



Arboricultural Consultancy

for

Mitchell Shire Council

Proposed residential development at
100 Natures Run, Kilmore

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1. Introduction

Homewood Consulting Pty Ltd has been engaged to provide independent advice regarding the proposed removal of native vegetation at 100 Natures Run, Kilmore. Mitchell Shire Council have received a Development Plan application for residential subdivision of the site in three stages.

It is proposed to subdivide the land within Stages 1 and 2 into 42 residential lots, with a balance lot (Stage 3) created. Stage 3 is intended to be subdivided under a future planning permit application.

The vacant land is currently vegetated with native forest dominated by Eucalypts, totaling approximately 580 trees. Of the 454 trees in Stages 1 and 2, 288 trees are proposed for removal¹ to facilitate the residential development of the land. Preliminary Stage 3 development plans indicate the proposed removal of approximately 70 - 100 additional trees², depending on the layout option adopted.

Council have requested the following independent advice regarding the removal of native vegetation, to inform its consideration of the application:

- Identification of key significant native vegetation or strands of native vegetation viable for retention;
- A review of the proposed native vegetation removal plan, with a focus on the proposed removal of significant strands of vegetation in the south east and north east;
- An assessment of the proposed vegetation removal against the relevant vegetation removal provisions of the Mitchell Planning Scheme, including Clause 52.17;
- Advice regarding the proposed lot layout and potential native vegetation retention measures for the strands of vegetation indicated; and
- An assessment of the significance of the native vegetation located in the south-east corner of the subject site, against the significance of the trees located in the Council owned reserve.

2. Site Visit and Assessment

Assessment of the site was conducted by Megan Brittingham on Friday and Saturday 19 and 20 March, and Wednesday 24 March, 2021.

Vegetation communities and individual trees were inspected in order to identify key significant native vegetation or areas of native vegetation viable for retention. Individual tree locations were plotted using sub-metre GPS and the following data recorded for each tree:

- Botanical Name
- Diameter at Breast Height (DBH)
- Retention Value
- Tree ID

A total of 543 trees were assessed, 522 within the subject property. Tree ID was recorded where tree tags were present and legible in the field.

¹ Galbraith and Associates correspondence re: 100 Natures Run, Kilmore (02 September 2020), herein referred to as the "Galbraith Report"

² Human Habitats Development Plan – Trees to Be Removed Option 1 and Option 2

It is understood that a feature survey plan and a tree location plan (annotated with tree identification numbers) have been prepared for the property, however these were not available for review. Plotted tree locations have not been aligned to design drawings as trees are not labelled on the design drawings. Trees were plotted to gather site information for the purposes of this report only, however the surveyed tree locations should be taken as spatially accurate.

Tree Retention Value was recorded for each tree and was determined from a ground-based visual inspection of the tree and its surrounding site, including a complete walk around the tree, looking at the buttress roots, trunk, branches and leaves. Retention value was assigned based on the combined tree attributes of health, structure, Useful Life Expectancy, landscape contribution and individual significance.

No tools were utilised in the assessment with the exception of a diameter tape to measure tree DBH.

2.1 Site Description

The subject property is located at 100 Natures Run Road, Kilmore and is approximately 6.27ha in area. As per the Town Planning and Urban Context Report (Human Habitats, 2020), neighbouring properties to the north and east are generally characterised by single and double-storey dwellings on conventional-sized lots. The majority of land south and west of the site has recently been subdivided into conventional-sized lots, and dwellings are being constructed throughout the estate.

The subject site is currently vacant land and is vegetated with native forest dominated by Eucalypts with a sparse Acacia sub canopy layer. The modified understory consists of exotic woody and herbaceous weeds and grasses with some native ground layer species. Access tracks have been constructed throughout the site.

The native forest in the property is part of a corridor of existing vegetation linking Monument Hill Reserve, to the north, to the Kilmore Creek eastern tributary (Natures Run Reserve), to the south.

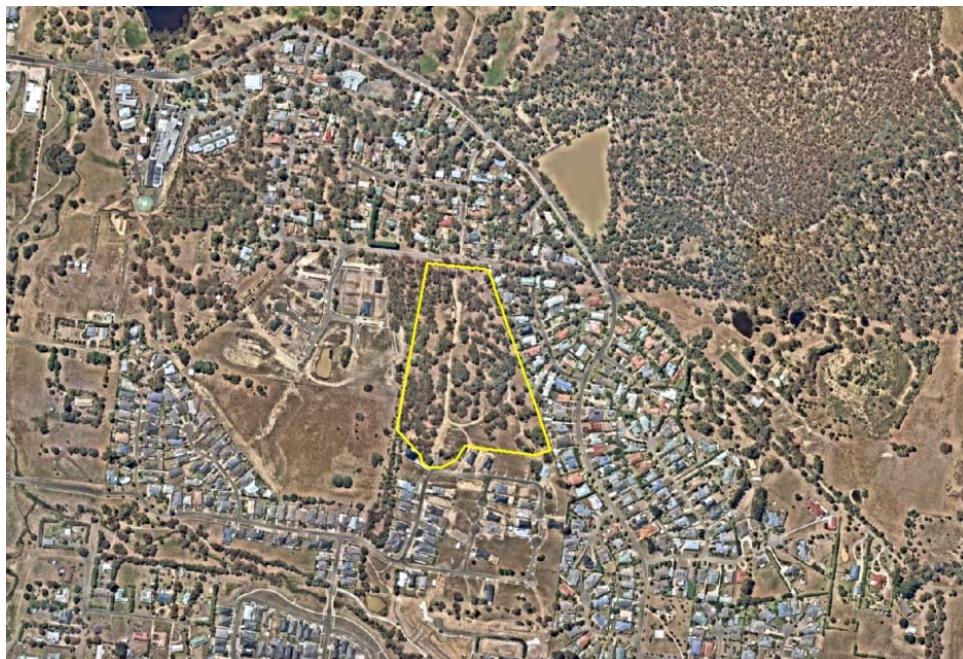


Figure 1: 100 Natures Run, Kilmore: site context.

2.2 Vegetation Summary

2.2.1 Dominant Tree Species

Eucalyptus melliodora (Yellow Box) and *E. goniocalyx* (Long Leaved Box) are the dominant tree species on site (Figure 2), both are present across the majority of the site with the exception of the south-east corner, where a small number of *E. viminalis* (Manna Gum) dominate. *E. obliqua* (Messmate) is the dominant species in the north-west corner and in a cluster approximately halfway down the eastern boundary, and a small number of *E. radiata* (Narrow Leaved Peppermint) are scattered through the south-east quadrant.

Small numbers of *Acacia melanoxylon* (Blackwood) and *A. mearnsii* (Black Wattle) are also present on site, although it is noted that the latter is incorrectly identified as *A. dealbata* (Silver Wattle) in the Flora and Fauna Assessment prepared by Cardno (23 September 2020).

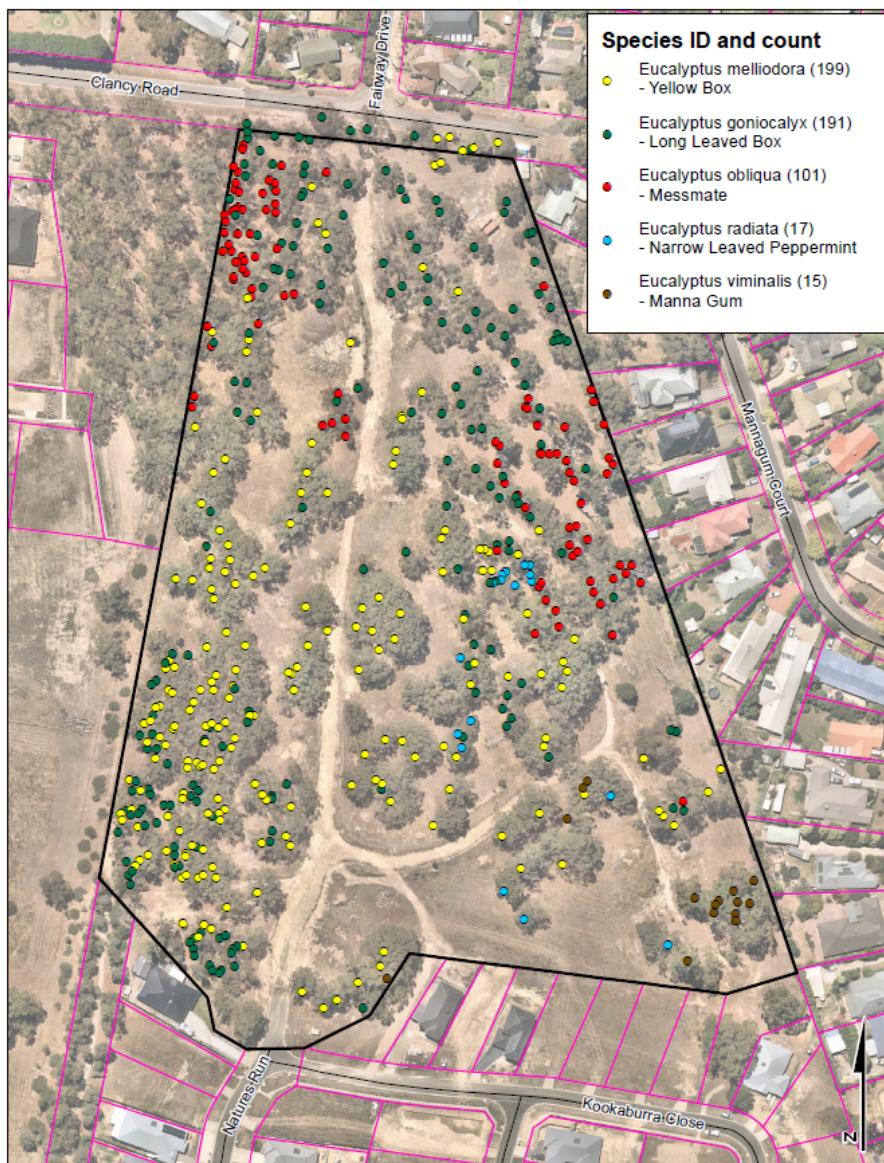


Figure 2: Distribution of Eucalyptus species across the subject site. Satellite image from Nearmap (19/03/2021)

