

## Natural Environment Referral Response - Biodiversity

<b>Application Number:</b>	DA2019/0393
<b>Responsible Officer</b>	Claire Ryan
<b>Land to be developed (Address):</b>	Lot 1 DP 202857 , 7 Trentwood Park AVALON BEACH NSW 2107

### Reasons for referral

This application seeks consent development on land, or within 40m of land, containing:

- All Development Applications on
- Actual or potential threatened species, populations, ecological communities, or their habitats;
- Wildlife corridors;
- Vegetation query stipulating that a Flora and Fauna Assessment is required;
- Vegetation query - X type located in both A & C Wards;

And as such, Council's Natural Environment Unit officers are required to consider the likely potential environmental impacts.

### Officer comments

#### Updated comments 18/09/2019

The applicant has provided additional information including:

- *Addendum Letter 1: DA for Additional Subdivision of Lot 2, Trentwood Park, Avalon* (Cumberland Ecology, 05/09/2019)
- *Arboricultural Impact Assessment - Additional Information Request* (Urban Forestry Australia, 10/09/2019)
- Proposed subdivision survey with surveyed trees (Adam Clerke, 09/09/2019)

The Arboricultural letter confirms that any services under the driveway will "*have no effect on remaining trees*". The impacts of the proposed stormwater piping in Lot 4 was assessed and confirms no excavation is required to seat anchors. Trenching near Tree 1 and Tree 3 require direct Arborist Supervision. Two replacement canopy tree plantings are proposed.

Council's Natural Environment - Biodiversity section raises no objections provided the following changes are made to the proposed building envelope for Lot 4:

- *The building envelope for proposed Lot 4 is to be amended to be a minimum of 3 metres from the trunk of T64 Angophora costata, T90 Turpentine, and T91 Turpentine.*

#### Original comments 12/07/2019

This subdivision application was assessed against Pittwater LEP Clause 7.6 and Pittwater DCP B4.2 Flora and fauna conservation category 1 and wildlife corridor, and B4.4 Flora and fauna habitat enhancement category 2 and wildlife corridor. The site is also mapped as Pittwater Spotted Gum EEC

in the SMCMA V3 mapping (OEH 2016).

Any development application must consider proposal options which are compliant with applicable Pittwater LEP and DCP controls, specifically:

- *The development is designed, sited and will be managed to avoid any significant adverse environmental impact.*
- *Development shall retain and enhance habitat for threatened species, endangered populations, endangered ecological communities and other locally native species.*
- *Development shall provide wildlife corridors via creation, restoration, and / or regeneration of habitat.*
- *Development shall result in no significant onsite loss of canopy cover and no net loss in native canopy trees.*
- *Development shall ensure that at least 80% of any new planting incorporates native vegetation (as per species listed in Native Plants for Your Garden available on the Pittwater Council website). Landscaping is to be outside areas of existing bushland and should not include environmental weeds. Development shall provide an adequate buffer to wildlife corridors.*
- *Caretakers of domestic animals shall prevent them from entering wildlife habitat areas.*
- *Fencing, where permitted, shall be passable by native wildlife.*

The property already has a previous court approved for 3 lot subdivision. The court approved subdivision will result in the removal of 34 trees (23 prescribed).

This application proposes to further subdivide one of the approved lots into two, resulting in changes to Lots 1 and 2 and the creation of Lot 4. This application is for the subdivision only. The submitted draft subdivision plans include building footprints for the lots.

The submitted **Arboricultural Impact Assessment - Addendum** (Urban Forestry Australia 30/01/2019) assesses the impacts of the new lot including the driveway and indicative house plans. The further subdivision will result in removal of a further 7 trees (5 prescribed, being T86, T89, T60, T62, T69). In addition, trees T66 and T87, which were originally approved for removal for bushfire management purposes, are now proposed to be removed to facilitate future development on proposed Lot 4.

The Arborist Report **does not assess** the impacts of the proposed stormwater plans or connection to utilities for proposed lot 4. There is a proposed "*150mm uPVC above ground pipe and Nepean pebble stabilising bed 1m wide and pipe anchor block @ 2m cts*" which is aligned within the Structural Root Zones (SRZ) of many large locally native trees to be retained. There is also proposed trenching along the driveway alignment. The approved driveway is to be on natural ground level or raised with piers (except one small section south-west of the existing house which will require excavation). Trenching impacts have not been assessed.

Further information required including details on how the new Lot 4 will be connected to utilities, and an Amended Arborist assessment which assesses the impacts of installation of stormwater infrastructure is required, including recommended locations for the concrete anchor blocks.

