

Bushfire Hazard Assessment Report

Proposed:
**Hospital, Aged Care &
Seniors Living**

At:
**95 River Road,
Lane Cove**

Reference Number: 171272

Prepared For:
Hammond Care

21st March 2018



Prepared By:
**Building Code & Bushfire
Hazard Solutions Pty Limited**

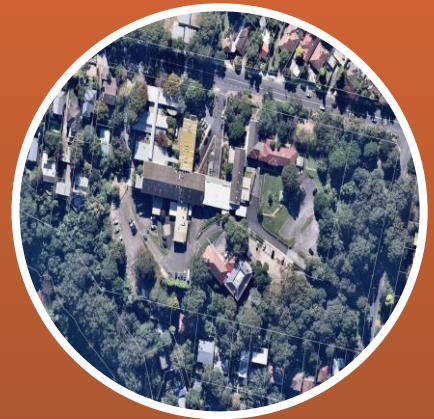
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List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2009 as amended.
BAL	Bushfire Attack Level
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Lane Cove Council
DA	Development Application
EP&A Act	Environmental Planning and Assessment Act - 1979
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NCC	National Construction Code
NP	National Parks
NSP	Neighbourhood Safer Place
OPA	Outer Protection Area
PBP	Planning for Bush Fire Protection – 2006
ROW	Right of Way
RF Act	Rural Fires Act - 1997
RFS	NSW Rural Fire Service
SEARs	NSW Dept. Planning / Secretary's environmental assessment requirements
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

1.0 Introduction

The development proposal relates to the concept masterplan approval and Stage 1 development application for the redevelopment of the Greenwich Hospital site located at 95 River Road Greenwich. The concept masterplan includes the demolition of the existing hospital and patient services and the construction of a new palliative care hospital (150 beds), two new seniors' housing buildings (80 units), nine (9) new seniors' housing villas and associated infrastructure. The works are occurring on land associated with the heritage listed Pallister House which is being retained within the subject site. The grounds around Pallister House and associated with the bridal track form part of the heritage listing of the house itself.

The subject site abuts River Road to the north and St Vincents Road to the east and private residential allotments to the south and west. Adjacent the southwestern boundary is Gore Creek Reserve which contains vegetation along and adjacent to Gore Creek, cleared playing fields (Campbell Oval), managed land around formal park uses (play equipment), car parking and amenities. The vegetation identified as being the hazard is located to the southwest both within a small portion of the subject site and within Gore Creek Reserve.

Lane Cove Council's Bushfire Prone Land Map identifies the subject property as containing Category 2 Vegetation and the 30 metre buffer zone from designated Category 2 Vegetation, therefore the application of Planning for Bush Fire Protection - 2006 (PBP) must apply in this instance. The majority of the works are occurring outside land mapped as a bushfire hazard and buffer zone from a bushfire hazard.

As the proposal relates to the redevelopment of an existing hospital establishment approved prior to August 2002 it has been assessed under the provisions of Special Fire Protection Purpose development as infill under section 4.2.5 of Planning for Bush Fire Protection 2006.

Intensification of the site is occurring in the form of proposed seniors' housing residential flat buildings. A better overall bushfire safety outcome will be achieved by providing:

- Compliance with Australian Standard 3959 'Construction of buildings in bushfire-prone areas' – 2009 for all new construction,
- Demolishing all existing construction onsite (excluding Pallister House) not compliant with AS3959 'Construction of buildings in bushfire-prone areas' – 2009,
- All new works will be setback from the bushfire hazard with Asset Protection Zones applied that comply with PBP 2006 as if the site was a greenfield development (10k/wm²),
- No new works will be located within a Bushfire Attack Level higher than BAL 12.5,
- Formal Asset Protection Zones which will be subject to a Fuel Management Plan,
- Improved emergency planning, and
- Improved perimeter access for fire appliances.

2.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide Hammond Care with an independent bushfire hazard determination together with appropriate recommendations for master planning design, new building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that the Authority Having Jurisdiction and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject development.

3.0 Scope of this Report

The scope of this report is limited to providing a bushfire hazard assessment and recommendations for the subject property. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

4.0 Referenced Documents and Persons

Comments provided are based on the requirements of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act), the Rural Fires Act 1997, the Rural Fires Regulation 2013, the RFS document known as 'Planning for Bush Fire Protection – 2006' for the purposes of bushfire hazard determination and Australian Standard 3959 – 2009 titled 'Construction of buildings in bushfire-prone areas' as amended for building/structural provisions. Consideration has also been made to the Draft Planning for Bush Fire Protection 2017 which is expected to be legislated in November 2018 and may affect future DA's for later stages of this development.

A company representative has made several site inspections of the subject property and the surrounding area. Meetings have occurred onsite with the consulting arborist Craig Martin from Redgum Horticultural and ecologist Elizabeth Ashby from Keystone Ecological.

