

Mr Matthew Freeburn
Freeburn Surveying
Suite 2, 1st Floor "Surveyor House"
2 Castlereagh St
PENRITH NSW 2750

21st March 2022

Dear Matthew

Re: Flora & Fauna Assessment for 40 - 46 Evan St, Penrith

Please find herewith additional information to address points 14 to 19 of the letter from Penrith City Council, dated 23rd December 2021, and Council's DA Assessment Report (undated), concerning the above.

Biodiversity Offset Scheme

Biodiversity Values Map

No part of the property is shaded on the NSW Government's Biodiversity Values Map (BVM). Therefore, the Biodiversity Offset Scheme (BOS) is not triggered by the BVM. The biodiversity values mapping is shown below in Figure 1.

Area of Clearing Threshold

Under the Penrith LEP 2010 the minimum lot size for the property is 400m². Therefore, under Clause 7.2 of the *Biodiversity Conservation Regulation 2017*, the area of clearing threshold for triggering the BOS is 2,500m².

The Site Tree Plan (Urban Link, 2021) identifies the trees proposed for removal and those proposed for retention. Based on the Site Tree Plan and using the Tree Survey Report (About Trees, 2021a) that identifies the species of all trees on the property, the native trees proposed for removal are shown in Figure 2.

Site assessments undertaken by Martin James of SIAEEP on the 2nd February 2022 and 18th March 2022 determined that across much of the property the groundcover is either not vegetation or not native vegetation. Some small areas of groundcover could be regarded as native vegetation, but in most cases the native plants there represent only a small proportion of the total plants present, a large proportion being introduced species. Additionally, these areas are small in size, being surrounded either by not vegetation or non-native vegetation. The native species that are present comprise Basket Grass (*Oplismenus aemulus*), Kidney Weed (*Dichondra repens*), *Hydrocotyle acutiloba*, *Oxalis perennans*, Weeping Grass (*Microlaena stipoides*), *Carex inversa*, Couch (*Cynodon dactylon*), Scurvy Weed (*Commelina cyanea*), White Root (*Pratia purpurascens*) and Wonga Wonga Vine (*Pandorea pandorana*). Elsewhere on the property the groundcover vegetation comprises planted ornamental introduced species, weeds or lawns of introduced grasses such as Durban Grass (*Dactyloctenium australe**), Buffalo Grass (*Bouteloua dactyloides**) and Narrow-leaved Carpet Grass (*Axonopus fissifolius**). *Note*: Council's DA Assessment Report refers to a row of the native Koda (*Ehretia acuminata*) on the property. No such row was observed during either site assessment, the second assessment looking specifically for this row. A row of the introduced Large-leaf Privet (*Ligustrum lucidum**) occurs beside the White Cedar (*Melia azedarach*) along boundary between the two residences fronting Lethbridge St that could be mistaken for Ehretia and this may be what Council's report is referring to.



Figure 1: Biodiversity Values Mapping with property marked in red.



Figure 2: Native trees proposed for removal.

Examining aerial imagery reveals that the native tree crowns do not exactly coincide with the plan drawings. Taking this into consideration and adding all of the areas of native groundcover vegetation that is not beneath trees to be retained results in Figure 3 that shows the total area of native vegetation that would be removed as a result of the proposal. This area comes to 2,085 m². As this is below the area of clearing threshold, the proposal would not trigger the BOS. *Note:* this area includes planted native tree species that are not characteristic of CPW.



Figure 3: Total area of native vegetation proposed for removal.

Significant Impact on Threatened Entities

The Flora and Fauna Assessment (About Trees, 2021b) states there would be no significant impact to threatened flora or fauna. The discussion below, including a Test of Significance (5-part test) for Cumberland Plain Woodland, provides further information to that contained in the Flora and Fauna Assessment (About Trees, 2021a) demonstrating there would be no significant impact to threatened ecological communities. As there would be no significant impact to threatened entities the proposal would not trigger the BOS.

Note: The study area for threatened entities is typically taken as a 10km x 10km square centred on the project site, as this is the area searched for records of threatened entities when assessing the impact of a proposal on threatened entities. The *Threatened species assessment guidelines: The assessment of significance* DECC (2007) defines the local occurrence of an ecological community is that which occurs within the study area.

Macadamia integrifolia

This species that occurs on the property is listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1991* (EPBC Act). The species occurs naturally in north-eastern NSW. It does not occur naturally in the Sydney region and was planted on the property. It is, therefore, not considered to be part of the EPBC Act listed natural populations of this species.

