
WESTERN PLAINS REGIONAL COUNCIL

Incorporating the former
Dubbo City & Wellington councils

Development Application Assessment

Report: Development application D16-70 – Extractive industry (Quarry)
Property: Lot 19 DP 753252, 65L Eulandool Road, Benolong
Applicant: Australian Zirconia Limited
Owner: Australian Zirconia Limited
Assessing Officer: Planning Services Supervisor
Date: 28 June 2016
File: D16-70; AU16/168

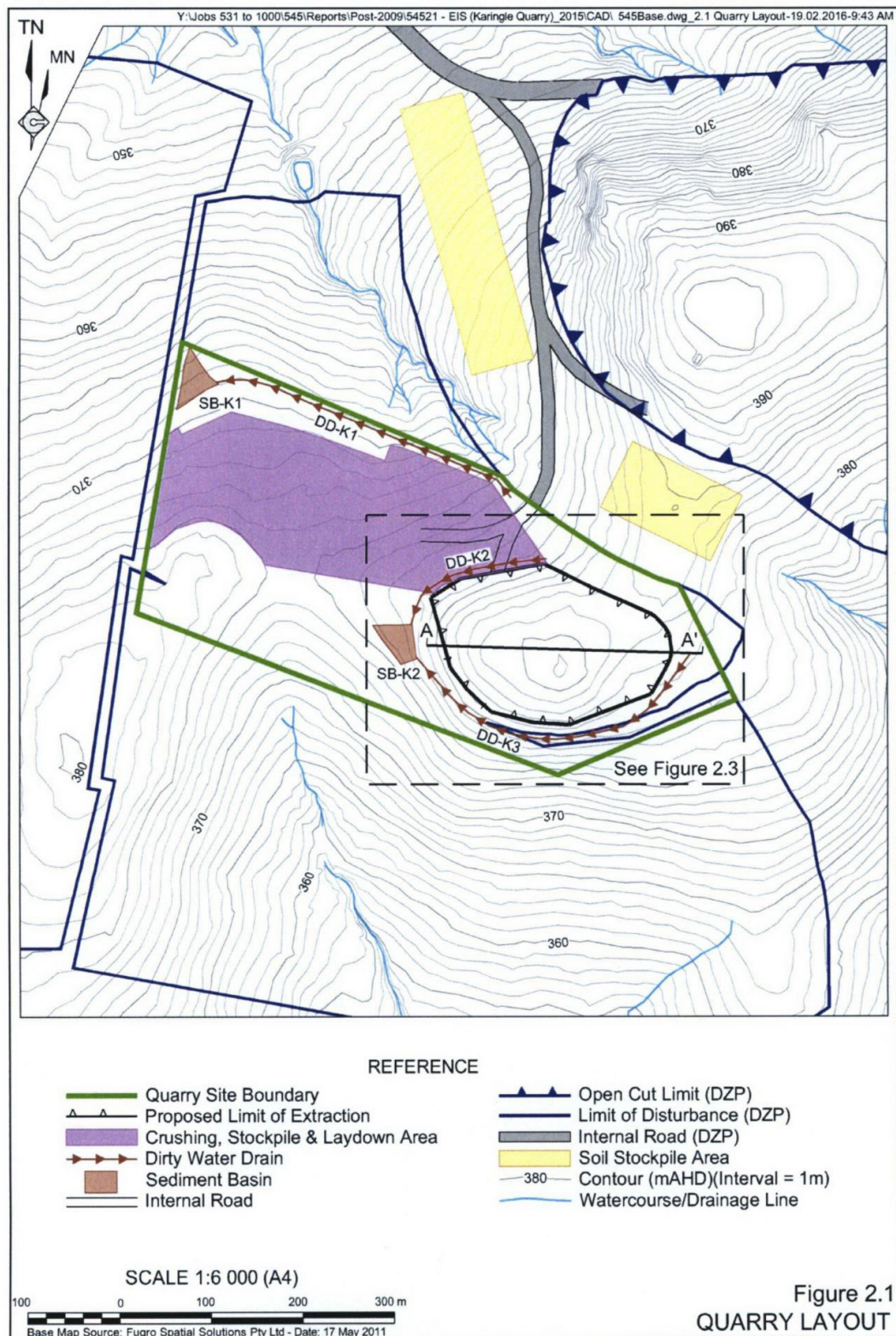
REPORT

1. DEVELOPMENT DETAIL

The subject Development Application was lodged with Council on 23 February 2016 by Australian Zirconia Limited. The Development Application is for an Extractive Industry (quarry) to extract basalt for use in the construction of roads, hardstands, concrete slabs and other components of the Dubbo Zirconia Project (DZP), with no products or waste materials generated by the quarry to be transported off-site. Drill and blast methods will be used to fragment the basalt outcrops prior to extraction. The establishment of the site will include the installation of mobile crushing facilities, demountable buildings and other ancillary infrastructure including workshops and fuel storage with a capital investment value of \$15,000 (**Appendix 2**).

From the submitted Environmental Impact Statement (EIS) dated February 2016 and prepared by R W Corkery and Co Pty Ltd, the following extract is provided:

“The Applicant proposes to extract and crush approximately 400 000t to 450 000t of basalt annually from an extraction area of up to 8ha on the Quarry Site. The basalt would be used to supply material for ground stabilisation and other construction works of the approved DZP.



The Quarry Site in its entirety ... occurs within the approved disturbance footprint of the DZP Waste Rock Emplacement (WRE). Access to the Quarry Site, would be via a private road network developed for the approved DZP.

Figure 2.1 displays the following principal components of the Quarry Site, namely:

- The proposed extraction area; and
- A crushing, stockpiling and laydown area where a mobile crushing unit would be operated, extracted and crushed basalt stockpiled, and ancillary infrastructure (demountable buildings and fuel storage) installed.

