



Title of Proposal - Cherrabah Mine Access Road

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Mining

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The Joyful View Unit Trust (JVUT) proposes to develop and operate a Granite Dimension Stone Mine at the Cherrabah property, within the Southern Downs Regional Council (SDRC) area. The site consists of a 1988ha freehold property accessed by Keogh Road. The property has been owned by JVUT since 2004 with an existing Eco Resort operating from site. The identified granite resource is estimated to produce a high quality dimension stone product for sale to local and export markets.

The Cherrabah Granite Mine is located approximately 25km south of Warwick on a property described as Lot 1000 SP268215. The location is within Southern Downs Regional Council and is part of the New England Tablelands. The property has a total area of 1988ha, but the proposed Mining Lease will only cover approx. 17.42ha which is less than 1% of the total land area. The land borders the QLD/NSW boundary on the south eastern side with elevations of approx 940m at the border to 630m at the site entrance. The property is accessed from Keogh Road via O'deas Road and Cullendore Road. The existing access to the site is via the northeast corner of the property and Keogh Road through the Cherrabah Resort facility. However, an alternative access is proposed from the existing gate to the west around the northern end of the airstrip then onto the existing access track to the Mining Lease.

The property is quite large and therefore has a large variety of conditions including heavily vegetated hills, baron granite outcrops and historically cleared slopes. The site contains a rolling hills with the highest point at the southern boundary, and the lowest at the northeast boundary. Small intermittent watercourses drain to the north and form the headwater of the Condamine River. There is evidence of mineral fossicking in the surrounding area, but the proposed ML area mostly contains virgin granite outcrop and surrounding Eucalyptus woodland. A significant portion of the property contains remnant 'least concern' and 'of concern' vegetation including the ML area and approximately half of the internal access road.

Establishment of the mine requires several construction/earthworks projects:

- Construction of the internal access road from the Mining Lease to the property entrance: this is to be constructed to rural road standard with a 6m wide gravel pavement on an 8m formation or other suitable design. (Refer Traffic Report in Appendix 13);
- Earthworks to level an appropriate processing and stockpiling area to the north of the resource area: including appropriate stormwater drainage infrastructure Establishment of the



site infrastructure (including office, amenities, power & communications).

- Establishment of access to the extraction area by several access roads graded to suit vehicle access.
- Once production exceeds 5,000t/a upgrade of Keogh Road at 5 locations as described in the traffic report to an 8m sealed pavement.;

This site establishment and construction phase is scheduled for a 3 month period following Mining Lease approval.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Road Closure & Access Route	1	-28.425914773232	152.08903266889
Road Closure & Access Route	2	-28.423895600559	152.09671451551
Road Closure & Access Route	3	-28.425914773232	152.08903266889
Access Route & Mine	1	-28.425995044618	152.08894056037
Access Route & Mine	2	-28.43786397285	152.05580991462
Access Route & Mine	3	-28.43788284131	152.05580991462
Access Route & Mine	4	-28.439467779966	152.05662530616
Access Route & Mine	5	-28.443354552817	152.05849212363
Access Route & Mine	6	-28.444958276692	152.05411475852
Access Route & Mine	7	-28.443599829808	152.05278438285
Access Route & Mine	8	-28.43986401092	152.05214065269
Access Route & Mine	9	-28.438335683349	152.05514472678
Access Route & Mine	10	-28.434146820535	152.06087392524
Access Route & Mine	11	-28.432184413347	152.06688207343
Access Route & Mine	12	-28.425995044618	152.08894056037

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

Lot 1000 on SP268215 and part of Cherribah Cherry Gully Road, Elbow Valley - please see Site



Based Management Plan

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

5.37 ha

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. Lot 1000 on SP268215

1.8 Primary Jurisdiction.

Queensland

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 09/2017

End date 08/2018

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

Road closure under the Land Act 1994

Mining Lease under the Mineral Resources Act 1984

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Public notification has been carried out for the Mining Lease

Public notification for the road closure is yet to be carried out



1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

Not applicable

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No



Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The [interactive map tool](#) can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

- [Profiles of relevant species/communities](#) (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- [Significant Impact Guidelines 1.1 – Matters of National Environmental Significance](#);
- [Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies](#).