2.2.2 Significant Native Vegetation Suitable for Retention

2.2.2.1 Individual Tree Significance

Of the 522 trees assessed within the subject property:

- A total of **48 High** retention value trees were identified on site. These are large, mature Eucalypts of high quality and are in good condition. They have the potential be a long-term landscape component where managed appropriately. They are the best trees on site and all efforts should be made to retain these trees and protect them from construction impact.
 - Of these, 36 are *E. melliodora*, 5 are *E. goniocalyx*, 4 are *E. viminalis* and 3 are *E. obliqua*.
- A total of **54 Medium to High** retention value trees were identified on site. These are large, mature indigenous trees of moderate to high quality and are in fair to good condition, and/or have a high contribution due to habitat value. They have the potential be a medium to long-term landscape component where managed appropriately and all efforts should be made to retain these trees and protect them from construction impact.
 - Of these, 32 are *E. melliodora*, 10 are *E. goniocalyx*, 8 are *E. obliqua*, 2 are *E. radiata* and 1 is *E. viminalis*.
- A total of **162 Medium** retention value trees were identified on site. These are mature and semi-mature trees of moderate quality in fair or good condition. They may be medium to large trees with a health or structural issue that can be resolved with arboricultural input, or small to medium trees in good condition. These trees have the potential to be a medium to long-term landscape component where managed appropriately and where practical, design modifications should be considered in order to retain and protect them from construction impact.
 - Of these, 64 are *E. melliodora*, 62 are *E. goniocalyx*, 29 are *E. obliqua*, 4 are *E. viminalis*, 2 are *E. radiata*, and there is 1 *A. melanoxylon* and 1 *A. mearnsii*.
- A total of **96 Low to Medium** retention value trees were identified on site. These trees are either in poor condition or are small trees in fair to good condition with low amenity value. These trees may or may not be suitable for retention depending on the landscape context, e.g., small trees can be retained and left to grow on if located within a larger clump of retained and protected trees where they will not be an impediment to development.
 - Of these, 35 are *E. goniocalyx*, 33 are *E. melliodora*, 26 are *E. obliqua* and 1 is *E. radiata*.
- A total of **170 Low** retention value trees were identified on site. These are trees of low quality in poor condition that are unlikely to be long or medium-term landscape components. They may be dead/dying/diseased or structurally unsound and are generally not considered suitable for retention.
 - Of these, 73 are *E. goniocalyx*, 35 are *E. obliqua*, 27 are *E. melliodora* and the remainder are a mix of *E. radiata*, *E. viminalis*, *A. melanoxylon*, *A. mearnsii* and dead trees not identified to species level.
- 13 trees are classified as Third Party Owned as they are located on Council land to the north (along Clancy Road) and south (Kookaburra Close Reserve) of the site.

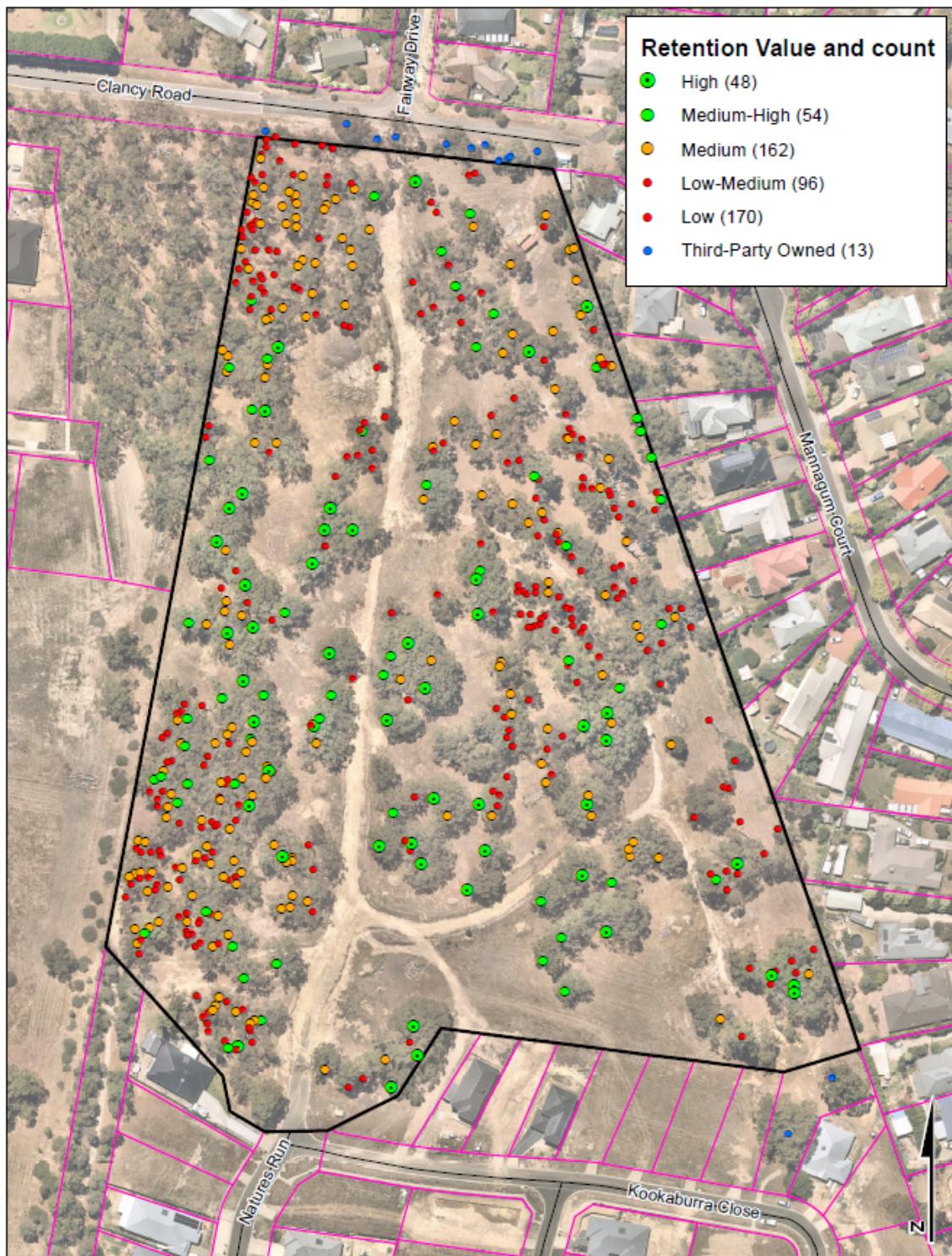


Figure 3: Retention values assigned to trees on the subject site. Satellite image from Nearmap (19/03/2021).

2.2.2.2 Dead trees

Standing dead trees are a unique and irreplaceable feature of the landscape and they provide many resources for wildlife including cracks, crevices, notches and hollows, as well as dead branches above the dominant canopy layer used for roosting. There are multiple dead trees present throughout the site, and while the majority have Low retention value and are not suited for retention on a residential lot, four large dead *Eucalyptus obliqua* do have habitat value and should be considered for retention and conversion to habitat stumps.

The best of these is Tree 360, which has a DBH of 120cm. Also of value are Trees 8, 44, and an unlabeled tree (possibly Tree 47), all with DBH at about 80cm. The development plans appear to indicate all four are proposed for removal (Figure 4). Photographs of these trees are shown in Figure 5 - Figure 8.

Habitat stumps are created by reducing or removing all the major branches and foliage from the tree. Natural hollows are retained as much as possible and in some cases artificial hollows are created in the upper portions of the tree trunk and/or nesting boxes are installed. In order for the habitat stumps to be of value to wildlife within a residential estate, they require connectivity and continuity with other vegetation and ideally incorporation into a reserve. Existing fallen limbs and removed limbs should be retained around the base of the tree as these also provide habitat for microfauna and invertebrates.

2.2.2.3 Hollows

Hollows are a vital source of habitat with many species of vertebrates and invertebrates using them as diurnal or nocturnal shelter sites, for rearing young, for feeding, for thermoregulation, and to facilitate ranging behaviour and dispersal. For many species there is no other habitat resource that represents a feasible substitute (Gibbons and Lindenmayer, 2002).

