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The General Manager
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Your Ref: MP 06_0135
Our Ref: S08/0031
DA08062652115 LC

ATTENTION: Kim Johnston

18 February 2014

Dear Sir/Madam,

Part 3A Development for Comberton Grange Road South Nowra

I refer to your letter dated 9 January 2013 seeking comments regarding bush fire protection for the above Part 3A Development in accordance with section 75F (4) of the *Environmental Planning and Assessment Act 1979*.

It is noted that the RFS made a submission regarding the proposed development in a letter dated 12 December 2013 and that the applicant has responded to key issues raised in that letter in a document titled "Response to Environmental Assessment Submissions MP06_0135" written by Conybeare Morrison and dated December 2013.

The RFS advises that the information submitted to date as part of the application is not detailed enough to provide advice on whether the application and specific components meets the requirements of *Planning for Bush Fire Protection 2006*. Information submitted by the applicant identifies that the proposal will be subject to further approval prior to construction of each stage of the development, and advises that they will submit more detailed information regarding proposed bush fire protection measures and compliance with PBP in these future applications.

Whilst the RFS cannot determine that the proposal can meet PBP requirements, it appears that the proposal is capable of achieving these requirements. However this is providing the following proposed design features are achieved:

- i. Currently it is proposed that a 50 metre buffer be provided between forest vegetation on the adjoining lot and proposed residential and SFPP development. This buffer is proposed to be maintained in the form of a golf course. Considering the location of the proposed development, it is considered

that this buffer is an essential part of the design to provide adequate separation between the bushland interface. It is assumed that this entire area will be managed as an Asset Protection Zone and should be conditioned as such.

- ii. As the main access road to the development is greater than 200 metres and travels through forest vegetation, it is essential that a secondary access road is provided in an opposite direction for all components of the development. The RFS would not support the development where only one access road was to be provided. Hence both access to the development via Comberton Grange Road and Charcoal road are to be legally created and fully constructed in accordance with PBP public road standards prior to development occurring within the site.
- iii. Submitted plans and information have identified areas within the development as managed land which has been incorporated into proposed APZs (reference made to page 33 of the Response to Environmental Submissions). Appendix 2 of PBP defines managed land as the following:
 - o Non vegetated areas including roads, footpaths, cycleways, waterways, buildings, rocky outcrops and the like; and
 - o Reduced vegetation including maintained lawns, golf course fairways, playgrounds or sports fields, vineyards, orchards, cultivated ornamental gardens and commercial nurseries.Hence it is expected that large areas of the site will be maintained in such a state where little to no vegetation will be present. It should be noted that APZs proposed on submitted drawings are not clear and are not endorsed by the RFS. APZs will be required in excess of what is proposed on submitted plans, and the applicant has proposed to provide this information at application for approval of future stages of the development.
- iv. Where it is proposed that an APZ will be established on land managed for a public purpose by Council, government or to the benefit of a community title, a Plan of Management (POM) should be prepared in accordance with NSW RFS Community Resilience Fast Fact 6/07 "Plans of Management".
- v. It is noted that areas of riparian vegetation are proposed to be retained within the site. The applicant has advised that required APZs can be achieved outside of these areas. The RFS would not support areas of riparian vegetation within APZs and this would be subject to assessment at further applications for stages of the development.
- vi. The proposed plans do not show all roads as being through roads nor do they provide for perimeter roads around all residential components of the proposal. It is recommended that all roads are through roads and that perimeter roads are provided for all components. However, it is considered that this requirement is achievable, and that where alternate measures for access are proposed, it could be assessed at lodgement of future application of staging.
- vii. Recently submitted information has identified that it is proposed to have a fire station within the property. In addition it is proposed that an Emergency Evacuation Plan be created for the development. Considering the scale and

location of the development, it is considered that these emergency management measures are crucial to the development.

