

Our patron, Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

CFA Fire Prevention and Preparedness
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CFA Ref: 107630-412711

24 February 2021

John Petrakos
Victorian Planning Authority
Level 25, 35 Collins Street
MELBOURNE VIC 3000

Dear John,

SUBMISSION

Proposal: Wonthaggi North East Precinct Structure Plan

Thank you for providing CFA with the opportunity to provide comment on the proposed Wonthaggi North East Precinct Structure Plan (PSP), associated planning scheme ordinances and documents. CFA's review of the assessment has considered all of the relevant information however our comments largely focuses on the PSP and the associated Bushfire Development Report (BDR) prepared by Terramatrix (2018).

Please find the following comments for your consideration.

Summary

The proposed PSP is located in an area dominated by grassland fire risks, with coastal scrub and isolated larger patches of vegetation forming the primary bushfire hazards in the surrounding environment.

The PSP has a generally high level of compliance with settlement based bushfire policy. However, the incorporation of the bushfire response within the PSP and associated planning policies is poor and could be substantially improved with a more comprehensive suite of bushfire related policy being developed and implemented via the PSP and planning controls.

Bushfire Assessments

CFA's detailed comments on the bushfire hazard and the relevant assessments that form part of the BDR can be found in Attachment 1. CFA's comments can be summarised as follows:

- CFA considers that no substantial change has occurred to the area from a bushfire hazard perspective since the time the BDR was prepared in 2018.
- CFA generally supports the landscape assessment and fire behaviour scenarios within the BDR. CFA considers that the site is located in a lower risk bushfire landscape that is dominated by grasslands and scrub with isolated patches of woodland.
- CFA agrees with the slope assessment shown in Map 3 of the BDR.
- CFA recognises that a number of vegetation assumptions have been made in the preparation of the BDR. There are some areas where CFA requires clarification, particularly in relation to ongoing management of roadside vegetation that has been considered as low threat. However, in the most part, CFA has applied the same assumptions in reviewing the bushfire response.

Policy Overview

Planning policy at Clause 71.02-3 gives priority to bushfire and the protection of human life over all other considerations. Bushfire policy that seeks to minimise risk and direct growth to appropriate areas is contained at Clause 13.02-1s.

There is a relatively high level of compliance with bushfire policy objectives of Clause 13.02-1s. However, the PSP and supporting documents generally fall flat in providing an appropriate bushfire response.

CFA provides the following information for consideration in this context:

Landscape Considerations

Development should be directed to areas where there is a lower level of bushfire risk. As demonstrated as part of the landscape bushfire hazard assessment, the site of the PSP is located in a lower risk landscape where, subject to appropriate bushfire protection measures it is appropriate to consider further growth.

It is useful to note that even though there are parts of the site in the Bushfire Management Overlay (BMO), this has had limited impact in determining whether the area is suitable for growth as the BMO is largely derived from a relatively small isolated patches of vegetation.

The response to the area of the PSP within the BMO is discussed later in this submission.

Alternative Locations for Development

An assessment of alternative locations for future development does not appear to be addressed in the BDR or any of the supporting amendment documentation at this time. However, it is reasonable in this case to assume that if this exercise was undertaken and the location of the PSP was compared to other areas within Bass Coast or surrounding larger townships, for example the Inverloch or Leongatha, it is likely that these areas would have relatively similar landscape risk assessments. Although some townships may have a slightly higher risk profile if they immediately abut long areas of coastal or localised vegetation i.e. Grantville or the Gurdies.

Availability of Safer Areas

A number of lower risk areas where BAL LOW could be achieved are available in the area surrounding the PSP including within the Wonthaggi township.

Site Based Exposure

The BDR has undertaken a thorough assessment of the localised bushfire hazards within 100-400m of the PSP area, in addition to a slope assessment. CFA agrees with these assessments. There is a substantial level of detail within the BDR regarding site based exposure and the need to provide an adequate separation distance between bushfire hazards and development to ensure radiant heat exposure does not exceed 12.5kw/m² or lead to construction that would warrant a construction standard greater than a Bushfire Attack Level (BAL) 12.5.

