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Our Ref: 4158C_DPHI_Response_CKPoM_ed

15 August 2024

James McDonough
Director, Resource Assessments
Department of Planning, Housing and Infrastructure

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Dear James

**RE: SSD-10432 Stone Ridge Quarry – Request for Additional Information,
Port Stephens Comprehensive Koala Plan of Management**

We refer to the Department's Request for Additional Information dated 3 July 2024. This response provides information requested in relation to an assessment of the Stone Ridge Quarry Project against the performance criteria for development applications set out in the Port Stephens Comprehensive Koala Plan of Management (Port Stephens Council, 2002).

A separate response has been prepared to address additional information requested by the Biodiversity Conservation and Science Group (BCS) following its review of our response.

1.0 Context for Assessment

As detailed in the BDAR that accompanied the EIS for the Project, a full suite of habitat and fauna surveys were undertaken targeting koala (amongst other species), in accordance with the SEARS issued for the Project and BAM survey guidelines. Further, as detailed in the RTS (Umwelt, 2024):

- Potential impacts to koala habitat will be fully offset in accordance with the NSW biodiversity offsetting requirements which are based on a no-net-loss principle and impacts on koala habitat will be subject to like-for-like offsetting requirements. Accordingly, the localised impacts on vegetation and fauna should be fully mitigated through offsetting requirements.
- Assessment against the performance criteria within the Port Stephens CKPOM is not a legislative requirement because the Koala Habitat Protection development control provisions of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Part 4) only apply to development applications determined by local councils.
- The CEMP and OEMP will include extensive biodiversity management measures to mitigate the impacts associated with the Project including specific management measures relating to the Koala.

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Further to the above, we also note that Part 4.1 Section 4.4 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Koala habitat protection 2021) provides that the Part does not apply to land which is dedicated under the *Forestry Act 2012* as a State Forest nor to land zoned RU2 or RU3. All but a small section of the Project Area adjacent to Italia Road is reserved as a State Forest under the *Forestry Act 2012* and Zoned RU2 under the Port Stephens Local Environmental Plan 2013 (Port Stephens LEP) and the small part of the Project Area located outside the State Forest is zoned RU2 (refer to Section 2.4 and Figure 2.2 of the EIS). As a result of both the zoning and land dedication, the assessment provisions under koala habitat assessment provisions under Part 4 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* do not apply to the Project.

2.0 Assessment Against Performance Criteria for Development in CKPoM

Notwithstanding the exclusion from the requirement for assessment contained in the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*, the following section contains an assessment of the Project against the performance criteria in Appendix 4 of Port Stephens Council Comprehensive Koala Plan of Management (CKPoM) (PSC, 2002).

The performance criteria apply to developments on sites that contain or are adjacent to the following categories of koala habitat, as mapped under the CKPoM (PSC, 2001):

- Preferred Koala Habitat.
- Supplementary Koala Habitat.
- Habitat Buffers.
- Habitat Linking Areas.