Soil excavated ahead of extraction area development would either be stockpiled in wind rows within the Quarry Site, or within the soil stockpile areas nominated for the DZP (see Figure 2.1). Due to the outcropping nature of the basalt, virtually no waste rock / overburden is anticipated, however, any such material would be stockpiled within the Quarry Site and either blended with the crushed basalt or placed within the final void space of the extraction area at the completion of the proposed quarry.

All material generated by the proposed quarry would be used for the construction of the DZP. No material would be despatched off the DZP Site via the public road network.

Following the completion of the construction stage of the DZP, anticipated to be up to 24 months, the proposed quarry would continue to operate for a period of up to 18 months to ensure that sufficient basalt material is stockpiled for future operational and site maintenance needs, eg stemming for DZP open cut blasts, sheeting for internal road maintenance.”

The Western Joint Regional Planning Panel is the consent authority (determination) in accordance with the Environmental Planning and Assessment Act, 1979 (Schedule 4A(8) below) and the Environmental Planning and Assessment Regulation, 2000.

“Schedule 4A Development for which regional panels may be authorised to exercise consent authority functions of councils

8 Particular designated development

Development for the purposes of:

- (a) *extractive industries, which meet the requirements for designated development under clause 19 of Schedule 3 to the Environmental Planning and Assessment Regulation 2000.”*

2. SITE CHARACTERISTICS

Locality and Access

The subject land is known as Lot 19 DP 753252, 65L Eulandool Road, Benolong (see Figure 1). The allotment is 346 ha with a frontage to Eulandool Road. However, all vehicle access will be

internal with a road linking the quarry to mining activities occurring further to the north (see Figure 2.1).

Slope

The proposed quarry site is located across a small ridge which then slopes away to both the north and south.

Vegetation

The proposed quarry site is clear of those areas mapped as being of moderate or high biodiversity value. The site is generally clear of any vegetation, with the clearing of the remnant vegetation having been adequately addressed in the submitted EIS.