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Border Thick-tailed Gecko (<i>Uvidicolus</i>	Direct impacts - Removal of 1.8 ha (or 15%) of



Species	Impact
sphyrurus) - Vulnerable Two individuals of this species were recorded during spotlight surveys in woodland habitat on the upper slopes of granite outcrop. Approximately 12.2 ha of Border Thick-tailed Gecko habitat has been identified in the project area	Border Thick-tailed Gecko habitat in the project area Indirect impacts associated with construction and operation of the proposed granite mine include noise and vibration, erosion and sedimentation, and the introduction or spread of invasive species.
Koala (<i>Phascolarctos cinereus</i>) - Vulnerable This species was recorded calling from woodland habitat during the field surveys. Approximately 16.8 ha of Koala habitat has been identified in the project area.	Removal of 4.0 ha (or 24%) of Koala habitat in the project area Indirect impacts associated with construction and operation of the proposed granite mine include noise and vibration, vehicle strike, erosion and sedimentation, and the introduction or spread of invasive species.
Spotted-tailed Quoll (south-eastern mainland population) (<i>Dasyurus maculatus maculatus</i>) - Endangered The Spotted-tailed Quoll was recorded within the study area during the current field surveys. Approximately 17.5 ha of Spotted-tailed Quoll habitat has been identified in the project area.	Removal of 4.7 ha (or 27%) of Spotted-tailed Quoll habitat in the project area Indirect impacts associated with construction and operation of the proposed granite mine include noise and vibration, vehicle strike, erosion and sedimentation, and the introduction or spread of invasive species.
Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>) - Vulnerable This species wasn't recorded within or adjacent to the project area during field surveys. However, it is considered to have a high likelihood of occurrence given it has previously been recorded in the eastern portion of the Cherrabah property and there is suitable forage habitat present.	Removal of 4.0 ha (or 24%) of potential forage habitat for Grey-headed Flying Fox in the project area. Indirect impacts associated with construction and operation of the proposed granite mine include noise and vibration and the introduction or spread of invasive species.
Brush-tailed Rock-wallaby (<i>Petrogale penicillata</i>) - Vulnerable This species wasn't recorded within or adjacent to the project area during field surveys. Nonetheless, the Brush-tailed Rock Wallaby is considered to have a moderate likelihood of occurrence based on the habitat present and the potential for this species to use the project area during broader movements through the surrounding landscape. There are no records for this species within 10 km of the project area.	Removal of 4.7 ha (or 27%) of potential habitat for Brush-tailed Rock Wallaby in the project area. Indirect impacts associated with construction and operation of the proposed granite mine include noise and vibration, vehicle strike, erosion and sedimentation, and the introduction or spread of invasive species.
Small Snake Orchid (<i>Diuris pedunculata</i>) - Endangered The Small Snake Orchid, listed as endangered under the EPBC Act is considered to have a moderate likelihood of occurrence within the study area. This assessment is conservative and based on: ? marginal habitat being present at the base of the granite	Removal of a small area of marginal habitat for this species that is outside its known distribution.



Species	Impact
outcrop; and ? presence/absence of this species could not be confirmed because the field surveys were not undertaken during the flowering period for this species. There are no records for this species within 10 km of the project area and the project area is outside the known distribution for this species.	

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

Yes

2.5.1 Impact table

Species	Impact
Black-faced Monarch (<i>Monarcha melanopsis</i>) This species was not recorded during field surveys, but is considered to have a moderate likelihood of occurrence based on potential habitat being present in the project area. There are no records for this species within 10 km of the project area.	Removal of 4.7 ha (or 27%) of potential habitat for this species in the project area.
Fork-tailed Swift (<i>Apus pacificus</i>) This species was not recorded during field surveys, but is considered to have a moderate likelihood of occurrence based on potential habitat being present in the project area. There is one record for this species within 10 km of the project area.	Removal of 4.7 ha (or 27%) of potential habitat for this species in the project area.
Rufous Fantail (<i>Rhipidura rufifrons</i>) This species was not recorded during field surveys, but is considered to have a moderate likelihood of occurrence based on potential habitat being present in the project area. This species has previously been recorded in the eastern portion of the Cherrabah property.	Removal of 4.7 ha (or 27%) of potential habitat for this species in the project area.
Spectacled Monarch (<i>Monarcha trivirgatus</i>) This species was not recorded during field surveys, but is considered to have a moderate	Removal of 4.7 ha (or 27%) of potential habitat for this species in the project area.



