

Northern Beaches Council

Bush Fire Assessment Report of SFPP at 181 Allambie Rd. Allambie Heights.



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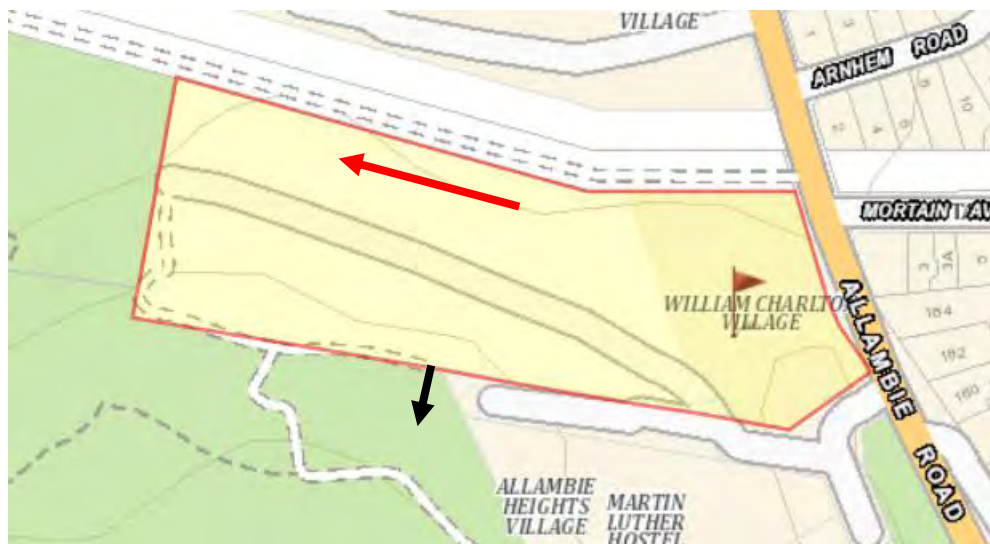
Introduction



The assessment is to establish the AS 3959-2009 BAL requirements of the site for the extension of the existing Special Fire Protection Purpose, a retirement village and a swimming pool.

Compliance with Section 100B Rural Fires Act 1997 is required

The BAL components are – dominant vegetation, dominant slope under the dominant vegetation, Asset Protection Zone (APZ) and the Fire Danger Index (FDI)

