

Landscape Referral Response

Application Number:	DA2019/0409
Date:	16/08/2019
Responsible Officer:	Lashta Haidari
Land to be developed (Address):	Lot 1113 DP 752038 , 1113 / 752038 Oxford Falls Road FRENCHS FOREST NSW 2086

Reasons for referral

This application seeks consent for the following:

- Construction / development works within 5 metres of a tree or
- New residential works with three or more dwellings. (RFB's, townhouses, seniors living, guesthouses, etc). or
- Mixed use developments containing three or more residential dwellings.
- New Dwellings or

Officer comments

It is noted that there is an existing approval on this site for a Residential Care Facility with a similar building footprint and layout to the current application.

This application is for Seniors Housing development. Some amendments to the existing approval include:

- Additional excavation for basement parking, pool and gym
- Additional driveway accesses for basement parking
- amended internal footpath access
- amended alignment of the northern section of the driveway.
- Increase in building footprint in the northern portion of the site.

1. Tree and Landscape Impacts

The excavation for the pool and gym will require removal of several trees required to be retained under the existing consent. These trees are noted as:

Tree 698 *Eucalyptus sieberi* 12m ht.

Tree 418 *Angophora costata* 23m ht.

Tree 410 *Eucalyptus piperita* 18m ht.

Tree 420 *Angophora costata* 17m ht.

Tree 422 *Eucalyptus piperita* 22m ht.

Tree 688 *Melaleuca styphelloides* 11m ht.

Tree 687 *Melaleuca styphelloides* 11m ht.

Additionally, the approved Landscape Plan proposed additional tree planting in the area now proposed to be occupied by the pool and gym as follows:

3 x *Eucalyptus haemastoma*

8 x *Archontophoenix cunninghamiana*

8 x *Elaeocarpus reticulatus*

4 x *Cyathea cooperi*.

The proposed landscape plan now indicates replanting of :

1 x *Elaeocarpus reticulatus*

3 x *Cyathea cooperi*

The new proposal therefore represents a net loss of 26 trees around the built form that provided important retention of existing native trees and provision of additional trees that helped to break down the bulk and scale of the buildings stepping down the site.

Consequently, the excavation for the pool and gym as proposed is not supported.

2. Tree Planting in the Asset Protection Zone

Some confusion regarding proposed tree planting in the Inner Protection Area to the north of the site is apparent in the documentation provided.

Relevant extracts from the Bushfire Protection Assessment and the Bushland Regeneration and Biodiversity Management Plan, both provided by Travers Bushfire and Ecology, are provided below, but essentially the two documents indicate different densities of tree planting in the IPA. The Bushfire Assessment indicates a tree planting density of 1 per 100m² in the area between 5-10m from the building and <10 per 400m² in the area between 10-20m off the building. (No densities are stated beyond that distance).

The Bushland Regeneration Report indicates a density of 1 per 200 to 1 per 400m².

In the interests of providing good canopy cover and the environmental and aesthetic benefits that they provide, a rate of 1 per 100m² would be preferable in accordance with the Bushfire Protection Assessment. This is reflected in the recommended conditions, but may require assessment by a bushfire expert.

3. Document Extracts

Bushfire Protection Assessment dated June 2016 prepared by Travers Bushfire and Ecology. Appendix 1 as referred to in Recommendation 3 of the Bushfire Report.

Presence of Trees within an Inner Protection Area

A tree may occur within an IPA if the canopy does not form a link with shrubs. The reason is to reduce any chance for „vegetation linking“ and the capability for fire to extend into the canopy....

....Similarly in „open forests“ the height of the forest is sufficiently removed from the shrub layer. As a general rule trees are allowed within an IPA where the density of those trees is commensurate with Table 2 below and located on slopes up to 20% with a westerly aspect.

In respect of trees that can be located in an IPA Table 2 provides guidelines.

Table 2 – Tree Density in Inner Protection Area

*Distance from dwelling
wall*

Trees permitted on

*Trees permitted on the
the exposed side of
a dwelling*

Within 5m No trees

No trees

Between 5-10m One tree per 100m²
100m²

2 trees per

Between 10-20m <10 tree per 400m².
400m²

<10 trees per

Bushland Regeneration and Biodiversity Management Plan dated 12 April 2019 prepared by Travers Bushfire and Ecology.

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3.1.4 Zone 4 – Northern Asset Protection Zone (Inner Protection Area)

This area contains the northern APZ between the proposed development and the biodiversity corridor which is to be managed in accordance with Planning for Bush Fire Protection 2006. The area is currently devoid of any natural vegetation but is to act as an arboreal stepping stone to the proposed corridor along the northern boundary. The ecological value of the APZ landscape is improved by selective planting of canopy species such that an APZ compliant landscape is created. All canopy trees are limited in terms of cover and canopy connectivity to be considered an actively managed asset protection zone.

