

BUSH FIRE ASSESSMENT REPORT

1 into 2 lot residential subdivision
69 Prince Street
Clarence Town



PREPARED BY:



NOVEMBER 2023



PEAK LAND MANAGEMENT

Land management consulting services:

-Bush Fire-

-Ecological-

-Environmental-

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Cover Photo: View of subject site.

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Document History

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Bush Fire Assessment Report	15.11.23	1	Perception Planning

AUTHOR DETAILS

Ted Smith is the director of PEAK LAND MANAGEMENT. He is a qualified Land Management Consultant with a Bachelor of Science Honours Degree in Physical Geography. He has over 25 years experience commercially consulting with PEAK LAND MANAGEMENT PTY LTD and working within state government.

Ted has completed a Graduate Diploma in Design for Bush Fire Prone Areas from the University of Western Sydney and is a member of the Fire Protection Association of Australia (FPA of Australia), being a BPAD Accredited Bush Fire Practitioner Level 3.

CERTIFICATION

Ted Smith of PEAK LAND MANAGEMENT has carried out a Bush Fire Assessment including a site inspection on the subject property. A detailed Bush Fire Assessment Report is attached which includes the submission requirements set out in *Planning for Bush Fire Protection, 2019* together with recommendations as to how the relevant specifications and requirements are to be achieved.

I hereby certify, in accordance with Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*:

1. That I am a person recognised by the *NSW Rural Fire Service* as a qualified consultant in Bush Fire Risk Assessment; and
2. That subject to the recommendations contained in the attached Bush Fire Assessment Report the proposed development conforms to the **relevant specifications and requirements** being the document entitled *Planning for Bush Fire Protection* prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*.



15th Nov, 2023

Signature

Date



1.0 INTRODUCTION

PEAK LAND MANAGEMENT has been engaged by Perception Planning to prepare a Bush Fire Assessment Report for a proposed one into two lot residential subdivision over land located at Lot 19 DP 758250 / 69 Prince Street, Clarence Town (termed “subject or development site”).

Figures 1-4 show the subject site location, topographic map, and proposed development site plans, and Appendix 1 shows photos of the subject site.

Under the *Environmental Planning and Assessment Act, 1979* (and its regulations), and the *Rural Fires Act 1997* (and its regulations), councils are required to assess and control new developments in Bush Fire prone areas. This land has been assessed as being part of a Bush Fire Prone Area as mapped by Council (Figure 7).

This development is classed as a subdivision under PBP 2019 and falls under Section 100B of the *Rural Fires Act 1997* (and its regulations) and will require integrated development approval/ Bushfire Safety Authority from the Rural Fire Service. PBP 2019 states that a residential subdivision should have required Asset Protection Zones, adequate access, water, and services as stated under the Act.

This report has been prepared in accordance with “*Planning for Bush Fire Protection (PBP) 2019*” guidelines, and makes reference to AS 3959. Clause 46 of the *Rural Fires Regulation 2002* sets out these requirements, which are addressed in this report. A Bush Fire Assessment Report is required showing the current situation and recommending how the risk may be ameliorated, so consideration may be shown by Council & NSW Rural Fire Service to allow development approval for the proposed dwelling, and subdivision.

