Muldu Road around the Manning Vale resource area; ▪ diversion of Lagoon Creek around the Manning Vale resource area and the progressive re-establishment of Lagoon Creek along its original alignment including rehabilitation of the riparian and in-stream zones; ▪ development of a suitable 'off set' strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA 50232; ▪ closure of Acland and the relocation of significant historical items to the 'Acland Heritage Precinct' off site for tourism and other commemorative purposes; ▪ construction of a new 8 km private haul road as a dedicated transport corridor from the Mine to the JRLF 	<p>management system involving various water management structures staged to accommodate the progressive development of the Mine. These water management structures will be constructed to divert clean water and capture and manage mine area runoff and mine pit water for reuse;</p> <ul style="list-style-type: none"> ▪ upgrade of existing administration and heavy vehicle maintenance area on ML 50170; ▪ relocation and potential upgrade of the power supply to the Project; ▪ diversion of the Jondaryan-Muldu Road around the Manning Vale resource area; ▪ development of a suitable 'off set' strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA 50232; ▪ preservation of historical items within Acland. ▪ construction of a new 8km spur rail line from Jondaryan to MLA50232 	<ul style="list-style-type: none"> ▪ No requirement for new Mine Industrial Area, upgrade of existing facility; ▪ No diversion of Lagoon Creek; ▪ No closure of Acland; ▪ No relocation of significant historical items to an 'Acland Heritage Precinct' off-site e.g., No 2 Colliery; ▪ No relocation of the Acland War Memorial; ▪ Additional construction of a spur rail line from Jondaryan to MLA 50232;

Original Proposal NOT PROCEEDING	Revised Project CURRENT PROPOSAL	Project Amendment Register KEY DIFFERENCES
<p>which will include supporting road infrastructure changes;</p> <ul style="list-style-type: none"> ▪ continued use of the current JRLF on the main western rail line to the east of Jondaryan township; ▪ decommissioning and relocation of existing local telecommunication network within the Project site; ▪ comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and ▪ amendment of NAC's existing EA authorising a sustainable level of environmental harm commensurate to the Project's size and scope. 	<ul style="list-style-type: none"> ▪ construction of a new Materials Handling and Train Loading Facility on MLA 50232. ▪ partial decommissioning and relocation of existing local telecommunication network within the Project site; ▪ comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and ▪ amendment of NAC's existing EA authorising a sustainable level of environmental harm commensurate to the Project's size and scope. 	<ul style="list-style-type: none"> ▪ Relocating of the Jondaryan Rail Loading Facility (JRLF); and ▪ Additional construction of a new Materials Handling and Train Loading Facility on MLA 50232.

Note: The Original Proposal - New Acland Coal Mine Stage 3 Expansion Project (and its key elements) is not subject to this assessment process.

In summary, the key elements that were initially canvassed by the Terms of Reference issued for the original proposal in October 2007 remain for the revised Project, and include the continuation to the extension of mining activities into parts of the Manning Vale and Willeroo resource areas within MLA50232, maintaining the existing thin seam coal, open cut mining techniques and expansion of the mine's truck and loader mining fleet. Other key elements that remain include the emplacement of out-of-pit spoil dumps, the addition of a new administration and heavy vehicle maintenance area on ML50170, the diversion of the Jondaryan-Muldu Road around the Manning Vale resource area, construction of a new Materials Handling and Train Loading Facility, and the relocation and upgrade of existing local telecommunication and power supply networks.

8 ENVIRONMENTAL AND SOCIAL MANAGEMENT

The EIS will present the revised Project and describe the measures that will be undertaken to prevent or mitigate any potential adverse impacts on the environment, including impacts on water resources (surface water and groundwater), land resources, air quality (including greenhouse gases), noise and vibration, cultural heritage (including indigenous and non-indigenous), and flora and fauna of conservation significance.

Environmental management requirements for the revised Project will be stipulated in the regulatory documents that are prepared as part of the approvals process prior to mining.

