

COUNCIL ASSESSMENT REPORT

Panel Reference	2019STH002
DA Number	10.2018.36584.1
LGA	Albury City
Proposed Development	Extension of existing Extractive Industry
Street Address	253 Shaw Street, Springdale Heights NSW 2640
Applicant/Owner	PGH Bricks and Pavers Pty Ltd c/- VGT Environmental Compliance Solutions Pty Ltd
Date of DA lodgement	17 December 2018
Total number of Submissions Number of Unique Objections	One
Recommendation	Approval
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	Extractive Industry (<i>a particular designated development</i> listed in Schedule 7)
List of all relevant s4.15(1)(a) matters	Any EPIs • Environmental Planning & Assessment Act 1979; • Protection of Environment Operations Act 1997; • Biodiversity Conservation Act 2016; • Threatened Species Conservation Act 1995; • Mining Act 1992; • National Parks and Wildlife Act 1974; • Protection of Environment Operations Act 1997; • Albury Local Environmental Plan 2010 (Albury LEP 2010); • Albury Development Control Plan 2010 (Albury DCP 2010); Section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4 • Nil Coastal Zone Management Plan • N/A Relevant regulations e.g. Regs 92, 93, 94, 94A, 288 • Environmental Planning and Assessment Regulation 2000 • Protection of the Environment Operations (General) Regulation 2009; • Protection of the Environment Operations (Noise Control) Regulation 2017; • Protection of the Environment Operations (Waste) Regulation 2014; • Protection of the Environment Operations (Clean Air) Regulation 2010; • Mining Regulation 2016; State Environmental Planning Policies • State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007; • State Environmental Planning Policy (Infrastructure) 2007; • State Environmental Planning Policy (State and Regional Development) 2011; • State Environmental Planning Policy No. 33 – Hazardous and Offensive Development;; and • State Environmental Planning Policy No. 55 – Remediation of Land. Other • Commonwealth legislation:

	- Environment Protection and Biodiversity Conservation Act 1999; and - Native Title Act 1993.
List all documents submitted with this report for the Panel's consideration	- Environmental Impact Assessment (EIS) Executive Summary - EIS - Secretary's Environmental Assessment Requirements Andersons Clay Mine Extension (EAR 1146) - Current Development Permit N72 - Current Mining Lease No 1229 - Current EPA Licence No 20938 - Aboriginal Cultural Heritage Assessment Report - Land Resource Assessment - Water Management Plan - Biodiversity Assessment - Noise and Vibration Assessment - Hazards and Waste Assessment - Traffic Assessment - Climate and Air Quality Assessment - Visual Assessment - Rehabilitation Plan - Statement of Commitments - Development Plans - Submission from neighbour - Response to submission - Further information requested by Council - Response to further information requested by Council - Compliance with Conditions Table - Targeted Threatened Species Survey - General Terms of Approval: DPIE Biodiversity Conservation Division - Transport NSW response - NSW Rural Fire Service response - EPA response - Report to Albury Council - Draft Development Consent - Councillor's submission - Applicant's response to Council decision and draft Consent Conditions
Clause 4.6 requests	Nil
Summary of key submissions	- Dust - Vibration - Noise - Compliance with existing consent conditions
Report prepared by	Marius Shepherd, Senior Planner Albury City Council
Report date	21 May 2020

Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?

Yes

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?

Yes

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?

Not applicable

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S7.24)?

Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions

Not applicable

Conditions

Have draft conditions been provided to the applicant for comment?

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Yes

DATE	21 May 2020	FIL REFERENCE	AF18/03988
CONFIDENTIAL	No		
FURTHER ENQUIRIES	David Christy City Development	PHONE	6023 8111
AUTHOR	Marius Shepherd		

**SOUTHERN REGIONAL PLANNING PANEL - Development Application 10.2018.36584.1
Extension of currently operating Clay Mine to an area to the west within the property
boundary – Lot 2 in DP 856969 addressed as 253 Shaw Street Springdale Heights
(AF18/03988)**

1.0 Executive Summary

Development Application No. 10.2018.36584.1 was lodged by PGH Bricks and Pavers Pty Ltd on 17 December 2018. The development proposes to extend the operation of an existing extractive industry (Anderson's Clay Mine) on Lot 2 in DP 856969 addressed as 253 Shaw Street Springdale Heights, to the west. An Interim Development Order (N72 79/627) was granted on the 7th of August 1979 by the Albury-Wodonga Development Corporation for the 'Extension of Clay Pits' on the property, subject to a number of conditions. Development Permit N72/291 was granted on the 17th of August 1983. Mining Lease No 1229 was granted by the Minister for Resources on 24 August 1990. The initial expiry date of the Mining Lease was 23 August 2011 however this was renewed until 23 August 2032. Copies of Mining Lease No. 1229 and Development Permit N72/291 are included in the attached documents.

The proposed development is defined as an *Extractive Industry* and is *Designated Development* under the provisions of Clause 19 of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)*. In this light a request for the Secretary's Environmental Assessment Requirements (SEARs) was made in April 2017. The SEARs were issued by the Secretary on the 18th of May 2017 (SEAR No. 1146). Refer to the attached documents for a copy of the SEARs.

Development Application No. 10.2018.36584.1 was subsequently exhibited from 22 December 2018 to 8 February 2019. One submission was received. The submission was received in two parts, with the first part received on 17 January 2019 and an addition received on 22 January 2019. A copy of the (combined) submission is included in the attached documents.

After initial assessment, Council considered the application to be lacking in a number of areas. Council requested further information on 27 March 2019 (refer to the attached documents). Following several requests to extend the timeframe within which to respond, the applicant submitted additional information on 23 September 2019. The additional information received is included in the attached documents.

The site is zoned *E3 Environmental Management* under *Albury Local Environmental Plan 2010* (Albury LEP 2010). An *extractive industry* is prohibited in the E3 zone, however Clause 2.5 and Item 6 of Schedule 1 (Additional Permitted Uses) of Albury LEP 2010 permits the use of the site for an *extractive industry*, with consent, notwithstanding the provisions of the Land Use Table of the applicable zone.

The proposal is to extend the current envelope of extraction to the west to continue to extract and process a maximum of 50,000 tonnes of clay/shale in any year for a period of up to 30 years. This extension is approximately 140 metres in length and around 2.5ha, in total. Depth of extraction will be limited to 50m below the surface, as consistent with the current consent. It has been estimated that the resources available in the extension area are approximately 1,000,000 cubic metres of shale and 574,000 cubic meters of clay. This will extend the life of the mine and secure future employment for exiting staff and contractors. The development seeks to minimise the environmental impacts of the mine extension and provide a final landform in keeping with surrounding land uses. The Development Application proposes no change to current extraction and haulage rates and the overall mine layout will remain essentially the same as is currently utilised.

Key issues identified during assessment includes:

1. Removal of Critically Endangered Ecological Community

The proposal will result in the removal of approximately 2.64ha of Box-gum Woodland, which is listed as a Critically Endangered Ecological Community (CEEC) under the Federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The NSW *Biodiversity Conservation Act 2016* (BC Act 2016) is now the principal biodiversity legislation in NSW and repealed the former *Threatened Species Conservation Act 1995* and *Native Vegetation Act 2003* on 25 August 2017. However, a transitional period applies for applications already issued with SEARs or lodged prior to the BC Act 2016 coming into force. The SEARs for this development were issued on 18 May 2017 which falls within the transitional period. Therefore, assessment of biodiversity matters has been made under the provisions of the *Threatened Species Conservation Act 1995* (TSC Act 1995). The Box-gum Woodland on the property is listed as an Endangered Ecological Community (EEC) under the TSC Act 1995 and, as a result, a Biodiversity Assessment was undertaken to identify the potential impact of removing 2.64ha of this EEC. The assessment concluded that the removal is not likely to substantially reduce the extent of this EEC so that its local occurrence is likely to be placed at risk of extinction or result in the fragmentation or isolation of this EEC.

Any removal of vegetation from the E3 zone must be replaced at a ratio of 10:1 for every tree removed. Council therefore recommends that prior to any works, a comprehensive tree survey be undertaken to determine the exact number of trees to be removed and an agreement entered into with Council regarding the replanting of the trees on site at a ratio of 10 trees for every tree lost, or monetary compensation at a rate determined by Council for replanting that number of trees in a suitable adjacent location. The proposal will also result in the removal of five hollow-bearing trees (HBT), while another four HBT will be retained. Council considers the loss of five HBT will have the potential for a greater impact to biodiversity value of the land and habitat retention. Council therefore will require part of the replanting works and/or a monetary contribution to include the establishment of habitat poles to connect existing areas of habitat.

Whilst Council generally supports the findings of the Biodiversity Assessment, it is noted that there is a separate but related statutory pathway for the applicant to follow regarding the

removal of any vegetation forming part of a CEEC. This relates to the need for consideration whether approval is required under the EPBC Act. One of the aims of the National Recovery Plan for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland (DECCW 2010) is to achieve no net loss in extent and condition of the ecological community throughout its geographic distribution. Also, according to the National Recovery Plan, all areas of Grassy Box-gum Woodland that meet the listing criteria should be considered critical to the survival of this ecological community. The matter of EPBC Act compliance is a separate issue as the responsibility is on the proponent to ensure any necessary approvals are obtained. Advice will be provided on the application regarding compliance with the EPBC Act and the proponent's responsibility to ensure compliance.

Notwithstanding, the potential impacts on threatened species and ecological communities has been comprehensively assessed. It is important to understand that, in this instance, the objectives of the E3 zone will take time to be achieved given the historic use and the established conditions of the site. It is acknowledged that the site has been significantly impacted for decades, however the proposed extension will not have significant additional adverse impacts on the ecological, scientific, or aesthetic values of the area and rehabilitation and mitigating measures are proposed to improve the final land form of the site. The continued use of the site for a mine was recognised in the listing of the use under Schedule 1 of ALEP2010 as an additional permitted use. Inclusion on this Schedule is formal Council recognition of the appropriateness of the continuation of a use that would ordinarily not be consistent with the objectives of the zone.

It should also be remembered that it will inevitably take many years, even decades, to completely backfill the pit given the vast volumes of material required to fill a pit of this size. The objectives of the zone and future land use of the site is however not lost and, in the long term, it remains possible for the site to be rehabilitated and still comply with Objectives i, ii and iii. It is therefore recommended that offset planting be required through Conditions of Consent to compensate for the loss of vegetation on the site in the short term in order to improve ecological communities in suitable adjacent areas whilst it is understood that the site itself can only be fully restored in keeping with its zoning in the long term at the end of the life of the mine.

2. Dust

The nature of the proposed development, being the open-cut extraction of clay and shale, inevitably leads to the generation of airborne dust. The Protection of Environment Operations (POEO) Act 1997 provides the statutory framework for managing pollution and waste in NSW, including the procedures for issuing licences for environmental protection on aspects such as dust control. Activities undertaken onsite must not contribute to environmental degradation and emissions must not exceed the standards. Subsequently, the mine operator is required to acquire and hold a current Licence from the NSW Environment Protection Authority (EPA). The current licence for this quarry was granted on 21 June 2017 (Licence 20938). As a consequence of the proposal extension of extraction activities, an amended license will need to be obtained from the EPA.

Depositional dust monitoring has been undertaken on the site since June 2017. The EPA recommends that the Annual Average for Insoluble Solids is less than 4g/m² per month. The results to date are well below the recommended level (however site visits to the dust gauges suggested they are not always in proper working order).

The impact from nuisance dust is likely to be low given the distance from sensitive receptors and the minimal complaints since operations commenced. Extraction of the clay will progressively deepen the mine and assist in shielding the site from windborne dust generation. As the footprint of the mine increases, dust suppression measures such as a watercart will be more frequently employed to reduce impacts. Rehabilitation will reduce exposed surfaces where practical to do so. Dust control measures that are currently and will continue to be employed on the site include:

- All vehicles are restricted to a speed limit of 15km/h on site and 30km/h on the unsealed section of Shaw Street
- Non-essential earth-moving activities are delayed during periods of high wind. Should the wind exceed 10m/sec, mining and hauling activities will cease
- The staff or contractors are required to deploy a water cart
- All laden trucks are required to have their loads covered.

Considering there will be no increase in the volume of extraction and number of truck movements, the impacts of nuisance dust are expected to be similar to the present levels experienced under the current approvals.

3. Noise and vibration

The principal source of noise and vibration is earth-moving activities, including topsoil stripping, screening and stockpiling, and re-spreading of overburden and topsoil. The bulldozer, excavator and loader will produce noise while undertaking clearing, mining and stockpiling activities and also by travelling along the unsealed internal roads.

Six sensitive receptors have been identified around the site at various distances which exceed 100m from the site, with only one being located at a higher elevation than the mine and approximately 500m to the north-east of the site. It is noted that there will be no increase in noise generating site activities, albeit moving closer to the receptors to the south and west. In addition to the significant distances to receptors, acoustic and visual bunds will be constructed on the perimeter of the site to provide further noise mitigation. There will be no changes to the volume and frequency of road haulage trucks transporting material and therefore no change to traffic noise is expected. Operations on the site are also restricted to the approved hours of 6:00am and 6:00pm Monday to Saturday inclusive, and mining occurs during three campaigns per year with a duration of four weeks. Noise and vibration is therefore not a constant or unmanaged impact.

4. Water quality

Surface water is captured and directed to a sedimentation dam on the mine floor. The proposed extension of the extraction area will not have significant impact on existing drainage patterns

in the locality. Extraction will extend to the west and the south of the existing pit and remain within the boundaries of the site, whereas the nearest drainage channel (Humbug Gully) runs to the north of the property on the other side of a ridge. The topography of the site does not suggest any watercourses or drainage channels to be significantly disrupted by the extension of the extraction area. It is anticipated that earthworks may reduce the amount of run-off into the small watercourse to the north, which currently has flows already captured by a weir upstream (Humbug Gully Catchment). There is one water sampling site at the boundary of the site and another two at the creek downhill from the mine to regularly monitor water quality.

5. Rehabilitation

The proposed rehabilitation strategy addresses the management of topsoil, erosion and sedimentation control and vegetation during and after the life of the mine. At the completion of extraction and rehabilitation, it is anticipated that the site would be returned to grassland for grazing purposes, with interspersed native trees for stock shelter, which will continue to provide some economic benefit for the landowner.

Felled trees will be placed in rehabilitation areas perpendicular to the slope to reduce erosion impacts, and trap seeds and nutrients in order to provide habitat. It is planned to store any topsoil and overburden won from the land clearing in separate bunds around the perimeter of the site to provide a visual and acoustic screen. These will be vegetated as soon as practicable to reduce erosion and sediment impacts. It is further anticipated that these topsoil bunds would be spread over any remaining disturbed areas after the end of life of the mine.

The site will be inspected daily for erosion hazards during mining and hauling campaigns and at least monthly at other times. Due to the mining methodologies having long gentle mine face slopes, active ongoing rehabilitation is not practical. Once final finished battered faces have been established, rehabilitation can commence. Rehabilitation activities are generally undertaken on a campaign basis in conjunction with mining due to equipment availability and the convenience of completing staged rehabilitation works. The areas to be rehabilitated include areas disturbed for the purposes of material extraction, storage, transport and for general mine management.

