

Stephen Barry
 Planning Director
 Office of the Independent Planning Commission NSW
 Suite 15.02, Level 15, 135 King Street
 SYDNEY NSW 2000

21 November 2024

Response to request for information regarding Sancrox Quarry Expansion Project (SSD-7293)

Dear Mr Barry

I refer to your request dated 8 November 2024 that the Department comment on revised draft conditions of consent regarding Koala habitat revegetation requirements for the Sancrox Quarry Expansion Project (SSD-7293). The Department has prepared revised draft conditions, taking into consideration the Commission's proposed revisions, and comments from the Applicant and BCS (see Attachments A and B). The Department's response is provided as follows:

Recommended conditions

*B42. The Applicant must revegetate the cleared areas of the site as identified in Appendix 8 in accordance with the Plant Community Types and planting densities described in the documents listed in condition A2(c), and the performance and completion criteria identified in **Table 5**.*

Table 5: Koala habitat revegetation performance and completion criteria

Area	Performance and completion criteria
Northern-most cleared area within Lot 2 DP574308	<ul style="list-style-type: none"> Revegetation must conform to adjacent Plant Community Types and incorporate Broad-leaved paperbark and Swamp mahogany species; Swamp mahogany must occur at a density of between 96 to 188 plants per hectare, of which at least 30% have a diameter at breast height ≥ 100 mm across the revegetation area; [The Department has adopted BCS' recommendation to rely on the 30% koala feed tree density, as it accords with the Class 1 Koala habitat identified in the 'Koala habitat mapping pilot: NSW state forests' study (EPA, 2016) referred to in BCS' advice (see Attachment B)] No barriers to Koala movement across the land marked 'No Barrier to Koala Movement' in Appendix 9 [see figure in Attachment C]; and either Evidence of Koala use of revegetation area must be identified using the NSW Koala Biodiversity Assessment Method Survey Guide; or A report prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS, demonstrating that the revegetation area has functional capacity as Koala habitat. The report is to demonstrate all habitat components for functioning koala habitat are present,

Area	Performance and completion criteria
	<p>including shrub layer, understorey, plant community type species association, and low weed cover. [The Department has adopted BCS' recommended requirements for the scope of the functional capacity report, but not the revised Koala use survey process set out in pages 2 to 3 and Attachment 2 in BCS' advice (Attachment B). The Department considers this process would overly complicate the conditions and reduce their workability and enforceability.]</p>
<p>Western and southern-most cleared areas within Lot 2 DP574308</p>	<ul style="list-style-type: none"> • Revegetation must conform to adjacent Plant Community Types and include Broad-leaved paperbark and Swamp mahogany in low-lying wetter areas and in more elevated areas the tallest stratum should include a mix of Tallowwood, Small-fruited grey gum and Forest red gum • Swamp mahogany, Tallowwood, Small-fruited grey gum and Forest red gum must collectively occur at a density of between 96 to 188 plants per hectare, of which at least 30% have a diameter at breast height of ≥ 300 mm across the revegetation area; • No barriers to Koala movement across the land marked 'No Barrier to Koala Movement' in Appendix 9; and either • Evidence of Koala use of revegetation area must be identified using the NSW Koala Biodiversity Assessment Method Survey Guide; or • A report prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS, demonstrating that the revegetation area has functional capacity as Koala habitat. The report is to demonstrate all habitat components for functioning koala habitat are present, including shrub layer, understorey, plant community type species association, and low weed cover.

B43. The Applicant must commence revegetation of the existing cleared areas of the site as identified in Appendix 8 prior to the commencement of native vegetation clearing.

B44. Vegetation clearing under this consent is limited to Areas A and B, as shown in Appendix 9. The Applicant must not commence vegetation clearing outside of Area A until Condition B42 has been met to the satisfaction of the Planning Secretary.