1.1 SCOPE OF WORKS

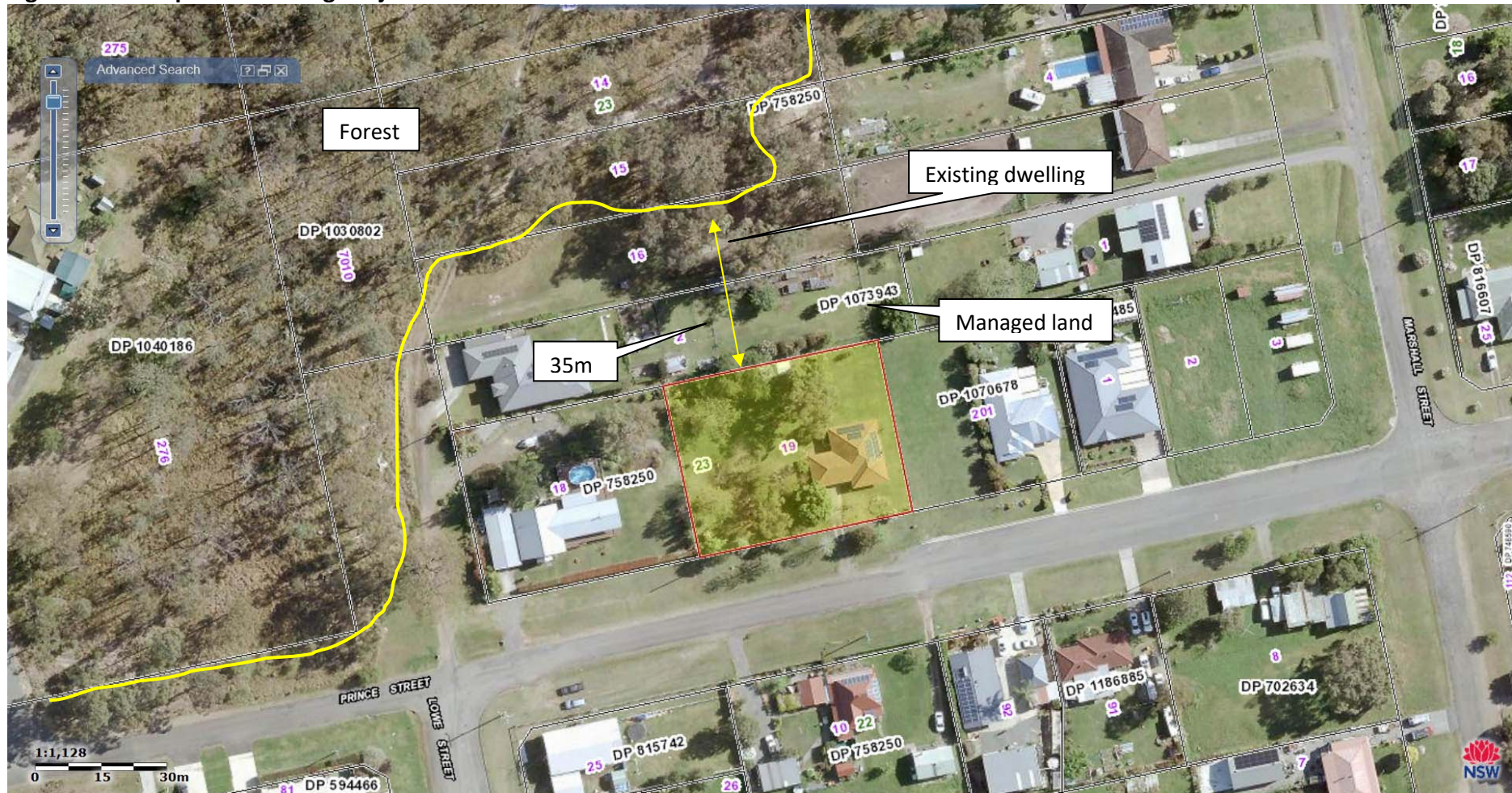
The proposal is for:

- Proposed 1 into 2 lot residential subdivision, with existing residential dwelling to be retained over proposed lot 192. No dwelling proposed over new lot.

Figure 1: Aerial photo showing subject site and surrounds (imagery from Department of Lands). North to top of all figures unless otherwise shown.



Figure 2: Aerial photo showing subject site and surrounds and distance to hazard.