An onsite pre DA meeting with Mr Jason Maslen from the NSW RFS has occurred at which time the conceptual methodology for the site specific bushfire hazard assessment and proposed APZ and other bushfire protection measures was discussed and agreed upon. This report remains consistent with those pre DA concepts and a copy of the NSW RFS correspondence is attached to this report.

The Site Plan prepared by Bickerton Masters Architecture (project 1213, dwg S.02, rev T3, dated 12/03/2018) has been relied upon for this assessment.

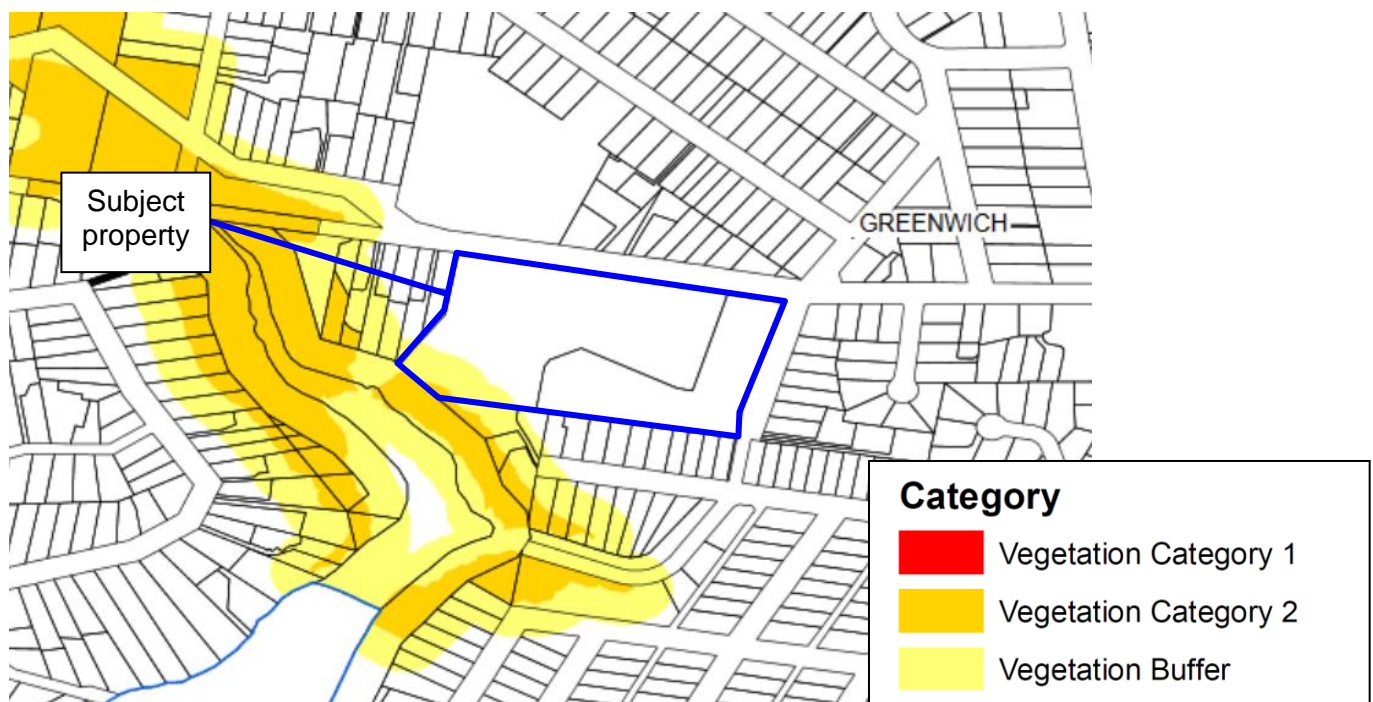


Image 01: Excerpt from Lane Cove Council's Bushfire Prone Land Map

5.0 Compliance Tables & Notes

The following table sets out the projects compliance with *Planning for Bush Fire Protection – 2006*.

	Southwest
Vegetation Structure	Remnant *
Slope	0 degrees across
Proposed Asset Protection Zone – Hospital and Villas	≥100 metres
Proposed Asset Protection Zone – Seniors' Housing Buildings	≥30 metres
Significant Environmental Features	Avenue of trees along bridal track in north-eastern corner of site excluded from specific APZ requirements however subject to a VMP to ensure it is not a bushfire threat to any development.
Threatened Species	Rainforest vegetation onsite, no APZ are located within this vegetation. Boundary of rainforest has been determined onsite with Keystone Ecology. Removal of weed species and two pittosporums only required.
Aboriginal Relics	Not known by others.
Radiant heat impact Hospital and Villas	n/a > 100 metre APZ
Radiant heat impact Seniors' Housing Buildings	≤ 10 k/Wm ² Table 2.6 PBP 2006
Bushfire Attack Level Hospital and Villas	BAL Low
Bushfire Attack Level Seniors' Housing Buildings	BAL 12.5

* The vegetation due southwest of the site has been classified structurally as rainforest by Keystone Ecological however as the corridor extends to the northwest and southeast of the rainforest area the vegetation transforms into a more forest like structure. Generally the vegetation provides less than a 50 metre fire run towards the site, and where the actual distance exceeds this fire runs are inhibited by cliffs and rock outcrops. The area was inspected with the NSW RFS and it is agreed that the vegetation can be assessed as remnant and that the effective slope along the length of the remnant can be applied (0 degrees across or upslope).