Cumberland Plain Woodland

Three trees of Grey Box (*Eucalyptus moluccana*), one tree of Mugga Ironbark (*E. sideroxylon*), one tree of White Feather Honey-myrtle (*Melaleuca decora*), and one tree of White Cedar (*Melia azedarach*) occur on the property. These tree species are characteristic of Cumberland Plain Woodland (CPW). Additionally, and as discussed above, there are areas containing native groundcover plants that are characteristic species CPW. The total area of vegetation that could be regarded as CPW encompasses the canopies of the CPW trees and the areas of CPW groundcover plants. These areas total 2,007 m². Cumberland Plain Woodland is listed under both the NSW *Biodiversity Conservation Act 2016* (BC Act) and the EPBC Act as a Critically Endangered Ecological Community. However, the area of CPW on the property does not meet the minimum size threshold of 0.5ha specified under the EPBC Act to be considered a patch of CPW. Therefore, no further assessment is required for CPW under the EPBC Act. To satisfy the requirements of the BC Act a Test of Significance (5-part test) needs to be undertaken to determine whether the proposal would have a significant impact on CPW. The 5-part test follows.

Test of Significance (5-part test) for Cumberland Plain Woodland

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

N/A.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

- (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or*

The proposal would clear a small area (approx. 0.15 ha) of poor quality CPW. Much of this area is arguably not CPW, but rather some native groundcover plants of CPW that have persisted at a site that has been almost completely transformed into a collection of residential dwellings with an area of manicured gardens comprised almost entirely of introduced species of plants, and an abundance of weeds. The poor quality of the remnant is such that it was not mapped as CPW by OEH (2013) (VIS_ID 4207). There are many similarly poor quality remnants of CPW throughout western Sydney that were not mapped by OEH as CPW. Importantly, there are numerous proper remnants of CPW that were mapped by OEH (2013) within the study area and, hence, that constitute the local occurrence of CPW. These include relatively large remnants of CPW within the Wianamatta Nature Reserve and Mulgoa Nature Reserve. A large area is also conserved at the former ADI site at Orchard Hills through the biocertification of the area. Nearer to the project site a remnant of CPW covering approximately 5ha is located at Kanangra Reserve approx. 1.2 km to the northeast of the subject property. Another remnant more than 6ha in size occurs at Peppermint Reserve, located approx. 1.9 km to the south-east. A remnant covering approx. 2.7ha is located at Kingswood High School approx. 1.6 km to the southeast. The two nearest mapped remnants of CPW are both less than 200m from the subject property, both covering an area of approx. 0.5ha. These mapped remnants are all local occurrences of CPW. Taking the above into consideration it is not likely that the proposal would place at risk of extinction the local occurrence of this ecological community.

- (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,*

The proposal would not adversely modify the composition of the local occurrence of the ecological community. The CPW species that would be removed on the property occur in most remnants of CPW, and there are many similarly poor quality, un-mapped remnants throughout western Sydney, as well as many relatively large mapped remnants in good condition conserved within reserves, so the removal of a small number of these plants would not modify the composition of the ecological community such that it is likely to place at risk of extinction the local occurrence of the ecological community.

(c) in relation to the habitat of a threatened species, population or ecological community:

- (i) *the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and*

Approximately 0.17 ha of poor quality Cumberland Plain Woodland would be removed. The quality of the remnant is so poor that it was not mapped as CPW by OEH (2013) and much of this area is arguably not CPW.

- (ii) *whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and*

The proposal would not impact any mapped remnants of CPW or fragment these areas. It may increase the fragmentation to a minor extent of un-mapped areas of poor quality CPW, but there are many such areas throughout western Sydney, and the impact of this on CPW would be negligible.

- (iii) *the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,*

The proposal would impact a small area that contains species characteristic of CPW. Due to its highly altered condition much of this small area is arguably not CPW. Furthermore, area was not mapped as CPW by OEH (2013). The species impact occur in most remnants of CPW. There are many relatively large areas of CPW that were mapped as such by OEH (2013) in the locality and that are located within reserves that will ensure their conservation into the future. The importance of the area impacted for the long-term survival of the community in the locality is low.

- (d) *whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),*

The proposal would not affect any declared areas of outstanding biodiversity value.

- (e) *whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.*

The proposal involves 'clearing of native vegetation' that is identified as a key threatening process. However, native species characteristic of CPW would be replanted on the site as part of the proposal landscaping.

Conclusion

Based on the above assessment it is concluded that the proposed development would not have a significant impact on Cumberland Plain Woodland.

Please contact me if you have any questions or wish to discuss the above.

Yours sincerely



Martin James
BSc (Hons) Geographical Ecology
Director/ BAM Accredited Assessor
SIA Ecological & Environmental Planning Pty Ltd

References:

- About Trees, 2019.** *Draft Preliminary Tree Survey & Report at 40-46 Evan St & 96-98 Lethbridge St Penrith.* About Trees Urban Tree & Bushland Management.
- About Trees, 2021.** *Flora & Fauna Assessment and 5-part Test of Significance at 40-46 Evan St & 96-98 Lethbridge St Penrith.* About Trees Urban Tree & Bushland Management.
- DECC, (2007).** *Threatened species assessment guidelines: The assessment of significance.* NSW Department of Environment and Climate Change.
- Urban Link, 2021.** *Site Tree Plan.* Drawing DA-005 Revision B, dated 21/09/2021.