Revised figure for inclusion in Appendix 9

A revised figure for inclusion in Appendix 9 of the conditions of consent is attached (see Attachment C). Areas A and B on the figure have been defined based on the significant Koala activity contours presented in the Biolink 2023 report, and the Applicant's proposed extraction staging, which formed key components of the Department's assessment of the project. BCS' proposed revisions to Areas A

and B (see Attachment B) have not been subject to detailed assessment, and therefore the Department has not recommended them.

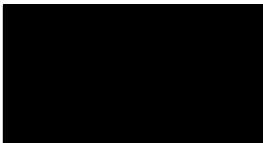
Conclusion

Thank you for the opportunity to provide this additional information to support the Commission's deliberations regarding the project. The Department considers that the recommended conditions are fair and reasonable, workable and enforceable.

If you wish to discuss the matter further, please contact me on [REDACTED] or

[REDACTED]

Yours sincerely



Jessie Evans
Director
Energy and Resource Assessments

Attachment A – Applicant response

From: [Pignone, Belinda \(Parramatta\) AUS](#)
To: [James McDonough; Driver, Andrew \(Parramatta\) AUS](#)
Cc: [Jessie Evans; Ward Tim](#)
Subject: RE: Sancrox Quarry Expansion Project (SSD 7293): Request to DPHI - Koala Habitat
Date: Wednesday, 13 November 2024 3:44:20 PM
Attachments: [image002.png](#)
[image013.png](#)
[image014.png](#)
[image015.png](#)
[image016.png](#)

Hi James,

Please see attached the requested figure, as discussed in the IPC letter dated 8 November 2024.

Regarding the proposed amendments to draft consent conditions B42, B43 and B44, Hanson has no further comment and accepts the proposed amendments to the consent conditions.

If there are any issues with the figure, please do not hesitate to reach out.

Kind regards,

Belinda Pignone
Senior Environmental Coordinator

[REDACTED]
[REDACTED]

[REDACTED]

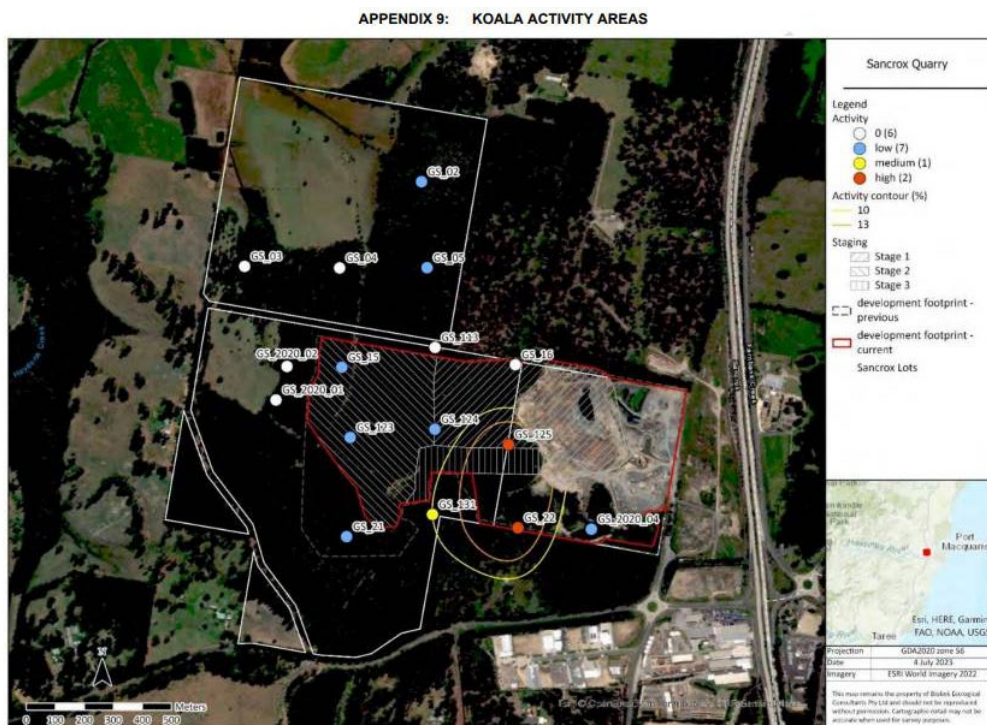
From: James McDonough [REDACTED]
Sent: Friday, November 8, 2024 1:53 PM
To: Driver, Andrew (Parramatta) AUS [REDACTED] Pignone, Belinda (Parramatta) AUS
[REDACTED]
Cc: Jessie Evans [REDACTED]
Subject: FW: Sancrox Quarry Expansion Project (SSD 7293): Request to DPHI - Koala Habitat