An EM Plan will be prepared for the revised Project. The EM Plan will contain:

- environmental values likely to be affected by mining activities;

- potential adverse and beneficial impacts of the mining activities on the environmental values;
- environmental protection objectives; and
- control strategies adopted to achieve the environmental protection objectives and the proposed EA conditions.

The EIS will also address the potential for social impacts and present mitigation strategies to manage any potentially adverse impacts if required. A Social Impact Management Plan (SIMP) will be developed for the revised Project.

The key objectives of the SIMP are to:

- present a clear summary of the potential positive and negative social impacts of the Project, as well as proposed mitigation and management strategies and implementation actions;
- reflect the key findings and recommendations of the social impact assessment, including the results of engagement with stakeholders; and
- promote an active and on-going role for communities, local authorities and government throughout the Project.

9 LEGISLATIVE REQUIREMENTS

The revised Project will be subject to a Mining Lease Application process pursuant to the *Mineral Resources Act 1989* (MR Act). The revised Project activities will be authorised by an EA granted under the *Environmental Protection Act 1994*. The revised Project will involve development both on and off-lease.

For development on the Mining Lease (ML), a number of approval exemptions will apply including:

- exemptions from the *Sustainable Planning Act 2009* (SP Act) as per Section 319 of the MR Act;
- exemptions from assessment against local government planning schemes as per Table 5, Schedule 4 of the *Sustainable Planning Regulation 2009* (SP Regulation); and
- an exemption from the VM Act for clearing native vegetation in accordance with Part 1, Item 1(6), Schedule 24 of the SP Regulation.

NAC will work closely with the TRC to ensure that benefits to the region are maximised and potentially adverse impacts are prevented or mitigated. The EIS will consider relevant TRC policies and planning schemes.

The following key policies and guidelines will be considered as part of the EIS process:

- Australian Government EPBC Act Environmental Offsets Policy Consultation Draft;
- Ecoaccess Guideline - Planning for Noise Control Guideline 2004;
- *Environmental Protection (Air) Policy 2008*;
- *Environmental Protection (Noise) Policy 2008*;
- *Environmental Protection (Water) Policy 2009*;
- Major Resource Projects Housing Policy: Core principles to guide social impact assessment;
- Manual for Assessing Hazard Categories and Hydraulic Performance of Dams;

- Queensland Department of Environment and Resource Management Government Biodiversity Offsets Policy DERM, 2011;
- Queensland Government Environmental Offsets Policy EPA, 2008;
- Queensland Government Policy for Vegetation Management Offsets Version 3, September 2011;
- Queensland Government Water Regulation 2000 Moratorium Notice 14 December 2010 for groundwater in the Fitzroy Basin;
- Queensland Water Quality Guidelines, Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000;
- Social Impact Assessment Guideline to Preparing a Social Management Plan;
- State Planning Policy 1/92 Development and the Conservation of Good Quality Agricultural Land;
- State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide; and
- State Planning Policy 1/12 Protection of Queensland's Strategic Cropping Land.

The revised Project will require inter-departmental coordination for permitting and approvals to mitigate the potential for schedule impact resulting from delays during the assessment process. The revised Project requires an application for a new ML and an amendment to the existing EA. Further approvals will be required for on-lease and off-lease works associated with the revised Project including under the SP Act. An indicative list of approvals for the revised Project is presented in **Table 5**.

Table 5 – Indicative List of Revised Project Approvals

Approval type	Approval triggers	Relevant legislation	Relevant agency
Issue of a Mining Lease for mining purposes (NAC has applied for MLA 50232)	<p>The Governor in Council may grant a mining lease for all or any of the following purposes:</p> <ul style="list-style-type: none"> • To mine the mineral or minerals specified in the lease and for all purposes necessary to effectually carry on that mining. • Such purposes, other than mining, as are specified in the mining lease and that are associated with arising from or promoting the activity of mining. 	Mineral Resources Act 1989	Department of Natural Resources and Mines (DNRM).
Issue of a Mining Lease for infrastructure purposes (NAC will apply for this ML)	<p>The Governor in Council may grant a mining lease for all or any of the following purposes:</p> <ul style="list-style-type: none"> • Such purposes, other than mining, as are specified in the mining lease and that are associated with arising from or promoting the activity of mining. 	Mineral Resources Act 1989	DNRM
Amendment to existing Environmental Authority	<p>The following ERAs may be triggered depending on activity threshold:</p> <ul style="list-style-type: none"> • ERA 8 (Chemical storage) 	Environmental Protection Act 1994; Environmental Protection	Department of Environment and Heritage Protection (DEHP)

