

# Appendix G BUSHFIRE ASSESSMENT REPORT



# BUSHFIRE THREAT ASSESSMENT FOR

# PROPOSED RESIDENTIAL SUBDIVISION

**AT** 

# 2 BRANTER ROAD NORDS WHARF NSW

Prepared for: NORDS WHARF DEVELOPMENT GROUP

**10 April 2018** 



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Nords Wharf BTA April 18



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Nords Wharf BTA April 18



#### 1.0 Introduction

It is proposed that a residential subdivision be undertaken within land known as 2 Branter Road, Nords Wharf, NSW (the site).

At the request of the Nords Wharf Development Company (*the client*), Anderson Environment & Planning (AEP) have undertaken necessary investigations to prepare a Bushfire Threat Assessment (BTA) report addressing the proposed development.

This report is specifically intended to assess the bushfire protection measures required by "Planning for Bushfire Protection 2006" (PBP) and the construction requirements of the proposed development in accordance with the provisions of the Building Code of Australia – Volume 2, Edition 2010 and Australian Standard 3959-2009 (AS 3959) – "Construction of buildings in bushfire-prone areas".

As the proposed development is a residential subdivision, it is classed as 'Integrated Development' under Section 91 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). In combination with Section 100B of the *Rural Fires Act 1997* (RF Act), a Bushfire Safety Authority (BSA) is required from the Rural Fire Service (RFS) to enable the development to proceed. This report addresses the required heads of consideration relevant to obtaining a BSA.

For the purposes of referencing, this document should be referred to as:

Anderson Environment & Planning (2018). Bushfire Threat Assessment for Proposed Residential Subdivision off 2 Branter Road, Nords Wharf, NSW. Unpublished report for Nords Wharf Development Company, April 2018.

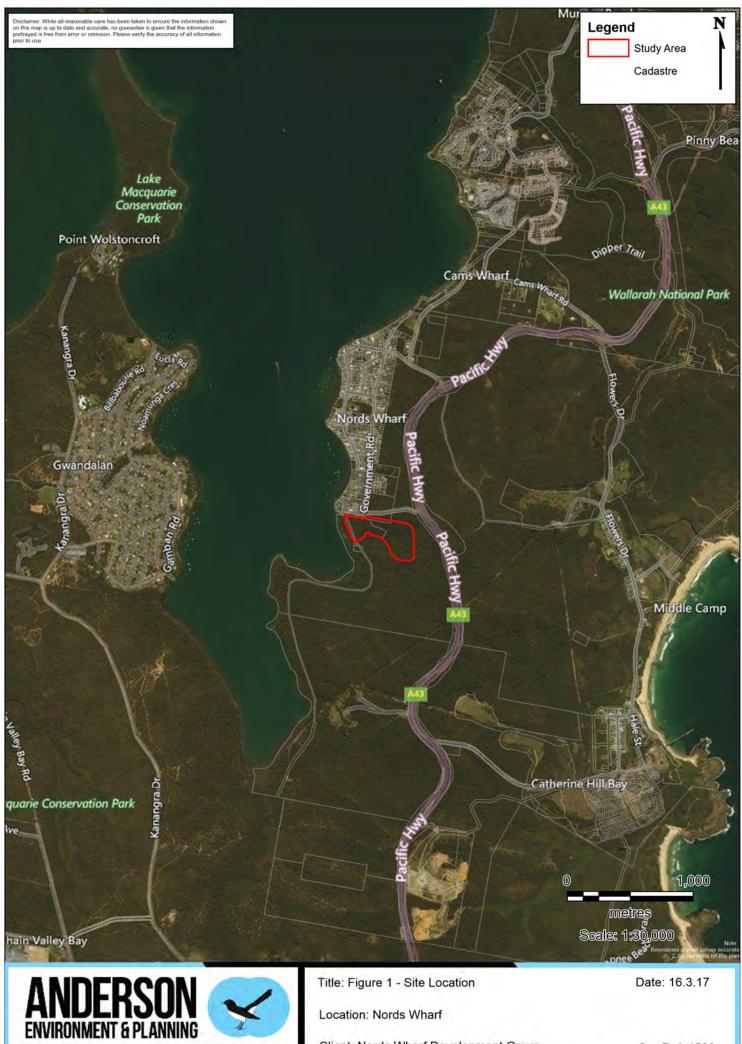


#### 2.0 Site Particulars

The proposed development is located at 2 Branter Road, Nords Wharf, NSW (the site). It consists of various parcels of land, identified as:

- Address 2 and 12 Branter Road, Nords Wharf, NSW.
- **LGA** Lake Macquarie City Council (LMCC).
- **Title Details -**Lots 1 and 2 DP 1180292.
- Study Area Lots 1 and 2 DP 1180292 comprise approx. 10.83ha.
- **Zoning** As per LMCC LEP 2014, the study area is predominantly zoned R2 Low Density Residential, with a small area zoned RE1 Public Recreation in the north.
- **Current Land Use** A small portion of the subject site is currently utilised as a Scout Camp with the remaining vacant native vegetation.
- **Surrounding Land Use** The site is bounded by Branter Road to the north, with residential housing beyond. Bushland zoned E1 in the form of the Lake Macquarie State Conservation Area fringes the study area to the east, south and west.
- **Topography** The subject site is surrounded by low undulating hills, with the land draining south-south-west into Lake Macquarie.

