



Addendum

to the Bushfire Development Report
for the Wonthaggi North East
Precinct Structure Plan

Prepared for
Victorian Planning Authority

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Cover: Looking south-east into the PSP from the corner of Fuller Road and Heslop Road.

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Table of Contents

1. INTRODUCTION	2
2. UPDATE TO KEY POINTS FROM 2018 BDR.....	2
3. REVISED SETBACKS.....	3
4. BMO COVERAGE AND SCHEDULE.....	4
5. APPENDICES	10
5.1. EXCLUDED VEGETATION UNDER AS 3959-2018	10
5.2. VEGETATION MANAGEMENT REQUIREMENTS FOR DEFENDABLE SPACE IN THE BMO	10
6. REFERENCES.....	11

1. Introduction

This is an addendum to the *Bushfire Development Report for the Wonthaggi North East Precinct Structure Plan* (hereafter referred to as 2018 BDR) prepared for Bass Coast Shire Council and the Victorian Planning Authority (VPA) by Terramatrix in October 2018.

The Settlement Planning strategies at Clause 13.02-1S *Bushfire Planning* in the Bass Coast Planning Scheme require that population growth be directed to low risk locations, being those assessed as having a radiant heat flux of less than 12.5kW/m². Achieving this radiant heat flux threshold requires future buildings to be sufficiently setback from classified vegetation within or external to the PSP area.

The 2018 BDR mapped the BAL-12.5 setbacks potentially required, based on credible assumptions about the future form of vegetation within the PSP, in particular that the drainage reserves, waterway linear reserves, southern tree reserve and shared-trail along McGibbonys Road would comprise classified (i.e. hazardous) vegetation of various types.

Bass Coast Shire Council have subsequently established that the vegetation in the following areas will be maintained in a low threat state:

- Northwestern drainage reserve;
- Northeastern drainage reserves; and
- Waterways.

The assumption that these areas will comprise classified Scrub in the future (see Section 5.2 *Future vegetated form* in the 2018 BDR) no longer applies.

Consequently, development is no longer required to be setback from these areas to achieve a BAL-12.5 rating. This alters some of the findings of the 2018 BDR, as detailed in this Addendum.

2. Update to key points from 2018 BDR

- The entire WNEPSP is within a designated BPA and a small area near the western boundary is covered by the BMO.
- The site is adjacent to the established township area of Wonthaggi, that includes areas that would be rated as BAL-Low using the AS 3959-2018 site assessment methodology.
- Grassland, Woodland and Scrub adjacent to the WNEPSP comprises a bushfire hazard that must be considered in the development and use of the precinct.

- The McGibbonys Road shared trail and the southern tree reserve are to be created within the WNEPSP area, which are likely to comprise a bushfire hazard that must be considered in the development of land adjacent to them.
- The terrain within and around the WNEPSP area is in the 'Flat land and all upslopes' slope class and benign from a bushfire perspective.
- To achieve the BAL-12.5 rating required for settlement growth by Clause 13.02-15 *Bushfire Planning*, buildings will need to be setback 19m from classified Grassland, 27m from classified Scrub and 33m from classified Woodland. These areas have been identified and mapped.
- Large areas of the WNEPSP are available for BAL-12.5 development.
- Part of the area covered by the BMO may be suitable for application of Schedule 1 to the BMO in the Bass Coast Planning Scheme. This area is, however, constrained by its proximity to the Wonthaggi Bushland Reserve to the west, which limits the land available for residential development.
- Much of the WNEPSP area is likely to be rendered low threat by the planned urban development and may become eligible for excision from the BPA as development proceeds.

3. Revised setbacks

For vegetation to be considered low threat it should meet the criteria for exclusion from classification under AS 3959-2018 *Construction of buildings in bushfire prone areas* (Standards Australia, 2020) and/or the vegetation management standards for defensible space under the Bushfire Management Overlay (BMO) (Bass Coast Planning Scheme 2018b). These standards are detailed in the Appendices at Section 0.

Scattered trees can be retained if the understorey beneath them is being managed in a low threat state, e.g. small clumps of shrubs and mown grass. Rows of trees along paths or waterways as shown on Figure 14 of the *Wonthaggi North East Growth Area Precinct Statutory Strategy* (VPA 2020) are also considered acceptable if the understorey beneath them is being managed in a low threat state.

