



DOC17/88811-1
SSD 7332

Ms Megan Dawson
Senior Planning Officer, Resources Assessments
Department of Planning and Environment
megan.dawson@planning.nsw.gov.au

Dear Ms Dawson

Eagleton Quarry - Environmental Impact Statement - Exhibition (SSD 7332)

I refer to your email dated 2 February 2017, seeking comments on the proposed Eagleton Quarry Environmental Impact Statement (EIS).

The Office of Environment and Heritage (OEH) has undertaken a review of the EIS titled *State Significant Development Application – Environmental Impact Statement: Eagleton Quarry, Barleigh Ranch Way (including Appendices)*, prepared for Eagleton Rock Syndicate Pty Ltd by JBA Urban Planning Consultants Pty Ltd (dated January 2017). OEH's review is in relation to threatened biodiversity, Aboriginal cultural heritage, and flooding / floodplain management. OEH understands the proposal is a State Significant Development project (SSD 7332) under the *Environmental Planning and Assessment Act 1979*.

The proponent has assessed the project under the NSW Biodiversity Offsets Policy for Major Projects which includes the requirement to comply with the Framework for Biodiversity Assessment (FBA). As part of this process the EIS must include a Biodiversity Assessment Report (BAR), which assesses the impacts on threatened biodiversity. OEH confirms that the EIS contains a BAR and a Biodiversity Offset Strategy. In general, the BAR is compliant with the requirements of the FBA, however, a number of minor issues have been identified in with this document and the associated credit calculator files. It is recommended that these are amended prior to approval being granted. These issues are discussed further in Attachment A.

Some aspects of the assessment of Aboriginal cultural heritage have not been adequately addressed. OEH recommends that the identified matters of concern are addressed prior to approval being granted. Further detailed comments are provided in Attachment A.

OEH has reviewed the flooding / floodplain management sections of the EIS, and is of the opinion the EIS adequately addresses any OEH issues.

If you require any further information regarding this matter please contact Steve Lewer, Regional Biodiversity Conservation Officer, on 4927 3158.

Yours sincerely

 13/3/2017

SHARON MOLLOY
A/Director, Hunter Central Coast Branch
Regional Operations

Enclosure: Attachment A

ATTACHMENT A: OEH REVIEW - EAGLETON QUARRY ENVIRONMENTAL IMPACT STATEMENT EXHIBITION (SSD 7332)

THREATENED BIODIVERSITY

OEH has reviewed the Biodiversity Assessment Report (BAR) and is satisfied that the proposal complies with the Framework for Biodiversity Assessment (FBA; OEH 2014) and the NSW Biodiversity Offsets Policy. OEH recommends that the following minor issues are amended prior to approval being granted.

A specific requirement of the issued Secretary's Environmental Assessment Requirements (SEARs) is that biodiversity / threatened species aspects of the project are to be assessed under the NSW Biodiversity Offsets Policy for Major Projects. This includes the requirement to comply with the FBA and the SEARs (including any project specific SEARs requirements). As part of this process the EIS must include a BAR, which assesses the impacts on threatened biodiversity; and a Biodiversity Assessment Strategy (BOS) which outlines the offset strategy to compensate the loss of biodiversity values. OEH confirms that the EIS included a BAR, titled *Biodiversity Assessment Report – Eagleton Rock Syndicate Pty Ltd: Eagleton Quarry, 13 Barleigh Ranch Way, Eagleton, NSW* (authored by Kleinfelder Australia Pty Ltd and dated December 2016), and that the biodiversity assessment was undertaken by an accredited person under section 142B(1)(c) of the *Threatened Species Conservation Act 1995* (i.e. the person has been checked against OEH's register of accredited assessors). The BAR also contained a compliant BOS (Appendix 2 of the BAR) which outlines the proposed offset strategy, and included copies of the credit profiles that indicate the biodiversity credit yields. OEH also confirms that the proponent submitted the BioBanking credit calculator files via OEH's portal to enable their veracity to be checked.