While Eucalypts develop hollows at all ages, large hollows are slow to develop and do not typically appear until trees are at least 120 years old, and hollows for larger species may not appear until trees are at least 220 years old (Gibbons and Lindenmayer, 2002). The loss of hollow bearing trees is a threatening process acknowledged in legislation and regional plans in many parts of Australia and land managers have an obligation to manage the hollow resource sustainably (Gibbons and Lindenmayer, 2002).

The Flora and Fauna Report (Cardno, 23 September, 2020, pg.10) states:

"No hollow bearing trees were observed during the field assessment thus the study area is unlikely to support species reliant on hollows such as the Powerful Owl and Barking Owls however it is possible that these species use the area for foraging."

"No arboreal habitat for the Brush-tailed Phascogale (i.e., hollows or dens) were observed within the study area".

On the contrary, multiple hollow bearing trees are present on site, with hollows clearly visible and easily observed during the ground-based assessment of the trees on site in March 2021. Hollows were observed in eleven trees, including Trees 123, 189, 260, 355 and 366, suspected trees 205 and 175 (Tree ID inferred from Galbraith Report), and four additional trees not presently labelled in the field. The Galbraith Report also notes the presence of four hollow bearing trees, including Tree 559, 355 (as noted above), Tree 160 and most notably, Tree 205, a *Eucalyptus viminalis* with the comment "Massive hollow at 5m". Aside from Tree 355, and probably 205, it is not clear if the other hollow bearing trees noted in the Galbraith Report correspond with those assessed in March 2021, however it is apparent that there are at least eleven hollow bearing trees on site.

Note that while this report makes reference to the habitat value of the trees it is not an ecological or biodiversity assessment. Ultimately, the habitat value of the trees requires assessment by a specialist zoologist or ecologist, however the *Assessor's handbook: applications to remove, destroy or lop native vegetation* (Department of Environment, Land, Water and Planning, 2017) lists hollows as a special feature that increase the biodiversity value of native vegetation.

In general, scattered or isolated old trees with hollows, broken limbs and fissures, usually contribute more to habitat values than younger trees that are structurally sound (Port Phillip and Westernport Catchment Management Authority, 2006). Large, old, scattered trees in particular will generally have higher habitat value due to the presence of hollows and the production of greater habitat resources such as nectar. These trees facilitate the movement of fauna through the landscape and every effort should be made to retain them where possible (Goulburn Broken Catchment Management Authority, 2005).

It appears that 10 of the 11 trees identified as bearing hollows are proposed for removal, as are all three scattered trees identified in the Cardno Flora and Fauna Assessment.

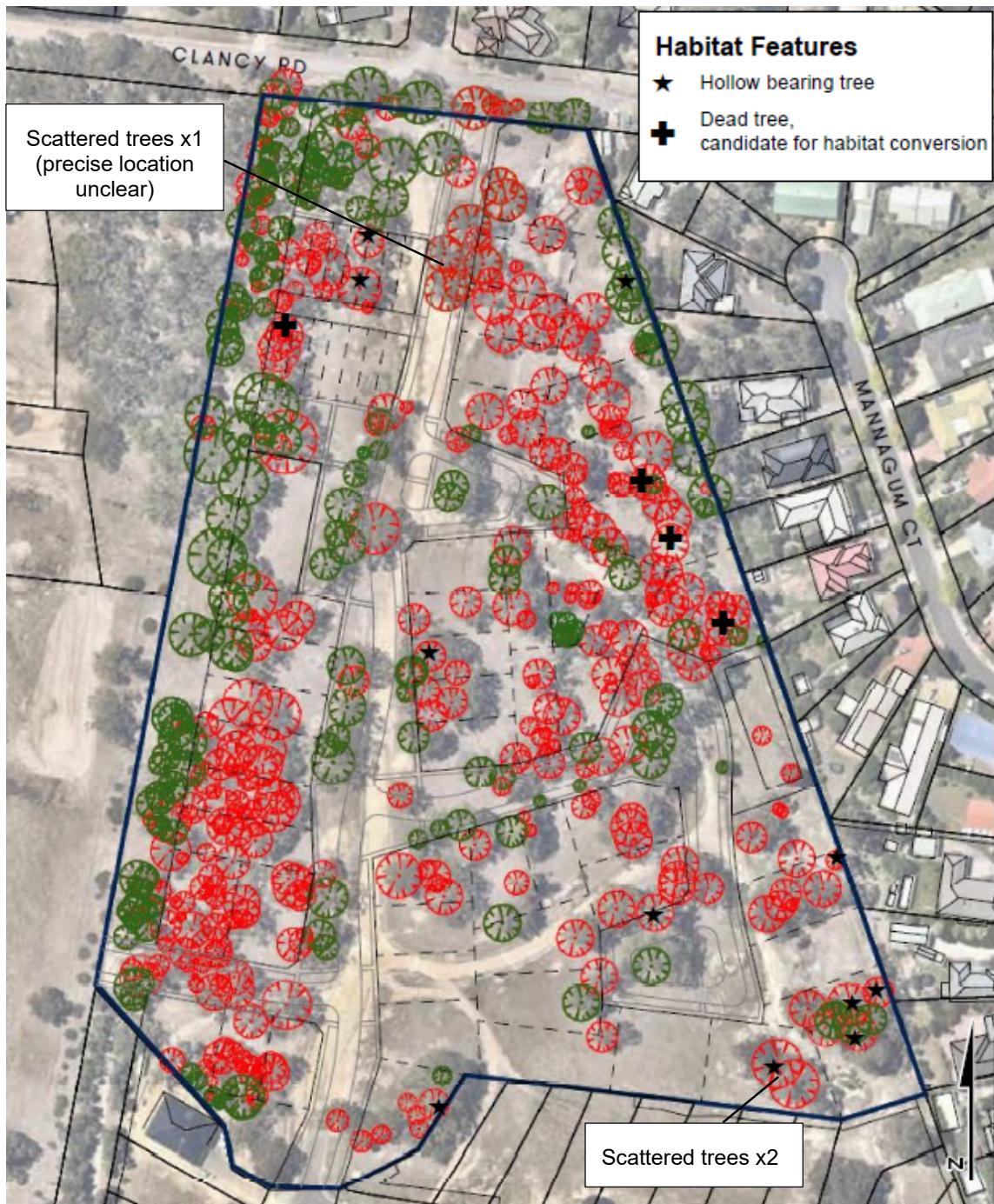


Figure 4: Hollow bearing trees, large dead trees of habitat value and scattered trees. Plotted location has been overlaid on the Tree Removal Plan prepared by Human Habitats.



Figure 5: Tree 360. DBH 120cm. Nominated for removal on development plans.



Figure 6: Tree 44. DBH 83cm. Nominated for removal on development plans.



Figure 7: Tree 47? DBH 80cm. Nominated for removal on development plans.



Figure 8: Tree 8. DBH 80cm. Nominated for removal on development plans.



Figure 9: Tree 205? *Eucalyptus viminalis*. Very large hollow indicated. Nominated for removal on development plans.



Figure 10: Unlabelled *Eucalyptus viminalis*. Large hollow indicated. Nominated for removal on development plans.



Figure 11: Tree 123 *Eucalyptus viminalis*. Hollow indicated. Nominated for removal on development plans.



Figure 12: Tree 176? – *Eucalyptus radiata*. Hollow indicated. Nominated for removal on development plans.

2.2.2.4 Tree Stand Significance

The **north-west corner** of the property (Figure 13) is dominated by a moderately dense forest of *E. obliqua* and *E. goniocalyx*, and a handful of *E. melliodora*. A single Medium-High retention *E. obliqua* is located to the south-west of this group and while approximately 40% of the trees have Medium retention value, the majority (~60%) are individually of Low and Low-Medium retention value due to poor health and/or structure. There are numerous dead trees and stumps scattered throughout, and the understorey is weedy with Gorse, Montpellier Broom and Blackberry. The predominant value of this patch of trees as a whole is its connectivity with the adjacent reserve.

The **centre-west** section of the property is dominated by mature *E. melliodora* with a few *E. obliqua* and *E. goniocalyx* to the north, including one very large dead *E. obliqua* with potential habitat value (Tree 360). The *E. melliodora* are growing in an open grassy woodland with little understorey and while there are some unforested gaps in this area, the tree canopies maintain connectivity. Individually, about 40% of the trees have High and Medium-High retention value, and 40% have Medium retention value, with only 20% of lesser value. This area of trees is significant due to both the value of individual trees, and as a group in providing connectivity between existing vegetation corridors. The group of trees warrants retention as an intact landscape unit, with the exception of any hazardous trees.

The **south-west** section of the property is forested by a moderately dense woodland of *E. melliodora* and *E. goniocalyx* with a grassy understorey. Approximately 16% have High and Medium-High retention value (mostly *E. melliodora*), ~37% have Medium retention value, and ~47% have lesser value. While the trees vary in size, condition and retention value, disturbance in this area is minimal relative to much of the property and the group of trees is significant and vital to retaining connectivity between existing vegetation corridors. This group of trees warrants retention as a largely intact landscape unit, maintaining as large and intact a contiguous patch of vegetation as possible, as well retaining as many High and Medium-High individual trees as possible.

