

Bushfire Assessment

Proposed Beach Clubhouse Building (restaurant, pool and indoor recreation areas) associated with Palm Lake Resort land lease community

Lot F DP 420085

42 Lewis Street, Old Bar

September 2024

Final

Prepared for
Palm Lakes Works Pty Ltd

Project No:23341

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1. INTRODUCTION

This Bushfire Assessment has been prepared in relation to the proposed construction of a Palm Lake Resort 'Beach Clubhouse' building on land at Lot F DP 420085, 42 Lewis Street, Old Bar.

The land is mapped as bushfire prone land (BFPL) for the purposes of Section 10.3 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

The proposal is not development for a Special Fire Protection Purpose (SFPP) for the purposes of Section 100B of the *Rural Fires Act 1997* (RF Act) or Clause 47 of the *Rural Fires Regulation 2022* (RF Regulation). The proposal is not subject to any requirement for a Bushfire Safety Authority via provisions of the RF Act.

As the site is mapped as bushfire prone land, the purpose of this Bushfire Assessment is to assist in the planning process, to identify the proximity of the proposal to any potential bushfire threat and to determine what, if any, bushfire protection measures are required in accordance with the New South Wales Rural Fire Service guideline entitled *Planning for Bush Fire Protection 2019* (PBP).

1.1 Background

The proposal involves construction of a communal facility (known as the 'Beach Clubhouse') for use by the residents of the Palm Lake Resort Manufactured Home Estate (MHE). The MHE is a separate development which is approved to be constructed on adjacent land at Lot 1 DP594864 pursuant to DA169/2010 (as modified on 13 December 2023 by MOD2022/0253).

The conditions of DA169/2010 (as modified) include the revegetation of a 15 metre wide strip of land adjacent to the eastern boundary of the MHE site. That revegetation zone commences approximately 52 metres from the south-eastern boundary of the subject site with all other land within the MHE site required to be managed to the standard of an APZ.

2. PROPOSED DEVELOPMENT

The proposed development is for the construction of a multi-purpose recreation ('Beach Clubhouse') building to be used by residents of the (yet to be constructed) Palm Lake Resort MHE on the adjacent Lot 1 DP 594864. The proposed building will be sited in the north-western part of the site and have two storeys of indoor recreation, amenities, leisure and dining facilities.

Outdoor recreation areas (including swimming pool) will occupy the south-eastern part of the site between the Clubhouse and Old Bar Beach. This area is to include ancillary detached structures for storage of pool equipment and seating.

While the Clubhouse building is proposed for exclusive use by the residents of the adjacent Palm Lake Resort MHE, the building will be located on a separate lot from the resort/MHE. While not relevant to bushfire assessment considerations, use of the Clubhouse facility by residents of Palm Lake Resort MHE is likely to be regulated under the *Residential (Land Lease) Communities Act 2013*.

Vehicular access to the clubhouse will be available via a service road from the adjacent Palm Lake Resort MHE. Pedestrian access will be provided through integrated pathways within the Palm Lake Resort MHE.

The proposed building will have a total floor area of 1,785m² over two storeys and is likely to be a Class 9b (assembly) building for the purposes of the National Construction Code (NCC). Detached structures are expected to be Class 10 buildings (depending on their intended function).

The proposed uses and associated floor areas are described in Table 2.1.

Table 2.1: Proposed Uses of the Beach Clubhouse building

Main Uses	Floor Area (Approx)
Ground Level	
Library / Craft	992m ²
Lounge	
Gym	
Yoga / Recreation	
Bar and Cafe	
First Floor	
Kitchen	793m ²
Dining	
Lounge	
Outdoor Terrace	232m ²

The proposed development is shown on plans prepared by VIA Architects (Project No. 2210012), *Old Bar - Beach Clubhouse*, Rev 2, dated 26/08/2024.

An extract of the site plan is at Figure 2.1.