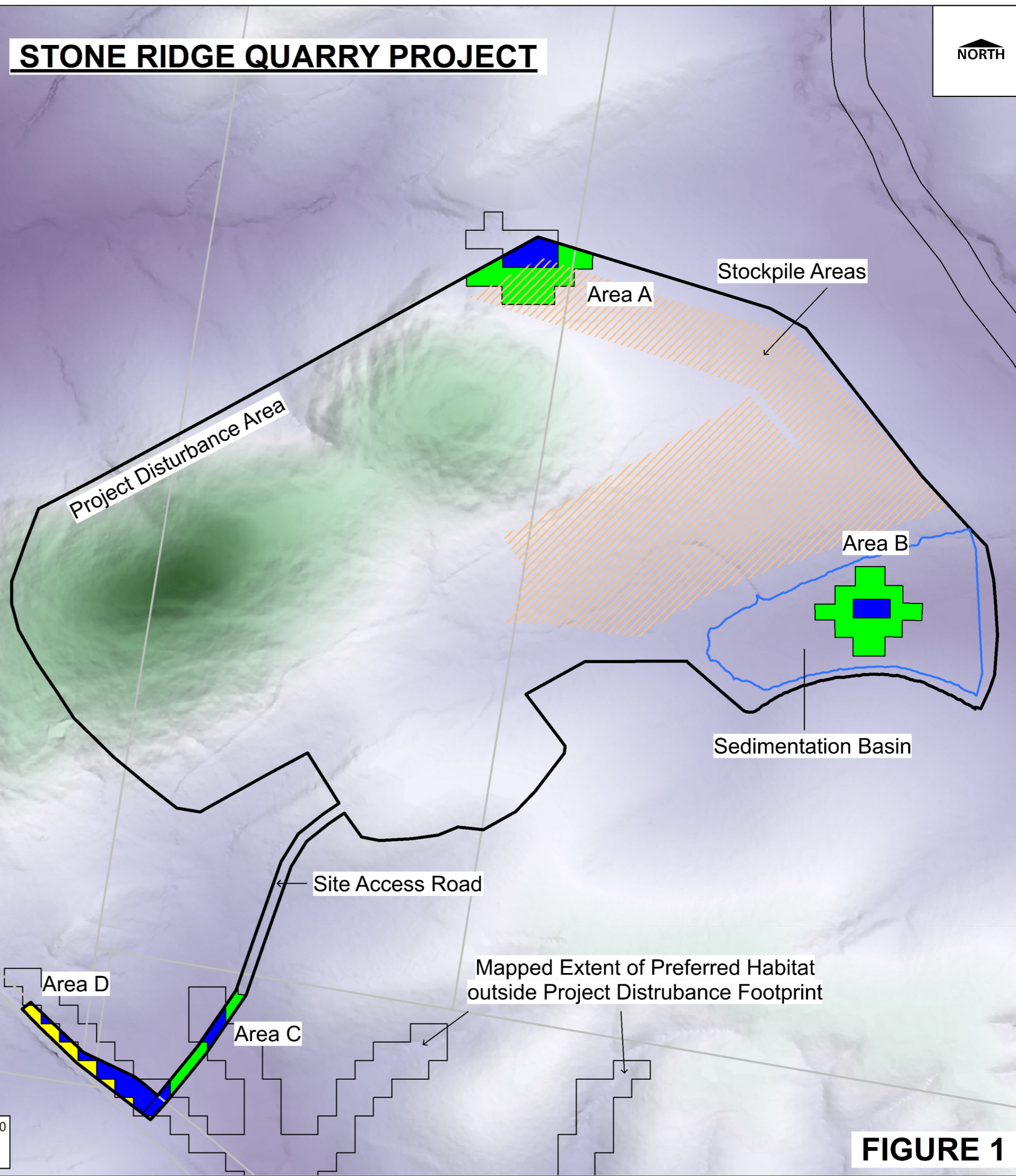
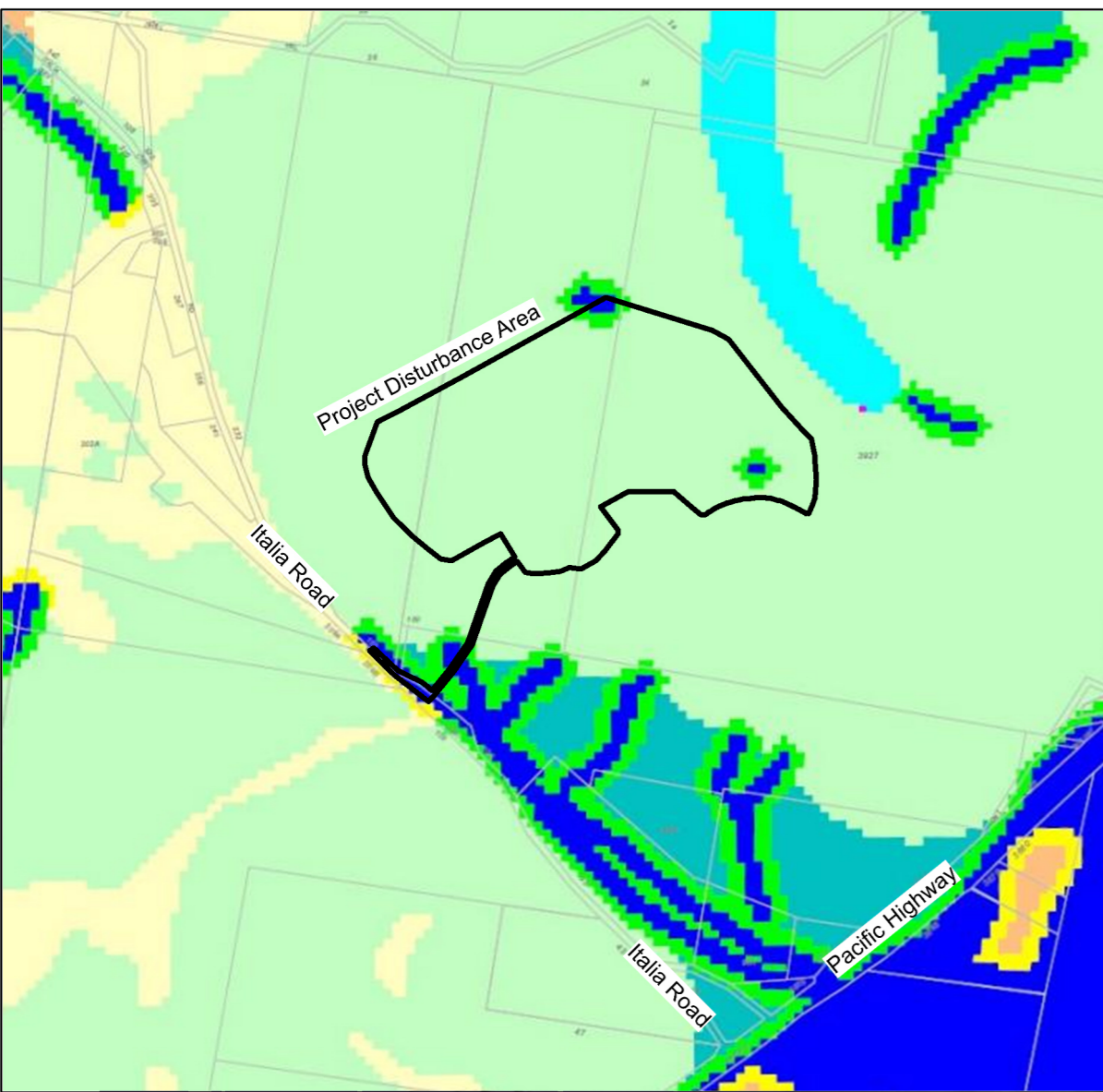
Figure 1 shows Koala Habitat Mapping contained within the CKPoM Map overlaid over the Stone Ridge Quarry disturbance area (68.09 ha). The mapped categories of koala habitats are as follows:

