Section 7

Justification of the Project

PREAMBLE

This section concludes the assessment of the Tomingley Gold Extension Project. and presents a justification of the Project with regards to:

- *the Project design and consideration of alternatives;*
- *consistency with the strategic and statutory context;*
- *consistency with community views;*
- *the scale and nature of the environmental, economic, social and impacts of the project, including consistency with the principles of ecologically sustainable development;*
- *ongoing monitoring and reporting of compliance; and*
- *remaining uncertainties associated with the Project.*

The section concludes with a review of the consequences of not proceeding with the Project and a justification of why the Project is, on balance, in the public interest.

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7.1 Action Taken to Avoid / Minimise Impacts

As described in Section 1.4, mineral exploration within and surrounding the Project Site has been undertaken since 2001 by the Applicant. This has been accompanied by feasibility assessments and numerous environmental studies undertaken by a range of specialist consultants for the original TGO application for development consent and subsequent modifications and preparation of the EIS. The design of the Project has therefore evolved in an iterative manner, taking into consideration the findings of the technical and environmental studies undertaken, feedback from the local community and other stakeholders, including Government agencies and the Applicant's experience in successfully operating the Peak Hill and TGO Gold Mines.

Section 1.6 describes the key strategies that have and would be implemented to avoid and/or minimise Project-related impacts and Section 2.5 presents the key alternatives considered and reject by the Applicant during the design phase of the Project. In addition, Section 6 presents, a range of design and management and mitigation measures that would be implemented to avoid or minimise Project-related impacts. The following presents a brief overview of the principal actions that have been or would be taken to avoid or minimise impacts of the Project include the following.

- Detailed studies have been undertaken to understand the nature of the SAR deposits and to optimise the extraction of the resource, thereby ensuring that the maximum benefit is obtained for the unavoidable impacts that would occur.
- Detailed studies have also been undertaken to ensure that the existing environment surrounding the Project Site is well understood, thereby ensuring that areas of high environmental or other sensitivity are avoided or protected and, where impacts are unavoidable, such impacts are quantified with a high level of certainty.
- Detailed consultation with the community surrounding the Project Site has been undertaken and feedback has been taken into consideration in the design of the Project, in particular in relation to the alignment of Kyalite Road, the design of the SAR Waste Rock Emplacement and the proposed location of monitoring equipment.
- The realigned Newell Highway has been designed in consultation with Transport for NSW to comply with the most up to date Austroads design standards, including installation of channelised turn treatments at each of the affected intersections and other safety improvements. The realigned Highway would also have a much greater level of flood protection than the existing Highway. Minor changes to overland flows have been discussed with affected landholders and mitigation measures have been agreed and would be implemented. Finally, the southern section of the proposed Highway was relocated to avoid a concentration of Aboriginal heritage sites.
- The realigned Kyalite Road would follow the alignment preferred by the local community, including an overpass over the proposed Haul Road and Services Road suitable for all farm-related vehicles likely to use the road.

- The SAR Waste Rock Emplacement was substantially redesigned and the volume of waste rock to be placed in-pit was maximised to avoid areas of high value Fuzzy Box Woodland Threatened Ecological Community. The SAR Waste Rock Emplacement was also designed to incorporate geomorphic design principles, thereby minimising future visual amenity impacts.
- The Caloma Waste Rock Emplacement would be backfilled to minimise the area of agricultural land that would be disturbed and to establish a final landform that would be suitable for a productive final land use rather than the currently approved final voids.
- Residue Storage Facility 2 has been designed to minimise the area required for residue storage and maximise integration with the existing Residue Storage Facility 1.
- The Applicant would seek to negotiate Memoranda of Understanding with the owners of Residences R6, R26, R40 and R43 to address potential noise and air quality-related impacts.
- The Applicant is currently reviewing the feasibility of installing a 5MW solar farm immediately to the north of the TGO Mine Site to offset a proportion of the greenhouse gas emissions associated with the Project.
- The Applicant has committed to retain, store and use all potentially chemical, salt and sediment-laden water to minimise the potential for discharge to natural drainage.
- The Applicant has committed to undertake a range of agricultural activities to increase the agricultural productivity of the land that would not be used for mining-related purposes so that the overall agricultural productivity of Applicant-owned land would be higher after mining than before, notwithstanding the permanent removal of some areas from agriculture.

Finally, the Applicant would retire required biodiversity offset credits in accordance with the requirements of the *Biodiversity Conservation Act 2016*.

7.2 Consistency with Strategic Context

Section 2.1 presents an overview of the key Government Strategies, Policies and Plans relevant to the Project. In summary, the Project would be consistent with each of the documents reviewed for the following reasons.

- The Project would result in the continued and expanded employment of the Applicant's workforce for at least another 7 years, from December 2025 to December 2032, thereby supporting the retention of existing residents and attraction of new residents to population centres such as Tomingley, Peak Hill, Narromine, and Dubbo.
- The Project would result in continued economic contributions for a further 7 years. This would support local business and would promote economic activity and provide diversification for the local and regional economy.

- The Project would not result in disturbance of key natural or built features. The realigned Newell Highway would be of a similar standard to the existing Highway, with a range of safety, flooding and other improvements more than compensating for the minor additional travel distance and time.

7.3 Compliance with Statutory Requirements

7.3.1 Introduction

Section 4 and **Appendix 15** provide an overview of the Project's compliance with relevant statutory requirements and where various requirements have been addressed. The following subsections address relevant statutory requirements that have not been addressed elsewhere in the document.

7.3.2 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the principal legislation regulating development in NSW. Development consent for the Project is being sought under Part 4, Division 4.7 of the EP&A Act as a State Significant Development (SSD). Section 4.15(1) of the EP&A Act describes the matters for consideration by a consent authority in evaluating a Project for determination. Table A15.2 of **Appendix 15** identifies where each matter has been addressed in this document.

Section 1.3 of the EP&A Act presents the objects of the Act. **Table 7.1** presents each of the objects of the Act and identifies how the Project is consistent with each.

Table 7.1
Objects of the EP&A Act

Page 1 of 3

Object	Consistency with the Project
The objects of this Act are as follows.	
a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The Project would provide for the continued orderly and professional development and operation of the Applicant's existing operations for further seven years, thereby permitting the existing social and economic benefits associated with the TGO Mine to continue. At all stages of design and planning for the Project the social and economic outcomes that would be experienced in the community have been considered. In addition, the Project has been designed to avoid environmental impacts to the extent practicable and would mitigate or manage residual impacts to an acceptable level. Consultation with the local community has resulted in refinement of the Project during the preparation of the EIS with these refinements presented to the community in order to gauge whether they are deemed acceptable. In all cases, those consulted did not make further comment in relation to the matter raised. It is therefore considered that the Project achieves this objective.