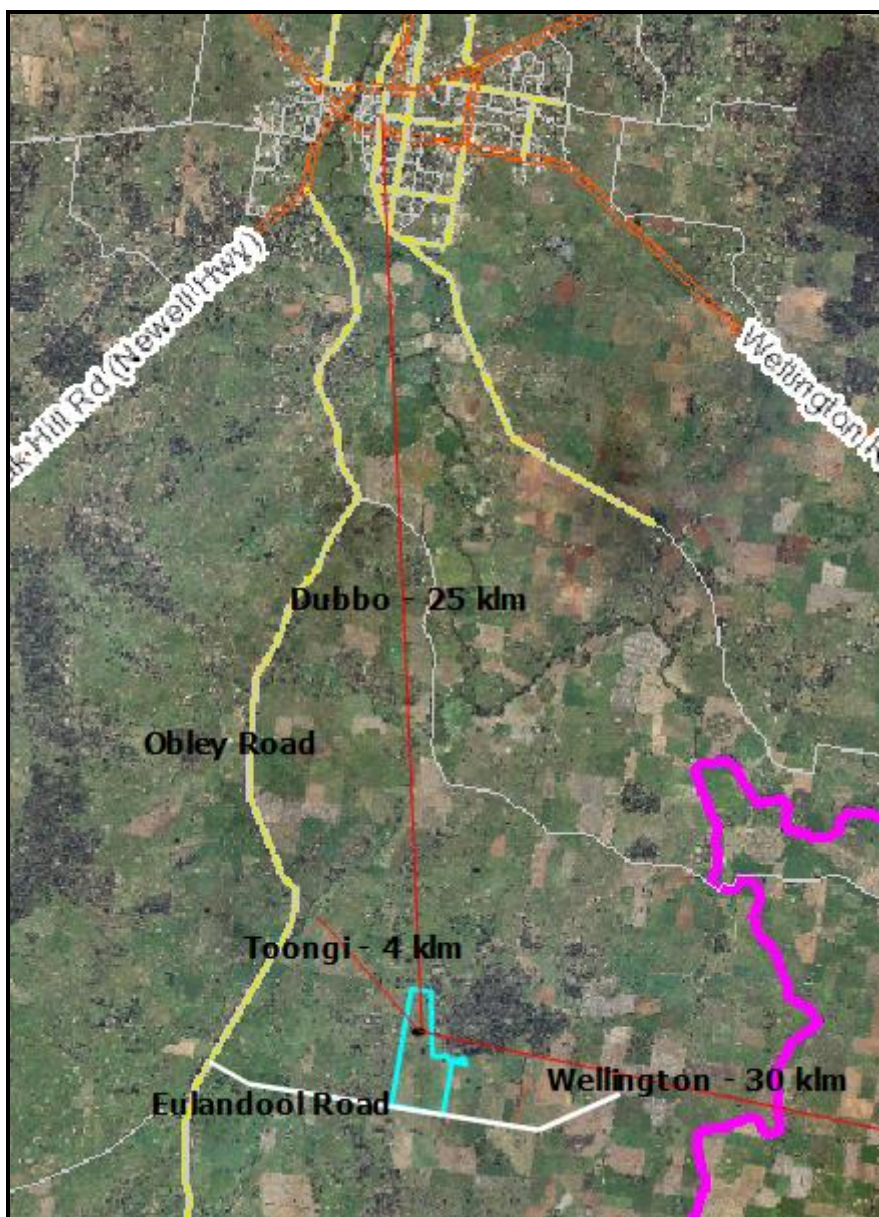


Figure 1: Lot 19 DP 753252, 65L Eulandool Road, Benolong (Karingle).

Adjoining Uses

The site will form part of the Dubbo Zirconia Project approved by the NSW Planning Assessment Commission on 28 May 2015 which is located predominantly to the north of the proposed quarry. Adjoining properties to the south along Eulandool Road are generally utilised for extensive agricultural pursuits.

The property has recently been purchased by the applicant Australian Zirconia Limited, which owns a number of adjoining properties.

3. SITE HISTORY

A review of Council's records has not identified any development files relating to the subject property. There is a dwelling and outbuildings located along the eastern boundary, but given the lot is an original parcel, these structures may pre-date Council's records. These structures are more than a kilometre from the proposed quarry and have vehicular access to Eulandool Road.