Throughout the **middle** of the property from north to south are clumps of trees that are separated from each other, as well as solitary specimens. Over half of the trees in this area are *E. melliodora*, with one quarter encompassing *E. goniocalyx* and the remainder a mix of *E. obliqua*, *E. radiata* and *E. viminalis*. Many of the trees are open grown and have large, spreading crowns and are visually dominant in the landscape. Approximately 34% of these trees have High and Medium-High retention value, and 20% have Medium retention value. There are considerable gaps between clumps of high value trees, as well as areas with poorer clumps of vegetation. The understorey is largely absent except for grass, and it is noted that a number of access tracks have been dozed through this area. The High and Medium-High trees in clumps warrant retention while areas of poorer vegetation are considered of lesser importance.

The **north-east/ eastern** swathe of vegetation is predominantly open grown *E. goniocalyx* and *E. melliodora* at higher elevation on the flats, with *E. goniocalyx/ E. obliqua* forest on the slope (where a small clump of *E. radiata* is also present). About 14% of the trees have High and Medium-High retention value, and 24% have Medium retention value. Of particular significance in this area are the large, veteran *E. obliqua* trees along the eastern boundary. These trees have high landscape value due to size and their structural complexity provides many habitat niches that do not coexist on younger trees. Three large dead *E. obliqua* (refer Section 2.2.2.2) are also of significance. While surrounding trees are of lesser individual value, there is risk that removing these trees and isolating the habitat trees will lead to their demise and reduce their habitat value, with the structural diversity of the stand (varying heights and densities of the trees) an integral habitat component (Watson 2006).

Vegetation in the **south-east corner** of the property is discussed in Section 2.2.2.5.

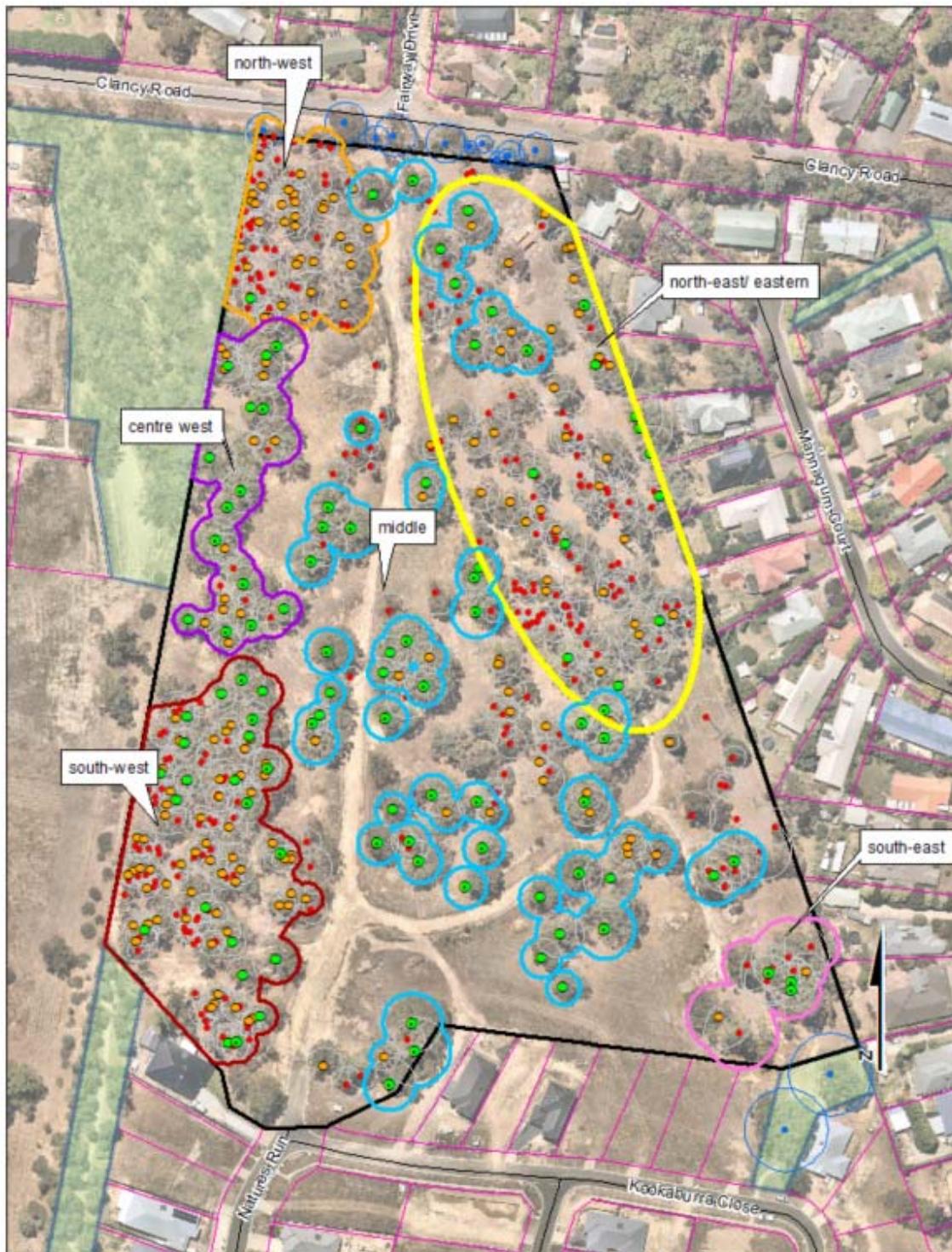


Figure 13: Stands and clumps of vegetation across the property.



Figure 14: North-west corner – moderately dense *E. obliqua* and *E. goniocalyx* woodland. Few individual trees of High value. Group adjoins existing reserve.



Figure 15: Centre west – open grown *E. melliodora* woodland. Many individually high value trees, and the group is significant in providing connectivity between existing vegetation corridors.



Figure 16: South west – moderately dense *E. melliodora* and *E. goniocalyx* woodland. Individual trees vary, but the group is significant in providing connectivity between existing vegetation corridors.



Figure 17: Middle - Clumps of mature trees and solitary specimens are scattered through the middle of the property from north to south. Many High value trees are present.



Figure 18: North east/ East – *E. goniocalyx* and *E. obliqua* forest dominates the slope along the eastern property boundary. Several large old *E. obliqua* are significant.

2.2.2.5 South-east corner and council reserve

Two large *E. viminalis* trees (herein referred to as Tree A and Tree B) have been retained in a small council pocket reserve between Kookaburra Close and the subject property. Council have requested an assessment of specified trees in the south-east corner of the property compared to these two trees (Figure 19).



Figure 19: Location of trees in the South-East corner. Trees A and B are in the council reserve. Trees 1-10 are in a contiguous group separated from Trees 11 and 12. All are *E. viminalis* except Tree 12 which is *E. radiata*.

Trees A and B (located in the Council reserve) are both large, mature trees that are somewhat isolated in the landscape.

Tree A (Figure 20) is a tall, upright *E. viminalis*. It has fair health and fair to poor structure, with basal trunk decay, deadwood, evidence of past canopy failures and branch hollows. There is a nest in the canopy. Tree B (Figure 21) is shorter and has a wide, sprawling canopy. It has good health and fair structure, and has had recent deadwood removal and reduction of limbs over a new dwelling.

Both trees are remnant vegetation and are considered to be of high significance due to their size and age, prominence in the local landscape and benefits to local wildlife.



Figure 20: Tree A in Council reserve. 20m tall, canopy 16m wide, DBH 124cm. High retention value, significant due to size, age and habitat.



Figure 21: Tree B in Council reserve. 14m tall, canopy 23m wide, DBH 153cm. High retention value, significant due to size, age and habitat.

Within the south-east corner of the subject property are a group of ten *E. viminalis*. (Figure 22).



Figure 22: Group of trees in south east corner of property.

The ten trees vary in size, condition, retention value and significance. When considered as individual trees and assessed on their suitability for retention in a residential setting, six have Low retention value, one has Medium retention value and three have High retention value. As a landscape unit however, the group of trees has high significance due to the size of some of the trees, the landscape contribution provided by the group of trees, habitat value due to the presence of hollows and the structural diversity of the stand, and proximity to other habitat trees. The different values are discussed below.

- Three trees have High retention value on an individual basis due to size, condition and ULE:
 - Trees 5, 9 and 10 are the dominant canopy trees in the group and have a DBH between 74 and 83cm. They are visually prominent in the landscape and are beneficial for local wildlife, with canopy hollows present in Tree 10 and a nest in Tree 5. They are in good condition, have a long Useful Life and the potential to develop hollows in the future if retained. Trees 5 & 9 appear to be retained on Development Plans while Tree 10 is to be removed.
- One tree has a Medium retention value:
 - Tree 8 is a medium sized tree in fair condition which requires weight reduction over the neighboring property. It has moderate visual amenity and plays a useful role to the significant patch of vegetation by maintaining canopy cover and connectivity. Tree 8 appears to be retained on development plans.

