



PRE DEVELOPMENT APPLICATION ASSEST PROTECTION
ZONE/LANDSCAPING REPORT

Date: 20th July 2024

Reference No: Compliance DBKL2024-278

Site Address: 113 Orchard Street, Warriewood, NSW

Description: Lot 6 DP 749791

Council: Northern Beaches Council

Development Consent No: n/a

Approval Date: n/a

Project: Infill Development – Construction of a new Dwelling

Bushfire Attack Level (BAL): BAL-40

CBAА has been engaged to inspect the plans and documentation for the infill development (construction of a new dwelling) at the above property to assess whether the standards for bushfire specific requirements can be met.

The following documents will support this report:

- a) L&Co, ***Aboicultural Impact Assessment and Tree Protection Specification***, Ref L&Co22032 dated 7th April 2023
- b) Bushfire Planning services, ***Bushfire Risk Assessment***, Ref 3907 dated 13th April 2022
- c) Ecological Consultants Australia Pty Ltd TA (Kingfisher Urban Ecology and Wetlands), ***Vegetation Management Plan 113 Orchard Street Warriewood***, dated May 2024 update July 2024
- d) NSW Rural Fire Service, ***Development Application s4.14-Infill-Single dwelling-New dwelling 113 Orchard Street Warriewood NSW 2102 6//DP749791***, Ref DA2024/0262(CNR-67237) dated 3rd April 2024

Bushfire Risk Assessment

As per **Bushfire Risk Assessment** (*Bushfire Planning Services* dated 13th April 2022), section 13. Recommendations.

13 Asset Protection Zone

The Asset Protection Zone is “An area surrounding a development managed to reduce the bushfire hazard to an acceptable level. The width of an APZ will vary with slope, vegetation and construction level”.

Recommendation;

- 6. At the commencement of building works and in perpetuity the property around the building shall be managed as follows and as outlined within Planning for Bushfire Protection 2019 and the New South Wales Rural Fire Service document standards for Asset Protection Zones:

Aspect	North	East	South-west	West
Vegetation type	Managed land/forest	Managed land/remnant	Managed land/forest	Managed land/forest
Setback within lot 6	18m	N/A	36m	18m
Off-site setback	N/A	N/A	N/A	N/A
Total setback	18m	To the already managed lands	36m	18m



Map 3 shows the estimated APZ to achieve BAL-40. The total area of the APZ as shown is 2934m2. Some of the above area of the required APZ is already managed land.

APZ Notes as per Bushfire Risk Assessment: In my opinion this provision is being followed as per the PBP and NSW RFS 'Standards for asset protection zones' based on the bushfire risk assessment guidelines as per the Planning for Bushfire Protection 2019 (PBP 2019).

NSW Rural Fire Service

As per **NSW Rural Fire Service** (dated 13th July 2023) letter of response recommendations.

Asset Protection Zones

The intent of measure is to provide sufficient space and maintain reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits to prevent direct flame contact.

1. At the issue of a subdivision certificate and in perpetuity, the entire Lot 2 must be managed as an inner protection area in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*.

When establishing and maintaining an inner protection area, the following requirements apply:

- tree canopy cover should be less than 15% at maturity;
- trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2 m above the ground;
- tree canopies should be separated by 2 to 5 m;
- preference should be given to smooth-barked and evergreen trees;

- large discontinuities or gaps in the shrubs layer should be provided to slow down or break the progress of fire towards buildings;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover;
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation;
- grass should be kept mown (as a guide, grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed regularly.

APZ Notes as per NSW RFS recommendations: In my opinion these provisions are being followed as per the requirements of Appendix 4 of Planning for Bush Fire Protection 2019. Despite the actual coverage at maturity of crown coverage being calculated at 20%, this is an estimate. The PBP 2019 says 'should be 15%' not must, with this in mind the arborist and ecologist have provided tree removal and Vegetation Management Plans (in perpetuity) to support the PBP 2019. These aforementioned documents embrace the requirements of the PBP 2019 with environmental and ecological planning, sustainability and sensibility that will nurture the requirements of the consent authority, NSW RFS, and planners with the client's needs, protection and survivability in the event of an extreme bushfire event.

Arborist and Ecological Services

As per the **Aboicultural Impact Assessment and Tree Protection Specification** (dated 7th April 2023) and the **Vegetation Management Plan 113 Orchard Street Warriewood** (dated May 2024 update July 2024), a tree removal and VMP has been established to balance the requirements of the PBP 2019, and the environmental and ecological impact of the site due to development, with the APZ guidelines designed to protect life and property.

"This VMP details management actions relating to the restoration of the original plant community including the management of Asset Protection Zones." (VMP-113 Orchard Street, Warriewood, 2024)

Sections 1.6.2 Tree Management, 1.6.3 Bushfire Mitigation = APZ and 1.6.4 APZ Creation and Tree Removals outlines the plan for tree removal and management plans to achieve the APZ requirements of the PBP 2019. Figure 1.5b of the VMP details post tree removal and management plans outcomes (see below).



Figure 1.5b Post Tree Removal and Canopy Gaps

Notes as per Arborist and Ecological Services Recommendations: In my opinion these provisions are being followed as per the requirements of Appendix 4 of Planning for Bush Fire Protection 2019. Despite the actual coverage at maturity of crown coverage being calculated at 20%, this is an estimate. The PBP 2019 says 'should be 15%' not must, with this in mind the arborist and ecologist have provided tree removal and Vegetation Management Plans (in perpetuity) to support the PBP 2019. These aforementioned documents embrace the requirements of the PBP 2019 with environmental and ecological planning, sustainability and sensibility that will nurture the requirements of the consent authority, NSW RFS, and planners with the client's needs, protection and survivability in the event of an extreme bushfire event.

In my opinion, based on the plans and documentation provided, it does appear the requirements for APZ can be met as prescribed by the conditions of the Northern Beaches Council, the Bushfire Risk Assessment, the NSW RFS document 'Standards for asset protection zones', and the NSW Rural Fire Service document *Planning for Bush Fire Protection 2019* Appendix 4.

Note: This report has been prepared by CBAA. CBAA is not a registered building surveyor, designer, architect, planner or certifier and as such is not liable for any building or structural failure or fault. This report for compliance should not form the basis of any type of Compliance or Occupancy/Construction Certificate, but rather act as supplementary documentation for an appropriately qualified certifier to perform their own inspection and assessment.

Sincerely



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References



VMP 113
Orchard.pdf



Report_-_Bushfire
(1).pdf



Rural_Fire_Service_
Referral_Response (ORCHARD RD_ 1826



Site Plan _113