Species	Impact
likelihood of occurrence based on potential habitat being present in the project area. There are no records for this species within 10 km of the project area.	
White-throated Needletail (<i>Hirundapus caudacutus</i>) This species was not recorded during field surveys, but is considered to have a moderate likelihood of occurrence based on potential habitat being present in the project area. There is one record for this species within 10 km of the project area.	Removal of 4.7 ha (or 27%) of potential habitat for this species in the project area.

2.5.2 Do you consider this impact to be significant?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place



Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No



Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

The project area primarily encompasses a large, granitic outcrop and immediately associated footslopes. The outcrop has a north to south exposure and is characterised by bare rock with islands of vegetation that have formed in depressions and crevices across the outcrop face. Intact, native woodland vegetation extends around the outcrop and onto the adjoining plains. A field survey was undertaken two ecologists over three days between 14 and 16 December 2016. Based on the results of this survey, the flora and fauna attributes of the project area are described as follows.

Two vegetation types were recorded within and adjacent to the project area. A New England Blackbutt (*Eucalyptus andrewsii*), Youman's Stringybark (*E. youmanii*), woodland on igneous rocks was mapped across the majority of the project area and encompasses the granitic outcrop and vegetation on adjoining slopes. Using the Queensland Herbarium's Regional Ecosystem (RE) mapping methodology, this community is analogous to RE 13.12.2, which has a least concern status under Queensland's Vegetation Management Act 1999 (VM Act). Broad-leaved White Mahogany (*E. caliginosa*) and Queensland Blue Gum (*E. tereticornis*) open forest was mapped on the lower slopes of the granite outcrop. This community is analogous to RE 13.12.4, which has an of concern status under the VM Act.

A total of 205 flora species were recorded during the field surveys representing 70 families and 147 genera. The dominant family group was Poaceae (33 species) with Asteraceae (19 species), Myrtaceae (12 species), Cyperaceae (11 species) and Fabaceae (9 species) also prominent. The dominant family groups exemplify the overall composition and condition of the vegetation communities surveyed, with the ground layer being the most diverse. The species inventory included 21 (10 %) exotic species, four of which are Weeds of National Significance (WoNS).

The eucalypt dominated woodlands within the study area were found to support a diversity of habitat features including:



- i) a variety of tree, shrub and groundstorey species that provide a range of forage and roosting resources
- ii) hollow bearing trees that provide denning resources
- iii) rocky outcrops
- iv) deep leaf litter layer
- v) fallen timber and coarse woody debris.

In addition to the above, a small constructed dam extends into the north-eastern corner of the study area, providing habitat for amphibian and wetland species fauna species as well as a source of water for terrestrial fauna.

A total of 52 fauna species were recorded within the project area during the field surveys. Birds were the most diverse fauna group with 27 species being recorded, followed by reptiles (11 species recorded) amphibians (9 species) and mammals (5 species).

Three EPB Act listed threatened fauna species were recorded within the study area during the field surveys, namely:

- i) Border Thick-tailed Gecko (*Uvidicolus sphyrurus*) – Vulnerable
- ii) Koala (*Phascolarctos cinereus*) – Vulnerable
- iii) Spotted-tailed Quoll (*Dasyurus maculatus maculatus*) – Endangered.

3.2 Describe the hydrology relevant to the project area (including water flows).

SEE STORMWATER MANAGEMENT PLAN ATTACHED

3.3 Describe the soil and vegetation characteristics relevant to the project area.



The project area encompasses a large granite outcrop and associated slopes. For the purposes of vegetation mapping in Queensland, the underlying geology of the project area equates to Land Zone 12, which is described by the Queensland Herbarium as Mesozoic to Proterozoic igneous rocks or in general terms - hills and lowlands on granitic rocks. Soils associated with Land Zone 12 are mainly Tenosols on steeper slopes with Chromosols and Sodosols on lower slopes and gently undulating areas. Soils are typically of low to moderate fertility. Field observations indicate that soils associated with the slopes of the granite outcrop were typically mid-grey to pale brown gravelly sands. The granite outcrop itself had a negligible soil cover, with skeletal sandy gravel recorded in fissures and depressions.

