

Landscape Referral Response

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| Application Number: | DA2020/0172 |
| Date: | 05/03/2020 |
| Responsible Officer: | Kent Bull |
| Land to be developed (Address): | Lot 30 DP 25461 , 29 Bilkurra Avenue BILGOLA PLATEAU NSW 2107 |

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 development application proposes a new carport, new crossover and driveway, and improved landscape works within the front setback.

The landscape component of the proposal is acceptable subject to the protection of existing trees and vegetation within the property, to adjoining properties and within the road verge, and the completion of landscaping consisting of shrub planting along the boundary between No. 29 and No.27.

Council's Landscape section has assessed the proposal against the following Pittwater 21 DCP Controls:

B4.22 Preservation of Trees and Bushland Vegetation

C1.1 Landscaping

D3 Bilgola Locality

The Site Plan numbered 20845 notes that existing trees on the site (T2 & T4) and the street tree (T1) are to remain, and existing tree (T3) is proposed to be removed. This numbering is contrary to the Arboricultural Impact Report submitted by Landscape Matrix, and reference to existing trees shall rely on the numbering noted in the Arboricultural Impact Report; as follows:

- Existing trees to be retained and protected: T1 - Sydney Red Gum (T2 on Site Plan); T3 - Sydney Red Gum street tree (T1 on Site Plan); and T4 - Jacaranda (T4 on Site Plan).
- Existing trees supported for removal: T2 - Sydney Red Gum (T3 on Site Plan); and T5 - Burrawang (not recorded on Site Plan).

Due to the major intrusions into the tree protection zones of existing trees over the 10% permitted under Australian Standard 4970-2009 Protection of Trees on Development Sites, the driveway alignment and width shall be determined and approved at Construction Certificate stage following arboricultural investigation through a non-destructive root investigation conducted to comply with clause 3.3.4 (TPZ encroachment considerations) of AS 4970-2009. This shall be conducted by an Arborist with a

minimum AQF Level 5 qualification in arboriculture/horticulture, to definitely determine the location and depth of existing roots that shall not be impacted upon by excavation /construction works.

This may require that the alignment and width of the driveway to be altered from the alignment and width shown on the DA plans. Conditions of Consent shall be applied at Construction Certificate stage to satisfy the requirement to retain and protect the existing trees in the vicinity of the proposed driveway and carport.

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, Root Mapping Plan & Driveway Alignment Plan

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, prior to the issue of a Construction Certificate. This shall be conducted by an Arborist with a minimum AQF Level 5 qualification in arboriculture/horticulture, to existing trees impacted by the proposed driveway and carport, with particular attention to existing trees T1 and T3 (Sydney Red Gums).

The findings of the root investigation shall be documented in a Root Mapping Plan and shall be the basis for determining the driveway alignment and width, and the construction methodology and materials for the driveway. A Driveway Alignment Plan, prepared by the Arborist, shall be issued to the Certifying Authority identifying a suitable layout for the driveway, including identifying the location of the vehicle crossing at kerb and the driveway alignment at the property boundary.

The recommendations from the Arborist shall include the assessment of placing the driveway on a shallow bed of sand over the existing grade with no excavation or compaction within areas of the tree protection zone, as the construction method for the new driveway. If structural roots are encountered (>25mm in diameter), recommendations for root pruning and preferably design change to the driveway alignment and width must be recommended and documented in the Driveway Alignment Plan.

The root investigation shall map existing roots of significance that must not be impacted by construction works.

The Root Mapping Plan shall provide a setback clearance recommendation from the trunks of the existing trees and provide recommended construction techniques to ensure no impact to existing roots. The Root Mapping Plan and the Driveway Alignment 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 in the Driveway Alignment Plan will ensure the long term survival of the existing Sydney Red Gums T1 and T3.

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

Reason: to ensure protection of existing Sydney Red Gum trees T1 and T3.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Tree removal within the property

The following existing tree and accent planting as recommended by the Arboricultural Impact Report prepared by Landscape Matrix:

- T2 - Sydney Red Gum; and
- T5 - Burrawang

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Tree and vegetation protection - General

a) Existing trees and vegetation shall be retained and protected, 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.

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 and the recommendations of the Arboricultural Impact Report prepared by Landscape Matrix,
- ii) removal of existing tree roots greater than 25mm is not permitted without consultation with a AQF Level 5 minimum qualification Arborist,
- iii) existing ground levels shall remain under the tree protection zone of trees to be retained, unless authorised by AQF Level 5 minimum qualification 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 Level 5 minimum qualification 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 Level 5 minimum qualification Project Arborist on site,
- vii) all structures are to bridge tree roots greater than 25mm diameter unless directed by a AQF Level 5 minimum qualification 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 Level 5 minimum qualification 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 Level 5 minimum qualification 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, in accordance with AS4970- 2009 Protection of Trees on Development Sites, with particular reference to Section 4, and the recommendations of the as recommended in the Arboricultural Impact report prepared by Landscape Matrix: including works in the vicinity of the following trees:

- Tree 1, T3, and T4.

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

- Tree Protection Measures contained in section 5,
- Specific driveway construction recommendations listed under section 6. Conclusion.

Additionally, the recommendations and resolution of the Driveway Alignment Plan shall be inspected and approved by the Project Arborist. Certification shall be provided to the Certifying Authority of arboricultural approval of the works, including photographic documentation during the works and at completion.

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

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

Landscape completion

Landscaping is to be implemented as indicated in the Proposed Plan 03, inclusive of the following requirements:

- i) removed shrubs as nominated on the plan shall be replaced with screen planting along the south boundary consisting of shrub planting capable of attaining 3 metres in height at maturity, planted at 300mm container pot size, and installed no more than 900mm apart,
- ii) all demolished existing surfaces shall as the obsolete driveway shall be turfed.

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 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.

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

Landscape maintenance

Any existing landscaping including trees required to be retained together with any additional landscaping required by this consent is to be maintained for the life of the development.

A 12 month establishment period shall apply for all new landscaping. If any landscape materials/components or planting under this consent fails, they are to be replaced with similar materials/components. All planting must be maintained for the life of the development, or for their safe useful life expectancy. Planting that may die or is approved for removal must be replaced.

Reason: to maintain local environmental amenity and ensure landscaping continues to soften the built form.