



MAXWELL PROJECT

ATTACHMENT 7

**Relevant Environmental Planning Instruments
and Government Policies**



TABLE OF CONTENTS

A7	RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS AND GOVERNMENT POLICIES	A7-1	A7.3.5	Muswellbrook Shire Council Community Strategic Plan 2017-2027	A7-22
A7.1	STATE ENVIRONMENTAL PLANNING POLICIES	A7-1	A7.3.6	Singleton Community Strategic Plan 2017-2027	A7-23
A7.1.1	State Environmental Planning Policy (State and Regional Development) 2011	A7-1	A7.3.7	Draft Muswellbrook Local Strategic Planning Statement 2018-2038	A7-23
A7.1.2	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007	A7-1	A7.3.8	Muswellbrook Mine Affected Roads – Road Network Plan	A7-24
A7.1.3	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development	A7-8	A7.3.9	Land Use Development Strategy	A7-25
A7.1.4	State Environmental Planning Policy No. 44 - Koala Protection	A7-10	A7.3.10	Muswellbrook Industrial Lands Audit	A7-26
A7.1.5	State Environmental Planning Policy No.55 – Remediation of Land	A7-11	A7.4	REFERENCES	A7-27
A7.1.6	State Environmental Planning Policy (Infrastructure) 2007	A7-12			
A7.2	MUSWELLBROOK LOCAL ENVIRONMENTAL PLAN 2009	A7-13			
A7.2.1	Objectives	A7-13			
A7.2.2	Permissibility	A7-14			
A7.2.3	Zone Objectives	A7-14			
A7.2.4	Special Provisions	A7-17			
A7.3	OTHER STRATEGIC PLANNING DOCUMENTS AND POLICIES	A7-20			
A7.3.1	Development Control Plans	A7-20			
A7.3.2	NSW Climate Change Policy Framework	A7-21			
A7.3.3	Upper Hunter Strategic Regional Land Use Plan	A7-21			
A7.3.4	Upper Hunter Economic Diversification Action Plan: Implementation Priorities	A7-21			

LIST OF TABLES

Table A7-1	Clause 12AB Non-discretionary Development Standards for Mining
Table A7-2	Consideration of the Recommendations of the Conditional Gateway Certificate

LIST OF FIGURES

Figure A7-1	Relevant Land Zoning – Maxwell Infrastructure
Figure A7-2	Relevant Land Zoning – Maxwell Underground

A7 RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS AND GOVERNMENT POLICIES

This attachment provides further discussion on the requirements and application of State Environmental Planning Policies (SEPPs), the *Muswellbrook Local Environmental Plan 2009* (Muswellbrook LEP) and strategic planning documents and government policies relevant to the Maxwell Project (the Project).

References to Sections 1 to 9 in this Attachment are references to Sections in the Main Report of the Environmental Impact Statement (EIS). References to Appendices A to V in this Attachment are references to Appendices of the EIS. Internal references within this Attachment are prefixed with "A7".

A7.1 STATE ENVIRONMENTAL PLANNING POLICIES

A7.1.1 State Environmental Planning Policy (State and Regional Development) 2011

Clause 3 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) outlines the aims of the SEPP, including the following of relevance to the Project:

- (a) to identify development that is State significant development,

...

The Project falls within Item 5 of Schedule 1 of the State and Regional Development SEPP as it is development for the purpose of mining that is coal mining. Under clause 8 of the State and Regional Development SEPP, the Project is, therefore, State Significant Development for the purposes of the New South Wales (NSW) *Environmental Planning and Assessment Act, 1979* (EP&A Act) (Section 4.3.2).

A7.1.2 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

The *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP) is applicable to the whole of NSW.

Part 1 – Clause 2

Clause 2 sets out the aims of the Mining SEPP, as follows:

- (a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and
- (b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and
- (b1) to promote the development of significant mineral resources, and
- (c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and
- (d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development:
 - (i) to recognise the importance of agricultural resources, and
 - (ii) to ensure protection of strategic agricultural land and water resources, and
 - (iii) to ensure a balanced use of land by potentially competing industries, and
 - (iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.

Parts 2 to 4AA of the Mining SEPP seek to achieve the aims outlined in clause 2. Relevant clauses in Parts 2 to 4AA of the Mining SEPP are addressed below.

Part 2 – Clauses 7 and 9

Clause 7

Clause 7(1) of the Mining SEPP states that development for any of the following purposes may be carried out only with Development Consent:

- ...
- (a) underground mining carried out on any land,
- ...

- (d) *facilities for the processing or transportation of minerals or mineral bearing ores on land on which mining may be carried out (with or without development consent), but only if they were mined from that land or adjoining land,*
- ...

The Project requires Development Consent under the EP&A Act.

Descriptions of the relevant Local Environmental Plan (LEP) land use zones and the applicability of the Mining SEPP to the permissibility of the Project are provided in Section A7.2.

Clause 9

Clause 9 of the Mining SEPP states that despite any other provision of the Mining SEPP or any other environmental planning instrument, development specified in Schedule 1 is prohibited.

Land covered by Exploration Licence (EL) 5460 is identified as “land where open-cut mining is prohibited” as mapped by *Map 4 – Jerrys Plains* in Schedule 1 of the Mining SEPP. The Project is development of an underground coal mining operation in EL 5460. As such, the Project is not prohibited development under clause 9 of the Mining SEPP.

Part 3 – Clauses 12AB to 17

Part 3 of the Mining SEPP provides matters for consideration for development applications.

Clause 12AB

Section 4.15(2) of the EP&A Act prescribes:

If an environmental planning instrument or a regulation contains non-discretionary development standards and development, not being complying development, the subject of a development application complies with those standards, the consent authority:

- (a) *is not entitled to take those standards into further consideration in determining the development application, and*
- (b) *must not refuse the application on the ground that the development does not comply with those standards, and*
- (c) *must not impose a condition of consent that has the same, or substantially the same, effect as those standards but is more onerous than those standards,*

and the discretion of the consent authority under this section and section 4.16 is limited accordingly.

Clause 12AB of the Mining SEPP identifies non-discretionary development standards for the purposes of subsection 4.15(2) of the EP&A Act in relation to the carrying out of development for the purposes of mining.

Table A7-1 provides each of the non-discretionary development standards listed in clause 12AB of the Mining SEPP and a summary of the conclusions of this EIS with respect to the Project. Where the Project complies with non-discretionary development standards in clause 12AB of the Mining SEPP, the NSW Minister for Planning (the Minister) or Independent Planning Commission (IPC) must act in accordance with subsection 4.15(2) of the EP&A Act.

Clause 12

Clause 12 of the Mining SEPP requires that, before determining an application for Development Consent for the purposes of mining, the consent authority (in this case the Minister or the IPC) must:

- (a) *consider:*
 - (i) *the existing uses and approved uses of land in the vicinity of the development, and*
 - (ii) *whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and*
 - (iii) *any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and*
- (b) *evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a) (i) and (ii), and*
- (c) *evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii).*

The Project is located on lands that have been largely disturbed by previous agricultural activities, particularly grazing, and previous open cut mining activities.

Consideration of the potential impacts of the Project on agricultural land uses within the Project area is provided in Section 6.6 and Appendix Q.

Table A7-1
Clause 12AB Non-discretionary Development Standards for Mining

Subclause of Clause 12AB	Compliance of the Project
(3) Cumulative noise level <i>The development does not result in a cumulative amenity noise level greater than the recommended amenity noise levels, as determined in accordance with Table 2.2 of the Noise Policy for Industry, for residences that are private dwellings.</i>	<p>The cumulative amenity noise level from the concurrent operation of the Project and adjacent Mt Arthur Mine would comply with the recommended amenity noise levels outlined in Table 2.2 of the <i>Noise Policy for Industry</i> (Environment Protection Authority, 2017) at all privately-owned receivers (Section 6.9 and Appendix I).</p>
(4) Cumulative air quality level <i>The development does not result in a cumulative annual average level greater than 25 µg/m³ of PM₁₀ or 8 µg/m³ of PM_{2.5} for private dwellings.</i>	<p>The Project would not result in a cumulative annual average greater than 25 micrograms per cubic metre (µg/m³) of PM₁₀ or 8 µg/m³ of PM_{2.5} at any privately-owned dwellings when considered with existing background sources (Section 6.10 and Appendix J).</p>
(5) Airblast overpressure <i>Airblast overpressure caused by the development does not exceed:</i> (a) 120 dB (Lin Peak) at any time, and (b) 115 dB (Lin Peak) for more than 5% of the total number of blasts over any period of 12 months, <i>measured at any private dwelling or sensitive receiver.</i>	<p>Airblast overpressure caused by the Project would not exceed the relevant criteria as measured at any privately-owned dwelling or sensitive receiver (Section 6.9 and Appendix I).</p>
(6) Ground vibration <i>Ground vibration caused by the development does not exceed:</i> (a) 10 mm/sec (peak particle velocity) at any time, and (b) 5 mm/sec (peak particle velocity) for more than 5% of the total number of blasts over any period of 12 months, <i>measured at any private dwelling or sensitive receiver.</i>	<p>Ground vibration caused by the Project would not exceed the relevant criteria as measured at any privately-owned dwelling or sensitive receiver (Section 6.9 and Appendix I).</p>
(7) Aquifer interference <i>Any interference with an aquifer caused by the development does not exceed the respective water table, water pressure and water quality requirements specified for item 1 in columns 2, 3 and 4 of Table 1 of the Aquifer Interference Policy for each relevant water source listed in column 1 of that Table.</i>	<p>The Project would meet the Level 1 minimal impact consideration classification (as defined by the Aquifer Interference Policy [NSW Government, 2012a]) for alluvial groundwater sources for all requirements.</p> <p>The Project would meet the Level 1 minimal impact consideration classification (as defined by the Aquifer Interference Policy) for the Permian hard rock groundwater sources (classified as a 'less productive' groundwater source) for water quality requirements. The Project would meet the Level 2 minimal impact consideration classification in relation to water table and water pressure requirements for the Permian hard rock groundwater sources within the Sydney Basin-North Coast Groundwater Source.</p>

Note: PM_{2.5} – particulate matter less than 2.5 micrometres (µm) in aerodynamic equivalent diameter.