- Six trees have Low retention value in the context of a residential setting, due to poor structure and reduced Useful Life Expectancy (between 0 and 10 years). Two however, are hollow bearing and provide significant benefits to local wildlife, and two are large and contribute to the structural diversity of the stand:
 - Tree 1 is a large tree in Fair health with multiple structural defects and a reduced ULE in a residential setting. The tree has moderate visual amenity but is significant due to a very large hollow in the trunk and hollows in the canopy.
 - Tree 2 is a very large tree which has multiple structural defects and a reduced ULE in a residential setting. It has high visual amenity due to size and is significant due to a large trunk hollow and multiple canopy hollows.
 - Trees 3 and 4 are large trees with multiple defects and have Poor health and Structure and limited ULE in a residential setting. They have moderate to high visual amenity and with canopy reduction pruning, both can continue to play a useful role in the patch of vegetation by maintaining canopy cover and connectivity.
 - Tree 7 is a smaller tree (7m x 7m) with Fair health and Poor structure. It has low amenity value and is of relatively minor contribution to the significance of the patch of vegetation.
 - Tree 6 has Very Poor health and Poor structure and a ULE of 0 years. It has advanced trunk and canopy decay, leans out of the group and is not suitable for retention.

Two large old trees, one *E. viminalis* (Figure 23) and one *E. radiata* (Figure 24), are located south west of the group of ten trees. These trees are assessed as scattered trees in the Flora and Fauna Assessment prepared by Cardno, but Tree 12 is incorrectly identified in this report as *Eucalyptus viminalis*.

It is noted that even at a distance the two species do not closely resemble one another; *Eucalyptus radiata* has non-shedding, finely fibrous grey-brown bark while the *Eucalyptus viminalis* on this site have a thick, hard fibrous grey-brown 'sock' of bark up the trunk, and are then mostly smooth barked, white to pale grey with long strips of shed pale brown bark hanging in the canopy.



Figure 23: Tree 11. *E. viminalis*. 20m tall, canopy 28m wide, DBH 110cm. Poor condition but some habitat value. Label: 175



Figure 24: Tree 12. *E. radiata*. 14m tall, canopy 16m wide, DBH 98cm. Poor condition but significant habitat value. No label, likely 176

Tree 11 is a large old *E. viminalis* with deadwood and dieback in the canopy, a large bracket fungus in the trunk, indicative of decay, and multiple large canopy failures. It has Poor health and structure but is considered to be of significance due to size, age and habitat value.

Tree 12 is a large old *E. radiata* that appears to have recently re-foliated. There is deadwood throughout the canopy and large, recent canopy failures. There is a small hollow in the trunk. It has Poor health (which appears to be improving) and structure but is considered to be of significance due to large size, age and habitat value.

While the trees have Low to Medium arboricultural significance, they are likely to have high ecological value. Every effort should be made to retain scattered trees where possible, particularly in the case of older trees which generally have higher habitat values (Goulburn Broken Catchment Management Authority, 2005).

As previously noted, this report makes reference to the habitat value of the trees but is not an ecological or biodiversity assessment.

Of the 12 trees within the subject property, Trees 5, 9 and 10 (all located within the group of ten trees) are considered suitable for retention in a residential setting (i.e., a backyard).

Retaining only these trees will however, result in a significant loss of habitat on site with five hollow bearing trees removed and will likely compromise the structural diversity of the tree group and will leave the remaining trees further exposed to increased wind forces.

In order to maintain these values, the group of trees can be retained as a whole, with the exception of Tree 6 which should be removed. The group would need to be incorporated into a reserve and ideally, the land between Trees A and B and the group of trees revegetated to provide connectivity in the landscape and improve habitat value over time.

Some of these trees clearly possess structural faults that could cause the trees or part of the trees to fail. Excluding built structures and pedestrian access to the 'drop' zone' of defective parts will ensure that the risk of harm is maintained at an acceptable level. This can be achieved by revegetating underneath the tree canopies with dense plantings, and/or woody or thorny shrubs (Lonsdale 1999) and installation of a physical barrier such as bollards. The works will need to be specified and overseen by a qualified arborist to determine the appropriate level of canopy removal and to ensure an adequate exclusion zone is established.

Minor canopy pruning would be required to remove immediate hazards such as hanging branches. Existing fallen limbs and removed limbs should be retained around the base of the trees to provide habitat for microfauna and invertebrates.

Options to retain Trees 11 and 12 include:

- Tree retention within a reserve, with target exclusion:

As described above for the group of trees, this would require excluding built structures, vehicles and pedestrians from the 'drop zone'. At a minimum, the exclusion zone would need to encompass the tree height and canopy projection.

- Habitat stump conversion within a reserve, with target exclusion:

In order to retain the trees and reduce the risk of canopy failure, the trees may be converted to habitat stumps. Habitat stumps are created by reducing or removing all the major branches and foliage from the tree. Natural hollows are retained as much as possible and in some cases artificial hollows are created in the upper portions of the tree trunk and/or nesting boxes are installed. If the tree is living, the trunk is poisoned, or ring-barked and the tree is prevented from re-shoots to avoid epicormic shoot regrowth which may cause future problems due to poor attachment.

This may allow a reduced exclusion zone to be established around the trees. As there is still potential for trunk failure, the exclusion zone would need to encompass the 'drop zone' of the trunk and scaffold limbs in order to ensure that the risk of harm is maintained at an acceptable level. As with Option 1, exclusion will be most easily achieved with a combination of fencing or bollarding and dense underplanting.

Under Clause 52.17, converting the trees to habitat stumps will require a planning permit and biodiversity offset requirements will apply.

If any of these trees are retained on the basis of high ecological value, consideration must also be given to the ecological value of the trees within the future environment, i.e., a residential estate. In order for any of the retained trees to be of ecological value within a residential estate, they will need connectivity and continuity with other vegetation required for habitat. Existing fallen limbs and removed limbs should be retained around the base of the tree as these also provide habitat for microfauna and invertebrates.

3. Proposed Native Vegetation Removal

Proposed native vegetation removal is documented in the arborist report prepared by Galbraith and Associates (2 September, 2020) and depicted in the Tree Removal Plan for Stages 1 and 2 prepared by Human Habitats (September 2020) and for Stages 1, 2 and 3 (Options 1 and 2) in the Development Plan prepared by Human Habitats (September 2020).

3.1 Arborist Assessment - Galbraith & Associates

A review of the Galbraith Report was undertaken. This report is an assessment of the impact of Stages 1 and 2 on the existing trees, based on proposed subdivision plans and the initial arborist report prepared by Galbraith and Associates (21 November, 2019). It also provides the assessment data for all 580 trees on site (Stages 1, 2 and 3). The initial arborist report has not been provided for review.

3.1.1 Tree Assessments - General

Field assessment of trees on site in March 2021 by Homewood Consulting allowed a review of the tree data and retention values recorded in the Galbraith Report. 354 trees were identified on site with a clear and legible label, and attributes for these trees were compared with the corresponding records in the Galbraith Report. Trees that were no longer labelled, or illegibly labelled could not be compared to the data from the Galbraith Report.

The assessment and comparison of 354 trees confirmed that:

- the Galbraith Report correctly identifies the trees to species level.
- Diameter at Breast Height has been accurately measured for the trees in the Galbraith Report.

3.1.2 Tree Assessments - Worthiness of Retention

The Galbraith Report uses a Worthiness of Retention (WOR) rating to assign retention value to the assessed trees within the subject property, with 1 being of lowest value and 8 of highest. When assessing labelled trees on site and comparing the retention value attributed to the WOR in the Galbraith Report, it is clear that there is considerable difference in opinion on the value of many individual trees. These are summarised in Tables 1 and 2 and described over.

Table 1: Worthiness of Retention (WOR) per Galbraith Report

Galbraith WOR	Galbraith Count
WOR 7+	14
WOR 6	19
WOR 5-6	20
WOR 5	159
WOR 4-5	51
WOR 4	141
WOR 3	78
WOR 2	42
WOR 1	38
Other	30
Total	580

Table 2: Homewood retention values, per Homewood Consulting.

Homewood Value	Homewood Count
High	48
Med-High	54
Medium	163
Med-Low	95
Low	170
Other	13
Total	543*

* Some trees have fallen since the Galbraith assessment or have not been recorded in the Homewood Assessment.

3.1.2.1 WOR 7+ to WOR 5-6

I agree with the Galbraith Report assessment of high significance for trees rated WOR 7 and above, also attributing High retention value to all.

Almost all labelled trees attributed WOR 6, and WOR 5-6 in the Galbraith Report are also significant and are considered to have High or Medium-High retention value. These are large, mature, indigenous trees with Fair to Good health and structure. They currently provide a positive contribution to the local landscape and will, given the opportunity, continue to contribute to the neighbourhood character for decades to come.

The Galbraith Report assesses only 14 trees with WOR 7+, 19 trees as WOR 6 and 20 trees as WOR 5-6 (totalling 53 trees). In contrast, I have attributed a High retention value to 48 trees and Medium-High retention value to 54 trees across the site.

The High and Medium-High trees (per Homewood), and WOR 5-6 and above trees (per Galbraith) are the best trees on site. All have the potential be long-term landscape components where managed appropriately and all efforts should be made to retain these trees and protect them from construction impact.

Examples of WOR 5-6 and WOR 6 trees with High retention value are shown in Figure 25 to Figure 28, all are nominated for removal.

3.1.2.2 WOR 5

Trees with WOR 5 in the Galbraith report vary considerably in size, condition, ULE, and ultimately, retention value as assessed by Homewood Consulting. Of the WOR 5 trees in the Galbraith report, Homewood retention value ranges from Low to High and there is no clear trend in the data to ascribe any differences of opinion to.

Examples of WOR 5 trees assessed with High retention value are shown in Figure 29 and Figure 30, both nominated for removal.