The APZ is to be planted with canopy vegetation as discontinuous trees to an average density between 1 tree per 200m² to 1 tree per 400m², or may be planted as very small clumps of 2-3 trees with separated canopy between clumps. No shrubs are proposed for planting.

P20.

3.1.8 Zone 8 – Landscaping with Native Canopy Planting

Zone 8 is located in the central-northern portion of the site to the immediate north of the proposed development area. This zone is to contain a bound and compacted gravel footpath and landscaped planting as per Landscaping Plans (John Chetham & Associates).

To enhance this area whilst not contributing to changes in asset protection zone management, the Zone is to be planted with native canopy species at no greater than 1 tree per 200m², similar to that prescribed for Zone 4. Tree species should be largely smooth-barked and mown underneath.

RFS General Terms of Approval 3 June 2019

Asset Protection Zones

The intent of measures is to provide sufficient space for fire fighters and other emergency services personnel, ensuring radiant heat levels permit operations under critical conditions of radiant heat, smoke and embers, while supporting or evacuating occupants. To achieve this, the following conditions shall apply:

1. At the commencement of building works and for the life of the development, the entire property shall be managed as an Inner Protection Area (IPA) as outlined within Appendices 2 & 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

The following exclusions apply: the wildlife restoration corridor, and the riparian zone and buffer located in the northern part of the site, as shown in Schedule 1 – Bushfire Protection Measures, Issue 1, dated 10/04/2019, contained within the 'Bushland Regeneration and Biodiversity Management Plan', prepared by Travers Bushfire & Ecology, dated April 2019, ref.A16087Bio.



DISCLAIMER: CAD (N. LEVEL 114) not correct
groundwater level and LPI boundaries. Verify
if required surveyor required prior to finalisation

Aerial source: GeoEye 3

Legend		Erosion Route		Avoid Protection Zone (APZ)	
	Subject site		Resident exit /		Inner Protection Area
	Lot boundary (demarcated)		Resident pickup point		Outer Protection Area
	Drainage base				Outer Protection Area Zones
	Metal Shed				Cleared (0.17 ha)
	Buff setbacks				Canopy with managed understorey (0.05 ha)
	50m wildlife corridor (for restoration)				Canopy with diverse mixed understorey (0.01 ha)
	Core Riparian Zone (CRZ)				
	Managed Vegetated Buffer (MVB)				