Table 7.1 (Cont'd)
Objects of the EP&A Act

Object	EIS Coverage
b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	Section 7.5.2 discusses how the Project is consistent with the principles of ecologically sustainable development. The Project has been subject to thorough technical assessment to understand the existing setting, predict potential impacts and identify those matter that require additional measures to manage the risk of impact. It is considered that the Project would be developed in an efficient manner that will take into account the value of environmental and social resources to the local and regional community both now and in the future.
c) to promote the orderly and economic use and development of land,	Detailed technical assessment has been undertaken to understand the existing setting including through comprehensive exploration programs and assessment of geotechnical characteristics. This has permitted the Applicant to design a Project that not only maximises the economic use of the land but also provides for appropriate staging, the ongoing management of by-products, staffing and supply planning, progressive and final rehabilitation and community-related programs and investment. In this regard the detailed planning and preparation would ensure that the Project is developed to promote the orderly and economic use and development of the site.
d) to promote the delivery and maintenance of affordable housing,	While not directly relevant to the Project, it is not expected that the supply and availability of housing in the region would significantly change due to the anticipated employment benefits of the Project.
e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	Consideration of residual impacts to biodiversity values has been undertaken in accordance with the *Biodiversity Conservation Act 2016* (BC Act). Direct disturbance of native vegetation and potential native fauna habitat has been minimised to the extent practicable to reduce the need for impact to biodiversity values. An offsetting strategy would ensure that residual biodiversity impacts are offset in accordance with the requirements of the BC Act.
f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The Project would require the salvage of Aboriginal artefacts from 12 sites. A further 27 sites would not be directly impacted and would be protected from inadvertent disturbance over the Project life. The Aboriginal sites to be disturbed would be managed in accordance with an approved Aboriginal Heritage Management Plan prepared in consultation with the local Aboriginal community. The Project would require the removal of the "Rosewood" homestead and associated structures. The realigned Newell Highway would also pass through the site of the former McPhail village. Test pitting in the vicinity of the village and archival recording of the "Rosewood" homestead and any structures identified within the proposed highway footprint would ensure that these structures are appropriately managed. It is not anticipated that the Project would significantly constrain the sustainable management of built and cultural heritage.
g) to promote good design and amenity of the built environment,	The realigned Newell Highway and Kyalite Road and associated intersections would be designed and constructed in accordance with requirements of the Austroads *Guide to Road Design* in consultation with Transport for NSW and Narromine Shire Council. Potential amenity impacts in the vicinity of the Project Site would be managed through:

Table 7.1 (Cont'd)
Objects of the EP&A Act

Object	EIS Coverage
g) to promote good design and amenity of the built environment, (Cont'd)	• improved safety and flood protection on the realigned Newell Highway and Kyalite Road; • construction of the SAR Amenity Bund, outer face of the SAR Waste Rock Emplacement and numerous vegetation screens that would obscure views of the Project Site; • adoptive blast designs that consider potential impacts at privately-owned residences; • preventative management incorporating meteorological forecasting, comprehensive monitoring and response protocols; and • reactive management protocols to address community complaints.
h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	Project-related buildings and other structures would be constructed in accordance with the relevant Australian Building Code and all required construction and occupation certificates would be obtained.
i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The assessment requirements addressed in this EIS include feedback from Narromine Shire Council and relevant State government agencies.
j) to provide increased opportunity for community participation in environmental planning and assessment.	Sections 5 and **Appendix 16** of this document and RDC (2021) describe the extensive community consultation and engagement activities that have been undertaken during the design and planning for the Project. Furthermore, the Applicant has committed to ongoing consultation and community and stakeholder engagement post-approval and over the Project life.

7.3.3 Narromine Local Environmental Plan 2011

The principal local planning instrument for the Project is the Narromine Local Environmental Plan (LEP) 2011. Under that plan, the Project Site is located within land zoned RU1 – Primary Production and SP2 – Infrastructure. Section 4.3.2 addresses matters related to permissibility of the Project and Table A15.1 of **Appendix 15** addresses matters related to a range of other Clauses within the Narromine LEP. **Table 7.2** presents an assessment of the Project against the objects of each of the above Zones.

Table 7.2
Narromine LEP Zone Objectives

Object	Consistency with the Project
Zone RU1 – Primary Production	
To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.	The Project would permanently remove 130ha of land from agricultural production, with 345ha temporarily removed from production. Notwithstanding this, the Applicant would increase the overall agricultural productivity of land under its control from approximately 6 888 dry sheep equivalent (DSE) to 8 371 DSE at the end of mining and 10 562 DSE following completion of rehabilitation operations.

Table 7.2 (Cont'd)
Narromine LEP Zone Objectives

Object	Consistency with the Project
Zone RU1 – Primary Production (Cont'd)	
To encourage diversity in primary industry enterprises and systems appropriate for the area.	The Project would implement best-practice agricultural techniques to maximise agricultural productivity and would provide opportunities for the Applicant and others to diversify agricultural practices within and surrounding the Project Site.
To minimise the fragmentation and alienation of resource lands	The Project would not fragment agricultural land and, following use for mining purposes, the maximum area would be returned to agricultural use.
To minimise conflict between land uses within this zone and land uses within adjoining zones.	The Project, has to the extent practicable, been designed to avoid land use conflicts between rural, infrastructure and village zones. In particular, the Applicant has consulted with surrounding landholders in relation to amenity-related impacts and has and would implement a range of measures to minimise potential land use conflicts.
Zone SP2 – Infrastructure	
To provide for infrastructure and related uses.	The Applicant anticipates that the road reserve associated with the realigned Newell Highway would be rezoned to SP2 – Infrastructure and that the road reserve associated with the section of the existing Highway to be decommissioned would be rezoned to RU1 – Primary Production. In this way, the Project would ensure the appropriate zoning and protection for the Newell Highway.
To prevent development that is not compatible with or that may detract from the provision of infrastructure.	The Project has been designed to minimise mining-related impacts to the Newell Highway, including locating the road outside the Blast Management Zone and screening the majority of mining-related activities from motorists using the Highway.