OEH has reviewed the BAR in conjunction with the submitted BioBanking credit calculator files and is of the opinion the FBA (including the BioBanking Assessment Methodology [BBAM]) has been correctly applied to the project. As part of this review OEH has checked the reliability of the numerous BBAM assumptions utilised in the BAR as part of their assessment and supports their conclusions (e.g. application of assessment circles, determination of 'plant community type', assessment of connectivity, targeted threatened species surveys etc.). OEH generally concurs with these assumptions as briefly outlined below, unless otherwise stated:

- OEH supports the BAR in its assertion that the main Plant Community Type (PCT; as per OEH's VIS database) on both the development footprint and biobank area is 'HU804: Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (PCT 1590) and concurs with the condition ratings assigned to the different vegetation zones. However, OEH does not agree that it is the only PCT present. Based on a site inspection (in February 2017), OEH is of the opinion that the riparian vegetation associated with the third order stream ('Seven Mile Creek', as shown on Figure 2 – Site Map – Development and Offset Sites in the BAR) located in the eastern part of the BioBank agreement site (excluding a small area affected by proposed haul road), represents a different and mappable PCT due to the dominance of *Eucalyptus acmenoides*, *Backhousia myrtifolia*, *Melaleuca linariifolia*, *Callistemon salignus* and other mesic vegetation (including elements of the previously mentioned Spotted Gum community). OEH recommends assigning 'HU798: White Mahogany - Spotted Gum - Grey Myrtle semi-mesic shrubby open forest of the central and lower Hunter Valley (PCT 1584). The BAR originally suggested this, but was discounted on the basis of structure. However, OEH disagrees with the assumption (as per Table 3 in the BAR), noting that the vegetation along these drainage lines would be consistent with a wet sclerophyll forest formation, given the dominance of ferns and other mesic understorey vegetation. OEH concurs that the vegetation on the first and second order streams that branch off the large drainage line would not be considered mesic and essentially these riparian areas represent minor variation within the broader HU804 unit. As such, OEH recommends that the vegetation along the third order stream in the BioBank area (excluding the small area where the proposed haul road crosses the creek) be assigned to PCT 1584 (HU798) and the BioBanking Assessment Methodology (BBAM) credit calculator be re-run to reflect this change and determine the revised biodiversity credit yields.

- Based on a site inspection, OEH concurs that the BBAM sampling quadrats / plots adequately reflect the vegetation on both the development and offset sites, with respect to PCTs present, geographic spread across the site, floristics, condition, and cover and abundance. OEH audited Kleinfelder's BBAM / floristic plot data sheets and found them to provide an accurate representation of the HU804 vegetation, and that plots within the larger drainage line (Q1 and Q3) were indicative of HU798. Similarly, OEH has reviewed the survey effort undertaken for the proposal, including targeted surveys (both flora and fauna; as detailed in Tables 5 and 8 of the BAR) and the BBAM plots (as outlined above). OEH acknowledges that they appear adequate with respect to sampling techniques, stratification areas / habitat sampled and timing / seasonality; and they appear to be compliant with recommended OEH guidelines (e.g. DEC 2004, DEC 2009).
- OEH is of the opinion that the data inputted into the credit calculator as detailed in the BAR has been correctly entered for both the development and offset proposal, with respect to assessment circles, determination of vegetation cover, regionally significant linkages and corridor widths, patch size, potential habitat niches / elements and overall plot / quadrat data (including condition indices).
- The BAR indicates that the Koala and the Southern Myotis were recorded on both the development and offset sites. Under BBAM, all suitable habitat (i.e. foraging and/or breeding) for these species must be identified on both sites to determine the 'species' credit yields (i.e. for development sites the number of credits the impact will generate, and similarly for the offset site credits that can be used to offset the impact). OEH generally concurs with the species habitat polygons used to generate the 'species' credits, as schematically shown on the habitat maps in the BAR (Figures 5 [Koala] and 6 [Southern Myotis]). With regard to the Koala, OEH notes that the proponent has utilised the methodology under SEPP44 (Koala Habitat Protection) in identifying areas which have greater than 15% of recognised primary browse / feed trees (e.g. *Eucalyptus punctata* and *Eucalyptus tereticornis*) and then further assessing these areas to determine potential occupancy rates via SAT analysis (Phillips & Callaghan 2011). OEH notes that this has resulted in a much more precautionary map (and ultimately more accurate) than the Port Stephens 'Comprehensive Koala Plan of Management' habitat mapping (as shown in Figure 7 of the BAR), which only identifies small areas of Preferred Koala Habitat within the south-eastern corner and along the southern boundary of the proposed offset areas. OEH supports this approach as it appears to correlate well with areas of suitable habitat that were observed during the site inspection. Nevertheless, OEH questions why SAT Test Location in the far south-eastern corner of the proposed offset area, which recorded a 13% activity level, is not included within the 'Koala habitat area' polygon (as per Figure 8 of the BAR).