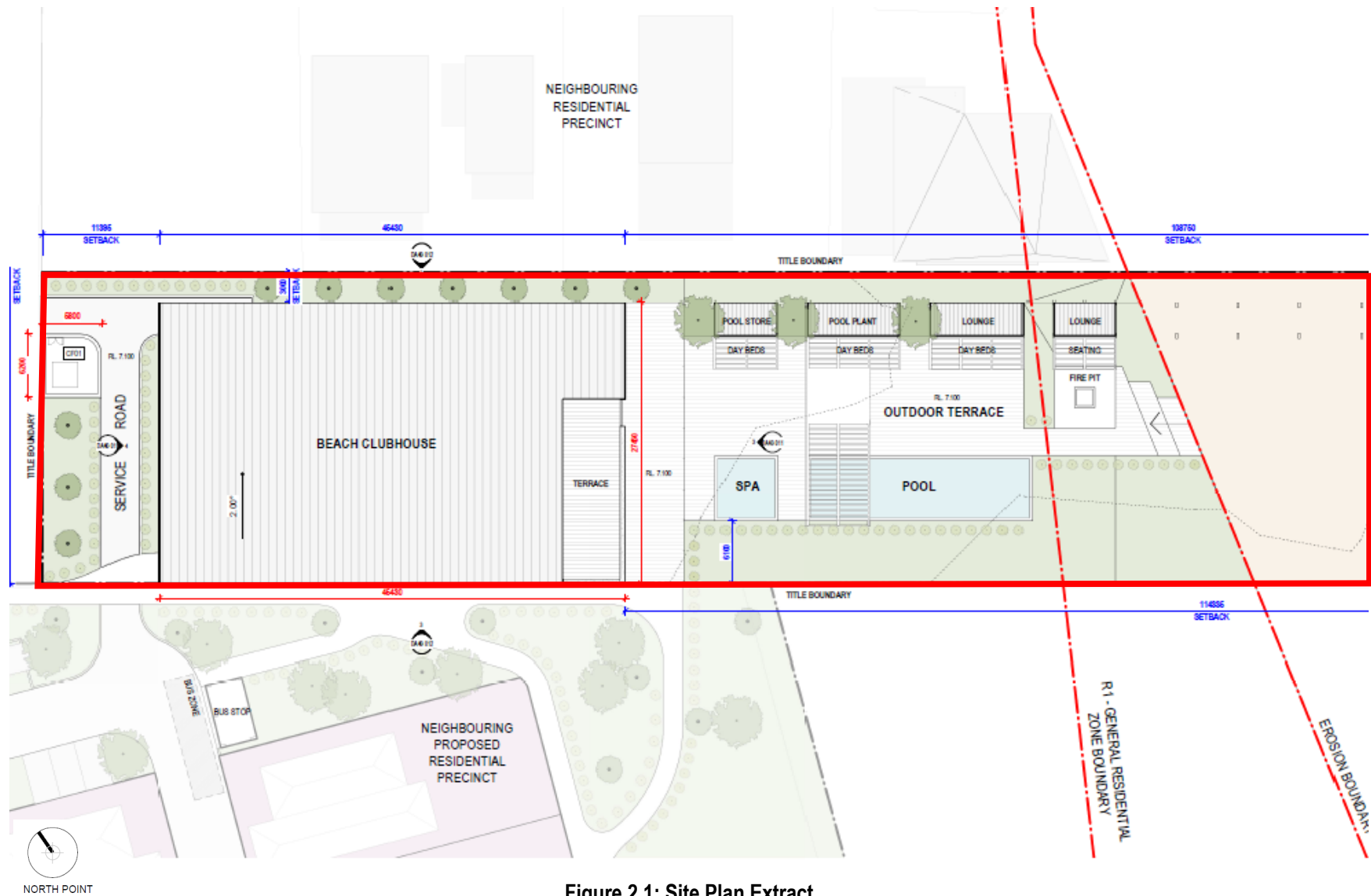


Figure 2.1: Site Plan Extract
(part of the site outlined red) Source: VIA Architects. North approx to top left of page.

3. SITE DESCRIPTION

3.1 Site Details

Address	42 Lewis Street, Old Bar
Lot / DP	Lot F DP 420085
Area	5,131 m ²
Local EPI	Greater Taree Local Environmental Plan 2010
Zoning (Current)	R1 General Residential & C2 Environmental Conservation
Fire Weather District	North Coast fire weather district (FDI 80)

3.2 Site Description

The site is at the southern end of Lewis Street, about 400 metres south-west of the intersection with Rose Street and Pacific Parade. Lewis Street forms the front (north-western) boundary, while the south-eastern boundary is defined by Old Bar Beach. The land is currently vacant and maintained as mown lawn or beach dunes.

Four (4) residential lots adjoin the north-eastern site boundary. Each adjacent lot either contains a dwelling or is vacant and maintained as mown lawn. Residential and tourism developments occupy other land further north-east of the site, on the eastern side of Lewis Street.

The eastern part of the south-western boundary adjoins Crown Land with coastal heath and littoral rainforest vegetation providing a buffer between Old Bar Beach and the approved Palm Lake Resort MHE site at Lot 1 DP 594864 (at the southern end of Lewis Street and adjoining part of the south-western boundary of the site).

The site and surrounding land is shown in Photo 3.1.



Photo 3.1: Aerial view looking south-east across the site with approximate lot area shaded blue.

Note: Adjacent land to the south-west (right) forms part of the approved Palm Lake Resort MHE and/or Crown land. Vegetation to be retained following development of that land is shaded green (approximately). Remaining vegetation is to be maintained to the standard of an APZ.

3.3 Services and Infrastructure

Table 3.1 summarises the services and infrastructure available to the site.

Table 3.1: Services

Service	Availability
Access	Access to the site is from Lewis Street which is a bitumen-sealed public road terminating at an informal cul-de-sac at the frontage of the site. Access is also proposed to be provided via the road internal / private road network of the adjacent Manufactured Home Estate development (when constructed).
Water	The site is serviced by reticulated water. Hydrants are on the western side of Lewis Street.
Electricity	Overhead electricity transmission lines are in Lewis Street and the adjacent land to the south-west of the site (Lot 1 DP 594864). Adjacent land to the north-east of the site appears to be serviced by underground power.

3.4 Bushfire Prone Land

Land within the site and surrounding land is mapped as Bush Fire Prone Land (BFPL) for the purposes of Section 10.3 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

Land within the site is partly mapped as Category 3 and partly buffer to Category 3 vegetation (including land Category 3 land mapped as occurring on land to the south-west and north-west of the site). Category 3 land is described in the *RFS Guide for Bush Fire Prone Land Mapping* (V5b, November 2015) as medium bush fire risk vegetation and corresponds with areas of vegetation having formations of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands (Keith, 2004).

While the surrounding land is largely mapped as Category 3 vegetation, inspection of the site indicates that surrounding vegetation formations are more representative of heath (tall and short), forest (Category 1) or rainforest (Category 2). Adjoining land to the south-west and north-west, Lot 1 DP594864 and 2 DP1022067, is in the same ownership as the subject site. Existing development consents for those lands provide for removal of certain areas of potential bushfire hazard vegetation from parts of Lot 1 and Lot 2.

The nearest area of bushfire prone vegetation that is likely to present a potential bushfire hazard to the development (following development of adjacent lands to the south and west) is within the Crown Land adjoining the eastern part of the south-western boundary.