Topographical



Effective slopes under the hazard within 100M = >5-10°downslope =  & upslope = 

Vegetation Communities



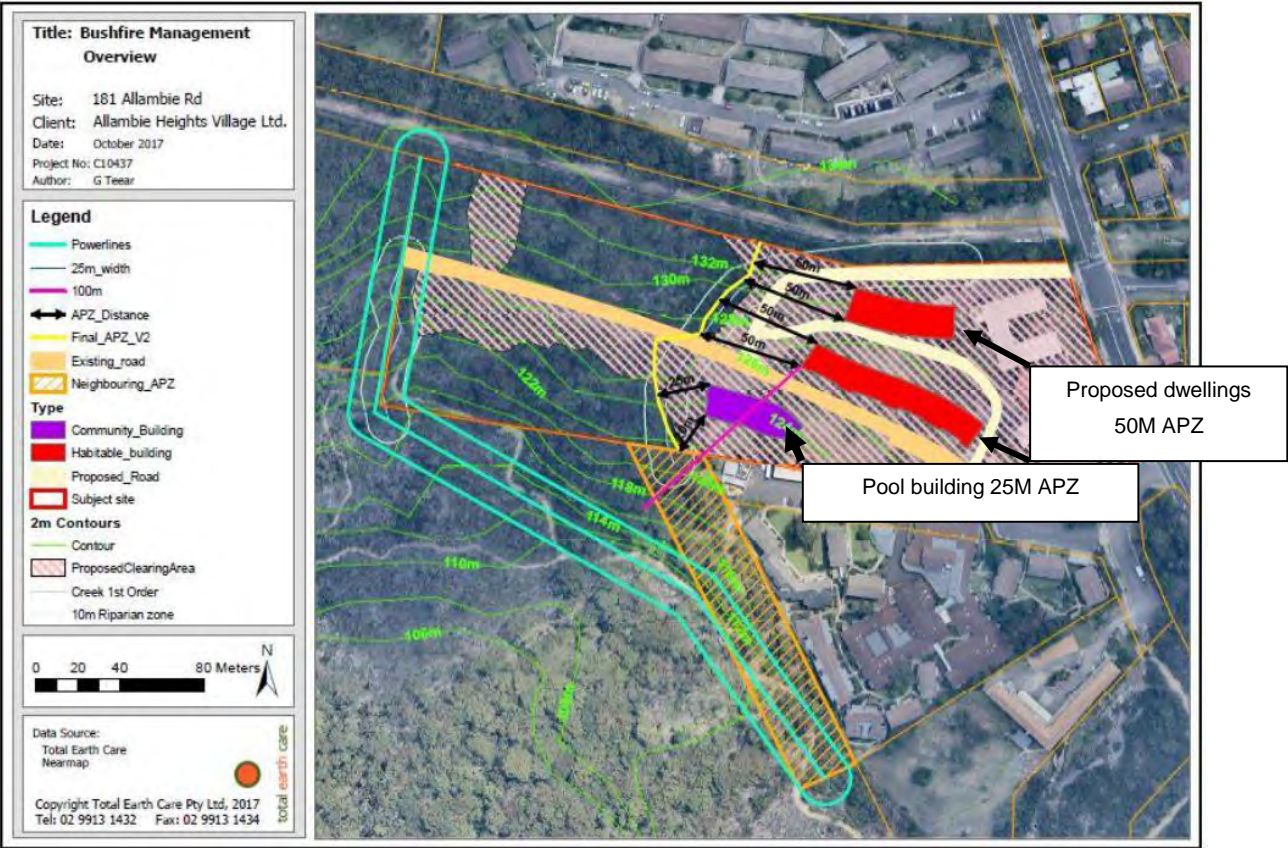
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- 1.Coastal Sandstone Heath Mallee 2.Weeds and exotics 3. Sydney North Exposed Sandstone Woodland
4. Urban exotic native. 5. Sydney Coastal Sandstone Gully Forest

Site Plan



APZ Bushfire Overview



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Bushfire Prone Land Approx. 37176M².