Vegetation species that will be established on the site will be consistent with the present woodland species and pasture species. Planting of vegetation is likely to be a combination of seeding and planting with tube stock as appropriate. Current consent conditions require that no extraction takes place within 15 metres of the boundary of the permit area. The vegetated buffer areas will be maintained in the future extension area to provide visual amenity to neighbouring landowners and dwellings.

The site will also be inspected regularly for weeds and spraying will be undertaken by appropriately qualified contractors as required. Weeds are currently sprayed approximately twice a year. The site is fenced with rural fencing to prevent invasion by livestock. Site visits have identified however that the fence is in parts in poor condition. Fencing will be required to be upgraded and maintained throughout the life of the project and rehabilitation activities. If

evidence of feral animal impacts on revegetation is noted, control measures such as rabbit proof fencing will be considered.

A regular monitoring program will be undertaken to ensure that rehabilitation goals are met adequately. The progress towards rehabilitation objectives will be reported annually until the Mining Lease is relinquished.

2.0 Introduction

Development Application No. 10.2018.36584.1 was lodged by PGH Bricks and Pavers Pty Ltd on 17 December 2018. The development proposes to extend the operation of an existing extractive industry (Anderson's Clay Mine) on Lot 2 in DP 856969 addressed as 253 Shaw Street Springdale Heights, to the west, within the property boundary (refer to **Figure 1** below). This extension is approximately 140 metres in length and 50m deep and around 2.5ha, in total. The proposal includes the following:

- Extension of the current consent boundary up to 15 metres from the western boundary
- Depth of extraction will be limited to 50m below the surface, consistent with the current consent
- Mining will result in batters of up to 4 Horizontal to 1 Vertical on the active face to maximise the resource and maintain a safe working face.
- Deepening of the pit to the depth restriction of 50m below the surface will be developed in stages as future requirements demand.
- Construction of visual and acoustic bunds along the perimeter of the development
- No change to current extraction and haulage rates
- Continuation of progressive rehabilitation in areas exhausted of resources.

The resource in Anderson's Clay Mine consists of two types of raw material: a red burning clay used in the production of red bricks and a weathered shale with a high percentage of mica. Both products are used as 'shorteners' which, when mixed with the local highly plastic Jindera clay, provides a very unique type of brick product.



Figure 1: Development site (red outline) showing existing consent (blue) and proposed extension (green). Note the purple extension to the south is within existing consent area.

The proposed development is defined as an *Extractive Industry* and is *designated development* under the provisions of Clause 19 of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000 (EP&A Regulation)*. As a result, the development application is required to be accompanied by an Environmental Impact Statement (EIS) prepared in accordance with the *EP&A Regulation*.

As an Environment Protection Licence from NSW Environment Protection Authority (EPA) is required, as well as an Aboriginal Heritage Impact Permit (AHIP) from the Department of Planning, Infrastructure and the Environment (DPIE) under the *National Parks and Wildlife Act 1974*, the development is also defined as *integrated development* under Section 4.46 of the *Environmental Planning & Assessment (EP&A) Act 1979*.

2.1 Background

Albrick Brickworks Limited (who were the operators of the Jindera Brickworks at the time) was granted a mining lease (P.M.L 1) in 1969 on the neighbouring Lot 35 in DP1007803 to the east in order to extract clay for brick production. When the resource was nearing exhaustion by 1978, Albury Council was approached to develop a new source of clay on the subject property (then Council-owned land) where the current quarry still operates. An interim Development Order (N72 79/627) was granted on the 7th of August 1979 by the Albury-Wodonga Development Corporation for the 'Extension of Clay Pits' to Albury Brickworks Limited (a subsidiary of Boral Bricks Pty Ltd) subject to a number of conditions. One of these conditions required 'satisfactory negotiations are concluded on the lease and royalty conditions'. Development Permit N72/291 was subsequently granted on the 17th of August 1983.

Within that period the land title was transferred to Boral Bricks Pty Ltd, negating the requirement for a lease agreement with Council. The mine commenced operations in 1983 under Mining Lease No 1229 granted on 24 August 1990. The initial expiry date of the Lease was 23 August 2011 however this was renewed and extended to 23 August 2032. Copies of Mining Lease No. 1229 and Development Permit N72/291 are included in the attached documents.

As the need for further extension became apparent in recent years, the subsequent need for Development Consent was realised and a request for the Secretary's Environmental Assessment Requirements (SEARs) was made in April 2017. The SEARs were issued by the Secretary on the 18th of May 2017 (SEAR No. 1146). A copy of the SEARs is provided in the attached documents. Development Application No. 10.2018.36584.1 was subsequently lodged with Council on 17 December 2018.

After initial assessment, Council considered the application to be lacking in a number of areas. Council requested further information on 27 March 2019 (refer to the attached documents). In summary, the concerns raised were:

- Confirmation of compliance with Conditions of current Development Permit, Mining Licence and EPA Licence
- Substantiating the need for the proposal
- Impacts on biodiversity
- Response to further information requested by NSW Rural Fire Service, Environment Protection Authority and Office of Environment and Heritage
- Resident Submission received

Following several requests to extend the timeframe within which to respond, the applicant submitted additional information on 23 September 2019. The additional information received is included in the attached documents. In summary, the information included:

- Response to further information (general)
- Compliance Table
- Resource Estimate
- Rehabilitation Plan
- Targeted Threatened Species Survey
- Response to Resident Submission

The sequence of events since lodgement is as follows:

- 22 December 2018 to 8 February 2019 – Public Notification;
- 18 January 2019 – Response received from NSW Rural Fire Service (RFS);
- 21 January 2019 – Public Submission received
- 22 January 2019 – Supplement to submission from neighbour received
- 11 February 2019 – Response from NSW Office of Environment and Heritage (OEH)
- 18 February 2019 – Application presented at Councillor Workshop
- 26 February 2019 – Response from NSW Roads and Maritime Services (RMS) received
- 7 March 2019 – Response from NSW Environment protection Agency received
- 27 March 2019 – Request for Further Information (RFI) provided to applicant
- 16 April 2019 – Request from applicant to extend time to respond to RFI to 10 May 2019
- 13 May 2019 – Request from applicant to extend time to respond to RFI to 31 May 2019

- 23 September 2019 – Additional Information provided
- 7 November 2019 – Response to Resident Submission provided
- 8 November 2019 – further comment requested from OEH in relation to RFI
- 5 December 2019 – Amended response from DPIE Biodiversity and Conservation Division (BCD, formerly OEH)
- 17 June 2020 – General Terms of Approval from DPIE Biodiversity and Conservation Division (BCD, formerly OEH)

As a result of further assessment of the amended information provided, further information was again requested from the applicant on 8 January 2020 regarding the comments made by DPIE: BCD in December 2019. Their response was received and forwarded to the Planning Panels Secretariat as a means to update on the progress of the application. As stated above, General Terms of Approval (GTAs) were received from DPIE: BCD on 17 June 2020.

The aim of this report is to provide additional information, as guided by the SEARs to assist the Department and relevant authorities in determining the development application.

The site is zoned *E3 Environmental Management* under *Albury Local Environmental Plan 2010* (Albury LEP 2010). An *extractive industry* is prohibited in the E3 zone however, Clause 2.5 and Item 6 of Schedule 1 (Additional Permitted Uses) of Albury LEP 2010 permits the use of the site for an *extractive industry*, with consent, notwithstanding the provisions of the Land Use Table of the applicable zone.

2.2 Secretary's Environmental Assessment Requirements (SEARs)

The Secretary's Environmental Assessment Requirements (SEARs) No. 1146 were issued by NSW: DPIE on 18 May 2017. Table 1 below provides an outline of the Key Issues of the SEARs and how they have been addressed in the submitted EIS. A full copy of the EIS is included in the attached documents and a copy of the SEARs is included as well. It is noted however, that since obtaining the SEARs, the proposed development was amended to maintain the annual maximum extraction to 50,000 tonnes per annum, and not increase to 100,000 tonnes as stated in the SEARs.

Table 1

Key Issue raised in SEARs	Where addressed in EIS
Water – including: - a detailed site water balance and an assessment of any volumetric water licensing requirements, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures; - identification of any licensing requirements or other approvals required under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>; - demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP) - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant Water Sharing Plan or water source embargo; assessment of activities that could cause erosion or sedimentation issues, and the proposed measures to prevent or control these impacts;	Section 8.4 Section 8.4.4 Section 8.4.2 Section 8.4.3 Section 8.4.1 Section 8.4.1 Section 8.4.1 Section 8.4.3 Section 8.4.3

- an assessment of activities that could cause erosion or sedimentation issues, and the proposed measures to prevent or control these impacts; - an assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; and - a detailed description of the proposed water management system, water monitoring program and other measures to mitigate surface and groundwater impacts;	Section 8.4.6 Section 8.4.4 Section 8.4.5 Section 8.4.3 Section 8.4.6
Noise – including a quantitative assessment of potential: - construction and operational noise and off-site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline, NSW Industrial Noise Policy and NSW Road Noise Policy</i> respectively; - reasonable and feasible mitigation measures to minimise noise emissions; and - monitoring and management measures;	Section 8.8
Air – including an assessment of the likely air quality impacts of the development in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>. The assessment is to give particular attention to potential dust impacts on any nearby private receivers due to construction activities, the operation of the quarry and/or road haulage	Section 8.11
Biodiversity – including: - accurate predictions of any vegetation clearing on site; - a detailed assessment of the potential biodiversity impacts of the development, - paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems; - a detailed description of the proposed measures to maintain or improve the biodiversity values of the site in the medium to long term, as relevant; and - an assessment of whether a Species Impact Statement is required	Section 8.5
Heritage – including: - an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and - identification of Historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1	Section 8.6 Section 8.7
Traffic & Transport – including: - accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products; - an assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road networks, detailing the nature of the traffic generated, transport routes, traffic volumes and potential impacts on local and regional roads; - a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road network (particularly the proposed transport routes) over the life of the development;	Section 8.10

- evidence of any consultation with relevant roads authorities, regarding the establishment of agreed contributions towards road upgrades or maintenance; and - a description of access roads, specifically in relation to nearby Crown roads and fire trails	
Land Resources – including an assessment of: - potential impacts on soils and land capability (including potential erosion and land contamination) and the proposed mitigation, management and remedial measures (as appropriate); - potential impacts on landforms (topography), paying particular attention to the long-term geotechnical stability of any new landforms (such as overburden dumps, bunds etc.); and - the compatibility of the development with other land uses in the vicinity of the development, in accordance with the requirements of Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>;	Section 8.2 Section 8.2.2 Section 8.2.3 Section 8.2.2 Section 8.2.3 Section 8.2.1.6
Waste – including estimates of the quantity and nature of the waste streams that would be generated or received by the development and any measures that would be implemented to minimise, manage or dispose of these waste streams;	Section 8.9
Hazards – including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, storage, handling and use of any hazardous or dangerous goods;	Section 8.9
Visual – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, including with respect to any new landforms	Section 8.12
Social & Economic – an assessment of the likely social and economic impacts of the development, including consideration of both the significance of the resource and the costs and benefits of the project; and	Section 8.13
Rehabilitation – including: - a detailed description of the proposed rehabilitation measures that would be undertaken throughout the development and during quarry closure; - a detailed rehabilitation strategy, including justification for the proposed final landform and consideration of the objectives of any relevant strategic land use plans or policies; and - the measures that would be undertaken to ensure sufficient financial resources are available to implement the proposed rehabilitation strategy, recognising that a rehabilitation bond will likely be required as a condition of any future development consent	Section 8.3 Section 8.3.2 Section 8.3.4 Section 8.3.5 Section 8.3.2 Section 8.3.3 Section 8.3.4 Section 8.3.5.10

2.3 Development Description

2.3.1 Mine operations

The proposal is to extend the current envelope of extraction to the west to continue to extract and process a maximum of 50,000 tonnes of clay/shale in any year for a period of up to 30 years. This extension is approximately 140 metres in length and around 2.5ha, in total. Depth of extraction will be limited to 50m below the surface, as consistent with the current consent. It has been estimated that the resources available in the extension area are approximately 1,000,000 cubic metres of shale and 574,000 cubic meters of clay. This will extend the life of the mine and secure future employment for exiting staff and contractors. The development seeks to minimise the environmental impacts of the

mine extension and provide a final landform in keeping with surrounding land uses. The Development Application proposes:

- Extension of the current consent boundary up to 15 metres off the western boundary
- Depth of extraction will be limited to 50m below the surface, consistent with the current consent
- Mining will result in batters of up to 4 Horizontal to 1 Vertical on the active face to maximise the resource and maintain a safe working face.
- Deepening of the pit to the depth restriction of 50m below the surface will be developed in stages as future requirements demand.
- Construction of visual and acoustic bunds along the perimeter of the development
- No change to current extraction and haulage rates
- Continuation of progressive rehabilitation in areas exhausted of resources.

The overall mine layout will remain essentially the same as is currently utilised. The haul road will continue to access the site from the end of Shaw Street and slope gently onto the pit floor where the stockpiles will be located. The removable temporary site office will remain, with light vehicle parking available, in its current location to the north-east of the main pit. No permanent buildings or structures are proposed. The main pit sump location will be located in the pit floor, generally towards the north-west, with its actual position dependant on mining access requirements and ease of management of discharge. Acoustic and visual bund walls will be constructed on the perimeter of the site as required and when material becomes available. Proposed site features are shown in the plans contained in the attached documents.

Mining is anticipated to continue in the current pit whilst commencing simultaneously in the proposed western extension area and the southern extension area (the latter is within the current consent area) in order to supply the two unique materials to the Jindera Brickworks. The proposed extraction method involves bulldozers ripping and pushing material down the active mine face and stockpiling at the base on the mine floor. This method differs slightly from the current mining techniques where an excavator is used to create narrow benches and a bulldozer pushes the material into stockpiles. The proposed method has the advantage of less mining equipment operating under normal conditions, which is beneficial in minimising noise and dust impacts. From time to time, however, an excavator and dump truck may be required for pre-stripping and selective inter-burden removal as is currently the case. Static screening will continue as required and is conducted on the mine floor to remove oversize particles. It is anticipated that due to the altered mining technique, screening of material will have a reduced duration due to the pulverising impact of the bulldozer.

Mining campaigns are undertaken approximately three times each year, with each campaign lasting around four weeks. Up to 50,000 tonnes (approx. 25,000m³) is currently mined per annum. No increase in volume is proposed.

It is noted that the proposed development does not utilise the entire site and an area of approximately 4ha on the western and southern sides of the property is not proposed to be used for extraction under this development proposal.

2.3.2 Access

At present the main access to the site is via Shaw Street, which is classed as a local road. Shaw Street is an approximately 1.3km long publicly maintained rural type *cul-de-sac* connecting to Strauss Street, with the last 860m nearest the pit unsealed. It is noted that Shaw Street currently provides access to approximately 15 properties off its sealed portion, and access to 6 properties off its unsealed portion, including the subject property.

Should Shaw Street be impassable in an emergency, the alternative access and egress route is via a private road (10m wide easement) turning north from the *cul-de-sac* head and then west from the main access point and ultimately joining Prune Street.