OEH recommends that either appropriate justification be given as to why this site was excluded or the boundary of the habitat area be amended to include it.

- OEH's recommended Project Specific SEARs requested that appropriate surveys be undertaken to determine whether the threatened orchid *Pterostylis chaetophora* was present on site, given its close proximity to one of the largest known populations in the Grahamstown Dam catchment. These surveys were to be undertaken during its known flowering period (September to November [Bishop 2000]) and samples sent to the NSW Herbarium for identification and/or confirmation if collected. I can confirm that the proponent's ecological consultants (Kleinfelder) consulted with OEH with respect to a suitable reference population to ensure sampling was undertaken when local populations were flowering. The Grahamstown Dam population was used as a reference site and appropriate surveys in accordance with OEH guidelines (OEH 2016) were undertaken in October 2016. The species was not detected on site, nor is there likely habitat present given the specific *Melaleuca* scrub habitat of the Grahamstown site. OEH is of the opinion the BAR has adequately assessed whether the proposal would impact on this species.

- OEH concludes that the BAR and associated BOS have undertaken in accordance with the FBA and BBAM guidelines. OEH notes that the credit calculator will need to be re-run to reflect OEH's comments (as outlined above) and quantum of biodiversity credits amended.

Biodiversity Offset Strategy

OEH notes that the BAR includes a BOS (Appendix A of the BAR), as required under the FBA. The BOS identifies that the proposed development will require the retirement 1,628 'ecosystem credits' (i.e. 24 ha of HU 804), and 276 Koala and 334 Southern Myotis 'species' credits.

As stated in the BOS, the proponent will:

- Establish a formal BioBank Agreement under the *Threatened Species Conservation Act 1995* on the offset lands surrounding the proposed development site. The BOS indicates the proposed offset would satisfy a large proportion of the biodiversity credits required at the development site, and that they are of the appropriate PCT (i.e. HU804) and/or contain suitable species credits. Specifically, that BioBank site will generate 630 'ecosystem' credits, and 304 Koala and 244 Southern Myotis 'species' credits. OEH notes that the Koala proportion of credits will be entirely met by the proposed on-site offset.
- The additional credit requirements (i.e. 998 ecosystem and 90 species [Southern Myotis] credits) will be met through purchasing the credits on the open market, based on 'like for like' matches and /or trade variations that are permitted under the FBA guidelines. Sections 1.3 and 1.3.1 of the BOS identify the proposed process. OEH supports this proposal as it is in accordance with the procedure and guidelines for retiring credits as set out in Appendix A of the *NSW Biodiversity Offsets Policy for Major Projects*. OEH notes that in the first instance, every effort to obtain like-for-like offsets has been committed to (as outlined in Section 1.3 of the BOS), however, if suitable credits cannot be sourced, then a variation of the offset rules (section 10.5.4 of the FBA) will be applied in which credits can be sought from a PCT in the same vegetation formation as the PCT to which the required ecosystem credits relate. OEH agrees this is permissible under the FBA. However, before any variation rule may be applied the proponent must demonstrate to OEH that they have searched the 'credits available' register and lodged a 'credits wanted' expression of interest on the BioBank webpage (www.environment.nsw.gov.au/bimsprapp/BiobankingPR.aspx) for a period of at least 6 months.

References:

Bishop, T. (2000) *Field Guide to the Orchids of New South Wales and Victoria*. Second Edition, University of New South Wales Press Ltd., UNSW, Sydney.

DEC (2004) *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities*. Draft, Department of Environment and Conservation, Hurstville; available at: www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf.

DECC (2009) *Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians*. April 2009. Department of Environment and Climate Change (NSW), Goulburn Street, Sydney.

OEH (2014) *Framework for Biodiversity Assessment*. September 2014. NSW Office of Environment and Heritage, Sydney. www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf

OEH (2016) *NSW Guide to Surveying Threatened Plants*. February 2016. Office of Environment and Heritage, Goulburn Street, Sydney.

Phillips, S. and Callaghan, J. (2011) The Spot Assessment Technique: a tool for determining localised levels of habitat use by koalas *Phascolarctos cinereus*. *Australian Zoologist*, **35**, pp:774-780.