- Preferred Koala Habitat – 0.788 ha (1.16 % of disturbance area).
- 50 m Buffer over Marginal Habitat – 1.704 ha (2.50 % of disturbance area).
- 50 m Buffer over Cleared – 0.197 ha (0.29 % of disturbance area).
- Marginal Habitat – 65.401 ha (96.05 % of disturbance area).

Therefore, application of the performance criteria is relevant for 3.95 % of the proposed Stone Ridge Quarry disturbance area. An assessment of the development against each of the performance criteria is provided below.



STONE RIDGE QUARRY PROJECT

NORTH



Koala Habitat Planning Map

Port Stephens Comprehensive Koala Plan of Management 2002

-  Preferred
-  Marginal
-  Mainly Cleared
-  Unknown
-  50m Buffer over Marginal
-  50m Buffer over Cleared
-  Link over Marginal

Digital mapping obtained from NSW Government Biodiversity Values Map - July 2023

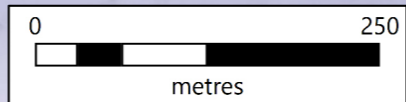


FIGURE 1

2.1 Performance Criteria (a)

Minimise the removal or degradation of native vegetation within Preferred Koala Habitat or Habitat Buffers;

Relative to the proposed disturbance area, the site contains small discontinuous areas mapped as Preferred Koala Habitat and 50 m Buffer over Marginal and Cleared Habitat. These areas combined constitute a very small proportion of the Project site footprint (3.95 %). **Figure 1** illustrates the location of these areas within the proposed disturbance area which are summarised as follows:

Area A - north corner of site adjacent to stockpile area:

- Preferred Koala Habitat (0.236 ha; 0.35 % of disturbance area)
- 50 m Buffer over Marginal Habitat (0.686 ha; 1.01 % of disturbance area).

This area is an isolated, relatively very small pocket, surrounded by extensive areas of mapped Marginal Habitat, both within and outside of the proposed disturbance area.

Area B - eastern portion of site, within sediment basin area:

- Preferred Koala Habitat (0.125 ha; 0.18 % of disturbance area)
- 50 m Buffer over Marginal Habitat (0.848 ha; 0.125 % of disturbance area).

This area is an isolated, relatively small area, surrounded by extensive areas mapped as Marginal Habitat, both within and outside of the proposed disturbance area.

Area C - southern portion of site traversed by a short length (approximately 90 m) of the site access road:

- Preferred Koala Habitat (0.143 ha; 0.21 % of disturbance area)
- 50 m Buffer over Marginal Habitat (0.168 ha; 0.25 % of disturbance area).

This area occurs at the north-western extent of the mapped Preferred Koala Habitat corridor that extends from the Pacific Highway. It is surrounded to the north, west and south by extensive areas mapped as Marginal Habitat, both within and outside of the proposed disturbance area.

Area D - southern portion of site adjacent to Italia Road, where Council has requested clearing to improve sight distance to the west of the quarry access point:

- Preferred Koala Habitat (0.284 ha; 0.42 % of disturbance area)
- 50 m Buffer over Marginal Habitat (0.001 ha; 0.001 % of disturbance area)
- 50 m Buffer over Cleared (0.197 ha; 0.29 % of disturbance area).

Similar to (c) above, this area is located at the north-western end of the mapped habitat that corresponds with the northern side of Italia Road/Balickera Canal. It is surrounded to the north, west and south by extensive areas mapped as Marginal Habitat, both within and outside of the proposed disturbance area.

The following comments are provided with respect to potential impacts on these mapped habitats:

- The disturbance area has been reduced from 79.02 ha to 68.09 ha through the Project design review and assessment process, in particular, in the north corner of the site. This has significantly reduced:
 - the area of Preferred Habitat that would have been impacted (from 0.469 ha to 0.236 ha – 49.7 % reduction).
 - the area of 50 m Buffer over Marginal Habitat that would have been affected (from 1.096 ha to 0.686 ha – 37.4 % reduction).
- The location and extent of the sediment basin (Area B) was determined following detailed consultation with Hunter Water. In addition to consideration of habitat, options for the location of the sediment basin were constrained by topography and the need to achieve the storage requirements of Hunter Water. Importantly, no other viable locations exist within the Project site to construct a sediment basin capable of meeting Hunter Water's requirements. As detailed above, the Preferred Koala Habitat impacted represents 0.18 % of the Project site disturbance area and cannot be avoided.
- In addition to consideration of habitat, options for the location of the site access road (Area C) are also heavily constrained by Balickera Channel, topography, access road engineering standards and the need to achieve acceptable site distance/safety standards at the Italia Road site access point. Noting that Council advised its preferred location for the site access point (opposite the entrance to Seaham Quarry), the alignment of the site access road was designed to meet all the identified constraints, including minimising impacts on koala habitat. As detailed above, the Preferred Koala Habitat impacted by the site access road represents 0.21 % of the Project site disturbance area. The resultant impacts on this habitat, while minimised, cannot be avoided.
- Sight distance clearing adjacent to Italia Road (Area D) is dictated by road safety/engineering standards. Notwithstanding, impacts on habitat were minimised when preparing the design. As detailed above, the Preferred Koala Habitat impacted represents 0.42 % of the Project site disturbance area. The resultant impacts on this habitat, while minimised, cannot be avoided.