PROJECT & SITE REFERENCE
Barnes Road, Frenchs Forest
A16087_BF001

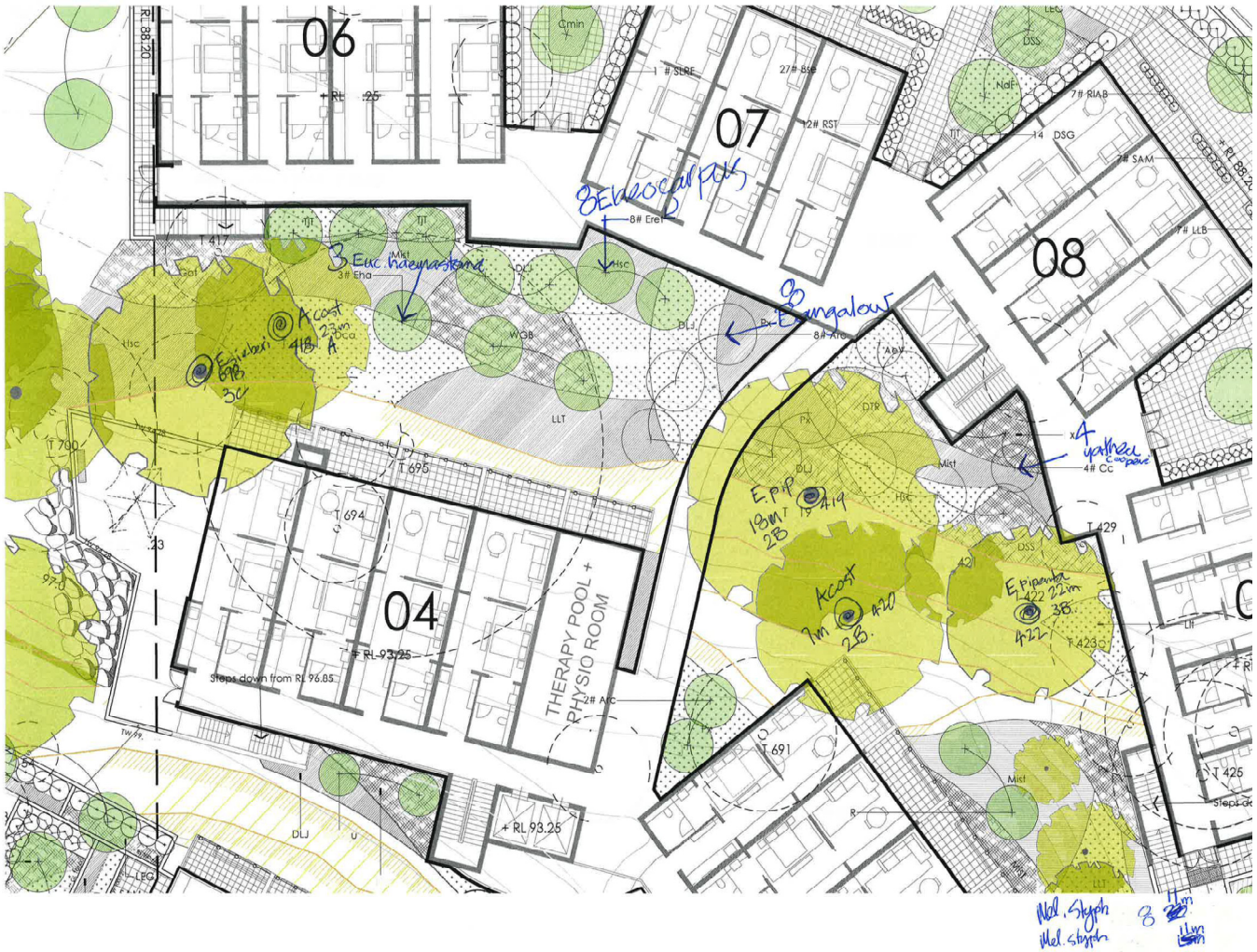
DATE & ISSUE NUMBER
10/04/2019
Issue 1

SCALE & COORDINATE SYSTEM
1:1,000 @ A3
GDA 1994 MGA Zone 56

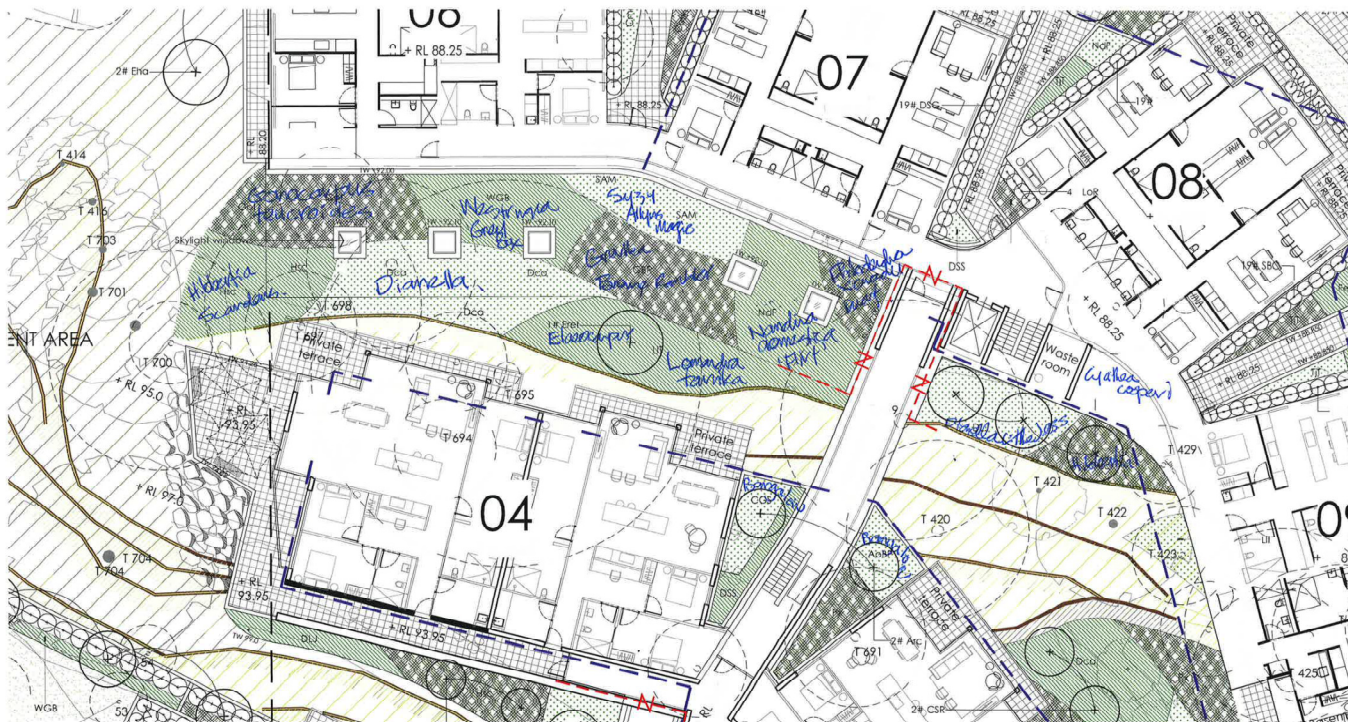




Excavation area for Pool & Gym



Approved Landscape Plan indicating trees to be retained and new tree planting.



Proposed Landscape Plan indicating tree removals and proposed planting.

Referral Body Recommendation

Recommended for refusal

Refusal comments

Recommended Landscape Conditions:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

On slab landscape planting and associated works

Details shall be submitted to the Certifying Authority prior to the issue of the Construction Certificate

- indicating the proposed method of waterproofing to concrete slabs and planters to which soil and planting is being provided.
- indicating soil type, plant species, irrigation, services connections, maintenance activity schedule and soil depth compliant with iii) below.
- The following minimum soil depths are required to be provided in approved landscape areas:
 - 300mm for lawn
 - 600mm for shrubs
 - 1 metre for trees
- certification shall be provided by a structural engineer that the planters are designed structurally to support the 'wet' weight of landscaping (soil, materials and established planting).

Reason: To ensure the provision of suitable landscape amenity and character.

Reason: <insert reason>.

Tree Protection Plan

(a) A Tree Protection Plan is to be prepared by an Arborist with minimum qualification AQF Level 5 showing the following:

- i) location of trees identified for retention or transplantation and extent of canopy,
- ii) location of tree protection fencing, tree trunk battens, ground protection and barriers,
- iii) the tree protection plan will identify key stages or 'hold points' where monitoring, inspections, and approval for work activities are approved by the Project Arborist prior to continuing works,
- iv) the tree protection plan will identify the scope of certification to be submitted by the Project Arborist to satisfy AS4970-2009 Protection of trees on development sites, including:

5.3 Pre-Construction, sections 5.3.1 and 5.3.2

5.4 Construction Stage, sections 5.4.1, 5.4.2, 5.4.3, 5.4.4 and 5.4.5

