

Bushfire compliance advice for the proposed subdivision (redesign) and associated APZ area – John Penn Drive Barlings Beach Estate (Lot 2 DP1016146)

16th March 2010



The following report has been commissioned by Mr Blake Walker - President Property Group Pty Ltd, herein '*the proponent*'.

The report provides a description and estimate of the Asset Protection Zone (APZ) area required for statutory bushfire safety compliance for the subject land, as approved and revised, as otherwise required for a new residential subdivision on bushfire prone land.

The land considered by this report includes Lots 38-56 & 160 John Penn Drive, Barlings Beach Estate and a section (30m wide) of an adjoining conservation area which abuts the northern boundary of the above allotments, herein '*the subject land*'.

It is understood that that all proposed stages of the Barlings Beach Estate (including the subject land) have been approved for development, herein '*the subject development*'. Barlings Beach Estate is entirely contained within Lot 2 DP1016146. The Barlings Beach Estate subdivision layout plan is as denoted Attachment 5 to this report.

On advice from the proponent, it is also understood that the subject development has previously been assessed against NSW Planning for Bushfire Protection Guidelines 2001.

A detailed inspection of the subject land to verify / ground truth mapped information shown by this report has not been undertaken.

The main or persisting bushfire hazard / vegetation formation considered as part of this assessment is 'Forest'. The effective slope considered as part of this assessment is 'Upslope / Flat'.

This report acknowledges that the above vegetation formation and effective slope may potentially overstate the respective parameters used to determine prescribed bushfire attack conditions and associated APZ requirements. In this regard, this report is conservatively overestimating bushfire safety requirements as described herein.

This assessment assumes that the creation of an APZ easement within the subject development (between the residential allotments) would be permissible if required.

Indicative building sitings considered by this assessment are at least 200sqm in area and are located to demonstrate APZ compliance only. The indicative building sitings do not indicate the only location or extent of building foot-print which could be located within the subject land.

Documentation / information considered as part of this report includes;

- a plan of the proposed subdivision for the subject property as provided by the proponent 26/02/10,
- 25m Digital Elevation Model (DEM) grid cell data for the subject property (average slope analysis),
- personal communication with the proponent (email and various phone communications), &
- NSW Planning for Bushfire Protection Guidelines (herein '*PBP*') 2006.

The Subject Land & Existing Subdivision / APZ Compliance

The subject land is comprised of 24 separate parcels, which includes Lots 38-56 & 160 John Penn Drive and an adjoining area of land dedicated as a conservation reserve, Barlings Beach Estate.

Lots 38-56 are residential allotments of approximately 770–870sqm in individual area, with dimensions of approximately 45 x 16m (lots 38 & 39 have a smaller depth – down to 35m).

Lot 160 is a larger allotment of approximately 1.2 ha, designated for medium density residential development.

Adjoining the northern boundary of the above allotments is residual forested land to be retained as a 'Conservation Area'. As advised by the proponent, it is understood that the native forest vegetation contained within the Conservation Area is an Ecologically Endangered Community (EEC). This is the only area of bushfire vegetation considered to have any potential impact on the subject land.

Within the Conservation Area, a 30m wide APZ area has also been designated and approved along the northern boundaries of Lots 38-56 (in favour of Lots 38-56).

Considering the persisting bushfire hazard (Forest vegetation formation) and effective slope (Upslope / Flat) that may influence the progression of an uncontrolled bushfire event towards the subject land, the 'Minimum Specified' APZ or setback distance required for bushfire safety compliance is 20m. The minimum specified APZ distance is derived from PBP Table A2.4 which is applicable to the Eurobodalla Local Government Area (or NSW Far South Coast Fire Weather Area).

Residential buildings located within the subject land can reasonably be located by at least 20m from the bushfire hazard within the adjoining conservation area, or otherwise are afforded ample area / distance within the designated APZ area (30m wide) to create and maintain the minimum specified APZ area on the adjoining section of Conservation Area.

In this regard, the currently approved subdivision design and associated APZ area would easily facilitate PBP acceptable solutions for APZ compliance, see Table 1.0.

The above is better denoted Attachments 1, 2 & 5 to this report.