**Figure 1** depicts the extent of the site overlain on an aerial photograph of the locality.



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Client: Nords Wharf Development Group

Our Ref: 1522



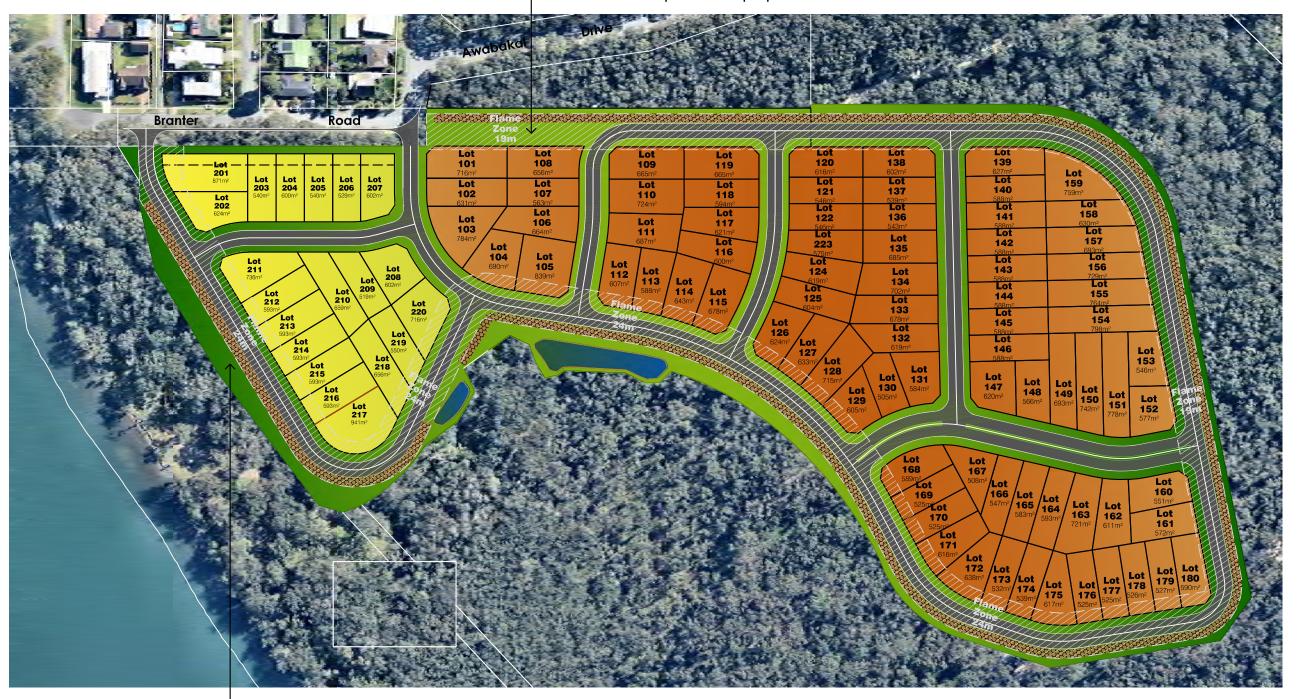
# 3.0 Proposed Development

It is proposed to subdivide the site in accordance with its residential zoning with a preliminary estimate to yield 101 residential lots. The proposed subdivision will include internal roads and other ancillary infrastructure.

The majority of the subdivision will be undertaken as Torrens Title development.

**Figure 2** depicts the plan of proposed development within the study area.

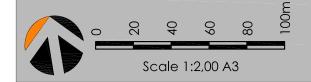
 Managed land including swale and pathway
 refer to concept landscape plan

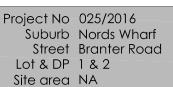


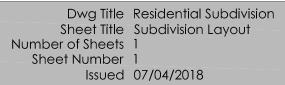
Unmanaged land following subdivision landscaping works

#### Notes:

- 1. Road hierarchy and road reserve allocation as per previously approved Concept plan.
- 2. Where required excessive cut or fill batters will be replaced with retaining walls subject to LMCC approval.
- 3. Adopted 5m wide managed land from nominal kerb line (swale, and or retaining wall) for determination of bushire APZ, refer to concept cross section by ADWJ ref 239566-ESK 003 & 004.
- 4. Refinement of APZ following detail design and negotiations with Council re maintenace of basins etc may reduce required APZ's in some area.











#### 4.0 Bushfire Hazard Assessment

#### 4.1 Bushfire Prone Land Mapping

Examination of the LMCC Bushfire Prone Land (BPL) Mapping (2011) confirms that the majority of the site is mapped as "Bushfire Prone Land – Vegetation Category 1" and "Buffer". This designation has triggered the need for the assessment herewith.



Figure 3 - Extract from Lake Macquarie Council Bushfire Prone Land Map (2011)

Appendix 3 of the PBP (2006) provides the steps required to determine the level of bushfire hazard that applies to the site. Factors influencing the hazard level include:

- The formation of vegetation surrounding the site (as defined by Keith 2004);
- The distance between vegetation and the site (or proposed buildings therein);
- The effective slope for each patch of vegetation; and
- The Fire Danger Index (FDI) of the council area within which the development occurs.



These factors together provide an indication of the level of threat posed to the development from any vegetation retained within the site and surrounding vegetation in the event of a bushfire, and the required mitigation measures to be taken in the form of Asset Protection Zones (APZs) and building construction standards. These measures are detailed further in Section 5 below.