Deeper soils associated with the slopes of the granite outcrop supported dry eucalypt woodland and open forest. The granite outcrop is characterised by expanses of bare rock interspersed by island of low, shrubby vegetation where soil has accumulated in fissures and depressions.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

Not applicable

3.5 Describe the status of native vegetation relevant to the project area.

As described in section 3.1, two vegetation types were recorded within and adjacent to the project area, namely:

- i) RE 13.12.2 - New England Blackbutt and Youman's Stringybark woodland on igneous rocks, which has a least concern status under Queensland's VM Act
- ii) RE 13.12.4 - Broad-leaved White Mahogany and Queensland Blue Gum open forest on igneous rocks, which has an of concern status under Queensland's VM Act.

There is some disparity between the field-validated vegetation mapping and the Queensland Government mapping for the project area. More specifically, the extent of remnant of concern vegetation (i.e. RE 13.12.4) was found to be more restricted than the Queensland Herbarium mapping, with this community being limited to the lower slopes of the granite outcrop. The balance of the project area was found to support vegetation consistent with RE 13.12.2.

Neither of these vegetation communities support the floristic or structural characteristics of any threatened ecological communities listed under the EPBC Act.



3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

Not applicable

3.7 Describe the current condition of the environment relevant to the project area.

The project area is located in a relatively undisturbed portion of the Cherrabah Homestead property (i.e. Lot 1000 on SP268215). Woodland and open forest communities within the project area are relatively intact with large, mature trees recorded throughout. The granite outcrop itself supports large areas of exposed rock face interspersed with islands of low, shrubby vegetation. Weed invasion was relatively low throughout the vegetation communities present and limited ground and shrub layers. Weed invasion was highest in areas that had previously been disturbed for construction of tracks and dams. A diversity of fauna habitats are available within the project area including a variety of tree, shrub and groundstorey species that provide a range of forage and roosting resources, hollow bearing trees that provide denning resources, rocky outcrops, deep leaf litter layer and fallen timber and coarse woody debris. The project area is located within a larger tract of similar vegetation and fauna habitat types within the broader Cherrabah property and adjoining areas.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

Not applicable

3.9 Describe any Indigenous heritage values relevant to the project area.

A cultural heritage due diligence report was obtained from Everick Heritage Consultants Pty Ltd. The following advice was offered:

There are no current or former Native Title Claims over the Project Area. As the Project Area is entirely within freehold land, Native Title has been extinguished. There are no requirements to notify potential Native Title holders or Queensland South Native Title Services of the proposed quarry.

As there are no current or former native Title Claims over the Project Area, the Aboriginal Party is any person or persons who are recognised as Traditional Owners for the region, as described in Section 35 (b) of the ACHA and reproduced above. It is Everick's understanding that the anthropological evidence for the region demonstrates that the Project Area is within the Traditional lands of the Githabul People. Should the Proponent wish to consult with an Aboriginal party, Everick can provide advice as to whom the most appropriate persons / families would be.



A search conducted on 21 November 2016 of the DATSIP database revealed no Aboriginal sites within 1000m of the Project Area.

A site inspection of the Project Area was undertaken by Everick Director Tim Robins and Everick Archaeologist Pauline Fowler on Wednesday, 14 December 2016. The survey was completed largely on foot, with some existing access tracks being surveyed by vehicle. The objective of the survey was to record any archaeological cultural heritage material found and assess its significance; and assess the potential for concealed Aboriginal archaeological sites. Photographs were taken as a record of general features and conditions. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features.

Aboriginal heritage was located in two parts of the Project Area. These consisted of an artefact scatter (AS01), located along the access track in a small drainage line (Figure 2), and a scar tree (ST01) located within the Proposed Access Track easement (Figure 3). The artefact scatter consisted of predominately locally sourced basalt flakes and cores with one quartz artefact also observed. Given the disturbance in these areas, the artefacts are considered of low to moderate scientific significance.

A scar tree (CST01), which has been assessed as likely meeting the threshold for being a cultural scar, was located at the eastern extent of the proposed access track. The scar terminated neatly at the base and the top. It showed no evidence of axe marks (stone or metal) and was located on a mature Queensland Blue Gum approximately 15 metres in height. Three additional non-cultural scar trees (NCST01; NCST02 & NCST03) were identified during the survey, where it was concluded that neither fulfilled the necessary criteria to be considered of Aboriginal cultural origin.