Proposed / Revised Subdivision & APZ Area Compliance

The proposed / revised subdivision plan seeks to increase the depth of the approved allotments (Lots 38-56 & 160 John Penn Drive) by 20m, generally making new allotment dimensions of approximately 65 x 16m (lots 38 & 39 have a smaller depth – down to 55m).

The proposed change effectively being a boundary adjustment between Lots 38-56 & 160 and the adjoining Conservation Reserve.

The basis of the proposed / revised subdivision plan is to contain part (20m only) of the currently approved APZ area within the bounds of Lots 38-56 & 160. In this regard, this avoids having the APZ on land designated as a conservation area (or Public Reserve) and causing additional responsibility / liability to the neighbouring land manager.

The additional 20m will also be partly constrained from vegetation removal, permitting vegetation management on the outermost 10m extent to 'Outer Protection Area' (OPA) standard only as prescribed by PBP. The intent of this arrangement to reduce the impact of APZ management on the adjacent EEC vegetation. It should be noted that the OPA is 'allowable' within the APZ area – a 10m OPA is allowable in this instance towards the outer most extent of the APZ area.

Within the allotments (Lots 38-56 & 160), a 20m wide area is also proposed to be designated as an 'Inner Protection Area' (IPA) as prescribed by PBP. The 20m IPA is to be located between future residential buildings and designated OPA within the allotments – effectively making a total APZ area of 30m or thereabouts within the allotment.

The basis of the 20m IPA extent is to ensure absolute compliance with minimum specified APZ requirements and further facilitate lower AS3959 construction levels (i.e. Levels 1-2 only where possible). A residential building located 25m to 35m from the Conservation Reserve may be built to AS3959 Level 2. A residential building located 35m to 100m from the Conservation Reserve may be built to AS3959 Level 1.

Considering the persisting bushfire hazard (Forest vegetation formation) and effective slope (Upslope / Flat) that may influence the progression of an uncontrolled bushfire event towards the subject land, the 'Minimum Specified' APZ or setback distance required for bushfire safety compliance is 20m. The minimum specified APZ distance is derived from PBP Table A2.4 which is applicable to the Eurobodalla Local Government Area (or NSW Far South Coast Fire Weather Area).

Residential buildings located within the revised subdivision plan can easily be located so as to facilitate at least 20m from the bushfire hazard within the adjoining conservation area.

In this regard, the proposed / revised subdivision plan would easily facilitate PBP acceptable solutions for APZ compliance, see Table 1.0.

The above is better denoted Attachments 3 & 4 to this report.

Table 1.0

PBP Acceptable Solution for APZ (Residential Subdivision)	Assessment / Compliance
<i>an APZ is provided in accordance with the relevant tables/ figures in Appendix 2 of this document</i>	Both the approved and proposed / revised subdivision plans facilitate APZ requirements in accordance with PBP. The minimum specified APZ extent of 20m is easily contained within the allotments and designated / approved APZ area which adjoins the allotments.
<i>the APZ is wholly within the boundaries of the development site. Exceptional circumstances may apply (see section 3.3)</i>	Where the APZ may extend beyond the boundary of the subject land (e.g. Lots 38 & 39), the exceptional circumstance is a designate / approved APZ area over the section of adjoining land (Conservation Reserve). The proposed / revised plan would easily contain the minimum specified APZ within the bounds of the allotments.
<i>in accordance with the requirements of Standards for Asset Protection Zones (RFS, 2005)</i> <i>Note: A Monitoring and Fuel Management Program should be required as a condition of development consent.</i>	Assumed – any future bushfire compliance assessment report to address s79BA of the Environmental Planning & Assessment Act or s100B Rural Fires Act should specify the extent and level of vegetation management to occur within each individual allotment and/or on surrounding undeveloped land under any temporary APZ easement agreements.
<i>the APZ is located on lands with a slope less than 18 degrees.</i>	Not applicable – subject land and immediate surrounds are on level / flat ground.

Conclusion / Summary

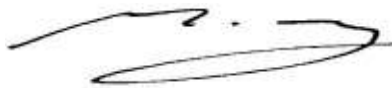
The proposed / revised subdivision plan and associated internal IPA & OPA will easily facilitate PBP requirements. Any new residential building development constructed within the new allotments can easily be separated by at least 20m (up to an estimated 40m) from the potential bushfire hazard which will persist within the adjoining conservation reserve.