2.2 Performance Criteria (b)

Maximise retention and minimise degradation of native vegetation within Supplementary Koala Habitat and Habitat Linking Areas;

The site does not contain any mapped Supplementary Koala Habitat or Habitat Linking Areas.

2.3 Performance Criteria (c)

*Minimise the removal of any individuals of preferred koala food trees, wherever they occur on a development site. In the Port Stephens LGA these tree species are Swamp Mahogany (*Eucalyptus robusta*), Parramatta Red Gum (*Eucalyptus parramattensis*), and Forest Red Gum (*Eucalyptus tereticornis*), and hybrids of any of these species. An additional list of tree species that may be important to koalas based on anecdotal evidence is included in Appendix 8*

One species of preferred koala food tree, *Eucalyptus tereticornis* (Forest Red Gum), was observed during surveys and recorded in PCT 1716 (BAM plot 7), PCT 1618 (BAM Plot 12B) and PCT 762 (Bam Plot 22). The Development Footprint has been modified to avoid impacts to PCT 1716. Impacts to PCT 762 will be limited to removal of 0.33 ha for the construction of the site access; this area broadly aligns with Area C and the associated marginal buffer area for Area C and Area D shown in **Figure 1**. Impacts to PCT 1618 will be limited to removal of 0.88 ha within a narrow linear drainage depression on which the sediment basin will be located and this area broadly aligns with Area B shown in **Figure 1**.

The site disturbance footprint has been carefully designed to minimise disturbance on the site, and as indicated previously has been reduced from 79.02 ha to 68.09 ha. As detailed in the assessment against Performance Criteria (a), reduction of the Project disturbance boundary in north corner of the site has significantly reduced the area of Preferred Habitat that would have been affected by 49.7 %.

Therefore, while the site has been carefully designed to minimise disturbance, the proposed disturbance boundary cannot completely avoid the removal of some vegetation within the Preferred and Habitat Buffer areas within the site.

Notwithstanding, the overwhelming majority (96.05 %) of the site disturbance footprint is mapped as 'Marginal Habitat' under the CKPoM. Therefore, disturbance to preferred koala feed trees has been minimised.

2.4 Performance Criteria (d)

Make provision, where appropriate, for restoration or rehabilitation of areas identified as Koala Habitat including Habitat Buffers and Habitat Linking Areas over Mainly Cleared Land. In instances where Council approves the removal of koala habitat (in accordance with dot points 1-4 of the above waive clause), and where circumstances permit, this is to include measures which result in a "net gain" of koala habitat on the site and/or adjacent land;

An area mapped as 50 m Buffer over Cleared (0.197 ha; 0.29 % of disturbance area) is located adjacent to Italia Road. As indicated in the assessment of Performance Criteria (a), sight distance clearing adjacent to Italia Road is dictated by road safety/engineering standards. Notwithstanding, impacts on habitat were minimised when preparing the design. As detailed above, the Preferred Koala Habitat impacted represents 0.42 % of the Project site disturbance area. The resultant impacts on this habitat, while minimised, cannot be avoided.

Impacts in relation to this clearing (and all clearing on site) will be as detailed in the RTS (Umwelt, 2024):

- Potential impacts to koala habitat will be fully offset in accordance with the NSW biodiversity offsetting requirements which are based on a no-net-loss principle and impacts on koala habitat will be subject to like-for-like offsetting requirements. Accordingly, the localised impacts on vegetation and fauna should be fully mitigated through offsetting requirements.

- The CEMP and OEMP will include extensive biodiversity management measures to mitigate the impacts associated with the Project including specific management measures relating to the Koala.