2.3.2.1 Haulage Routes

The route commences on the unsealed portion of Shaw Street for approximately 860m before it reaches the sealed portion of the road. The remaining portion of the route to Jindera is sealed. Haul trucks leaving the site travel south on Shaw Street, turn right onto Strauss Street, left onto Prune Street and then turn right onto Kaitlers Road. This road becomes Hague Street to the south before intersecting with Urana Road. Trucks then turn right onto Urana Road which continues to Jindera. The complete route is approximately 12km one way. Approximately 3km of the journey is through suburban housing with the remaining portions through rural or rural residential areas.

2.3.2.2 Haulage volumes

There will be no changes to the frequency of transportation of the material won from the site to the Jindera Brickworks. Haulage from the site is undertaken periodically using 33 tonne road haul trucks. Based on a maximum usage of 50,000 tonnes per annum, it would require up to 1,515 loads, or 3,030 truck movements per annum to move this material to the brickworks. Haulage is undertaken on a campaign basis and not spread evenly throughout the year.

2.3.2.3 Haulage hours

Cartage of material only takes place within the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive. No transportation is undertaken on Sundays, Christmas Day or Good Friday, except for essential plant maintenance. No changes are proposed to the current arrangement.

2.3.3 Utility services

The site is not connected to any reticulated utility services, as the operation of the mine does not require it. Operations do not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility in the area.

2.3.4 Rehabilitation

The proposed rehabilitation strategy addresses how environmental issues will be managed over time. The key areas addressed are the management of topsoil, erosion and sedimentation control and vegetation during and after the life of the mine. Council has also been provided a copy of the

Rehabilitation Management Plan (VGT 2017) to serve as the Landscape Development Plan required under Condition 16 of the current consent.

At the completion of extraction and rehabilitation, the site should be returned to a condition consistent with the *E3 Environmental Management* zone objectives and the desired environmental outcomes identified for the area. It is anticipated that, initially, the site will be returned to grassland for grazing purposes, with interspersed native trees for stock shelter, which will continue to provide some economic benefit for the landowner. The post mining land use of extensive agricultural activities, including grazing, are permitted with consent under Albury LEP 2010 and will be consistent with the *E3* zone objectives. The proposed final land use will also not exclude other uses permitted within the *E3* zoning. The potential uses are limited in order to protect the environmental values of the land, which remains the ultimate long term outcome.

There are no common boundaries with existing mines at the site therefore the project does not need to accommodate the rehabilitation strategies of other mines.

2.3.4.1 Land Clearing

Land clearing will be undertaken in future years to the south of the site as mining progresses into the full extent of the current consent and into the proposed extension area, which is to the west. The removal of trees impeding the progress of the mine will be required in the south and in the extension area. Felled trees will be placed in rehabilitation areas perpendicular to the slope to reduce erosion impacts, trap seeds and nutrients in order to provide habitat. Trees not used immediately will be stored in windrows around the perimeter of the site until suitable rehabilitation areas become available. To date, topsoil and overburden not immediately used in earth mound construction or rehabilitation has been stockpiled in the southern and south-eastern portion of the mine. It is planned to store any topsoil and overburden won from the land clearing in separate bunds around the perimeter of the site to provide a visual and acoustic screen. These will be vegetated as soon as practicable to reduce erosion and sediment impacts. It is anticipated that at the end of the life of the mine, these bunds will be spread over any remaining disturbed areas.

2.3.4.2 Soils and Erosion Control

The site will be inspected daily for erosion hazards during mining and hauling campaigns and at least monthly at other times. Areas that have been identified as high risk and requiring maintenance will be identified and remedial work undertaken as soon as possible. Items of particular concern are:

- Topsoil stripping to be visually monitored for moisture content and depth of stripping
- Topsoil and overburden stockpiles to be visually assessed at time of forming to check they do not exceed three metres high
- Ensure the actual depth of stripping of each soil layer is recorded and a total volume of topsoil and subsoils estimated, and an inventory kept
- Soil not to be placed in hazard areas, including lands closer than five metres from areas of likely concentrated or high velocity flows, especially waterways and access roads
- Constructing additional erosion and/or sediment control works to ensure the desired sediment and erosion control is achieved

- Barrier fencing will be installed to limit access to rehabilitated areas or the stockpiles
- Visual inspection of the mine batters and slopes to determine if areas of instability are apparent and undertake works to stabilise the landform as required
- During re-spreading of soils, the depth of soils will be checked by test pits to assess if the desired thickness has been achieved
- Vehicular access to areas of high erosion risk shall be restricted
- Rehabilitated lands and stockpile soil resources will ensure groundcover is at least 60% coverage

2.3.4.3 Mine Staging and Progressive Rehabilitation

Mining is proposed to commence in the south within the current approved area and the west extension area simultaneously in order to supply the two unique materials to the Jindera Brickworks. Mining is currently occurring in the north of the currently approved mine area (see **Figure 1**). This will continue to approximately RL294m. Land clearing will then commence into the extension area. Mining will follow progressively behind the land clearing. The clearing is expected to reach its full extent by Stage 3 in approximately 12 to 16 years. Mining will continue to deepen the pit in the extension area until it reaches the current pit floor level of RL298m in about 16 years depending on demand. Land clearing will also continue southward with mining following progressively behind. The clearing is expected to reach its maximum extent in 12 to 19 years, with the pit continuing to deepen to RL298m.

Due to the mining methodologies having long gentle mine face slopes, with stockpiles on a relatively small pit floor, active ongoing rehabilitation is not practical. Once final finished battered faces have been established, rehabilitation can commence. Rehabilitation activities are generally undertaken on a campaign basis in conjunction with mining due to equipment availability and the convenience of completing staged rehabilitation works. Campaigns generally occur three times a year with a duration of approximately 4 weeks per campaign. Revegetation planting or seeding may occur outside these periods as bulk earth moving equipment is not required.

The areas to be rehabilitated include areas disturbed for the purposes of material extraction, storage, transport and for general mine management. Such works include:

- Removal of haul roads
- Removal of storage and loading areas
- Battering of the in-pit slopes to meet those outlined in the agreed final landform
- Removal of material stockpiles or incorporating material into the final batters
- Incorporating overburden stockpiles into the final landform
- Revegetation of disturbed areas, except the principle access/management tracks.
- Importation of Virgin Excavated Natural Material to complete rehabilitation where required due to on-site material shortfall.

2.3.4.4 Vegetation Establishment

Vegetation species that will be established on the site will be consistent with the present woodland species and pasture species. Planting of vegetation is likely to be a combination of seeding and planting with tube stock as appropriate. The newly planted vegetation will be

watered, if required, in order to assist in establishment. Tree guards will be employed to protect seedlings from adverse weather and vermin. These will be regularly inspected to ensure that they are providing sufficient protection for the juvenile plants and replaced when necessary.

A high quality soil will be provided prior to planting, however if it is found that onsite soils require additional nutrients, fertilising options will be reviewed. The site will be reviewed regularly to examine the vegetation progress of the site. Areas that require more seeding/planting will be identified and remediated. Regular inspections will also indicate the need for regular watering or other assistance. The aim of the woodland rehabilitation areas is a minimum of 2-3 plants per square metre. Grassland areas should aim for at least 70% groundcover.

Current consent conditions require that no extraction takes place within 15 metres of the boundary of the permit area. The vegetated buffer areas will be maintained in the future extension area to provide visual amenity to neighbouring landowners and dwellings. If required, further plantings to enhance the existing habitat will be undertaken. Weeds will be monitored and controlled to reduce competitiveness with target species.

2.3.4.5 Weed Control

The site will also be inspected regularly for weeds and spraying will be undertaken by appropriately qualified contractors as required. Weeds are currently sprayed approximately twice a year. Documentation of all spraying will be retained by the operator of the mine.

2.3.4.6 Pest and Stock Control

The site is fenced with rural fencing to prevent invasion by livestock. Site visits have identified however that the fence is in parts in poor condition. Fencing will be required to be upgraded and maintained throughout the life of the project and rehabilitation activities. If evidence of feral animal impacts on revegetation is noted, control measures such as rabbit proof fencing will be investigated. A baiting program may also be investigated with the appropriate authorities if required.

2.3.4.7 Monitoring and Maintenance

A regular monitoring program will be undertaken to ensure that rehabilitation goals are met adequately. Whilst monitoring methodology and frequency of rehabilitation progress is discussed in the current Mining Operations Plan (MOP), a new MOP will be developed should this development application be approved, and the Performance Indicators and Completion Criteria will be further developed. This may include the use of control sites which will be identified in consultation with a DPIE representative and person(s) suitably qualified in flora and landform assessment. It is expected that these sites will be used as a comparison to assist in determining whether the objectives relative to slope stability and vegetation coverage have been achieved. The progress towards rehabilitation objectives will be reported annually until the Mining Lease is relinquished.

2.4 Site and Locality Description

The subject site is described as Lot 2 in DP 856969, addressed as 253 Shaw Street, Springdale Heights. The site is located in the hills north of Springdale Heights (Black Ranges) at the end of Shaw Street, approximately 4km north of the Lavington CBD. The predominant land use in the immediate vicinity of the site includes mixed agricultural purpose; and rural and rural living activities. Importantly, the site is located relatively close to the Brickworks factory located approximately 12km from the site at Jindera.

The subject site has a total area of 15.46ha. Mining Lease No. 1229 is registered over the current mining operations, causing separate rates and taxes being levied over the land and creating the impression of two separate lots on Council's mapping system. However, the property is one single lot, being Lot 2 in DP 856969.

The site is generally square in shape with all sides approximately 400m long. The site has road frontage to Shaw Street of approximately 337m in the east (as Shaw Street terminates approximately 60m short of the northern boundary of the property). With the exception of the extraction pit itself, the land is naturally undulating with a predominant hill-top shape sloping down to the boundaries. The extraction pit is located in the north-eastern quadrant of the site, encompassing approximately 3ha and is presently 10 to 15m deep.

The site contains approximately 3ha of mostly native trees to the west of the extraction pit (in the area where the extension is proposed) and approximately 1.6ha to the north and 0.5ha south of the pit. The majority of the trees can be classified as Grassy Box-Gum Woodland, however there is also 0.8ha of White Cypress Pine plantation to the west of the pit. The majority of trees north and south of the pit are replanting from rehabilitation activities in the past.

3.0 Council Plan and Council Policies

The following Council Policies are relevant to the application:

1. *Albury Local Environmental Plan 2010* (Albury LEP 2010);
2. *Albury Development Control Plan 2010* (Albury DCP 2010);
3. *Albury Infrastructure Contributions Plan 2014*; and
4. *Albury City Council's Notification Policy*.

The town planning assessment of the proposal under Section 4.15 of the *EP&A Act* has included consideration of Albury LEP 2010 and Albury DCP 2010.

4.0 Environmental Assessment

An assessment of the application has been carried out under the provisions of the *Environmental Planning and Assessment Act, 1979* (*EP&A Act*). Relevant details are outlined below.

Development proposals within the *E3 Environmental Management* zone are assessed according to the zone objectives, the provisions of Albury LEP 2010 and Albury DCP 2010 and the provisions of Section

4.15 of the *EP&A Act 1979*. The relevant considerations under Section 4.15 are considered in this report and a response is outlined in the following section of this report.

4.1 Provisions of Environmental Planning Instruments (S4.15(1)(a)(i))

4.1.1 Commonwealth Legislation

4.1.1.1 Environment Protection and Biodiversity Conservation (EPBC) Act 1999

The EPBC Act provides the framework to assess proposed actions that will have, or are likely to have, a significant impact on matters of National Environmental Significance. These matters of National Environmental Significance include threatened species, critical habitats or ecological communities listed in the EPBC Act.

A Biodiversity Assessment (NGH 2016) has been prepared as part of this proposal (included in the attached documents), which identified two distinct vegetation communities within the proposal area:

- White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland (Box-Gum Woodland).
- White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland.

In addition, there were two vegetation assemblages which do not conform with any native vegetation communities:

- Exotic Vegetation.
- Planted White Cypress Pine trees.

Further details regarding each of these threatened species and ecological communities are provided below:

- a. White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland (Box-Gum Woodland)

An assessment of whether the Box-gum Woodland in the proposal area met the condition threshold for the EPBC listed community was undertaken. Based on the presence of natural regeneration of Blakely's Red Gum, the woodland areas were considered to form part of the EPBC listed White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland. The area of derived grassland did not meet the condition threshold for the EPBC listed community due to the predominantly exotic groundcover.

The proposal will result in the removal of around 2.64ha of the Box-gum Woodland. 1ha of this area is a derived grassland in low condition. The other 1.6ha is regenerating woodland that also conforms with the EPBC Act listing. This woodland has been disturbed through prior farming activities and clearing. Although a few mature trees remain, the over-storey is mostly comprised of regenerating eucalypts. The under-storey is comprised of a mix of native grasses and exotic annual grasses and forbs (herbs that are not grass or grass-like). The site does not appear to support any threatened fauna species and therefore this loss of habitat and features was not considered to be significant in the assessment. No areas of critical habitat occur within the proposal area and there would be no direct or indirect adverse effects on any declared areas of critical habitat.

Box-gum Woodlands are listed as a Critically Endangered Ecological Community (CEEC) under the EPBC Act. The potential impact of removing 2.64ha of this community as a result of the proposed extractive industry extension was assessed as part of the Biodiversity Assessment prepared by NGH. The assessment concluded that the removal of 2.64ha is not likely to substantially reduce the extent of this CEEC so that its local occurrence is likely to be placed at risk of extinction. The woodland to be removed is part of a larger contiguous patch of remnant woodland and the proposal would not result in the fragmentation or isolation of this CEEC. The habitat within the study area has been previously disturbed, and the amount of habitat to be removed is very small in the local context. Approximately 1ha is comprised of a low condition derived grassland that would be unlikely to regenerate without assisted rehabilitation. Approximately 38.5ha of the CEEC is located within a 1km radius of the site and will remain in the locality to continue to contribute to the ongoing survival of the community in the vicinity. The 2.64ha to be removed is not considered to be important to the long-term survival of the CEEC in the locality.

Whilst Council generally supports the findings of the Biodiversity Assessment, it is noted that there is a separate but related statutory pathway for the applicant to follow regarding the removal of any vegetation forming part of a CEEC. This relates to the need for consideration whether approval is required under the EPBC Act. One of the aims of the National Recovery Plan for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland (DECCW 2010) is to achieve no net loss in extent and condition of the ecological community throughout its geographic distribution. Also, according to the National Recovery Plan, all areas of Grassy Box-gum Woodland that meet the listing criteria should be considered critical to the survival of this ecological community. The matter of EPBC Act compliance is a separate issue as the responsibility is on the proponent to ensure any necessary approvals are obtained. Advice will be provided on the application regarding compliance with the EPBC Act and the proponent's responsibility to ensure compliance.

Any removal of vegetation from the E3 zone must be replaced at a ratio of 10:1 for every tree removed. Council therefore recommends that prior to any works, a comprehensive tree survey be undertaken to determine the exact number of trees to be removed and an agreement entered into with Council regarding the replanting of the trees on site at a ratio of 10 trees for every tree lost, or monetary compensation at a rate determined by Council for replanting that number of trees in a suitable adjacent location. The proposal will also result in the removal of five hollow-bearing trees (HBT), while another four HBT will be retained. Council considers the loss of five HBT will have the potential for a greater impact to biodiversity value of the land and habitat retention. Council therefore will require part of the replanting works and/or a monetary contribution to include the establishment of habitat poles to connect existing areas of habitat.