5.5 Post-construction, section 5.5.2

(b) The Tree Protection Plan is to be submitted to the Certifying Authority for approval prior to issue of a Construction Certificate.

Reason: To ensure compliance with the requirement to retain and protect significant planting on the site.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Tree trunk, branch and root protection

(a) Existing trees which must be retained

- i) All trees not indicated for removal on the approved plans and reports, unless exempt under relevant planning instruments or legislation

(b) Tree protection

i) No tree roots greater than 30mm diameter are to be cut from protected trees unless authorised by the Project Arborist on site.

ii) All structures are to bridge tree roots greater than 30mm diameter unless directed otherwise by the Project Arborist on site.

iii) All tree protection to be in accordance with the approved Tree Protection Plan and AS4970-2009 Protection of trees on development sites, with particular reference to Section 4 Tree Protection Measures.

iv) All tree pruning within the subject site is to be in accordance with the approved Tree Protection Plan and AS 4373 Pruning of amenity trees

v) All tree protection measures, including fencing, are to be in place prior to commencement of works.

vi) the tree protection measures specified in this clause must:

be in place before work commences on the site, and

be maintained in good condition during the construction period, and

remain in place for the duration of the construction works.

vii) the Project Arborist shall be in attendance for all excavation works carried out within the Tree Protection Zone of existing trees required to be retained.

Reason: To ensure compliance with the requirement to retain and protect significant planting on the site.

Project Arborist

- i) A Project Arborist with minimum qualification AQF Level 5 is to be appointed prior to commencement of works.
- ii) The Project Arborist is to oversee all tree protection measures, removals and works adjacent to protected trees as outlined in the approved Tree protection Plan and AS4970-2009 Protection of trees on development sites.
- iii) The Project Arborist is to ensure compliance as relevant with any other environmental requirements conditioned under this consent.