Proposed Rezoning

The RFS is aware that the proposal includes rezoning to accommodate the proposed uses which will result in permissibility of increased density. The RFS does not object to the rezoning, provided the following issues are considered:

- a. Minimising the interface to the bush fire hazard is a key planning principle of PBP 2006. This may be achieved by providing perimeter roads to subdivisions, minimising the perimeter of the land which may be developed, to the interface, locating a development away from areas of vegetation that cannot be modified as a result of environmental constraints and legal rights to clear certain property (i.e vegetation on adjoining lots or areas of high conservation value such as riparian buffers or steep slopes).
- b. Ensure a radiant heat level of 10kW/m² may be achieved for any future SFPP (i.e the example seniors living development within the planning proposal). The level of clearing that may be undertaken on the lots in consideration of environmental constraints that may exist to determine whether the Asset Protection Zones (APZs) required for a SFPP can be achieved within its own property boundaries.
- c. Provide mechanisms for future residential subdivisions to achieve APZs within property boundaries of lots (or likely future lots) and may achieve a radiant heat level not greater than 29kW/m² in accordance with Table A2.4 of PBP.
- d. PBP 2006 has certain requirements for access to and from development. For example, where a dwelling is located greater than 200 metres from a public through road, a secondary access route should be provided. In consideration of this it is recommended that The Department consider the strategic access of a locality as part of an overall assessment of suitability for bush fire protection measures.
- e. PBP 2006 includes requirements for water. Where appropriate a reticulated water supply should be provided.

Proposed Shaolin Tourist & Residential Development

Where the proposed development is approved by the Department of Planning and Infrastructure, the RFS recommends that the following conditions be met:

Asset Protection Zones

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent

direct flame contact with a building. To achieve this, the following conditions shall apply:

1. The proposed golf course is to be maintained in perpetuity as an Asset Protection Area (APZ) as outlined with section 4.1.3 and Appendix 5 of *Planning for Bush Fire Protection 2006*. The area designated as a golf course should be established as an APZ prior to construction of any residential or Special Fire Protection Purpose (SFPP) to ensure that an adequate buffer is provided between the forest vegetation.
2. At lodgement of application for approval of each stage of the proposed development, a detailed assessment against the provisions of *Planning for Bush Fire Protection* (PBP) is to be provided. The assessment should clearly identify how each development meets APZ requirements of Appendix 2 of PBP.
3. It is noted that areas of riparian vegetation are proposed to be retained and revegetated and that this may create a bush fire hazard within the development and/or conflict with APZ requirements. Future applications for stages of the development should clearly identify how these areas will interact with proposed APZs to ensure that hazards within the site are reduced and required APZs can be achieved for all components of the development.
4. Prior to construction a Plan of Management is to be developed for all components of the development and should include the following at a minimum:
 - a. How vegetation within the development will be managed in perpetuity to ensure that all components of the proposal establish and maintain adequate APZs in accordance with the requirements of Appendix 2 of *Planning for Bush Fire Protection* and RFS document *Standards for Asset Protection Zones*;
 - b. How land adjoining unmanaged forest vegetation will be managed to prevent the spread of fire towards residential and SFPP development;
 - c. How maintenance of the golf course will be maintained.The Plan of Management should be developed in consultation with the Shoalhaven Bush Fire Management Committee.

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 shall apply:

5. At lodgement of application for approval of each stage of the proposed development, a detailed assessment against the provisions of *Planning for Bush Fire Protection* (PBP) is to be provided. The assessment should clearly identify how each development meets water, electricity and gas requirements of section 4.1.3 of PBP. It is recommended that the proposal provide underground electricity and reticulated water in accordance with relevant standards to all components of the development.

Public Road Access

6. At lodgement of application for approval of each stage of the proposed development, a detailed assessment against the provisions of *Planning for Bush Fire Protection* (PBP) is to be provided. The assessment should clearly identify how each development meets access requirements of section 4.1.3 (1) of PBP. It is recommended that all components of the development have two access roads, perimeter roads, and no dead end roads.
7. Prior to any construction of residential or SFPP development, the two access roads being Comberton Grange Road between the development and the Princes Highway, and Charcoal Road between the development and Forest Road, are to be constructed in accordance with the following requirements of section 4.1.3 (1) of PBP:
 - Road(s) shall be two-wheel drive, all weather roads.
 - Two-way, with a carriageway 8 metres minimum kerb to kerb.
 - Traffic management devices are constructed to facilitate unobstructed access by emergency services vehicles.
 - Public roads have a cross fall not exceeding 3 degrees.
 - All roads should be through roads.
 - Curves of roads (other than perimeter roads) are a minimum inner radius of 6 metres.
 - The minimum distance between inner and outer curves is 6 metres.
 - Maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.
 - There is a minimum vertical clearance to a height of 4 metres above the road at all times.
 - The capacity of road surfaces and bridges is sufficient to carry fully loaded fire fighting vehicles (approximately 15 tonnes for areas with reticulated water, 28 tonnes or 9 tonnes per axle for all other areas). Bridges clearly indicate load rating.
 - Public roads greater than 6.5 metres wide locate hydrants outside of parking reserves to ensure accessibility to reticulated water supply for fire suppression.
 - Parking bays are a minimum of 2.6 metres wide from kerb to edge of road pavement. No services are located within the parking bays.
 - Public roads directly interfacing the bush fire hazard vegetation provide roll top kerbing to the hazard side of the road.
 - Access roads are to be legal and practicable. Where access roads are proposed over adjoining land easements shall be created in accordance with Section 88B of the Conveyancing Act 1919.
8. All roads within the development are to comply with the following requirements of section 4.1.3(1) of PBP:
 - Road(s) shall be two-wheel drive, all weather roads.