Notwithstanding, the potential impacts on threatened species and ecological communities has been comprehensively assessed. It is important to understand that, in this instance, rehabilitation of the site will take time to be achieved given the historic use and the established conditions of the site. It is acknowledged that the site has been significantly impacted for decades, however the proposed extension will not have significant additional adverse impacts

on the ecological values of the area and rehabilitation and mitigating measures are proposed to improve the final land form of the site. The continued use of the site for a mine was recognised in the listing of the use under Schedule 1 of ALEP2010 as an additional permitted use. Inclusion on this Schedule is formal Council recognition of the appropriateness of the continuation of a use that would ordinarily not be consistent with the objectives of the Environmental zone.

A Targeted Threatened Species Survey also sought to confirm the potential occurrence of Sloane's Froglet and Pink-tailed Legless Lizard. Targeted surveys were undertaken on foot at the areas of threatened species habitat. Further details regarding each of these threatened species are provided below:

b. Sloane's Froglet

Following the initial surveys in 2016, two NGH Environmental ecologists attended the Anderson's Clay Mine site again on Friday 24 August 2018. Call playback surveys for Sloane's Froglet were conducted within and adjacent to the two small dams in the subject land. In accordance with current best practice survey methods, recorded calls were played around each dam followed by a period of listening for responses by this species, between dawn and midday during the survey window. No Sloane's Froglets were heard calling in or around either dam during the August targeted survey.

c. Pink-tailed Legless Lizard

Following the initial surveys in 2016, two NGH Environmental ecologists attended the Anderson's Clay Mine site again on Friday 14 September 2018. An active search under surface rocks for Pink-tailed Legless Lizard was conducted in and around the rock outcrops in the subject land. In accordance with the *Survey Guidelines for Australia's Threatened Reptiles (Commonwealth of Australia, 2011)*, between 150 and 200 shallowly-embedded surface rocks were turned and the ground beneath searched for this species, during warm spring conditions. No Pink-tailed Legless Lizards were found during the September targeted survey.

It is therefore concluded that the proposal area is unlikely to support either of these species. An impact on these species, or their habitat is therefore unlikely from the proposed development. As a result, no Assessment of Significance is required for either species. No other threatened species were recorded during the site visits. Following advice received from DPIE, it is recommended that a targeted survey for *Caladenia concolor* (Crimson Spider Orchid) be undertaken by an appropriately qualified ecologist prior to clearing when the species is likely to be above ground and identifiable, as this species was not adequately covered in the submitted survey. A Condition of Consent to this effect will be imposed should the development be approved.

4.1.1.2 Native Title Act 1993

The *Native Title Act 1993* provides a legislative framework for the recognition and protection of common law native title rights and is administered by the National Native Title Tribunal. This Tribunal is responsible for maintaining a register of native title claimants and bodies to whom native title rights have been granted. The Act prescribes that native title can be extinguished under certain circumstances, including the granting of freehold land. Given the historical ownership and use of the land, there are no

areas of land within the subject land where native title may not have been extinguished. A search of the Register of Native Title Claims was carried out on 17 March 2017 confirming there were no records of claims within the Albury LGA. The proposal area is located on freehold land and not subject to any native title claims.

4.2.1 State Legislation

4.2.1.1 *National Parks and Wildlife (NPW) Act 1974*

Under the NPW Act, the DPIE (former OEH) is responsible for the care, control and management of all national parks, historic sites, nature reserves, reserves, Aboriginal areas and state game reserves. DPIE is also responsible under this legislation for the protection and care of native fauna and flora, and Aboriginal places and objects throughout NSW.

The Aboriginal Heritage Information Management System (AHIMS) is maintained by DPIE and provides a database of previously recorded Aboriginal heritage sites. A search of the system indicated that 77 Aboriginal sites are recorded in the search area (approximately 13 km east-west x 13 km north-south centred on the proposal area) and no declared Aboriginal Places. None of the sites are located within the current proposal area. A survey of the proposed Andersons Clay Mine expansion was undertaken by an NGH Environmental Archaeologist on the 9th of November 2017. Owing to the visibility at the time of the survey being about 10% due to dense grass cover, no Aboriginal cultural material was identified. Accordingly, a program of test excavations was undertaken. Of the thirteen test pits excavated, no Aboriginal objects were recovered. Despite the highly disturbed area, one isolated artefact was observed (recorded as Isolated Artefact Andersons PAD 1-1). The artefact was a *"White quartz flake 16mm x 19mm x 5mm, focal unifacial platform with feather termination"*. The isolated quartz artefact was not removed from site and remains where it was recorded during the fieldwork. The site has now been registered with AHIMS (#60-3-0146). As there is only a single isolated quartz flake and a highly disturbed area, the assessment of harm overall for the proposal is therefore assessed as very low.

Notwithstanding, the Heritage Assessment recommends that prior to commencing construction, the proponent must apply for Aboriginal Heritage Impact Permit (AHIP) that covers the development area. DPIE provided GTAs which have been included in the Draft Determination. The recommended conditions require that ACH Actions 3 to 9 be addressed in a revised ACHAR at the AHIP application stage.

4.2.1.2 *Protection of Environment Operations (POEO) Act 1997*

The POEO Act provides the statutory framework for managing pollution and waste in NSW, including the procedures for issuing licences for environmental protection on aspects such as waste, air, water and noise pollution control. Companies and property owners are legally bound to control emissions (including particulates and deposited dust) from construction sites under the POEO Act. Activities undertaken onsite must not contribute to environmental degradation, and pollution and air emissions must not exceed the standards. Where an environment protection licence applies, waste management requirements and air quality requirements (including criteria) may be specified by the licence.

Clause 29 of Schedule 1 of the POEO Act relates to *mining for minerals*, meaning the mining, processing or handling of minerals that is to disturb a total surface area of more than 4ha of land. Given the scale

and nature of the existing activities conducted on-site, the existing clay mine is currently classified under Schedule 1 of the POEO Act. Subsequently, an Environment Protection Licence application was submitted to the EPA on the 31st of March 2017, which was granted on the 21st of June 2017 (Licence 20938).. As a consequence of the proposal for extension of extraction activities, an amended license must be obtained from the EPA for the proposed development.

4.2.1.3 Biodiversity Conservation (BC) Act 2016

The BC Act is the principal environmental legislation in NSW and repealed the former *Threatened Species Conservation Act 1995* and *Native Vegetation Act 2003* on 25 August 2017. A transitional period applies for applications for approval or consent already started under the *EP&A Act 1979*. That is, development applications (including for modifications) which were made before commencement will be considered under previous legislation.

The development application is defined as pending under the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* as follows:

"Section 27 Definitions Part 7 (1)

Pending or interim planning application means any of the following:

(b) an application for planning approval (or for the modification of a planning approval) made within 18 months after the commencement of the new Act if an environmental impact statement is to be submitted in connection with the application and the Secretary of the Department of Planning and Environment issued, before the commencement of the new Act, environmental assessment requirements for the preparation of the statement."

The SEARs were issued on 18 May 2017 which falls within the transitional period. Therefore, assessment of biodiversity matters has been made under the provisions of the *Threatened Species Conservation Act 1995*. It is noted however that consideration is still required under the EPBC Act as outlined in Section 4.1.1 above.

4.2.1.4 Threatened Species Conservation (TSC) Act 1995

The TSC Act provides for the conservation of threatened species, populations and ecological communities of animals and plants. The Act sets out a number of specific objectives relating to the conservation of biological diversity and the promotion of ecologically sustainable development.

A biodiversity assessment was undertaken under the TSC Act to identify and map vegetation communities, particularly threatened communities, and potential habitat for threatened species on the site. It involved two components: a desktop assessment and a field survey. The field survey was initially undertaken on the 17th of May 2016 by NGH Environmental and following the results and recommendations of the survey, a further Targeted Threatened Species Survey was undertaken in spring 2018.

The Box-gum Woodland on the property was found to be listed as an Endangered Ecological Community (EEC) under the TSC Act although some areas were in better condition than others. As mining proceeds to the west, an area of trees approximately 2.64ha in size within the extension area would be removed.

The Woodland EEC to the south would remain. The removal of these trees and mitigation of the impacts of its removal is discussed under Sections 4.1.1 and 4.3.1 in this report.

4.2.1.5 Mining Act 1992

The proposed development seeks approval to extend the current activities of an existing clay mine. The Mining Act applies to this application. Clauses 5 and 6 of the Mining Act require that an authority or mineral claim is required for the mining of any privately or publicly owned mineral. As stated in the report, current extraction occurs under Mining Lease No 1229 granted on 24 August 1990. The initial expiry date of the Lease was 23 August 2011 however this was renewed until 23 August 2032. The Mining Regulation accompanies the Mining Act and prescribes for the purposes of the Mining Act, the definition of 'minerals' and 'groups of minerals' as defined within Schedule 1 and 2 of the Mining Regulation. It is noted that clay/shale is a mineral under Schedule 1 of the Regulations.

4.2.1.6 Water Management (WM) Act 2000

The aim of the WM Act is to ensure that water resources are conserved and properly managed for sustainable use benefiting both the present and future generations. It is also intended to provide formal means for the protection and enhancement of the environmental qualities of waterways and their in-stream uses as well as to provide for protection of catchment conditions. The Act identifies basic landholder rights and when access licences are required. The harvestable water right is defined in terms of and equivalent dam capacity, the Maximum Harvestable Right Dam Capacity (MHRDC). Schedule 1 of the Water Management Regulation exempts certain classes of dam including those dams solely for the capture, containment and recirculation of drainage and/or effluent, consistent with best management practice or required by a public authority to prevent the contamination of a water source. Therefore, as the on-site dams are used solely for the capture, containment and reticulation of drainage, consistent with best management practice to prevent impacts to Humbug Gully, the dams are currently exempt from the need to obtain a licence under the WM Act.

Whilst the development site is located within the Murray Unregulated and Alluvial Water Source water sharing plan, it is not proposed to extract water from the natural rivers, creeks, in-river or off-river pools and therefore licencing is not required.

4.2.1.7 State Environmental Planning Policy (SEPP) 55 – Remediation of Land

Clause 7 of SEPP 55 requires that, in determining development applications on potentially contaminated sites, Councils consider whether previous uses on the site may have resulted in contamination and whether the site is suitable for the development proposed.

As stated earlier in this report, the site has been used for the extraction of clay and shale since 1969 and will be continued to be used as such at least until the current mining lease expires on 23 August 2032. There are no known contamination issues at the site. Hydrocarbons are a potential contamination source due to the use of vehicles and plant on the site during extraction and rehabilitation activities. It is however unlikely that either on-site or off-site activities will result in significant land contamination. All contractors are required to follow spill and leaks procedures. They are also required to carry spill kits and refuelling is undertaken within the hardstand areas or off-site. The volumes of fuel held on site are minimal and it is unlikely that spill would result in contamination of groundwater or surface water. Spills would be cleaned up immediately and contaminated material removed to a licenced waste facility. Fuel

and oil is not stored on site in large quantities. Diesel fuel is mainly contained within the plant and trucks and only minor amounts are held in a mobile refuelling tank which is filled off-site as required.

Due to the small volumes of hydrocarbons held on site it is considered unlikely that operation of the mine will cause significant material contamination harm to the environment.

4.2.1.8 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

This SEPP outlines where various extractive industry activities are permissible both with and without development consent. The SEPP also defines mining, petroleum production and extractive industry developments that are prohibited, exempt or complying development.

As outlined in this report the subject land is zoned 'E3 Environmental Management' under the provisions of Albury LEP 2010. An extractive industry is prohibited within the E3 zone. Notwithstanding, the subject land is listed as Item No. 6 within Schedule 1 of Albury LEP 2010 as an 'Additional Permitted Use', which allows development for the purposes of 'open cut mining or extractive industries' as permitted with consent. Part 3 of the Mining and Extractive Industries SEPP identifies matters for consideration that the consent authority must take into account when determining a development application. A checklist of those relevant matters contained within the SEPP have been addressed in the EIS (see Table 6, pg. 25 – 29 of the EIS included in the attached documents). The assessment notes that the site is located within an identified mineral resource area and thus protected by a Section 9.1 Ministerial Direction (*Direction 1.3 – Mining, Petroleum Production and Extractive Industries*). The proposed development has been designed to maximise the efficiency of resource recovery and evaluated alternatives in the setup of the existing mine. The assessment concluded that the proposed development will not have a significant impact on existing and approved land uses in the vicinity of the project area.

It is noted that Conditions of Consent are recommended to specifically address the impacts on threatened species and biodiversity.

4.2.1.9 State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services by providing greater flexibility in the location of infrastructure and service facilities. The subject development is not defined as an infrastructure project or works for the purposes of this SEPP. Following a review of Clause 104 of this SEPP, it is noted that the subject development is not classified as a 'traffic generating development' in Schedule 3.

Notwithstanding, given the site's access point to Shaw Street and its near exclusive use of heavy vehicles, the proposal was referred to the NSW Roads and Maritime Services (RMS) to consider impacts on the existing road network. RMS' response stated that the surrounding road network is classed as local roads under the provisions of the Roads Act. The majority of traffic generated by the development would be towards Jindera to the north west of the site. Given that the proposal does not propose an increase in traffic volumes it is not considered that the development proposal will significantly change the current impacts of the existing quarry operation on the classified road network. On this basis RMS

advised that it would have no objection to the development proposal. Their full response is included in the attached documents.

4.2.1.10 State Environmental Planning Policy (State and Regional Development) 2011

The aim of this SEPP is to identify development that is State Significant Development, as well as identify development that is State Significant Infrastructure and Critical State Significant Infrastructure. Schedule 1 of the SEPP identifies types of development that are considered to be State Significant Developments.

Whilst it is acknowledged that 'extractive industries' are a state significant development type for the purposes of Schedule 1, the subject quarry does not:

- a) extract more than 500,000 tonnes of extractive materials per year, or
- b) extract from a total resource (the subject of the development application) of more than 5 million tonnes, or
- c) extract from an environmentally sensitive area of State significance.

Accordingly, the subject proposal is not classified as State Significant Development and the provisions of this SEPP do not apply.

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

SEPP 33 requires the consent authority to consider whether an industrial proposal is a potentially hazardous industry or a potentially offensive industry and whether any measures proposed to be employed to reduce the impact of the development are taken into account.

The proposed extractive industry is not classified as a 'hazardous' or 'potentially hazardous industry' as the development only involves the extraction of in-situ materials and does not involve the use or processing of any hazardous materials or chemicals. It is also noted that an 'extractive industry' is defined in Albury LEP 2010 as not being an industry.

4.2.2 Albury Local Environmental Plan 2010 (Albury LEP 2010)

The subject site is zoned 'E3 Environmental Management' under Albury LEP 2010 and is subject to the provisions of this LEP.