PM₁₀ – particulate matter less than 10 µm in aerodynamic equivalent diameter.

Existing and approved land uses in the vicinity of the Project include:

- mining (Mt Arthur Mine) and power generation (Liddell and Bayswater Power Stations);
- equine enterprises (with the Coolmore and Godolphin Woodlands Studs the closest equine enterprises);
- a viticulture enterprise (Hollydene Estate Wines);
- rural residential properties to the north of Thomas Mitchell Drive;
- agricultural land owned by Malabar, currently used for cattle grazing and opportunistic fodder cropping; and
- industrial uses in the Muswellbrook Industrial Area.

Section 9.1.5 provides a detailed consideration of the compatibility of the Project with existing and approved land uses in the vicinity of the Project, along with any likely preferred land uses. Through the voluntary adoption of the proposed Project design measures and operating philosophy (Sections 2.1.5 and 5.2), Malabar is confident that the Project would not be incompatible with existing, approved or likely preferred uses of land in the vicinity of the Project. Malabar is also confident that the Project is not likely to have a significant adverse impact on likely preferred uses of land in the vicinity of the Project.

The Project would generate a significant net benefit to the locality and the State of NSW (Section 9.4 and Appendix M).

Accordingly, the Minister or IPC can be satisfied as to these matters.

Clause 12A

Clause 12A(2) requires that, before determining an application for consent for State Significant Development for the purposes of mining, the consent authority must consider any applicable provisions of a voluntary land acquisition and mitigation policy and, in particular:

- (a) any applicable provisions of the policy for the mitigation or avoidance of noise or particulate matter impacts outside the land on which the development is to be carried out, and
- (b) any applicable provisions of the policy relating to the developer making an offer to acquire land affected by those impacts.

The applicable provisions of the *Voluntary Land Acquisition and Mitigation Policy – For State Significant Mining, Petroleum and Extractive Industry Developments* (NSW Government, 2018a) are addressed in Sections 6.9 and 6.10 and Appendices I and J.

Clause 13

Clause 13(2) of the Mining SEPP requires that, before determining any application for consent for development in the vicinity of an existing mine, petroleum production facility or extractive industry (clause 13[1]), to which this clause applies, the consent authority must:

- (a) consider:
 - (i) the existing uses and approved uses of land in the vicinity of the development, and
 - (ii) whether or not the development is likely to have a significant impact on current or future extraction or recovery of minerals, petroleum or extractive materials (including by limiting access to, or impeding assessment of, those resources), and
 - (iii) any ways in which the development may be incompatible with any of those existing or approved uses or that current or future extraction or recovery, and
- (b) evaluate and compare the respective public benefits of the development and the uses, extraction and recovery referred to in paragraph (a) (i) and (ii), and
- (c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii).

The substantial existing Maxwell Infrastructure is located within existing mining tenements under the *NSW Mining Act, 1992* (CL 229, ML 1531 and CL 395) and would be used for handling, processing and transportation of coal for the life of the Project.

The use of the Maxwell Infrastructure for the Project results in less disturbance and a significantly lower initial capital cost, than would otherwise be required for a greenfield project to access the coal resource within EL 5460.

In the absence of approval for the Project, this existing infrastructure would be decommissioned and the potential benefits of its use would be lost.

In addition to the above, the Project would support continued rehabilitation activities at the Maxwell Infrastructure (within CL 229, ML 1531 and CL 395), including reduction in the volume of final voids through emplacement of reject material generated by coal processing activities.

The Project is located adjacent to the Mt Arthur Mine. The Project would not have a significant detrimental impact on current or future extraction or recovery of coal at the Mt Arthur Mine.

Malabar will continue to consult and work closely with BHP, the owner of the Mt Arthur Mine, regarding the interactions between this operation and the Project to maximise cooperation, efficiencies and positive environmental outcomes.

As described in Section 2.3, there would be no direct interaction between the Project and other existing or proposed mining operations. A summary of the Project key interactions with surrounding mining projects is provided in Section 2.3 and, where relevant, potential cumulative environmental impacts are described in Section 6.

There are no Petroleum Exploration Licences (PELs) overlapping the Development Application Area. As such, it is not expected that the Project will have a significant impact on future extraction of petroleum. Similarly, it is not expected that the Project would have a significant impact on future extractive industry.

Accordingly, the Minister or IPC can be satisfied as to these matters.

Clause 14

Clause 14(1) of the Mining SEPP requires that, before granting consent for development for the purposes of mining, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following:

- (a) *that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable,*
- (b) *that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,*
- (c) *that greenhouse gas emissions are minimised to the greatest extent practicable.*

In addition, clause 14(2) requires that, without limiting subclause (1), in determining a Development Application for development for the purposes of mining:

the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

The potential impacts of the Project on groundwater and surface water resources are discussed in Sections 6.4 and 6.5 and Appendices B, C and D, including measures to minimise potential impacts.

The potential impacts of the Project on threatened species and biodiversity are described in Sections 6.7 and 6.8 and Appendices E and F, including measures to minimise potential impacts.

The Project Biodiversity Offset Strategy has been developed to address the potential residual impacts on biodiversity values associated with the Project in accordance with the offset rules under the NSW Biodiversity Offsets Scheme (as required by the Secretary's Environmental Assessment Requirements [SEARs] for the Project) and Commonwealth biodiversity offset requirements (Section 6.7.6).

The Project greenhouse gas emissions assessment is provided in Section 6.19 and Appendix J. Greenhouse gas abatement measures and relevant state or national policies, programs and guidelines are described in Sections 6.19 and 9. As such, this EIS demonstrates that greenhouse gas emissions have been minimised to the greatest extent possible.

Accordingly, the Minister or IPC can be satisfied as to these matters.

Clause 15

Clause 15 of the Mining SEPP requires:

- (1) *Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider the efficiency or otherwise of the development in terms of resource recovery.*
- (2) *Before granting consent for the development, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at optimising the efficiency of resource recovery and the reuse or recycling of material.*

- (3) *The consent authority may refuse to grant consent to the development if it is not satisfied that the development will be carried out in such a way as to optimise the efficiency of recovery of minerals, petroleum or extractive materials and to minimise the creation of waste in association with the extraction, recovery or processing of minerals, petroleum or extractive materials.*

Malabar has presented Project description information, mine layout plans and other information to the NSW Division of Resources and Geoscience (DRG) (within the Department of Planning and Environment [DP&E]) during the development of this EIS (Section 5.3.1).

Constraints to the extent of the Project underground mine are discussed in Section 3.1.3. Malabar would seek to maximise resource recovery within geological, environmental and tenement constraints.

Further exploration or technical assessment may result in changes to the recoverable coal resource. Malabar also recognises that mining technology will advance over the life of the Project, influencing the ultimate coal reserves.

There is the potential to recover additional coal beyond the life of the Project, which would be subject to separate assessments and approvals. The Project would not be expected to have a significant impact on future extraction or recovery of coal in either deeper seams or beyond the proposed Maxwell Underground area.

Accordingly, the Minister or IPC can be satisfied as to these matters.

Clause 16

Clause 16(1) of the Mining SEPP requires that before granting consent for development for the purposes of mining that involves the transport of materials, the consent authority must consider whether or not the consent should be issued subject to conditions that do any one or more of the following:

- (a) *require that some or all of the transport of materials in connection with the development is not to be by public road,*
- (b) *limit or preclude truck movements, in connection with the development, that occur on roads in residential areas or on roads near to schools,*
- (c) *require the preparation and implementation, in relation to the development, of a code of conduct relating to the transport of materials on public roads.*

As detailed in Section 3.7, product coal would be transported via the existing Antiene Rail Spur and Main Northern Railway to market or to the Port of Newcastle for export or via conveyor to the Bayswater and/or Liddell Power Stations.

No changes to existing rail transport routes are proposed for the Project.

Consistent with the current approval for the Antiene Rail Spur (DA 106-04-00), coal may be hauled on public roads under emergency or special situations with the prior written permission of the Secretary of the DP&E, NSW Roads and Maritime Services (RMS) and Muswellbrook Shire Council.

The Project would use the existing site access to the Maxwell Infrastructure from Thomas Mitchell Drive. Thomas Mitchell Drive, along with being a public road, is used to access a number of mining and other industrial areas.

The Road Transport Assessment concluded that the existing road network can satisfactorily accommodate the forecast traffic demands resulting from the Project (e.g. employee movements and deliveries), such that no specific measures or upgrades are required to mitigate the impacts on the capacity, safety and efficiency of the road network (Appendix K).

Subclause 16(2) of the Mining SEPP provides that, if the consent authority considers that the development involves the transport of materials on a public road, the consent authority must, within seven days after receiving the Development Application, provide a copy of the application to each roads authority for the road, and the Roads and Traffic Authority (now RMS) (if it is not a roads authority for the road).

In addition, clause 16(3) of the Mining SEPP requires that the consent authority:

- (a) *must not determine the application until it has taken into consideration any submissions that it receives in response from any roads authority or the Roads and Traffic Authority within 21 days after they were provided with a copy of the application, and*

...

Malabar has consulted with the RMS and Muswellbrook Shire Council during the development of this EIS (Section 5), and these authorities are aware of the associated use of relevant roads for the Project.

Clause 17

Clause 17 of the Mining SEPP outlines various rehabilitation requirements. Subclause 17(1) requires that, before granting consent for development for the purposes of mining, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.

Subclause 17(2) provides that, in particular, the consent authority must consider whether conditions of the consent should:

- (a) *require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated, or*
- (b) *require waste generated by the development or the rehabilitation to be dealt with appropriately, or*
- (c) *require any soil contaminated as a result of the development to be remediated in accordance with relevant guidelines (including guidelines under clause 3 of Schedule 6 to the Act and the Contaminated Land Management Act 1997), or*
- (d) *require steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation, does not jeopardize public safety.*

A Preliminary Rehabilitation and Mine Closure Strategy has been prepared for the Project (Appendix U). The content of this document would form the basis for the content that is required to be presented in the subsequent Mining Operations Plan (MOP) or Rehabilitation Plan, should the Project be approved.