#### 4.2 Vegetation Analysis

The study area occurs within the Greater Hunter region, with existing vegetation subsequently classified with a Fire Danger Index (FDI) of 100 as per Appendix 2 of the PBP.

Vegetation identified surrounding most of the site (aside from the Nords Wharf village interface) poses a bushfire hazard to the development. Survey showed the vegetation constitutes intact native vegetation and is classified as "Forest" under the PBP (see **Figure 4**).

#### 4.3 Slope Analysis

From the plan presented in **Figure 4**, it is apparent that the study area slopes generally south and west towards Lake Macquarie.

Examination of effective slope class for the relevant hazard areas reveals the study area slopes down to the south-and west towards Lake Macquarie. Site slope detail is presented in **Figure 4**. There are two key slope classes identified:

- 1. 0 to <5 degrees downslope towards forest vegetation to the south and west of the study area.
- **2.** Flat / upslope towards forest vegetation to the north and east of the study area.





#### 4.4 Required Asset Protection Zones

Based on the information presented previously, the following derivation of required Asset Protection Zones (APZ's) was concluded.

Fire Danger Index Rating = 100

#### **North**

- Predominant Vegetation Forest (plus developed village area).
- Effective slope Upslope / Flat.
- Required Minimum APZ 20m (to Forest areas).

#### **East**

- Predominant Vegetation Forest.
- Effective slope Upslope / Flat.
- Required Minimum APZ 20m.

#### **South**

- Predominant Vegetation Forest.
- Effective slope >0 -5 degrees downslope.
- Required Minimum APZ 25m.

#### West

- Predominant Vegetation Forest.
- Effective slope >0 -5 degrees downslope.
- Required Minimum APZ 25m.

Note that the derived APZ setbacks are based upon the need to conform to Level 3 construction as per AS 3959 for a building of Class 1 or 2 under the BCA. Construction standard options are discussed further in the report.



#### 4.5 Water Supply

It is expected that the development will be serviced by a reticulated water supply system extended from existing and proposed residential areas.

The reticulated water supply and street hydrant access will need to be delivered in accordance with AS 2419.1–2005.

#### 4.6 Access and Egress

The proposed development will be serviced via Branter Road and Awabakal Drive to Pacific Highway to the north-east, with secondary access via Branter Road and Government Road through Nords Wharf to the north. Two access points are proposed to Branter Road.

Roads proposed within the site are in compliance with Section 4.1.3 of the PBP 2006. A perimeter road between proposed lots and vegetation in the north, east and south will provide the required defendable space between development and existing hazards.

If such occurs, it is considered that the proposed access and egress arrangements are suitable.

Emergency response times would be expected to be prompt with a NSW Rural Fire Brigade station in Nords Wharf Road, approx. 1.5km away.



#### 5.0 Bushfire Hazard Determination

#### 5.1 Construction Standards - AS 3959-2009

As outlined above. The identification of proximate hazards post development has resulted in the need for APZs, and hence consideration of related construction standards.

#### **Bushfire Impact and AS-3959**

The Australian Standard 3959-2009 Construction of buildings in bushfire prone areas, details six (6) levels of construction standards that are required for buildings, depending upon the expected impact of a bushfire from adjacent areas. These Bushfire Attack Levels (BALs) are measured from the edge of the hazard and incorporate vegetation type and slopes (see **Section 4** above) to determine the relevant distance for each BAL rating (and associated construction standard). The relationship between the expected impact of a bushfire and the BAL rating is provided in **Table 1** below.

Table 1 - BAL Construction Standard

Bushfire Attack Level	Maximum radiant heat impact (kW/m²)	Level of construction standard under AS 3959-2009				
Low		No special construction requirements				
12.5	≤12.5	BAL – 12.5				
19	12.6 to 19.0	BAL – 19				
29	19.1 to 29	BAL - 29				
40	29 to 40	BAL – 40				
Flame Zone	≥40	BAL – FZ (Not deemed to satisfy provisions)				

**Figure 5** depicts the BAL construction standards applicable for the proposed development. Specifically, these BALs are:

#### North

<19m: BAL - Flame Zone</li>

• 19 to <25m: BAL – 40

• 25 to <35m: BAL – 29

• 35 to <48m: BAL – 19

• 48 to <100m: BAL – 12.5



#### **East**

• <19m: BAL - Flame Zone

• 19 to <25m: BAL – 40

• 25 to <35m: BAL – 29

• 35 to <48m: BAL – 19

• 48 to <100m: BAL – 12.5

#### **South**

• <24m: BAL - Flame Zone

• 24 to <32m: BAL - 40

• 32 to <43m: BAL – 29

• 43 to <57m: BAL – 19

• 57 to <100m: BAL – 12.5

#### West

• <24m: BAL - Flame Zone

• 24 to <32m: BAL - 40

• 32 to <43m: BAL – 29

• 43 to <57m: BAL – 19

• 57 to <100m: BAL – 12.5

These BALs are to be adopted as the minimum requirement for each specific zone. Any lessening of these requirements would require reassessment to ensure increased APZ's are provided, or other acceptable mitigation measures are in place.





#### 6.0 Other Considerations

The following analysis applied to the site in reference to environmental features present.