The particular aims of *Albury LEP 2010* are set out below:

- a. *to give effect to the desired outcomes, principles and actions contained in the Council's adopted strategies and policy documents, and*
- b. *to promote sustainable urban development by providing for efficient management of urban growth and resource utilisation, and*
- c. *to promote a city for the people, with a high level of social and physical amenity and a diversity of activities and uses, and*
- d. *to maintain or improve biodiversity across Albury, and to avoid significant impacts on matters of environmental significance.*

Planning Comment: The proposed development is consistent with these objectives. The extension of the current operations is geographical in nature and represents a shift of operation within the boundaries of the site. No increase in volume of extraction is proposed and there will be no increase in haulage rates or the number of mining campaigns during the year. Operations are therefore not intensifying and will not have a significant impact on the area. The impact on biodiversity has been assessed and is considered manageable and in keeping with the desired future land use outcomes of the site. Any adverse impact will be restored through rehabilitation works and offset planting.

Specific clauses of *Albury LEP 2010* relevant to the development include:

Part 2 Permitted or prohibited development

Clause 2.1 Land Use Zones

Planning comment: The development is proposed on a site zoned 'E3 Environmental Management' and therefore will be assessed against the provisions of this zone.

E3 Environmental Management Zone

1) Objectives of zone

- i. *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- ii. *To provide for a limited range of development that does not have an adverse effect on those values.*
- iii. *To ensure the long term viability of populations of threatened species, populations and ecological communities by protecting and improving the condition of wildlife habitats and wildlife corridors.*
- iv. *To allow appropriate land uses in close proximity to the Landfill Buffer Area.*

Planning Comment: In the short term the proposed development appears contrary to Objectives i, ii and iii. Potential impacts on threatened species and ecological communities have been comprehensively assessed and the short term viability of populations of threatened species and ecological communities on the site is considered already compromised. It is important to understand that, in this instance, the objectives of the E3 zone will take time to be achieved given the historic use and the established conditions of the site. It is acknowledged that the site has been significantly impacted for decades, however the proposed extension will not have significant additional adverse impacts on the ecological, scientific, or aesthetic values of the area and rehabilitation and mitigating measures are proposed to improve the final land form of the site. The continued use of the site for a mine was recognised in the listing of the use under Schedule 1 of ALEP2010 as an additional permitted use. Inclusion on this Schedule is formal Council recognition of the appropriateness of the continuation of a use that would ordinarily not be consistent with the objectives of the zone.

It should also be remembered that it will inevitably take many years, even decades, to completely backfill the pit given the vast volumes of material required to fill a pit of this size. The objectives of the zone and future land use of the site is however not lost and, in the long term, it remains possible for the site to be rehabilitated and still comply with Objectives i, ii and iii. It is therefore recommended that offset planting be required through Conditions of Consent to compensate for the loss of vegetation on the site in the

short term in order to improve ecological communities in suitable adjacent areas whilst it is understood that the site itself can only be fully restored in keeping with its zoning in the long term at the end of the life of the mine.

2) Permitted without consent

Environmental protection works; Home occupations.

3) Permitted with consent

Boat launching ramps; Boat sheds; Community facilities; Dual occupancies (attached); Dwelling houses; Environmental facilities; Extensive agriculture; Farm buildings; Group homes; Home-based child care; Information and education facilities; Jetties; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Recreation facilities (indoor); Roads; Signage; Tank-based aquaculture; Water recreation structures.

4) Prohibited

Industries; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3.

extractive industry means the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.

Note.

Extractive industries are **not** a type of industry.

extractive material means sand, soil, gravel, rock or similar substances that are not minerals within the meaning of the Mining Act 1992

2.5 Additional permitted uses for particular land

- (1) Development on particular land that is described or referred to in Schedule 1 may be carried out—
- a) with development consent, or
 - b) if the Schedule so provides—without development consent,
- in accordance with the conditions (if any) specified in that Schedule in relation to that development.*
- (2) This clause has effect despite anything to the contrary in the Land Use Table or other provision of this Plan.

Planning comment: Extractive industry is prohibited in the zone. However, Schedule 1 of the Albury LEP 2010 contains “Additional Permitted Uses” for certain sites. The Schedule serves the purpose of permitting specific additional uses (that may be otherwise prohibited) for specific sites without the need or consequence of having such use more broadly permissible in the zone. This provides flexibility in those rare instances where a specific site is, despite its zoning, suitable for a normally prohibited use and to allow that use in that specific instance without having to change the zoning of the site or suffer the consequences of permitting an undesirable or incompatible use across the board. In this example,

Item 6 of Schedule 1 states that 253 Shaw Street, being Lot 2 in DP 856969, specifically nominates "Development for the purpose of open cut mining or extractive industries as permitted with development consent". The 'clay mine' use can be defined as an *extractive industry* and is therefore a permitted use on the site, with consent. It is noted that the mine currently operates under Development Permit N72/291 which was granted on the 17th of August 1983 and Mining Lease No 1229 granted on 24 August 1990.

Part 3 Exempt and Complying Development

The application is not Exempt or Complying Development.

Part 4 Principal Development Standards

No Principal Development Standards are applicable to the proposed development.

Part 5 Miscellaneous Provisions

No Miscellaneous Provisions are applicable to the proposed development.

Part 6 Urban Release Area

The subject site is not located in an Urban Release Area.

Part 7 Additional Local Provisions

7.1 Earthworks

(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 separate development consent.*

(2) *Development consent is required for earthworks unless—*

- a) the work does not alter the ground level (existing) by more than 600 millimetres, or*
- b) the work is exempt development under this Plan or another applicable environmental planning instrument, or*
- c) the work is ancillary to other development for which development consent has been given.*

(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 and 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.

Planning comment: Being a clay and shale open-cut mine/quarry, the very nature of the development involves significant earthworks. Accordingly, it is prudent that the consent authority considers the matters listed under this part.

Prior to development, surface water captured on the northern portion of the ridge transecting the site would drain into Humbug Gully creek and thereafter to Bungambrawatha Creek which reaches the Murray River at Albury some 8km from the site. Surface water captured on the south western portion of the ridge drains to an unnamed creek to the west which joins Bungambrawatha Creek. In the south east surface water drains to a number of farm dams located off the site and any overflows are directed alongside Shaw Street until it disperses into rural pastures in the south west. See **Figure 2** below.

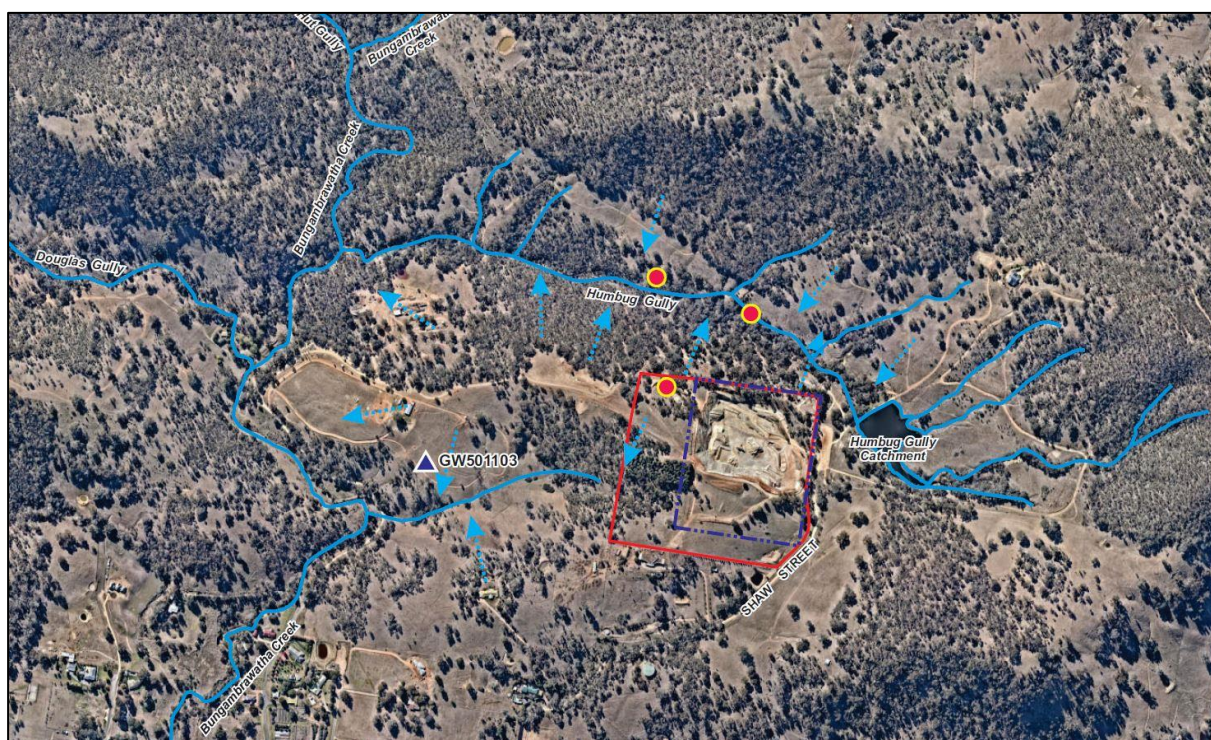


Figure 2: Drainage patterns. Note red dots indicating water sampling sites. (extract from EIS as submitted)

With the development of the mine, surface water captured to the north of the ridge line is directed to the pit sump. A small clean water catchment is located to the west of the current pit along the ridgeline and drains into a farm dam. Outside of these catchments, clean surface water continues to flow the natural drainage lines outlined above. Thus, the site currently has one dirty water catchment (approximately 4.7ha) that requires management. The sedimentation dam covers an area of 1,928m² and has a total volume of 7,712m³. The dam volume required for a 90th percentile, 5-day rainfall event for a 20 – day management period (170%) is 1,947m³. The dam is therefore more than sufficient.

The proposed extension of the extraction area will not have significant impact on existing drainage patterns in the locality. Extraction will extend to the west and the south of the existing pit and remain

well within the boundaries of the site, whereas the nearest drainage channel (Humbug Gully) runs to the north of the property on the other side of a ridge. The topography of the site does not suggest any watercourses or drainage channels to be significantly disrupted by the extension of the extraction area. It is anticipated that earthworks may reduce somewhat the amount of run-off into the small watercourse to the north, which currently has flows already captured by a weir upstream (Humbug Gully Catchment).

Soil stability is of great importance to the operation of the mine, not only to manage risk for personal health and safety but also for effective and efficient extraction processes. The depth of extraction will be limited to 50m below the surface, consistent with the current consent, which naturally will lead to steep slopes on all sides of the pit. These slopes will be battered up to a grade of 4 Horizontal to 1 Vertical to maximise the resource and maintain a safe working face.

In this instance, the quality of the material to be excavated is of the utmost importance to the feasibility of the mine. The quality of the clay and shale is indeed the reason for the existence and longevity of the mine for the past five decades and also the projected life of the mine for a few decades more. The resource consists of two types of raw material, a weathered granite from the Silurian period (which is a red burning clay) and a weathered Shale with a high percentage of mica, which is grey burning. Both products are used as 'shorteners' which, when mixed with the local highly plastic Jindera clay, provides a very unique type of brick product. As stated before, extracted material is hauled to Jindera Brickworks (PGH Bricks and Pavers) which has a proven demand for the resource. All topsoil stripped from the surface is recorded, stockpiled and monitored and will be used in the rehabilitation process post mining.

The proposed development does not directly seek to import any material onto the site. That is, the proposal does not involve any fill. Indirectly however, ongoing rehabilitation may require the import of material where and when stockpiled topsoil will not be sufficient. All imported material will be certified before received to the site and logged as per EPA requirements. Should the entire pit be required to be backfilled at the end of the lifespan of the mine, fill would need to be imported to the site due to the substantial volumes of fill material required to create a free draining landform. Obtaining material suitable for filling (Virgin Excavated Natural Material i.e. VENM) is likely to be challenging due to low availability in the local area. The total rehabilitation of the site may therefore be prolonged for many years or decades. As a result, the use of the site for other uses, such as grazing or recreation, will not likely be feasible in the short term.

A search of the State Heritage Inventory did not identify any items of heritage value on the site. While there are no known Aboriginal Cultural Heritage (ACH) objects identified within the subject area, this is likely to reflect a lack of survey rather than actual archaeological content. It is known from other studies that low density dispersed artefacts persist throughout much of the Albury Local Government Area. As such it would not be uncommon for ACH to occur within the subject area. As a result, an Aboriginal Cultural Heritage Assessment was conducted on the site (NGH Environmental, August 2018). The assessment confirmed that no Aboriginal sites have previously been recorded within the proposal area and found no Aboriginal objects from 13 test pits that were excavated in the test program. The report concluded that the area is in fact highly disturbed and modified, and the likelihood of in situ archaeology occurring is very low. Despite the highly disturbed area, during test excavation field work one isolated artefact was observed. It was recorded as "Andersons PAD 1-1" and shows that despite the apparent

surface disturbance, the area most likely contained an Aboriginal heritage site which has now been largely removed. The site has now been registered with AHIMS (#60-3-0146).

The report recommended that prior to commencing construction the proponent must apply for Aboriginal Heritage Impact Permit (AHIP) that covers the development area. DPIE: BCD confirmed the AHIP must be granted and received by the proponent prior to any on ground works commencing. A Condition of Consent to this effect will be imposed should the development be approved.

The proposed development will have some impact on the amenity of adjoining properties, insofar as potential noise, dust, vibration and traffic. Owing to the nature of the development, the majority of potential impacts are directly caused by earthworks and therefore these impacts will be extensively addressed here.

Noise

The principal source of noise is earth-moving activities, including vegetation and topsoil stripping, overburden and ore extraction, screening and stockpiling, and re-spreading of overburden and topsoil for rehabilitation. The bulldozer, excavator and loader will produce noise while undertaking clearing, mining and stockpiling activities and also by travelling along the unsealed internal roads.

Six sensitive receptors have been identified around the site. The closest is a dwelling approximately 120m to the south of the southern extraction area, down slope of the current active mine. The active mine faces are therefore not visible and acoustically shielded. A number of overburden and topsoil stockpiles have been placed as acoustic and visual screening between this residence and the active pit as additional protection. It should also be noted that the area for extension as relevant to this application is approximately 210m north of this receptor and shielded by significant vegetation including a dense patch of white cypress trees 145m long and 55m deep. Another receptor is located approximately 500m to the north-east of the site at an approximate elevation 40m higher than the mine. Due to the elevation of the residence it is likely that noise from the mining activities are somewhat audible at this dwelling. This is the only receptor elevated above the mine. It should be noted that there will be no increase in noise generating site activities, albeit moving closer to the receptors to the south and west. The receptor to the north will not experience any noise impacts greater than currently experienced and in fact noise levels are expected lower somewhat with the extension increasing the distance between this dwelling and the mine face.

Acoustic and visual bunds will be constructed on the perimeters of the site to provide additional noise mitigation. There will be no changes to the volume and frequency of road haulage trucks transporting material and therefore no change to traffic noise is expected. Operations on the site are also restricted to the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive and limited to mining campaigns.

Vibration

The extraction technique involves bulldozers ripping and pushing material down the active mine face and stockpiling at the base on the mine floor. The proposed technique has the advantage of less mining equipment operating under normal conditions which is beneficial in minimising impacts. No blasting is undertaken on the site. As discussed above, the sensitive receptors are reasonable distances away

(120m the closest with others 600m and more) and these methodologies are not considered to significantly impact on neighbouring properties.