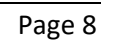


Figure 4: Subdivision plan (from Delfs Lascelles, dated 8.8.23)

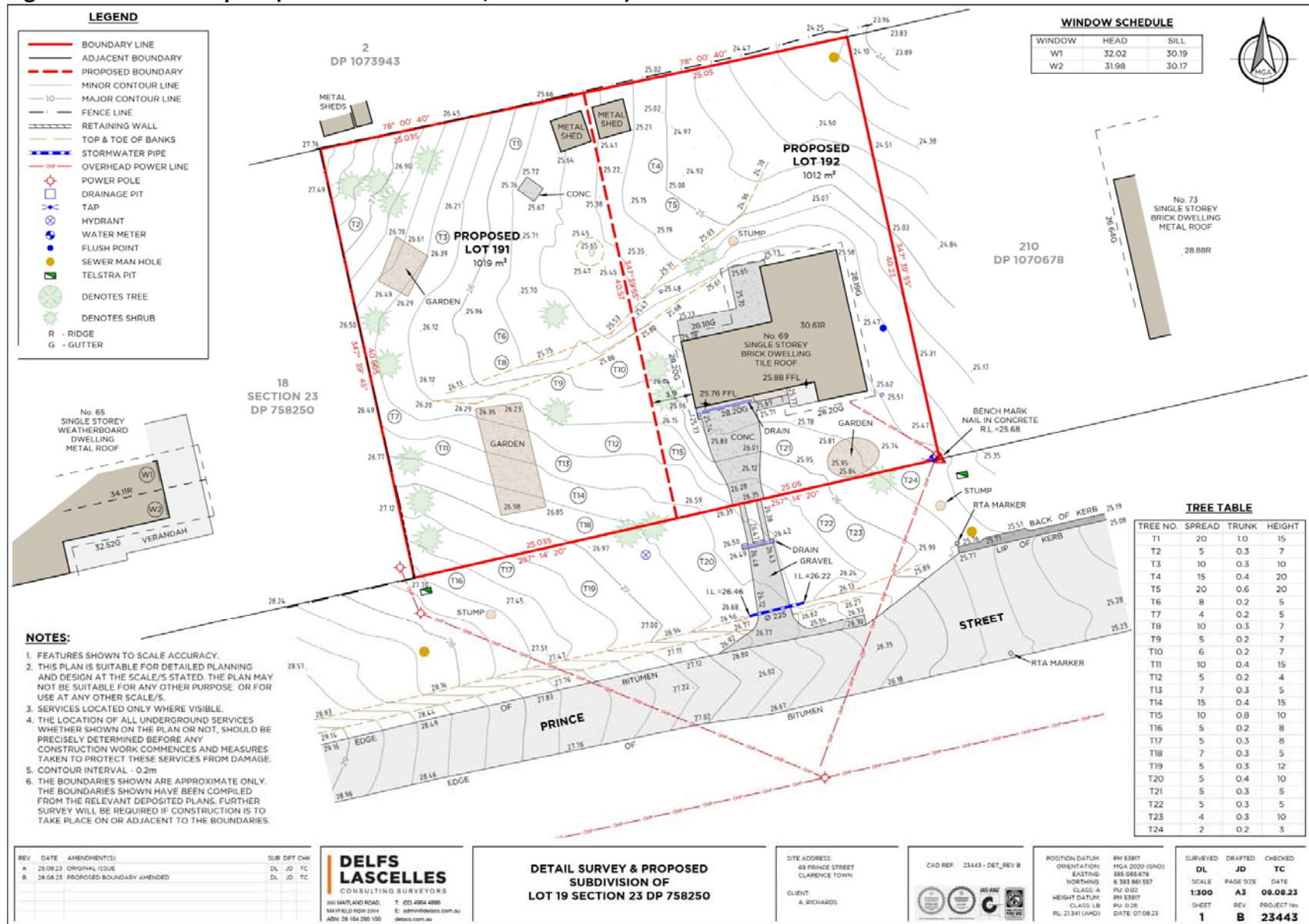


Figure 5: Bush Fire Prone Land Map (from ePlanning, NSW Government)



2.0 SITE DESCRIPTION AND SURROUNDING LANDUSE

The subject site and surrounding vegetation and landuse/topography are shown in Figures 1-6. The subject site is a residential lot, in an older residential area, surrounded by residential dwellings/managed land in all directions.