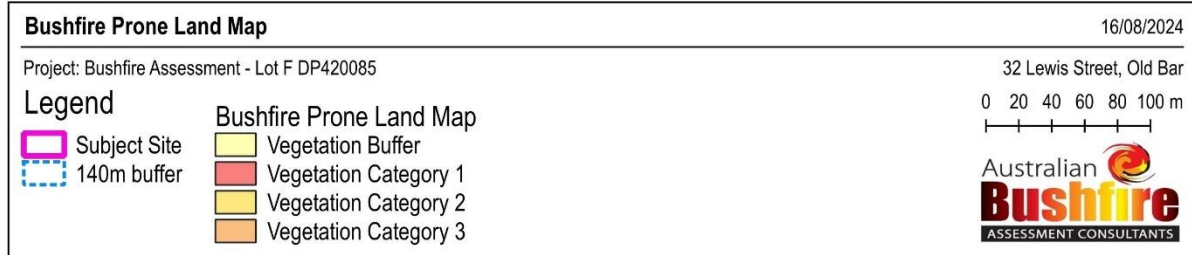


Figure 3.1: Site Locality and Bushfire Prone Land Map

3.5 Vegetation and Slope

The assessed vegetation formations are summarised in Table 3.2 and Table 3.3.

The assessment of slope has been undertaken in accordance with the methodology contained within Section A1.5 of PBP. The analysis of slope was undertaken via analysis of 1 metre resolution Digital Elevation Model (DEM) and through field analysis using a hand-held inclinometer and range finder.

The slope of land surrounding the site is detailed in Figure 3.2.

Table 3.2: Vegetation formations (PBP / Keith, 2004)

Direction	Description	Predominant Formation	Slope
North-east	Existing urban development adjoining the north-eastern boundary that is maintained as low threat vegetation.	Low threat (excluded)	N/A
East / South-east	Old Bar Beach and non-vegetated coastal dunes located within the site.	Low threat (excluded)	N/A
North-west	Tall heath vegetation within the approved Palm Lake Resort MHE development site at Lot 1 DP594864. It is expected that this vegetation will be removed upon commencement of development on that land. Coastal swamp forest vegetation within the Golf Course site adjoining the western boundary of Lot 1 DP594864. The Golf Course land is required to be maintained as an APZ (29 metres wide) adjacent to the western boundary of Lot 1 DP594864 (resulting in any unmanaged forest vegetation being >100 metres from the subject site).	Tall heath (subject to consent for removal) Coastal swamp forest (>100 metres)	2° downslope (>0-5°)
South / South-East	Tall heath vegetation within Crown Land (Lot 2 DP594864). Vegetation within the Crown reserve is also contiguous with the revegetation zone required to be provided adjacent to the eastern boundary of the MHE development site at Lot 1 DP594864. The Crown Land contains a mix of littoral rainforest and tall heath formations and has been conservatively classified as tall heath to reflect the 'worst case' scenario.	Tall heath with littoral rainforest (predominantly tall heath)	Relatively flat/level

Table 3.3: Summary of vegetation formations



Photo 3.2

Looking south across the south-western boundary showing regenerating Tall heath (centre) and littoral rainforest (far left).

Lot 1 DP 594864 (approved MHE site) depicted in the right of the photo.

Classification: Tall heath (worst case)



Photo 3.3

Looking north-east toward adjacent residential development. Subject site shown to the right as mown lawn.

Classification: Low Threat (Excluded)



Photo 3.4

Looking north-west over Lewis Street showing regenerating Tall heath within Lot 1 DP 594864 (shaded green) with regenerating swamp forest beyond (>100 metres).

While certain areas of vegetation within 100 metres to the west of the site (within Lot 1 DP594864) is to be removed under DA169/2010, that vegetation has been classified as Tall heath based on the existing condition of the vegetation.