Dust

Airborne dust is the main source of potential air pollution on the site. Concerns about amenity from mine site dust often relate to visible dust plumes and dust sources. Visible dust is usually due to short-term episodes of high emissions, such as from blasting, which is not applicable to this site. The principal source is earth-moving activities, with the highest risk for dust generation during the summer months when rainfall is at its lowest. Afternoon wind is generally stronger than the morning and predominately westerly in direction.

Depositional dust monitoring has been undertaken on the site since June 2017. The EPA recommends that the Annual Average for Insoluble Solids is less than 4g/m² per month. The results to date are well below the recommended level (however site visits to the dust gauges suggested they are not always in proper working order).

Other amenity impacts include dust depositing on fabrics (such as washing) or on house roofs and solar panels, and the transport of dust from roofs to water tanks, during rain. The closest resident to the south of the site is most likely to be impacted when winds are north to north east. According to historical climate data, this wind direction is not commonly experienced but most likely found in the afternoon. The vegetation in and around the site, including the forested areas of Humbug Gully and waterways are not likely to be adversely impacted by nuisance dust. There is no evidence that the vegetation or streams are currently affected, and dust levels are not predicted to increase due to the development.

The impact from nuisance dust is likely to be low given the distance from sensitive receptors and the minimal complaints since the operations commenced. Extraction of the clay will progressively deepen the mine and assist in shielding the site from windborne dust generation. As the footprint of the mine increases, dust suppression measures such as a watercart will be more frequently employed to reduce impacts. Rehabilitation will reduce exposed surfaces where practical to do so. Dust control measures that are currently and will continue to be employed on the site include:

- Backfilling, contouring and top soiling of previously extracted areas will assist with revegetation and dust minimization
- Access roads are sheeted with coarse material where possible to minimise the potential for dust generations associated with traffic
- All vehicles are restricted to a speed limit of 15km/h on site and 30km/h on the unsealed section of Shaw Street
- Non-essential earth-moving activities are delayed during periods of high wind. Should the wind exceed 10m/sec mining and hauling activities will cease
- The day-to-day on-site visual dust assessment determines whether PGH staff or contractors are required to deploy a water cart. If required, a water cart will be used for temporary dust suppression during active extraction campaigns and rehabilitation activities. Deployment of the water cart includes the unsealed section of Shaw Street
- Disturbed clay, once watered, develops a surface crust that resists dust generation provided the surface is not subsequently disturbed

- All laden trucks are required to have their loads covered
- Longer term revegetation of the disturbed areas of the site will assist with the reduction in wind velocity across the site and lessen the potential for dust generation
- There is a phone number displayed at the front gate to allow the public to make complaints if necessary
- Depositional Dust Gauge monitoring will continue through the life of the mine to ascertain if mitigation measures are effective

The impacts of nuisance dust are not expected to be higher than the present levels experienced under the current approvals.

Traffic

There will be no changes to the volume or frequency of transportation of the material from the site to the Jindera Brickworks. Haulage from the site to the Brickworks is undertaken periodically using 33 tonne road haul trucks. Approximately 3,030 truck movements per annum is required to move this material to the brickworks. It is noted however that haulage is undertaken on a campaign basis and not spread evenly throughout the year. Cartage of material only takes place within the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive. No transportation is undertaken on Sundays, Christmas Day or Good Friday, except for essential plant maintenance. All vehicles are required to maintain a speed limit of 15km/h within the site and 30km/h on the unsealed portion of Shaw Street.

As there is no change to the traffic volumes or traffic routes for the development the impact of the development on the local roads will not be any greater than what is currently experienced. Council is responsible for the repair and maintenance of public roads external to the site, including Shaw Street. Internal access roads are maintained by PGH.

7.3 Protected regrowth

1. *The objective of this clause is to identify, for the purposes of the Native Vegetation Act 2003, protected regrowth on land in Zone E2 Environmental Conservation and Zone E3 Environmental Management.*
2. *Regrowth of native vegetation on all land in Zone E2 Environmental Conservation and Zone E3 Environmental Management is identified as protected regrowth for the purposes of section 10 (1) of the Native Vegetation Act 2003.*
3. *In this clause, protected regrowth has the same meaning as it has in the Native Vegetation Act 2003.*

Planning comment: It is noted that the *Native Vegetation Act 2003* was repealed on 25 August 2017 and current legislation governing the clearing of native vegetation is the *Biodiversity Conservation Act 2016*. The biodiversity value of existing vegetation, which includes any regrowth, has been extensively discussed in this report.

7.6 Essential services

1. *This clause does not apply to land in an urban release area.*
2. *Development consent must not be granted to development unless the consent authority is satisfied that any of the following services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required:*
 - a. *the supply of water,*
 - b. *the supply of electricity,*
 - c. *the disposal and management of sewage,*
 - d. *stormwater drainage or on-site conservation,*
 - e. *suitable road access.*

Planning comment: No reticulated services are essential for the efficient operation of the mine. Occupation of the site and site activities are intermittent with no staff or contractors staying on site for extended periods of time. The application does not include any development reliant on reticulated services.

4.1.3 Environmental Planning & Assessment Regulation 2000

The proposed development is classified as 'designated development' under Schedule 3 of the EP&A Regulation because it will disturb a total surface area of more than 2ha of land by:

- (i) clearing or excavating;
- (ii) constructing dams, ponds, drains, roads or conveyors, or
- (iii) storing or depositing overburden, extractive material or tailings.

In reference to designated development, a development application must be accompanied by an EIS to assess the likely impacts of the development. The structure and content of the EIS is detailed in Schedule 2 and clauses 72 and 73 of the *EP&A Regulation*. This EIS is also required to address the Environmental Assessments Requirements outlined by the Secretary of NSW DPIE (SEARs). A copy of the SEARs for this EIS is provided in the attached documents to this report and the subject EIS has been prepared to satisfy the requirements of the *EP&A Regulation*.

4.2 Provisions of any Draft Environmental Planning Instruments (S4.15(1)(a)(ii))

Planning comment: No draft environmental planning instrument affects the site or proposed form of development.

4.3 Provisions of Development Control Plans (S4.15(1)(a)(iii))

4.3.1 Albury Development Control Plan 2010 (Albury DCP 2010)

The application has been assessed against the provisions of *Albury Development Control Plan (ADCP) 2010*. More specifically, the application has been assessed against the following Parts of *Albury DCP 2010*:

Part 3 Development Notification Policy

The Development Application was publicly exhibited from 8 January 2019 to 8 February 2019. One submission was received.

Part 4 Infrastructure Contributions

No Infrastructure Contributions are payable under the *Albury Infrastructure Contributions Plan 2014* as outlined below:

Section 7.12

Not applicable as the proposed cost of development is under \$100,000.

Section 64

Not applicable as the land is not located in a Sewer or Water area.

Part 5 Tree Preservation

The proposal will result in the removal of around 2.6ha of Box-gum Woodland. 1ha of this area is a derived grassland in low condition. The other 1.6ha is regenerating woodland comprised of two separate smaller patches (0.5ha & 1.1ha). This woodland has been disturbed through prior farming activities and clearing. Although a few mature trees remain, the over storey is mostly comprised of regenerating eucalypts. The site does not appear to support any threatened fauna species and therefore this loss of habitat and features is not considered to be significant. No areas of critical habitat occur within the proposal area and there would be no direct or indirect adverse effects on any declared areas of critical habitat.

Regardless, the 1.6ha matches the criteria for Grassy Box-gum Woodland listed under the NSW Biodiversity Conservation Act (BC Act) as an Endangered Ecological Community (EEC) and as Critically Endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) as Critically Endangered. Under the EPBC Act an action will require approval from the Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance. A Significant Impact Criteria (SIC) assessment is required to determine if a significant impact is likely and this is undertaken in accordance with the Significant Impact Guidelines for critically endangered ecological communities. The first criteria assessed is if the action will reduce the extent of an ecological community.

A Targeted Threatened Species Survey has been completed by NGH (2019) which included an Assessment of Significance and concluded that the impact on this endangered ecological community would not be significant, and so no SIC or referral to the Minister is required. While discussing the removal of 1.6ha of Grassy Box-gum Woodland, the survey states that "its removal is not likely to substantially reduce the extent of this EEC." This conclusion is based on the fact that 2ha of Box-gum Woodland will be avoided by the development and remain on site. Existing vegetation mapping shows a further 38.5ha of Box-gum Woodland located within a 1000m radius. Whilst the 2.6ha to be removed will lead to a small reduction in the extent of the community, this area is a small proportion (6%) of the EEC present in the locality. The survey considers the removal of 2.6ha not to substantially reduce the extent of this EEC so that it is at risk of extinction for the following reasons:

- A large proportion of the community to be impacted by the proposal has some form of disturbance
- the amount of the community to be removed by the proposal is relatively small compared to the known local occurrence and estimated extent of the community in the locality
- The proposal would not isolate areas of the community
- Viable areas of the local occurrence of the community that are generally well connected will remain within the locality area that will continue to contribute to the ongoing survival of the community.

Whilst Council generally supports the findings of the Biodiversity Assessment, it is noted that there is a separate but related statutory pathway for the applicant to follow regarding the removal of any vegetation forming part of a CEEC. This relates to the need for consideration whether approval is required under the EPBC Act. One of the aims of the National Recovery Plan for White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland (DECCW 2010) is to achieve no net loss in extent and condition of the ecological community throughout its geographic distribution. Also, according to the National Recovery Plan, all areas of Grassy Box-gum Woodland that meet the listing criteria should be considered critical to the survival of this ecological community. The matter of EPBC Act compliance is a separate issue as the responsibility is on the proponent to ensure any necessary approvals are obtained. Advice will be provided on the application regarding compliance with the EPBC Act and the proponent's responsibility to ensure compliance.

The applicant's assertion that no offset planting is required to compensate for trees lost because the *Threatened Species Conservation Act 1995* does not mandate any offset requirements is incorrect because the land is not included in the Biodiversity Certification (Bio-Certification) of Albury LEP 2010 and the land is zoned "*E3 Environmental Management*". Furthermore, the subject site was cross referenced with the *Biodiversity Values Map and Threshold Tool* published by the NSW Government and it was found that the land does not contain any high diversity value, however the extent of native vegetation being removed exceeds the 1ha threshold requiring an offset area to be planted, as defined under the *Biodiversity Conservation Act 2016 and Regulations*.

Section 3.1 of the Bio-Certification Report states that clearing of vegetation may be permitted if offset by the retention, protection and conservation management of retained vegetation. A guide to the offset needed is contained in the "Threatened Species Tool". The Threatened Species Tool is a decision support system associated with the Environmental Outcomes Assessment Methodology, used in the determination of Property Vegetation Plans under the then *Native Vegetation Act 2003* and the *Native Vegetation Regulation 2005*. It defines the offset ratio required for losses of certain vegetation types, based on the threatened species that are predicted to occur within those vegetation types. The offset ratio associated with the most sensitive threatened species (i.e. the species with the highest offset requirement) is to be applied to any loss of that vegetation type. In the Albury area, the Squirrel Glider is this most sensitive species and predicted to occur in all vegetation types in the area. The Threatened Species Tool suggests a 10:1 offset ratio meaning that for each hectare of vegetation cleared, 10 hectares should be retained and protected. Any tree removal is therefore subject to these offsets and to be calculated at the ratio of 10:1 for core vegetation.

The E3 zoned lands are the 'offset' for the other urban development zones (Residential, Commercial and industrial) under bio-certification. Therefore, any removal of vegetation from the zone must be replaced and, as per the understanding with the Department of Planning, Infrastructure and Environment (DPIE), be replaced at a ratio of 10:1. Council therefore recommends that prior to any works, a comprehensive tree survey shall determine the number of trees to be removed and an agreement shall be entered into with Council regarding the replanting of the trees at a ratio of 10 trees for every tree lost in a suitable location adjacent to the site, or monetary compensation at a rate determined by Council for replanting that number of trees in a suitable adjacent location.

The proposal will also result in the removal of five hollow-bearing trees (HBT), while another four HBT will be retained. Council considers the loss of five HBT will have a significant impact to biodiversity value of the land and habitat retention. Council may therefore also consider requiring part of the replanting works and/or a monetary contribution to the establishment of habitat poles to connect existing areas of habitat. A Condition of Consent to this effect will be imposed should the development be approved.

Part 6 Planning for Hazards

The site is not identified as being at risk from flooding.

The site is identified as being at risk from bush fire. The subject land contains Vegetation Category 1 to the north and west of the site with a vegetation buffer of 100m. The provisions of Section 4.14 of the EP&A Act requires that a consent authority shall not grant approval for a development application for any purpose on Bush Fire Prone Land, unless it is satisfied that the development conforms to the specifications and requirements of the *Planning for Bush Fire Protection* guidelines as prepared by the NSW Rural Fire Service (RFS). The aim is to provide for the protection of human life (including firefighters) and to minimise impacts on property from the threat of bush fire, whilst having due regard to development potential, on-site amenity and protection of the environment. It is noted that no buildings are proposed as part of this development.

The proposal was referred to the RFS who recommended the following Conditions of Consent should the development be approved:

1. *A Fire Management Plan (FMP) shall be prepared for the proposed development in consultation with the local NSW RFS District Office. The FMP shall include:*
 - *24-hour emergency contact details including alternative telephone contact*
 - *Site infrastructure plan*
 - *Fire-fighting water supply plan*
 - *Site access and internal road plan*
 - *Construction of asset protection zones and their continued maintenance*
 - *Location of hazards (physical, chemical and electrical) that will impact on the fire-fighting operations and procedures to manage identified hazards during the fire-fighting operations*
 - *Such additional matters as required by the NSW RFS District Office*

2. *Essential equipment should be designed and housed in such a way as to minimise the impact of bushfire on the capabilities of infrastructure which provide communication during bushfire emergencies.*
3. *To allow for emergency service personnel to undertake property protection activities, a minimum 10 metre Asset Protection Zone (APZ) shall be provided around all assets. This APZ shall be managed as an Inner Protection Area (IPA) as outlined within section 4.1.3 and Appendix 5 of Planning for Bush Fire Protection 2006 and the NSW Rural Fire Service's document Standards for asset protection zones.*
4. *A minimum 20,000 litres of water shall be provided within the site for fire-fighting purposes in accordance with Section 4.1.3 of Planning for Bush Fire Protection 2006.*

Part 7 Heritage Conservation

The subject land is not a heritage item nor within a heritage conservation area as defined by *Albury LEP 2010*. Issues pertaining to Aboriginal Cultural Heritage has already been discussed under Section 7.1 of this report.

Part 8: Development in the Environmental zones

Albury enjoys a rich diversity of environmental and scenic qualities thanks to the location of the Murray River flood plain that traverses the Albury-Wodonga area, the surrounding hillsides as well as the low mountain ranges, which are considered to be amongst the Albury LGAs greatest natural resources

8.2 General Objectives & matters for consideration in the Environmental zones

1. *To ensure that development in these zones is carried out in a way that is sensitive to the land and environmental characteristics.*
2. *To ensure that development does not create unreasonable or uneconomic demands for the provisions of services, including roads.*
3. *To provide a development buffer for the flight path of aeroplanes utilising the Albury Airport.*
4. *To provide a buffer to the Albury Landfill, and to regulate development, which may be adversely affected by the operations of the Albury Landfill (so as to maintain its operational capacity and viability).*

Planning Comment: The proposed development is not inconsistent with these objectives.