Approval type	Approval triggers	Relevant legislation	Relevant agency
	<ul style="list-style-type: none"> • ERA 60 (Waste Disposal) • ERA63 (Sewage Treatment) • Chapter 5 activities (mining), including tailings storage • ERA 15 (Fuel Burning) • ERA 16 (Extractive and screening activities) • ERA 21 (Motor vehicle workshop) • ERA 43 (Concrete batching) • ERA 50 (Bulk Material Handling) • ERA 64 (Water Treatment) 	Regulation 2008; Mineral Resources Act 1989; Mineral Resources Regulation 2003	
ERA registration certificates	Only a registered operator may undertake an ERA	Environmental Protection Act 1994	DEHP
Acceptance of failure impact assessment	Failure impacts assessment is required for referable dams	Water Supply (Safety and Reliability) Act 2008	Department of Energy and Water Supply (DEWS)
Development permit for material change of use of premises on the environmental management register or contaminated land register	<p>Making a material change of use of premises if all or part of the premises is on the EMR or CLR, unless—</p> <p>(a) All of the following apply:</p> <ul style="list-style-type: none"> (i) A suitability statement has been given for the premises. (ii) A site management plan has been approved for the land for the intended use. (iii) The application only involves— <ul style="list-style-type: none"> - The fit out of a building on the land - Minor site excavation <p>(b) There is currently a notifiable activity on the land and this notifiable activity is continuing; or</p> <p>(c) The proposed use is industrial and only involves minor site excavation;</p> <p>(d) The land is used for a mining activity;</p> <p>(e) The land is in an Urban Development Area.</p>	Environmental Protection Act 1994	DEHP
Disposal permit to remove and treat or dispose of contaminated soil from land	A disposal permit may be required if contaminated soil is to be removed from a site listed on the EMR or CLR	Environmental Protection Act 1994	DEHP

Approval type	Approval triggers	Relevant legislation	Relevant agency
on the EMR or CLR			
Development permit for operational works for taking or interfering with water	As the Lagoon Creek diversion is not proceeding, will only be required for operational work which is taking or interfering with water in a watercourse, lake or spring (being both the construction of the dam and temporary works for taking water for construction).	Sustainable Planning Act 2009; Sustainable Planning Regulation 2009; Water Act 2000	DEHP
Development permit for waterway barrier works	A development permit is required for constructing or raising waterway barrier works in a watercourse Note: the project does not meet the criteria for temporary waterway barrier works	Sustainable Planning Act 2009; Sustainable Planning Regulation 2009; Fisheries Act 1994	DNRM
Water licence	Diverting a creek; interference with water in a watercourse, lake or spring	Water Act 2000	DEHP
Permit to alter a local road	Conduct of works in a local road reserve	Transport Infrastructure Act 1994; Local Government Act 2009	Toowoomba Regional Council
Permit to Occupy	Required for a specific purpose with a road reserve or unallocated State land, such as a pipeline, pump/bore or investigation work.	Transport Infrastructure Act 1994	DTMR
Permit for temporary or permanent road closure	Required for the closure of existing road reserves and the area of land to be occupied by construction works or structures.	Transport Infrastructure Act 1994	DTMR
Road Corridor permit	Certain ancillary works and encroachments on State-controlled roads must be authorised in writing by the chief executive	Transport Infrastructure Act 1994	DTMR
Works within a state controlled road	Approval is required to interfere with a State-controlled road or its operation or to carry out works (other than ancillary works and encroachments)	Transport Infrastructure Act 1994	DTMR
Public Utilities Plan	Coordination of utility relocation	Electricity Act 1994; Telecommunications Act 1997	Public utility providers (Telstra, Ergon)
Clearing permit	A permit is required to take protected plants, subject to certain exceptions	Nature Conservation Act 1992	DEHP
Reconfiguration of a lot	A development permit is required for the reconfiguration of a lot, may be required for excisions or long term leases for ancillary infrastructure	Sustainable Planning Act 2009; Sustainable Planning Regulation 2009; Land Titles Act 1994	Toowoomba Regional Council
Fibre optic cable	Installation of fibre optic cable between the Project's new		