Classification: Tall heath

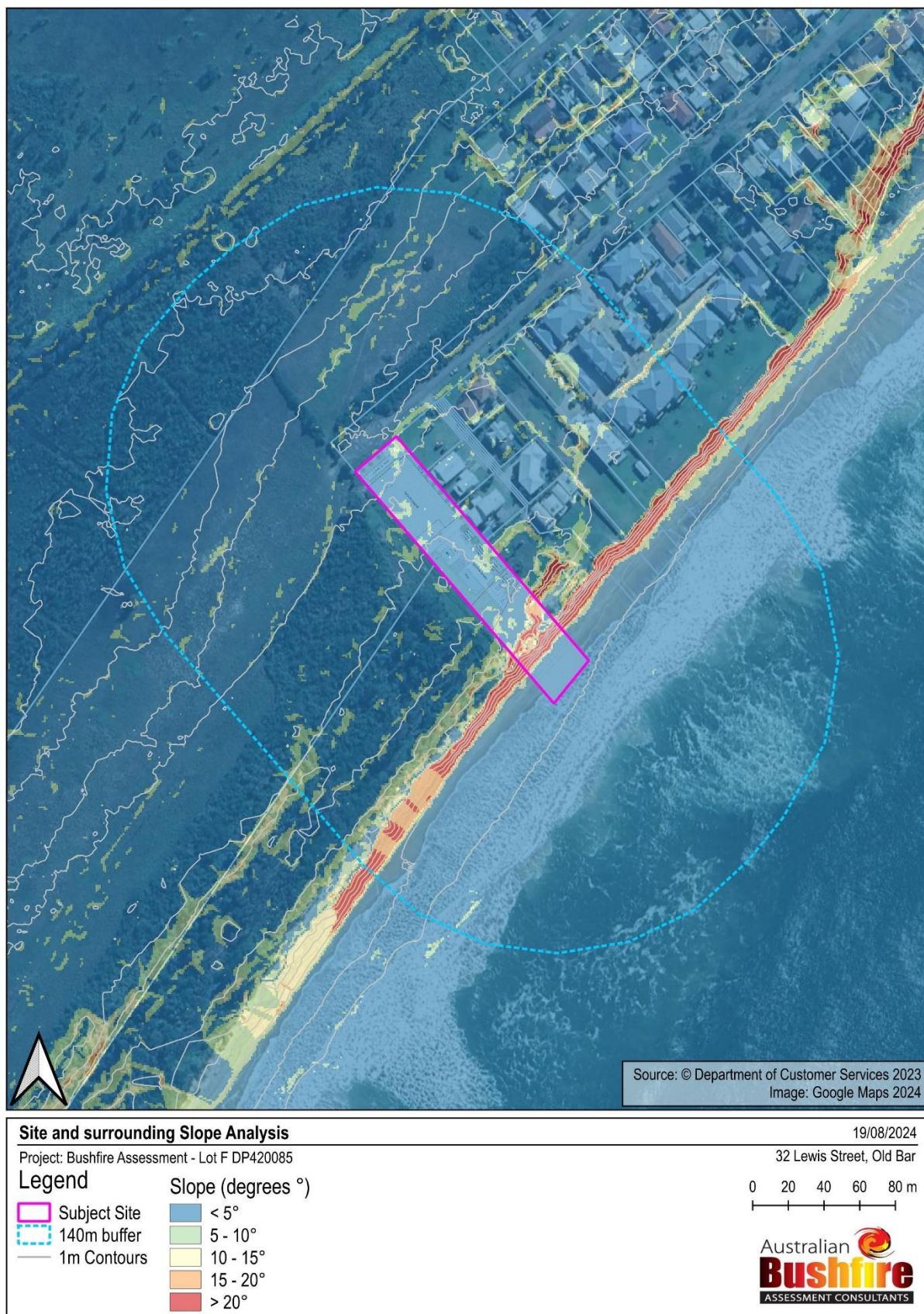


Figure 3.2: Slope Analysis

4. BUSHFIRE ASSESSMENT

Chapter 8 of PBP relates to 'other' development (not covered by Chapters 5 to 7 of PBP) and requires the following to be met:

1. Satisfy the aim and objectives of PBP;
2. Consider any issues listed for the specific purpose for the development set out in Chapter 8; and
3. Propose an appropriate combination of BPMs.

While the Clubhouse building is likely to be a Class 9b (assembly) building for the purposes of Volume 1 of the National Construction Code: Building Code of Australia (NCC/BCA), the proposal is not SFPP development for the purposes of the RF Act.

As the proposal is not SFPP development, the NCC does not specify any particular construction requirements for bushfire protection. The requirements contained in clause G5D4 of the NCC (including Specification 43 and Addendum to PBP November 2022) do not apply.

As described in Section 8.3 of PBP, the NCC does not provide bushfire-specific performance criteria for the particular class of building. While AS3959 is not considered as a Deemed to Satisfy construction solution, compliance with AS3959 is to be considered when meeting the aim and objectives of PBP.

Section 4.1 is an assessment of BALs for the purposes of considering BPMs, including construction requirements, for the proposed building. Section 4.2 subsequently provides an assessment of the proposal in relation to the aim and objectives of PBP.

4.1 Bushfire Attack Level

Appendix 1 of PBP provides the site assessment methodology for determining the applicable Bushfire Attack Level (BAL). Once the BAL is determined, construction requirements for the corresponding BAL may apply subject to AS3959-2018: *Construction of buildings in bushfire-prone areas* subject to Section 7.5 of PBP.

The site is in the North Coast fire (weather) area and is subject to a Fire Danger Index (FDI) of FDI 80. Table 4.1 provides a summary of the assessed BALs applying to buildings within the proposed development (Table A1.12.6, FDI 80).

Table 4.1: Separation Distances & BALs (PBP, Table A1.12.6)

Direction	Vegetation	Min Separation	Highest BAL
Clubhouse Building (Class 9 Building)			
North / north-east	Low threat	N/A	BAL-LOW
South / South East	Tall heath	~17 metres (roof and wall)	BAL-29
		~14 metres (first floor terrace)	BAL-40*
West	Coastal swamp forest	>100m	BAL-LOW
East	Low threat	N/A	BAL-LOW
Detached buildings (pool stores and shade structures – Class 10)			
North / north-east	Low threat	N/A	BAL-LOW
South	Tall heath	~24 metres (store & lounge buildings)	BAL-19
		~ 6 metres (shade structure)	BAL-FZ
West	Low threat	N/A	BAL-LOW
East	Low threat	N/A	BAL-LOW

*Concrete (non-combustible deck extending east from the eastern elevation)

As detailed in Table 4.1 above, the south-eastern elevation of the proposed Clubhouse building is setback at least 17 metres from the nearest unmanaged vegetation (Tall Heath) existing in the adjacent Crown Reserve. The highest BAL applying to the wall and roof elements of the main building (excluding the attached first floor deck) is BAL-29.

The proposed first floor terrace extends from the south-eastern elevation of the Clubhouse building with separation of approximately 14 metres to the nearest potentially unmanaged vegetation within the Crown land (at the closest point). While the highest BAL applying to the terrace is BAL-40, it is noted that the entire terrace is to be constructed as a concrete slab with non-combustible columns and balustrades that do not present a risk of ignition to the main building. Construction requirements for the building (excluding the terrace) have been determined based on the minimum separation distance between any wall or roof element to the nearest classified vegetation.