Following the completion of mining, the Project area would be rehabilitated to a combination of pasture and woodland areas.

It is anticipated that agricultural activities would occur on rehabilitated land, subject to the agreed final land use and any land use constraints developed in consultation with relevant stakeholders prior to mine closure.

Malabar will continue to encourage and be supportive of other community and government proposals or initiatives for the use of Malabar land or infrastructure that can co-exist with the Project. Any proposals or initiatives would need to be permissible land uses and would require relevant assessment and approvals.

In regard to subclause 17(2)(b), the Project would support a reduction in the volume of legacy final voids through emplacement of coal handling and preparation plant (CHPP) reject material generated by coal processing activities.

The proposed management of CHPP reject material is discussed further in Section 3.8 and the management of other wastes is discussed in Section 3.12.

As outlined in Appendix U, investigations would be undertaken at mine closure to identify and remediate any contaminated soil that may exist (e.g. in infrastructure areas), in accordance with the requirements of the *NSW Contaminated Land Management Act, 1997*, which addresses subclause 17(2)(c). Contaminated land would be remediated by removal and disposal at an appropriately licensed facility, encapsulation, or appropriate remediation treatment on-site.

In regard to subclause 17(2)(d), a key objective of the Preliminary Rehabilitation and Mine Closure Strategy is to provide a landscape that is safe, stable and non-polluting (Appendix U).

Accordingly, the Minister or IPC can be satisfied as to these matters.

Part 4A – Clause 17B

Clause 17B relates to “mining and petroleum development” on strategic agricultural land:

- (1) *Before determining an application for development consent for mining or petroleum development that is accompanied by a gateway certificate, the consent authority must:*
 - (a) *refer the application to the Minister for Regional Water for advice regarding the impact of the proposed development on water resources, and*
 - (b) *consider:*
 - (i) *any recommendations set out in the certificate, and*
 - (ii) *any written advice provided by the Minister for Regional Water in response to a referral under paragraph (a), and*
 - (iii) *any written advice of the Gateway Panel in relation to the development given as part of the consultations undertaken by the Director-General under clause 3(4A)(b) of Schedule 2 to the Environmental Planning and Assessment Regulation 2000, and*

- (iv) *any written advice of the IES Committee provided to the Gateway Panel as referred to in clause 17g(1) (whether that advice was received before or after the expiry of the 60-day period referred to in clause 17G(1)(b)(i)), and*
 - (v) *any cost benefit analysis of the proposed development submitted with the application*
- (2) *In determining an application for development consent for mining or petroleum development that is accompanied by a gateway certificate, the consent authority must consider whether any recommendations set out in the certificate have or have not been addressed and, if addressed, the manner in which those recommendations have been addressed.*
- (3) *The Minister for Regional Water, when providing advice under this clause on the impact of the proposed development on water resources, must have regard to:*
- (a) *the minimal impact considerations set out in the Aquifer Interference Policy, and*
 - (b) *the provision of that Policy.*

There is approximately 72 hectares (ha) of verified biophysical strategic agricultural land (BSAL) within the Project area. Malabar lodged an application for a Gateway Certificate to the Mining and Petroleum Gateway Panel (Gateway Panel) in relation to the Project on 23 August 2018.

A Conditional Gateway Certificate was issued on 20 December 2018 and is provided in Attachment 10.

A copy of the written advice provided by the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) to the Gateway Panel is available to the determining authority:

<http://www.iesc.environment.gov.au/system/files/iesc-advice-maxwell-2018-098.pdf>.

The advice provided by the IESC has been considered in the preparation of relevant specialist studies (Appendices A, B, C, D, E, F and V).

In relation to subclause 17B(b)(v), a cost-benefit analysis for the Project has been undertaken by Deloitte Access Economics (2019) in accordance with the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (NSW Government, 2015) and the *Technical Notes Supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* (DP&E, 2018). The cost-benefit analysis is provided in Appendix M.

Table A7-2 outlines how the recommendations of the Conditional Gateway Certificate have been addressed. All recommendations of the Gateway Certificate have been addressed in this EIS, with the exception of recommendations that refer to the operational phase of the Project.

Accordingly, the Minister or IPC can be satisfied as to these matters.

A7.1.3 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

The *State Environmental Planning Policy No.33 – Hazardous and Offensive Development* (SEPP 33) applies to the whole of NSW.

Clause 2 outlines the aims of SEPP 33, of which the following are relevant to the Project:

- (a) *to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and*
- ...
- (d) *to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and*
- (e) *to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and*
- ...

Clause 12 of SEPP 33 requires an applicant, who proposes to make a Development Application to carry out development for the purposes of a potentially hazardous industry, to prepare (or cause to be prepared) a Preliminary Hazard Analysis (PHA) in accordance with the current circulars or guidelines published by the NSW Department of Planning (DoP) (now the DP&E) and submit the analysis with the Development Application.

Table A7-2
Consideration of the Recommendations of the Conditional Gateway Certificate

Relevant Criteria	Recommendation	How the Recommendation has been Addressed
17H4(a)(i), (ii), (iii), (vi)	1. Incorporate all available geotechnical, geological and geophysical information into a comprehensive subsidence model.	The Subsidence Assessment (Appendix A) considers all relevant, available geotechnical, geological and geophysical information. To address the limited multi-seam data available for third and fourth seams, a conservative approach has been taken to develop predictions for the Arrowfield and Bowfield Seams. The maximum predicted additional subsidence from these seams represents close to 100% of their respective seam thicknesses. This is considered to be conservative since the actual subsidence is limited by the available voids defined by the overall seam thicknesses (Appendix A).
	2. Provide a detailed assessment of changes to surface water movement and potential subsoil inundation as a result of subsidence.	A detailed assessment of changes to surface water movement and potential subsoil inundation as a result of subsidence is provided in the Surface Water Assessment (Appendix C) and the Geomorphology Assessment (Appendix D).
	3. Provide a comprehensive Extraction Plan including subsidence and rehabilitation management plans.	Extraction Plans are an operational document and would be prepared during the life of the Project to allow for environmental consequences from subsidence to be regularly reviewed and adaptively managed (Section 8).
	4. Complete BSAL verification in the entire GCAA to determine all possible areas of BSAL >20ha.	A <i>Refined Biophysical Strategic Agricultural Land Verification Assessment</i> (SLR, 2019) (Attachment 1 of Appendix Q) has been completed in accordance with the <i>Interim Protocol for Site Verification and Mapping of Biophysical Strategic Agricultural Land</i> (NSW Government, 2013) (Interim Protocol), which addresses the comments in the report by the Gateway Panel issued in support of the Gateway Certificate.
17H4(a)(iv)	1. Using a calibrated transient 3D model, re-quantify the impacts on nearby water assets (bores/wells and GDEs). This updated modelling and reporting should: <ul style="list-style-type: none"> Capture the hydrogeological complexity of the site; Use temporal input data; Have distributed input parameters; Quantify any uncertainties in the groundwater/surface water connection; Undertake both sensitivity and uncertainty analysis and have the model independently peer reviewed. 	The numerical groundwater model has been updated and refined to incorporate additional baseline data and to address the recommendations of the Gateway Panel and the written advice of the IESC. The Groundwater Assessment (Appendix B) outlines how these recommendations have been incorporated into the assessment. The Groundwater Assessment has been peer reviewed by Dr Frans Kalf (Attachment 6).
	2. Undertake more studies to establish baseline groundwater conditions.	
	3. Monitor and report actual mine water inflows and develop a strategy for complying with Water Sharing Plan rules.	Malabar would monitor and report actual mine water inflows during the life of the Project (Section 8). A strategy for complying with relevant Water Sharing Plans is provided in Attachment 8.
	4. Complete studies on groundwater dependent ecosystems,	Groundwater dependent ecosystems are considered in Appendices B, E and V.
17H4(a)(vi)	1. Reassess validity of soil sampling scheme density within the area of the 2018 survey and reassess soil sampling and analysis in Soil Unit 2.	A <i>Refined Biophysical Strategic Agricultural Land Verification Assessment</i> (SLR, 2019) (Attachment 1 of Appendix Q) has been completed in accordance with the <i>Interim Protocol</i> (NSW Government, 2013), which addresses the comments in the report by the Gateway Panel issued in support of the Gateway Certificate. Appendix A of SLR (2019) provides a detailed consideration of these comments.
	2. Complete BSAL verification in the entire GCAA to determine all possible areas of BSAL >20ha.	The supplementary work resulted in no change to the extent of verified BSAL compared to the area shown in the Application for a Gateway Certificate (Section 6.2.2).

Clause 13 of SEPP 33 requires that, in determining an application to carry out development for the purposes of a potentially hazardous or offensive industry, the consent authority (the Minister or IPC) must consider (in addition to any other matters specified in the EP&A Act or in an environmental planning instrument applying to the development):

- (a) *current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and*
- (b) *whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and*
- (c) *in the case of development for the purpose of a potentially hazardous industry – a preliminary hazard analysis prepared by or on behalf of the applicant, and*
- (d) *any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application), and*
- (e) *any likely future use of the land surrounding the development.*

In accordance with the SEARs and as part of the preparation of this EIS, a PHA has been conducted in accordance with SEPP 33 (Appendix T).

The PHA has been conducted in accordance with the general principles of risk evaluation and assessment outlined in the NSW Government *Assessment Guideline: Multi-level Risk Assessment* (Department of Planning and Infrastructure [DP&I], 2011) and has been documented in general accordance with *Hazardous Industry Planning Advisory Paper (HIPAP) No. 6: Hazard Analysis* (DoP, 2011).