- **Riparian Corridors** several ephemeral drainage lines traverse the development area. These will be developed and drainage handled by appropriate civil works.
- **SEPP 14 Coastal Wetlands** none present.
- **SEPP 26 Littoral Rainforests** none present.
- **SEPP 44 Koala Habitat** The site was determined to be Potential Koala Habitat under SEPP 44 but was not determined to constitute Core Koala Habitat and as such no further provisions of SEPP 44 apply to the proposed development.
- **Areas of geological interest** none present.
- Environmental protection zones or steep lands (>18°) none present.
- Land slip or flood prone areas none present.
- National Parks estate or various other reserves the site is surrounded on three sides by National Park estate. None of the development or the required APZ lands etc. are within the National Park.
- **Threatened species matters** the site has approvals relating to an offset land swap creating adjacent National Park areas.
- **Aboriginal Heritage** none known to be present.



#### 7.0 Conclusion

Investigations undertaken for this Bushfire Threat Assessment report have revealed that the proposed development will be affected by bushland hazard adjoining the site in all directions.

The proximate Forest hazard has necessitated the need for application of APZ setbacks for the development interface, and also the application of building construction levels for proximate dwellings. All Asset Protection Zones (APZs) have been fully incorporated into the subdivision design and are wholly located within the development site such that there is no direct impact on any neighbouring lands.

Suitable access / egress will be provided via a perimeter road system and two connections to Branter Road and the established village of Nords Wharf to the north. Roads proposed within the site are in compliance with Section 4.1.3 of the PBP 2006. A perimeter road between proposed lots and vegetation in the north, east and south will provide the required defendable space between development and existing hazards.

An expansion of the existing reticulated water supply system for the existing dwelling is expected to service the site, and street hydrant access is to be delivered in accordance with AS2419.1 - 2005.

It is considered that the proposed protection measures, principally APZs and relevant construction standards, comply with the relevant requirements of Planning for Bushfire Protection and AS-3959. When applied, these measures should provide adequate protection to life and property within the proposed development in the event of a bushfire occurring in the immediate locality.

However, it can never be guaranteed that the site and residents and property therein will not at some stage be affected by a bushfire event.



#### 8.0 References

Environment al Planning & Assessment Act 1979. NSW Government.

Keith D (2004). Ocean Shores to Desert Dunes. DEC, Sydney.

Lake Macquarie Council (2011). Bushfire Prone Land Map. 2011.

NSW Rural Fire Service (2006). *Planning for Bushfire Protection*. NSW RFS / DoP, December 2006.

OEH (2017). Threatened Species, Populations and Ecological Communities website. (<a href="http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/</a>)

Rural Fires Act 1997. NSW Government.

Rural Fires Act Regulation 2008. NSW Government.

Standards Australia (2009) AS-3959 Construction of Buildings in Bushfire-Prone Areas.



#### **APPENDIX A**

**SITE PHOTOGRAPHS** 





Views west through Forest vegetation towards Lake Macquarie.







View south into Forest (above) and to the east (below).







23 June 2017

Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Attn: Emma Butcher

Subject: Nords Wharf Residential Development (Southern Estate)

Modification Of Concept Plan (MP10 0088) -

Lot 1 & 2 DP 1180292,

2 & 12 Branter Road, NORDS WHARF NSW 2281,

Thank you for your correspondence dated 18 May 2017 and the opportunity for Council to provide comment on the proposed modification to the Concept Plan.

Council has reviewed the application documentation and offers the following comments:-

- 1. Bushfire Figure 5 of the Anderson Bushfire Threat Assessment indicates an Asset Protection Zone (APZ) extending inwards from the edge of the parent lot boundary. Note that this generally corresponds with the BAL FZ. Much of the APZ is proposed to be located on the future Public road reserve. Council does not have an issue with APZ located on road reserves but Council will not maintain APZ's. ie Council will not maintain APZ's where they extend into bushland areas. APZ's shall not start until the area of the road reserve that Council maintains in its normal duties such as the carriageway and associated drainage swales. This will impact the location of the APZ and will in many instances force the APZ inwards onto the lots. Currently many of the lots have BAL 40 within their front setback and then BAL 29 where future dwellings would be. By moving the APZ the likely dwelling location will be BAL 40 or FZ. RFS is very unlikely to support this. An example of this would be lots 115,126 129 7 168 180. These lots all rely on an APZ extending into batter areas beyond the roadside swale.
- Crown Road Council understands that the applicant does not have tenure of the crown road reserve (proposed lots 301 - 306). In the current Concept Plan and approved DA this crown road reserve becomes a public road. It is not transferred to private ownership.
- Cut / Fill There is no detail as to proposed cut and fill nor any other preliminary civil works details. This lack of information compromises Council's ability to provide constructive comments.
- 4. Traffic The modification proposes to limit the intersection of Awabakal Dr and the Pacific Hwy to Left in / Left out. This will significantly alter the local road traffic flows. The application does not sufficiently address the impact on the local road network as a result of the proposed modified access /egress arrangements

from the Pacific highway. In particular, the impact on the intersection of Nords Wharf Road and Government Road, should be addressed.

- 5. Landscape buffer The current concept plan includes for large lots where the lots are impacted by the Branter Road landscape buffer. The revised lot layout includes proposed lots that are much smaller. Council's experience with successfully achieving landscaping buffers on smaller lots has not been positive.
- 6. Urban Design Guidelines the proposed modifications to the concept lot layout are inconsistent with the Urban Design Guidelines approved for the site. The Department should consider whether revised Urban Design Guidelines are required.
- 7. Attached are 3 submissions that were received by Council and are being forwarded for your consideration.