Hi Andrew and Belinda,

Please see attached a request from the NSW Independent Planning Commission for further information regarding some proposed amendments to conditions of consent for the Sancrox Quarry Expansion Project (SSD-7293).

You are requested to provide advice on the proposed amendments by 5pm Wednesday 13 November 2024.

Please also note the requested figure to be prepared by Hanson for inclusion in the consent (see condition B44 in the attached letter). The figure should replace the current figure in Appendix 9 of the recommended conditions of consent (shown below)



Please get in touch if you would like to discuss.

Attachment B – BCS response



Senior Environmental Assessment Officer
Planning and Assessment Group
Department of Planning, Housing and Infrastructure
PO Box 5022
PARRAMATTA NSW 2124

Attention: Mr Jarrod Blane

Dear Mr Blane

RE: Sancrox Quarry Expansion – Independent Planning Commission Request for Further Information (SSD 7293)

Thank you for your email dated 8 November 2024 about the Independent Planning Commission's Request for Further Information (RFI) for the Sancrox Quarry expansion seeking comments from the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water. I appreciate the opportunity to provide input.

BCS has reviewed the RFI dated 8 November 2024.

Our review has identified several issues with the draft conditions of consent in the RFI. The metrics for demonstrating the performance and completion criteria of the koala habitat revegetation areas require updating to accord with current data. In addition, the information in the criteria for demonstrating evidence of koala use and habitat function requires further steps to ensure the success of the revegetation in creating habitat to be used by koalas. These issues are discussed in detail in **Attachment 1** to this letter, with an alternative approach (summarised in **Attachment 2**) outlined.

In summary, BCS recommends that:

1. The performance and completion criteria in Table 5 be revised to remove the wording "*at least 25 plants per hectare (averaged over the revegetation area)*" and replaced with:
 - a. For the northern revegetation area - greater than or equal to 30% of Swamp mahogany having a diameter at breast height $\geq 100\text{mm}$ across the revegetation area, and
 - b. For the western and southern revegetation areas - greater than or equal to 30% of Swamp mahogany, Tallowwood, Small-fruited grey gum and Forest red gum having a diameter at breast height $\geq 300\text{mm}$ across the revegetation area.
2. The performance and completion criteria in Table 5 be revised to delete all the text under the dot points starting with 'either' for both the northern and western revegetation areas, and replace it with the following wording:

- a. Evidence of koala use of the revegetation area identified using the NSW Koala Biodiversity Assessment Method Survey Guide with two koala surveys carried out per season for a period of 12 months, noting the full 12 months survey is not required if evidence of koala use is detected in any of the surveys; and
 - b. If koala surveys in 2a above do not detect koala use in the revegetation area after 12 months, then:
 - i. evidence of koala use in the existing koala habitat on Lot 2 DP574308 be identified in accordance with the NSW Koala Biodiversity Assessment Method Survey Guide, and
 - ii. if evidence of koala use is detected in the existing koala habitat on Lot 2 DP574308 then criteria 2a and 2bi be reapplied; or
 - iii. if evidence of koala use is not detected in the existing koala habitat on Lot 2 DP574308 then a report demonstrating the revegetation areas have functional capacity as koala habitat be prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS. The report is to demonstrate all habitat components for functioning koala habitat are present, such as shrub layer, understory, plant community type species association, and low weed cover.
 - c. If criteria 2a and 2bi above are repeated for three more years detecting koala use in existing koala habitat on Lot 2 but not in the revegetation area, then a report demonstrating that the revegetation areas have functional capacity as koala habitat be prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS. The report demonstrating all habitat components for functioning koala habitat are present, such as shrub layer, understory, plant community type species association, and low weed cover.
 - d. Any reports prepared under 2a, 2b, or 2c above be provided to the Department of Planning Housing and Infrastructure and BCS for review and confirmation the performance and completion criteria have been met before clearing of Area B can commence.
3. The quarry expansion footprint be reduced to further avoid impacts of the proposal on high quality koala habitat.
 4. If the consent authority decides to pursue the approval of the expansion of the Sancrox Quarry as per the current footprint, then the map on page 4 in Attachment 1 to this letter showing Areas A and B be adopted by the Independent Planning Commission for the consent.