3.1.2.3 WOR 4-5 to 4

I concur that of the labelled trees with WOR 4 and WOR 4-5 in the Galbraith report, few are above Medium retention value. It is important to note that many of these trees are suitable for retention, though not necessarily a priority, unless located within larger groups of retained trees.

3.1.2.4 WOR 1 to 3

I concur that trees assessed with a WOR of 1-3 in the Galbraith Report are, in general, of Low retention value and do not warrant retention and protection throughout development, with exceptions:

- Trees with WOR 3 or below can be retained as part of larger groups of retained trees unless deemed hazardous. They should not necessarily automatically be nominated for removal.
- All dead trees on site have been rated WOR 1 in the Galbraith Report, indicating that they are of no value. Four dead trees have been identified with habitat value and are discussed in Section 2.2.2.2.

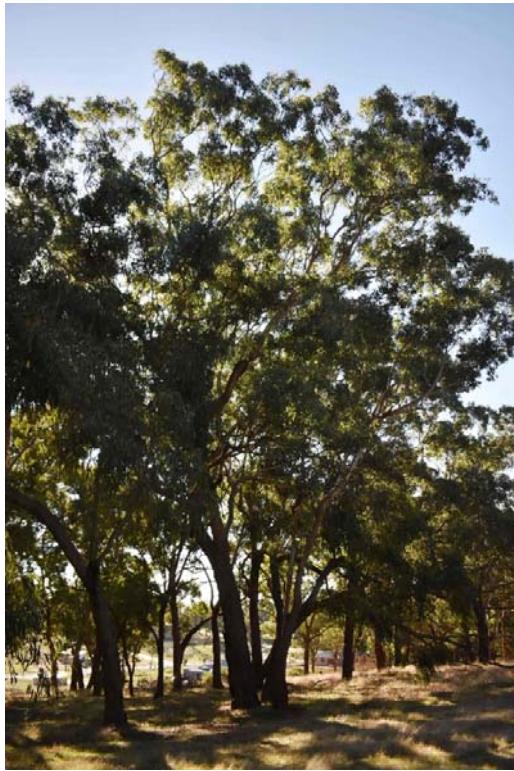


Figure 25: Tree 553: *E. melliodora*, WOR 5-6.
High retention value, nominated for removal.

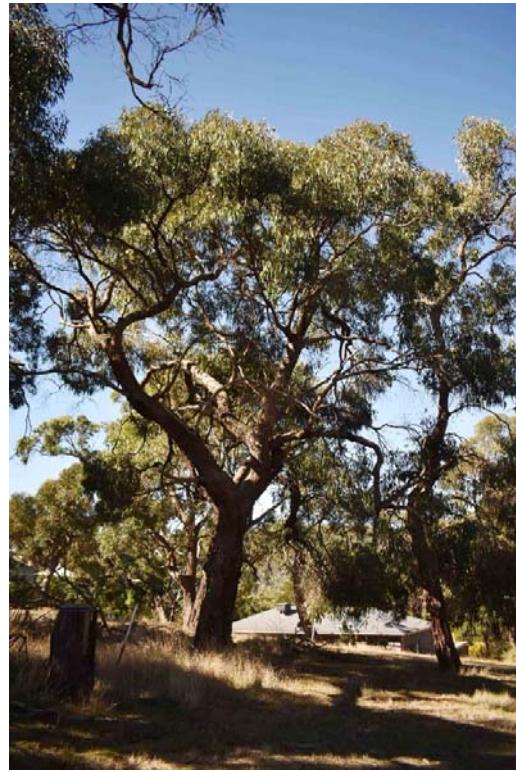


Figure 26: Tree 79: *E. goniocalyx*, WOR 6.
High retention value, nominated for removal.



Figure 27: Tree 150: *E. melliodora*, WOR 6.
High retention value, nominated for removal



Figure 28: Tree 703: *E. melliodora*, WOR 6.
High retention value, nominated for removal



Figure 29: Tree 571, *E. melliodora*, WOR 5.
High retention value, nominated for removal.



Figure 30: Tree 174, *E. melliodora*, WOR 5.
High retention value, nominated for removal.

In summary:

- The Galbraith Report has undervalued the better trees across the site.
- Trees of WOR 5-6 and above are the best trees on site. These trees should be prioritised for retention.
- There are also High and Medium-High retention value trees amongst those assessed WOR 5.
- Trees with WOR 4 to 4-5 are generally of Medium retention value and should be considered for retention, where possible, across the site.
- I concur that trees with WOR 3 to 1 are generally of Low retention value, but these do not automatically require removal if located within groups of retained trees, unless hazardous.
 - I disagree that dead Trees 8, 44, 360 and an unlabeled tree (possibly 47) are of Low retention value given their potential as habitat trees.

3.2 Proposed Tree Retention and Removal

Proposed tree retention for Stages 1 and 2 is summarised in Table 3.

Per the Galbraith Report, of the 454 trees in Stages 1 and 2, 166 are proposed to be retained and 288 are proposed to be removed.

Table 3: Proposed tree removal per Galbraith Report and Development Plan

Galbraith WOR	Count	Proposed no. Retained	Proposed no. Removed	Retention Rate
WOR 7+	14	11	3	79%
WOR 6	17	11	6	65%
WOR 5-6	17	8	9	47%
WOR 5	112	43	69	38%
WOR 4-5	43	21	22	49%
WOR 4	115	50	65	43%
WOR 3	71	15	56	21%
WOR 2	31	2	29	6%
WOR 1	30	2	28	7%
Total	450*	163*	287*	36*%

* Figures have been derived from the table of data in the Galbraith Report. Some trees are groups and could not be counted.

The major issues identified with the proposed tree removals are as follows:

1. The proposed number of trees to be removed from Stages 1 and 2 is excessive, with 288 trees proposed for removal.
2. The proposed removal rate for trees in Stages 1 and 2 is excessive, with 63% of the trees earmarked for removal.
3. Trees have been undervalued. The low number of trees rated WOR 7+, aka High retention value, has led to a poor design outcome.
 - In Stages 1 & 2, the Galbraith Report attributes 14 trees with WOR 7+ and these trees have been the focus for retention in the Development Plan. The Galbraith Report favourably paints the proposed 79% retention rate for WOR 7+ trees within Stages 1 and 2. Unfortunately, the evident bias towards undervaluing the trees across the site means that of the 454 trees in Stages 1 and 2, only 14 trees are attributed WOR 7+ - and even still, only 11 are to be retained. Photographs of two WOR 7+ trees nominated for removal are shown in Figure 31 and Figure 32.
 - 65% of WOR 6 trees are proposed for retention, but again, the tendency to undervalue trees across the site means that only 17 of the 454 trees in Stages 1 and 2 are attributed WOR 6 – and only 11 are to be retained. Similarly, only 47% of WOR 5-6 trees are proposed for retention, with only 8 trees in this category to be retained.
 - It is noted that of the trees rated WOR 5, a retention rate of less than 36% is proposed, considerably low despite these trees still, per the Galbraith Report, being “of some significance” and which although “in somewhat lesser condition which can nevertheless also be considered for retention”.

4. The proposed design has largely failed to retain trees in groups, instead leaving many isolated specimens. This is in contrast to the 'Considerations' for tree retention noted in the Galbraith Report:

"we believe that when retaining trees it is important to endeavour to retain clumps, rather than leaving isolated specimens which were once closely linked with neighbouring trees." (pg. 2)

5. The design focus for the property has been on individual tree retention and, with the exception of a narrow strip of vegetation proposed for retention along the western boundary, has disregarded the larger function of the intact area of native vegetation as whole.

The *E. melliodora* and *E. goniocalyx* woodland in the south-west is largely nominated for removal. As discussed in Section 2.2.2.4, this forest contains trees varying in size and condition with High and Medium-High individual trees throughout. The largely undisturbed patch is significant and vital to retaining connectivity between existing vegetation corridors (Figure 33). A narrow strip of vegetation is proposed for retention along the western boundary but the removal of the bulk of the trees to the east will expose the retained strip and reduce the structural diversity of the stand, reducing its value as a vegetation corridor and likely reducing the Useful Life of the individual trees.

The north-east/ eastern swathe of vegetation is also largely nominated for removal. This area includes open grown *E. goniocalyx* and *E. melliodora* on the flats, many of which should be targeted for retention, and *E. goniocalyx*/ *E. obliqua* forest on the slope, including some large, veteran *E. obliqua* trees along the eastern boundary. The veteran trees are nominated for retention on design plans, but the removal of almost all vegetation in proximity will isolate these trees in the landscape, potentially contributing to their demise and reducing their habitat value. The plan depicts these trees along the shared back fence of existing and proposed residential lots. As these trees age and decline they will require increasing input to manage and maintain in a safe condition in a solely residential setting and will quite possibly require premature removal.



Figure 31: Tree 123 – WOR 7, nominated for removal in development plans. DBH 102cm, hollow bearing



Figure 32: Tree 196 – WOR 7, nominated for removal in development plans. DBH 88cm



Figure 33: The subject property in the context of surrounding native vegetation and reserves. The native forest on this property, and other private property to the north links vegetation in Monument Hill Reserve (north) to Natures Run linear reserve (south), around the eastern tributary of Kilmore Creek.