Any information received in support of your application will be publicly available on the City's website. Third parties may access any information under the Government Information (Public Access) Act 2009. Council may also reproduce information in Council reports or in Court proceedings.

Should you require further information, please contact the undersigned on 4921 0455 or by e-mail on dpavitt@lakemac.nsw.gov.au.

Yours faithfully

**David Pavitt** 

**Principal Development Engineer** 

**Development Assessment and Compliance** 

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#### Submission 1 - Pam Percic

Nords Wharf Residential Development (Southern estate)

MP10\_0088 MOD 1 Modification to Nords Wharf Residential Development (Southern Estate) Concept Plan.

Pamela Percic 6A Central Ave, Nords Wharf NSW 2281 Submission:

I am against a number of the proposed changes to the existing approval for the above development.

In relation to the proposed changes to the current approval for the development of southern Nords Wharf, a number of issues are apparent.

 If Awabakal Dr is changed to a 'left in left out' intersection there are immediate implications, being: 100% of the traffic in Nords wharf that needs to turn right, that is south, will have to travel through the village

The condition of the roads in Nords Wharf would not cope with 100% of the traffic now, let alone with 200 plus more cars in the village – all roads are currently falling apart with loose aggregate, holes and disintegration.

More than half that traffic would move through the village past the school and only playground and have to go around a right hand blind corner – not ideal as people walk on the road in this area as there are no footpaths

The rest of the traffic would go through Government Rd where there is an existing hazardous corner on a steep hill - a cross intersection with extremely poor vision to the right when turning to go to the highway. This traffic would also go past the only kindergarten which is situated on a steep slope on the side of a hill with poor vison and parking – if cars park on both sides of the road there is not room for 2 travelling cars to pass.

These traffic movements are multiplied by 2 as no-one could turn into Awabakal Dr when driving south on the highway from Swansea or Catherine Hill Bay, a major inconvenience for the 50% of the population who live at the southern half of the village, and this percentage would increase when another 80-100 houses are built in the south.

Residents and children use the roads when walking around Nords wharf as there are limited pathways and none around the majority of the village.

The statistics provided by the RMS showed that 40% of the population use Awabakal Dr to turn to the south, or right from Awabakal Dr. There has been one only reportable accident on the Awabakal Dr / Pacific Highway intersection in the past 6 years. It would appear that this intersection is a safe intersection.

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To change this intersection to a 'left in let out' intersection would create incredible risk and safety issues, noise and added car pollution for the community and inconvenience a minimum of 40% of the population daily.

- 2. To put lights at the Nords Wharf Rd and Pacific Highway intersection is not justified in any way there have be NO reportable accidents at this intersection in the last 6 years and NO justification for lights. If both of the suggested proposals were implemented the inconvenience, time and travel wastage and general frustration would be enormous and absolutely of NO benefit to the community of Nords Wharf. As frustration at lights increased people would be looking for any exit without lights and at this time means they would end up at Cams Wharf Rd and the Pacific Highway which again is a very dangerous intersection that at this time is not being rectified.
- 3. The removal of any monetary contribution to the community for leisure, children or social benefit obviously there are a number of services that would need to be instigated or improved with another 200-300 residents in the village.

Bus services would have to come through the village to Morisset railway station as the only bus going to any railway currently takes over 2 hours.

Footpaths would have to constructed on ALL roads to ensure pedestrian safety.

The boat ramp at south Nords Wharf would have to upgraded and some parking provided – currently there is none but if 200-300 people move into the area on the lake they would expect to be able to launch a boat safely and be able to park their car and trailer.

A children's park would need to be constructed in Gathercole Park for the children of Nords Wharf.

A safe swimming enclosure (shark proof) would have to be constructed either at Nords Wharf or Cams Wharf – accessible for the residents of Nords Wharf

There are numerous other changes from the initial approved development, namely the 100 lots instead of 84 or 90, changes to the fire hazard reduction precautions etc but the primary ones I believe are those I've outlined.

I am very grateful for the opportunity to put forward the issues I can foresee if the proposals go ahead.

My understanding is that there was little thought and no research into the proposal to change the lights from 'seagull' lights at Awabakal Dr to Nords Wharf Rd and I VERY STRONGLY object to this change. Nords wharf would be better off with NO lights anywhere if necessary, definitely no lights at Nords Wharf Rd and if lights are necessary then the only place for them is at Awabakal Dr allowing both north and south of the village to be accessed from the Awabakal Dr and Pacific Highway intersection.

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#### Submission 2 - David Russell

David Russell 93 Government Road Nords Wharf NSW 2281

12 July, 2017

The General Manager Lake Macquarie City Council Lake Macquarie City Council Administration Building, 126-138 Main Road, Speers Point, NSW 2284

#### Nords Wharf Residential Development (Southern Estate) – Proposed Modification

Dear Sir/Madam,

Further to recent correspondence received from NSW Department of Planning and Environment, (ref. MP 10\_0088 MOD 1) dated 18 May 2017, I have reviewed the available documentation and provide the following comments for Council's consideration/response:

- 1. The correspondence refers to Urbanise as the Proponent. Documentation attached to the Urbanise letter (no reference provided) dated 10 May 2017, identifies Coal & Allied Industries Pty Ltd as the existing Proponent and "Nords Wharf Development Company Pty Ltd" (NWDC) as the proposed Proponent. It is unclear whether the letter is in error or whether Urbanise is acting on behalf of one of the above parties
- 2. The Department of Planning and Environment website below is referenced in the above letter. http://www.majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=8352