Two areas containing potentially Significant Aboriginal Objects, as defined under the ACH Act, were found during the archaeological survey, being AS01 and ST01. Should the Proponent wish to impact on these areas, an agreement with an Aboriginal Party will be required. However, from discussions with Ausrocks, it is anticipated that both AS01 and ST01 will be able to be avoided. An appropriately qualified environmental consultant should be consulted over an appropriate buffer zone to ensure the ST01 tree is not harmed by the construction and ongoing use of the access track. Figure 4 provides a plan of the potential boundaries of site AS01. Conclusively determining the boundaries of the artefact scatter can only be achieved through subsurface archaeological testing, which would generally require the consent of the Aboriginal party. In the absence of such works, Everick must use archaeological modelling to propose a likely boundary. Key factors that we have considered in identifying a potential boundary of AS01 as shown in Figure 4 are:



- a) areas with exposed rock can demonstrably be shown not to contain Significant Aboriginal Objects;
- b) despite the high degree of surface visibility, no artefacts were located further east along the access track;
- c) it would appear the focal point of Aboriginal occupation was the banks of the creek line south of the Project Area; and
- d) the extensive cultural heritage survey works undertaken by Archaeo in 2009 around the Cherrabah

Resort found no artefact scatters of significance, demonstrating that that site AS01 is not indicative of an area rich in archaeological potential.

Whilst we believe these conclusions are defensible, we note that without archaeological testing they remain open to conjecture and potential challenge, including through a potential stop work order. It should also be noted that Aboriginal persons may have particular knowledge about the cultural values of the Project Area that are not publicly accessible.

Recommendations: The options for ongoing heritage assessment generally fall into three categories:

1. Consultation with an Aboriginal Party to determine whether cultural values not identified in this assessment.
2. Preparing and independent archaeological assessment report to substantiate reasonable measures being taken to avoid impacts to cultural heritage (used in the event of a potential stop work order or investigation of alleged harm to Aboriginal heritage), consistent with s23(2)(d) of the ACHA.
3. Relying on this letter of advice.

If consultation with an Aboriginal Party does not occur, it is recommended that the Proponent as a minimum:

- a) fence the ST01 site and Heritage Avoidance Area prior to any construction activities



occurring within the Project Area;

b) seek to implement a potential cultural heritage find procedure into their Environmental Management Plan;

c) Document the results of this assessment in professional archaeological assessment, including

documenting:

a. Relevant environmental attributes of the project area.

b. Authoritative archaeological and anthropologies research for the region.

c. Archaeological predictive modelling.

d. Archaeological survey methods including statistical analysis of survey coverage and adequacy.

e. Analysis of how any management outcomes relate to legislative requirements and archaeological best practise.

d) provide a cultural heritage induction to relevant contractors undertaking initial clearing and grubbing

works within the proposed processing area.

These recommendations should be reviewed if and when the DOC Guidelines are amended by DATSIP in mid to late 2017.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The project area is located within a privately owned freehold parcel of land, namely Lot 1000 on SP268215. The Cherrabah property has a total area of 1,988 ha, but the project area only encompasses approximately 17.5 ha (< 1 %) of the total land area.

3.11 Describe any existing or any proposed uses relevant to the project area.

There are no current uses of the project area at present, except for passive recreation activities such as bushwalking. However, the project area lies approximately 4 km west-southwest of the



Cherrabah Resort and close to the western boundary of the property (Lot 1000 on on SP268215).



Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Measures to avoid impacts

The proposed granite mine layout is dependent on the geology of the area, and is constrained by the availability of granite rock. Nonetheless, measures have been taken to reduce the footprint of the proposed granite mine to extent necessary for viable establishment and operation of the granite mine. To improve the financial viability of the proposed granite mine, use of by-products resulting from the extraction of dimension stone will be incorporated into the proposed operations. Use of these by-products essentially reduces the dependency on increasing the footprint of granite extraction to improve financial returns. The potential also exists to retain trees within the site office and stockpile area where practical.