7.4 Consistency with Community Views

Sections 5.1 and 5.2 present an overview of the engagement carried out for the Project and the views of the community surrounding the Project Site. The community's views may be summarised as follows.

- The surrounding community is aware of the Applicant's operations within the TGO Mine Site. The community was generally satisfied with the manner in which the Applicant has undertaken its activities and acknowledged the benefits that the TGO Mine as bought. A range of minor issues were identified, with particular reference to operations in the early years of the TGO Mine, however, it was generally acknowledged that the Company appropriately managed and resolved issues as they arose.
- The surrounding community did not raise any fundamental objections to the Project, although it was noted by a number of community members that they would prefer if the Project did not proceed.

- The surrounding community raised a number of matters of particular concern. These are summarised in Section 5.2.2 and detailed descriptions and cross references to where each matter has been addressed is presented in **Appendix 16**.

Overall, the Applicant contends that the Project has a high degree of community support and the views of the community have been sought and appropriately addressed.

7.5 Scale and Nature of Anticipated Impacts

7.5.1 Introduction

The Project has been subject to detailed review, refinement and assessment during design and planning and the preparation of this EIS. The following subsections present an overview of how the Project is consistent with the principles of ecologically sustainable development, a brief summary of the anticipated biophysical, social and economic impacts of the Project assuming the implementation of proposed mitigation and management measures.

7.5.2 Ecologically Sustainable Development

7.5.2.1 Introduction

The importance of ecologically sustainable development (ESD) has been acknowledged across all levels of government in Australia for almost three decades. The concept of ESD highlights the need for development that meets the needs of the Australian society today to occur in a manner that does not compromise the ecosystems on which life depends, so that future generations are able to meet their own needs. ESD involves integrating economic and social development with environmental protection in decision making and for balancing the interests of current and future generations.

Clause 7(4) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* identifies the principles of ESD as follows.

7(4) The principles of ecologically sustainable development are as follows—

*a) the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by—*

i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*

ii) *an assessment of the risk-weighted consequences of various options,*

*b) **inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*

c) ***conservation of biological diversity and ecological integrity****, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*

d) ***improved valuation, pricing and incentive mechanisms****, namely, that environmental factors should be included in the valuation of assets and services, such as—*

i) *polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*

ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*

iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*

The following subsections evaluate the Project in terms of its consistency with ESD and, in particular, the above principles.

7.5.2.2 The Precautionary Principle

The approach to the assessment of the Project has involved the following activities consistent with a preventative approach to environmental impact.

- A detailed analysis of the risk associated with potential environmental outcomes.
- Collection of comprehensive baseline environmental data.
- Comprehensive consultation with Government agencies, businesses and the surrounding community to gauge local knowledge and to understand concerns.
- Robust technical assessment of worst-case scenario outcomes with management and mitigations recommendations adopted.
- Emphasis has been placed on preventative environmental management measures to be implemented on the basis of predictive assessment of worst-case scenario conditions rather than reactive measures.
- Provision of training and induction for all workforce personnel to ensure that they understand their obligations to prevent or minimise environmental impacts.
- Avoidance of long-term adverse impacts on the local environment through the design and rehabilitation of disturbed areas to a landform and land use equivalent or better than that of the pre-mining environment.

The technical assessments for the Project have considered a range of risks that may result in serious and irreversible harm including the following.

- Contamination of land or water resulting in permanent damage to these resources and impacts to those that rely on them (see Sections 6.6 and 6.8).
- Alterations to the flow regime in local watercourses permanently altering water availability for human and ecosystem use (see Sections 6.6 and 6.9).
- Permanent or long-term impacts to the regional groundwater system including risks to groundwater quality and impacting water use and accessibility (see Section 6.7).
- Removal of habitat for threatened native flora and fauna (see Section 6.10).
- Harm or desecration to significant sites of Aboriginal or historic heritage value (see Sections 6.11 and 6.12).
- Permanently altering the landscape and impacting the visual outlook from homes or public vantage points (see Section 6.3).
- Significant changes to the existing local road network that result in traffic accidents with severe or life-threatening outcomes (see Section 6.2).

Other matters that have been considered for assessment such as noise, blasting or air quality impacts are able to be mitigated or are reversible. Each of these matters has been thoroughly assessed with comprehensive scientific methods applied to understand potential risks and to predict environmental outcomes. On the basis of what is known with regards to environmental risks, the Applicant has committed to preventative measures to reduce potential impacts to the extent practicable. Environmental monitoring and reporting would be implemented to track trends in environmental outcomes / performance and guide adaptive management practices. In this regard, the Applicant has acknowledged where scientific uncertainty exists and has committed to proactive management of residual environmental risks.

7.5.2.3 Social Equity

Social equity in the context of ESD relates to the maintenance or enhancement of the natural environment and resources in order to provide benefit to both current (intra-generational equity) and future (inter-generational equity) generations.

The Project would be consistent with the principle of intra-generational equity as the economic benefits would be experienced throughout Australia, at the scale of the State of NSW, within the local community including the Tomingley village, as well as for Peak Hill, Narromine and Dubbo and for individuals employed within the Project Site. Measures such as the continuation of the existing Planning Agreement with Narromine Shire Council and ongoing payment of mining-related rates, royalties and other taxes would maximise the local, State and national distribution of benefits.

The predicted residual impacts of the Project would not focus on any one specific social or demographic group. Individual landowners have been consulted on predicted outcomes and where appropriate, are to be offered mitigation measures to address minor noise impacts during the initial years of open cut mining operations.

Through direct investment, the attraction of families to the area, the provision of opportunities for gaining off-farm income and by providing funding for community programs, the Project would continue to encourage a more diverse business base in the villages of Tomingley and Peak Hill, as well as other locations in the region, that would benefit future generations. In addition, the Applicant is continuing to invest in exploration that could potentially see the benefits of employment and training extending beyond the current generation.

The residual environmental impacts of the Project are also predicted not to be prolonged such that they may represent an unacceptable cost to future generations. This is particularly relevant where impacts may continue post-mining such as for the groundwater system. Numerical groundwater modelling was extended to 200 years post-mining and identified that the extent of drawdown, as defined by the 2m drawdown contour, is not predicted to impact on any registered bores other than monitoring bores associated with the Project and with a service station within Tomingley village.

The natural environment would be enhanced through the in-perpetuity conservation of land proportionate to the offsetting obligations of the Project. This approach, which is consistent with NSW government legislation and policies, ensures that native vegetation clearing for the Project development, is offset through conservation that would be available for future generations.