ABORIGINAL CULTURAL HERITAGE

OEH has considered the following documents in the review of Aboriginal cultural heritage matters for the Eagleton Quarry proposal:

- McCardle Cultural Heritage (MCH) Pty Ltd July 2012 *Indigenous Archaeological Due Diligence Assessment Balickera Hard Rock Quarry, LGA: Port Stephens*. Report prepared for Orogen Pty Ltd.
- OEH 2012 *Adequacy Review of Environmental Assessment for Castle Quarry Products Eagleton Quarry (MP 10_0199), Eagleton* (OEH Reference DOC12/44358)
- JBA Urban Planning Consultants 2017 *State Significant Development Application Environmental Impact Statement Eagleton Quarry Barleigh Ranch Way Submitted to Department of Planning and Environment on Behalf of Eagleton Rock Syndicate Pty Ltd*. Pages 92-95 (Section 7.9.1).

The following comments on the Aboriginal cultural heritage components of the Eagleton Quarry proposal are provided. Please note that some aspects of the assessment of Aboriginal cultural heritage have not been adequately addressed. OEH recommends that those matters of concern identified below are addressed prior to approval being granted:

- It is acknowledged that the previously identified Aboriginal archaeological sites have been registered on the OEH Aboriginal Information Management System (AHIMS) as requested in the 2012 Adequacy Review (OEH Reference: DOC12/44358).
- An Indigenous Archaeological Due Diligence Assessment is not the appropriate assessment framework for the Aboriginal cultural Heritage component of the EIS. The assessment provided does not meet the requirements of the DECCW 2011 *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*.
- Section 9.3 of MCH 2012 states that an AHIP is required only if harm will occur to an Aboriginal object or Place;

The OEH 2012 Adequacy Review (OEH Reference: DOC12/44358) noted that this information was not correct and would not apply following approval of a major project. OEH recommends that the management strategy is corrected and addressed via consultation with all relevant Aboriginal stakeholders.

- Section 7.9.1 of the EIS (JBA2017:92) states that consultation was undertaken in consultation with the relevant stakeholders in accordance with the SEARs;

As a general rule, OEH considers gaps in the consultation process of 6 months or more will not constitute a continuous consultation process. It is noted that no evidence of continued consultation with the registered Aboriginal parties has been provided to support the current EIS. OEH therefore considers the Aboriginal consultation undertaken in 2012 as inadequate to support the current proposal and recommends that a revised consultation process for this project (undertaken in accordance with the provisions of the *DECCW 2010 Aboriginal Cultural Heritage Consultation Requirements for Proponents*).

- Section 7.9.1 of the EIS (JBA 2017:92) states:

"It is considered that there is a high potential for isolated finds and/or artefact scatters on the site due to presence of Seven Mile Creek.

PAD 1 will be partially impacted by the proposed development, especially through the construction of roads and bridges during the construction of the quarry. The consequence of this impact would be a partial loss of value. Whilst no Aboriginal items have been

discovered in this PAD, there is a high potential for both surface and subsurface cultural materials to be present.

Subsurface testing is appropriate when a PAD has been identified, and it can be demonstrated that sub-surface Aboriginal objects with potential conservation value have a high probability of being present, and that the area cannot be substantially avoided by the proposed activity. As such, the area where the proposed internal site access road will cross Seven Mile Creek will need to be subject of subsurface testing in order to establish whether any items of Aboriginal cultural heritage are present."

In regard to the proponent's commitment to undertake sub-surface archaeological testing of the identified areas of potential archaeological deposit (PAD), it is noted that Section 3 of the OEH 2012 Adequacy Review (OEH Reference: DOC12/44358) outlined the requirement for the proponent to "...develop an appropriate management strategy in consultation with the RAPs and in compliance with the appropriate legislative provisions." Appropriate management strategies to undertake a sub-surface archaeological testing program, or evidence of consultation with the RAPs regarding the same, have not been provided in the current EIS.

OEH recommends that the identified areas of PAD are investigated prior to project approval in order to adequately assess the likely significance and impact to Aboriginal cultural heritage that may be present in these areas. OEH recommends that all archaeological investigations be undertaken in accordance with the requirements of the *DECCW 2010 Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW*, and that adequate consultation with the Aboriginal community is undertaken in accordance with the provisions of the *DECCW 2010 Aboriginal Cultural Heritage Consultation Requirements for Proponents*.

- Section 7.9.1 of the EIS (JBA 2017:92) states:

"Vegetation cover across the site hampered the survey and as such, these areas have been selected to be further surveyed in the future to ensure any significant artefacts are identified."

Updated survey results have not been provided with the current EIS. OEH recommends that all Aboriginal cultural heritage assessments and/or archaeological assessments of the subject property that are required to determine Aboriginal cultural and scientific significance are undertaken prior to approval.