This effectively equates to the need to setback development from a bushfire hazard:

- 19m from Grassland
- 27m from scrub
- 33m from woodland

No links to the required setback distances set out in the BDR are provided in the PSP or any planning scheme ordinances, including Schedule 1 to Clause 37.07 or as part of any requirements in the Development Plan Overlay or Incorporated Plan Overlay.

The inclusion of Requirement 36 in the PSP is considered an inadequate response to ensuring radiant heat objectives are met into the future.

CFA encourages a bushfire response methodology be adopted similar to the one VPA has employed for the work they have undertaken in response to bushfire issues in the Beveridge North West PSP and Craigieburn West PSP. Whilst neither of these PSP's have been completed, they are considered a useful guide in preparing an appropriate suite of policy controls and links to bushfire outcomes in the context of a PSP.

Bushfire Management Overlay, Radiant Heat Exposure and Industrial Area Design and Layout

Given part of the site is covered by the BMO further consideration should be given to whether there is any need for a planning policy mechanism to 'lock in' the BAL 12.5 construction standard and associated setback as the BMO contemplates lesser setbacks and higher construction standards.

This may not be necessary where development is passively setback and no opportunities for setback encroachment exist.

Road Network and Design

Perimeter Road

CFA strongly encourages the use of perimeter roads adjacent all bushfire hazards where feasible. It is recommended that this be included in the PSP requirements/guidelines.

Waterway Corridor

The waterway / wetland corridors include a cross section (14) that shows the waterway with a local access street on one side. This cross section appears applicable to the eastern waterway corridor however it is less clear whether a local access street will be provided on both sides of the western corridor extent. It is also noted that, Plan 7 does not show a local access street extending the length of either corridor. CFA strongly recommends that these interfaces include hard surfaces and managed vegetation. Perimeter roads are strongly encouraged in these areas.

Roadside Vegetation and Design

Perimeter roads adjacent all bushfire hazards are recommended, including adjacent unmanaged roadside vegetation. There are a number of road reserves adjacent grassland vegetation that have not had the setback for radiant heat exposure applied as the road reserve has been considered low threat vegetation. As noted in the information above, CFA does not object to this approach, provided that the roadside will have ongoing management to ensure the extent of vegetation does not incrementally change over time.

Further undertakings from Council to manage the roadside vegetation is needed. Alternatively, these areas should be considered as a bushfire hazard and an appropriate setback or provision of a perimeter road should be included as a requirement or guideline in the PSP.

Waterway Crossings

There are a number of waterway crossing proposed within the PSP. Where these cater for vehicles, they should be designed to accommodate fire appliances. The fire authority recommends that these crossings be constructed to at least the following standard:

- Curves must have a minimum inner radius of 10m.
- Have a minimum trafficable width of 3.5m of all- weather construction.
- Be clear of encroachments for at least 0.5m on each side and 4m above the crossing.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.
- Be able to accommodate a 15 tonne vehicle load.

Vegetation Management and Defendable Space

It is unclear how the required areas of vegetation management for defendable space will be implemented via either the PSP or planning scheme controls. CFA recommends that requirements be included to ensure vegetation in defendable space is managed to the following standard:

- 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.
- 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.

Further consideration should also be given to:

- Ensuring that requirements and guidelines and other policy objectives are consistent with the above requirements in defendable space areas.
- How vegetation along waterway corridors and drainage lines will be managed to ensure that the assumptions relied upon in the BDR are not exceeded.

No Increase in Risk

There are elements of this proposal that will increase the bushfire hazard, this includes the revegetation along waterway corridors and drainage lines. This is generally discouraged unless the risk can be reasonably reduced.