As a considered opinion, the proposed / revised subdivision plan is a fair compromise between maintaining the currently approved level of bushfire safety (APZ) and reducing the potential impact upon the undeveloped / forested land affected by bushfire safety compliance.

In this regard, the proposed / revised subdivision plan reasonably provides as good, or reasonably better, outcome for bushfire safety (APZ) compliance in as far as it;

- reduces the area of APZ impact which would otherwise affect EEC vegetation, i.e. 10m (wide) less vegetation management on the conservation reserve and an OPA constraint within the allotment as an ecological buffer,
- places the onus and responsibility of maintaining the entire APZ area on the residential building owner, rather than imposing additional responsibility / liability on the local Authority,
- still allows residential buildings to be constructed to lower AS3959 standards (Levels 1-2), &
- does not significantly alter the design or shape of the approved Barlings Beach Estate subdivision.

Should any of the above information require further clarification, please contact the author



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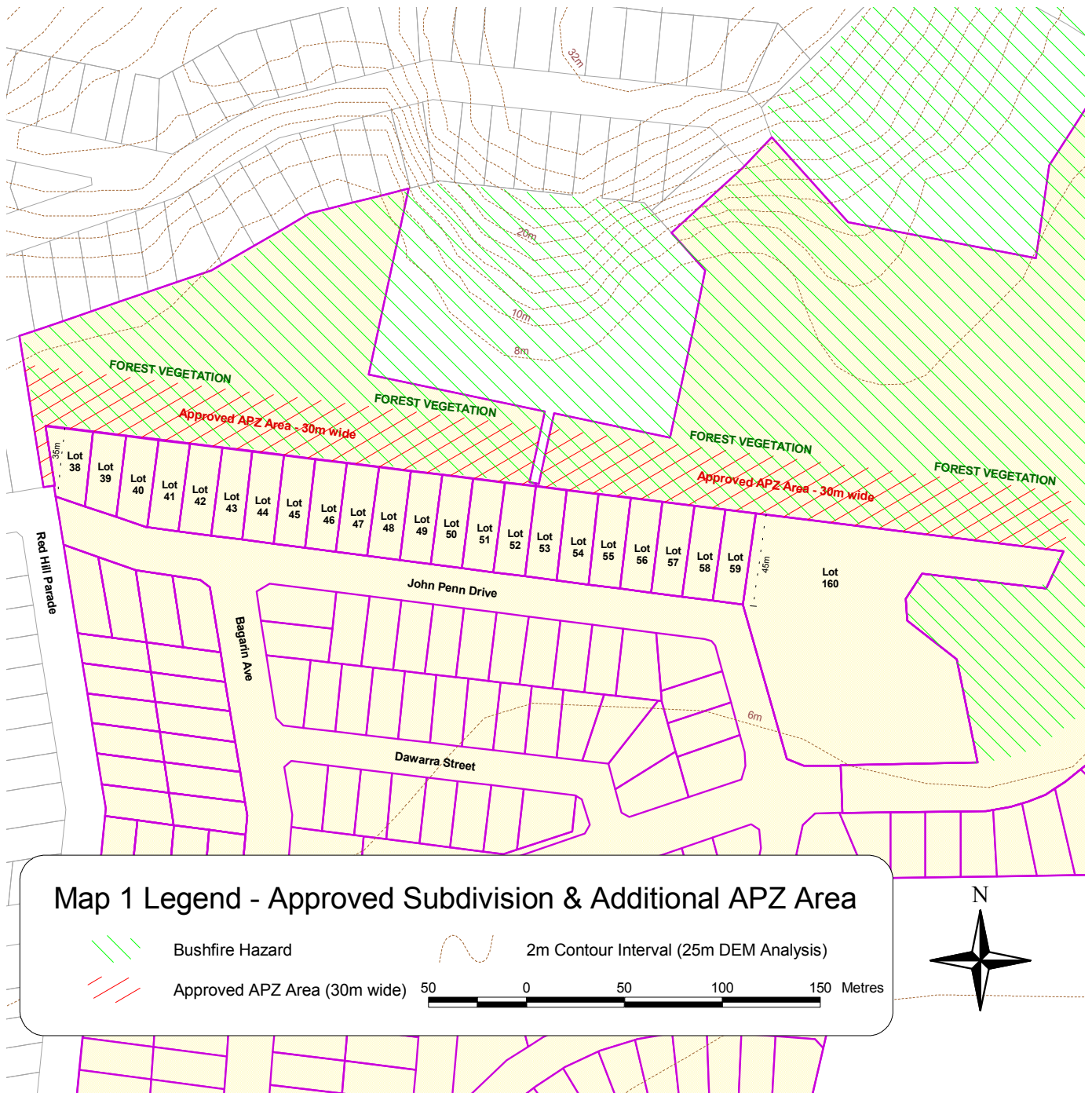
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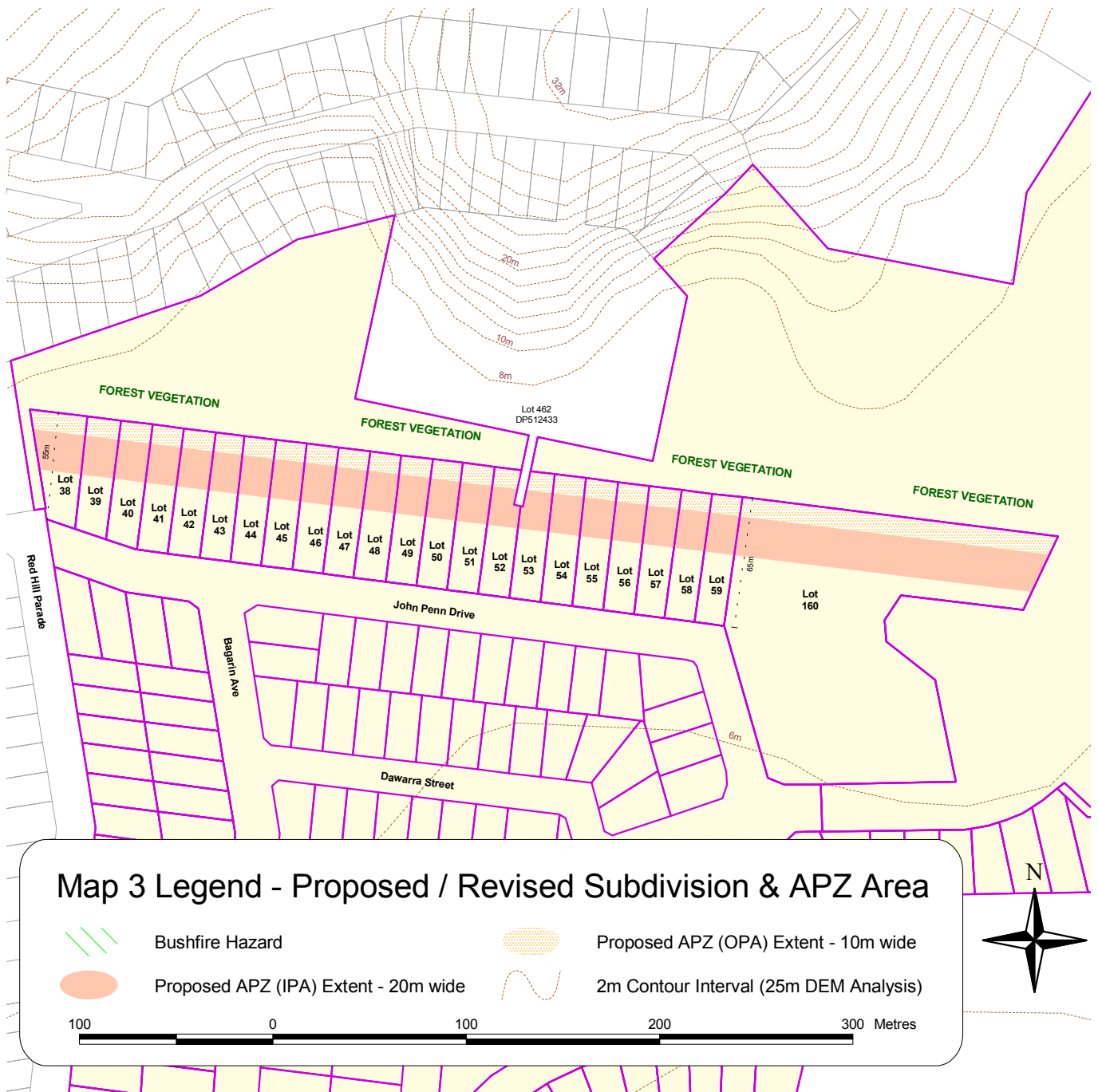