It is noted that the mining products (i.e. gold) are recyclable and reusable and therefore would meet the needs of both the current generation and future generations.

Finally, it needs to be acknowledged that the significant economic benefits to the Narromine LGA, NSW and nationally through the payment of taxes, royalties and wages would provide funding for the development of local infrastructure that would be a direct benefit to future generations. This is dependent on the funding priorities of government at all levels but may include enhancement of schools, medical facilities and the funding of road and other infrastructure.

7.5.2.4 Conservation of Biological Diversity and Ecological Integrity

This principle establishes the need to consider the conservation of biological diversity and ecological integrity in decision making. It is important that developments do not threaten the integrity of the ecological system as a whole or the conservation of threatened species in the short or long term.

As noted in Section 7.1, the Project has been subject to comprehensive assessment as well as a series of design and planning iterations that have included changes to the Project layout. As the area of disturbance of the Project has been reduced and modified, so has the area of potentially impacted native vegetation and flora and fauna habitat. In addition, measures would be implemented on site to conserve the integrity of soil resources for use in rehabilitation activities, which would in part aim to re-establish native ecosystems within the Project Site.

In addition, the biodiversity offsetting obligations of the Project have been assessed in accordance with the *Biodiversity Conservation Act 2016* and the NSW Biodiversity Offset Scheme. This process maintains the integrity of native vegetation and habitat, assessed to be consistent with that removed for the Project.

7.5.2.5 Improved Valuation and Pricing of Environmental Resources

The Applicant has made a range of commitments relating to the implementation of safeguards to avoid or minimise environmental impacts, manage the by-products of development (principally waste rock and residue) and manage wastes on site over the longer term. While this may present a short-term cost to the operation, it is acknowledged that the long-term benefit of management is of high value to the Applicant and to the local environment. Importantly, this includes the Applicant's commitments regarding the long-term storage, monitoring and management of residue, with detailed planning and design effort undertaken to ensure that the rehabilitated landform would remain safe, stable, secure and non-polluting.

The planning process in NSW requires that Applicants adequately consider, assess and value the potential environmental outcomes of development. Through multi-agency input to the assessment requirements, the priorities of all levels of government are considered and included in assessment. By taking this approach the relevant agency(ies) determine the value that should be placed on the environmental resources within NSW. The Applicant has addressed the assessment requirements of all government agencies that had input to the assessment requirements for the Project. This has also been extended to a specific focus on addressing the queries and concerns of the local community and in valuing the feedback of the community and the local experience of the natural environment.

7.5.2.6 Conclusion

The aim of ecologically sustainable development is to recognise the environmental and social outcomes of development that must be considered if the economic benefits are to be realised in the short and long term. The focus is not on the sustainability of a single action but the sustainability of society between and across generations and the preservation of the ecosystem processes on which life depends. In this regard, the non-renewable aspects of mining have been recognised with objectives for mining development that seek the efficient removal and beneficiation of natural resources for economic benefit alongside detailed consideration of the environmental and social outcomes of these processes.

The Applicant has undertaken thorough scientific assessment of the potential impacts of the Project and assumed worst case scenario settings for the development of preventative measures that would limit the potential for adverse environmental impacts. This includes the conservation of biological diversity through offsetting of residual impacts to biodiversity values. Social equity would be achieved for the Project through the broad distribution of benefits including directly within the local community and across generations. The environmental impacts would not expand over the long term or result in a direct cost to future generations. Finally, through the commitment to a range of Project components designed to limit local impacts and manage the outcomes of development, the Applicant is placing appropriate value on the environmental resources within and surrounding the Project Site including the need to manage the by-products of development.

7.5.3 Biophysical Considerations

7.5.3.1 Traffic and Transportation

An *Integrated Transport Assessment* (Constructive Solutions, 2021b) was undertaken for the Project that considered traffic and transport related impacts associated with the construction and operation of the Project.

The principal Project-related traffic and transportation impacts would be associated with the realignment of the Newell Highway, Kyalite Road and associated intersections. As the proposed road designs are consistent with the *Austroads Guide to Road Design* and would be approved by the relevant roads authority, there would be no unacceptable road design or operational impacts.

Additional traffic generated by the Project would principally comprise light vehicles used to transport personnel to work. Heavy vehicles use of the public road network would not be a significant feature of the Project.

Notwithstanding the above, the Project would result in minor additional travel time for users of the Newell Highway and residents along Kyalite Road travelling to the south. This would, however, be offset by substantial safety and intersection improvements. As a result, on balance the Applicant contents that the Project would not result in unacceptable adverse traffic and transportation-related impacts.

7.5.3.2 Visibility

The visibility assessment of the Project established that key infrastructure within the SAR Mine Site, namely the SAR Waste Rock Emplacement, would be highly visible from much of the area in the vicinity of the Project Site, including from privately-owned land (including Residences) and from users of the local road network. Two principal matters relating to visibility impacts were addressed by the visibility assessment; driver distractibility and impacts to existing visual amenity.

Users of the existing and proposed realignments of the Newell Highway and Kyalite Road would have views of the Project Site; however, direct views of the principal mining related activities within the Project Site would largely be reduced or prevented by the SAR Amenity Bund, the progressively rehabilitated outer ‘wall’ of the SAR Waste Rock Emplacement and both existing and proposed vegetation visibility screens.

The most visible feature of the Project would be the light-coloured rock being placed within the SAR Waste Rock Emplacement; However, the visual impacts would be managed through the progressive revegetation of the outer slopes. The geomorphic design of the SAR Waste Rock Emplacement with variable slopes and elevations would enable this landform to blend within the surrounding natural landscape. Other visual controls would also assist to manage the visual impacts of the Project including the retention and establishment of tree screens adjacent to local roads. The proposed final landscape has been designed to integrate into the surrounding rural and mining landscape.

Overall, the limited visibility of the mining activities within the Mine Site and the range of visual controls would achieve an acceptable level of impact.

A lighting and night glow assessment (LAS, 2021) determined that the Project would comply with the limits for dark rural environments as stipulated in AS/NZS 4282:2019 *Control of the Obtrusive Effects of Outdoor Lighting* with the implementation of the mitigation measures to be adopted for the Project. Lighting impacts on the local environment were assessed to be minimal.

A number of calculations were undertaken to determine the total lumens, total upward lumens and the illuminance of sky particles at varying levels above the Project Site. These calculations were provided to the Siding Spring Observatory who calculated that the night sky brightness above the observatory as a result of the Project would be negligible.