Matters for Consideration

- i. *The impact of the development on the natural scenic backdrops of the City or the rural character of the land. **The proposed development is not visible from the city or nearby built-up areas and has no visual impact on any scenic backdrops or surrounding character.***
- ii. *The effect of the development on the Murray River floodplain and other natural drainage systems, as well as, any measures to control stormwater run-off, soil sedimentation and erosion. **The development will have no effect on the Murray River floodplain. Extension of the extraction areas will not cause significant disruption to the local drainage systems. Stormwater run-off is adequately contained within the lot to manage soil sedimentation and erosion. Standard***

Conditions of Consent with regard to stormwater management can be imposed should the development be approved.

- iii. *The availability of an adequate water supply and, where a reticulated supply is unavailable, the source and capacity of any alternate water supply intended to service the needs of the development. **The development does not require reticulated water and in general has a limited need for water besides dust suppression and basic bushfire defence. On-site storage will satisfy these needs and can be required though Conditions of Consent.***
- iv. *The availability of facilities for the removal or disposal of sewage effluent and wastes, including, where appropriate, the ability of the land to accommodate on-site disposal. **No on-site sewage disposal is required as the development does not involve habitation of the site by a permanent workforce.***
- v. *The availability of other public utility services and social facilities having regard to the likely demand for those services or facilities and the cost of their provision. **The development does not require any public utility services or social facilities. The development involves the extension of the extraction area for an existing, consented clay mine and therefore does not create any demand for these services or facilities.***
- vi. *The standard and capacity of public roads serving the land. **The main access to the site is via a publicly maintained road (Shaw Street). Shaw Street is approximately 1.3km long, with the last 860m nearest the pit unsealed. The unsealed portion of the road requires ongoing maintenance due to its use by haulage trucks from the mine. Overall, the road is of adequate standard and capacity.***
- vii. *The need for all-weather vehicular access to and from the development site. **The unsealed portion of Shaw Street shall be maintained to a safe standard as directed by AlburyCity at the cost of the applicant. A Condition of Consent to this effect may be imposed should the application be approved.***
- viii. *The impact of any proposed land clearing or surface modification on the physical and visual environment and any measures proposed for the protection of the environment, site rehabilitation or reforestation. **Adequate measures will be taken to address land clearing and surface modification as discussed in this report. The proposed development includes rehabilitation works, and will not have significant impact on the physical and visual environment if these rehabilitation works are suitably carried out.***
- ix. *The need for the retention or reinstatement of vegetation to protect the physical and visual environment and to reduce the risk of soil erosion. **Approximately 2ha of existing vegetation will be retained. Ongoing soil erosion management will occur and the reinstatement of vegetation forms part of the rehabilitation process as envisaged.***
- x. *The risk from flooding, landslip, bushfire or any other natural hazard, and the adequacy of any measures proposed for the prevention or mitigation of risk. **The development is not at any risk from natural hazards. The land is not subject to flooding and there is no evidence to suggest and landslip risk. Whilst the land is identified as being bushfire prone, the nature of the development causes it to have no inherent risk from bushfire. Adequate arrangements can be made to protect any vehicles, equipment or temporary structures in the event of a fire. The proposed development is not considered to contribute to the risk of bushfire as vehicles and machinery operate in cleared areas.***
- xi. *The physical characteristics of the land, including slope, aspect, topography and land capability attributes as related to the intensity of development. **The land is physically suitable for the***

development which involves an extraction industry. The land is capable of accommodating the proposed development.

- xii. *The siting and design of any building, structures or works proposed.* **No buildings or structures are proposed, apart from bunding along the perimeter for visual, dust and noise mitigation reasons. The proposal is to extend the area for extraction in a western direction to within 15m of the property boundary. The siting of the development is logical and reasonable.**
- xiii. *Whether any environmental resources, including riparian and floodplain ecosystems, will be jeopardised by the development.* **The proposal will result in the removal of around 2.6ha of Box-gum Woodland which is potential habitat for squirrel gliders. Council considers it appropriate to request a monetary payment to contribute to the improvement (condition and extent) of existing environmental lands or the establishment of habitat poles to connect existing areas of habitat to compensate for this loss of habitat.**
- xiv. *The nature of other land/s in the locality.* **The surrounding area is characterised by open woodland and pasture with rural residential neighbouring properties. The extraction industry has been operating for several decades and, in some cases, have been operating prior to neighbouring residential dwellings being constructed. The proposed extension will not significantly impact on other lands in the locality.**
- xv. *Whether the proposed development is likely to adversely restrict the operation and extension of the Albury Landfill site, or whether that development will be adversely affected by the operation of the facility.* **The proposed development will have no impact on the Albury landfill site.**
- xvi. *Whether the proposed development is consistent with the Thurgoona Threatened Species Conservation Strategy 2004, the Albury Ranges Threatened Species Conservation Strategy 2006, or the Hamilton Valley Strategy 2002.* **The proposed development is not impacted by the Thurgoona Threatened Species Conservation Strategy 2004 or the Hamilton Valley Strategy 2002.**

The site is located within the 'Black Range' precinct as identified in the Albury Ranges Threatened Species Conservation Strategy 2006. This document includes a habitat framework and management strategies for endangered species in the locality. Effectively, it provides guidelines for the protection of fauna and flora in the area. A key outcome of this strategy was that it informed AlburyCity's Bio-Certification and ultimately the "Environmental" zoning of lands. The proposed development has been assessed against the provision of the 'E3 Environmental Management' zone with consideration of Bio-certification status of the land. The proposed removal of trees has been considered and offset planting or contributions thereto will be required as a Condition of Consent. It is noted that the long-term land use zoning outcomes for the site can still be achieved whilst the short-term focus is on adjacent land with regard to vegetation retention and offset planting.

8.3 Subdivision

Not applicable. No subdivision is proposed as part of this development.

8.4 Development in the Environmental Zones

Objectives

1. *To ensure dwelling houses and outbuildings do not detract from the visual prominence of natural features on or surrounding the site.*
2. *To maximise the energy efficiency of the development.*

3. *To avoid development on environmentally constrained parts of the site.*
4. *To retain and promote design elements which contribute to the built character of the City's environmental areas.*

Planning Comment: Only Objective 3 is considered pertinent to this application. The impact of the development on the environment has been considered in this report and the development was found to be adequately consistent with this objective.

Controls

Planning Comment: All the controls under this part relate to buildings and are not applicable to the proposed development.

8.4.2 Setbacks

Not applicable. No buildings are proposed as part of this development.

8.4.3 Building Height

Not applicable. No buildings are proposed as part of this development.

8.4.4 Building Materials

Not applicable. No buildings are proposed as part of this development.

8.4.5 Energy Alternatives

Not applicable. No buildings are proposed as part of this development.

8.4.6 Landscaping

Objectives

1. *To enhance the setting of buildings and the environmental quality of the surrounding environment.*
2. *To establish and reinforce native vegetation corridors and clusters.*

Planning Comment: Only Objective 2 is pertinent to this application. The proposed rehabilitation program will establish and reinforce native vegetation on the site. Offset planting or contributions thereto will be required through a Condition of Consent to further replenish native vegetation in the adjacent area. The Rehabilitation Management Plan (VGT 2017) includes the Landscape Development Plan as required under Condition 16 of the current consent.

Controls

Planning Comment: The proposed development does not require landscaping as intended under this part. All planting and vegetation re-establishment is required as part of rehabilitation or as offset planting to compensate for tree removal under the *Biodiversity Conservation Act*.

8.4.7 Ancillary Structures

Not applicable. No structures are proposed as part of this development.

8.4.8 Bushfire Protection

Planning Comment: No buildings are proposed as part of this development. Whilst the land is identified as being bushfire prone, the nature of the development causes it to have no inherent risk from bushfire. Adequate arrangements can be made to protect any vehicles, equipment or temporary structures in the event of a fire. The proposed development is not considered to contribute to the risk of bushfire as vehicles and machinery operate in cleared areas. Notwithstanding, the proposal was referred to the RFS who recommended that a Fire Management Plan (FMP) shall be prepared for the proposed development in consultation with the local NSW RFS District Office through a Condition of Consent, should the development be approved.

8.4.9 Services

Wastewater Management

Wastewater management for environmental development must be in accordance with wastewater management controls within Section 8.3.3.

Planning Comment: The proposed development does not require sewage treatment.

Water Supply

Water supply for environmental development must be in accordance with the water supply controls within Section 8.3.4.

Planning Comment: The proposed development does not require a potable water supply. No residential use of the property is proposed. Suitable arrangements will be made for firefighting purposes. No dams are proposed for the capture of drinking water. The proposed 'dam' is a sedimentation pond for the purposes of stormwater run-off and pollutant control, as discussed earlier in this report.

Existing Service Lines

Existing service lines for environmental development must be in accordance with the existing service line controls within Section 8.3.5.

Planning Comment: The proposed development does not require any reticulated services.

8.4.10 Incompatible Uses

Objectives

- 1. To provide for environmental living opportunities which do not reduce the potential for productive primary industries to operate.*
- 2. To reduce potential land use conflicts between land use activities on Environmental and other surrounding zones.*
- 3. Provision is to be made for appropriate buffers from possible sources of noise, odours and emissions.*

Planning Comment: The proposed development is consistent with these objectives. Adequate provision is made to mitigate and reduce land use conflicts including appropriate buffers.

Controls

Planning Comment: All of the controls under this part relates to separation buffers to prevent impacts from spray drift from aerial spraying on dwelling houses. No dwelling houses or aerial spraying is proposed and therefore these controls are not applicable.

8.5 The Murray River

Not applicable

8.6 Albury Landfill Buffer Areas

Not applicable

8.7 Area Specific Development Plans

None applicable

4.4 Any Planning Agreement (S4.15(1)(a)(iia))

There are no planning agreements in place that affect the evaluation of the subject development application.

4.5 Provisions of Regulations (S4.15(1)(a)(iv))

Clauses 92-98 of the Regulations outline the matters to be considered in the assessment of a development application. There are no provisions in the Regulations which apply to this development.

4.6 Likely Impacts of the Development (S4.15(1)(b))

Section 4.15 of the *Environmental Planning and Assessment Act 1979*, requires consideration of likely impacts of the development, including environmental impacts on both natural and built environments, and social and economic impacts in the locality. Key areas for consideration in respect to the subject application are:

Context and Setting

The site is located in the hills north of Springdale (Black Ranges) at the end of Shaw Street, approximately 4km north of the Lavington CBD. The predominant land use in the immediate vicinity of the site includes mixed agricultural purposes including rural and semi-rural residential dwellings. The predominant zonings in the area are Environmental, signifying the natural setting of the Black Ranges and the low level of urban development in this setting.

However, the operators of the Jindera Brickworks were granted a mining lease in 1969 on the neighbouring property to the east in order to extract clay for brick production. When the resource was nearing exhaustion an interim Development Order was granted in 1979 by the Albury-Wodonga Development Corporation for the 'Extension of Clay Pits' on the subject property. A Development Permit was granted in 1983 and a Mining Lease in 1990.

In this historic context, the proposed extension of the mine is considered appropriate as it has a compatible scale, design, and function in the area where the extractive industry has been operating for decades. Whilst the area of extraction is proposed to shift, no increase in the volume or frequency of

extraction is proposed and rehabilitation processes will aim to minimise the total area of extraction active at any point in time.

Streetscape

The clay mine is not visible from any street with the exception of the end of Shaw Street at the eastern boundary of the site. From this location, the majority of the mine is visible and extension westward would be further away from the viewer, having little to no impact on the streetscape.

Site Design and Internal Design

The site is constrained by its boundaries and the location of the natural resource being extracted, as well as the fixed location of its access point off Shaw Street and the topography of the site. In this regard, the design response is appropriate and the location of the temporary site office and car park, vehicle routes, sedimentation dams and stockpile sites are adequately positioned and separated to allow efficient and safe operations on site.

The primary focus of this application is extension the west, which is informed by the location of the resource. Existing facilities can be reasonably extended to access and maintain this new area of extraction. The site provides adequate access and manoeuvrability whilst minimise potential impacts on neighbouring properties.

Traffic, Access and Parking

At present the main access to the site is via Shaw Street. Should Shaw Street be impassable in an emergency, the alternative egress route is via a private road (access easement) to the west of the pit which ultimately joins Prune Street. There will be no changes to the frequency of transportation of the material won from the site to the Jindera Brickworks. Cartage of material only takes place within the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive. No transportation is undertaken on Sundays, Christmas Day or Good Friday, except for essential plant maintenance. No changes are proposed to the current arrangement. The route commences on the unsealed portion of Shaw Street for approximately 860m before it reached the sealed portion of the road. A speed limit of 30km/h is maintained on this portion. It is however recommended that the mine operators maintain this unsealed portion to the satisfaction of Council at their cost. The remaining portion of the route to Jindera is sealed. Approximately 3km of the journey is through suburban housing with the remaining portions through rural or rural residential areas.

The Mine Operations Plan (MOP) required to be submitted annually includes an on-site Traffic Management Plan. Heavy vehicles are required to maintain contact via radio and access is restricted to the pit floor for loading and hauling. All vehicles are required to maintain a speed limit of 15km/h. Light vehicles must make radio contact with any heavy vehicles on the site before entering and must proceed to the site office to register. Temporary parking for light vehicles is provided at the site office. Should light vehicles require access to the pit floor, contact with heavy vehicles and plant, both visually and by radio, must be made. Visitors to the site must follow all safety instructions and directions given by on-site staff. The proposed internal access arrangements are suitable for heavy and light traffic.

Public Domain

The proposed development is not anticipated to have an adverse impact on the public domain.

Utilities

The proposed development does not require and utilities or reticulated services. It involves the extension of the area of extraction for an existing clay/shale mine and does not involve habitation or a permanent workforce. Temporary facilities may be provided as and when necessary.

Construction

The proposed development does not involve any construction apart from the necessary earthworks related to the extraction of the natural resource. These works will be conducted in a safe and compliant manner, with relevant Conditions of Consent recommended in this regard, should the development be approved.

Water Quality and Stormwater

All surface water captured within the disturbed area of the pit will be diverted to the in-pit sedimentation dam. The total dirty water catchment will increase in area from approximately 4.7ha to 11ha. The current In-Pit Sedimentation Dam is estimated to have a capacity of approximately 7,700 cubic metres. The sediment dam is of sufficient capacity to contain the design storm event.

All clean water will be diverted around the site via earthen bunds as necessary. Due to the ridgeline setting, clean water will naturally fall away from the pit. The need to discharge will be determined on the need for extraction within the mine void. A small volume of water may be retained onsite for dust suppression. Water to be discharged will be tested to ensure it meets the required criteria. Treatment of the water will be undertaken, if required, which may include flocculation to remove sediment. No concentrated flows will be permitted to leave the site. The flow rate will be approximately 1L/sec (0.001m³/sec). A discharge pipe will be fed into an energy dissipater to minimise erosion impacts from the discharged water. The discharge will be supervised to ensure there is no adverse impacts noted such as visible sediment in discharge water, erosion and gully, flooding, etc. If impacts are noted discharge will cease immediately and remedial action undertaken.