If you have any further questions about this issue, please contact Mr Dimitri Young, Senior Team Leader Planning North East, BCS, on [REDACTED] or at [REDACTED]

Yours sincerely

[REDACTED]
GABRIELLE PIETRINI
Director North East
Biodiversity, Conservation and Science

19 November 2024

Enclosure: Attachment 1 Sancrox Quarry Expansion - Independent Planning Commission Request for Further Information

Attachment 1: Detailed DCCEEW BCS Comments – Sancrox Quarry Expansion Independent Planning Commission Request for Further Information

The Biodiversity Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water has reviewed the Independent Planning Commission's Request for Information (RFI) dated 8 November 2024. Based on our review, BCS provides the following comments.

The metrics for koala food tree revegetation success in the performance and completion criteria require revision

The RFI has provided draft koala habitat revegetation performance and completion criteria in Table 5, which specifies for the northern, western and southern revegetation areas that revegetation must conform to adjacent Plant Community Types and incorporate the specific koala food trees species for both those areas. In addition, the performance and completion criteria require that the specific koala food trees species for both the revegetation areas must occur at a density of between 96 to 188 plants per hectare, with at least 25 of these plants per hectare (averaged over the revegetation area) having a diameter at breast height $\geq 100\text{mm}$ for the northern area, and $\geq 300\text{mm}$ for the western area.

The Environmental Protection Authority (EPA) carried out a study with a panel of koala experts to develop an accurate method for mapping koala habitat for the purposes of managing the impact of koala in relation to forestry operations. The study was published in a document *Koala habitat mapping pilot: NSW state forests* (EPA 2016). The study included surveys of over 6000ha across four sites including Maria State Forest, which is approximately 30km north of the Sancrox Quarry site.

The surveys demonstrated the accuracy of the koala habitat mapping and provided data for a series of map-based products to show koala habitat class, koala 'probability of occurrence', generational persistence and habitat utilisation. The EPA study classified koala habitat into four classes with Class 1 being greater than or equal to 30% local koala feed tree species and Class 2 greater than 15%, but less than 30%, local koala feed tree species with percentages reducing further for the other classes.

The EPA study provides scientifically tested and published information that would provide better metrics for demonstrating performance and completion criteria for the proposed revegetation areas.

BCS Recommendation

1. The performance and completion criteria in Table 5 be revised to remove the wording "*at least 25 plants per hectare (averaged over the revegetation area)*" and replaced with:
 - a. For the northern revegetation area - greater than or equal to 30% of Swamp mahogany having a diameter at breast height $\geq 100\text{mm}$ across the revegetation area, and
 - b. For the western and southern revegetation areas - greater than or equal to 30% of Swamp mahogany, Tallowwood, Small-fruited grey gum and Forest red gum having a diameter at breast height $\geq 300\text{mm}$ across the revegetation area.

Evidence of koala usage and functional capacity of the koala habitat in the performance and completion criteria requires revision

The performance and completion criteria in Table 5 also require evidence of koala usage of the revegetation area or a report that demonstrates functional capacity of the revegetation area as koala habitat. The draft performance and completion criteria state:

- “*Either*
 - *evidence of Koala use of the revegetation area identified using the NSW Koala Biodiversity Assessment Method Survey Guide; or*
 - *a report prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS, with a comparative analysis of equivalent functional Koala habitat undertaken in accordance with the Biodiversity Assessment Method 2020 (or its latest version) and the NSW Koala Biodiversity Assessment Method Survey Guide, that the revegetation area has functional capacity as Koala habitat.*”

It would not be possible to achieve these criteria because the *NSW Koala Biodiversity Assessment Method Survey Guide* details the methodology required to determine presence or absence of koalas when applying the Biodiversity Assessment Method under the *Biodiversity Conservation Act 2016*, but it does not provide methods to determine the functional capacity of koala habitat.