The following maps from the 2018 BDR are to be replaced by the maps in this addendum:

- Map 3 – Vegetation classification as per AS 3959-2009 – vegetation to be retained/created in the PSP and existing vegetation within 400m.
- Map 7 – BAL-12.5 setbacks from classified vegetation for the northwestern section of the WNEPSP area.
- Map 8 – BAL-12.5 setbacks from classified vegetation for the northeastern section of the WNEPSP area.

- Map 9 – BAL-12.5 setbacks from classified vegetation for the southern section of the WNESP area.
- Map 10 – BMO coverage and potential BMO1 area.

The new maps show the revised distribution of classified vegetation within the PSP area and the associated BAL-12.5 setbacks.

Development will no longer need to be setback from the drainage reserves and waterways. Section 6.1.4 *Drainage reserves and waterways* of the 2018 BDR, which stipulated 27m setbacks from future classified Scrub in these areas, no longer applies.

Setbacks in response to classified vegetation along the McGibbonys Road shared trail, in the southern tree reserve, and outside of the PSP area continue to apply and are shown on the maps accordingly.

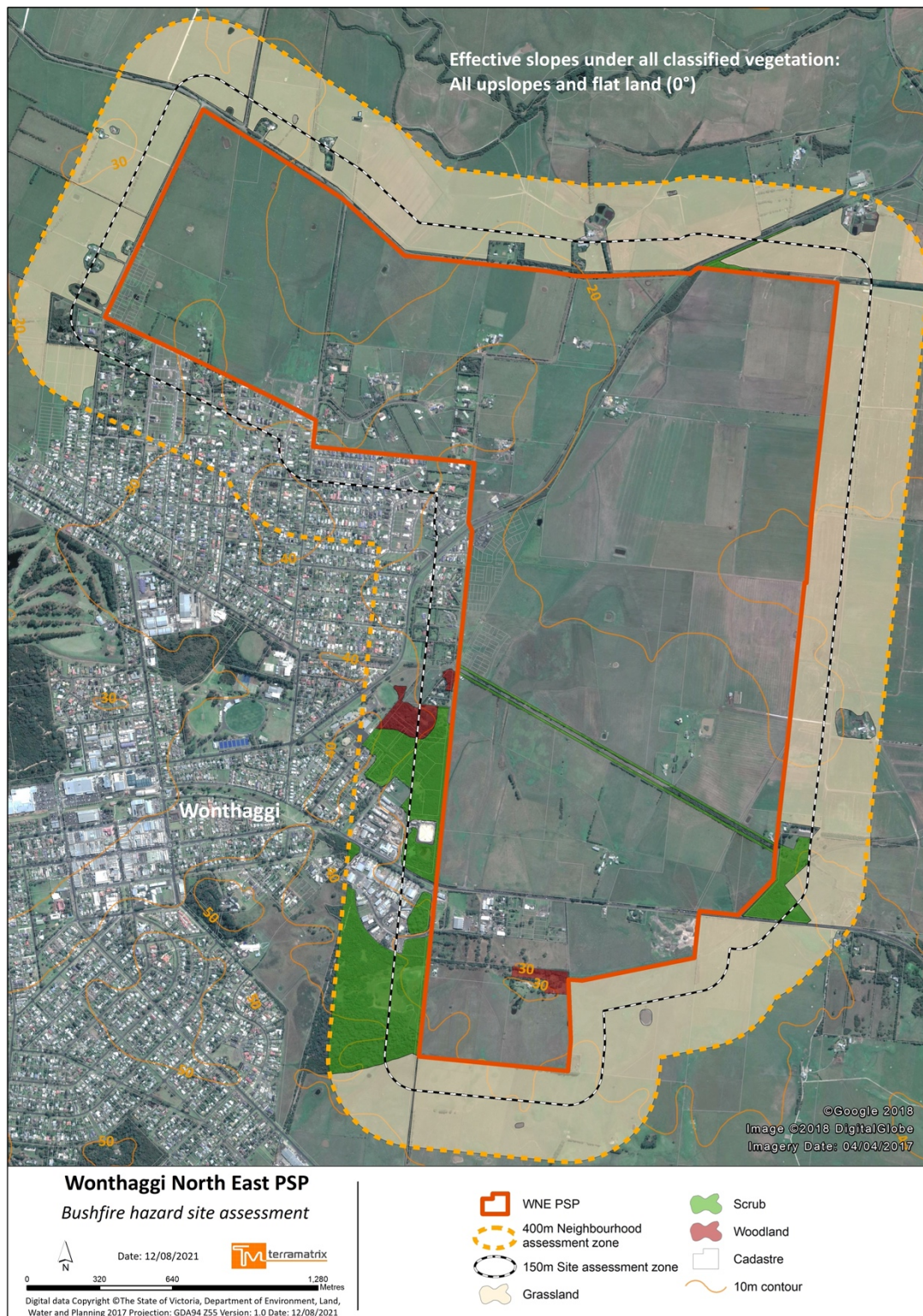
4. BMO coverage and schedule

The western waterway reserve will be close to the area to which the BMO is currently applied. The 2018 BDR advised in Section 6.1.4 *Drainage reserves and waterways* that if the waterway reserve were to comprise classified Scrub, it may result in an extension of BMO coverage. As the waterway reserve is to be maintained in a low threat state, this finding is no longer applicable.

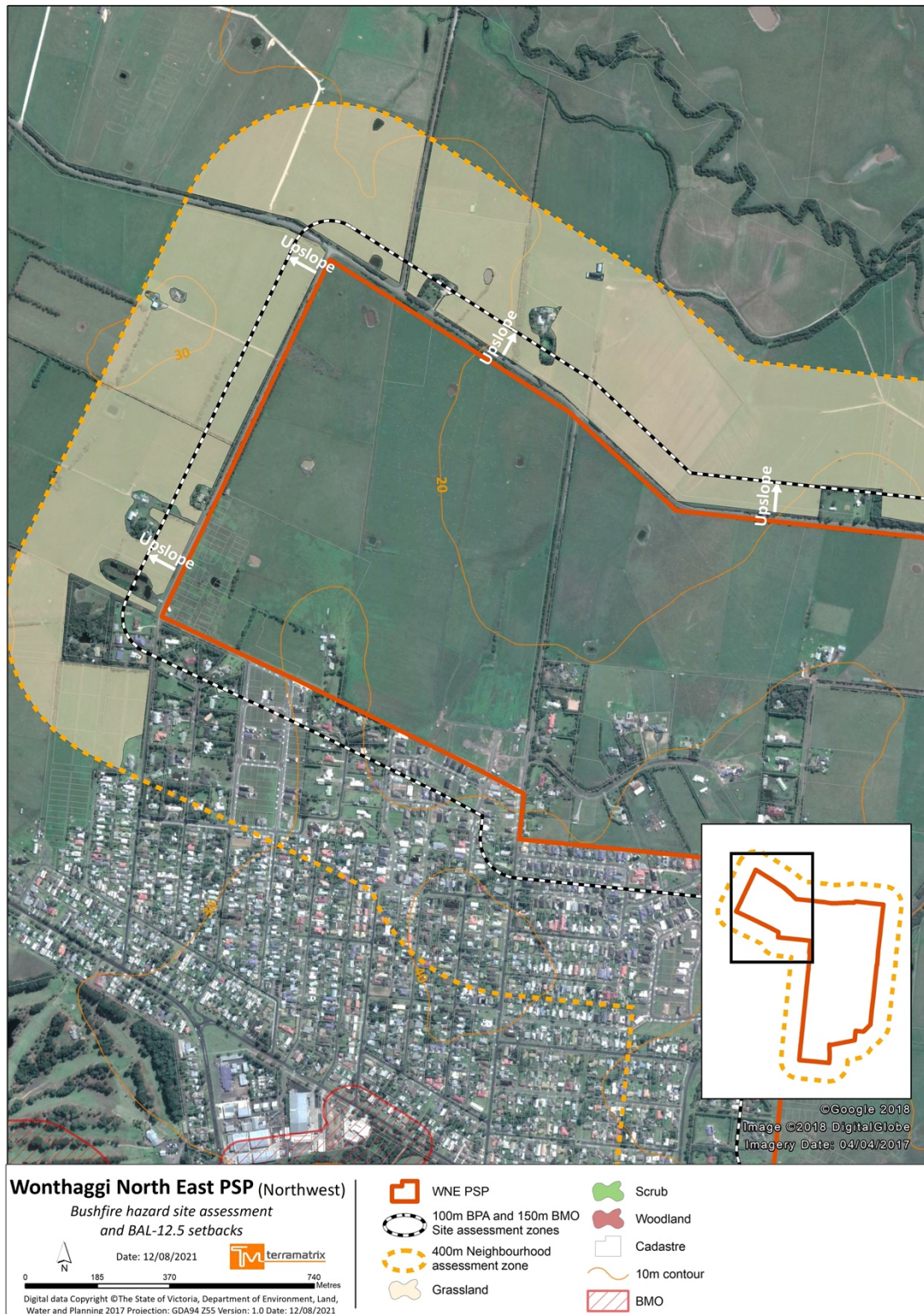
The 2018 BDR identified in Section 6.3 *BMO schedule* that part of the land covered by the BMO would likely be suitable for application of Schedule 1 to the BMO, but that the potential coverage was constrained by the proximity of the Wonthaggi Bushland Reserve to the west and the proposed waterway reserve to the east.