Reason: to ensure protection of vegetation proposed for retention on the site.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Trees Condition

During the construction period the applicant is responsible for ensuring all protected trees are maintained in a healthy and vigorous condition. This is to be done by ensuring that all identified tree protection measures are adhered to. In this regard all protected plants on this site shall not exhibit:

- (a) A general decline in health and vigour.
- (b) Damaged, crushed or dying roots due to poor pruning techniques.
- (c) More than 10% loss or dieback of roots, branches and foliage.
- (d) Mechanical damage or bruising of bark and timber of roots, trunk and branches.
- (e) Yellowing of foliage or a thinning of the canopy untypical of its species.
- (f) An increase in the amount of deadwood not associated with normal growth.
- (g) An increase in kino or gum exudation.
- (h) Inappropriate increases in epicormic growth that may indicate that the plants are in a stressed condition.
- (i) Branch drop, torn branches and stripped bark not associated with natural climatic conditions.

Any mitigating measures and recommendations required by the Arborist are to be implemented.

The owner of the adjoining allotment of land is not liable for the cost of work carried out for the purpose of this clause.

Reason: Protection of Trees.

Tree management in Barnes Road road reserve

No native trees on the unformed Barnes Road road reserve is to be removed without written approval from Council. Management of fuel loads in the bushfire Asset protection Zone is to Outer Protection Standard and is to remove weeds species.

Reason: Management of Council assets.

Protection of landscape features and sites of significance

- a) All natural landscape features, including natural rock outcrops, natural vegetation, soil and watercourses, are to remain undisturbed during demolition, excavation and construction works, except where affected by works detailed on approved plans and reports.
- b) Should any Aboriginal sites be uncovered during the carrying out of works, those works are to cease and Council, the NSW Office of Environment and Heritage (OEH) and the Metropolitan Local Aboriginal Land Council are to be contacted.

Reason: Preservation of significant environmental features.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Landscape completion certification

a) Prior to the issue of an Occupation Certificate, a landscape report prepared by a landscape architect or landscape designer shall be submitted to the Certifying Authority, certifying that the landscape works have been completed in accordance with the approved landscape plan and inclusive of any conditions of consent.

b) Prior to the issue of an Occupation Certificate, a landscape report prepared by a landscape architect or landscape designer shall be submitted to the Certifying Authority, certifying that the landscape works have been established and maintained in accordance with the approved landscape plan.

Reason: To ensure that the landscape treatments are installed to provide landscape amenity.

Condition of retained vegetation

Prior to the issue of an Occupation Certificate, a report prepared by the Project Arborist shall be submitted to the Principal Certifying Authority addressing the health and impact on trees and vegetation required to be retained as a result of the proposed development, including the following information:

- i) Compliance with conditions for tree protection works.
- ii) Any damage sustained by trees or vegetation as a result of the works.
- iii) Remedial works undertaken to ensure the long term retention of the vegetation or tree canopy cover.

Reason: to ensure the long term survival of vegetation to be retained.

Required Planting

a) Trees shall be planted in accordance with the following schedule:

Minimum No. of Trees Required.	Species	Location	Minimum Pot Size
All trees	As indicated on the approved landscape plans.	As indicated on the Landscape Plans	As indicated on the landscape plans
1 tree per 100m ²	Low flammability native canopy species	Zone 4 as defined on the Management Zones drawing dated 11/04/2019 in the Biodiversity Management Plan.	As indicated in the Biodiversity Management Plan.

b) Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the

issue of any interim / final Occupation Certificate.

Reason: To maintain environmental amenity.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Undesirable Trees

Leighton Green Cypress *Cupressocyparis leylandii* or any of its cultivars, must not be planted on the site for the life of the development. In the event of any inconsistency between this condition and the development application documents, this condition will prevail to the extent of the inconsistency.

Reason: To reduce the potential for adverse amenity effects such as overshadowing, loss of views, and loss of plant diversity.

Environmental and priority weed control (PLEP)

Condition: All weeds are to be removed and controlled in accordance with the Biodiversity Conservation Act 2016.

Reason: Preservation of environmental amenity.

Screen Planting to Western Boundary

- a) Existing screen planting along the western boundary of the site is to be retained and maintained to a maximum height of 3.5 metres.
- b) Should any existing screen planting fail, replacement planting is to be immediately installed to maintain the density of the existing screen.
- c) Replacement planting is to comprise suitable low flammable native species capable of attaining a minimum height of 3.5 metres at maturity, be of minimum pot size 25 litres and planted, watered and fertilised as per industry best practice.

Reason: To maintain environmental amenity.

Landscape maintenance

- i) Trees shrubs and groundcovers required to be planted under this consent are to be mulched, watered and fertilized as required at the time of planting.
- ii) If any tree, shrub or groundcover required to be planted under this consent fails, they are to be replaced with similar species to maintain the landscape theme and be generally in accordance with the approved Landscape Plan.

Reason: To maintain local environmental amenity.