In addition, the wording above would allow further clearing of occupied koala habitat without any attempt to demonstrate by survey that koalas are using the revegetated habitat. BCS recognises that a proponent must be able to comply with conditions of consent, which must be reasonable, so we support an alternative to ongoing koala surveys if such surveys fail to detect koalas in the revegetation area.

If no koalas were found using the revegetation area, but they persisted in the habitat proposed to be cleared for the quarry expansion, then one would conclude the revegetated habitat is not yet suitable for occupation by koalas.

Hence, the alternative of seeking to demonstrate functional capacity of the koala habitat in the revegetation area would logically only be triggered if koalas were also not found to persist in the vegetation proposed to be cleared for the quarry expansion. This would suggest something has happened to the koala population, possibly unrelated to the quarry, which impacts their use of the revegetation areas.

Hence, if it is proposed to allow clearing of the existing koala habitat on the subject land without evidence of koala usage of the revegetation area, then BCS would expect surveys to demonstrate that koalas do not occur in the revegetation area or in the existing koala habitat to be cleared for the quarry expansion, before the alternative of demonstrating functional capacity of the revegetated koala habitat is implemented.

For clarity regarding their operation, the performance and completion criteria recommended by BCS are set out in a flow chart in **Attachment 2** to this letter.

BCS Recommendations

2. The performance and completion criteria in Table 5 be revised to delete all the text under the dot points starting with ‘either’ for both the northern and western revegetation areas, and replace it with the following wording:
 - a. Evidence of koala use of the revegetation area identified using the NSW Koala Biodiversity Assessment Method Survey Guide with two koala surveys carried out per season for a

period of 12 months, noting the full 12 months survey is not required if evidence of koala use is detected in any of the surveys; and

- b. If koala surveys in 2a above do not detect koala use in the revegetation area after 12 months, then:
 - i. evidence of koala use in the existing koala habitat on Lot 2 DP574308 be identified in accordance with the NSW Koala Biodiversity Assessment Method Survey Guide, and
 - ii. if evidence of koala use is detected in the existing koala habitat on Lot 2 DP574308 then criteria 2a and 2bi be reapplied. or
 - iii. if evidence of koala use is not detected in the existing koala habitat on Lot 2 DP574308 then a report demonstrating the revegetation areas have functional capacity as koala habitat be prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS. The report is to demonstrate all habitat components for functioning koala habitat are present, such as shrub layer, understory, plant community type species association, and low weed cover.
- c. If criteria 2a and 2bi above are repeated for three more years detecting koala use in existing koala habitat on Lot 2 but not in the revegetation area, then a report demonstrating that the revegetation areas have functional capacity as koala habitat prepared by a suitably qualified and experienced person endorsed by the Planning Secretary in consultation with BCS. The report demonstrating all habitat components for functioning koala habitat are present, such as shrub layer, understory, plant community type species association, and low weed cover.
- d. Any reports prepared under 2a, 2b or 2c above be provided to the Department of Planning Housing and Infrastructure and BCS for review and confirmation the performance and completion criteria have been met before clearing of Area B can commence.

The entire quarry expansion area likely comprises high activity levels for koalas over a 12 month period

When combined, the two koala activity surveys (Biolink 2020 and 2023) undertaken for the proposal identified high koala activity virtually across the entire quarry expansion area. BCS continues to raise the issue of the proposal's significant adverse impacts on the Port Macquarie koala population that is likely to result from the clearing of 30ha of high-quality koala habitat. We also reiterate that to avoid these impacts on high quality koala habitat, the quarry expansion footprint needs to be substantially reduced.