The Wonthaggi Bushland Reserve, which is beyond the PSP boundary, will remain classified vegetation and the 27m setback of dwellings from the Scrub beyond the PSP boundary continues to apply.

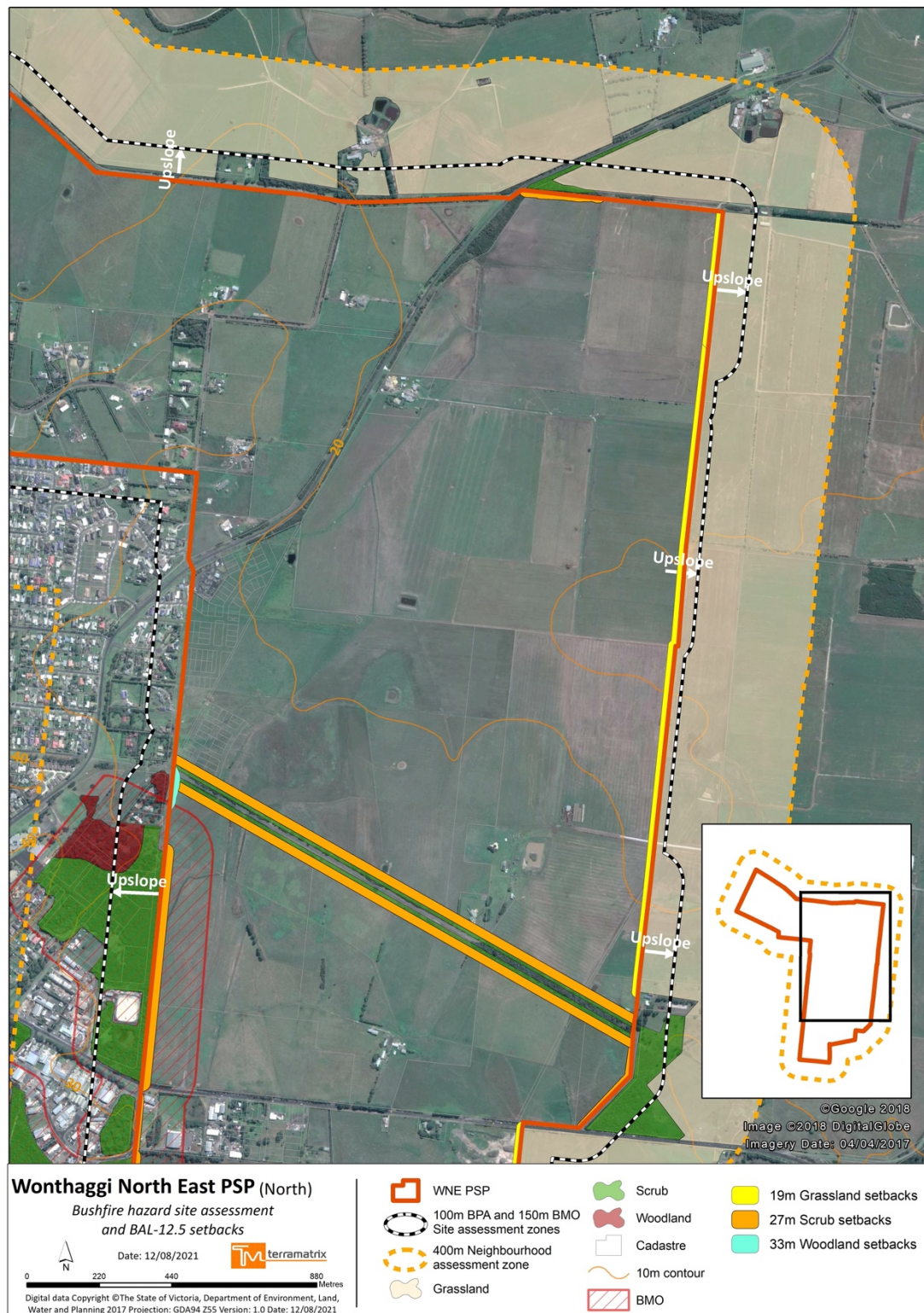
The waterway reserve, however, will be maintained in a low threat state and should no longer affect the potential BMO1 coverage nor, more fundamentally, the ability to achieve BAL-12.5 construction in this area. This increases both the area available for development with BAL-12.5 dwellings and the potential BMO1 coverage as shown on revised Map 10.