Asset Protection Zones Compliance

The Asset Protection Zones consist of maintained land within the subject site. All grounds within the subject site excluding the rainforest vegetation in the southwest corner (see Image 07 p13) and the heritage land associated with Pallister House (being Lot 4 DP 584287) will be managed as an Inner Protection Area. The heritage land associated with Pallister House will be subject to a specific VMP to ensure it is not a bushfire threat to any development and this will include maintaining ground fuels to low level grasses less than 100 mm in height, no surface fuel accumulation (bark leaf and twigs) greater than 4 t/ha, restricting any shrub gardens to no more than 20% of the area and maintaining 2 – 5 metre separation from any tree limb to a shrub garden. All grounds within the subject site shall be subject to a Fuel Management Plan (FMP) to ensure their ongoing management.

Construction Level Compliance

The highest Bushfire Attack Level to the closest point of the proposed new seniors' housing buildings and Café was determined from Table 2.4.2 of AS3959 – 2009 to be 'BAL 12.5'. The proposed new seniors' housing buildings and Café are therefore required to be constructed to BAL 12.5 under section 3 & 5 of AS3959 – 2009 and the additional construction detail within Addendum Appendix 3 of PBP 2006.

All other buildings inclusive of the proposed hospital and villas are located greater than 100 metres from the hazard interface and consequently they are in an area determined to be BAL Low, attracting no specific construction requirements under AS3959 – 2009.

6.0 Aerial view & Site plan



Image 02: Aerial view of the subject area c/- Nearmap



Image 03: Extract from the Site Plan prepared by Bickerton Masters Architecture

7.0 Bushfire Hazard Assessment

7.01 Preface

Properties considered to be affected by possible bushfire impact are determined from the local Bushfire Prone Land Map as prepared by Council and or the Rural Fire Service. All property development within affected areas is subject to the conditions detailed in the document 'Planning for Bush Fire Protection - 2006' (PBP). Set back distances for the purpose of creating Asset Protection Zones (APZ's) must be applied and any buildings must then conform to corresponding regulations detailed in Australian Standard 3959 – 2009 'Construction of buildings in bushfire prone areas'.

Planning for Bush Fire Protection – 2006, (PBP) formally adopted on the 1st March 2007 and amended May 2010 (Appendix 3) provides for the protection of property and life (including fire-fighters and emergency service personnel) from bushfire impact.

The thrust of the document is to ensure that developers of new properties or sub-divisions include the constraints associated with the construction of buildings in bushfire prone areas within their proposed development sites. PBP is applicable to proposed development inside a determined Category 1 or 2 areas and also inside a buffer zone radius of 100m from a Category 1 bushfire area or 30m from a Category 2 bushfire area.

The document also acknowledges 'infill' developments associated with re-development of existing properties and allows some higher levels of building safety where the increased 'set backs' (APZ's) may not be achievable.

The subject development relates to the redevelopment of an existing Special Fire Protection Purpose development. To accord with PBP the development is classified as Special Fire Protection Purpose development and assessed as a section 100b application under the Rural Fires Act 1997. The site has existing use rights for SFPP purpose development approved prior to August 2002 and therefore this application has been assessed under the provisions of section 4.2.5 'SFPPs as infill' of Planning for Bush Fire Protection 2006.



Image 04 Extract from Dept. Planning database showing Land Cove Council LEP 2009 Zones

7.02 Location

The subject property is known as Greenwich Hospital and is located at 95 River Road Greenwich which is within Lane Cove Councils Local Government Area.

The subject site abuts River Road to the north and St Vincents Road to the east and private residential allotments to the south and west and adjacent the southwestern boundary is Gore Creek Reserve. The vegetation identified as being the hazard is located to the southwest both within a small portion of the subject site and within Gore Creek Reserve.