3.0 VEGETATION

The predominant vegetation type within 140m is Forest assessed as per PBP, 2019 (Figure 3, Appendix 1 - photos).

The Forest has trees to 20m tall, with a sparse shrub/grass understorey.

Land over the subject site and surrounds including to the west adjoining this site is managed land, and intensively mowed/slashed/and grazed, with a residential dwelling present.

4.0 SLOPE

Slope assessment has been carried out around the subject site under hazardous vegetation out to 100 metres as specified under the Guidelines Assessment Procedure. The angles have been measured in the field by an inclinometer. Table 1 shows the results.

PBP, 2019 states: - *“The effective slope is considered to be the slope under the vegetation which will most significantly influence the bush fire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be fully justified. Vegetation located closest to an asset may not necessarily be located on the effective slope”.*

5.0 ENVIRONMENTAL FEATURES

The subject site has no environmental features, being fully cleared.

6.0 ABORIGINAL FEATURES

An Aboriginal archeological survey/or AHIMS search has not been undertaken to the authors knowledge. The development area is cleared, developed land and is not required.

7.0 BUSH FIRE ASSESSMENT

The legislation as it relates to this site calls for asset protection zones (APZ) to be established around the proposed development, provision of adequate access, design staging and citing of the development and provision of appropriate water supply for bush fire fighting purposes.

7.1 SETBACKS INCLUDING ASSET PROTECTION ZONES

Table 1 shows the bush fire risk assessment for the subject site. An Asset Protection Zone managed land has been provided over adjoining managed lands which complies with PBP 2019. The subdivision complies with Table A1.12.2 PBP, 2019 subdivision requirements.

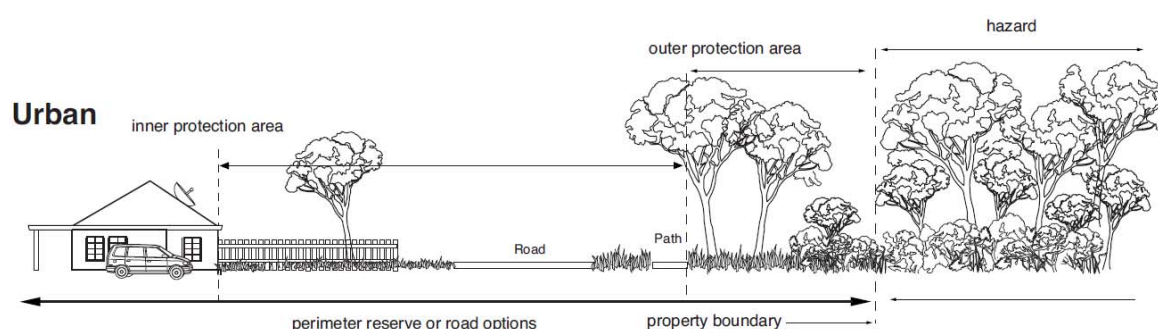
Table 1: Bush Fire Site Assessment –FDI 100

Direction to bush fire hazard	Effective slope	Predominant vegetation type within 140m as per PBP 2019	Distance hazard (from proposed dwelling footprint)	Required minimum asset protection zone (from A1.12.2 PBP, 2019)	Conformance
West	0-5° upslope	Forest	67m	24m	✓
North	0-5° upslope	Forest	38m	24m	✓
Other directions	Managed land within 140m	-	-	-	-

Note: BAL refers to the maximum Bush Fire attack level expressed in kW/m² radiant heat flux exposure for the given slope, distance to hazard, and type of hazard (ie vegetation type and fuel load).