Hazard



Scrub 20M south west of Pool building

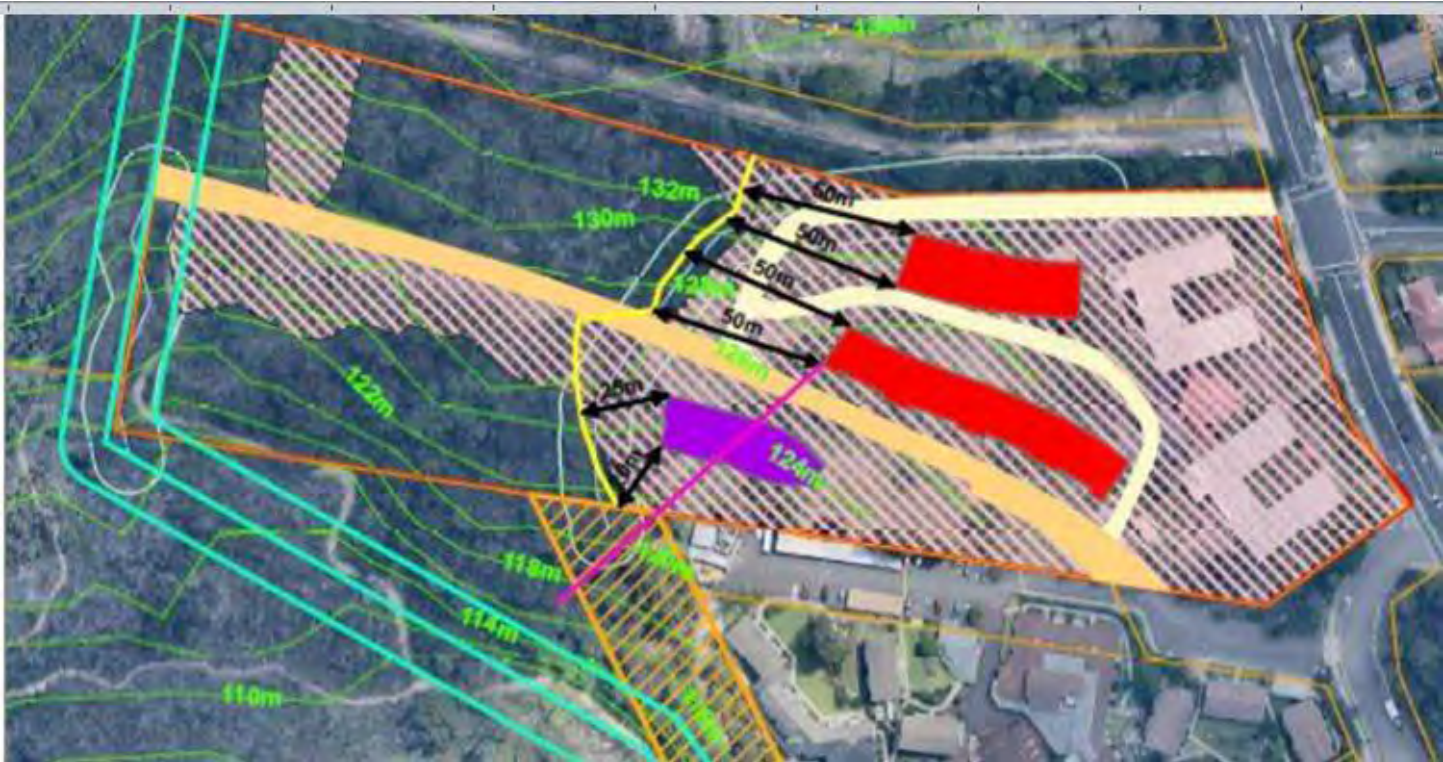


Weeds & exotics mixed with woodland and forest



Woodland >50M west of the dwellings APZ.

APZ/Contours



APZ's



Upslope / Flat. >50M west of proposed dwellings.



>5 -10° downslope

Project Objectives and Methodology

1. To assess the Bushfire Threat to the dwellings and pool to minimize Bushfire Risk to fire fighters, residents, neighbouring buildings and the environment.
2. The measures recommended for the protection of the site, proposed use of the dwellings and pool are based on scientific findings to assess the maximum potential danger to the dwellings and pool
3. To minimize fire protection impact on flora, fauna, soil stability and water quality.

Date of site inspection 3.5.18

Council application Special Fire Protection Purpose application for a retirement village and pool

Bushfire Protection Factors

Bushfire Threat Assessment with reference to Planning for Bushfire Protection 2006 directives on Asset Protection Zones, access for firefighters and visitors to the site, and water supplies.

Factors	Details
Legislative Requirement	Compliance with Section 100B Rural Fires Act 1997
Limitations of Bushfire Protection	The proposal will comply with the requirements of Planning for Bushfire Protection 2006, Table A2.6 to the dwelling aspect only to achieve an improved barrier to minimize the impact of ember, radiant heat and flame attack. The Pool building does not comply.
Infill Development	Including PBP 2006 4.3.2 Specific Objectives for Infill, the following are fulfilled.

	<ul style="list-style-type: none"> the hazard is on public and private land and the owners/managers have a duty of care to reduce/manage the hazard under the Rural Fires Act 1997 Part 4 Div.2A. Sec.74. The proposed development will not influence the bushfire risk to adjoining lands. a defendable space will be provided at each structure <10kW/m² at the dwelling sites will be achieved but not at the Pool building site The building lines will be planned without detriment to the existing structures the owners of the hazard will have the opportunity to oppose the project building and occupant survival will be enhanced by the adoption of PBP <p>Table A2.6. Woodland (Grassy) >0-5° Downslope 50M</p>
Address & Title Details	181 Allambie Rd. Allambie Heights L2615 DP752038
Local Government Area	Northern Beaches
Area of L2615	37176M ²
Radiant heat	Dwellings 5kW/M ² Pool Building >10kW/M ²
Bushfire Risk Assessment (PBP 2006)	Bushfire Prone Land within the Northern Beaches Council Bushfire Prone Land Map.
Bushfire Attack Level BAL	Dwellings BAL LOW Pool Building BAL40
Vegetation Classifications	Forest, Scrub & Woodland,
APZ	Dwellings 50M Pool Building 25M
Slope Assessment	Dwellings. Upslope /Level Pool Building. >5-10°downslope
FFDI	100
Significant Environmental Features	Nil observed
Threatened Species Conservation Act	There is no evidence of any threatened species, population or ecological community on the property.
Nat. Parks and Wildlife Act 1974	Nothing encompassed by the Act was observed.
Water Supply	A ring main water reticulation system will be installed along the outer alignment of the road verge i.e on the bushland side of the access road. Metal Storz valves/hydrants

