

Building Code & Bushfire Hazard Solutions

(Pty. Limited) ABN 19057 337 774

**Building Code Assessments, Project Management,
Bushfire Hazard Assessments, Fuel Management Plans,
Mitigation and Protection Systems.**

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FUEL MANAGEMENT PLAN

for:

**Lots 20 – 26 Montpelier Place,
St Patricks Estate
Manly**

Prepared for:
Lend Lease Development Pty. Ltd.
Level 4, 30 The Bond
30 Hickson Road
MILLERS POINT NSW 2000
Our Ref. 80148

1.0 INTRODUCTION

This Plan relates to the maintenance of the vegetation immediately adjoining Lots 20 – 26 Montpelier Place, Manly in a manner that will not be conducive to the propagation of bushfires.

As detailed within the *Rural Fires Act - 1997* it is “*the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from*” any land vested in or under its control or management. The development of Fuel Management Plans is essential for land holders or trustee’s in order to provide an established methodology for the management of fuel loads for prevention of bushfires within those lands.

The primary purpose of an Asset Protection Zone is to ensure that a progressive reduction of bushfire fuels occurs between the bushfire hazard and any habitable structures.

2.0 PURPOSE OF PLAN

The purpose of this Fuel Management Plan is to provide the owners with a tool to be used as a guide for the ongoing maintenance of the property, including Asset Protection Zones, in order to maximise its effectiveness as a buffer during a bushfire emergency in this area.

This plan does not guarantee that a bushfire will not occur within the subject property, it will however provide a method to minimise the intensity of a bushfire and impact to the dwellings along Montpelier Place should a bushfire occur within the vegetation further southeast. In this instance any bushfire within the property would be insipient in nature and is likely to have started by spotting from fire burning some distance away. This is due to the isolation from forest fuels by road infrastructure, landscaped areas and residential development.

3.0 SCOPE OF THIS PLAN

The scope of this plan is limited to providing a guideline to the management of the grounds immediately adjacent the southern boundaries of Lots 20 – 26 Montpelier Place, Manly and immediately adjacent the managed riparian zone. Please refer to the attached plan for a visual depiction of this area.

4.0 REFERENCED DOCUMENTS

Comments provided are based on the Rural Fire Services documents known as;

‘Planing for Bushfire Protection –2006 (PBP) &
“Standards for Asset protection Zones”

5.0 ASSET PROTECTION ZONE

Any vegetation greater than 15 metres in width adjoining the rear of lots 20 – 26 will be maintained in accordance with the guidelines for an Asset Protection Zone as described in Planning for Bushfire Protection - 2006.

Further to this the existing managed area to the southeast of the subject allotments will be extended by 2 metres and again this area will be managed as an Asset Protection Zone.

Please refer to attachment 01 for a depiction of these areas.

6.0 FUEL MANAGEMENT

The **Asset Protection Zones** ensure that the presence of fuels which could become involved in a fire are minimised close to a development. Therefore the impact of direct flame contact and radiant heat on the development will be reduced.

The following correspondence from Mr Jeremy Hodges of Knox & Partners Landscape Architects Pty Ltd details the maintenance program proposed within the vegetation adjoining lots 20 - 26 rear boundary. This maintenance area must also extend an additional 2 metres to the southeast of the existing maintained area detailed on attachment 01.

The following works are proposed as part of the estate maintenance program:

- *On-going removal of weed species.*
- *Additional planting to bare areas using Lomandra, Dianella Hibbertia and Isolepis.*
- *Vegetation management to areas of existing vegetation greater than 15m wide adjoining the rear of the lots. This will include crown lifting to 2m, and the removal of some shrub species (particularly Pittosporum and senescent Acacias) to create a shrub layer that takes on a clumping rather than continuous pattern.*
- *Removal of weed species, and replacement with low growing stabilising native species – Lomandra, Dianella Hibbertia, and Isolepis.*

It is of our opinion that should the landscape be managed as specified above that it will provide a satisfactory Asset Protection Zone and remove the bushfire hazard adjoining the rear boundary of the lots 20 - 26.

It is acknowledged that some of the proposed maintenance within the vegetation adjoining lots 20 - 26 rear boundary is on gradients exceeding 18 degrees. This final correspondence from Mr. Hodges details how the stability of this area has been ensured.

Bank at rear of lots.

The following works have been undertaken in this area since 2000:

- *Clearing of dense weed, predominantly Lantana. (2000)*
- *Regrading to reduce gradients and installation of a gravity rock wall at the toe of the bank. (2000)*
- *Dense planting of stabilising native species, predominantly ground cover species such as Lomandra, Dianella Hibbertia and Isolepis. (2000)*
- *Reshaping of the grass areas upslope of the bank to form a large swale which redirects overland flow to the gully to the south east. (2003)*

7.0 SCHEDULE OF MAINTENANCE

Once established these grounds should be managed on a routine basis. Particular attention to pruning, crown lifting and removal of dead fuels is made prior to the commencement of the bushfire danger period (1st October to 31st March) and at least once during the bushfire danger period.