Photograph 01: View of Greenwich Hospital from River Road

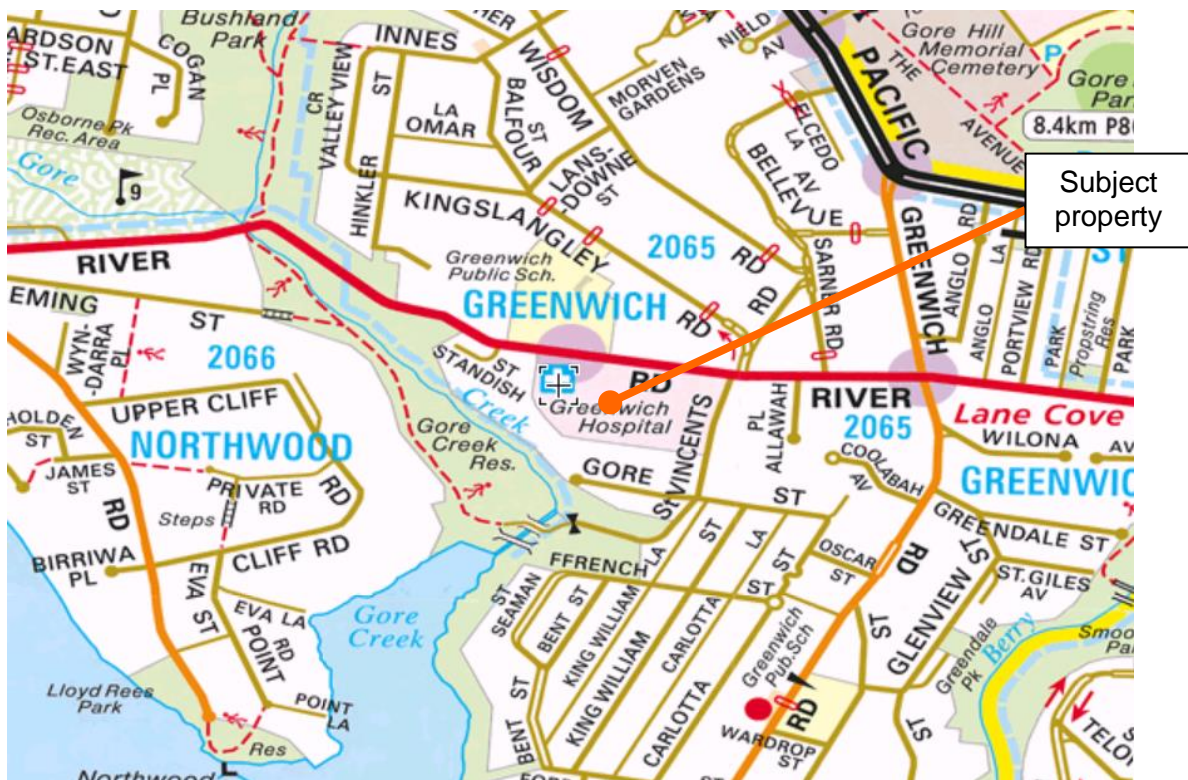


Image 05: Extract from street-directory.com.au

7.03 Vegetation

The predominant vegetation inside the subject site was found to consist of maintained lawns and gardens around existing assets. There is a small pocket of unmanaged vegetation in the southwest corner below the carpark on the steeper section sloping into Gore Creek Reserve. This vegetation is contiguous with the vegetation within the reserve associated with Gore Creek.

The vegetation within the southwest corner of the site and due southwest of the site has been classified structurally as rainforest by Keystone Ecological. As the corridor extends to the northwest and southeast of the rainforest area the vegetation transforms into a more forest like structure. Generally the vegetation provides less than a 50 metre fire run towards the site, and where the actual distance exceeds this the fire runs are inhibited by cliffs and rock outcrops. The area was inspected with the NSW RFS and it is agreed that the vegetation can be assessed as remnant vegetation and rainforest fuels allocated regardless of the actual vegetation structure.

For the purpose of assessment under Planning for Bush Fire Protection 2006 and AS3959 – 2009 the vegetation to the southwest was determined to be remnant (with the slope measured along the length of the remnant) and a rainforest classification applied.



Photograph 02: View north towards the subject site from within Gore Creek Reserve



Photograph 03: View northwest within Gore Creek Reserve taken southwest of the subject site

7.04 Slope and Topography

The slope that would most significantly affect bushfire behaviour must be assessed for at least 100 metres from within the hazard. When assessing the impact from a remnant hazard PBP 2006 does not require the slope to be assessed perpendicular to the asset but rather stipulates that the “effective slope is to be determined over the length of the remnant”.

In accordance with the assessment methodology detailed within Planning for Bush Fire Protection 2006 and as agreed upon onsite with the NSW RFS the most significant bushfire impact was determined to be:

- 0 degrees across or upslope slope within the hazard to the southwest



Image 06: Topographic image of the subject area from the Dept. of Lands SixMaps database

7.05 Asset Protection Zones

Asset Protection Zones for new Special Fire Protection Purpose (SFPP) development are determined from Table A2.6 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 10kW/m² at the closest point of the available building footprint.

The subject site contains an operational hospital approved prior to August 2002 and is therefore considered to have existing use rights for SFPP development. PBP states that ‘Alterations and additions to existing SFPP’s (i.e. approved prior to 1st August 2002), including their external appearance or finish, which may involve an increase in size and footprint of the building or redevelopment of an existing building are considered to be infill development’. This application can be assessed under the provisions of section 4.2.5 of PBP ‘SFPPs as infill’.