In regard to subclause 13(b), extensive consultation has been undertaken with various public authorities during the preparation of this EIS, as described in Section 5.

Project alternatives (including the Project location) are discussed in Section 9.2, which addresses subclause 13(d) of SEPP 33.

Potential future uses of the land are considered in Section 9.1.5.

Accordingly, the Minister or IPC can be satisfied as to these matters.

A7.1.4 State Environmental Planning Policy No. 44 - Koala Protection

Part 2 of the *State Environmental Planning Policy No 44 – Koala Habitat Protection* (SEPP 44) requires the councils in certain Local Government Areas (LGAs) (including Muswellbrook) to consider whether the land which is the subject of the Development Application comprises of “potential koala habitat” or “core koala habitat”.

Clause 8 of SEPP 44 states:

- (1) *Before a council may grant consent to an application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself whether or not the land is a core koala habitat.*
- ...
- (3) *If the council is satisfied:*
 - (a) *that the land is not a core koala habitat, it is not prevented, because of this Policy, from granting consent to the development application, or*
 - (b) *that the land is a core koala habitat, it must comply with clause 9*

Clause 10 of SEPP 44 states:

Without limiting clause 17, a council must take the guidelines [being the Guidelines made for the purposes of SEPP 44] into consideration in determining an application for consent to carry out development on land to which this Part applies.

Since the Project is State Significant Development to which Division 4.7 of Part 4 of the EP&A Act applies, the Minister or IPC is the consent authority (Section 4.3.2) rather than the Council.

Notwithstanding that clauses 8 and 10 of SEPP 44 do not apply in circumstances where the consent authority is the Minister or IPC, an assessment of Koala (*Phascolarctos cinereus*) habitat for the purpose of SEPP 44 has been undertaken (Appendix E) and found that the Project Development Application Area comprises potential Koala habitat, but does not comprise of core Koala habitat.

Accordingly, the Minister or IPC can be satisfied as to these matters.

A7.1.5 State Environmental Planning Policy No.55 – Remediation of Land

The *State Environmental Planning Policy No.55 – Remediation of Land* (SEPP 55) applies to the whole of NSW and is concerned with the remediation of contaminated land. It sets out matters relating to contaminated land that a consent authority must consider in determining an application for Development Consent.

“Contaminated Land” in SEPP 55 has the same meaning as it has in the EP&A Act:

***contaminated land** means land in, on or under which any substance is present at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.*

Subclause 7(1) of SEPP 55 provides that a consent authority must not consent to the carrying out of any development on land unless:

- (a) *it has considered whether the land is contaminated, and*
- (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

Clause 7 of SEPP 55 further provides:

- (2) *Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.*

- (3) *The applicant for development consent must carry out the investigation required by subclause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.*

- (4) *The land concerned is:*
 - (a) *land that is within an investigation area,*
 - (b) *land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,*

...

Subclause 7(2) provides that, before a consent authority determines an application for Development Consent, a “preliminary investigation” is required where:

- the application for consent to carry out development that would involve a “change of use”; and
- that “change of use” is relevant to certain land specified in subclause 7(4).

The certain land specified in subclause 7(4) on which the “change of use” must relate is either:

- land that is an “investigation area” – defined in SEPP 55 as land declared to be an investigation area by a declaration in force under Division 2 of Part 3 of the *NSW Contaminated Land Management Act, 1997*; or
- land on which the development for a purpose referred to in Table 1 to the contaminated land planning guidelines (being *Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land* [NSW Department of Urban Affairs and Planning and Environment Protection Authority, 1998]) is being, or is known to have been, carried out.

The portions of the Project located in CL 229 and CL 395 and ML 1531 do not involve a “change of use” as these are existing coal mining land use areas. Where activities are to be undertaken within the existing mining tenements, Project activities would not result in any change in the use of land, as mining-related activities (including rehabilitation) are already approved and occurring.

Similarly, there is no “change of use” for land within Authorisation (A) 5460 as this land would continue to be used for exploration activities.

The parts of the Project described in Section 3 that fall within the mining lease application area, transport and services corridor, and the potential Edderton Road realignment corridor (where these Project elements extend beyond existing mining leases) would involve a change of land use.

JBS&G Australia Pty Ltd (JBS&G) (2019) (Appendix O) prepared a Land Contamination Assessment in accordance with *Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998). This assessment included a “Stage 1 Preliminary Investigation”, including a desktop review of previous land uses and aerial photographs, followed by a site inspection.

JBS&G (Appendix O) concluded that the site is suitable for the land use changes proposed by the Project, with the implementation of appropriate mitigation measures.

Land contamination management measures, including post-mining operations and remediation measures are described in Sections 6.6 and 8 and Appendix U.

Accordingly, the Minister or IPC can be satisfied as to these matters.

A7.1.6 State Environmental Planning Policy (Infrastructure) 2007

The *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) applies to the whole of NSW and includes provisions for consultation with relevant public authorities about certain development during the assessment process prior to development commencing.

Electricity Transmission and Distribution Networks

Subdivision 2 of Division 5 of Part 3 of the Infrastructure SEPP relates to developments that are likely to affect an electricity transmission or distribution network.

Clause 45 of the Infrastructure SEPP relevantly provides:

- (1) *This clause applies to a development application (or an application for modification of a consent) for development comprising or involving any of the following:*
 - (a) *the penetration of ground within 2m of an underground electricity power line or an electricity distribution pole or within 10m of any part of an electricity tower,*
 - (b) *development carried out:*
 - (i) *within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or*
 - (ii) *immediately adjacent to an electricity substation, or*
 - (iii) *within 5m of an exposed overhead electricity power line,*
- ...
- (2) *Before determining a development application (or an application for modification of a consent) for development to which this clause applies the consent authority must:*
 - (a) *give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and*
 - (b) *take into consideration any response to the notice that is received within 21 days after the notice is given.*

An overhead 66 kilovolt (kV) power line and associated switch station may be constructed from the Ausgrid network to the mine entry area (MEA) to support Project activities (Figures 3-2 and 3-3).

Ausgrid would separately construct an extension from an existing Ausgrid 66 kV power line to a proposed switch station, metering point and substation in the north-west of the existing Maxwell Infrastructure (Figure 3-3). This would be subject to separate assessment under Part 5 of the EP&A Act and any relevant notification requirements (e.g. under clause 42 of the Infrastructure SEPP).

An environmental review of the potential power line extension has been conducted on the basis of known constraints and is presented in Attachment 11.

In addition, an Ausgrid 11 kV overhead power line is located above the underground mining area (Section 6.3.4). Potential subsidence consequences on the Ausgrid 11 kV overhead power line would be managed in consultation with Ausgrid, and may include the implementation of preventive measures such as the provision of cable rollers, guy wires or additional poles, or relocation of the power line around the Maxwell Underground area.

Consultation with Ausgrid regarding energy requirements for the Project is ongoing (Section 5.3.5). Ausgrid has indicated that mitigation of subsidence impacts on the 11 kV power line (including any potential realignment of the power line) can be managed by Ausgrid under contractual arrangements with Malabar.

Rail Corridors

Subdivision 2 of Division 15 of Part 3 of the Infrastructure SEPP relates to development in or adjacent to rail corridors.

Clause 85 of the Infrastructure SEPP relevantly provides:

- (1) *This clause applies to development on land that is in or adjacent to a rail corridor, if the development:*
 - ...
 - (c) *involves the use of a crane in air space above any rail corridor, or*
 - (d) *is located within 5 metres of an exposed overhead electricity power line that is used for the purpose of railways or rail infrastructure facilities.*
- (2) *Before determining a development application for development to which this clause applies, the consent authority must:*
 - (a) *within 7 days after the application is made, give written notice of the application to the rail authority for the rail corridor, and*
 - (b) *take into consideration:*
 - (i) *any response to the notice that is received within 21 days after the notice is given, and*
 - (ii) *any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.*

The Project would involve activities adjacent to the Antiene Rail Spur, such as upgrade and/or replacement of the train load-out bin and conveyor drives (Section 3.4.5). The Antiene Rail Spur is owned by the Antiene Joint Venture, which is currently managed by BHP and Malabar.

Malabar has consulted with Transport for NSW, ARTC and BHP in relation to the Project (Section 5).

A7.2 MUSWELLBROOK LOCAL ENVIRONMENTAL PLAN 2009

A7.2.1 Objectives

Clause 1.2 of the Muswellbrook LEP outlines the aims of the plan, with the following of particular relevance to the Project:

- ...
- (a) *to encourage the proper management of the natural and human-made resources of Muswellbrook by protecting, enhancing or conserving:*
 - (iii) *productive agricultural land, and*
 - (iv) *timber, minerals, soils, water and other natural resources, and*
 - (v) *areas of significance for nature conservation, and*
- ...
- (v) *places and buildings of archaeological or heritage significance,*
- ...
- (c) *to promote ecologically sustainable urban and rural development,*
- ...
- (f) *to protect and conserve:*
 - (i) *soil stability by controlling development in accordance with land capability, and*
 - (ii) *remnant native vegetation, and*
 - (iii) *water resources, water quality and wetland areas, natural flow patterns and their catchment and buffer areas,*
- (g) *to provide a secure future for agriculture by expanding Muswellbrook's economic base and minimising the loss or fragmentation of productive agricultural land,*

- (h) *to allow flexibility in the planning framework so as to encourage orderly, economic and equitable development while safeguarding the community's interests and residential amenity, and to achieve the objectives of each zone mentioned in Part 2 of this Plan.*

The Project has regard to the aims of the Muswellbrook Plan LEP, as:

- The Project is an underground mining operation, and any subsidence impacts to agricultural land use would be short-term, with minimal to no impacts to production, including over areas identified as BSAL or other highly productive soil areas (Section 6.6.3 and Appendix Q).
- The majority of land required for surface development for the Project would be moderate to low capability agricultural land (Class 4, 5 or 6) (Section 6.6.3 and Appendix Q).
- The Project would involve the development of a mineral resource (coal) in a manner that would avoid or mitigate potential impacts on the environment (including soils, groundwater, surface water, remnant native vegetation and other biodiversity values) and places and buildings of archaeological or heritage significance (Sections 6 and 8).
- The design, planning and assessment of the Project has been carried out applying the principles of Ecologically Sustainable Development (ESD) (Section 9.3).
- Project design measures and other measures would be adopted by Malabar to allow for compatibility with agricultural land uses (Section 9.1.5).