Measures to reduce impacts

A number of controls on the clearing method are proposed in order to minimise impacts on vegetation communities and fauna habitat. These measures are discussed in detail in the Ecological Report (MNES) prepared by EcoSM and are summarised below.

i) Pre-clearing surveys by an appropriately qualified and licensed ecologist/fauna spotter-catcher to identify, map and mark potential fauna breeding/roosting habitat trees, active roosts and nests. The spotter catcher will also identify suitable habitat outside the clearing footprint for relocation of fauna, and assess whether additional habitat features are required (such as providing artificial hollows). Nocturnal spotlighting surveys should be undertaken over two nights prior to clearing to identify and relocate any Border-thick Tailed Geckos located in or within 100 m of the clearing area. Spotter catcher services will include the management of threatened fauna where they are discovered within the clearing footprint and the provision of advice about which direction trees should be felled, how hollows are to be handled and how felled timber should be left, retained or relocated.



ii) Vegetation clearing - Clearing will be undertaken sequentially. This process includes delineation of the approved clearing area with survey pegs or flagging tape. This will ensure that any areas of remnant vegetation to be cleared are restricted to the minimum area necessary for construction of the proposed granite mine to prevent unnecessary encroachment of disturbance into adjoining remnant vegetation. Large hollow logs should be relocated into undisturbed areas to supplement potential denning resources for the Spotted-tailed Quoll.

iii) Minimising clearing - Where there is flexibility in the locating of certain infrastructure (e.g. site office, stockpile area), the proponent will prioritise avoiding remnant vegetation, where possible.

iv) Weed control - Appropriate weed control and management measures will be incorporated into the management of the proposed granite mine. Potential measures include, but are not limited to weed audits and mapping, design and implementation of an appropriate treatment control program, monitoring of weed infestations, clean-down of all vehicles and plant prior to entering the proposed haul road, inclusion of weed hygiene in site specific inductions.

v) Erosion, sedimentation and stormwater - A Stormwater Management Plan (SMP) has been prepared for the proposed granite mine. This plan provides key management strategies to reduce potential erosion and sedimentation through minimising disturbed catchment areas, the use of diversion bunds/drains and use of catch drain treatments. The SMP also provides measures for the internal management and treatment of surface runoff using a combination of sediment fences, check dams and sediment basins. A Site Based Management Plan has also been prepared for the proposed granite mine and includes a number of measures to mitigate impacts associated with stormwater, erosion and sedimentation.

vi) Vehicle strike - Given the size of the proposed granite mine operation, vehicle movement along the internal haul road will be relatively low. When the mine is at its maximum operating capacity, it is anticipated that there will be between 10 and 15 heavy vehicle movements along the haul road per day. Speed along the haul road will be limited to 40 km/hr and the design and alignment of the road itself, with creek crossings and bends, will moderate vehicle speed. It is also noted that the mine will not be operating during the night, in which case the risk of vehicles striking nocturnal species such as the Spotted-tailed Quoll will be low.

vii) Noise and vibration - The SBMP includes measures to manage and mitigate impacts associated with noise and vibration. It is noted that blasting is not required for extraction of dimension stone, rather blocks of granite will be cut from the granite dome with a Diamond Wire Saw. Noise and vibration would therefore be associated with the operation machinery such as a diamond wire saw, stitch drill, blade saw, excavator, rock breaker, front end loader and fork lift.



Mitigation measures specified in the SBMP include fixed operating hours, personnel qualifications and training, equipment and machinery maintenance, use of mufflers on all combustion engines and minimising incidental noise such as reverse beepers or radios especially after operating hours. It is noted that the proposed granite mine will not include any night works.

viii) Site rehabilitation - A Rehabilitation Plan has been prepared for the proposed granite mine. This plan outlines the rehabilitation intent for the quarry based on the intended final land use for different areas. It is intended to return the processing and stockpiling area to natural bushland, while the outcrop will remain as an open pit water storage but will be fenced. The on-site dams will also remain for firefighting purposes, but the land around it will be returned to native bushland.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

The primary environmental outcome to be achieved for matters protected under the EPBC Act is no significant residual impact as detailed in the Ecological Report (MNES)



Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No



5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

The Ecological Report (MNES) prepared by EcoSM (2017) provides significance assessments for threatened flora and fauna species, and listed migratory species that were either identified in the project area or assessed as having a moderate likelihood of occurrence. These assessments conclude that for each matter there is no significant residual impact given:

The footprint of the proposed granite mine is relatively small

there are large tracts of similar habitat within the Cherrabah property and adjoining areas that directly connect with the proposed granite mine footprint

potential indirect impacts will be managed appropriately through relevant management plans.