Assuming these areas will become scrub vegetation into the future, there is a need to lock in both the management of these corridors/drainage lines (as identified above) and the setbacks to future development.

It is difficult to argue that risks will not be increased without a high level of certainty around these elements combined with good policy to ensure outcomes are secured. Further consideration should be given to whether the bushfire risk to any adjacent land, particularly land located to the east of the PSP adjacent the eastern waterway corridor will be increased and what effect any revegetation of this area will have. This may vary depending on the extent of revegetation that occurs. This will impact on the appropriate risk management options and/or design outcomes. Additional bushfire protection measures to reduce risk within the PSP include:

- Requiring the use of non-combustible fencing
- Ensuring interim bushfire risk is managed during the construction phase of the development.
- Minimising revegetation works along the western waterway corridor where it runs in parallel to a bushfire hazard that is connected to the bushland reserve located outside of the PSP at the south west corner and the area of scrub in the south east corner for the eastern corridor.

PSP Guidelines and Requirements

An opportunity to link the information in the BDR within the PSP Guidelines and Requirements has been missed. CFA strongly recommends that the PSP expand upon bushfire and include relevant information and requirements to ensure the intended bushfire response that has helped justify the proposal and manage bushfire risk for the future and existing communities is required to be implemented.

The following are some examples of where gains can be made:

- Improving consistency with information and recommendations contained within the Bushfire Development Report;
- Adding more bushfire specific maps in the PSP that better identify the current and future bushfire hazards, development setback requirements and other bushfire protection measures;

- Updating bushfire information to show that the bushfire interface extends west along Heslop Road and south along Fullers Road;
- Including more bushfire related guidelines and requirements in the PSP, including requirements for vegetation management;
- Inserting more design requirements for the subdivision layout and road network;
- Requiring perimeter roads adjacent all bushfire hazards, where feasible;
- Clarifying the management of roadside vegetation into the future and whether development will need to be setback from these areas to ensure bushfire risks are minimised;
- Creating bushfire policy links to the various planning scheme ordinances that are subject to the amendment;
- Requiring interim bushfire hazards to be managed;
- Seeking the use of non combustible fencing adjacent bushfire hazards;
- Considering where to encourage or discourage revegetation works relative to bushfire hazards;
- Capturing the need for certain design and engineering responses to cater for fire appliances; and
- Ensuring that vegetation along waterway corridors, drainage lines and McGibbonys Road Trail will not exceed a scrub classification when fully developed.

Planning Provisions

The proposed planning provisions currently lack integration with any bushfire requirements that will demonstrate how bushfire policy outcomes will be achieved on an ongoing basis.

CFA recommends that any changes made to the PSP in terms of bushfire related objectives, guidelines and requirements then be transferred to apply in policy, such as:

- An application requirement for a bushfire management plan that shows how the bushfire requirements are met;
- Conditions that ensure the ongoing implementation of the bushfire management plan
- Conditions around interim management of bushfire risks;
- Conditions or requirements that lock in certain development outcomes that limit options being utilised under the BMO

CFA would welcome the opportunity to continue to work with VPA as this matter progresses. Please don't hesitate to contact Anne Coxon on 9262 8614 (Land Use Planning Team Manager) or Jude Kennedy (Manager Community Safety) on 9767 1880 should you wish to discuss anything raised in this submission.

Yours sincerely



Anne Coxon
Land Use Planning Team Manager
FIRE PREVENTION AND PREPAREDNESS

ATTACHMENT 1 – DETAILED BUSHFIRE ASSESSMENT

Bushfire Development Report – Timeframe

A Bushfire Development Report was prepared by Terramatrix in October 2018. Given over two years have passed since the date of the report, CFA has turned our mind to site conditions and whether anything has substantially changed over time.

CFA has undertaken a recent site visit and reviewed aerial photography covering the period between late 2017 to late 2020 and found that no significant changes to the vegetation forming the bushfire hazard has occurred in the intervening period since the preparation of the BDR.

