

Land Use Planning Case Study

The benefits of perimeter roads in strengthening community resilience to bushfire



Pindara Estate, Langwarrin

Background

This case study demonstrates the benefits of including perimeter roads in areas at risk from bushfire. In 2001, CFA received a referral under Section 55 of the *Planning and Environment Act 1987*, for Stage 2 of a residential subdivision known as 'Pindara Estate' Langwarrin. The land abuts unmanaged vegetation along Appleberry Avenue, is approximately 15 hectares in size and is covered by the Bushfire Management Overlay (BMO).

Issue

The first stage of the subdivision was not referred to CFA, and as a consequence there are some residential properties directly abutting the bushfire hazard. Once the application was referred to CFA, it identified that the proposed development would result in lots with the potential for residential buildings within Flame Zone. This is the highest level of exposure to the risk and means that buildings will have direct contact with flames, radiant heat and embers from the fire front. It also creates life safety issues and increases the cost of building. CFA began discussions with the developer to reduce the overall community fire safety risk to an acceptable level.

Outcome

During consultation and discussion between CFA and the developer, it was agreed by the relevant parties that the following occur:

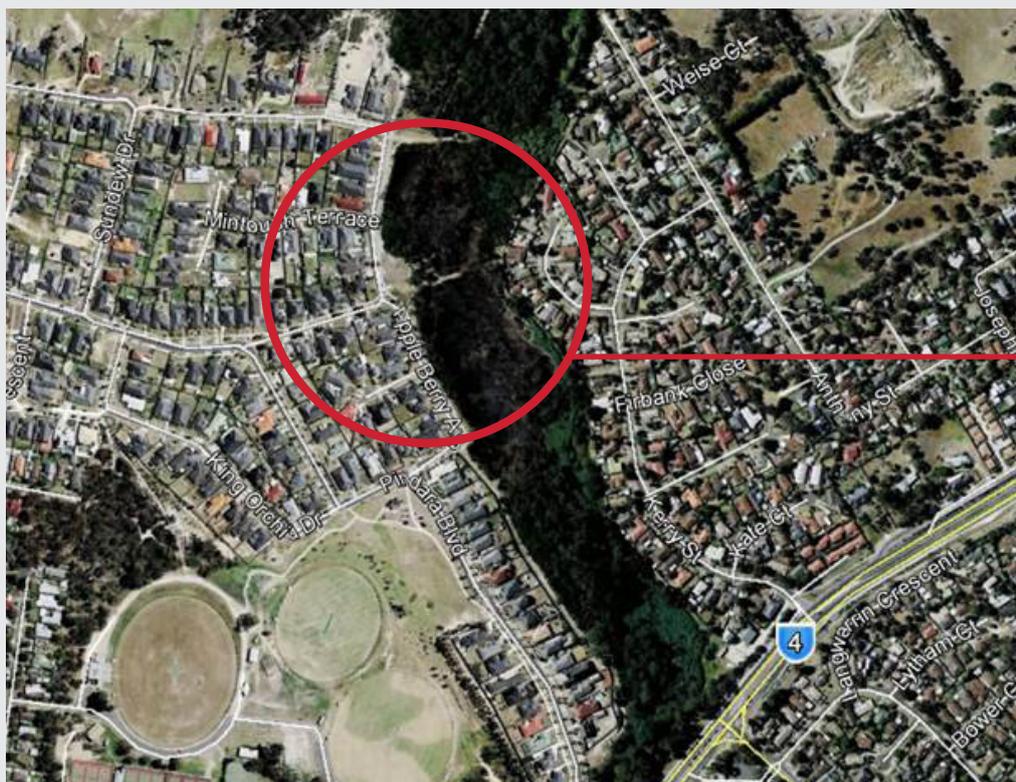
- Stage 1 development, which was not referred to CFA, would place a restriction on development within 10 metres of the rear of each property, creating defensible space and separation from the hazard; and
- Stage 2 and subsequent development would incorporate a perimeter ring road, with additional vegetation management to occur between the road and the bushfire hazard.

By incorporating these bushfire mitigation measures, the bushfire hazard for current and future residents is being managed, and buildings are no longer being exposed to Flame Zone.

Evidence of success

On 20 January 2009, there was a bushfire in the vegetation abutting the subdivision. There was minimal impact on the existing community, with the 'passive' fire prevention measures (the perimeter road) working effectively to provide a non-fuel break between the vegetation and the community. The following link is a YouTube clip of the 2009 bushfire <https://www.youtube.com/watch?v=mzqrPM-At0Y>

For further information about CFA's involvement in subdivisions and the planning system go to www.cfa.vic.gov.au



Perimeter road provided as a result of CFA involvement.

Image source: Google Earth