Accordingly, the Minister or IPC can be satisfied as to these matters.

A7.2.2 Permissibility

Part 2 of the Muswellbrook LEP outlines the land use zone objectives that are relevant in determining whether the Project (or any part of the Project) is permissible under the Muswellbrook LEP, in any zones within the Development Application Area.

Figures A7-1 and A7-2 present the relevant land use zones under the Muswellbrook LEP within the Development Application Area.

The Development Application Area includes land zoned under the Muswellbrook LEP as RU1 (Primary Production) and SP2 (Power Station).

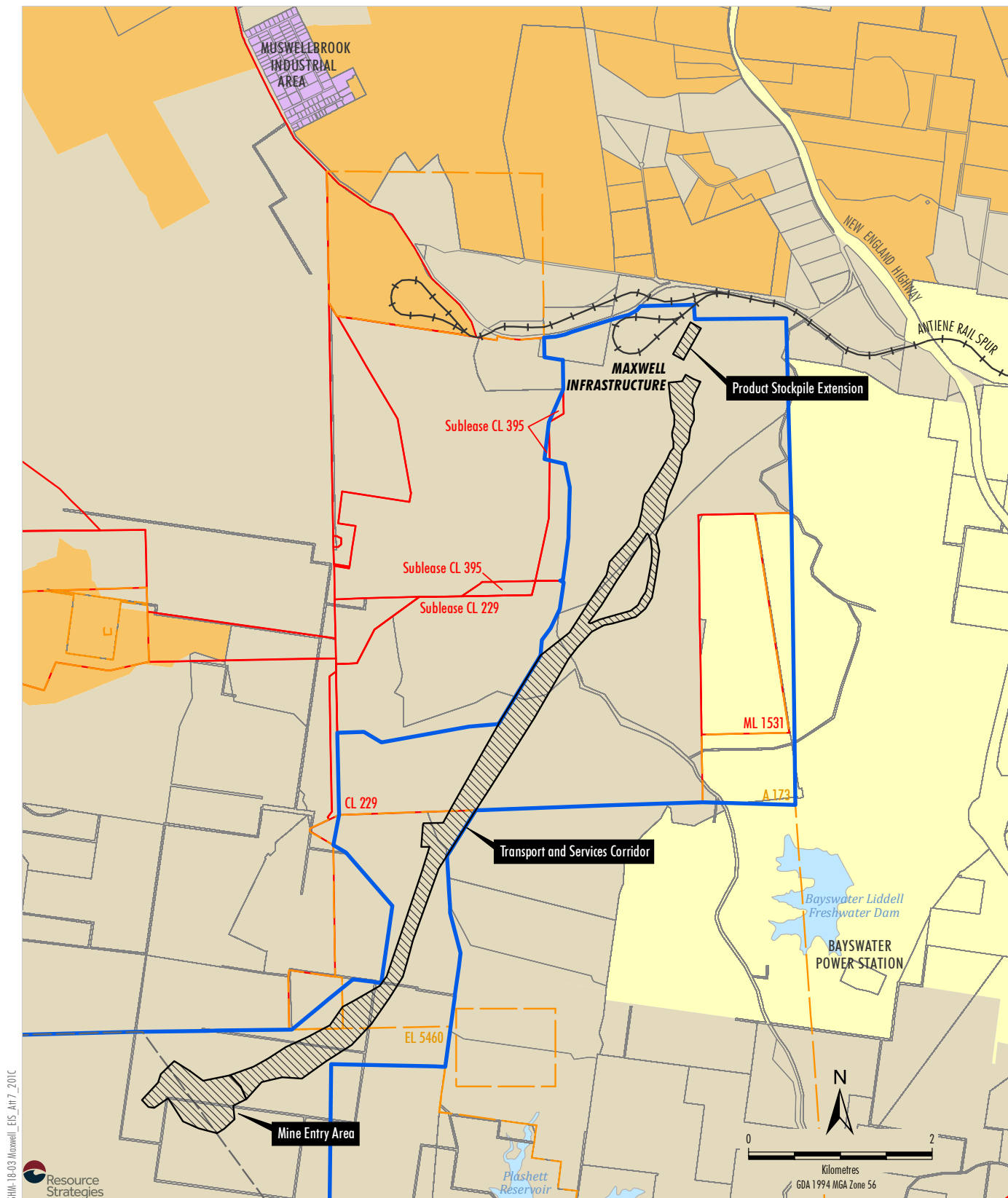
Under the Land Use Table in the Muswellbrook LEP, “underground mining” is prohibited in Zone RU1 (Primary Production) and Zone SP2 (Power Station). However, the effect of clause 7(1)(a) of the Mining SEPP in conjunction with the operation of clause 5(3) of the Mining SEPP (Section 4.3.1), is that notwithstanding any prohibition in the Muswellbrook LEP, development for the purpose of underground mining and facilities for the processing and transportation of coal may be carried out with Development Consent.

A7.2.3 Zone Objectives

Zone RU1 (Primary Production)

The objectives of the RU1 (Primary Production) Zone are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To protect the agricultural potential or rural land not identified for alternative land use, and to minimise the cost to the community of providing, extending and maintaining public amenities and services.*
- *To maintain the rural landscape character of the land in the long term.*
- *To ensure that development for the purpose of extractive industries, underground mines (other than surface works associated with underground mines) or open cut mines (other than open cut mines from the surface of the flood plain), will not:*
 - (a) *destroy or impair the agricultural potential of the land or, in the case of underground mining, unreasonably restrict or otherwise affect any other development on the surface, or*



- LEGEND**
- Railway
 - Exploration Licence Boundary
 - Mining and Coal Lease Boundary
 - Development Application Area
 - Indicative Surface Development Area
 - Indicative Extent of Underground Development
 - Land Zoning
 - E3 Environmental Management
 - IN1 General Industrial
 - RU1 Primary Production
 - SP2 Infrastructure

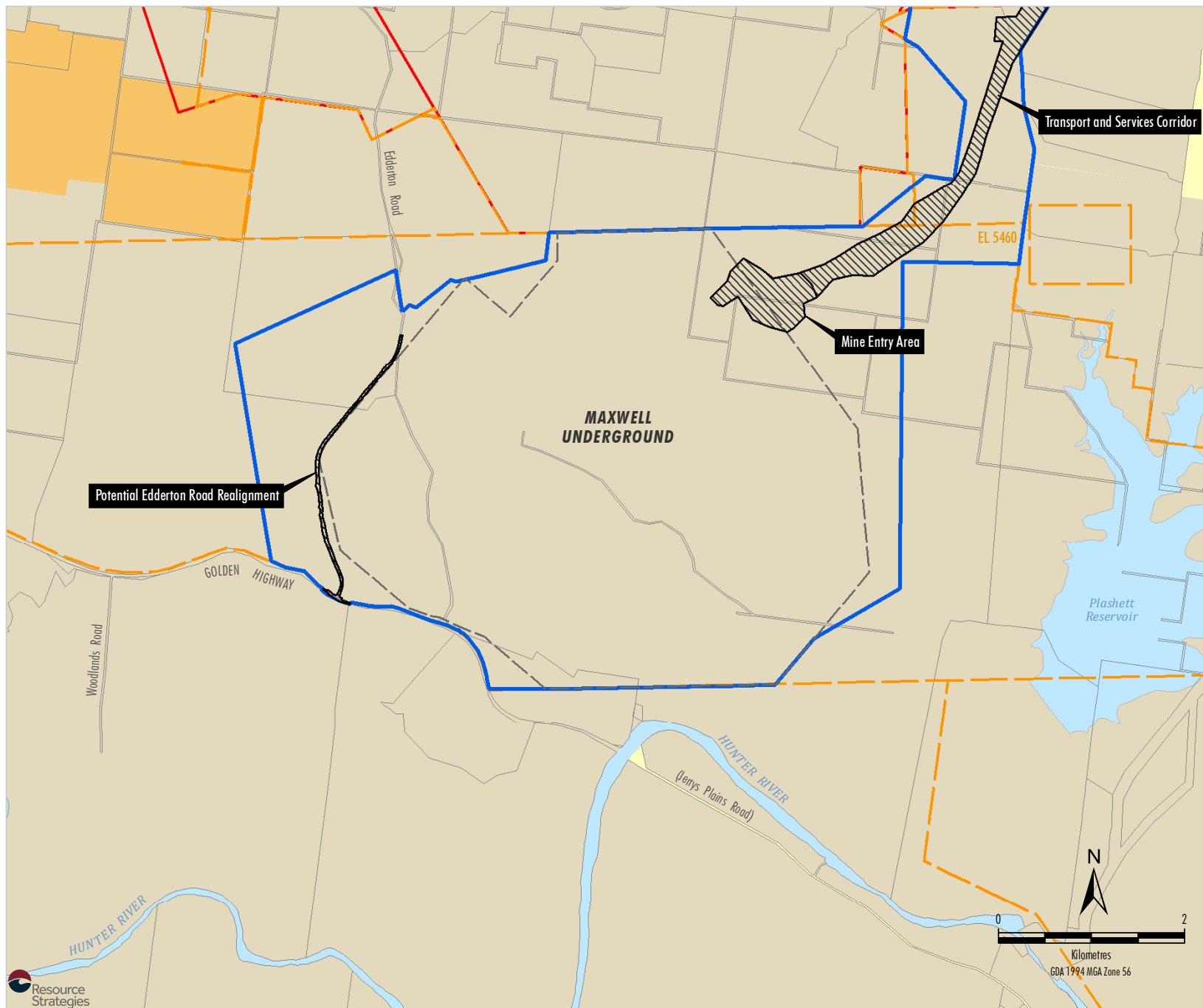
Source: © NSW Department of Planning and Environment (2019);
NSW Department of Finance, Services & Innovation (2019)