Dubbo Zirconia Project (DZP) SSD-5251 was approved 28 May 2015 by the NSW Planning Assessment Commission. The Quarry the subject of this application is located within the DZP site. The DZP involves the mining and processing of a body of ore containing rare earth and metal concentrates (zirconium, niobium, hafnium, tantalum, yttrium, europium, dysprosium and neodymium). The project is proposed to mine 19.5 million tonnes of ore over a 20 year period, producing 75,000 tonnes of concentrate per year. The proposal includes:

- A small open cut mine;
- Processing and refining facilities, plant and equipment, including a 90 m high stack;
- Chemical storage areas, including a tank farm;
- Waste encapsulation cells;
- Water and gas supply pipelines;
- Road upgrades, and potential future reopening of the adjoining railway line.

This project has not yet commenced.

4. PLANNING ASSESSMENT

Legislative Requirements (EP&A Act 1979)

Designated Development (EP&A Regulation 2000)

The proposed development is deemed to be Designated Development as per the Environmental Planning and Assessment Regulation 2000, Part 1 of Schedule 3 Designated development, 19 Extractive industries:

- (1) *Extractive industries (being industries that obtain extractive materials by methods including ... quarrying or that store, stockpile or process extractive materials by methods including washing, crushing, sawing or separating):*
- (a) *that obtain ... or reuse, more than 30,000 cubic metres of extractive material per year,*

The Quarry proposes to extract and crush approximately 400,000 to 450,000 tonnes annually, which for basalt (solid) equates approximately to 132,800 m³ to 149,500 m³, being above the stated threshold.

Section 77 of the Regulation requires referral (written notice) to such public authorities (other than concurrence authorities or approval bodies), that in the opinion of the consent authority may have an interest in the determination of the development application.

As stated above, the Joint Regional Planning Panel (Western Division) is the consent authority for the proposed development. For the assessment of the Development Application, Dubbo City Council is obliged to assume the role of consent authority.

On reviewing the comments provided in the Secretary's Environmental Assessment Requirements and Requirements of Other Government Agencies (EIS Appendix 2) with regard to the proposed development, only NSW Department of Primary Industries (DPI) Water merited a referral. However, those comments did not state that the proposal triggered the Integrated Development provisions within the Water Management Act 2000.

DPI Water responded in correspondence dated 1 April 2016 (**Appendix 4**), stating: *DPI Water believes that there is the potential for the quarry site to be located on waterfront land.* Again, DPI Water has not stated that the proposed development triggers the Integrated Development provisions within the Water Management Act 2000.

As such, given the location of the site atop a hill, it is the opinion of Council that the proposed development is not located within 40 metres of a river bank. The nearest designated watercourse being Wambangalang Creek is located at its closest point approximately 2.2 kilometres to the south-east.

Integrated Development (Section 91)

The development proposal is considered to be Integrated Development as defined under section 91 of the Environmental Planning and Assessment Act 1979 (EP&A Act) as the application seeks General Terms of Approval for a licence under section 43(b), 48 and 55 of the Protection of the Environment Operations Act 1997.

Following the submission of additional information, the NSW Environment Protection Authority (EPA) in correspondence dated 14 June 2016 granted General Terms of Approval with regard to licencing for the proposal subject to conditions (see **Appendix 3**).

Assessment (Section 79C(1))

The Application has been assessed in accordance with the Environmental Planning and Assessment Act 1979 (the Act). The main issues are addressed below:

(a)(i) *The provisions of any environmental planning instrument,*

SEPP (State and Regional Development) 2011

The development application is not deemed to be State Significant development for the following reasons:

- Extracting less than 500,000 tonnes per year;
- Extracts less than a total of 5 million tonnes as per this application;
- Is not located in an area defined as environmentally sensitive being of State Significance; and
- Does not have a capital investment value of more than \$30 million.

The development application is deemed to be Regional development and the provisions of Part 4 Regional development are applicable, which with regard to Council, include:

- The receipt and assessment of development applications;
- The determination and receipt of fees for development applications; and
- Notification of determination of development applications.

SEPP (Mining, Petroleum Production and Extractive Industries) 2007

The proposed quarry (*extractive industry*) meets the relevant aims of the Policy with regard to the orderly and economic use of the land, while addressing the ecological and environmental issues.