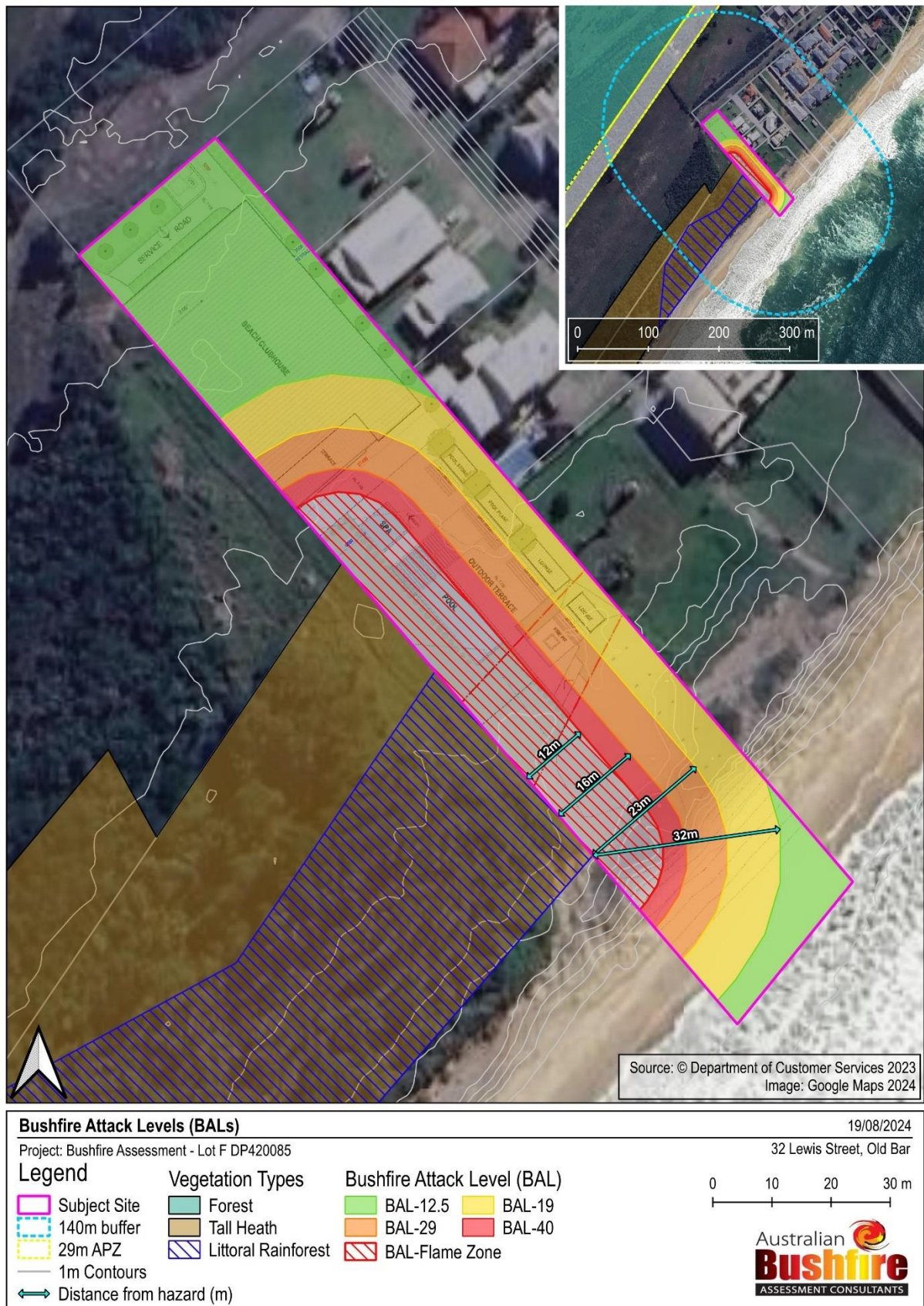


Figure 4.1: Bushfire Attack Levels in relation to the proposed development

4.2 Issues Listed for the Specific Purpose for the Development set out in Chapter 8

The proposed development involves construction of a Class 9b (assembly) building for the purposes of the NCC.

Section 8.3.11 *Public Assembly Buildings* of PBP provides relevant 'specific issues' for consideration when assessing compliance with the requirements of PBP. Importantly, Section 8.3.11 of PBP acknowledges the variation in risk associated with occupants of assembly buildings and recognises that a variety of bushfire safety solutions may apply based on the merits of the situation.

While the proposed building has a total floor area >500m², the floor area and occupant capacity of the building does not necessarily result in an increase to evacuation challenges during a bushfire emergency affecting the site. The following circumstances are unique to this particular proposal:

- The proposed building includes multiple individual uses/spaces that are used independently and do not necessarily attract a large number of occupants at any one time.
- The building is intended for exclusive use by the residents of the Palm Lake Resort MHE which will be developed separately on the adjacent land.
- Emergency management and evacuation procedures are required to be prepared for the MHE development pursuant to the conditions of the BFSA referenced in DA169/2010 (as modified).
- Having regard to the only potential fire runs from the south, the Palm Lake Resort MHE would be expected to be impacted well before the clubhouse building and emergency management and evacuation procedures for the Palm Lake Resort would be commenced in advance of any bushfire impacting the Beach Clubhouse.
- Users / occupants of the Clubhouse facility will only be those residents of the Palm Lake Resort. The occupants are not expected to be reliant on additional assistance of emergency services, for the purposes of assisting with an evacuation of the building, compared to the evacuation (if required) of the Palm Lake Resort more generally.
- In terms of evacuation challenges and radiant heat exposure, it is noted that the entry points of the building are available at the Lewis Street frontage (being the shielded side of the building)

and persons entering and exiting the building at that location are not exposed to radiant heat flux of $>10\text{kW/m}^2$ (based on separation to Tall heath in the Crown reserve).