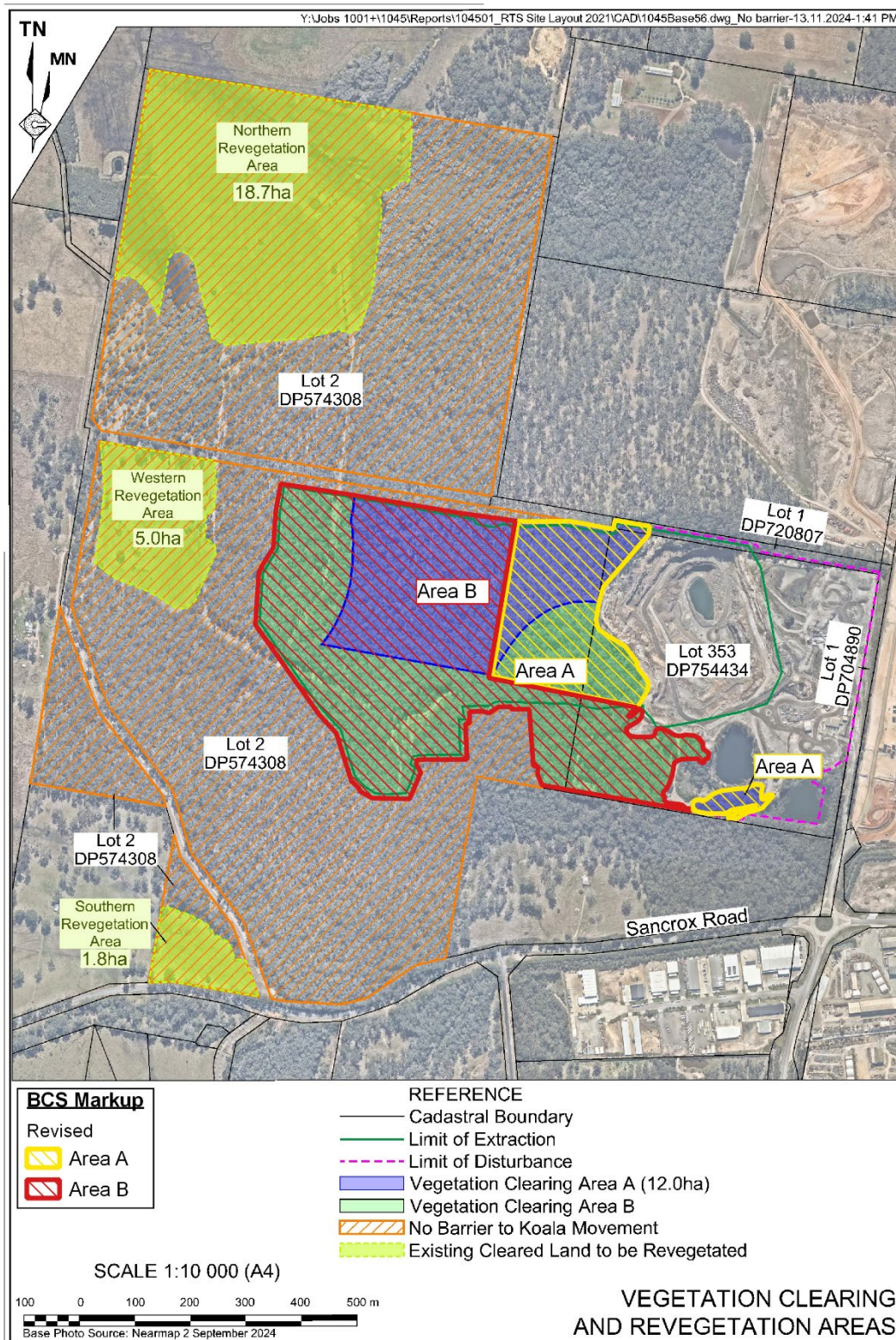
If the consent authority decides to pursue the approval of the expansion of the Sancrox Quarry as per the current footprint, despite the proposal's significant adverse impacts to areas of known high-quality koala habitat, then BCS advocates a precautionary approach. To this end, BCS has mapped a proposed area which identifies the extent of Stage 1 for immediate quarry expansion (Area A) and the remainder of the expansion after the performance and completion criteria for revegetation areas have been met (Area B), as shown in BCS recommendation 4 below.