The proposal is 'permissible with consent' in accordance with Clause 7(3)(a) whenever *agriculture* may be carried out with development consent. Additionally, as per Clause 7(4)(a) the processing of extractive material and (c) facilities for the processing or transport of extractive material, are also 'permitted with consent'.

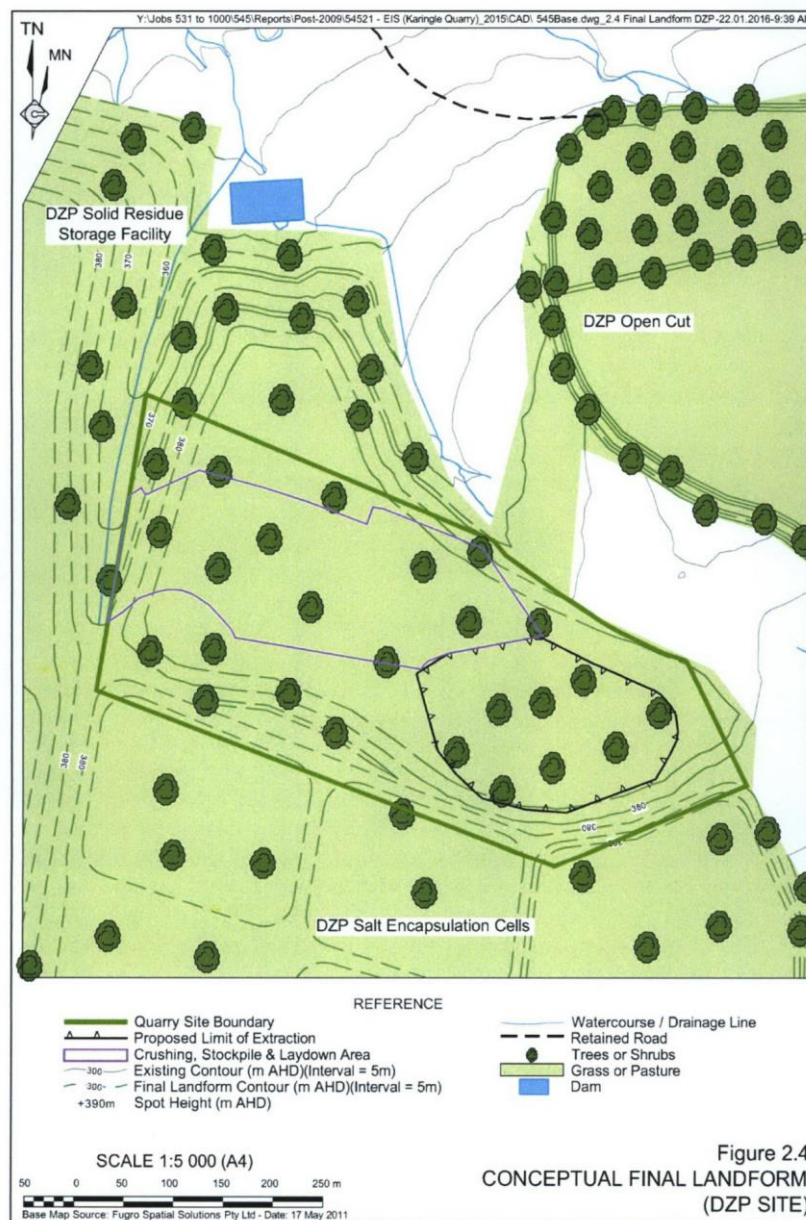
With regard to Clause 12, the proposed quarry (*extractive industry*) will have minimal impact on the existing uses of land in the vicinity of the development. Land uses in the locality predominantly comprise *extensive agriculture* due to the poor agricultural quality of the land, however the quarry is a viable operation providing basalt to the approved Dubbo Zirconia Project for ground stabilisation and other construction works.

While there are large areas available for extensive agriculture, there are limited areas for the quarrying of basalt which is commercially viable. As such, the uniqueness of the site increases its value with regard to public benefit.

If approved, the quarry (*extractive industry*) should be subject to conditions of consent, including the General Terms of Approval issued by the EPA in correspondence 14 June 2016 including licensing requirements. Furthermore, it is considered that quarry (*extractive industry*) will result in negligible increases of greenhouse gas emissions.