MALABAR COAL

MAXWELL PROJECT

**Relevant Land Zoning
- Maxwell Infrastructure**

Figure A7-1



LEGEND

- Exploration Licence Boundary
- Mining and Coal Lease Boundary
- Development Application Area
- Indicative Extent of Underground Development
- Indicative Surface Development Area
- Land Zoning**
 - E3 Environmental Management
 - RU1 Primary Production
 - SP2 Infrastructure

Source: © NSW Department of Planning and Environment (2019);
NSW Department of Finance, Services & Innovation (2019)

MALABAR COAL
MAXWELL PROJECT
Relevant Land Zoning
- Maxwell Underground

Figure A7-2

- (b) *detrimentally affect in any way the quantity, flow and quality of water in either subterranean or surface water systems, or*
- (c) *visually intrude into its surroundings, except by way of suitable screening.*
- *To protect or conserve (or both):*
 - (a) *soil stability by controlling development in accordance with land capability, and*
 - (b) *trees and other vegetation, and*
 - (c) *water resources, water quality and wetland areas, and their catchments and buffer areas, and*
 - (d) *valuable deposits of minerals and extractive materials by restricting development that would compromise the efficient extraction of those deposits.*

The Project is not inconsistent with the objectives of Zone RU1 (Primary Production), as:

- The Project would involve the development of a natural resource (coal).
 - Engagement with the Muswellbrook Shire Council has identified the benefits of the Project's proposed coking coal product and underground mining techniques in providing industry diversity in the Muswellbrook LGA (Section 5.3.2).
 - The Project site is considered suitable, and incorporates measures to allow for compatibility with existing, approved and likely preferred land uses (Section 9).
 - The Project would not result in the fragmentation or alienation of resource lands.
 - The Project incorporates measures to avoid and mitigate potential impacts on rural landscape character, including placement of the MEA in a natural valley, and reducing the height of infrastructure components, to restrict direct views of the MEA (Section 5.2 and Appendix N).
 - The Project is an underground mining operation, and any subsidence impacts to agricultural land use would be short-term, with minimal to no impacts to production, including over areas identified as BSAL or other highly productive soil areas (Section 6.6.3 and Appendix Q).
 - The majority of land required for surface development for the Project would be moderate to low capability agricultural land (Class 4, 5 or 6) (Section 6.6.3 and Appendix Q).
- Subsidence as a result of the Project is not expected to result in changes to land capability and rehabilitated pasture areas would be returned to grazing land, with a land capability class similar to the pre-mining land capability class (Appendix Q).
 - The Project would incorporate measures to avoid and mitigate potential impacts on groundwater and surface water systems, including water quality (Sections 6.4 and 6.5 and Appendices B, C and D).
 - Biodiversity impacts have been assessed in accordance with the Biodiversity Assessment Method (NSW Office of Environment and Heritage [OEH], 2017), which sets a standard that would result in no net loss of biodiversity values in NSW.
 - The Project would not have a significant detrimental impact on current or future extraction or recovery of coal.

Accordingly, the Minister or IPC can be satisfied as to these matters.

Zone SP2 (Power Station)

The objectives of the SP2 (Power Station) Zone are as follows:

- *To provide for infrastructure and related uses.*
- *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*
- *To recognise existing railway land and to enable future development for railway and associated purposes.*
- *To prohibit advertising hoardings on railway land.*
- *To recognise major roads and to enable future development and expansion of major road networks and associated purposes.*
- *To recognise existing land and to enable future development for utility undertakings and associated purposes.*

The Project is not incompatible with the continued operation of the adjacent Liddell and Bayswater Power Stations. Malabar will continue to consult and work closely with AGL Energy Limited to manage interactions between these operations and the Project (Sections 2.3.5 and 5).

A7.2.4 Special Provisions

Parts 5 and 7 of the Muswellbrook LEP provide a number of provisions of potential relevance to the Project, including the relevant clauses described below.

Heritage Conservation

Clause 5.10 relates to the assessment and management of impacts to historic heritage or Aboriginal heritage and includes the following subclauses relevant to the Project:

Note. *Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the Heritage Map as well as being described in Schedule 5.*

(1) Objectives

The objectives of this clause are as follows:

- (a) *to conserve the environmental heritage of Muswellbrook,*
- (b) *to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) *to conserve archaeological sites,*
- (d) *to conserve Aboriginal objects and Aboriginal place of heritage significance.*

(2) Requirement for consent

Development consent is required for any of the following:

- (a) *demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):*
 - (i) *a heritage item,*
 - (ii) *an Aboriginal object,*
 - (iii) *a building, work, relic or tree within a heritage conservation area,*
- (b) *altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,*
- (c) *disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- (d) *disturbing or excavating an Aboriginal place of heritage significance,*

- (e) *erecting a building on land:*
 - (i) *on which a heritage item is located or that is within a heritage conservation area, or*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*
- (f) *subdividing land:*
 - (i) *on which a heritage item is located or that is within a heritage conservation area, or*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.*

...

(4) Effect of Proposed development on heritage significance

The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).

(5) Heritage assessment

The consent authority may, before granting consent to any development:

- (a) *on land on which a heritage item is located, or*
- (b) *on land that is within a heritage conservation area, or*
- (c) *on land that is within the vicinity of land referred to in paragraph (a) or (b),*

require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

(6) Heritage conservation management plans

The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.

(7) Archaeological sites

The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):

- (a) *notify the Heritage Council of its intention to grant consent, and*
- (b) *take into consideration any response received from the Heritage Council within 28 days after the notice is sent.*

(8) Aboriginal places of heritage significance

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) *consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and*
- (b) *notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.*

...

Clause 5.10 set out above is potentially relevant to the Project with respect to considering direct disturbance or indirect effects (e.g. potential subsidence or visual impacts) that could impact on Aboriginal or historic heritage sites located within, or adjacent to, the Development Application Area.

However, it should be noted that the provisions in clause 5.10 relate to the circumstance where the consent authority is exercising the function of determining whether or not to grant a consent under clause 5.10 of the Muswellbrook LEP. The Minister or the IPC will not be exercising this function when determining the Development Application for the Project.

Aboriginal cultural and historic heritage assessments have been conducted for the Project and are provided in Appendices G and H, respectively. Suitable mitigation measures for potential direct and indirect impacts on heritage would be adopted for the Project (Section 8).

Terrestrial Biodiversity

Clause 7.1 outlines considerations relating to the conservation and improvement of terrestrial biodiversity:

7.1 Terrestrial biodiversity

- (1) *The objective of this clause is to protect, maintain and improve the diversity of landscapes, including:*
 - (a) *protecting the biological diversity of native fauna and flora, and*
 - (b) *protecting ecological processes necessary for their continued existence, and*
 - (c) *encouraging the recovery of threatened species, communities and populations and their habitats.*
- (2) *This clause applies to land identified as "Biodiversity" on the Terrestrial Biodiversity Map.*
- (3) *Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that the development satisfies the objective of this clause and:*
 - (a) *the development is designed and will be located and managed to avoid any potential adverse environmental impact, or*
 - (b) *if a potential adverse environmental impact cannot be avoided, the development:*
 - (i) *is designed and located so as to have minimum adverse impact, and*
 - (ii) *incorporates effective measures to remedy or mitigate any adverse impact caused.*

Land identified as "Biodiversity" on the Muswellbrook LEP Terrestrial Biodiversity Map is located within the Development Application Area.

The potential impacts of the Project on threatened species and biodiversity are described in Sections 6.7 and 6.8 and Appendices E and F, including measures to avoid and minimise potential impacts.

The Project Biodiversity Offset Strategy has been developed to address the potential residual impacts on biodiversity values associated with the Project in accordance with the offset rules under the NSW Biodiversity Offsets Scheme (as required by the SEARs for the Project) (Section 6.7.6).

Earthworks

Clause 7.6 outlines considerations relating to earthworks undertaken:

- (1) *The objectives of this clause are as follows:*
 - (a) *to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,*
 - (b) *to allow earthworks of a minor nature without requiring separate development consent.*
- ...
- (3) *Before granting development consent for earthworks, the consent authority must consider the following matters:*
 - (a) *the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
 - (b) *the effect of the proposed development on the likely future use or redevelopment of the land,*
 - (c) *the quality of the fill or the soil to be excavated, or both,*
 - (d) *the effect of the proposed development on the existing and likely amenity of adjoining properties,*
 - (e) *the source of any fill material or the destination of any excavated material,*
 - (f) *the likelihood of disturbing relics,*
 - (g) *the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

Note. *The National Parks and Wildlife Act 1974, particularly section 86, deals with disturbing or excavating land and Aboriginal objects.*

The Project would involve earthworks as a component of construction and other development activities (Section 3.4).

In regard to subclauses 7.6(3)(a) and 7.6(3)(g), the Surface Water Assessment (Appendix C) includes assessment of the potential impacts on drainage patterns and waterways. Section 6.5 and Appendix D describe the erosion and sediment control measures that would be implemented for the Project.

In regard to subclause 7.6(3)(b), rehabilitation and decommissioning of Project disturbance areas, including post-mining land uses, are described in Section 7. Potential future uses of the land are considered in Section 9.1.5.

In regard to subclauses 6.3(3)(c) and 6.3(3)(e), virgin excavated natural material excavated during development of the MEA and access drifts would preferentially be used as construction fill (e.g. for hardstand areas, dam embankments and road construction). Excess material would be emplaced in the existing South Void at the Maxwell Infrastructure and would not leave the site.

The topsoil stripped during construction activities would be stockpiled for use on areas disturbed during the construction phase. The volume of topsoil stockpiled would be modest given the modest extent of the MEA.

Potential impacts on amenity, including noise, dust and visual impacts, are described in Section 6 and Appendices I, J and N, in regard to subclause 7.6(3)(d).