The proposed works are however located such that the minimum required APZ of 30 metres determined from Table 2.6 for a greenfield site is achieved. All grounds within the subject site excluding the rainforest vegetation in the southwest corner (as shown below) and the heritage land associated with Pallister House (being Lot 4 DP 584287) will be managed as an Inner Protection Area. The heritage land associated with Pallister House will be subject to a specific VMP to ensure it is not a bushfire threat to any development and this will include maintaining ground fuels to low level grasses less than 100 mm in height, no surface fuel accumulation (bark leaf and twigs) greater than 4 t/ha, restricting any shrub gardens to no more than 20% of the area and maintaining 2 – 5 metre separation from any tree limb to a shrub garden. All grounds within the subject site shall be subject to a Fuel Management Plan (FMP) to ensure their ongoing management.



Photograph 04: View of the trees along St Vincents Road which form part of the heritage land associated with Pallister House

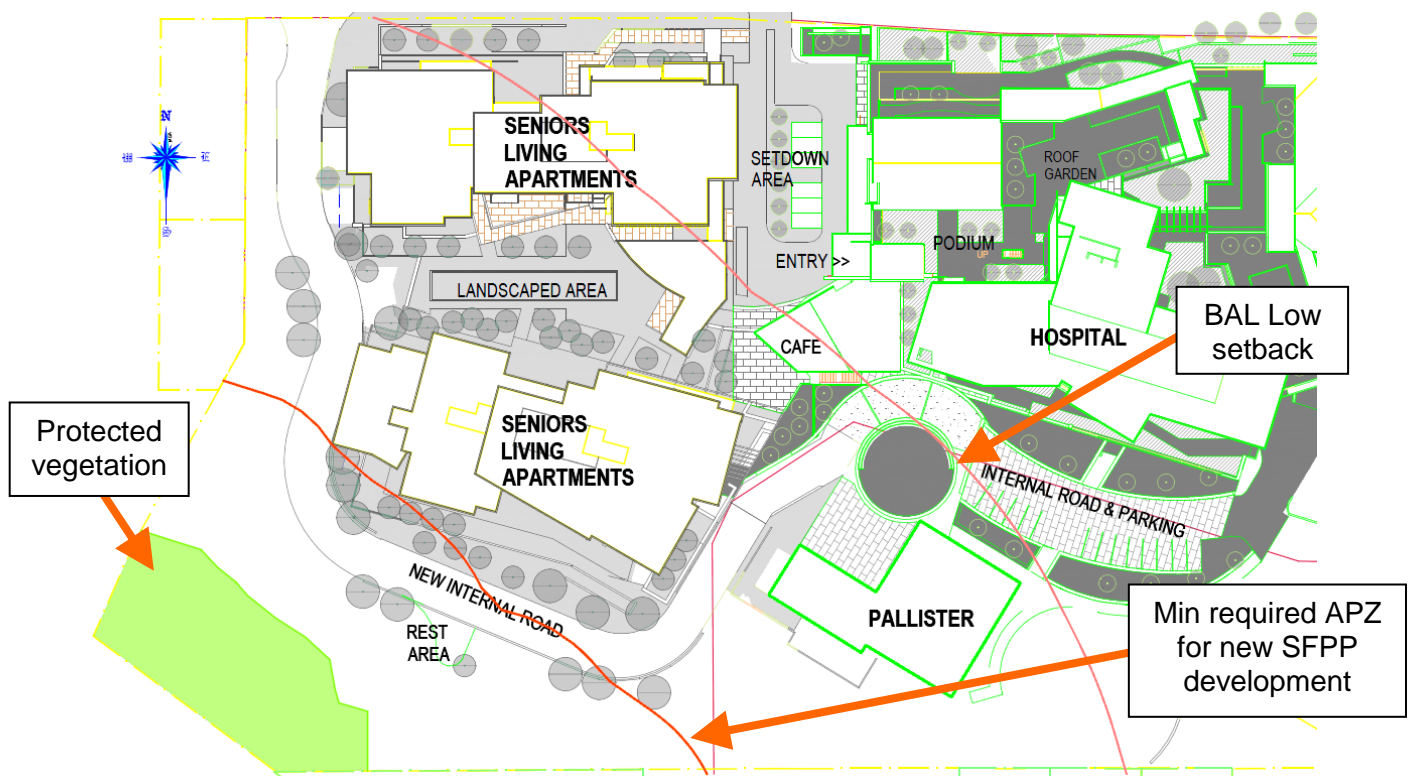


Image 07: Overlay showing protected vegetation (shaded green), minimum required APZ for new SFPP (red line) and BAL Low setback (pink line).

7.06 Fire Fighting Water Supply

The subject site is connected to the existing reticulated water mains along for its commercial purposes.

Existing hydrants are available along River Road and St Vincents Road and within the subject property. This system will be redesigned and re-installed to suit the new development and will be compliant with AS2419 including other essential fire safety features required by the NCC such as extinguishers, fire hose reels and the like.