The need for such precaution is increased by extensive recent vegetation clearing for an approved industrial subdivision adjoining the northern boundary of the existing quarry, which has further reduced vegetation available for koala use in the immediate area.

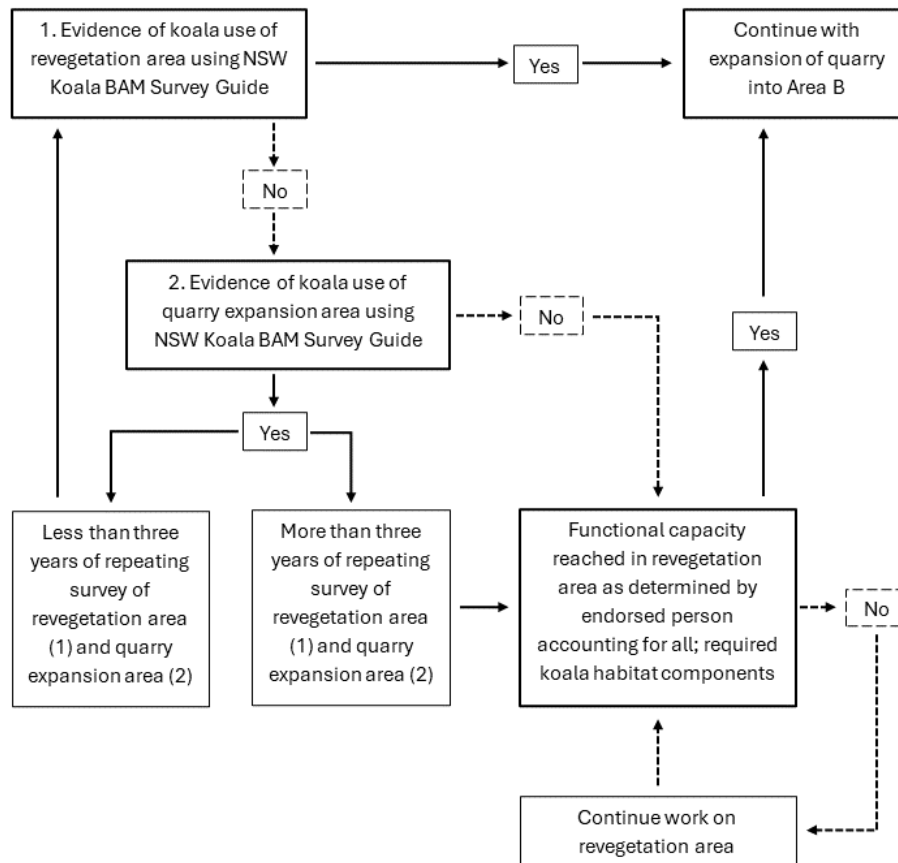
BCS Recommendations

- 3. The quarry expansion footprint be substantially reduced to further avoid impacts of the proposal on high quality koala habitat.