This website contains conflicting information as follows:

- I. A Letter dated 12 April 2017, from Coal & Allied Pty Ltd which is described as Land Owners Consent MP 10\_0088 MOD 1- Nords Wharf.pdf (74.90 KB)
- II. A letter dated 22 March 2017 from Nords Wharf Development Company Pty Ltd which is described as Appendix H Owner's commitment to legal fees.pdf (26.57 KB)
- III. Correspondence from Intersect Traffic dated 21 March 2017 states: "Nords Wharf Development Company Pty Ltd are considering the purchase of land off Awabakal Drive, Nords Wharf from Coal and Allied for which an approval exists for an 84 lot residential subdivision"

Clearly the land owner is Coal & Allied at the date the above documents were made available and the transfer of ownership is subject to the ability of NWDC to satisfy clause 1.1 of Schedule 8 of the VPA dated 12 March 2012. Item (ii) above is misleading because the commitment is made by an entity that is not the owner

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- 3. What is the legal status of the letter from Nords Wharf Development Company Pty Ltd (NWDC) with regard to its commitment to pay ministerial legal fees and associated costs. If Urbanise is the Proponent, what is the relevance of the NWDC letter and what security is offered to the state of NSW (aka ratepayers) for these costs in the event that the proposed modification is rejected. It is noted that NWDC has an ABN and was incorporated on 07 Dec 2016, as an Australian Private Company located in NSW. Under the circumstances, it is important to identify whether legitimate funding is available for costs incurred by the state of NSW in relation to this matter. Whilst Coal & Allied has provided consent for NWDC to enter discussions with the Department, it has not made any commitments in relation to costs. Council's review should take into account Item 5 of the Urbanise submission Nords Wharf Development Company Pty Ltd which requests that all bank guarantees be removed from the Concept Approval and VPA
- 4. In Item 2 of its letter dated 10 May 2017, Urbanise Consulting (Urbanise) states that "The implication of the proposed changes is that a minor inconvenience may be encounter by a portion of the Nords Wharf population wishing to travel to the South of which 40% of journeys are. This inconvenience (estimated at approximately 2 minutes additional travel time for 20% of the Nords Wharf population) when considered against road safety is easily justified". This statement is misleading for the following reasons:
  - a) For southbound travel, measurement using NSW Government software "SIXMAPS" indicates that existing residents travelling from Branter Road and Berncla Avenue would have to travel an additional 2.6 km to reach the same location on the Pacific Highway where it intersects Awabakal Drive. To be clear, if the right turn onto the Pacific Highway southbound was banned, it would be necessary for residents to travel 3km along Government Road, Nords Wharf Road and the Pacific Highway to arrive at the same location that is currently a 400 metre trip. This additional travel would apply to all vehicles including heavy vehicles that could cause damage to local roads maintained by Lake Macquarie City Council
  - b) Expanding on the point above, during the construction phase of the new subdivision, additional vehicles would include but not be limited to the following:
    - (i) Heavy multi-axle trucks delivering major construction equipment
    - (ii) Truck and dogs delivering quarry materials for road construction
    - (iii) Semi-trailers delivering pipes for stormwater drainage
    - (iv) Concrete agitators delivering ready-mixed concrete
    - (v) Concrete boom pumps
    - (vi) Semi-trailers with timber house frames
    - (vii) Semi-trailers with bricks, blocks and other construction materials
    - (viii) Endless streams of trades vehicles bringing workmen in and out on a daily basis

With restricted traffic movements at the Awabakal Drive / Pacific Highway intersection, the above additional traffic entering and leaving at all hours for six or seven days a week, would create unacceptable hazards to the local community, preschool children and school children. The impact would be to destroy the current Quiet Enjoyment to which residents are entitled

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- c) As indicated on the current version of "SIXMAPS", the vast majority of Nords Wharf residents are located south of Nords Wharf Road. Banning the right turn out of Awabakal Road for southbound traffic has the potential to increase the length of journey and travel time for the vast majority of residents and not only 20% as suggested in the Urbanise correspondence
- d) It is unclear how the Urbanise has arrived at its conclusion that the "minor inconvenience" which results from banning the right turn from Awabakal Road onto the Pacific Highway is "easily justified", when Urbanise has not been able to present the facts correctly as noted above. In the fifth bullet point of Item 2, no road safety audit or statistics have been presented to support the Urbanise statement in relation to road safety
- e) The Urbanise reference to road safety is incongruous. Clearly, the consequences of forcing more traffic onto local streets with poor vertical geometry such as Government Road produces a poor safety outcome
- 5. In Item 2, Urbanise states "The proposed signalization works at Awabakal Drive are cost prohibitive to the proposed development for a 90 or 101 lot development". The proposed signalisation works at Awabakal Drive were approved by RMS in the original proposal for an 84 lot subdivision and additional traffic generated by that subdivision would not have impacted adversely on the existing Nords Wharf community when travelling southbound
- 6. The existing undesirable right turn from Government Road northbound into Nords Wharf Road would be part of the primary southbound traffic route for a large proportion of existing Nords Wharf traffic and all new traffic generated by the proposed modification. This intersection is controlled by a stop sign and both stopping sight distance (SSD) and approach sight distance (ASD) for westbound Nords Wharf Road traffic approaching Government Road is severely restricted by the presence of a cutting on Government Road that hides vehicles approaching the intersection. This existing hazard would be exacerbated by any increase in traffic volume
- 7. Government Road has poor visibility for both northbound and southbound traffic at the crests near Omaru Crescent and Central Avenue. Introducing additional traffic onto Government Road presents an unacceptable outcome due to extremely poor SSD at the crests. It is likely that the vertical geometry of Government Road at these locations will not comply with the Austroads Road Design Guide. No road safety analysis has been provided by the Proponent to consider impacts at the Nords Wharf Road / Government Road intersection, or increases to traffic on Government Road generally after the proposed right turn ban from Awabakal Road into the Pacific Highway is implemented
- 8. The modification proposal does not consider the impact it would have on emergency services and the ability of emergency response vehicles to readily access all areas of Nords Wharf using currently allowed intersection movements versus the restrictions proposed. Once installed, a median barrier on the Pacific Highway adjacent to Awabakal Drive would present both a barrier and a road safety hazard. Emergency access and egress options for Nords Wharf are currently unrestricted and changing such circumstances to provide cost savings to a property developer cannot be supported