7.07 Property Access

The subject property has street access to River Road to the north and St Vincent's Road to the east. Access to the bushfire hazard is available via the proposed perimeter road or Gore Creek Reserve for hazard reduction or fire suppression activities.

Planning for Bush Fire Protection addresses design considerations for internal roads for properties determined to be bushfire prone. The proposed new internal roads must comply with the requirements for Internal Roads as detailed in section 4.2.7 of PBP.

Specifically this development has included the following:

- Provision of loop access (through road system) from River Road to St Vincents Road around the southwestern perimeter of the development.
- The perimeter road will maintain minimum carriageway of 8 metres.
- Car parking can be located within the APZ.

8.0 Site & Bushfire Hazard Determination

8.01 Planning for Bush Fire Protection - 2006

Planning for Bush Fire Protection – 2006 (PBP) is applicable to those lands determined as being within a 'bushfire prone area' in accordance with a local Bushfire Prone Land Map as provided by the Rural Fire Service and Council.

The most appropriate method of determining site bushfire hazard under the terms of PBP is to consider the site in a singular form.

Bushfire prone areas are defined as those areas;

- *within or within 100m of high or medium bushfire hazards; or*
- *within or within 30m of low bushfire hazards.*

In this instance the subject property has been identified as being bushfire prone land therefore it is appropriate to apply PBP.

8.02 Australian Standard AS 3959 – 2009 'Construction of buildings in bushfire –prone areas'

Australian Standard 3959 – 2009 'Construction of buildings in bushfire-prone areas' provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ. The Australian Standard 3959 specifies construction standards for buildings within various Bushfire Attack Levels as determined by the Planning for Bush Fire Protection – 2006 document. The NSW Rural Fire Service will not accept deemed to satisfy provisions for BAL Flame Zone and therefore have a NSW variation to the listed standard provisions of BAL FZ under AS3959 - 2009.

8.03 Correlation between bushfire impact and AS3959

Bushfire Attack Level	Maximum radiant heat impact (kW/m ²)	Level of construction under AS3959-2009
Low		No special construction requirements
12.5	≤12.5	BAL - 12.5
19	12.6 to 19.0	BAL - 19
29	19.1 to 29.0	BAL - 29
40	29.1 to 40.0	BAL - 40
Flame Zone	>40.0	BAL FZ No deemed to satisfy provisions

8.04 Site Specific Bushfire Hazard Determination

All property development must be assessed on an individual basis as broad-brush approaches of documents such as PBP may not be applicable in every instance. The proposed development located at 95 River Road Greenwich was assessed against the requirements of Planning for Bush Fire Protection 2006 noting the following:

- a) Water supplies for fire fighting purposes will be improved and supplied in accordance with AS2419 for the new development.
- b) The proposed new works will be constructed to the relevant Bushfire Attack Level under AS3959 – 2009 whereas the existing buildings onsite are not compliant with this standard.
- c) The proposed access provisions are considered adequate to comply with section 4.2.7 and 4.1.3 or PBP 2006.

8.05 Viable Construction Method

One of the objectives of Planning for Bush Fire Protection – 2006 are for the protection of life including fire fighters. Provided these objectives can be met the construction of buildings is feasible and both the Rural Fire Service and Council should be in a position to consider such applications.

The highest Bushfire Attack Level to the closest point of the proposed new seniors' housing buildings and Café was determined from Table 2.4.2 of AS3959 – 2009 to be 'BAL 12.5'. The proposed new seniors' housing buildings and Café are therefore required to be constructed to BAL 12.5 under section 3 & 5 of AS3959 – 2009 and the additional construction detail within Addendum Appendix 3 of PBP 2006.

All other buildings inclusive of the proposed hospital and villas are located greater than 100 metres from the hazard interface and consequently they are in an area determined to be BAL Low, attracting no specific construction requirements under AS3959 – 2009.