	will be provided at intervals and with pressures and volumes complying with AS 2419. 1-2005 and in accordance with the performance criteria table for water supply services in PBP.
Gas & Electrical supply	Gas & electrical supply will be located underground within the road corridor. All gas services will be installed and maintained in accordance with AS 1596 and specifically in accordance with the performance criteria table for gas supply services in PBP.
Egress/Access	<p>Egress from the proposed site is via Allambie Road into suburbia.</p> <p>Fire fighter and vehicular access to the site is from Allambie Road.</p> <p>Fire fighter access round the sites is planned.</p> <p><u>Road specification.</u></p> <p>A minimum carriageway width of 4 metres to the dwellings is required.</p> <p>A minimum vertical clearance of 4 metres to overhanging obstructions including tree branches.</p> <p>The crossfall is not more than 10°.</p> <p>Curves have a minimum inner radius of 6 metres and are minimal in number.</p> <p>The minimum distance between inner and outer curves is 6 metres.</p> <p>Maximum grades for sealed roads do not exceed 15° and not greater than 10° for unsealed roads.</p>

Recommendations for Building & Maintenance

Subject	Recommendation
Dwelling Construction Level	<p>The proposed dwelling locations fulfil the dwelling requirements of PBP Table A2.6. i.e Upslope /Flat Woodland with 50M APZ</p> <p>Gutterless roofing may be considered</p>
Pool Construction Level	BAL40
All buildings access	In perpetuity maintain clear access past past/round all buildings for fire fighting
Inner Protection Area Management	<p>Inner Protection Area, PBP 2006</p> <p>Planning for Bushfire Protection 2006 Appendix 2 A2.2(vi)</p> <ol style="list-style-type: none"> 1. Manage all gardens as an Inner Protection Area (IPA).(Planning for Bushfire Protection 2006 Appendix 2 A2.2(vi) <p>An IPA should provide a tree canopy of less than 15% and should be located greater than 2 metres from any part of the roofline of a dwelling.</p> <p>Garden beds of flammable shrubs are not to be located under trees and should be no closer than 10 metres from an exposed window or door.</p> <p>Trees should have lower limbs removed up to a height of 2 metres above</p>

	<p>the ground.</p> <p>2. Continuous canopy within the IPA is not permissible</p>
Hazard management on influential bushfire prone land	The owner of the influential bushfire hazard in the subject property has a duty of care to reduce/manage the hazard under the Rural Fires Act 1997 Part 4 Div.2A. Sec.74.
Future dwelling maintenance	To minimize opportunities for ember attack/entry from inside the Bushfire Prone Land the half yearly removal of fuel from the roof and an annual inspection of the roof for loose roof cladding is recommended.
Bushfire management and maintenance.	Management of all buildings against ember attack/entry will be the owner's ongoing responsibility.

References

NSW Rural Fire Service, Planning for Bushfire Protection 2006.

NSW Rural Fire Service Building in Bushfire Prone Areas

Northern Beaches Council Bushfire Prone Land Map

Standards Australia. AS 3959 – 2009

Rural Fires Act 1997

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Conclusion

Compliance with AS 3959-2009 Construction Level BAL LOW on all aspects of the proposed dwellings will provide improved protection against bushfire attack providing Asset Protection Zone and building maintenance is practiced across the total site.

Disclaimer

The report is prepared in accordance with current accepted practice as described in Australian Standard AS 3959 – 2009 and amendments thereto “Construction of Buildings in Bushfire Prone Areas” and N.S.W. Rural Fire Services guide “Planning for Bushfire Protection 2006” and other relevant regulations.

This report is not an insurance policy because owing to the unpredictable nature of bushfires and of weather conditions at the time of a bushfire this report cannot be taken as a warranty that the recommended bushfire mitigation measures will protect the property from damage in every possible bushfire condition.

Ultimately the responsibility is the owner's to accept the risks associated with development in bushfire prone areas.

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