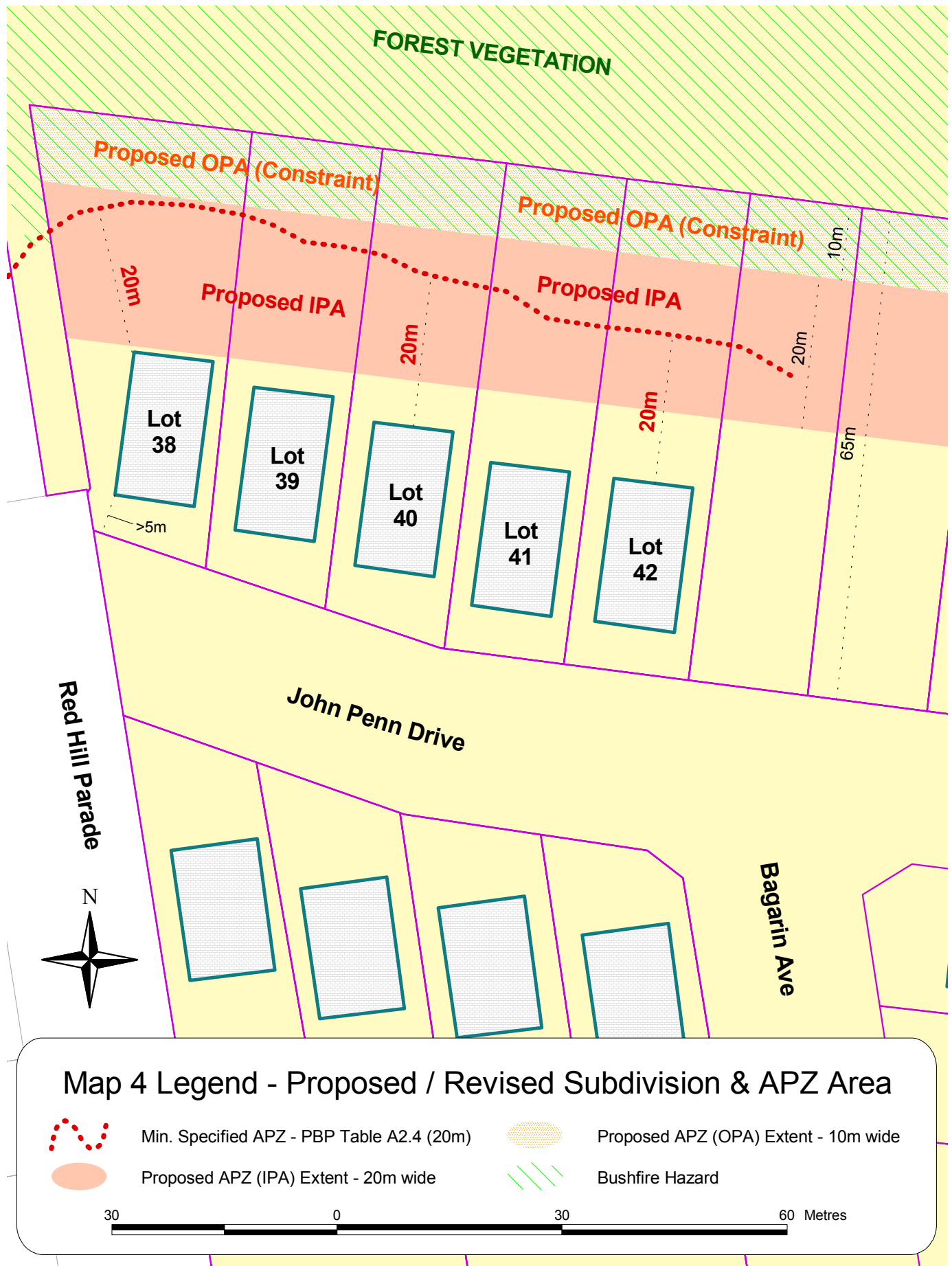
Attachment 1 – Map 1 Approved Subdivision & APZ Area





Attachment 3 – Map 3 Proposed / Revised Subdivision & APZ Area





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