- Emergency management and evacuation plans are required to be prepared for the Palm Lake Resort MHE and it is expected that those plans would include emergency procedures for the Clubhouse facility (in the same manner as other community facilities).

As the occupant characteristics of the Beach Clubhouse (being residents of the overall site) are unique (and do not present the same evacuation challenges as normally expected with large public assembly buildings), the merits of the situation do not necessarily warrant the same level of separation to hazards as expected for SFPP developments (being $<10\text{kW/m}^2$ on any part of the building).

4.3 Aim and Objectives of PBP

The aim of PBP is:

“to provide for the protection of human life and minimise the impacts on property from the effect of bushfire, while having due regard to development potential, site characteristics and protection of the environment.”

The relationship of the proposed building with the objectives of PBP is outlined in Table 4.2.

Table 4.2: Compliance with the Objectives of Planning for Bush Fire Protection 2019

Objective	Comment
<i>i. Afford occupants of any building adequate protection from exposure to a bushfire</i>	<p>As discussed above, the proposed building is a communal facility for the residents of the adjacent Palm Lake Resort MHE. Occupants of the building will be limited to residents of manufactured homes in the Palm Lake development (each sited to maintain radiant exposure of $<29\text{kW/m}^2$ consistent with the minimum separation distances for residential subdivision).</p> <p>In combination with bushfire-resisting construction, fire services and emergency management procedures, the occupants of the proposed building will be afforded adequate protection from exposure to any bushfire occurring within the adjacent Crown reserve.</p>
<i>ii. Provide for a defensible space to be provided around buildings</i>	<p>The proposal maintains defensible space surrounding the building, including at least 17 metres of defensible space between the building and the Crown land adjoining the south-western boundary of the site.</p> <p>The outdoor terrace provides non-vegetated areas immediately surrounding the building. Defensible space is to be maintained as landscaping / lawn in accordance with Appendix 4 of PBP.</p>

Objective	Comment
<i>iii. Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent likely spread to buildings.</i>	<p>The proposed building will have approximately 17 metres separation between the nearest classified vegetation (tall heath) and the southern corner of the proposed building. The available separation is commensurate with BAL-29.</p> <p>It is also noted that the proposed first floor terrace (being a concrete balcony) extends approximately 3 metres from the south-eastern elevation and the southern corner of that terrace would be exposed to radiant heat flux of <40kW/m² (BAL-40) when assessed in accordance with Table A1.12.6 of PBP. Specific recommendations are made for the terrace to be constructed of entirely non-combustible material (i.e., concrete or masonry).</p> <p>The proposal includes construction of detached Class 10 buildings in the south-eastern part of the site. Those buildings are separated from the proposed Clubhouse building by at least 6 metres and (in combination with partly non-combustible construction) do not have potential to result in spread of fire to the proposed clubhouse building.</p> <p>The proposal provides an Asset Protection Zone with defensible space that is located entirely within the site and adjacent Palm Lake Resort MHE (in the same ownership). Subject to maintaining land surrounding the site at Lot 1 DP594864 to the standard of an Inner Protection Area (as per conditions of the BFSA and DA169/2010), the proposed APZ management prevents spread of fire from hazards to the proposed buildings on the site.</p>
<i>iv. ensure that appropriate operational access and egress for emergency service personnel and occupants is available;</i>	<p>Operational access and egress is available to the building directly from Lewis Street. The proposed access also provides through connection to the associated Palm Lake Resort MHE at the south-western boundary.</p> <p>It is noted that Lewis Street provides an operational environment for fire fighting with hydrants located at the frontage of the site.</p>
<i>v. provide for ongoing management and maintenance BPMs</i>	<p>The proposed development relies on the management of APZs on the adjoining land to the south-west that is approved under DA169/2010 for the construction of the Palm Lake Resort.</p> <p>The conditions of DA169/2010 require that land to be maintained to the standard of an APZ, except where identified as a revegetation zone. This results in an area of land at least 50 metres wide (perpendicular to the south-western boundary of the site) being maintained to the standard of an APZ.</p> <p>While the proposed development is reliant on the removal of vegetation and commencement of construction work pursuant to DA169/2010, it is understood that both sites are in the same ownership (Palm Lake). There are no apparent impediments to the application of conditions of consent to ensure that work commences (and continues in perpetuity) on Lot 1 DP594864 prior to completion of the proposed clubhouse development.</p>
<i>vi. ensure that utility services are adequate to meet the needs of fire fighters.</i>	<p>The site is serviced by mains water supply with hydrants located in Lewis Street.</p>

Objective	Comment
	<p>It is also understood that the proposed building would be required to provide fire protection services (such as hydrants and hose reels) in accordance with the NCC.</p> <p>Subject to maintaining access to hydrants (as required under the NCC), the existing and proposed utility services would be adequate to meet the needs of fire fighters.</p>

4.4 Bushfire Protection Measures

As described in Chapter 8 of PBP, an appropriate combination of BPMs is required and must operate in combination to minimise the impact of bushfire and ensure that access and services are available. Importantly, PBP notes that defensible space is to be provided for the scale of the development.

The following BPMs have been identified for the development having regard to the characteristics of the building, occupants and level of bushfire attack.