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- 9. If a reasonable solution such as a signalised intersection at Awabakal Drive makes the subdivision uneconomic, then it would be better for it not to proceed, rather than propose options that add unnecessary impost to the existing community. Banning right turn movements at Awabakal Drive has potential to disadvantage most of the Nords Wharf community by introducing an increase in travel distance and time. Forcing more vehicles to use Government Road would result in an adverse safety outcome due to the poor geometry at crests. Any cost benefit analysis needs to take into account the benefits to all stakeholders and not simply assume that all existing stakeholders (except for the property developer) must be inconvenienced for the benefit of the property developer
- 10. As a general comment, it would be reasonable to suggest that the submission from Urbanise dated 10 May 2017, falls short of providing reasonable justification for the proposed modification and apart from the errors and omissions identified above, contains other examples of sloppy or careless preparation including but limited to the items below:
  - a. In the first sentence, the letter states "we have complied the following request". Compiled would have been more appropriate
  - b. The fourth paragraph states: "In addition a revised intersection arrangements would also significantly assist in delivering cost effective lots to the market". It fails to note that the alleged benefit would create a poor safety outcome and present a time and distance hurdle to most existing Nords Wharf residents/visitors and all future residents/visitors in the new subdivision
  - c. In the fifth paragraph "The principals of the current approval and supporting reports". Principles would have been more appropriate
  - d. Proposed alterations to the Concept Approval under Section 750 and 75P of the Environmental Planning and Assessment Act 1979 are approved as a track-changes document. The document is misleading because it contains signatures from the approval dated 12 July 2012
  - e. The identified changes resiles from earlier commitments and offers significantly less value to the community whilst increasing the number of residential lots from 84 to 101
  - f. Urbanise claims that the revised lot layout provides "a superior outcome over the approved layout which ran lots longitudinally down the slope creating lots with 6 to 8m of fall front to back. The revised layout now responds to the slope by running the lots across the lots which minimise cut and fill resulting in more buildable and desirable lots". These cost savings along with greater income from an increase in the number of lots appears to be in inconsistent with the Urbanise proposal to walk away from community commitment funding
  - g. in its recommendation, The Intersect Traffic Report dated 21 March 2017, makes the astonishing conclusion that "RMS and Lake Macquarie City Council could support the proposal which includes the conversion of the Pacific Highway / Awabakal Drive intersection to a left in and left out intersection and the signalisation of the Pacific Highway / Nords Wharf Road intersection as the proposal would not adversely impact on traffic flows on the state and local road networks". On the contrary, it can be readily demonstrated that the local road network and neighbourhood in general would be negatively impacted by the substantial increase in traffic

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- h. When referring to the Pacific Highway / Awabakal Drive intersection, the Intersect Report concludes: "As such whether the proposed subdivision proceeds or not intersection upgrade works will be required to be carried out prior to 2016. This is surprising when considering that the Report is dated 21 March 2017 and no works have been carried out to date
- i. The Intersect Traffic Report does not address the checklist provided in Section 1.1 Lake Macquarie Council's Traffic Impact Statement and Vehicle Access Guideline
- j. Environmental Planning and Assessment Act 1979, Section 90 Matters for Consideration include a number of items not addressed by the Urbanise document, including but not limited to the existing and likely future amenity of the neighbourhood
- k. No consideration has been given to increased parking requirements at the existing boat ramp adjoining the proposed development. The existing ramp is overcrowded during peak periods and ramp users commonly park their vehicles on grassed areas set aside for picnickers and families. This illegal use of the reserved area is rarely policed and will only worsen after the new subdivision is developed
- I. The Intersect Traffic Review does not fulfil the requirements of Austroads Guide to Traffic Management Part 12: Traffic Impacts of Developments (2016 Edition). The Review specifically targets an outcome without reviewing alternatives and does not contemplate the impact on local road intersections within the Nords Wharf area. The Review has taken an outdated report produced in 2010 under different prevailing standards and attempted to update the conclusions on the basis of a single day of traffic counts for one hour. SIDRA is useful as a modelling tool, but as with all models, if the inputs are flawed, the output will be no better
- m. The Nords Wharf Progress Association at its meeting on Tuesday 11 June 2017, made it clear that residents wishes are for the Section 94 contributions provided by the developer to be utilised for the benefit of the local Nords Wharf Community. If the development proceeds and when the funds are secured, there needs to be consultation with the community on how the funds should be utilised. With a significant increase to the size of the local community, there will be a corresponding need for better and upgraded local facilities. Council should not contemplate taking the Section 94 funds and placing them into the consolidated revenue account because that would be a travesty of justice
- n. The Urbanise letter states: "The proposed development has and will contribute greatly to the Nords Wharf community through payment of the Secction 94 contributions being \$1,680,000 and possibly increased to \$2,020,000 (proposed modification increases yield by 17 lots or approximately \$340,000 additional \$94 fees collected by Council), intersection upgrades and 116 hectares offset land dedications already provided". This is misleading because there is no guarantee that Council will provide all or any of the Section 94 contributions for works that will benefit the Nords Wharf community. Council needs to address this concern