7.5.3.3 Noise and Blasting

The design of the Project, the selection of the type and number of mobile equipment used on site and operational hours have largely been influenced by the noise assessment for the Project. Key design features that have been refined through this process include the following.

- The construction of physical elements within the Project Site to reduce the propagation of noise, including the SAR Amenity Bund, the outer face of the SAR Waste Rock Emplacement and the construction of an acoustic barrier for the Haul Road within the TGO Mine Site.
- Land preparation activities, which may occur prior to the construction of landform noise mitigation elements, would be restricted to daytime operations when required.
- Installation of additional noise monitoring terminals that would monitor noise in real-time and enable the Applicant to actively manage noise emissions to ensure compliance at surrounding residences.

The noise assessment undertaken by MAC (2021) has concluded that Project-related noise levels experienced at surrounding residences would be low and would be mainly audible during periods of adverse weather conditions, i.e. gentle winds towards residences or evening or night-time temperature inversion.

The Applicant maintains several Memoranda of Understanding with surrounding Residences relating to potential noise impacts from approved operations within the existing TGO Mine Site. MAC (2021) has predicted that the Project Noise Trigger Levels would be exceeded at four private Residences during the evening and night with a negligible exceedance of 1dB(A) to 2dB(A) during the initial two years of mining operations within the SAR Open Cut only. Mitigation would be offered to each of the affected residents.

Overall, whilst noise from the Project Site activities would be periodically audible by local receptors, the magnitude of the noise would be at a level recognised by the EPA's policy as being acceptable to most people and unlikely to cause annoyance.

Road traffic noise levels would be less than the relevant assessment criteria, including as a result of realignment of the Newell Highway and Kyalite Road.

Blasts would be designed to ensure that both ground vibration and airblast overpressure levels comply at all privately-owned Residences. Blasts would be periodically heard but their effects would be within both comfort and damage criteria.

7.5.3.4 Air Quality and Greenhouse Gas

Through detailed and conservative modelling, the air quality assessment (Northstar, 2021) has predicted that there would be a limited number of exceedances of the relevant air quality criteria 24-hour average PM_{10} at privately-owned residences or receptors. These would be the only exceedances of the air quality-related criteria for the Project.

It should be noted, however, that the air quality assessment was based on background data from 2017 collected by the Applicant. That data includes mining operations within the TGO Mine Site during 2017. Mining operations within the TGO Mine Site during the life of the Project would occur at a scale that is substantially less than during 2017. As a result, the assumed background dust levels are likely to overstate actual background dust levels and the air quality assessment is therefore conservative.

The existing real-time air quality monitoring network would be retained and expanded and would enable proactive management of the location and intensity of activities and/or increased controls to minimise emission of particulate matter when existing levels are approaching the relevant criteria. Northstar (2021) identify that with the implementation of the above mitigation measures, that exceedances were predicted to occur only on days where existing background levels were already at 95% of the relevant criteria.

Based upon conservative assumptions, the total estimated GHG emissions over the Project life represent approximately 0.04% of total GHG emissions for NSW and 0.01% of total GHG emissions for Australia. The GHG emission estimates are conservative as they do not account for the offset of emissions through the increase in vegetative biomass through progressive rehabilitation, nor for the reduction in emissions that would occur through the removal of agricultural land. The Applicant is currently reviewing options to install solar power generation to offset power consumption within the TGO Mine Site. No decision has been made in relation to that proposal and subsequent approval under the EP&A Act would be required prior to installation. Notwithstanding this, potential exists to further mitigate greenhouse gas emissions from the Project.

7.5.3.5 Surface Water Resources

The outcomes of the Surface Water Assessment (Jacobs, 2021a and 2021b) have been used to refine the design of the Project to maximise the quantity of water that can practically be diverted around disturbance areas and away from the Project Site. Dirty or mine affected water would be retained and recycled on site and would not affect downstream water quality. Jacobs (2021a) states that there would be no significant impacts to surface water quality from the construction, operation and decommissioning of the Project that would not be managed through the appropriate application of surface water management and mitigation measures.

The Project would result in changes to the existing surface water and flooding environment. During operational phase of the Project, the proposed realignment of the Newell Highway would achieve 1% AEP flood immunity, with some areas anticipated to reach a 0.1% AEP flood immunity. Compared to the maximum 20% AEP flood immunity of the current Newell Highway within the Flood Study Area, this represents a significant increase in flood immunity.

Jacobs (2021b) determined that the Project would result in minor changes to the distribution of overland flows as follows.

- Peak flood levels upslope of the proposed Haul Road and Services Road and the realigned Newell Highway would be approximately higher than currently. This is primarily as a result of construction the proposed roads resulting in ponding of water where no water previously ponded.
- Peak overland flow levels immediately south of the Wyoming 1 Open Cut are expected to be lower than currently, primarily because the Newell Highway would not be overtopped during a 5% AEP rainfall event and peak flows would therefore be lower and later than is currently the case.
- Peak overland flow levels south and west of the approved Residue Storage Facility 2 are expected to be lower than before the facility was constructed. This is partly as a result of the construction of the approved Residue Storage Facility 2 directing water further south and partly as a result of the Highway no longer overtopping. The Applicant has discussed this matter with the owners of both properties potentially impacted and has agreed to construct diversion banks to re-establish existing flows.
- Peak overland flood levels downslope of the proposed intersection of the Newell Highway and Kyalite Road are expected to be higher than currently. This is primarily the result of additional water being diverted to the north around the SAR Open Cut and passed through culverts to the south of the intersection. The Applicant has discussed these additional flows with the single landholder potentially affected and has agreed to relocate gate access to paddocks to facilitate access during periods of overland flow.
- Peak overland flood levels to the southwest of the SAR Open Cut are expected to be higher than currently. This is primarily the result of additional water being diverted to the south around the SAR Open Cut. The anticipated additional flood height would be restricted to the Applicant's own land.
- Peak overland flood levels within the named Bulldog Creek downstream of the realigned Highway would be approximately 100mm lower than currently. This is primarily because the Newell Highway would not be overtopped during a 5% AEP rainfall event and peak flows would be lower than is currently the case.

Overland flood levels at the point where Bulldog Creek crosses Back Tomingley West Road would be largely unchanged as a result of the Project because surface water flows merge at this point, resulting in a negligible change to water levels once each of the flood paths have merged.