4. Mitchell Shire Planning Scheme

The subject land is zoned General Residential – Schedule 1. A Development Plan Overlay – Schedule 10 applies.

State and Local planning provisions apply to the proposed development of the land, as well as Mitchell Shire Strategies. The following are relevant to the proposed removal of native vegetation and development of the land.

4.1 VPP Clause 52.17: Native Vegetation

Objective:

To ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved by applying the following three step approach in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017):

1. Avoid the removal, destruction or lopping of native vegetation.

Maintaining native vegetation that currently exists is an effective way to ensure native vegetation continues to deliver its important values into the future.

Avoiding the removal of native vegetation can be achieved by locating or designing a development so that native vegetation is not removed.

An application to remove native vegetation must demonstrate or provide appropriate evidence to show that no options exist to avoid native vegetation removal, that will not undermine the objectives of the proposed use or development.

2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.

Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.

Minimising ensures that impacts from native vegetation removal on biodiversity or other values are kept to the minimum necessary.

- siting and/or designing the use or development to reduce the amount of native vegetation that has to be removed
- siting and/or designing the use or development so that impacts are restricted to areas of native vegetation that have the least biodiversity or other values
- managing the use or development to minimise any impacts on surrounding native vegetation, for example stormwater control measures.

An application to remove native vegetation must demonstrate or provide appropriate evidence to show that no options exist to further minimise the impacts of native vegetation removal, that will not undermine the objectives of the proposed use or development.

3. Provide an offset to compensate for the biodiversity impact if a permit is granted to remove, destroy or lop native vegetation.

The Guidelines refer to the biodiversity and other values of native vegetation. Offsetting only addresses the loss in biodiversity value that results from native vegetation removal.

4.1.1 Development Plan Response

The proposed landscaping response seeks to retain a large proportion of existing native vegetation to protect the habitat of local wildlife as well as enhance the natural landscape setting of the future neighbourhood. Where vegetation is to be removed, substantial areas are provided within each lot for canopy tree planting to offset the loss of the trees to be removed.

It is further noted that environmental studies of the trees on the subject site have been undertaken, with trees identified as suitable for retention or removal nominated and clearly shown within the tree retention plan submitted as part of the plan package. Given the intent for the site to be developed for residential development under its GRZ1 zoning, the extent of vegetation being cleared is appropriate and necessary to facilitate the subdivision and eventual construction of dwellings on the land in accordance with Council's expectations whilst retaining a suitable quantity of significant native vegetation across the entire site.

4.1.2 Observations

The proposed development does not apply the three-step approach.

It is not adequately demonstrated that no options exist to further minimise the impacts of native vegetation removal, that will not undermine the objectives of the proposed use or development.

4.2 VPP Clause 12: Environment and Landscape Values

Planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape values.

Clause 12.01-1S: Biodiversity - Protection of biodiversity

Objective: To assist the protection and conservation of Victoria's biodiversity

Relevant Strategies:

Ensure that decision making takes into account the impacts of land use and development on Victoria's biodiversity, including consideration of:

- Cumulative impacts
- Fragmentation of habitat
- Assist in the establishment, protection and re-establishment of links between important areas of biodiversity, including through a network of green spaces and large-scale native vegetation corridor projects
- Avoid impacts of land use and development on important areas of biodiversity

Clause 12.01-2S: Biodiversity – Native Vegetation Management

Objective: To ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.

Relevant Strategies:

Ensure decisions that involve, or will lead to, the removal, destruction or lopping of native vegetation, apply the three-step approach in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017):

1. Avoid the removal, destruction or lopping of native vegetation.

2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
3. Provide an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation.

LPP Clause 21.03: Environment and Landscape Values

Provides local content to support Clause 12 (Environmental and Landscape values) of the State Planning Policy Framework.

Objective 1: To protect and enhance indigenous flora, fauna and habitat.

Relevant Strategies:

- Revegetate and connect bio-links, including along watercourses.
- Protect high quality native vegetation and habitat for native animals.
- Control declared and environmental pest plants and declared pest animals.
- Identify and document remnant vegetation, biodiversity assets and wildlife corridors.
- Improve the connectivity and long-term security of indigenous habitats and species.

4.2.1 Development Plan Response

The subject site features a large number of native trees which are proposed to play an important role in creating a leafy and green neighbourhood character. The priority retention approach adopted in the proposed subdivision layout provides an excellent response to this policy context. The retention of trees will retain and create habitats for local wildlife and allow future residents to enjoy shade and amenity within the neighbourhood.

The protection of significant vegetation in the form of a protected ecological reserve, with multiple options would? provided for the preservation of a nationally significant species (Matted Flax Lily).

4.2.2 Observations

The proposed development is inconsistent with Mitchell Shire Council Planning Provisions for Environment and Landscape Values, with respect to the proposed removal of native vegetation.

- It is likely to result in fragmentation of habitat.
- It does not apply the three-step approach for the removal destruction or lopping of native vegetation.
- It does not adequately protect high quality native vegetation and habitat for native animals.
- It does not improve the connectivity and long-term security of indigenous habitats and species.

4.3 VPP Clause 15: Built Environment and Heritage

Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context.

Planning should promote development that is environmentally sustainable and should minimise detrimental impacts on the built and natural environment.

Clause 15.01-3S: Built Environment - Subdivision Design

Objective: To ensure the design of subdivisions achieves attractive, safe, accessible, diverse and sustainable neighbourhoods.

Relevant Strategies:

In the development of new residential areas and in the redevelopment of existing areas, subdivision should be designed to create liveable and sustainable communities by:

- Protecting and enhancing native habitat.

Clause 15.01-5S: Built Environment - Neighbourhood character

Objective: To recognise, support and protect neighbourhood character, cultural identity, and sense of place.

Relevant Strategies:

Ensure development responds to its context and reinforces a sense of place and the valued features and characteristics of the local environment and place by respecting the:

- Underlying natural landscape character and significant vegetation.

Clause 15.02 Sustainable Development - Energy and Resource Efficiency

Objective: To encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions.

Relevant strategies:

Encourage retention of existing vegetation and planting of new vegetation as part of development and subdivision proposals.

4.3.1 Development Plan Response

The proposed Development Plan will facilitate a high quality development outcome which will contribute to achieving the aims of the State Planning Policy Framework in relation to Neighbourhood character, by acknowledging the low rise character of the area and the intent for a leafy residential neighbourhood character.

The proposed subdivision implements these objectives by ensuring residents will enjoy a high level of amenity due to the retention of native vegetation and high-level landscaping throughout the site.

4.3.2 Observations

The proposed development is inconsistent with Mitchell Shire Council Planning Provisions for Built Environment and Heritage, with respect to the proposed removal of native vegetation.

- It does not protect and enhance native habitat.
- It does not adequately respect the significant vegetation on site.
- It does not favour the retention of existing vegetation.

4.4 Clause 43.04: Development Plan Overlay – Schedule 10 – Kilmore Strategic Development Sites

A development plan must be generally in accordance with the Kilmore Structure Plan, August 2016 as appropriate.

Kilmore Structure Plan – Relevant Excerpts

Planning fundamentals, include but are not restricted to, the following:

- Encouraging sustainable development outcomes and enhancing the natural environment.

Vision

To provide for sensitive, sustainable and well-managed growth that enhances and maintains Kilmore's valued lifestyle attributes and recognises, and is responsive to, Kilmore's important heritage, character, environment, and landscape features.

Guiding Principles for Key Elements: Biodiversity and Environment

Kilmore's natural systems are complex and dynamic, made up of hills and ridge lines, exotic and native vegetation, wildlife corridors and waterways which together create opportunities which will set the character of Kilmore and its precincts. As the town grows, development will need to balance its biodiversity, landscape and environmental values and recognise opportunities to positively incorporate these elements into the story and character of Kilmore.

Key Objectives & Strategies

To recognise Kilmore's existing natural environment for its biodiversity and ecological values for its contribution to a healthy community and ecosystems and contribution to the character of Kilmore.

- Prioritise the retention of existing trees, native vegetation, natural landscape and habitat design in open spaces and which contribute to the character of Kilmore.
- Support development which implements Environment Sustainable Development initiatives.

Key Issues and Outcomes

- Balancing planned growth and retention of biodiversity values that both benefit the environment and the character of the urban context
- Lack of consistent approach to the role of retention of scattered trees for the landscape, amenity and biodiversity value

Precincts: Strategic Infill Development Sites - Design/ Development Objectives

General design and development objectives for Strategic Infill Development Sites are listed as follows:

- Encourage diverse housing opportunities including medium density development particularly in proximity to the Sydney Street town centre, community uses and activity nodes, and lower density where heritage, topographical, vegetation and other features warrant such sensitive design.
- Subdivision design and development appropriately responds to site conditions such as heritage buildings and streetscapes, topographical features, vegetation and other elements which contribute to the character of Kilmore.

4.4.1 Development Plan Response

The development plan package includes specific plans relating to the proposal's response to the high points, views and vistas of the subject site. Further, the maximised retention of significant native vegetation on the subject site has been a key consideration as evident in the development plan package.

Overall, the project is not anticipated to have a significant environmental effect in the State or regional context. A number of standard conditions are recommended to mitigate potential impact of protect fauna through the construction phase of the development.