A lowering of one BAL is supported by PBP 2019 where the elevation of the building is not exposed directly to the source of bush fire attack and/or is shielded by the building/other buildings/landforms, or is set back sufficiently to achieve the next lower BAL as described in PBP, 2019. This is not applicable in this case as no dwelling proposed.

Figure 6: Asset Protection Zone standard (from PBP, 2019)



7.2 WATER SUPPLIES AND UTILITIES

The subject site is serviced by reticulated town water supplies, and above ground electricity transmission wires. A fire hydrant is located within 60m of the site.

7.3 ACCESS

The site is accessed from Prince St, a sealed two way public road.

7.4 CONSTRUCTION STANDARDS

Any future dwelling would be subject to a Bush Fire Report in accordance with PBP 2019 (Table A1.12.5).

The existing dwelling is an older dwelling, not ember screened, and is required to be ember screened in accordance with Sect 5.1.3 PBP, 2019. It is in good condition, being a single storey brick dwelling on a concrete slab.

7.5 OTHER FIRE PROTECTION MEASURES

Recommendations are made below to address further non compulsory bush fire protection measures.

8.0 BUSH FIRE RECOMMENDATIONS

The development complies with PBP, 2019:

- ❑ Serviced by reticulated water & fire hydrant nearby- complies with PBP, 2019.
- ❑ Serviced by above ground electricity power- complies with PBP, 2019.
- ❑ Serviced by a public road –complies with, PBP, 2019.
- ❑ Asset Protection Zone – will comply with Table A1.12.2, PBP, 2019.
- ❑ Dwellings to be constructed in conformance with PBP, 2019, and AS 3959.
- ❑ Landscaping- to comply with PBP 2019 & recommendations below.

The following recommendations are made:

- ❑ **Design and Construction:** - The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions are recommended:
 - The existing dwelling shall be ember screened with steel corrosion resistant mesh, 2mm max aperture size. All doors to have draught excluders, or doors tight fitting to exclude embers (no gaps >2mm present). No gaps >2mm elsewhere within exterior of dwelling walls/roof/floor/elsewhere to allow potential ember intrusion into dwelling.
- ❑ **Asset Protection Zone:** - The intent of measures for Asset Protection Zones is to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.
 - Asset Protection Zone has been provided off site and not applicable.
- ❑ **Water and Utilities:** - The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas

and electricity so as not to contribute to the risk of fire to a building. To achieve this, the following conditions should apply:

- No dwelling proposed- not applicable.
- **Landscaping** - The intent of measures is landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions. To achieve this, the following conditions should apply:
 - An Asset Protection Zone has been provided off site and not applicable. The existing site is adequately managed in terms of landscaping & to an Asset Protection Zone standard.

The bush fire risk is considered to be adequately managed through the recommendations made above, and in conjunction with recommendations/approval conditions from the NSW Rural Fire Service and Council.

Report prepared by:



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PEAK LAND MANAGEMENT PTY LTD

DISCLAIMER: Whilst every effort is made to present clear and factual information based on fieldwork and current legislation no guarantee is made that the development or its occupants are safe from bush fire, or development will be approved, or to stated BAL, as this is in the hands of the approving statutory authorities/certifier. No warranty or guarantee, whether expressed or implied, is made with respect to the observations, information, findings and inclusions expressed within this report. No liability is accepted for losses, expenses or damages occurring as a result of information presented in this document.

9.0 REFERENCES

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Websites

www.rfs.nsw.gov.au

Lands Department- SIX Maps

nearmap

NSW Planning Portal Spatial Viewer

APPENDIX 1: PHOTOS OF SITE AND SURROUNDS

Subject site—looking north



Looking north from subject site northern boundary showing managed land in foreground and Forest in background



Looking north from subject site northern boundary showing managed land in foreground and Forest in background



Managed land & Forest to north-west of subject site



Managed land to west, and Forest in background



Managed land & Forest to west of subject site in background



Prince St