The quarry (*extractive industry*) is to provide the Dubbo Zirconia Project with basalt for ground stabilisation and other construction works, resulting in efficient resource recovery.

The transport of the extracted material will be contained within the site and not utilise any public roads.



It is proposed by the applicant within the submitted EIS (2.12 Rehabilitation and Decommissioning) that the subject land will be rehabilitated at the conclusion of the quarrying operations (see Figure 2.4 above) and appropriate conditions have been included in the draft conditions of consent (**Appendix 1**).

SEPP (Rural Lands) 2008

The relevant aim of this planning policy relates to “... *measures designed to reduce land use conflicts.*”

The proposed quarry is not contrary to any of the Rural Planning Principles as noted in Part 2 and given the location of the quarry within the impact footprint of the Dubbo Zirconia Project, the SEPP is not deemed applicable.

SEPP 55 – Remediation of Land

The subject site is not specifically listed on Council’s register of potentially contaminated land, though all rural land is considered potentially contaminated. Noting the comments within the submitted EIS, no further contamination investigation is necessary as the sensitivity of the proposed development will not be more sensitive than the existing situation. As such, the SEPP is not applicable to the proposed development, noting that the site will be specifically listed on Council’s register of potentially contaminated land once operations commence.

Orana REP No 1 – Siding Spring

The subject site is situated in excess of 100 km from the Observatory and the development will not provide a significant level of light spill or glare. The proposed development does not require referral to the Observatory under the provisions of the State Environmental Planning Policy.

Dubbo Local Environmental Plan 2011

The following clauses of Dubbo Local Environmental Plan (LEP) 2011 have been assessed as being relevant and matters for consideration in assessment of the Development Application.

Clause 1.2 Aims of Plan

The proposed development is not inconsistent with the relevant aims of the Plan.

Clause 1.4 Definitions

The proposed development is defined as an *extractive industry*:

extractive industry means the winning or removal of extractive materials (otherwise than from a mine) by methods such as ... quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating.

Clause 1.6 Consent authority

As stated above, under the provisions of the Act, Schedule 4A, the Western Joint Regional Planning Panel is the consent authority.

Clause 2.2 Zoning of land to which Plan applies

The subject site is zoned RU1 Primary Production.

Clause 2.3 Zone objectives and Land Use Table

The proposed development complies with the relevant objectives of the zone, in that its location (by distance) has removed any potential conflicts with any adjoining agricultural lands.

Clause 7.2 Natural resource - biodiversity

Portions of the subject site (Lot 19) are included on the Natural Resource – Biodiversity Map, showing areas of high and moderate biodiversity. The proposed location of the quarry site is however, clear of the areas shown as containing high and moderate biodiversity.

Clearing of some remnant vegetation will be required and in this regard the EIS states:

“Prior to commencement of clearing, a Vegetation Clearing Protocol will be prepared and distributed to Quarry personnel and contractors. The Vegetation Clearing Protocol documents the operational safeguards, controls and management measures to minimise the potential for resident native fauna to be injured during clearing campaigns.

- A limited number of trees would be removed using a bulldozer with its blade positioned just above the surface. In the event tree removal by this method is not possible, the tree would be chainsaw felled, with the stump then pulled from the ground by the bulldozer.*
- A 'timber inventory' would be maintained which identifies and classifies the felled timber on the basis of type, size, density, habitat features (e.g. hollows) and potential for other uses (for milling, structural timber, etc.).*
- Felled timber would be managed in the following order of priority.*

1. *Whole trees would be retained for future use in improving the habitat complexity of the final landform, or re-establishment or improvement of habitats surrounding the Quarry Site.*
2. *Tree hollows would be separated for re-hanging within the Biodiversity Offset Area (BOA) of the DZP or the final landform as part of habitat enhancement activities.*
3. *Cutting and milling or sale of suitable species for fence posts, structural timber or floor boards.*
4. *Chipping of crowns and limbs, following harvest of seed for use in rehabilitation, and either use on rehabilitated land or sale.*
5. *Cutting and sale as firewood for community benefit/use.*
6. *Pyrolysis to charcoal and use in soil amelioration."*

Comments from Council's Environmental health Services Supervisor are that no further assessment is required.