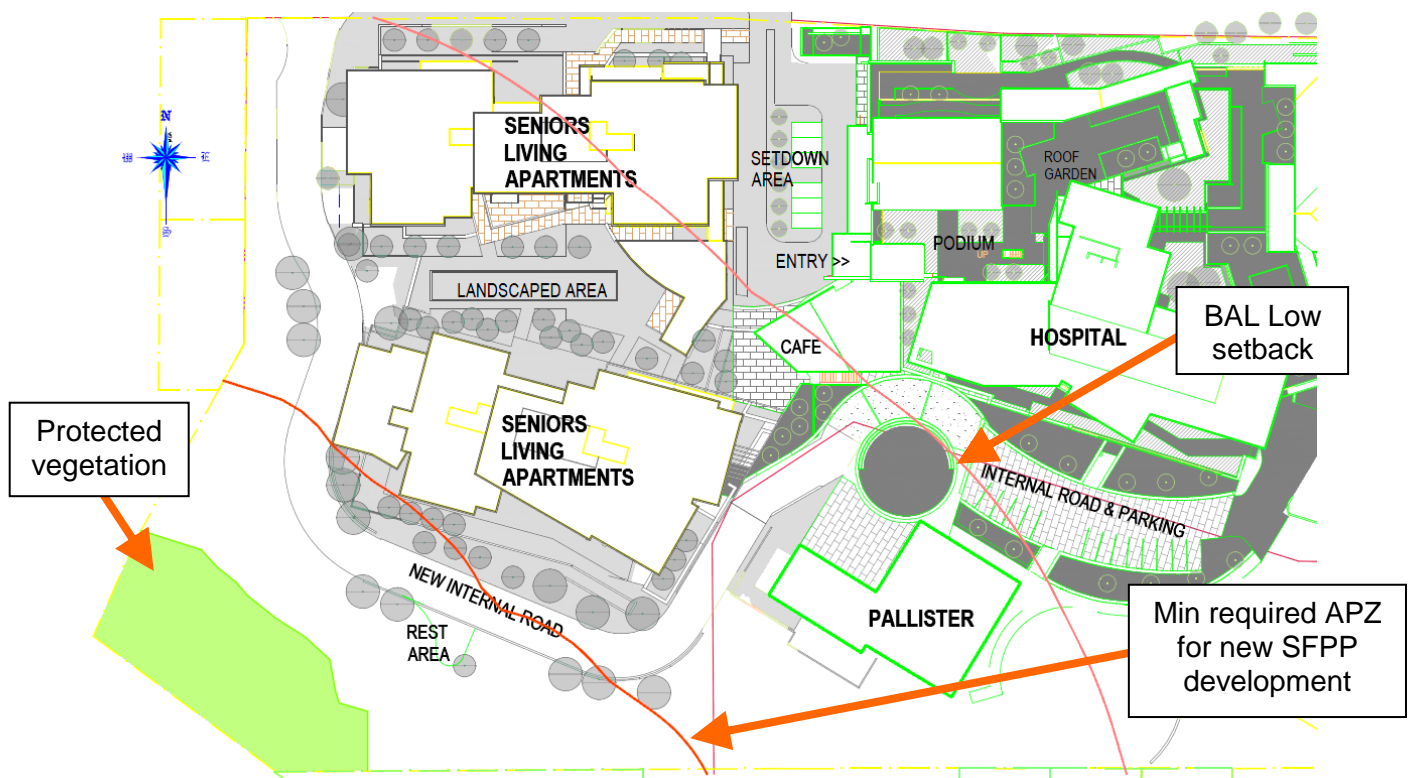


Image 08: Overlay showing protected vegetation (shaded green), minimum required APZ for new SFPP (red line) and BAL Low setback (pink line).

9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with Planning for Bush Fire Protection – 2006 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas' - 2009. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

General

1. That the development be in accordance with the Site Plan prepared by Bickerton Masters Architecture (project 1213, dwg S.02, rev T3, dated 12/03/2018).

Asset Protection Zones

2. That all grounds within the subject site excluding the rainforest vegetation in the southwest corner (see Image 01 p13) and the heritage land associated with Pallister House (being Lot 4 DP 584287) be managed as an Inner Protection Area.
3. That the grounds within Lot 4 DP 584287 be subject to a specific VMP to ensure it is not a bushfire threat to any development and this will include;
 - maintaining ground fuels to low level grasses less than 100 mm in height,
 - no surface fuel accumulation (bark leaf and twigs) greater than 4 t/ha,
 - restricting any shrub gardens to no more than 20% of the area and maintaining 2 – 5 metre separation from any tree limb to a shrub garden,
4. That a Fuel Management Plan be established to ensure the ongoing management of the Asset Protection Zones.

Construction

5. That new construction for the proposed new seniors' housing buildings and Café shall comply with section 5 (BAL 12.5) Australian Standard AS3959-2009 "Construction of buildings in bush fire-prone areas" and section A3.7 Addendum Appendix 3 of "Planning for Bush Fire Protection".

Note: All other buildings inclusive of the hospital and villas are located greater than 100 metres from the hazard interface and consequently they are in an area determined to be BAL Low, attracting no specific construction requirements under AS3959 – 2009.

Landscaping

6. That any new landscaping within the Asset Protection Zone is to comply with Appendix 5 'Landscaping and Property Maintenance' under Planning for Bush Fire Protection 2006.

Emergency Management

7. That a bushfire emergency / evacuation plan is prepared constant with the NSW Rural Fire Service Guidelines for the *Preparation of Emergency / Evacuation Plan*.

Water Supply

8. That new hydrants be installed in accordance with AS2419.1 - 2005.

Access

9. That the new access roads are to comply with sections 4.2.7 & 4.1.3 of Planning for Bush Fire Protection 2006.

10.0 Conclusion

Given that the property is deemed bushfire prone under Lane Cove Council's Bushfire Prone Land Map any development would need to meet the requirements of Planning for Bush Fire Protection – 2006 and of the construction requirements of Australian Standard 3959 – 2009. The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject property.