Soils, Soil Erosion

Matters regarding erosion and sediment control can be effectively managed by the adoption and implementation of erosion and sediment control measures such as silt fencing, diversion of stormwater run-off through settlement dams and the stabilisation and top-dressing of disturbed areas, which are already in place and suitably proposed for the areas of extension. Erosion and sediment control measures are already undertaken on site, with future controls to be undertaken in accordance with relevant Australian Standards and regulations including *NSW Managing Urban Stormwater* (the "Blue Book") and *Managing Urban Stormwater, Soil and Construction, Volume 2E Mines and Quarries* and Council's *Soil and Water Management Policy*.

Extraction processes will limit the area of land disturbance and potential erosion and the loss of sediment. To ensure an appropriate long term outcome is achieved, the site will be gradually rehabilitated with areas of disturbance to be stabilised, landscaped and returned to its pre-development state. Furthermore, erosion and sediment control measures will be periodically reviewed and maintained to ensure that they effectively functioning.

Noise and Vibration

The mine is located along a ridgeline north of Albury with elevations ranging from RL320m in the south west and down to RL300m in the north. The mine itself is set into the ridgeline with the void presently at about RL300m RL, 10 to 15 metres below the natural ground level. Six sensitive receptors have been identified around the site located between 200m and 600m from the extraction site. A number of overburden and topsoil stockpiles have been placed as acoustic bunds along the perimeter of the site as additional protection. There will be no changes to the volume and frequency of road haulage trucks transporting material and therefore no change to traffic noise is expected. Operations on the site are also restricted to the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive and restricted to three campaigns of approximately four weeks each during the year, meaning that noise is not a constant concern.

The majority of the mining will be undertaken using a bulldozer to push material down the active mining face and forming stockpiles on the pit floor. The action of pushing the material will assist in breaking up of oversize material and therefore reduce the screening time and therefore reduce the duration of noise impacts.

Flora and Fauna

Flora and fauna have been extensively discussed in this report. During a Targeted Threatened Species Survey, no endangered fauna and no significant other fauna was found. The proposal will result in the clearing of approximately 2.6ha of Box-gum Woodland, which have been assessed as reasonable in the context of the site's historic and existing land use whilst noting the site's ability to still achieve the desired environmental zone objectives in future. These trees are however recommended to be replaced in the short term on suitable adjacent lands at a ratio of 10:1 as per Albury LEP 2010 Bio-certification report and agreements with DPIE.

Following advice received from DPIE, it is further recommended that a targeted survey for *Caladenia concolor* (Crimson Spider Orchid) be undertaken prior to clearing by an appropriately qualified ecologist when the species is likely to be above ground and identifiable, as this species was not adequately covered in the submitted survey. A Condition of Consent to this effect will be imposed should the development be approved.

Natural Hazards

The land is identified as being bushfire prone. The nature of the extractive industry does not cause it to be at risk from bushfire and vehicles, plant and temporary structures could be located on the site to

avoid undue bushfire risk. In addition, a water source could be placed on-site to assist with bushfire protection if necessary. The proposed development is not considered to contribute to the risk of bushfire as vehicles and machinery operate in cleared areas.

NSW RFS has recommended appropriate Conditions of Consent which have been included in the Draft Determination should the development be approved.

Safety, Security and Crime Prevention

Trespassing is not common. However, the site is fenced around the perimeter with rural style fencing to deter unauthorised access. Access is gained via a locked gate at the entrance. Visitors onto the site must report to the site supervisor. All visitors must be accompanied by the proponent's personnel at all times. Contractors must undertake a site induction which includes safety hazards and emergency procedures. Signage is posted on the gate and around the site to dissuade trespassers and to warn staff of site hazards such as steep slopes and drowning hazards. The office also holds a first aid kit in case of emergencies. The site has developed a Traffic Management Plan and a 15km/hr speed limit is enforced.

There is no anticipated increased safety risk as a result of the proposed development.

Overlooking

The proposed development does not overlook any sensitive areas or sites.

Overshadowing

The proposed development does not pose any risk of overshadowing.

Waste

There is no processing of waste on the site and no waste is generated. There are no chemicals or dangerous goods held on the site. Any general waste is collected in rubbish bins located at the site office and disposed of at a licensed waste disposal facility. During mining campaigns, portable amenities are brought onto the site for the duration of the works and then removed.

Standard conditions would be imposed should the development be approved.

4.7 Public Submissions (S4.15(1)(d))

4.7.1 Community submissions

The Development Application was publicly exhibited from 8 January 2019 to 8 February 2019. One submission was received. The submission was received in two parts, with the first part received on 17 January 2019 and an addition received on 22 January 2019. A copy of the submission is included in the attached documents.

In summary, the submission raised the following concerns:

- i. *The letter drop (mentioned in the EIS) did not make any mention of the southern extension. The text of the letter and the associated map only depicted the north western proposed Extension Area. Discussions with Council and with the mine excavator operators only referenced the north western extension. It is this new southern extension as only detailed in the EIS that does concern us.*

Planning Comment: Mining to the south is currently consented as per Development Consent N72. Given the consent boundaries of the mine, it would be reasonable to assume that mining could progress to the south up to the buffer limit of 15 metres. Whilst the EIS includes 'extension' of the mine to the south in its maps and makes reference to it in the text of the report, this is for information purposes only as extraction in this area is already consented. The current application seeks Development Consent to extend the consented area to the west (as per the letter drop and subsequent discussions with Council).

- ii. *The proposed southern extension will lower the skyline to the north east of our property by approximately 5m. Our property developments are limited by Council in that 'no structure shall be constructed in a location such that the roofline projects above the ridgeline levels crossing the site area and approved in DA12232-2000'. The elevation profiles do not address the potential impact on sightlines for the whole property. The lowering of the skyline may impact current developments and disadvantage any future developments we or any subsequent owner of our property may have.*

Planning Comment: It is reiterated that extraction to the south is already consented and not part of this application. Notwithstanding, existing consented structures on the neighbouring property will not be affected by height restrictions relating to DA12232-2000. Council has assessed the impact to the skyline when granting the original quarry consent in 1979 and the latest amendment granted in 1990 and also when granting consent for the dwelling on the neighbouring property in 2000. It is acknowledged that future developments subject to Council consent would have to comply with requirements at the time. However, given Shaw Street and the entrance to the site is to the south-east and the ridgeline is being reduced to the north-east, only a small part of the property (approximately 10%) to the east of the access driveway is affected by the reduced skyline. It is noted that a shed has been consented and constructed in this part of the property.

- iii. *The cross-section plans for the southern extension indicate a shallow depression that may retain water and cause water seepage issues with our dwelling. Our home is underground. The site was cut to bedrock and returned to original profile after construction. We are concerned that excavation will allow if not encourage water to directly access the clay/rock transition layer and be funnelled directly into our residence. This would directly impact on the footings of our structure, but also create the potential for damp/ mould and our ability to maintain a liveable temperature inside.*

Planning Comment: It is reiterated that extraction to the south is already consented and not part of this application. The 'roof' of the underground dwelling is at approximately 308m. The floor level is therefore

presumed to be approximately three to four metres below this level at 304m. The current pit floor ranges from 300m to 298m in the vicinity of the current pit sump (which lies below this level) and well below the floor level of the dwelling. The conceptual final base of the quarry will also slope to the north with the base at 298m and the sump base at approximately 294m. Due to the current sump being north of the ridgeline, any movement of groundwater would be downslope to the north. Dissipation rates from the sump are considered very low given the clay nature of the site. The final void has been designed to overtop at 300m which is below the floor level of the dwelling.

- iv. *We are contracted to provide real-time meteorological and aviation information. There is a risk that significant additional excavations may sufficiently alter the local environment as to endanger this data. Additionally, with the mine coming so much closer to us, the increased dust presents significant additional maintenance in checking and cleaning filters, screens, optical measuring equipment and cameras.*

Planning Comment: It is considered unlikely that the development will impact meteorological conditions in the area. All efforts will be made to control dust. Nuisance dust is controlled by the current EPA Licence 20938, which sets a “discharge to air” limit of 4g/m² per month. All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises. The licence furthermore includes conditions on testing methods, recording of complaints, reporting and notification. Council is satisfied that sufficient dust control measures and reporting systems are in place to minimise negative impacts from dust on neighbouring properties.

- v. *Because we are underground, and built directly on the bedrock below, we have concerns that all vibration from mining operations will directly and negatively affect our comfort and repose. We already ‘feel’ the infrasound from operations at the mine, but with works coming so much closer expect the effect to be exponentially higher.*

Planning Comment: No blasting is undertaken on the site. The proposed mining methodology involves bulldozers ripping and pushing material down the active mine face and stockpiling at the base on the mine floor. This method requires less mining equipment operating under normal conditions which is beneficial in minimising impacts. The proposed excavation activities will be in excess of 100m away from the dwelling and constrained to the consented hours of 6:00am to 6:00pm Monday to Saturday inclusive. No operations are undertaken on Sundays, Christmas Day or Good Friday. Mining campaigns are undertaken approximately three times each year, with each campaign lasting around four weeks. Activities on the site are therefore considered intermittent and not a constant nuisance.

- vi. *We already receive a significant amount of airborne dust from the mine both directly (when there’s a northerly wind) and indirectly (easterly and southerly wind) blowing dust caused by vehicular traffic up and down Shaw Street.*

Planning Comment: Dust suppression measures such as a water cart will be more frequently employed to reduce impacts and rehabilitation processes will reduce exposed surfaces. Dust monitoring will continue on the site and further mitigation measures implemented if monitoring results indicate they are required. All loads will be covered and vehicle speeds limited to 15km/h on site and 30km/h on the unsealed section of Shaw Street. The intersection with Shaw Street will be inspected daily during mining

and hauling activities to ensure material is not tracked off-site. As discussed above, proposed excavation activities will be intermittent and not a constant nuisance.

- vii. *Shaw Street is already frequently impassable to smaller vehicles as the road surface becomes severely corrugated from heavy vehicles (particularly semi-trailers with air-bag suspension). We run two businesses from this location and frequently have delivery drivers refuse to deliver, citing the road as being 'impassable'. This causes us significant cost and inconvenience. We believe with the extension of the mine the road will degrade even more quickly and in all probability be more problematic, more often.*

Planning Comment: Shaw Street is a public road maintained by Council. As the proposed development does not seek to increase the consented extraction tonnage limit, there will be no increase in traffic due to the development over that which is already permitted. As stated previously, haul vehicle speeds will be limited to 30km/h on the unsealed section of Shaw Street. Notwithstanding, a Condition of Consent is recommended, should the development be approved, that the unsealed portion of Shaw Street shall be maintained to a safe standard as directed by AlburyCity at the cost of the applicant as advised by Council's Development Engineer.

- viii. *Fencing and livestock - while we applaud the requirement to improve the current woefully inadequate fencing we have experienced problems in the past with cattle grazing on the buffer paddock adjacent to our boundary fence. In places cattle have been pushing and damaging fences and grazing on and damaging our trees on our side of the fence. If the fencing could be upgraded to secure smaller, less destructive livestock and strong enough to keep neighbouring cattle and roaming dogs out, it would be safer and better for all concerned.*

Planning Comment: The applicant will be required to repair and replace the fencing with a 1.2m high stock proof fence as required pursuant to Conditions of Consent.

- ix. *We find the conclusions of the Targeted Threatened Species Surveys to be incorrect. We have on numerous occasions found and photographed both Sloan's Froglets (*Crinia sloanei*) and Pink-tailed Legless Lizard (*Aprasia parapulchella*) around our residence and (in the case of the frogs) around our dams adjacent to Anderson's mine's southern boundary. (note: a photograph of the 'pink-tailed lizard' was emailed to Council in support of this point and forwarded to DPIE: BCD)*

Planning Comment: An additional Threatened Species survey was commissioned following the submission and Further Information request. This survey (NGH, 2019 – included in the attached documents) found no Sloane's froglets in or around either dam using a comprehensive call test. Recorded calls were played around each dam followed by a period of listening for responses by this species, between dawn and midday during the survey window. No Pink-tailed Legless Lizards were found in or around either rock outcrop during the targeted survey in and around the rock outcrops in the subject land. Between 150 and 200 shallowly-embedded surface rocks were turned and the ground beneath searched for this species, during warm spring conditions. DPIE: BCD's Ecosystems and Threatened Species Team confirmed that the photograph sent was of a blind snake (*Anilius species*) (previously *Ramphotyphlops*) and not a Pink-tailed Legless Lizard (*Aprasia parapulchella*). BPIE: BCD further confirmed that the proposal site is outside the Sloane's froglet Local Area Management Plan

area, so management of the stormwater system for habitat protection or creation as outlined in the Sloane's froglet Stormwater Wetland Design Guidelines are a lower priority. A Condition of Consent regarding harm to threatened species if encountered can be imposed if the development is approved.

4.7.2 Internal Referrals

The application was referred to the Building Surveyor, Plumbing Inspector, Development Engineer, Environmental Planner, Environmental Health Officer and Contributions Planner, who have recommended approval of the development subject to standard conditions that have been included in the Draft Determination contained in the attached documents.

4.7.3 External Referrals

Apart from the Southern Regional Planning Panel, the application was referred to the following external departments:

- NSW Rural Fire Service (RFS)
- NSW DPIE Biodiversity and Conservation Division (BCD, formerly OEH)
- NSW Roads and Maritime Services (RMS)
- NSW Environment Protection Agency

Their responses have been incorporated in the report where relevant, and Conditions of Consent included in the draft Determination. Copies of their responses are included in the attached documents.

4.8 Public Interest (S4.15(1)(e))

The public interest is a broad consideration relating to many issues and is not limited to the demand upon public services and infrastructure. Taking into account the full range of matters for consideration under Section 4.15C of the Environmental Planning and Assessment 1979 (as discussed within this report) it is considered that approval of the application is consistent with the public interest.

5.0 Conclusion

Overall it is concluded that the impacts of the proposed development on the environment and neighbouring properties are reasonable and satisfy the requirements of this consideration subject to remediation action as contained in Conditions of Consent.

The proposed development has been assessed against the requirements of Section 4.15C of the *Environmental Planning and Assessment Act 1979*. This has involved consideration of the requirements of relevant State Environmental Planning Policies, *Albury LEP 2010* and *Albury DCP 2010*. It is considered that the proposed development has adequately demonstrated it is appropriate for this site and that the development would not generate significant adverse impacts within the site and on neighbouring areas.

Accordingly, it is recommended that Development Application 10.2018.36584.1 for the extension of the currently operating Clay Mine to an area to the west within the property boundary of Lot 2 in DP 856969

addressed as 253 Shaw Street Springdale Heights, be approved subject to the conditions contained in the Draft Determination included in the attached documents to this report.

Recommendation

That the Southern Regional Planning Panel:

- a. Receive and note the contents of this report; and
- b. Grant development consent to Development Application 10.2018.36584.1 for the extension of the currently operating Clay Mine to an area to the west within the property boundary – at Lot 2 in DP 856969 addressed as 253 Shaw Street Springdale Heights, subject to the conditions contained in the Draft Determination, included with this report in the attached documents.