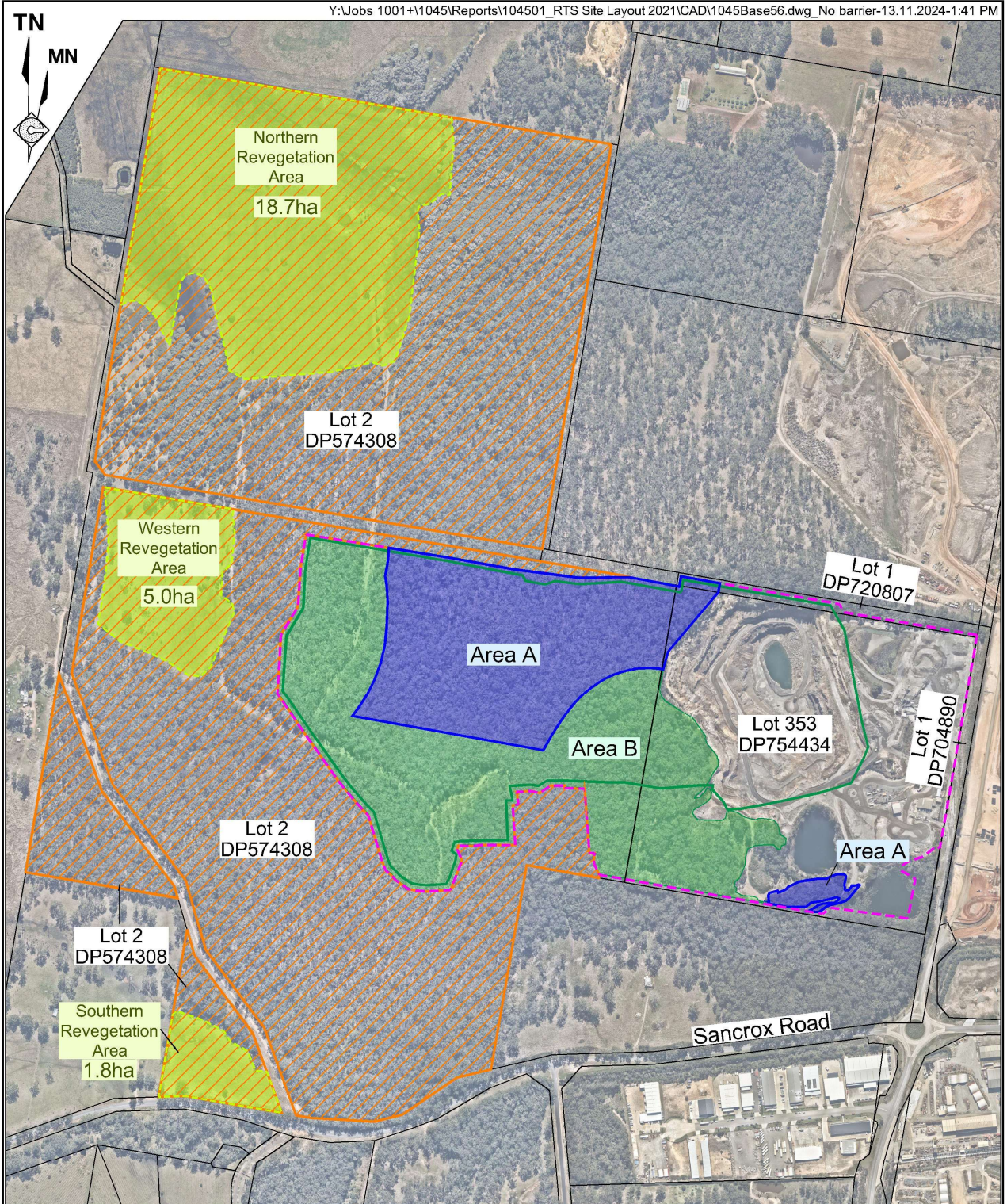
4. If the consent authority decides to pursue the approval of the expansion of the Sancrox Quarry as per the current footprint, then the map below showing Areas A and B be adopted by the IPC for the consent:



Attachment 2: Flowchart of Performance and Completion Criteria Proposed by BCS - Sancrox Quarry Expansion



Attachment C – Figure for inclusion in Appendix 9



REFERENCE

- Cadastral Boundary
- Limit of Extraction
- - - Limit of Disturbance
- Vegetation Clearing Area A (12.0ha)
- Vegetation Clearing Area B
- ▨ No Barrier to Koala Movement
- ▨ Existing Cleared Land to be Revegetated

SCALE 1:10 000 (A4)

100 0 100 200 300 400 500 m

Base Photo Source: Nearmap 2 September 2024

VEGETATION CLEARING
AND REVEGETATION AREAS