Clause 7.3 Earthworks

Arguably, the whole development application involves *earthworks*, just on a much larger scale and as such, the issue is being addressed in its totality in the overall assessment of the development.

Clause 7.4 Natural resource - riparian land and waterways

Not applicable.

Clause 7.5 Groundwater vulnerability

The subject site is not identified on the Natural Resource – Groundwater Vulnerability Map. Comments from Council's Environmental Health Services Supervisor were as follows:

"The SEE states that no direct impacts on groundwater as any standing groundwater encountered will be removed. If the mining phase does not occur after quarrying commences an increase in recharge will occur. This potential impact has been addressed and predicts the increase in groundwater would not extend to the nearby Wambangalang Creek alluvial sediments which would exacerbate dryland salinity.

General Terms of Approval have now been received from the NSW EPA and include conditions requiring the development and implementation of a detailed Water Management Plan. These conditions should address any impacts related to the quarrying activities and should also satisfy the relevant DPI - Office of Water comments."

(a)(ii) *Any draft environmental planning instruments apply to the land or the proposed use to which the Development Application relates,*

No draft environmental planning instruments apply to the land to which the Development Application relates.

(a)(iii) *Any development control plan,*

Dubbo Development Control Plan (DCP) 2013 is applicable to the subject site and specifically Chapter 2.4 Rural Development and Subdivisions.

The Chapter relates predominantly to agricultural uses and as such is not entirely relevant with regard to *extractive industries*. Those Elements that are relevant are discussed below.

Element 3: Access

The quarry will be servicing the larger DZP area to the north, with all access internal. There are no impacts upon Council's road infrastructure system. There is emergency access to the quarry via an existing farm access track to the south, utilising the 'Karingle Homestead' on Eulandool Road. The track will be maintained for the life of the quarry to provide a secondary access and egress route in the case of an emergency.

Element 6: Waste management

In respect of waste management the submitted EIS states:

"There would be minimal waste rock material created through the proposed operations. Any available waste rock would be managed in the following order of priority.

- 1. In the construction of a safety bund around the perimeter of the extraction area.*
- 2. For environmental or rehabilitation works on the larger DZP Site.*
- 3. Stockpiled for future replacement within the final void of the extraction area.*

The principal wastes that would be generated would be general wastes associated with equipment maintenance, and day to day operations. Any paper and general wastes originating from the office and amenities together with routine maintenance consumables from the servicing of equipment facilities would be disposed of in appropriate containers placed adjacent to the office or a storage container within the stockpiling and handling area. The waste containers would be collected by a licenced waste disposal contractor or removed to a licenced facility on an as-needs basis.

All wastes capable of being recycled e.g. paper, cardboard, metals, would be separately stored from non-recyclable wastes.

Any waste oil (should maintenance works be undertaken within the Quarry Site) would be stored within a bunded facility and collected by a waste oil contractor on a regular basis."

It is considered that the waste management arrangements as outlined would be appropriate. The waste management issue is covered in Condition 1 of the proposed development consent, which requires compliance with the submitted EIS and Condition 3 of the proposed development consent, which requires compliance with requirements with the General Terms of Approval provided by the NSW Environment Protection Authority.

Chapter 3.1 Access and Mobility

Given the nature of the work conducted on-site – *extractive industry*, it is argued that the requirements of this Chapter are not applicable. All persons working and accessing site would need to be able bodied to work on the site.

(a)(iv) The regulations

As described earlier in the report, various matters regarding the nature of the proposal, the consent authority and advertising, have all been addressed.

(b) The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

As stated above (DLEP 2011, Cl. 7.2), while there will be some clearing of remnant vegetation it is minimal, having negligible impact on the natural or built environment.

The beneficial social and economic impacts resulting from the proposed development are that the extraction of basalt from the quarry, means that the raw materials do not have to be extracted elsewhere and then be transported along public roads.

(c) The suitability of the site for the development

The quarry will have minimal impacts. There will be no impacts to any access points to the Dubbo Zirconia Project area, thereby reducing vehicles movements on the public road network. There are no perceived impacts with regard to the environment (air quality, water resources and water cycle, acidity, salinity soils management or microclimatic conditions).