In regard to subclause 7.6(3)(f), an Aboriginal Cultural Heritage Assessment and Historic Heritage Assessment have been prepared for the Project and are provided in Appendices G and H.

A7.3 OTHER STRATEGIC PLANNING DOCUMENTS AND POLICIES

The *Strategic Statement on NSW Coal* (NSW Government, 2014) and the *Hunter Regional Plan 2036* (NSW Government, 2016) are discussed in Section 4.1, while the *NSW Aquifer Interference Policy* (NSW Government, 2012a) is considered in Attachment 8. Other relevant strategic planning documents and policies are discussed below.

A7.3.1 Development Control Plans

Clause 11 of the State and Regional Development SEPP provides that development control plans (whether made before or after the commencing of the SEPP) do not apply to State Significant Development, and hence to do not apply to the Project.

A7.3.2 NSW Climate Change Policy Framework

The main climate change policy implemented by the NSW Government is the *NSW Climate Change Policy Framework* (OEH, 2016).

The *NSW Climate Change Policy Framework* seeks to provide aspirational goals and broad policy directions to achieve NSW's objective of achieving net-zero emissions by 2050, and to allow NSW to be more resilient and responsive to climate change (OEH, 2016).

Its other aspirational objectives include the implementation of policies consistent with the Commonwealth's plan for long-term emissions savings, to reduce emissions in government operations, and to advocate for action by the Commonwealth, Council of Australian Governments (COAG) and internationally consistent with the *Paris Agreement* (OEH, 2016).

Under the *NSW Climate Change Policy Framework*, NSW has committed to work to complement national action taken in respect to Australia's commitments under the *Paris Agreement*. The policy framework is being delivered through (OEH, 2016):

- the Climate Change Fund;
- the development of a value for emissions savings that will be applied consistently in government economic appraisals;
- embedding climate change mitigation and adaptation across government operations including service delivery, infrastructure, purchasing decisions and regulatory frameworks;
- building on NSW's expansion of renewable energy; and
- developing action plans and strategies, including for advanced energy, energy efficiency, climate change adaptation, energy productivity, fugitive emissions, primary industry emissions and adaptation and health and wellbeing.

The Project is not inconsistent with either the policy directions or the proposed delivery mechanisms outlined in the *NSW Climate Change Policy Framework* (OEH, 2016).

A7.3.3 Upper Hunter Strategic Regional Land Use Plan

The *Upper Hunter Strategic Regional Land Use Plan* (the Upper Hunter SRLUP) was released by the then DP&I (now DP&E) in September 2012. The aim of the plan was to provide a framework to support growth, protect the environment and manage competing land uses over the next 20 years (NSW Government, 2012b).

The Upper Hunter SRLUP was recommended for review as part of the *Hunter Regional Plan 2036* (NSW Government, 2016). The *Hunter Regional Plan 2036* is considered in Section 4.1.2.

The Upper Hunter SRLUP is focused around eight key areas each with several underlying objectives. These key areas include: balancing agriculture and resources development; infrastructure; economic development and employment; housing and settlement; community health and amenity; natural environment; natural hazards and climate change; and cultural heritage (NSW Government, 2012b).

The 'Gateway process' is outlined in the Upper Hunter SRLUP as the key policy response for resolving land use conflict between mining and coal seam gas proposals and strategic agricultural land (NSW Government, 2012b). In compliance with the 'Gateway process', Malabar lodged an application for a Gateway Certificate to the Gateway Panel in relation to the Project on 23 August 2018. The Gateway Certificate was issued on 20 December 2018 (Section A7.1.2).

In addition to the above, the Upper Hunter SRLUP outlines a number of actions for the DP&E and other agencies to prepare additional guidance and policy material, undertake studies and compile baseline information. This EIS has been prepared with reference to relevant environmental planning instruments, policies, guidelines and plans required by the SEARs (Attachment 1).

A7.3.4 Upper Hunter Economic Diversification Action Plan: Implementation Priorities

The *Upper Hunter Economic Diversification Action Plan: Implementation Priorities* (NSW Government, 2018b) establishes renewed priorities for business growth and sustainable economic transitions in the region.

The *Upper Hunter Economic Diversification Action Plan: Implementation Priorities* (NSW Government, 2018b) identified five core strategic themes to facilitate new long-term regional economic opportunities for the Upper Hunter:

1. **Driving land use certainty**
Economic development and jobs in the region will be underpinned by planning frameworks delivering certainty of land use.
2. **Encouraging new industry investment**
A focus on better land use planning and improved access to land fosters improved certainty for industry investment across industry sectors.
3. **Developing new market opportunities**
There are major opportunities to expand industry in the region to service national and international market needs.
4. **Planning for water security**
Key industries in the Upper Hunter and new targeted industries and activities will require access to water and future water security.
5. **Establishing appropriate governance**
Targeted and connected governance is critical to successful industry transition, involving collaborative dialogue, planning and funding through partnerships between government, industry and the community.

The Project would generate a number of benefits that are consistent with the *Upper Hunter Economic Diversification Action Plan: Implementation Priorities*, including:

- development of local workforce capacity with Malabar's proposed focus on local employment and the recruitment of personnel from outside of the underground mining sector (including females and Indigenous people) (Section 6.17.5 and Appendix L);
- continued support for the vitality and growth of local and regional businesses (e.g. through the provision of non-labour inputs such as maintenance supplies and professional services) (Section 5.4.5);
- support for local community objectives and aspirations (including objectives to support job growth and diversify from reliance on thermal coal production, which would occur through the Project's proposed coking coal product and underground mining techniques) (Appendix L); and
- certainty over future development plans at the Maxwell Infrastructure and within EL 5460.

The adoption of underground mining methods allows for the Project to be compatible with other surrounding land uses (Section 9.1.5).

In addition, Malabar will continue to encourage and be supportive of other community and government proposals or initiatives for productive economic uses of Malabar's buffer and rehabilitation land that can co-exist with the Project.

In relation to water security and efficiency:

- The Project would use water treatment systems that maximise the re-use of water on-site and remove any requirement to source water externally for mining operations (e.g. from the Hunter River) (Section 3.10).
- The site water management system avoids the need for controlled release of mine-affected water to the Hunter River (Section 3.10).
- Malabar would hold appropriate water licences under the *NSW Water Management Act, 2000* for water taken incidentally for the Project (Sections 6.4 and 6.5 and Attachment 8).

A7.3.5 Muswellbrook Shire Council Community Strategic Plan 2017-2027

The *Muswellbrook Shire Council Community Strategic Plan 2017-2027* (Muswellbrook Shire Council, 2017) identifies the community's main priorities and visions for the future. The plan has been developed to closely integrate with the *Hunter Regional Plan 2036, Premier's Priorities in Action* and *State Priorities* (Muswellbrook Shire Council, 2017).

Goals outlined in the *Muswellbrook Shire Council Strategic Plan 2017-2027* are to meet six key objectives:

- economic prosperity;
- social equity and inclusion;
- environmental sustainability;
- cultural vitality;
- community infrastructure; and
- community leadership.

The Project would be generally consistent with the objectives of the *Muswellbrook Shire Council Strategic Plan 2017-2027*, as:

- The Project would support job growth, providing employment opportunities for the local community and creating additional direct and indirect economic revenue (Section 6.17.5 and Appendices L and M).
- The Project would contribute to local industry, economic and technical diversity as an underground mining operation, in a predominantly open cut mining industry environment (noting there are no underground mines currently operating in the Muswellbrook LGA and these technically complex operations demand a wide-range of technical skills and associated skilled workforce) (Appendix L).
- The Project would contribute to economic diversity through the mining of coking coal for steel-making, in an area where thermal coal (for power generation) is predominantly mined (Appendix L).
- The Project would contribute to workforce diversity and social inclusion by employing a local recruitment strategy with potential for half of the operational workforce to be new to the underground mining sector, of whom around 20% would be female and around 10% would be Indigenous people (Section 6.17.5 and Appendix L).
- The Project would also support continued rehabilitation activities at the Maxwell Infrastructure, including reduction in the volume of final voids through emplacement of reject material generated by coal processing activities (Sections 3.8 and 7).
- The Project's proposed rehabilitated land uses include woodland corridors, providing linkages with existing remnant vegetation (Section 7).
- The Project incorporates measures to avoid and mitigate potential impacts on heritage (Sections 6.12 and 6.13 and Appendices G and H).
- Malabar would implement a workforce settlement campaign developed in consultation with Muswellbrook Shire Council and Singleton Council, to facilitate effective integration of new residents.
- Malabar would continue to provide funding contributions to local community programs and groups during the life of the Project.

A7.3.6 Singleton Community Strategic Plan 2017-2027

The Project is located outside of the Singleton LGA; however, it is anticipated that a reasonable portion of the workforce would be drawn from the Singleton LGA (Section 6.16.3).

The *Singleton Community Strategic Plan 2017-2027* (Singleton Council, 2017) is a representation of the long-term vision for the community, and outlines the expectations, aspirations and challenges for the Singleton community into the future.

The five key strategic themes of the *Singleton Community Strategic Plan 2017-2027* are 'vibrant', 'progressive', 'connected', 'sustainable' and 'resilient' (Singleton Council, 2017).

The Project would be consistent with the *Singleton Community Strategic Plan 2017-2027* as:

- The employment opportunities of the Project would be experienced as a substantial regional benefit (Appendix L).
- The Project would provide support for the vitality and growth of businesses in the Singleton LGA (e.g. through the provision of non-labour inputs such as maintenance supplies and professional services).
- Malabar would implement a workforce settlement campaign developed in consultation with Muswellbrook Shire Council and Singleton Council, to facilitate effective integration of new residents.

A7.3.7 Draft Muswellbrook Local Strategic Planning Statement 2018-2038

The draft *Muswellbrook Local Strategic Planning Statement 2018-2038* (Muswellbrook Shire Council, 2018) was developed in consideration of the *Muswellbrook Shire Council Community Strategic Plan 2017-2027* (Muswellbrook Shire Council, 2017) and the *Hunter Regional Plan 2036* (NSW Government, 2016). The statement identifies outcomes and goals to assist in implementing the *Hunter Regional Plan 2036* and meet the six key objectives of the *Muswellbrook Shire Council Community Strategic Plan 2017-2027*.