7.5.3.6 Groundwater Resources

A Groundwater Assessment has been prepared by Jacobs (2021c) to assess the possible risks associated with the Project to groundwater resources including impacts to water supply bores, streamflow and natural ecosystems that are dependent on groundwater. A numerical groundwater model has been developed that simulates the regional groundwater system and known influences on the existing hydraulic behaviour of the system.

The principal changes to the groundwater setting would be caused by groundwater inflows to the existing and proposed workings and subsequent localised drawdown to the regional water table.

Based on modelling predictions, the key residual impacts to the groundwater system as a result of the Project include the following.

- The principal impacts of the Project would be restricted to the underlying fractured rock aquifer. The perched alluvial aquifers, which support local groundwater use would not be impacted.
- During the Project life, groundwater inflow rates are predicted to be between 0.5ML/day to 2.5ML/day, with a peak of 3.04ML/day. Annual inflow rates are predicted to increase from approximately 230ML in 2021 to approximately 427ML in 2025, before further increasing to approximately 767ML in 2026.
- Post-mining inflows would progressively decrease over time as an equilibrium is reached in the final void lakes, with a final water level approximately 20m to 25m below that of the pre-mining groundwater levels. Water quality within the final voids would progressively decrease with time.
- The extent of the 2m drawdown contours within the underlying fractured rock aquifer would not encroach on any registered groundwater production bores, either at the end of mining operations or 200-years post mining**.**

The Applicant has committed to obtaining adequate allocation to account for the anticipated inflow of 427ML in 2025. In the interim, the Applicant would collect additional groundwater monitoring data and would review and revise the groundwater model in 2024 to determine the likely peak groundwater inflows during the remaining life of the Project. Additional allocations would be obtained if required.

Based on the outcomes of the groundwater modelling and assessment, it is considered that potential impacts to the groundwater setting are well understood and would be acceptably managed.

7.5.3.7 Soils and Land Capability

A *Land and Soil Capability Assessment* (SSM, 2021a) was undertaken to guide the management of soils and to determine potential impacts to soils and land capability resulting from the Project. A total of six soil mapping units (SMUs) were identified within the SAR Mine Site with land and soil capability (LSC) Classes of 4 and 6. Generally, the LSC Class 6 land is associated with gilgai landforms.

The Applicant would implement a range of soil stripping and soil stockpile management measures to maintain soil health and structure, ameliorate soil deficiencies and ensure that adequate topsoil and subsoil resources are available for progressive rehabilitation and closure activities.

7.5.3.8 Agricultural Resources, Land Uses and Enterprises

The *Agricultural Impact Statement* prepared for the Project TGO (2021) determined that whilst the Project would remove agricultural land, proposed increases in agricultural productivity as a result of a range of improvements in land management, would ensure that the Project would only have minor to negligible impacts on land used for agriculture during Project life, and would in fact result in a net increase in the productivity of the land overall.

7.5.3.9 Biodiversity

Throughout the design process, the Applicant has undertaken to minimise impacts upon biodiversity values to the greatest extent possible.

Comprehensive field surveys undertaken by AREA (2021) identified four vegetation communities within the proposed limit of disturbance, as follows.

- PCT 55 – Belah woodland.....43.78ha
- PCT 82 – Western Grey Box – Poplar Box – White Cypress Pine tall woodland 22.77ha
- PCT 201 – Fuzzy Box Woodland.....10.80ha
- PCT 27 – Weeping Myall open woodland 0.68ha

Two of these, namely PCT201 and PCT27 are identified as TEC under the NSW *Biodiversity Conservation Act 2016*, with PCT27 also identified under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.*

Two threatened species, namely the Grey-crowned Babbler and the Superb Parrot were also observed.

AREA (2021) identified that the following Ecosystem Credits would be required for each of the vegetation communities identified. No Species Credits would be required.

- PCT 55 – Belah woodland.....552 credits
- PCT 82 – Western Grey Box – Poplar Box – White Cypress Pine tall woodland .....733 credits
- PCT 201 – Fuzzy Box Woodland.....426 credits
- PCT 27 – Weeping Myall open woodland .....13 credits

In addition, PCT 201 – Fuzzy Box Woodland was assessed as a candidate for Serious and Irreversible Impacts. AREA (2021) undertook included detailed and targeted field and desktop assessments for this community and assessed the Applicant's ongoing Fuzzy Box management and replanting program. The Applicant contends that the Project would not result in Serious and Irreversible Impact on the Fuzzy Box Woodland TEC.

A range of management and mitigation measures have been proposed to avoid impacts to biodiversity, primarily through impact avoidance via Project design and the payment of offsets into the Biodiversity Offsetting Fund. In the long-term, the final rehabilitated landform of the SAR Mine Site would further strengthen the existing and approved biodiversity offsetting and management program of the TGO Mine Site.

7.5.3.10 Aboriginal Heritage

OzArk (2021a) prepared an *Aboriginal Cultural Heritage Assessment Report* for the Project in consultation with Registered Aboriginal Parties (RAPs). The survey identified 39 Aboriginal sites, comprising:

- two scarred trees;
- eight artefact scatters; and
- twenty-nine isolated finds.

Twelve sites would be disturbed by the Project, comprising:

- three scarred trees (two of which were identified by previous surveys);
- three artefact scatters; and
- six isolated finds.

Each would be salvaged in accordance with an *Aboriginal Heritage Management Plan* to be prepared in consultation with the RAPs and Heritage NSW.

A further six identified sites, whilst not directly impacted, would require protection from inadvertent disturbance via the installation of protective barriers.

7.5.3.11 Historic Heritage

The Aboriginal and Historical Cultural Heritage Assessment undertaken by OzArk (2021a) identified four sites of potential historical heritage significance within the vicinity of the Project Site including the following.

- The "Rosewood" homestead and trotting stud.
- The ruins of "Old Thornycroft".
- The historic mining village of McPhail.
- The McPhail Mine.

It was concluded that the sites were of low significance on all criteria except for the potential for local heritage values. None of the sites would meet the thresholds for consideration of State heritage significance.

"Rosewood" would be removed following photographic archival recording.

To further investigate the potential impact of the Project on McPhail village, the Applicant would undertake test-pitting within selected sections of the footprint of the realigned Newell Highway in the vicinity of the former the village.

7.5.3.12 Public Safety Hazards

The SEPP 33 Screening Study for Dangerous Goods identified that the storage and use of explosives within the SAR Mine Site required assessment in a Preliminary Hazard Analysis (PHA). That assessment determined that offsite risks associated with these materials are considered to be acceptable.