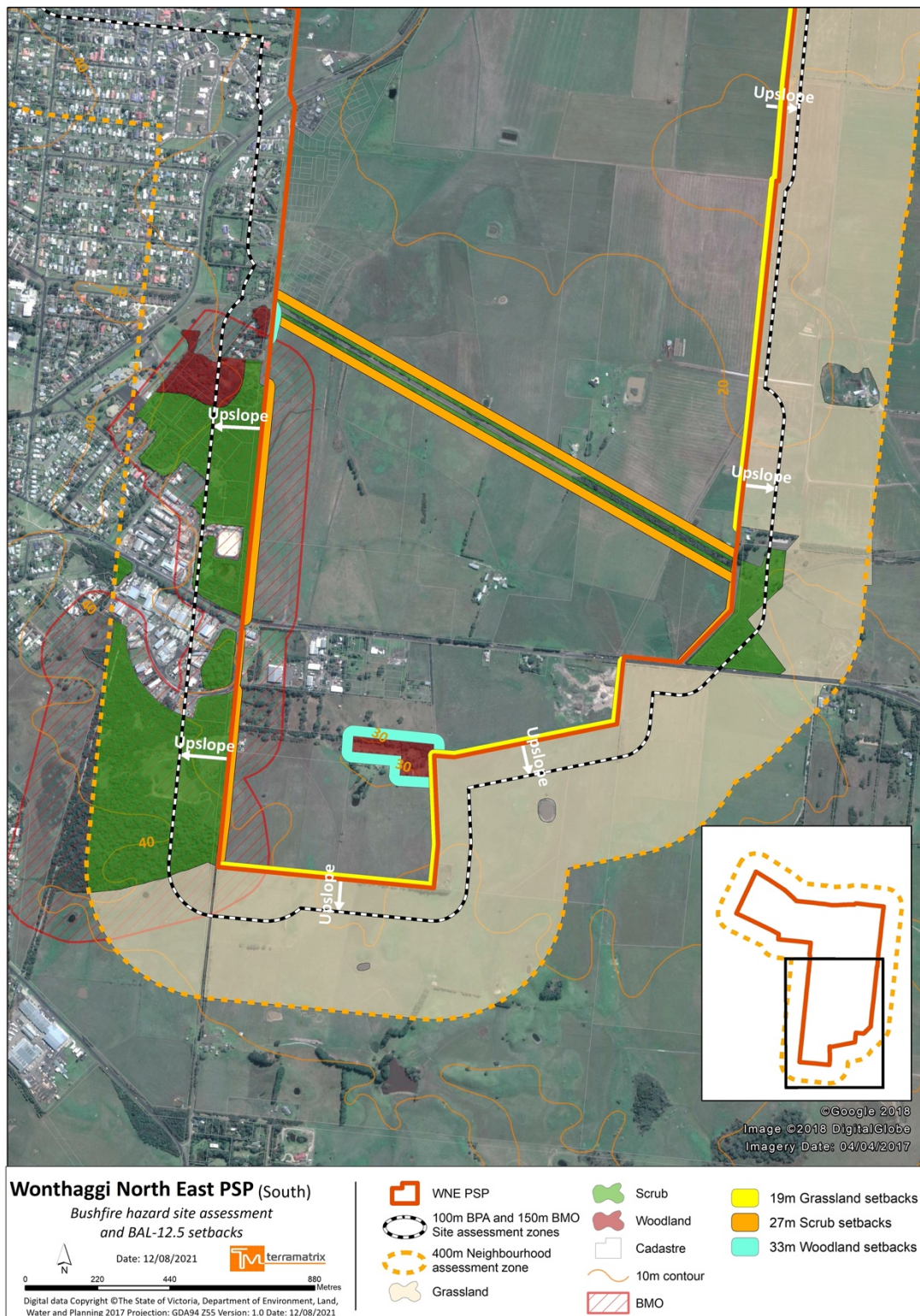
Map 3 – Vegetation classification as per AS 3959-2018 – vegetation to be retained/created in the PSP and existing vegetation within 400m.



