

Landscape Referral Response

Application Number:	DA2019/1287
Date:	29/01/2020
Responsible Officer:	Kye Miles
Land to be developed (Address):	Lot 1 DP 566102 , 2 Cooleena Road ELANORA HEIGHTS NSW 2101

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

The proposal seeks approval for alterations and additions to the existing dwelling including construction of a new garage and driveway, and conversion of the existing garage into a detached secondary dwelling.

There are two existing Gum trees (T2 - Red Bloodwood, and T3 - Smooth Barked Apple) of value located within the site, and one existing Gum (T1 - Smooth Barked Apple) located within the road verge that are likely to be impacted by the proposed driveway/hardstand and associated retaining wall. The proposed driveway is a reinforced concrete suspended slab on bored piers.

An Arboricultural Impact Assessment and Tree Protection Plan is provided with the application, prepared by MacKay Tree Management, dated 28 January 2020, assessing that the extent of works represents a Major Encroachment upon T1, T2, and T3, as defined by Australian Standard 4970-2009 Protection of Trees. Intrusion by the proposed driveway/hardstand and associated retaining wall into the tree protection zone of the existing trees is more than the 10% permitted under 4970-2009. As such a root investigation by non-destructive methods is required to locate existing tree roots, and hence the available locations for any proposed piers for the retaining wall and the proposed piers for the suspended driveway slab, and recommendations on construction methods are to be documented and utilised in the structural design of the driveway/hardstand and walling. This shall be provided at Construction Certificate approval stage.

The landscape component of the proposal is acceptable subject to the above requirements at Construction Certificate stage that demonstrate the following:

- Tree Root Investigation and Root Mapping Plan, to locate existing tree roots that shall not be impacted upon,
- Pier Footing Plan for the retaining wall and as determined by the Root Mapping Plan.

Controls:

B4.22 Preservation of Trees or Bushland Vegetation

C1.1 Landscaping

D5 Elanora Heights Locality

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Landscape Conditions:

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

Tree Root Investigation

A non-destructive root investigation shall be conducted complying with clause 3.3.4 (TPZ encroachment considerations) of AS 4970-2009 Protection of Trees on Development Sites to the area proposed for construction of a retaining wall and the suspended driveway in close proximity to existing trees identified in the Arboricultural Impact Assessment prepared by MacKay Tree Management as T1 (Smooth Barked Apple), T2 (Red Bloodwood), and T3 (Smooth Barked Apple).

This investigation shall be undertaken prior to the issue of a Construction Certificate. The investigation shall be conducted by an Arborist with a minimum AQF Level 5 qualification in arboriculture/horticulture.

The findings of the root investigation shall be documented in a Root Mapping Plan and shall be the basis for determining the location of all pier footings for the proposed retaining wall and the suspended driveway.

Reason: to ensure protection of the existing trees identified as T1, T2, and T3.

Root Mapping Plan

The findings of the root investigation shall be documented in a Root Mapping Plan and shall be the basis for determining the location of all pier footings for the retaining wall and suspended driveway within the tree protection zone of the existing trees identified as T1, T2, and T3.

The Root Mapping Plan shall provide a setback clearance recommendation from the existing tree roots of the existing trees and provide recommended construction techniques to ensure no impact to existing roots.

The Pier Footing Plan shall be issued to the Certifying Authority, and shall be issued to the structural engineer as a basis for structural design.

The Arborist shall provide certification to the Certifying Authority that the Root Mapping Plan and clear distances recommended will ensure the long term survival of the existing trees.

The Certifying Authority shall approve Construction Certificate design that satisfies the recommendations of the Root Mapping Plan.

Reason: to ensure protection of the existing trees identified as T1, T2, and T3.

Pier Footing Plan

A Pier Footing Plan shall be developed in co-ordination with a AQF minimum Level 5 Arborist with qualifications in arboriculture/horticulture and a qualified Structural Engineer, and shall be issued to the Certifying Authority identifying suitable locations for piers for the proposed retaining wall and suspended driveway.

If structural roots are encountered (>25mm in diameter), recommendations for root pruning and preferably design change to the pier footing location must be recommended and documented in the Pier Footing Plan.

The Pier Footing Plan shall be issued to the Certifying Authority identifying a suitable locations for each pier footing. The Certifying Authority shall approve Construction Certificate design that satisfies the recommendations of the Pier Footing Plan.