- Urban perimeter roads are two-way, with a carriageway 8 metres minimum kerb to kerb. The perimeter road is linked to the internal road system at an interval of no greater than 500 metres.
 - Traffic management devices are constructed to facilitate unobstructed access by emergency services vehicles.
 - Public roads have a cross fall not exceeding 3 degrees.
 - All roads should be through roads.
 - Non perimeter road widths comply with Table 4.1 in 'Planning for Bush Fire Protection 2006'.
 - Curves of roads (other than perimeter roads) are a minimum inner radius of 6 metres.
 - The minimum distance between inner and outer curves is 6 metres.
 - Maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient.
 - There is a minimum vertical clearance to a height of 4 metres above the road at all times.
 - The capacity of road surfaces and bridges is sufficient to carry fully loaded fire fighting vehicles (approximately 15 tonnes for areas with reticulated water, 28 tonnes or 9 tonnes per axle for all other areas). Bridges clearly indicate load rating.
 - Public roads greater than 6.5 metres wide locate hydrants outside of parking reserves to ensure accessibility to reticulated water supply for fire suppression.
 - Public roads 5.5 to 6.5 metres wide (kerb to kerb) provide parking within parking bays located outside the kerb to kerb space and located services outside of the parking bays to ensure accessibility to reticulated water for fire suppression.
 - One way only public access roads are no less than 4 metres wide (kerb to kerb) and provide parking within parking bays located outside the kerb to kerb space. Services are located outside of the parking bays to ensure accessibility to reticulated water for fire suppression.
 - Parking bays are a minimum of 2.6 metres wide from kerb to edge of road pavement. No services are located within the parking bays.
 - Public roads directly interfacing the bush fire hazard vegetation provide roll top kerbing to the hazard side of the road.
9. Where perimeter roads cannot be provided around all elevations of all components of the development, an alternative measure shall be provided. An alternative measure should allow for separation between residential and/or SFPP development and adjacent land which could pose a hazard or is required to be maintained or accessed for the purposed of hazard reduction. This area should be accessible by fire trucks as outlined in Clause 4.1.3(3) of PBP. This information should be submitted as part of a detailed assessment when application is lodged for approval of future stages of the development.

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 shall apply:

10. At lodgement of application for approval of each stage of the proposed development, a detailed assessment against the provisions of *Planning for Bush Fire Protection* (PBP) is to be provided. The assessment should clearly identify how proposed buildings meet construction requirements of PBP Addendum: Appendix 3.

Evacuation and Emergency Management

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments. To achieve this, the following conditions shall apply:

11. At lodgement of application for approval of each stage of the proposed development, an Emergency/evacuation plan is to be prepared and submitted as part of the application. The Plan is to be prepared in accordance with the NSW Rural Fire Service Guidelines for the preparation of Emergency/Evacuation Plan and comply with Australian Standard AS3745-2010 '*Planning for Emergencies in Facilities*'. The plan should include information regarding the proposed rural fire station and be prepared in consultation with Shoalhaven RFS District Office.

General Advice – Consent Authority to note

Future development applications for residential subdivision and/or SFPP development within the site will be required to obtain a Bush Fire Safety Authority in accordance with 100B of the *Rural Fires Act 1997*.

For any enquiries regarding this correspondence please contact Lauren Cole on (02) 44 72 0600.

Yours Faithfully,



Amanda Moylan
Team Leader Development Assessment and Planning

The RFS has made getting information easier. For information on Planning for Bush Fire Protection 2006, visit the RFS web page at www.rfs.nsw.gov.au and search under Planning for Bush Fire Protection 2006.