Approval type	Approval triggers	Relevant legislation	Relevant agency
	administration areas. If goes ahead will occur at the same time as the Jondaryan-Muldu road diversion.		
Building work	Under section 319(3) of the MRA, building work which is development authorised under the MRA will still be subject to SP Act and the Building Act, and is taken to be self-assessable development under section 21 of the Building Act. This means all building work is required to comply with the relevant codes.	Building Act 1975	

10 COST AND BENEFITS OF THE PROJECT

The estimated capital cost of the revised Project is \$700 million. The revised Project will provide an annual \$530 million injection into the south-east Queensland economy and \$8 billion over the life of the mine.

The revised Project is expected to provide the following benefits.

- A significant contribution will be made to the State's economy and additional employment opportunities will be provided. The revised Project will directly employ up to 220 people during the peak constructional phase and approximately 400 employees and 170 FTE contractors during the peak operations phase. In addition, there will be opportunities for local employment in construction, transport and the supply of goods and services.
- Significant capital will be invested to facilitate full production and further expenditure on replacement capital will occur over the life of the revised Project.
- The increased industrial activity in the region will generate wealth for many sectors of the local and regional economies. Oakey and the surrounding regional communities are expected to receive significant economic benefits over the life of the revised Project.
- Efficiencies will be provided by capitalising on existing infrastructure located at the Mine.

11 COMMUNITY AND STAKEHOLDER CONSULTATION

NAC has significantly increased engagement with the local community, industry organisations, local council and state government departments since the notification of the new ToR for the Project. NAC has received positive feedback and support for the existing operations through a dedicated Oakey Community Information Centre, mine open days, website enquiries, newsletters, local newspaper articles, audio visual material, fact sheets, billboards and visits by local community groups. On-going communication with community stakeholders will be formalised through the New Acland Community Reference Group which begun in October 2012.

A Stakeholder Engagement and Communications Plan will be developed for the revised Project. The NHG intends to work with and maintain open communication with the stakeholders on all aspects of the Project.

Key objectives of this plan for the revised Project will be to:

- initiate and maintain open communication with all relevant stakeholders;
- identify community issues and concerns;
- target specific stakeholders to help identify potential social impacts and develop appropriate mitigation strategies;
- proactively respond to and work with the stakeholders to develop appropriate solutions and strategies to minimise negative impacts;
- address stakeholder issues through the EIS process and communications;
- continue the long-term relationship between NAC/NHG and the stakeholders that is based on mutual trust and respect;
- provide feedback to the stakeholders about their issues and concerns and how their feedback has been used; and
- manage a process which uses existing stakeholder contact points and avenues for discussion.

To achieve the objectives outlined in the plan, the stakeholder engagement process will involve:

- planning for and implementing opportunities for the stakeholders to comment on the potential impacts of the revised Project;
- establishing flexible and mobile display and support facilities that maximise stakeholder involvement;
- recognising the contribution that NAC makes in the economic development of the region;
- obtaining, considering, managing and documenting stakeholder comments and issues of concern; and
- building on information developed by NAC during the planning process for the revised Project.

The NHG will undertake formal public consultation with the stakeholders as part of the EIS process.

12 REFERENCES

- | | |
|-----------------------------|---|
| Sinclair Knight Merz (2009) | New Acland Coal Mine Stage 3 Expansion Project, Environmental Impact Statement Volume 1 |
| Sinclair Knight Merz (2009) | New Acland Coal Mine Stage 3 Expansion Project, Environmental Impact Statement Volume 2 |

<http://www.toowoomba.org/>