Table 4.3: Bushfire Protection Measures

Bushfire Protection Measure	Recommendations
Asset Protection Zones	<p>As described in Table 4.2 above, the proposed development is partly reliant on the maintenance of land as an APZ within the adjacent (approved but not constructed) Palm Lake Resort MHE site at Lot 1 DP DP594864.</p> <p>This assessment has been based on an assumption that the adjacent land would be maintained in accordance with current conditions of consent and BFSA to maintain separation (in perpetuity) to potential bushfire hazards on land to the south and west/north-west of the site.</p> <p>The subject site is presently maintained as mown lawn and maintained in a condition consistent with an IPA. Recommendations of this assessment include maintenance of the western part of the site to the standard of an APZ to the specifications of an IPA as per Appendix 4 of PBP.</p> <p>It is noted that the south-eastern part of the site is potentially affected by coastal erosion and removal of vegetation may be incompatible with coastal management objectives. Land located east of the 'erosion boundary' as identified on the site plan (DA00-011) is not required to be maintained as an APZ and may retain vegetation for coastal protection purposes.</p>
Building Construction, Siting and Design	<p>Compliance with AS3959 has been considered in meeting the aim and objectives of PBP.</p> <p>As described in Section 4.1 of this assessment, the proposed clubhouse building is sited 17 metres from the nearest vegetation (tall heath) and likely to be exposed to BAL-29 at the south-eastern and south-western elevations of that building.</p>

Bushfire Protection Measure	Recommendations
	<p>The proposed first floor terrace extends from the south-eastern elevation (toward the hazard) and is subject to BAL-40 (although that building element is constructed as a concrete slab with inherent resistance to bushfire).</p> <p>Recommendations of this assessment include the adoption of construction standards as per AS3959-2018 (or the NCC) as follows:</p> <ul style="list-style-type: none"> • Construction of the south-western and south-eastern elevations (including the entire roof) of the proposed clubhouse building is to comply with the construction requirements for BAL-29 as per AS 3959-2018 (<i>Construction of buildings in bushfire-prone areas</i>) and the additional construction requirements as per Section 7.5.2 of PBP. • The first-floor terrace and any structural supports are to be constructed of concrete with any attached building elements (such as balustrades) complying with the construction requirements for BAL-40 as per AS 3959-2018. <p>While no particular construction requirements apply to any detached Class 10 buildings, consideration should be given to adoption of the following construction standards (as relevant) to provide building construction standards commensurate with the level of bushfire attack:</p> <ul style="list-style-type: none"> • Construction of the detached pool storage and lounge buildings (including attached shade structures) should comply with the construction requirements for BAL-29 as per AS 3959-2018 (<i>Construction of buildings in bushfire-prone areas</i>) and the additional construction requirements as per Section 7.5.2 of PBP. • Construction of the shade structure covering the north-western end of the proposed pool should be constructed using non-combustible materials.
Access Arrangements	<p>Access to the site is available directly from Lewis Street which provides an operational environment for fire fighters. A service road is also proposed to provide vehicular access between the site and adjacent Palm Lake Resort site (Lot 1 DP DP594864). While the service road is not necessary for fire fighter access, the road provides an alternative point of emergency access and egress from the Palm Lake Resort via Lewis Street and may be utilised during a bushfire emergency.</p> <p>Recommendations are made for that service road to be constructed as a 2wd all-weather surface.</p>
Water supply and Utilities	<p>Water</p> <p>The site is serviced by reticulated water supply with hydrants located at the site frontage.</p> <p>It is understood that fire fighting equipment is required to be provided to the building in accordance with Part E1 of the NCC. This is likely to include installation of a hydrant system in accordance with AS 2419.1 hydrants and installation of hose reels.</p> <p>It is expected that compliance with the fire fighting requirements of the NCC would provide a suitable water supply and fire fighting services for bushfire protection purposes.</p>

Bushfire Protection Measure	Recommendations
	<p>Electricity</p> <p>It is to be recommended that all new electricity supply is provided underground.</p> <p>Gas</p> <p>Bottled gas installations may be required. If installed, recommendations are made for bottled gas installations to be located on the north-eastern or north-western side of the building to provide shielding from the bushfire hazards. Recommendations are also made for any above-ground gas service pipes to be metal.</p>
Emergency Management Arrangements	<p>As discussed above, the development is to be used as one of the community facilities available to the residents of the Palm Lakes Resort residential land lease community.</p> <p>While the building will be located on a separate parcel of land, the occupants of the facility will be the residents of the homes within the adjacent/associated resort. Public visitation to the facility would not be a regular occurrence.</p> <p>Emergency management and evacuation plans are to be prepared prior to occupation of the Palm Lake Resort. Those plans would detail procedures for on-site refuge and triggers for evacuation of the resort (if required). It is expected that the emergency management procedures for the Palm Lake Resort could specifically include protocols relating to the use of the proposed Beach Clubhouse.</p> <p>Recommendations are made for an emergency management and evacuation plan to be prepared for the Beach Clubhouse in accordance with the RFS document: <i>A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan</i>.</p>
Landscaping	<p>As described above, the south-eastern part of the site provides separation as required to act as a defensible space between the building and the hazards within the adjacent Crown land.</p> <p>Land within the site is to be maintained in accordance with the specifications of an IPA as per Appendix 4 of PBP and the NSW RFS document <i>Standards for Asset Protection Zones</i>.</p> <p>As described in PBP, careful attention should be paid to vegetation species selection, their location relative to their flammability, minimising continuity of vegetation (horizontally and vertically), and ongoing maintenance to remove flammable fuels (leaf litter, twigs and debris).</p> <p>Any fencing (if proposed) is to be constructed of non-combustible materials.</p>

5. CONCLUSION

The site comprises land described as Lot F DP 420085, 42 Lewis Street, Old Bar. The proposed development involves the construction of a 'Beach Clubhouse' that is proposed to be used as a facility to the adjacent Palm Lake Resort residential land lease community.

The proposed building is not development for a Special Fire Protection Purpose (SFPP) and does not require a Bushfire Safety Authority under the RF Act. While the NCC does not specify any particular construction requirements for bushfire protection, compliance with AS3959 is to be considered in relation to the aim and objectives of PBP.