Reason: to ensure protection of the existing trees identified as T1, T2, and T3.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Tree removal within the property

The following tree located on the property, within the vicinity of 5 metres of development, is approved for removal based on the recommendations of the Arboricultural Impact Assessment prepared by MacKay Tree Management:

- T4 - Cheese Tree (subject to replacement within the site)

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Tree and vegetation protection

a) Existing trees and vegetation shall be retained and protected as recommended in the Arboricultural Impact Assessment prepared by MacKay Tree Management, and as shown on Sheet No. 16, including:

- i) all trees and vegetation within the site not approved for removal, excluding exempt vegetation under the relevant planning instruments of legislation,
- ii) all trees and vegetation located on adjoining properties,
- iii) all road reserve trees and vegetation not approved for removal.

b) Tree protection shall be generally undertaken as follows:

- i) all tree protection shall be in accordance with AS4970- 2009 Protection of Trees on Development Sites, including the provision of temporary fencing to protect existing trees within 5 metres of development,
- ii) removal of existing tree roots greater than 25mm is not permitted without consultation with a AQF minimum Level 5 Arborist,
- iii) existing ground levels shall remain under the tree protection zone of trees to be retained, unless authorised by AQF minimum Level 5 Arborist,
- iv) any tree roots exposed during excavation with a diameter greater than 25mm within the tree protection zone must be assessed by an AQF minimum Level 5 Arborist. Details including photographic evidence of works undertaken shall be submitted to the Certifying Authority,
- v) to minimise the impact on trees and vegetation to be retained and protected, no excavated material, building material storage, site facilities, nor landscape materials are to be placed within the canopy dripline of trees and other vegetation required to be retained,
- vi) no tree roots greater than 25mm diameter are to be cut from protected trees unless authorised by a AQF minimum Level 5 Project Arborist on site,

- vii) all structures are to bridge tree roots greater than 25mm diameter unless directed by a AQF minimum Level 5 Arborist on site,
- viii) excavation for stormwater lines and all other utility services is not permitted within the tree protection zone, without consultation with a AQF minimum Level 5 Arborist, including advice on root protection measures,
- ix) should either or all of vi), vii) and viii) occur during site establishment and construction works, a AQF minimum Level 5 Arborist shall provide recommendations for tree protection measures. Details including photographic evidence of works undertaken shall be submitted by the Arborist to the Certifying Authority,
- x) any temporary access to, or location of scaffolding within the tree protection zone of a protected tree or any other tree to be retained during the construction works, is to be undertaken using the protection measures specified in sections 4.5.3 and 4.5.6 of AS 4970-2009,
- xi) tree pruning to enable construction shall not exceed 10% of any tree canopy, and shall be in accordance with AS4373-2009 Pruning of Amenity Trees.

c) All protected trees are to be retained for the life of the development, or for their safe natural life. Trees that die or are removed by approval must be replaced with a locally native canopy tree.

Reason: to retain and protect significant planting on development and adjoining sites.

Project Arborist

A Project Arborist with AQF minimum Level 5 qualification in arboriculture/horticulture is to be appointed to supervise and certify tree protection measures for existing trees to be retained and protected, requiring site attendance during excavation and construction works, in accordance with AS4970- 2009 Protection of Trees on Development Sites, with particular reference to Section 4, and the recommendations of the Arboricultural Impact Assessment prepared by MacKay Tree Management: including works in the vicinity of the following trees:

- T1 (street tree) and T2 and T3 (within the frontage)

The following recommendations of the Arboricultural Impact Assessment shall be specifically undertaken:

Appendix 4 - Tree Protection Plan, with particular attention to the requirements for trunk and ground protection, and construction exclusion zone, and

Appendix 5 - Tree Protection Specification.

The Arborist shall submit certification that the works described in Appendix 4 and Appendix 5 have been correctly installed and adhered to during the construction period.

Reason: to ensure the protection of the existing landscape amenity.

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

Condition of retained vegetation

Prior to the issue of an Occupation Certificate, a report prepared by an Arborist with AQF minimum Level 5 qualifications in arboriculture/horticulture shall be submitted to the Certifying Authority, assessing the health and impact on all existing trees required to be retained, including the following information:

- i) compliance to any Arborist recommendations for tree protection and excavation works,
- ii) extent of damage sustained by vegetation as a result of the construction works,
- iii) any subsequent remedial works required to ensure the long term retention of the vegetation.

Reason: to retain and protect significant planting on development sites.