Higher levels of development are present within two subdivisions on the north and south side of McGibbonys Road (located towards the corner of Carneys Road).

Landscape Bushfire Assessment

The area around the PSP is not located within a landscape likely to experience extreme fire behaviour. The use of landscape typologies can be used as a guide to help contextualise different environments and the fire behaviour that may occur. The BDR has determined the PSP to be within a Type 1 landscape. This assessment is not unfair, although it would also be reasonable for the site to be described as leaning towards a Type 2 assessment.

Either way, it is recognised that the site is located within a lower risk bushfire environment and has certain existing elements that assist mitigate the passage of a fire, for example, the extent of existing development on the south west interface that breaks up the availability of fuel for fires that could come from the coastal areas on the south west wind change typically seen on days of high fire danger.

Any fires that come from the surrounding grasslands are likely to be fast moving.

There are multiple access and egress routes away from the PSP area. The most common evacuation route would likely be considered to the Wonthaggi Township, where multiple low threat areas exist.

Slope Assessment

CFA agrees that the land is generally flat or gently sloping and that the rise that is evident on the nearby bushland reserve is upslope relative to the PSP area. CFA agrees with the plan shown as Map 3 contained in the BDR (p.30).

Bushfire Development Report – Vegetation Classification Assumptions

A number of assumptions have been relied upon in the development of the BDR, including:

- That any classified vegetation outside of the PSP area will be retained, including the Wonthaggi Bushland Reserve to the west and southwest and the pasture that abuts the PSP area in other directions (Section 5.2, Page 26).
- That surrounding road reserves will retain native vegetation and that two are considered substantial enough to be considered potentially hazardous. The road reserves of the Korumburra-Wonthaggi Road, particularly the southern reserve south of Heslop Road, will retain a cover of Scrub. An area of Scrub, partially on the Sharrock Road reserve, is to be retained that is adjacent to Scrub and Grassland beyond the eastern boundary of the PSP (Section 5.2, Page 26).
- That two waterways and two drainage reserves located within the PSP boundary will be revegetated as part of the future development of the PSP and that they have been considered as scrub for the purposes of this assessment.
- That the existing trees within the McGibbonys Road shared train (i.e. 2.45ha) area will be retained and maintain the woodland vegetation classification.

CFA has relied on the same assumptions and generally agrees with the assessment of roadside vegetation, although some consideration of the extent and management of roadside vegetation should be undertaken in the design and layout of future subdivision. If there is no management of

roadside vegetation where it has an interface with a bushfire hazard it can create a new bushfire risk into the future. The proposal should ensure this issue is addressed.

CFA also notes that there are other areas of more scrub like vegetation evident within other road reserves, particularly in the section of Carneys Road south of the Bass Highway.

CFA considers that the bushfire hazard interface extends the full extent along Heslop Road and south along Fullers Road where it fronts a grassland.

Localised Bushfire Hazard Assessment

CFA generally agrees with the assessment of vegetation within 150m/400m of the site as shown in Map 3 (p.30). Whilst there may be some slight variation between where the scrub ends and the woodland starts in the northern section of the reserve, it is fairly representative to rely on the assessment provided and it is acknowledged that this area will be retained into the future.

Fire Prevention Works

The BDR references applicable Fire Operation Plans and areas where fire prevention activities are planned for a certain period of time. Whilst these plans contribute to framing the bushfire response, they are generally provided with less weight in planning assessments given the purpose and designed outcomes of these works do not always align with the planning policy outcomes that may also apply in or around these areas. For example, the timeframe for works associated with an asset protection zone is 5-7 years, where most bushfire planning requirements are to be undertaken each Fire Danger Period. Also given the purpose of the works may differ, the extent of mitigation don't always align.

This is not considered to be a significant issue in the context of this application, given the need to provide sufficient setbacks and the steady state vegetation classification that has been relied upon in the precautionary bushfire hazard assessment. CFA supports this approach.

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