Chapter 8 of PBP relates to "other" development and requires the following to be met:

1. Satisfy the aim and objectives of PBP;
2. Consider any issues listed for the specific purpose for the development set out in Chapter 8; and
3. Propose an appropriate combination of BPMs.

Importantly, Section 8.3.11 of PBP acknowledges the variation in risk associated with occupants of assembly buildings and recognises that a variety of bushfire safety solutions may apply based on the merits of the situation. As the occupant characteristics of the Beach Clubhouse (being residents of the overall site) do not present the same evacuation challenges as normally expected with large public assembly buildings, the merits of the situation do not necessarily warrant the same level of separation to hazards as expected for SFPP developments.

This assessment has been based on an assumption that the adjacent land will be maintained in accordance with current conditions of consent to DA169/2010 to maintain separation (in perpetuity) to potential bushfire hazards. Recommendations are made for the completion of Conditions of DA169/2010 (relating to APZs and landscaping), and an Approval to Operate being issued, prior to occupation of the proposed Beach Clubhouse.

The proposal has been assessed against the relevant requirements of PBP and a combination of BPMs has been proposed to achieve the aim and objectives of PBP and having regard to the risk profile of the facility. These include the following recommendations relating to building construction standards, APZs, water supplies, servicing, landscaping and emergency management.

6. RECOMMENDATIONS

Asset Protection Zones

- A. Land within the site boundaries is to be maintained (and/or continue to be maintained) as an Asset Protection Zone (APZ) for the purposes of *Planning for Bush Fire Protection 2019*.

Note: This excludes land east of the 'erosion boundary' as identified on the site plan (DA00-001) which may retain vegetation for coastal protection purposes.

- B. APZs are to be maintained in accordance with the requirements of an Inner Protection Area (IPA) as described in Appendix 4, Section A4.1.1 of *Planning for Bush Fire Protection 2019* (PBP) and any grassy vegetation within the IPA is to be maintained to a height <100mm. A clear area of low-cut lawn or pavement is to be maintained adjacent to the proposed building(s).
- C. Prior to occupation or use of the proposed development, adjacent land at Lot 1 DP 594864 (the approved MHE development site) is to be managed as an APZ to the extent and specifications referenced in the Bushfire Safety Authority issued by the NSW Rural Fire Service, as follows:

At the commencement of building works (including Stages 1B, 2 and 3) and then in perpetuity the entire property shall be maintained as an inner protection area (IPA), except for the eastern located area that is identified as a Revegetation Zone within the drawing; prepared by Via Architects, titled 'Proposed Site Plan', noted as drawing No. CP 1.0, noted as Revision 8 and dated 21/10/2022.

The IPA shall be maintained as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the Rural Fire Services document 'Standards for asset protection zones'.

- D. To ensure maintenance of land at Lot 1 DP 594864 in perpetuity, an Approval to Operate (ATO) is to be issued in relation to a Manufactured Home Estate under the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2021* prior to occupation of the proposed Beach Clubhouse.

Building Construction, Siting and Design

- E. Construction of the clubhouse building is to comply with the construction requirements for BAL-29 as per AS 3959-2018 (*Construction of buildings in bushfire-prone areas*) and the additional construction requirements for BAL-29 as per Section 7.5.2 of PBP.
- F. The first floor 'terrace' and any attached building elements attached to the south-eastern elevation of the clubhouse building are to be constructed of non-combustible materials (such as concrete or masonry).
- G. Applying Section A1.8 of PBP, consideration may be given to construction of north-east and north-west facing elevations of the clubhouse building being reduced by one level of construction to meet the requirements for BAL-19 as per AS3959-2018 and the additional construction requirements for BAL-19 as per Section 7.5.2 of PBP.
- H. Consideration should be given to the construction of detached buildings to comply with the construction requirements for BAL-29 as per AS 3959-2018 (*Construction of buildings in bushfire-prone areas*) and the additional construction requirements for BAL-29 as per Section 7.5.2 of PBP.
- I. Consideration should be given to the construction of the shade structure (located over the western end of the pool) with non-combustible materials.

Water Supply and Utilities

- J. The development is to incorporate a fire hydrant system as per the NCC/BCA and the relevant clauses of AS 2419.1 - *Fire hydrant installations System design, installation and commissioning*.
- K. Any new electricity supply required to service the development should be provided underground.
- L. Where bottled gas is proposed:
 - i. It is to be installed and maintained in accordance with AS 1596 and the requirements of relevant authorities.
 - ii. All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation.
 - iii. If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion.
 - iv. Connections to and from gas cylinders are to be metal.

- M. All above-ground water service pipes external to the proposed buildings are to be metal, including and up to any taps.

Emergency Management Arrangements

- N. A Bush Fire Emergency Management and Evacuation Plan is to be prepared for the proposed development consistent with the NSW RFS document: *A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan*). The plan is to include consideration of the adjacent (approved) MHE development.

NOTE & DISCLAIMER:

1. *This assessment relates only to the development described in Section 2 of this assessment.*
2. *This assessment has been based on bushfire protection guidelines as outlined in the document entitled Planning for Bush Fire Protection 2019 (PBP).*
3. *Notwithstanding the precautions recommended, it should always be remembered that bushfires burn under a range of conditions and an element of risk, no matter how small, always remains.*
4. *This assessment does not imply or infer any approval for the removal and/or thinning of vegetation for Asset Protection or other purposes. It is the responsibility of the client/landowner to obtain all necessary approvals in this regard.*

7. REFERENCES

NSW Rural Fire Service (2019)

Planning for Bush Fire Protection 2019

Standards Australia (2018)

AS 3959-2018 Construction of buildings in bushfire-prone areas