The Project would be generally consistent with the *Hunter Regional Plan 2036* and the *Muswellbrook Shire Council Strategic Plan 2017-2027*, as outlined in Sections A7.3.5 and 4.1.2.

The adoption of underground mining methods allows for the Project to be compatible with other surrounding land uses, including existing equine and viticulture enterprises (Section 9.1.5).

A relevant 'desired outcome' of the Muswellbrook draft *Muswellbrook Local Strategic Planning Statement 2018-2038* (Muswellbrook Shire Council, 2018) is:

Coal mining continues, both as open cut and underground operations, within a defined footprint and based on world's best practice for mining, including best practice management of impacts on the local community and environment, during mining, and with focussed rehabilitation of the landscape and repurposing of infrastructure post mining.

Draft actions to achieve the above draft desired outcome include:

The location and maximum extent of coal extraction areas is identified in state and local planning strategies and planning instruments, which also seek optimal production with acceptable social, economic and environmental impacts.

State and local planning controls are prepared to encourage coal mines and quarries to maintain buffers to equine and viticulture operations.

Council will seek investment by the mining companies and the State Government to ensure adequate infrastructure and studies to protect the community from the cumulative impacts of dust, noise and transport associated with this activity.

Master planning will be undertaken by the mining companies, in partnership with Council, with a view to post-mining land uses focussed on facilitating a range of large scale agribusiness, food processing, industrial, tourism, recreation and other uses, and with consideration for local infrastructure requirements.

Council will support rehabilitation of coal mining land that achieves land uses identified in master plans, and to provide opportunities for agricultural/horticultural production, bio-diversity offsetting and scenic and landscape values (existing and desired) of the Shire.

The Project includes a range of mitigation measures to avoid or minimise the Project's potential impacts on the local community and environment and potential conflicts with equine and viticulture operations (Sections 8 and 9.1.5).

This EIS includes cumulative impact assessments of potential dust, noise and transport impacts associated with the Project and other surrounding mining activities (Section 2.3.9 and Appendices I, J and K).

This EIS also includes a preliminary rehabilitation and mine closure strategy for the Project (Appendix U). A conceptual post-mining land use of a combination of agriculture and nature conservation has been selected for the majority of the Project domains. Notwithstanding, Malabar recognises that government and community stakeholders may identify final land uses that provide greater net benefits to the locality. Malabar would encourage and be supportive of other community and government proposals or initiatives for the use of Malabar land or infrastructure that can co-exist with the Project.

A7.3.8 Muswellbrook Mine Affected Roads – Road Network Plan

Cardno Pty Ltd were engaged by Muswellbrook Shire Council to undertake an assessment of the impacts of mine-related traffic on the local road network (Muswellbrook Shire Council, 2015a).

The *Muswellbrook Mine Affected Roads Stage 1 – Road Network Plan* identifies that the Muswellbrook Shire Council's overall objectives in relation to the management of its road network, are to:

- maintain the road network to retain value, quality and capacity;
- provide a safer road environment for all users;
- optimise the efficiency and reliability of moving people and goods; and
- meet the needs of present and future land use development.

The main concerns of the Muswellbrook Shire Council are listed as asset management, safety, efficiency and maintenance and construction costs (Muswellbrook Shire Council, 2015a).

A Road Transport Assessment has been prepared for the Project which provides an assessment of the likely transport impacts of the Project on the capacity, condition, safety and efficiency of the road network (Appendix K).

The Road Transport Assessment (Appendix K) concluded that no specific measures or upgrades are required to mitigate the impacts of the Project on the capacity, safety and efficiency of the road network as a result of the changed road traffic conditions associated with the Project.

Malabar would continue to consult with Muswellbrook Shire Council and the DP&E to develop a plan to contribute to the maintenance of local roads under the control of the Muswellbrook Shire Council.

In relation to approved and potential realignments of Edderton Road, the *Muswellbrook Mine Affected Roads – Road Network Plan* (Muswellbrook Shire Council, 2015a) recommends the following:

11. *Examine opportunities to forego the temporary relocation of Edderton Road on the less efficient alignment (as proposed by Mt Arthur Mine and the proposed Drayton South Mine) in lieu of contributions for works to improve the safety and efficiency of Denman Road and the Golden Highway;*
12. *In the longer term, at completion of mining activity, the Road Authority prefers Edderton Road to be reconstructed in generally it's [sic] current more efficient alignment with upgraded intersections at Denman Road and the Golden Highway at design standards appropriate at the time and considering traffic growth over the period.*

The Project is proposing two options to manage potential subsidence impacts on Edderton Road: (i) road maintenance along the existing alignment; or (ii) the realignment of the road around the Maxwell Underground area. The selected option would be informed by further consultation with Muswellbrook Shire Council and other stakeholders.

In relation to the potential Edderton Road realignment, a review of the design by the Transport Planning Partnership (TPPP) (Appendix K) concluded:

- the proposed carriageway and shoulder widths would comply with appropriate Austroads (2016) requirements;
- the turn treatments at the new intersection would meet or exceed the warrants set out by Austroads (2017) and are considered satisfactory; and
- the layout is safer than that of the existing intersection of Edderton Road and the Golden Highway, as it allows turning vehicles to slow clear of the through traffic on the Golden Highway.

A7.3.9 Land Use Development Strategy

The *Land Use Development Strategy* (Muswellbrook Shire Council, 2015b) predates the *Muswellbrook Shire Council Community Strategic Plan 2017-2027* (Muswellbrook Shire Council, 2017) and the draft *Muswellbrook Local Strategic Planning Statement 2018-2038* (Muswellbrook Shire Council, 2018).

The *Land Use Development Strategy* (Muswellbrook Shire Council, 2015b) identified a number of 'strategic directions' in relation to coal mining activities to address the following:

- natural environment, including vegetation and revegetation/rehabilitation, water and soil structures, and final landform;
- physical environment, including transport infrastructure;
- managing competing land use, including the interaction of coal mining with urban, agriculture, equine, viticulture and tourism activities; and
- socio-economic and other matters.

The Project would be generally consistent with a number of the strategic directions outlined in the *Land Use Development Strategy* (Muswellbrook Shire Council, 2015b), as:

- The use of the Maxwell Infrastructure for the Project results in less disturbance and a significantly lower initial capital cost, than would otherwise be required for a greenfield project to access the coal resource within EL 5460.

- The rehabilitated final land uses for the Project include woodland corridors that provide linkages to remnant vegetation (Section 7 and Appendix U).
- The Project would support continued rehabilitation activities at the Maxwell Infrastructure, including reduction in the volume of final voids through emplacement of reject material generated by coal processing activities (Section 3).
- Where possible, landform designs for previous open cut mining areas at the Maxwell Infrastructure have been modified to create more natural landscapes, incorporating dams and natural drainage lines to result in a more visually appealing outcome (Section 7).
- The Project does not involve any modified slopes facing the townships of Muswellbrook, Jerrys Plains and Denman.
- The Project avoids direct subsidence impacts on the Hunter River and the Hunter River alluvium by imposing constraints on the design of the mine layout (Section 5.2).
- The Project would use water treatment systems that maximise the re-use of water on-site and remove any requirement to source water externally for mining operations (e.g. from the Hunter River) (Section 3.10).
- The existing road network can satisfactorily accommodate the forecast traffic demands resulting from the Project without any specific additional road upgrade requirements (Section 6.14.4 and Appendix K).
- Malabar would continue to consult with Muswellbrook Shire Council and the DP&E to develop a plan to contribute to the maintenance of local roads under the control of the Muswellbrook Shire Council (Section 6.14.4).
- Through the voluntary adoption of the proposed Project design measures and operating philosophy, Malabar is confident that the Project would not be incompatible with existing and future surrounding land uses, including existing equine and viticulture enterprises (Section 9.1).
- There are no identified urban expansion areas in the vicinity of the Project.
- Potential labour force impacts have been considered in the assessment of the Project and Malabar's proposed approach to workforce recruitment (Sections 6.16 and 6.17 and Appendices L and M).

- The Project would include apprenticeship opportunities (Section 6.17 and Appendix L).
- The design of the Project and Malabar's operating philosophy have been informed by local stakeholder feedback (Section 5.2).
- The Project would not directly impact any significant European cultural heritage items or conservation areas, and involves measures to mitigate impacts on Aboriginal cultural heritage, which have been developed in consultation with the Aboriginal community (Sections 6.12 and 6.13 and Appendices G and H).

A7.3.10 Muswellbrook Industrial Lands Audit

The *Muswellbrook Industrial Lands Audit* (Muswellbrook Shire Council, 2015c) was conducted to assess existing industrial land supply, identify future industrial land requirements and advise on strategies and implementation actions to support future growth within the Muswellbrook LGA.

No areas identified for future industrial land release are located in the vicinity of the Project (Muswellbrook Shire Council, 2015c).

The *Muswellbrook Industrial Lands Audit* (Muswellbrook Shire Council, 2015c) also identified a number of land uses that could occur on land owned by mining companies. These land uses are framed around three key categories:

- *Symbiotic* – land uses that are mutually dependent on mining and resource activities (i.e. mining-related engineering/manufacturing industries).
- *Opportunistic* – land uses that are not directly related to the operation of the mine, but an opportunity for the development is apparent due to the industrial nature of the area (e.g. light and heavy industrial industries, agribusinesses such as poultry processing and forestry, etc.).
- *Independent* – land uses that are independent to the mining usages, but are not completely incompatible (e.g. adventure- and experience-based tourism).

Malabar would encourage and be supportive of other community and government proposals or initiatives for the use of Malabar land or infrastructure that can co-exist with the Project. Any proposals or initiatives would need to be permissible land uses and would require relevant assessment and approvals.

A7.4 REFERENCES

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