2.5 Performance Criteria (e) –

Make provision for long term management and protection of koala habitat including both existing and restored habitat;

As detailed in the RTS (Umwelt, 2024):

- Potential impacts to koala habitat will be fully offset in accordance with the NSW biodiversity offsetting requirements which are based on a no-net-loss principle and impacts on koala habitat will be subject to like-for-like offsetting requirements. Accordingly, the localised impacts on vegetation and fauna should be fully mitigated through offsetting requirements.
- The CEMP and OEMP will include extensive biodiversity management measures to mitigate the impacts associated with the Project including specific management measures relating to the Koala.

2.6 Performance Criteria (f)

Not compromise the potential for safe movement of koalas across the site. This should include maximising tree retention generally and minimising the likelihood that the proposal would result in the creation of barriers to koala movement, such as would be imposed by certain types of fencing. The preferred option for minimising restrictions to safe koala movement is that there be no fencing (of a sort that would preclude koalas) associated with dog free developments within or adjacent to Preferred or Supplementary Koala Habitat, Habitat Buffers or Habitat Linking Areas. Suitable fencing for such areas could include:

- fences where the bottom of the fence is a minimum of 200 mm above ground level that would allow koalas to move underneath;*
- fences that facilitate easy climbing by koalas; for example, sturdy chain mesh fences, or solid style fences with timber posts on both sides at regular intervals of approximately 20m; or*
- open post and rail or post and wire (definitely not barbed wire on the bottom strand).*

However, where the keeping of domestic dogs has been permitted within or adjacent to Preferred or Supplementary Koala Habitat, Habitat Buffers or Habitat Linking Areas, fencing of a type that would be required to contain dogs (and which may also preclude koalas) should be restricted to the designated building envelope. Fences which are intended to preclude koalas should be located away from any trees which now or in the future could allow koalas to cross the fence.

As detailed in the RTS (Umwelt, 2024), security fencing will be limited to around the quarry pit and operational areas, but not include the proposed access road. It is unlikely to impact fauna and a koala exclusion fence would limit access to the quarry pit and prevent koala access to operational areas and thus reducing the potential for injury due to site operations.

2.7 Performance Criteria (g)

Be restricted to identified envelopes which contain all buildings and infrastructure and fire fuel reduction zone. Generally there will be no clearing on the site outside these envelopes. In the case of applications for subdivision, such envelopes should be registered as a restriction on the title, pursuant to the Conveyancing Act 1919.

The proposed development has a clearly defined development footprint/disturbance area. No disturbance will occur outside of this area. The proposed development does not involve a subdivision of land. Accordingly, registration of the disturbance area / envelope as a restriction on title is not required.

2.8 Performance Criteria (h)

Include measures to effectively minimise the threat posed to koalas by dogs, motor vehicles and swimming pools by adopting the following minimum standards.

i) The development must include measures that effectively abate the threat posed to koalas by dogs through prohibitions or restrictions on dog ownership. Restrictions on title may be appropriate.

ii) The development must include measures that effectively minimise the threat posed to koalas from traffic by restricting motor vehicle speeds, where appropriate, to 40 kph or less.

iii) The development must reduce the risk of koala mortality by drowning in backyard swimming pools. Appropriate measures could include: trailing a length of stout rope (minimum diameter of 50mm), which is secured to a stable poolside fixture, in the swimming pool at all times; designing the pool in such a way that koalas can readily escape; or enclosing the pool with a fence that precludes koalas. This last option should include locating the fence away from any trees which koalas could use to cross the fence.

The proposed development is not of a type that will allow domestic dogs on site, nor will it include swimming pools. All vehicles on site will be required to adhere to a maximum speed of limit 40 km/hr (lower speed limits will apply in specific locations) and fencing that precludes koalas will be utilised to prevent koalas from entering the quarry pit and associated sediment basins.

We trust this information addresses the request for additional information. Umwelt would be happy to meet with DPHI to discuss further. Please do not hesitate to contact the undersigned on 1300 793 267 should you wish to meet or require any further clarification.

Yours sincerely



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