A biodiversity assessment titled "**Supplementary Ecological Assessment**" (Cumberland Ecology, 12/03/2019) was provided to assess the biodiversity impacts of the proposal. The report relies on the field survey completed in September 2017. The calculated additional impacts of further subdivision within the report is 0.04 ha of native vegetation to be removed, and the remainder of the native vegetation within proposed Lot 4, 0.08 ha to be maintained as an Asset Protection Zone (APZ), the report states a total of 0.14 ha. The clearing threshold for entry into the Biodiversity Offset Scheme (BOS) for this property is 0.25 ha, and therefore the proposal does not trigger the BOS through the

clearing threshold trigger. It should be noted that the cumulative impacts of the 4-lot subdivision is a total impact to 0.44 ha of native vegetation.

Cumberland Ecology Ecologists previously ground-truthed the vegetation to be "Coastal Enriched Sandstone Moist Forest" NSW PCT 1841, hence no impacts to any EEC. The report includes formal Assessment of Significance for the Powerful Owl, combined microbats (Little Bentwing-bat, Eastern Bentwing-bat, Yellow-bellied Sheathtail-bat only), and the Grey-headed Flying-fox, all concluding that the proposal will not result in significant impacts to threatened entities. The site and surrounding land contains many records of threatened species, and to date, no targeted survey for hollow-roosting microbats has been undertaken at the site. The likelihood table within the report assesses threatened microbats as having either "low likelihood" or "unlikely to occur" despite some species having many records nearby. Furthermore, the subdivision can reasonably assumed to result in the increase of artificial night light - this known indirect impact has not been assessed. At a minimum a ultrasonic call detector must be deployed during prescribed survey season for a minimum of 14 nights to determine presence of species currently visiting the site, as well as stag watching of suitable roosting hollows. The report states, "*The hollow-bearing stag (i.e. T112) with two hollows suitable as roosting habitat for microchiropteran bats will be removed.*". Council notes the mitigation measures "*in the previous FFA must apply to the proposed development application.*".

Furthermore, no information on how the proposal can achieve no net loss of canopy trees was provided.

Council's Natural Environment - Biodiversity section cannot complete this assessment until further information is provided.

Additional information required:

- Updated Arborist Report to assess impacts resulting from installation of stormwater infrastructure and connection of utilities, including recommendations for tree protection measures throughout construction, and recommended locations for the concrete anchor blocks.
- An original detailed subdivision plan with proposed building envelope on Lot 4, and all surveyed trees numbered.
- Updated Ecological Assessment, including targeted microbat survey and assessment of significance assessing all likely direct and indirect impacts, including potential roosting habitat.
- Details on replacement canopy trees

### Referral Body Recommendation

Recommended for approval, subject to conditions

Recommended Natural Environment Conditions:

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

### Lot 4 Building Envelope to be set back from T64, T90 and T91

The building envelope for Lot 4 is to be amended to be a minimum of 3 metres from the trunks of T64 *Angophora costata*, T90 *Syncarpia glomulifera*, and T91 *Syncarpia glomulifera*.

Details demonstrating compliance with this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** Tree protection in accordance with relevant Natural Environment LEP/DCP controls

### **Preparation of a Construction Environment Management Plan (CEMP)**

A detailed construction environment management plan for the site is to be prepared by the Project Ecologist prior to the commencement of any works on site. The construction management plan is to be consistent with the approved Tree Protection Plan, Flora and Fauna Report and Arborist Report and is to include detailed information and specifications concerning the following:

- Proposed access for tree pruning and removal works and methods for removal of tree waste;
- Proposed access methods for the delivery and storage of materials and storage and removal of waste materials;
- Proposed storage areas for waste and construction materials;
- Quantity of material to be transported
- Proposed truck movements per day
- Proposed hours of operation
- Proposed traffic routes, noting that 3 tonne load limits apply to some roads within the former Pittwater Council Local Government Area
- Location of on/off site parking for construction workers during the construction period.

**Reason:** Protection of native vegetation and wildlife in accordance with relevant Natural Environment LEP/DCP controls.

### **Preparation of a Tree Protection Plan**

A Tree protection Plan, prepared by a minimum AQF level 5 Arborist, shall be issued to the Certifying Authority documenting the extent and alignment of tree protection fencing for all existing prescribed trees within 5 metres of the proposed works. All tree protection measures is to be in accordance with AS4970-2009.

**Reason:** to protection existing trees not impacted by the development.

### **Preparation of Erosion and Sedimentation Control**

An Erosion and Sediment Control Plan is to be prepared in accordance with Landcom's Managing Urban Stormwater: Soil and Construction Manual (2004) by a suitably qualified engineer and submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** To protect natural features and habitats in accordance with relevant Natural Environment LEP/DCP controls

### **Engage a Project Arborist**

A Project Arborist with a minimum of AQF Level 5 is to be appointed for the duration of the works. The Project Arborist is to implement pre-construction tree protection measures and supervise all works within 5m of significant trees.