Similarly, a bush fire assessment undertaken by RWC assessed that it is likely that the Project would be able to operate with suitable Asset Protection Zones around key Project Site components and comply with all requirements stipulated by the RFS.

7.5.4 Social and Economic Considerations

7.5.4.1 Economic Considerations

The economic assessment for the Project has analysed the Project using both Cost Benefit Analysis and Local Effects Analysis methodologies.

In summary, the results of the Cost Benefit Analysis conclude that the Project is estimated to deliver the net economic benefits of approximately $633.17M (in 2021 dollars). Over the life of the Project, the Project would result in an overall increase in regional production of approximately $176.7M, or 22.7% for total output from the Narromine LGA. Royalties to the State Government are expected to be in the order of $44M.

The Local Effects Analysis also considered the impacts at a local scale. In terms of employment, during operation the Project would provide an average of 179 addition Full-time Equivalent jobs. In addition, the Project would allow for the continuation of existing employment levels TGO Mine.

7.5.4.2 Social Considerations

A comprehensive program of community engagement and research has identified the anticipated and likely social risks of the Project. A range of feedback has been received indicating both support for and concern in regard to the Project. Overall, the local communities identified a range of substantial benefits that would arise from the Project, including economic benefits, local job creation and continued community support and finding. However, a range of perceived adverse impacts were also identified, including amenity (visual, noise and air quality) and ongoing challenges being “heard” by the Mine and not being able to have a say on decisions negatively affecting daily life.

A range of community engagement and enhancement strategies are proposed to maximise the social benefit of the Project and minimise adverse social impacts.

The Social Impact Assessment has assessed both the positive and adverse social impacts of the Project. The predicted adverse impacts are primarily expected to be direct and localised relating to:

- way of life (how people work, rest and play); and
- surroundings including aesthetic values and/or amenity (social amenity):

The Applicant would seek to minimise these impacts through open, honest and proactive consultation with the local community and, where appropriate, adaptation of its operation or mitigation measures to address reasonable community concerns.

The Project would, however, result in very substantial positive impacts in the wider community in terms of continuation of employment, workforce and supplier expenditure, and community investment, with many of these benefits also expected to be experienced by the local community.

7.6 Compliance Monitoring and Communication

The Applicant would continue to monitor and report on the environmental performance of its operations and compliance with the relevant conditional requirements of all approvals, licences and consents in accordance with current procedures, amended as required to reflect SAR-specific commitments and requirements. In summary, the Applicant would implement the following.

- Undertake environmental monitoring in accordance with the commitments presented in Section 6 of this document, the revised and approved Management Plans for the Project. The Management Plans would include all monitoring requirements embodied in approvals, licences and consents held for the Project.
- Ensure in the case of real-time monitoring that all equipment is appropriately calibrated, maintained and connected to the existing automated notification system, with appropriate triggers for automated notifications.
- Ensure that when automated notifications from the real-time environmental monitoring network are received that appropriate responses are identified and implemented, including verifying the cause of the notification and implementing appropriate measures, where required, to manage the identified emissions.
- Ensure that the results of all monitoring are reviewed upon receipt for trends and compliance with relevant criteria and implement appropriate measures, where required, to manage identified non-compliances.
- Ensure that all monitoring results are saved to a suitable database to enable future retrieval and analysis.
- Ensure that any non-compliances are reported to the relevant Government authority in accordance with the conditions of the relevant approval, licence or consent.
- Ensure that all monitoring results are collated into monthly and annual reports and that those reports are published on the Project's website.[1]
- Ensure that Independent Environmental Audits are undertaken regularly and the results of those audits published on the Applicant's website.
- Ensure that open and honest communication is maintained with the surrounding community, including but not limited to the following.
  - Regular meetings of the Community Consultative Committee.
  - Regular Community Newsletters.
  - Regular one-on-one meetings with all immediate rural neighbours (and residents of Tomingley village as requested or required).
  - Town Hall-style meetings as required.

[1]https://www.alkane.com.au/projects/tomingley-gold-project/tomingley-gold-operations/tgo-reports/environmental-reports/

7.7 Remaining Uncertainties

As identified in Section 7.5.2.2, a wide range of measures have been implemented to identify potential Project-related risks and substantial and detailed technical and environmental studies have been undertaken to inform the design of the Project. In addition, the Applicant has consulted widely with Government agencies and the surrounding community. As a result, the Applicant contends that it has adequately identified and addressed all substantive Project-related risks and environmental issues.

Throughout the assessment, the Applicant has consistently assessed the worst-case scenario for each of the identified risks and environmental issues. As a result, the Applicant contends that there is limited potential for unanticipated Project-related impacts greater than those assessed. Notwithstanding this, **Table 7.3** presents remaining Project-related uncertainties that may result in impacts greater than those assessed, and the mitigation measures proposed to manage each.

Table 7.3
Remaining Uncertainties and Proposed Mitigation Measures

Remaining Uncertainty	Proposed Mitigation Measure(s)
Additional ore may be discovered, requiring additional time, rate of processing, modified mining methods or disturbance areas.	• Apply for a modification or new development consent.
Additional waste rock may be extracted, requiring additional waste rock storage.	• Apply for a modification or new development consent.
The volume of residue produced may exceed the combined capacity of Residue Storage Facility 1 and 2.	• Apply for a modification or new development consent.
Rehabilitation operations may not achieve the proposed completion criteria identified in this document or any subsequent *Rehabilitation Management Plan.*	• Obtain the advice of suitably qualified expert(s) and implement the resulting recommendations to achieve the proposed criteria.
Noise, blasting or air quality emissions maybe greater than those assessed and impacts at surrounding residences may be greater than anticipated	• Continue to monitor noise, blasting and air quality emissions, including in real-time, and modify Project-related activities to ensure compliance with relevant criteria.
Surface water flows, including incident rainfall, may be greater than those assessed, resulting in failure of surface water control structures and/or discharge of water to natural drainage.	• Inspect all surface water control structures following rainfall and ensure that all surface water storages are managed in accordance with the revised and approved *Water Management Plan*.
Groundwater inflows or the extent of groundwater drawdown maybe greater than those assessed.	• Continue to monitor groundwater inflows to the mine workings and standing water levels in surrounding monitoring bores. • Undertake a review of the groundwater model and, if required, revise the modelling in 2024, prior to the expected peak in groundwater inflows. • Obtain suitable water access licence allocations for observed groundwater inflows and/or revised modelled inflows.
Agricultural productivity gains may be less than anticipated	• Monitor agricultural for all Applicant-owned land. • Obtain the advice of suitably qualified expert(s) and implement the resulting recommendations to achieve the proposed criteria.
Unanticipated Aboriginal or historic heritage objects may be identified.	• Implement the proposed Unanticipated Finds Protocol for both Aboriginal and historic heritage objects.