The proposed Development Plan has been prepared with the assistance of consulting arborists Galbraith and Associates. As set out in the development plan, the overall strategy is to adopt a presumption in favour of tree retention, particularly of those trees considered to have a high retention value to their quality and health. The proposed design response has enabled the retention of trees in tree reserves, road reserves and within lots, and aims to deliver a leafy neighbourhood character befitting of the site and area.

The Kilmore Structure Plan seeks to protect and enhance the town's natural character elements. The proposed subdivision achieves this vision by designing the layout to optimise the retention of existing native trees. The proposed allotments have been designed to provide for reasonable development opportunities, whilst allowing trees to be retained within the front, rear and side setbacks of lots.

4.4.2 Observations

The proposed development is inconsistent with the Kilmore Structure Plan, with respect to the proposed removal of native vegetation.

It does not adequately mitigate potential impacts to fauna with proposed removal of significant habitat trees.

It does not propose lower density housing warranted by the vegetation.

4.5 VPP Clause 56: Residential Subdivision

Clause 56.03-4: Liveable and Sustainable Communities - Built Environment Objective

To create urban places with identity and character.

Standard C5

The built environment should:

- Provide living and working environments that are functional, safe and attractive.
- Contribute to a sense of place and cultural identity.
- An application should describe the identity and character to be achieved and the elements that contribute to that identity and character.

Clause 56.03-4: Liveable and Sustainable Communities - Neighbourhood Character Objective

To create urban places with identity and character.

Standard C6

Subdivision should:

- Respect the existing neighbourhood character or achieve a preferred neighbourhood character consistent with any relevant neighbourhood character objective, policy or statement set out in this scheme.
- Respond to and integrate with the surrounding urban environment.
- Protect significant vegetation and site features.

Clause 56.04-2: Lot Design - Lot Area and Building Envelopes Objective

To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicles access and parking, water management, easements and the retention of significant vegetation and site features.

Standard C8

Lot dimensions and building envelopes should protect:

- Significant vegetation and site features.

Clause 56.05-1: Urban Landscape - Integrated Urban Landscape Objectives

To provide attractive and continuous landscaping in streets and public open spaces that contribute to the character and identity of new neighbourhoods and urban places or to existing or preferred neighbourhood character in existing urban areas.

To incorporate natural and cultural features in the design of streets and public open space where appropriate.

To protect and enhance native habitat and discourage the planting and spread of noxious weeds.

Standard C12

An application for subdivision that creates streets or public open space should be accompanied by a landscape design. The landscape design should:

- Maintain significant vegetation where possible within an urban context

- Protect and enhance any significant natural and cultural features.
- Protect and link areas of significant local habitat where appropriate.

Clause 56.06-7: Access and Mobility Management - Neighbourhood Street Network Detail Objective

To design and construct street carriageways and verges so that the street geometry and traffic speeds provide an accessible and safe neighbourhood street system for all users.

Standard C20

A street detail plan should be prepared that shows, as appropriate:

- Location of existing vegetation to be retained and proposed treatment to ensure its health.

4.5.1 Development Plan Response

The retention of native vegetation throughout the site will provide for an attractive neighbourhood and contribute to the natural landscape setting of the area.

The proposal will be respectful of the existing neighbourhood character found to the north and south of the site, providing ample roadside landscaping and open space reserve areas to retain the area's leafy neighbourhood character.

4.5.2 Observations

The proposed development plans do not satisfy Standard C8, with no building/ driveway envelopes and or building exclusion zones (i.e., Tree Protection Zones) depicted in the development plans. There is no assurance that the successful protection of trees is compatible with viable residential lots.

The proposed development does not satisfy Standard C12, due to the excessive removal of significant native vegetation and fragmentation of local habitat.

The proposed development plans do not satisfy Standard C20, with no assessment of construction impact on retained trees, and thus no assurance that trees can be successfully retained within the proposed street plans.

4.6 VPP Clause 65: Decision Guidelines

Clause 65.01: Approval of an Application or Plan

Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- The effect on the amenity of the area.
- The extent and character of native vegetation and the likelihood of its destruction
- Whether native vegetation is to be or can be protected, planted or allowed to regenerate.

Clause 65.02: Approval of An Application to Subdivide Land

Before deciding on an application to subdivide land, the responsible authority must also consider, as appropriate:

- The subdivision pattern having regard to the physical characteristics of the land including existing vegetation.

4.6.1 Development Plan Response

The proposed development plan has been prepared to maximise retention of trees on-site, and provides options for management of protected native vegetation, both of which incorporate significant retention on site.

The proposal involves the protection of existing native vegetation as well as the planting of new native vegetation through landscape treatments.

4.6.2 Observations

The proposal is inconsistent with Clause 65 with no assessment of construction impact on retained trees, and thus no assurance that trees can be successfully protected.

The proposal does not maximise retention of trees on site and will have a significant impact on amenity and local character through excessive removal of native vegetation.

4.7 Council Strategy and Policy

Mitchell Shire Council Environmental Policy – May 2020

Vision: Mitchell Shire Council is a leader in sustainable environmental management in all our business operations and in support of the wider community.

Strategic Aim - Land and Biodiversity:

We will practice, promote and encourage sustainable, innovative and adaptive land management that responds to climate change.

We will protect, restore and connect landscapes by increasing the extent and quality of native habitat.

2050 Goals Land and Biodiversity Goals:

Mitchell Shire is known for supporting innovative, sustainable and adaptable land management and agricultural business.

Mitchell Shire's biodiversity values and natural environment are embedded within and protected by the planning scheme and local policy.

The majority of our population is connected to nature.

Mitchell Shire Council Environment Strategy 2014-2024

Mitchell Shire Council recognises the need to show leadership in environmental sustainability by embracing its responsibility to the next generation of Mitchell Shire residents. The strong association between the local environment, economy and community calls for a considered approach to the management of the natural environment. This is particularly important in the current context of environmental pressures such as climate change, land use changes and population growth.

Biodiversity Vision: Protect, enhance and connect landscapes by increasing the extent and quality of native habitat.

Desired outcomes: Implementation of sustainable land management practices on private land to improve the extent and condition of native vegetation and habitat is encouraged and supported.

Urban land use, planning and development Vision: Enable land use planning and development that respects and conserves Mitchell Shire's natural environment by anticipating, avoiding and reducing potential adverse impacts from increased population, economic and settlement growth.

Kilmore Creek Precinct Landscape Master Plan (draft) - August 2019

General Actions and Recommendations - Biodiversity and Environment

Improve the quality of existing wildlife corridors within the Kilmore Creek Precinct and establish new corridor links to nearby open spaces and reserves.

4.7.1 Development Plan Response

Nil.

4.7.2 Observations

The forest within the subject property is a link in the chain of vegetation connecting Monument Hill Reserve in the north to the Kilmore Creek eastern tributary (Natures Run Reserve), in the south.

The proposed native vegetation removal does not protect, restore and connect landscapes by increasing the extent and quality of native habitat.

The proposed native vegetation removal will not improve the quality of the existing wildlife corridor.

5. Proposed Lot Layout

The proposed lot layout consists of a moderate density arrangement of conventional sized lots across the site (Figure 33). The lot layout does not adequately respond to the existing native vegetation across the site, focusing on maximising the number of lots within the property bounds, rather than recognising the inherent constraints in the existing native vegetation and habitat value.

It must be acknowledged that the existing vegetation will present a significant challenge in the development of the property for residential purposes and that a conventional development is unlikely to be appropriate on this site. It is clear that the proposed development and design warrant further investigation and consideration in order to provide an appropriate response to the existing native vegetation.



Figure 34: Development Plan - Option 1 (Human Habitats) showing proposed lot layout and trees to be retained, with retention value and vegetation clumps (per Homewood Consulting) overlaid.

6. References

- Department of Environment, Land, Water and Planning, 2017, *Guidelines for the Removal, Destruction or Lopping of Native Vegetation*, The State of Victoria, DELWP
- Department of Environment, Land, Water and Planning, 2017, *Assessor's handbook: applications to remove, destroy or lop native vegetation*, The State of Victoria, DELWP
- Gibbons, P. and Lindenmayer, D., 2002, *Tree Hollows and Wildlife Conservation in Australia*, CSIRO Publishing, Collingwood
- Goulburn Broken Catchment Management Authority, 2005, *Goulburn Broken Native Vegetation Management Strategy Volume 2: Native Vegetation Retention Control, Regional Guidelines for the Goulburn Broken Catchment*, The State of Victoria, Goulburn Broken Catchment Management Authority
- Lonsdale, D., 1999, *Principles of Tree Hazard Assessment and Management*, The Stationery Office, London
- Port Phillip and Westernport Catchment Management Authority, 2006, *The Port Phillip and Western Port Native Vegetation Plan*, The State of Victoria, Port Phillip and Westernport Catchment Management Authority
- Watson, B., 2006, *Trees: Their Use, Management, Cultivation and Biology - A Comprehensive Guide*, Crowood Press, Great Britain

Reports prepared for 100 Natures Run, Kilmore:

- Cardno Victoria Pty Ltd: Flora and Fauna Assessment, 23 September 2020
- Galbraith and Associates: Correspondence re: 100 Natures Run, Kilmore, 2 September 2020
- Human Habitats: Town Planning and Urban Context Report, 24 September, 2020
- Human Habitats: Plan Set V01, September 2020
- Human Habitats: Development Plan, September 2020