Evidence demonstrating Project Arborist engagement (i.e. cover letter from Project Arborist) is to be provided to the Principal Certifying Authority prior to the issue of Construction Certificate.

**Reason:** Tree protection in accordance with relevant Natural Environment LEP/DCP controls.

### **Engage a Project Ecologist**

A Project Ecologist is to be employed for the duration of the approved works to ensure all bushland biodiversity protection measures are carried out according to the conditions of consent and the reports

listed below. The Project Ecologist will ensure that all conditions relating to the biodiversity management of the property are fully implemented.

- Addendum Letter 1: DA for Additional Subdivision of Lot 2, Trentwood Park, Avalon (Cumberland Ecology, 05/09/2019)
- Supplementary Ecological Assessment (Cumberland Ecology, 12/03/2019)
- Flora and Fauna Assessment by Cumberland Ecology October 2017

The Project Ecologist must have one of the following memberships/accreditation:

- Practising member of the NSW Ecological Consultants Association (<https://www.ecansw.org.au/find-a-consultant/>) OR
- Biodiversity Assessment Method assessor accreditation under the NSW Biodiversity Conservation Act 2016 (<https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>)

Employment of a project ecologist is to be certified by the Principal Certifying Authority Prior to issue of Construction Certificate.

**Reason:** To protect native vegetation and wildlife in accordance with relevant Natural Environment LEP/DCP controls.

## CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

### Compliance with Arborist's Recommendations – Pre-construction

All pre-construction tree protection measures specified in the Arborist reports listed below and these conditions of consent are to be implemented at the appropriate stage of development.

- Tree Protection Plan as required by this consent
- Part 5.3 and Appendix C of the original Arboricultural Impact Assessment (Tree Wise Men July 2017)
- Arboricultural Impact Assessment - Additional Information Request (Urban Forestry Australia, 10/09/2019)
- Arboricultural Impact Assessment - Addendum (Urban Forestry Australia 30/01/2019)

Compliance with pre-construction measures is to be certified by the project arborist and details submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.

**Reason:** To confirm compliance with tree protection/replacement measures in accordance with relevant Natural Environment LEP/DCP controls.

## CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

### Replacement Tree Planting

Replacement planting is to be provided for any trees removed as part of the civil works, including construction of the access driveway and services. Replacement planting is to be at a ratio of 3:1 for every tree removed. Replacement planting is to be located outside of construction zones and building envelopes to ensure survival. Location of new trees should also be in accordance with the Bushfire requirements of the site. The trees are to be retained for the life of the development.

**Reason:** To replace locally native trees in accordance with relevant Natural Environment LEP/DCP

controls.

### **No Material Storage within 5m/calculated Tree Protection Zone (TPZ)**

No storage of building materials or building waste, excavated fill or topsoil storage is to occur within 5m or the notional TPZ of trees shown on the approved landscape working drawing(s) as being retained or within protective fenced areas. Drainage is to be arranged such that fill, building materials or contaminants are not washed into protective fenced areas.

**Reason:** To protect and retain trees proposed for retention.

### **Compliance with Arborist's Recommendations – During Construction**

All tree protection measures to be implemented during construction, as specified in the Arborist reports listed below and these conditions of consent are to be implemented at the appropriate stage of development.

- Tree Protection Plan as required by this consent
- Part 5.3 and Appendix C of the original Arboricultural Impact Assessment (Tree Wise Men July 2017)
- Arboricultural Impact Assessment - Additional Information Request (Urban Forestry Australia, 10/09/2019)
- Arboricultural Impact Assessment - Addendum (Urban Forestry Australia 30/01/2019)

Compliance with these measures is to be certified by the project arborist in writing, including photographic evidence, and details submitted to the Principal Certifying Authority prior to issue of the Occupation Certificate.

**Reason:** To confirm compliance with tree protection/replacement measures in accordance with relevant Natural Environment LEP/DCP controls.

### **Implementation of Erosion and Sediment Control Plan**

The Erosion and Sediment Control Plan is to be fully implemented and measures are to remain in effective operation until all development activities have been completed and the site fully stabilised.

No building materials or other materials are to be placed on Bushland vegetation. Sediment is not to leave the site or enter areas of Bushland vegetation.

Sedimentation and erosion controls are to be effectively maintained at all times during the course of construction and shall not be removed until the site has been stabilised or landscaped to the Principal Certifying Authority's satisfaction.

Evidence of compliance is to be certified by a suitably qualified engineer and submitted to the Principal Certifying Authority prior to the issue of any Occupation Certificate.