7.8 Consequences of Not Proceeding

The consequences of not proceeding with the Project relate principally to the lost opportunity to mine the identified gold resources and any further resources that may be identified throughout the life of the Project. The Applicant is confident that it has presented a Project that not only seeks the efficient development of the SAR deposits but has taken into consideration the likely impact of the Project on the local community and the predicted short-, medium- and long-term environmental outcomes. Each of these matters has been considered in detail in designing the Project, with progressive design changes discussed in Section 7.1. It is concluded that the Project, as presented, provides an acceptable balance of environmental and social outcomes in achieving the economic benefits of the combined TGO and SAR Mines.

The Applicant, through the development and operation of the existing and approved TGO Mine has been a significant source of local and regional employment and economic benefits since 2014. In the event that the Project were not to proceed, the TGO Mine would cease to operate on 31 December 2025, after which the current benefits would no longer reach the local and regional community.

Furthermore, employment opportunities within Regional LGAs such as Parkes, Narromine and Dubbo are a source of concern for local and State governments and some members of the community. This is closely associated with concerns regarding the viability of some of the smaller towns and villages in regional NSW. The TGO Mine has provided a stable and significant source of employment for the local community since 2014. Should the Project not proceed, employment for the current approximately 230 staff, as well as those employed by associated contractors and service industries, would cease in December 2025.

It is anticipated that the Project would improve outcomes for local people seeking employment in the mining industry. The community anticipation of this benefit has been reflected in the outcomes of community engagement both by the Applicant and for the Social Impact Assessment, where both recognition of the existing benefits as well as enquiries for future opportunities were heard. Therefore, should the Project not proceed, these anticipated employment benefits would not eventuate resulting in both economic and potentially social and mental health impacts as a result of continued lost opportunity

The Project would result in the extension of life of the TGO Mine until at least 2031, over which time the Economic Impact Assessment for the Project has identified that the Project would provide benefits to NSW of $633.17 million (in 2021 dollars).

Should the Project not proceed, not only would the anticipated broader economic benefits associated with local employment and procurement of services and consumables not be achieved, but the local enhancement projects and other community benefits resulting from the Project would be foregone.

Throughout the planning and design of the Project and development of the EIS, the Applicant has continued its exploration activities within and surrounding Project Site. Should the Project not proceed, it is likely that there would be an impact on future exploration by the Applicant and others in the region and subsequently on the attractiveness of mineral development in the region.

It is also accepted that should the Project not proceed, a range of residual environmental and social impacts (summarised in Section 7.5.2 to 7.5.4) would be avoided.

7.9 The Public Interest

Section 4.15(1)(e) of the EP&A Act requires a consent authority to consider the "public interest" in determining an application for development consent. The public interest is generally difficult to define as it depends on contextual factors and intangible and variable matters such as public opinion and public need. It therefore requires a balancing of public expectations of impacts and benefits, as well as support and opposition, but may also be considered in terms of the principles of ecologically sustainable development and the aims or 'objects' of the guiding legislation for the application (in this case, the EP&A Act).

Consultation and engagement throughout the development of the EIS (summarised in Sections 5 and 6.15) has identified a range of supportive feedback as well as key elements of concern. Community feedback, both positive or otherwise, has been considered and integrated into Project design wherever possible.

There is clearly evident support for the employment and other economic opportunities that the Project would provide across the local and regional economies. However, it is also acknowledged that there is concern about the Project from some immediate neighbours. This is to be expected given that those living closest to the Project Site would be more likely to experience both realised and perceived negative outcomes.

Not only has the Applicant focused on avoiding or mitigating the residual environmental impacts of the Project, but the proposed continuation of the existing Planning Agreement and mining rates payments would ensure that the economic outcomes continue to be distributed locally, while programs for environmental and social monitoring, regular reporting and auditing of performance would ensure that the commitments to responsible environmental management are achieved.

The outcomes of environmental, economic and social assessments for the Project have confirmed that the Project would operate in accordance with the legislation, policies and guidelines developed to ensure responsible environmental practices for development. These assessments have not only considered the immediate impacts of the operation but also longer-term outcomes involving potential land use conflict and residual impacts to resources that may be utilised by others. In each case, worst case scenario outcomes were considered to ensure a precautionary and conservative approach was taken. In addition, the legacy of the Project has been considered with regards to the rehabilitation and final land use options and mechanisms to preserve the existing character of the Tomingley village, while providing sufficient economic stimulus to ensure its sustainability. Finally, the economic impact assessment considers the public interest in economic terms and concludes that the Project would deliver net social benefits (i.e. following the inclusion of environmental, social and cultural costs) for the NSW community $633.17 million (in 2021 dollars).

The objects of the EP&A Act present the many aspects of planning and development that must be managed in ensuring that development in NSW remains in the public interest. **Table 7.1** demonstrates how each of these aspects would be managed for the Project to ensure that these objectives are achieved. In this manner the lives of all people in NSW (and arguably Australia) would be better served by the Project through its consistency with the planning and development preferences of the NSW Government.

It is finally noted that the feedback from the community in the form of public submissions would provide some indication of the public interest. All submissions on the application received by DPE at the end of the public exhibition process will be considered by the Applicant and a response would be provided to the issues raised.

7.10 Conclusion

This EIS has described the identified mineral resources and explained the procedures necessary to develop the Project in a suitable manner. Each component of the assessment has been accompanied by a description of the environmental management commitments that are proposed in order that:

- predicted residual environmental impacts remain acceptable; and
- ongoing management, monitoring and reporting ensures that compliance is maintained.

The assessment of impacts for the Project has determined that all other aspects have been mitigated to the maximum extent practicable and the Applicant contends that these would not result in unacceptable or unreasonable impacts.

Planning and design of the Project has been an iterative process that has involved refinements in response to the outcomes of assessment and the feedback technical experts. The Applicant considers that the scale of the Project would be sufficient to provide a boost to the local economy but not cause substantial adverse environmental or social impacts. The Project, as presented, provides an acceptable balance of environmental and social outcomes in achieving the economic benefits. In addition, the legacy of the Project has been considered with regards to the rehabilitation and final land use options.