Yearly Schedule

Time	Elevated Fuels	Surface Fuels
August	✓	✓
November		✓
February		✓

Untreated Fuel Clumps



Treated Fuel Clumps



8.0 METHOD FOR FUEL MANAGEMENT

All clearing is to be undertaken by hand and / or mechanical means. The use of hand held machine tools is acceptable including chainsaws. Mulching should be undertaken well before the summer months however mulch should not be applied to any garden adjacent any dwelling, as these will be stone, crushed porcelain or similar non combustible material. Raking up of fine ground fuels is also acceptable as a general method of vegetation removal however any large quantities of collected vegetation should be manually moved away from the Asset Protection Zone and not allowed to “Stockpile”.

9.0 CONCLUSION

The vegetation must be maintained on an ongoing basis for the life of the development in Montpelier Place in accordance with this plan to ensure continued protection from bushfire impact. Although management of this vegetation does not prevent ignition within the subject area, it does ensure that any insipient fire cannot promulgate into a wild fire and therefore reduces the expected severity and consequences to the surrounding residents and dwellings.

In consideration of the recommendations contained within this Fuel Management Plan and the site specific circumstances it is our opinion that when established they will provide reasonable provisions for the prevention of bushfires within the property and that the duty of the owners / estate managers under the *Rural Fires Act - 1997* has been satisfactorily addressed.

Prepared by
Building Code & Bushfire Hazard Solutions P/L

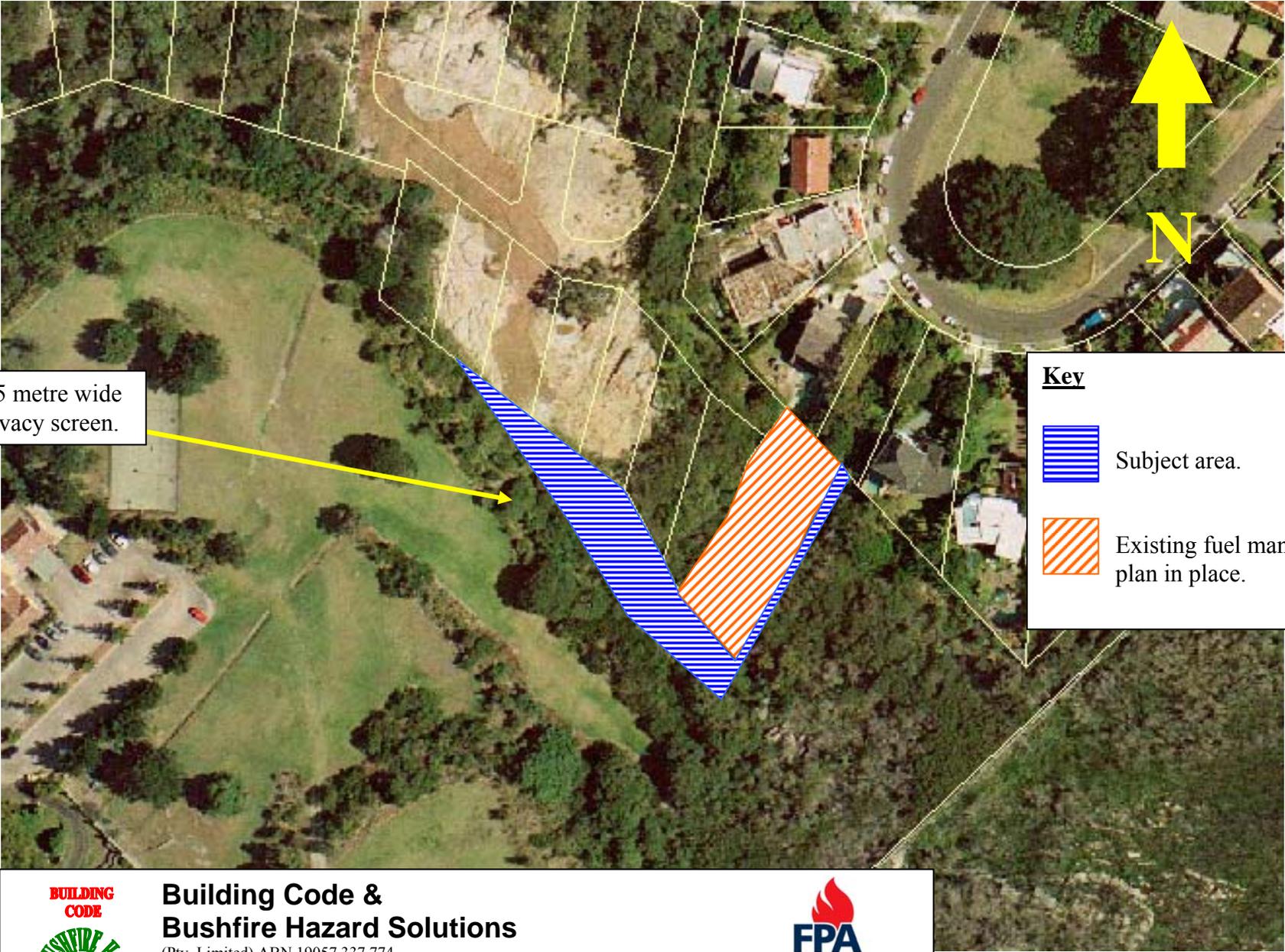


Stuart McMonnies
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
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Certification number – BPD – PA-02354



Attachment 01:
Attachment 02:

Site plan of proposed fuel managed area.
Indicative species list provided by Knox & Partners
Landscape Architects Pty. Ltd.



≤15 metre wide privacy screen.

Key

-  Subject area.
-  Existing fuel management plan in place.



BUILDING CODE

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