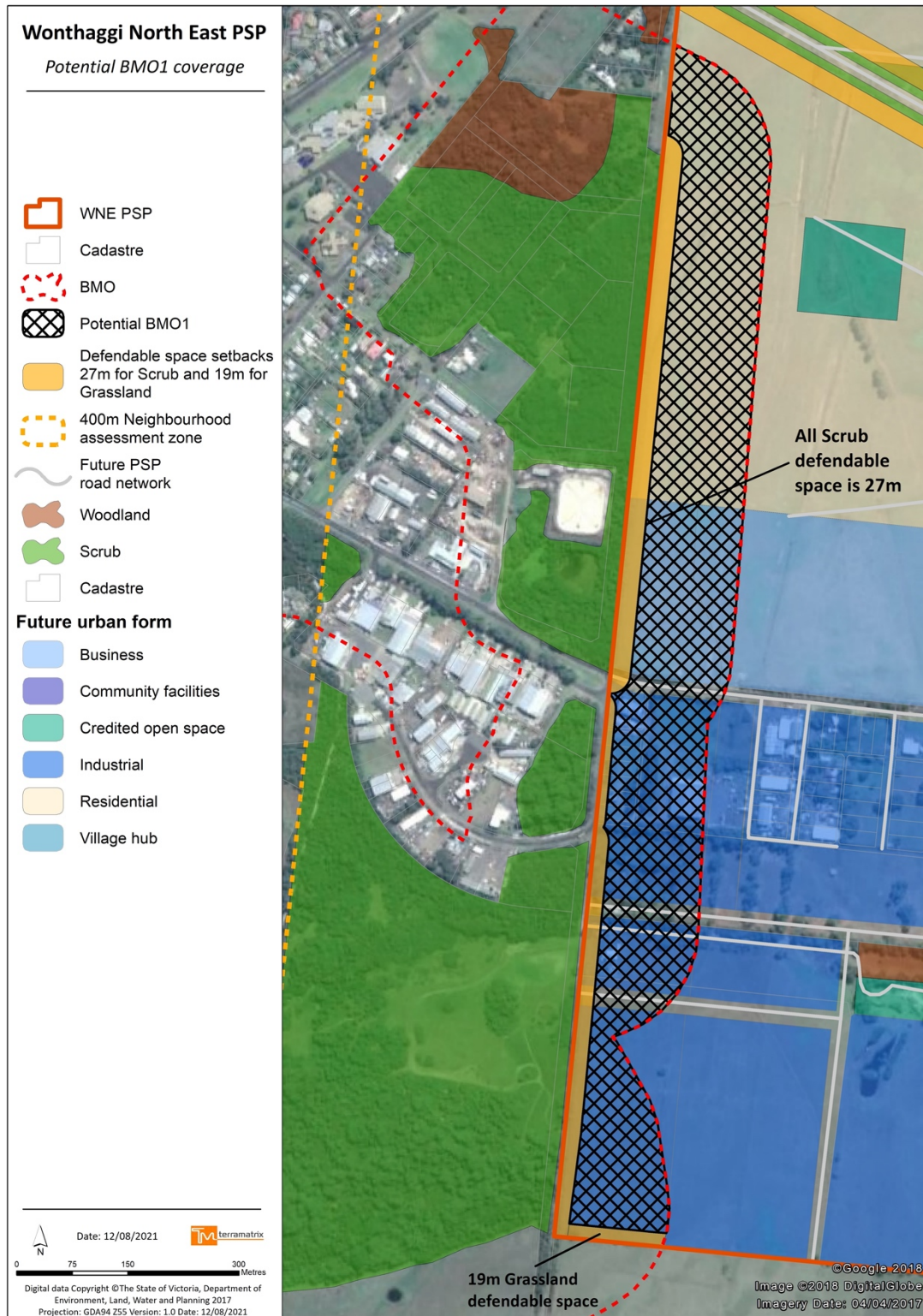
Map 7 – BAL-12.5 setbacks from classified vegetation for the northwestern section of the WNE SP area.