The proposal relates to the redevelopment of an existing Special Fire Protection Purpose development (hospital establishment) and has therefore been assessed under the provisions of SFPP development as infill under section 4.2.5 of Planning for Bush Fire Protection 2006.

Intensification of the site is occurring in the form of proposed seniors' housing buildings and villas. A better overall bushfire safety outcome will be achieved by providing:

- Compliance with PBP 2006 as if it was a greenfield site is achieved,
- Compliance with Australian Standard 3959 'Construction of buildings in bushfire-prone areas' – 2009 for all new construction,
- Demolishing all existing construction onsite (excluding Pallister House) not compliant with AS3959 'Construction of buildings in bushfire-prone areas' – 2009,
- All new works will be setback from the bushfire hazard with Asset Protection Zones applied that comply with PBP 2006 as if the site was a greenfield development,
- No new works will be located within a Bushfire Attack Level higher than BAL 12.5,
- Formal Asset Protection Zones which will be subject to a Fuel Management Plan,
- Improved emergency planning, and
- Improved perimeter access and onsite turning provisions for fire appliances.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is our opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

We are therefore in support of the development application. Should you have any enquiries regarding this project please contact me at our office.

Prepared by
Building Code & Bushfire Hazard Solutions



Stuart McMonnies

G. D. Design in Bushfire Prone Areas
Certificate IV Fire Technology
Manager - Bushfire Section
Building Code and Bushfire Hazard Solutions
Fire Protection Association of Australia BPAD – L3 Accredited Practitioner
Accreditation number – BPD – 9400



11.0 Annexure 01

List of Referenced Documents

- a) Environmental Planning and Assessment Act - 1979
- b) Rural Fires Act 1997 as amended
- c) Rural Fires Regulations 2013
- d) 'Planning for Bush Fire Protection'- 2006 - NSW Rural Fire Services & Planning NSW
- e) 'Construction of buildings in bushfire prone areas' - AS 3959 – 2009 (as - amended) – Standards Australia
- f) 'Ocean Shores to Desert Dunes' David Keith
- g) 'Lance Cove Council's Bushfire Prone Land Map'
- h) Site Plan prepared by Bickerton Masters Architecture (project 1213, dwg S.02, rev T3, dated 12/03/2018)
- i) Acknowledgements to:
NSW Department of Lands – SixMaps
Street-directory.com.au

Attachments

Attachment 01: Pre DA Advice meeting summary NSW RFS 1- Nov 2017



PRE-DA ADVICE MEETING SUMMARY

Attendees: Wayne Tucker, Building Code & Bushfire Hazard Solutions
Jason Maslen, Team Leader, Development Assessment and Planning

Subject: Greenwich Hospital redevelopment – River Road, Greenwich
DOC17/120690

Time and date: 11:00 26/10/2017 **Location:** Site

Details of the proposal

☒ SFPP

Redeveloping of an existing non-for-profit hospital involving:

- Replacement and expansion of the existing ageing hospital facilities and small residential aged care facility;
- Construction of new independent living units (approximately >80) to provide financial support to the redevelopment of the hospital

Bush fire protection issues discussed

☒ Hazard Assessment

- Assessment of the hazard to the south of the site as rainforest in consideration of the vegetation formations present (based on ecological studies) and narrow vegetation paths available.
- Effective slope to be taken across the hazard (i.e. from the north-west) due to the short / lack of fire run available directly towards the site from the south-west resulting from the substantial rock cliff at the southern end of the run and substantial rock walls throughout the corridor limiting ground and mid-storey vegetation.

☒ Asset Protection Zones

- APZs to be provided to achieve 10kW/sqm on the basis of the above.

☒ Access

- Through-access to be provided with a perimeter road around the facility.

☒ Access

- New buildings to be constructed to BAL-12.5 standards. No works proposed to Pallister House as this has heritage significance and is only used for administration purposes.

Documentation / plans referenced

Draft site plan; Draft ecological assessment plan.

Advice Provided

- No objection is held in principle to the proposed approach. A bush fire report shall be submitted with the development proposal which clearly outlines the above and provides information to support the hazard assessment (such as photos and detailed plans showing slope transects).

Disclaimer

RFS advice is based on information provided and policy and legislative requirements applicable at the time. The advice should be copied into, or referenced in, any subsequent development application.

All efforts are made to identify issues of relevance and likely concern with the preliminary proposal. However, the comments and views in this document are based only on the plans and information submitted for preliminary assessment and discussion at the pre-DA meeting. You are advised that: -

- The views expressed may vary once detailed plans and information are submitted and formally assessed in the development application process, or as a result of issues contained in submissions by interested parties;
- Given the complexity of issues often involved and the limited time for full assessment, no guarantee is given that every issue of relevance will be identified;
- Amending one aspect of the proposal could result in changes which would create a different set of impacts from the original plans and therefore require further assessment and advice; and,
- The Pre-DA advice given does not bind Council officers, the elected Council members, or other parties to the DA process.

Signed:



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