**Reason:** To protect natural features and habitats in accordance with relevant Natural Environment LEP/DCP controls.

### **Compliance with Ecologist's Recommendations – During Construction**

All biodiversity-related measures are to be implemented during construction, as specified in the approved Flora and Fauna Assessment by Cumberland Ecology October 2017, Addendum Letter 1: DA for Additional Subdivision of Lot 2, Trentwood Park, Avalon (Cumberland Ecology, 05/09/2019), Supplementary Ecological Assessment (Cumberland Ecology, 12/03/2019) and these conditions of

consent.

Specifically the Project Ecologist must undertake pre-clearance surveys and direct supervision of all tree removal works.

Compliance with these measures is to be certified by the project ecologist in writing including photographic evidence to the Principal Certifying Authority prior to issue of the Occupation Certificate.

**Reason:** To confirm compliance with wildlife and habitat protection/replacement measures in accordance with relevant Natural Environment LEP/DCP controls.

#### **Tree removal for building envelope not permitted**

The removal of trees within, or immediately adjacent to, the designated building envelopes as indicated in the , is to be further considered in relation to the subsequent development applications for the house/s on these lots and no trees within the building envelopes nominated on the two proposed lots are to be removed as part of the subdivision works. Trees may be removed only where necessary to carry out the approved engineering works of the subdivision, including the new driveway and services.

**Reason:** Tree protection in accordance with relevant Natural Environment LEP/DCP controls.

#### **Signage – No work / storage within dripline**

The project manager is to erect signs advising all contractors and visitors to the site that no works or storage are to take place within the dripline of existing trees.

**Reason:** To protect and retain trees proposed for retention.

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

#### **Compliance with Arborist's Recommendations – During and Post-construction**

All tree protection measures to be implemented, as specified in the Arborist reports listed below and these conditions of consent are to be implemented at the appropriate stage of development.

- Tree Protection Plan as required by this consent
- Part 5.3 and Appendix C of the original Arboricultural Impact Assessment (Tree Wise Men July 2017)
- Arboricultural Impact Assessment - Additional Information Request (Urban Forestry Australia, 10/09/2019)
- Arboricultural Impact Assessment - Addendum (Urban Forestry Australia 30/01/2019)

Completion of arborist requirements and satisfactory establishment/initiation of post-construction measures is to be certified by the consulting arborist and details submitted to the Principal Certifying Authority prior to issue of the Occupation Certificate.

**Reason:** To confirm compliance with tree protection/replacement measures in accordance with relevant Natural Environment LEP/DCP controls.

#### **Compliance with Ecologist's Recommendations – Post Construction**

All biodiversity-related measures are to be implemented at the appropriate stage of development, as specified in the approved Flora and Fauna Assessment by Cumberland Ecology (October 2017) and as amended by Addendum Letter 1: DA for Additional Subdivision of Lot 2, Trentwood Park, Avalon (Cumberland Ecology, 05/09/2019), Supplementary Ecological Assessment (Cumberland Ecology, DA2019/0393

12/03/2019) and these conditions of consent.

Removal of exotic weeds is to be certified by Project Ecologist.

Satisfactory establishment/initiation of post-construction measures is to be certified by the project ecologist prior to issue of any Occupation Certificate.

**Reason:** To confirm compliance with wildlife and habitat protection/replacement measures in accordance with relevant Natural Environment LEP/DCP controls.

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

### **Control of Weeds**

Prior to the completion of works, all priority weeds (as listed under the Biosecurity Act 2015) are to be removed/controlled within the subject site using an appropriately registered control method. Information on weeds of the Northern Beaches can be found at the NSW WeedWise website (<http://weeds.dpi.nsw.gov.au/>). All environmental weeds are to be removed and controlled. Refer to Council website [http://www.pittwater.nsw.gov.au/environment/noxious\\_weeds](http://www.pittwater.nsw.gov.au/environment/noxious_weeds)

**Reason:** Weed management.

### **Retention of Natural Features**

All natural landscape features, including natural rock outcrops, natural vegetation, soil and watercourses, are to remain undisturbed except where affected by necessary works detailed on approved plans.

**Reason:** To ensure the retention of natural features.

### **No Planting Environmental Weeds**

No environmental weeds are to be planted on the site. Information on weeds of the Northern Beaches can be found at the NSW WeedWise website (<http://weeds.dpi.nsw.gov.au/>).

**Reason:** Weed management.

### **Works to cease if item found**

If any Aboriginal Engravings or Relics are unearthed all work is to cease immediately and the Aboriginal Heritage Office (AHO) and Office of Environment and Heritage (OEH) are to be notified.

**Reason:** To protect Aboriginal Heritage.

### **Dead or Injured Wildlife**

If construction activity associated with this development results in injury or death of a native mammal, bird, reptile or amphibian, a registered wildlife rescue and rehabilitation organisation must be contacted for advice.

**Reason:** To mitigate potential impacts to native wildlife resulting from construction activity.