Given the above, we are of the view that the proposed granite mine should not be a considered a controlled action under the provisions of the EPBC Act.



Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

The applicant is a first-time operator and does not have a record of responsible environmental management at this stage.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Not applicable

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

Joyful View Unit Trust recognises and accepts that caring for the environment needs to be integrated with Company management and that due regard for environmental management is critical to a successful business.

Joyful View Unit Trust accepts joint responsibility to protect and enhance the quality of our environment which commits us to:

- Support the principles of sustainable development in particular, optimise the use of our waste products through recycling and rehabilitation.
- Train and encourage employees to act in accordance with Environmental Management



Guidelines set by the Company and relevant Government agencies ensuring that we comply with all environmental regulations as a minimum standard through induction and ongoing awareness programs.

- Prevent or minimise air, water and land pollution through effective management procedures aligned with government approval conditions.
- Assist the public in understanding the environmental impact of our project with a focus on minimising the environment impact on our neighbouring residences.
- Be proactive in the promotion of energy efficiency in our operations.
- Provide the public with access to our environmental policy to ensure we remain transparent in our commitments.

Joyful View Unit Trust understand that being environmentally responsible in the way we conduct our operation will ensure the protection of the environment for our future generations

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

No



Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Ecological Report by Ecological Survey & Management	The author is a qualified ecologist	not applicable



Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

The resource to be mined is only located in the area proposed and therefore there are no feasible alternatives to taking the proposed action.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No



Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Manager

9.2.2 First Name

Enoch

9.2.3 Last Name

Ren

9.2.4 E-mail

enoch.ren@royalduke.com.au

9.2.5 Postal Address

1 Gladstone Road
Highgate Hill QLD 4101
Australia

9.2.6 ABN/ACN

ACN

110967023 - Joyful View Garden Real Estate Development Resort Co. Pty Ltd

9.2.7 Organisation Telephone

0425 967 799



9.2.8 Organisation E-mail

enoch.ren@royalduke.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date:

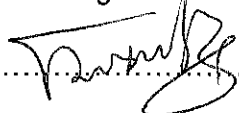
9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

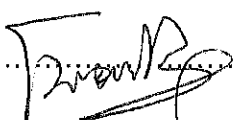
9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Enoch REN, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:.....  Date: 31/08/2017.....

I, Enoch REN, the person proposing the action, consent to the designation of WENDY WOOD as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:.....  Date: 31/08/2017.....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?



Organisation

9.5 Organisation

9.5.1 Job Title

Senior Town Planner

9.5.2 First Name

Wendy

9.5.3 Last Name

Wood

9.5.4 E-mail

wendy.wood@ausrocks.com.au

9.5.5 Postal Address

PO Box 359
Virginia BC QLD 4014
Australia

9.5.6 ABN/ACN

ABN

64056939014 - AUSROCKS PTY LTD

9.5.7 Organisation Telephone

0732653399

9.5.8 Organisation E-mail

carl.morandy@ausrocks.com.au

Proposed designated proponent - Declaration

I, WENDY WOOD, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.



Signature:.....*W. A. W. A. A.*..... Date: *29/8/17*.....

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Senior Ecologist

9.8.2 First Name

Monica

9.8.3 Last Name

Campbell

9.8.4 E-mail

monica.campbell@ecosm.com.au

9.8.5 Postal Address

PO Box 5385
Brendale QLD 4500
Australia

9.8.6 ABN/ACN

ABN

94570133824 - STEVEN PATRICK MARSTON

9.8.7 Organisation Telephone

0448 899 649

9.8.8 Organisation E-mail

steve.marston@ecosm.com.au

Referring Party - Declaration



I, MONICA CAMPBELL, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: M. Campbell Date: 30/08/17



Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. appendix_6_-_site_plans_small.pdf
2. appendix_7_-_rehabilitation_management_plan_small.pdf
3. appendix_8_-_stormwater_management_plan_small.pdf
4. ecological_report_small.pdf
5. site_base_management_plan_report_v1.2.pdf