Map 8 – BAL-12.5 setbacks from classified vegetation for the northeastern section of the WNESP area.



Map 9 – BAL-12.5 setbacks from classified vegetation for the southern section of the WNESP area.



Map 10 – BMO coverage and potential BMO1 area.

5. Appendices

5.1. Excluded vegetation under AS 3959-2018

Areas of low threat vegetation and non-vegetated areas can be excluded from classification in accordance with Section 2.2.3.2 of AS 3959-2018, if they meet one or more of the following criteria:

- a. *'Vegetation of any type that is more than 100m¹ from the site.*
- b. *Single areas of vegetation less than 1 ha in area and not within 100m of other areas of vegetation being classified vegetation.*
- c. *Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other, or of other areas of vegetation being classified vegetation.*
- d. *Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.*
- e. *Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.*
- f. *Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition², mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks' (Standards Australia, 2020).*

5.2. Vegetation management requirements for defensible space in the BMO

As per Table 6 to Clause 53.02-5:

'Defensible space is provided and is managed in accordance with the following requirements:

- *Grass must be short cropped and maintained during the declared fire danger period.*
- *All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.*
- *Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.*
- *Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.*
- *Shrubs must not be located under the canopy of trees.*

¹ This distance extends to 150m in BMO areas.

² Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack, recognisable as short-cropped grass for example, to a nominal height of 100mm (Standards Australia, 2020).

- *Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 metres.*
- *Trees must not overhang or touch any elements of the building.*
- *The canopy of trees must be separated by at least 5 metres.*
- *There must be a clearance of at least 2 metres between the lowest tree branches and ground level.*

Unless specified in a schedule or otherwise agreed in writing to the satisfaction of the relevant fire authority' (Bass Coast Planning Scheme, 2018).

6. References

Bass Coast Planning Scheme (2018a) *Clause 13.02-1S Bushfire Planning*. Available at <https://planning-schemes.api.delwp.vic.gov.au/schemes/vpp/13_02-1S.pdf>.

Bass Coast Planning Scheme (2018b) *Clause 53.02 Bushfire Planning*. Available at <https://planning-schemes.api.delwp.vic.gov.au/schemes/vpp/53_02.pdf>.

Standards Australia (2020) *AS 3959-2018 Construction of buildings in bushfire-prone areas*. Incorporating amendment no. 2, Standards Australia, North Sydney, New South Wales.

Terramatrix (2018) *Bushfire Development Report for the Wonthaggi North East Precinct Structure Plan*. Prepared for Bass Coast Shire Council and the Victorian Planning Authority. Terramatrix, Collingwood.

VPA (2020) *Wonthaggi North East Growth Area Precinct Statutory Strategy*. Victorian Planning Authority, Melbourne.