(d) Any submissions

The proposed development was exhibited in accordance with Sections 78, 79 and 80 of the Environmental Planning and Assessment Regulation 2000 and Sections 79 and Section 79A of the Environmental Planning and Assessment Act 1979, with a notice first appearing in the Daily Liberal newspaper on Thursday 3 March 2016, then Thursday 17 March 2016, with copies of the Development Application (including the EIS) available for public perusal at Council's Administration Building until Monday 4 April 2016 (being a period in excess of twenty-eight (28) days). The Development Application (including the EIS) was also available at:

- The Department of Planning and Environment, Information Centre, 23-33 Bridge Street, Sydney;
- On Council's website (Application Tracker); and
- Letters were sent to adjoining property owners.

The exhibition period for the proposed development ended Monday 4 April 2016. Council received no submissions and as such, no referral is required to the Secretary under S81 of the Environmental Planning and Assessment Regulation 2000 or S80(9) of the Environmental Planning and Assessment Act 1979.

(e) The public interest

There are no matters other than those discussed in the assessment of the Development Application above that would be considered to be contrary to the public interest.

5. SECTION 64/SECTION 94 CONTRIBUTIONS

Contributions are not applicable to the rural area for this development.

6. INTERNAL REFERRALS

Building Assessment

Council's Building Services Supervisor in his report dated 25 February 2016 raised no concerns with the proposed development, providing conditions regarding the temporary transportable crib/ablutions structure and a notation regarding a sewage management facility. The conditions and notations by the Building Services Supervisor have been included in the recommended conditions of consent attached to this report as **Appendix 1**.

Engineering Assessment

Council's Development Engineer in his report dated 17 March 2016 raised no concerns with the proposed development stating that as it is internal to the Dubbo Zirconia Project site, there are no impacts upon Council's civil engineering infrastructure without the need to adjust any

driveway access arrangements. As such, no conditions or notations were recommended from an engineering perspective.

Environment and Health Assessment

Following the submission of additional information and the issuing of General Terms of Approval by the NSW EPA, Council's Environment and Health Services Supervisor in his revised report dated 17 June 2016, stated as follows:

"General Terms of Approval have been received from the NSW EPA in relation to noise impacts emanating from within the site. Strong conditions have been included which will be enforced by the EPA to control any likely impacts. Standard notation recommended to address any impacts not directly related to the quarrying activities.

General Terms of Approval have now been received from the NSW EPA in relation to odour and dust impacts emanating from within the site. Conditions have been included which will be enforced by the EPA to control any likely impacts. Standard notation is recommended to address any air pollution impacts not directly related to the quarrying activities.

General Terms of Approval have been received from the NSW EPA in relation to waste management within the site. Conditions have been included but appear to only relate to the management and disposal of wastes onsite.

No other waste management impacts are likely provided the relatively small amount of general wastes likely to require off-site disposal are assessed and disposed of in an appropriate manner.

Standard condition is therefore recommended."

The conditions and notations recommended by the Environmental and Health Services Supervisor have been included in the recommended conditions of consent attached to this report as **Appendix 1**.

7. RECOMMENDATION

The proposed development to establish a quarry (*extractive industry*) complies with the requirements of the Environmental Planning and Assessment Act, 1979, Environmental Planning and Assessment Regulation, 2000, relevant State Environmental Planning Policies, Dubbo Local Environmental Plan 2011 and Dubbo Development Control Plan 2013. Further it is anticipated that the subject development would positively contribute to the approved Dubbo Zirconia Project and enable that development to operate more efficiently with a reduced impact on local roads due to its vicinity.

Accordingly, it recommended that the proposed quarry (*extractive Industry*) at Lot 19, DP 753252, 65L Eulandool Road, Benolong be approved subject to the conditions attached in **Appendix 1**.

Darryll Quigley
Planning Services Supervisor

Date: ____/____/____

Melissa Watkins
Director Environmental Services

Date: ____/____/____

Mark Riley
Interim General Manager

Date: ____/____/____