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- o. Whilst Item 4 in the Urbanise letter states that the retail value of the lots it intends to bring to the market will be \$220,000 \$240,000, despite the smaller lot size, this valuation appears well below what similar boutique lots are selling for in nearby areas such as Murrays Beach. If the subdivision proceeds it has the potential to provide for very desirable residences in a pristine lake environment. This outcome is more likely to occur if the Awabakal Road / Pacific Highway intersection is signalised and the
  - Proponent honours the social benefit commitments made in the existing VPA. The VPA commitments would enhance the neighbourhood and make the locality more desirable
- p) As a sign of good faith and an indication that it stands behind the valuation provided, would Council request that the proponent consider providing additional contribution to the Nords Wharf community with all of the sale proceeds where they exceed \$240,000 per lot?
- 11. The Proponent has provided a budget costing from RPS for the modified Nords Wharf Road/Pacific Highway intersection signalisation. The Proponent has stated: "In addition a revised intersection arrangements would also significantly assist in delivering cost effective lots to the market". Without a cost comparison for construction of a signalised intersection at Awabakal/Pacific Highway intersection, it is unclear how the Proponent can support such a statement
- 12. Contributions to the community reduced or eliminated:

In the originally proposed development, Coal & Allied had provided an initiative contained in the Urbis Concept Plan Environmental Assessment dated November 2010, in which is states "The \$5 million allocation may be used for sustainability initiatives for future residents, additional

infrastructure to support existing and future residents, educational and or community programs. In

summary, for Nords Wharf the list of initiatives relate to:

- a. Employment generation.
- b. Boat Ramp Facilities.
- c. Parks/Open Space.
- d. Footpath Extension.
- e. Sustainability.
- f. The local Aboriginal Community.
- g. Walkways external to the development site".

The current modification proposal falls far short of the initial offerings from Coal & Allied

13. In summary, the documentation provided by the Proponent does not justify changing the currently approved intersection arrangements for signalising the Awabakal Drive/ Pacific Highway intersection.

#### Conclusion

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A more suitable solution would be for the Proponent to construct a signalised intersection at Awabakal/Pacific Highway as required by the then Department of Planning and Infrastructure approval dated July 2012. This approved solution fixes the problem at the source, rather than attempting to move the problem to another location and cause adverse impact for existing residents. I note that the new subdivision at Catherine Hill Bay has redeveloped Montefiore Road and signalised the intersection with the Pacific Highway to avoid the issue of increased traffic traipsing through Flowers Drive and the existing village of Catherine Hill Bay. The similar and also appropriate solution approved for Nords Wharf in July 2012, should be adopted by the Proponent.

At a later date to be determined by further traffic analysis and road safety audits, construction of a signalised intersection at Nords Wharf Road/Pacific Highway could be funded by a future property developer or RMS if appropriate.

LMCC needs to responsibly address the issue of Section 94 fee distribution so that the local Nords Wharf Community is the major beneficiary.

Yours Sincerely,

David Russell BE (Civil), MIE(Aust), NPER

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#### Submission 3 – Sue Ehinger

Dear David.

Thank you for coming to speak at our Progress Association meeting in June. Of course you are now aware of the community's concerns regarding the proposed changes to the Awabakel Drive/Pacific Hwy intersection as in our opinion they will mean:

- 101 new houses means much more traffic especially in the peak times.
- Construction traffic including heavy vehicles will be directed through our village.
- Increased traffic down Government Road/Marine Pde/Nords Wharf Rd in order to access the Highway if going South.
- Safety of all pedestrians and children on bikes will be compromised due to lack of footpaths. There are only 8 houses on Government Road with a footpath! When we go to the park with our grandchildren we are forced to walk on the road which is narrow and at times busy with a very poor surface so difficult with a stroller.
- The pre-school access will become dangerous as visibility is poor due to the steep hill when travelling north, and there is no parking other than on the street.
- Increased traffic outside the school will compromise the safety of our children during drop off/pick up times and when using the park opposite. The school population is already predicted to double in size to 250 students within 5 years from the new developments at Murrays Beach and Catherine Hill Bay.
- More traffic incl. trucks using Government Rd will impact on the BLIND corner of Government Rd and Nords Wharf Rd the Stop sign doesn't improve this corner and with 100 + more vehicles going this way is inviting accidents.
- It will be even more dangerous for residents with steep driveways and low visibility in Government Rd and Nords Wharf Rd when exiting their properties.
- Not enough parking for the increase in residents and visitors accessing the public waterfront land in front of the development.

101 houses up from 84 is also excessive given the limited infrastructure in Nords Wharf.

More pressure on our community – parking, road quality, school, pre-school etc – with no additional monetary contribution.

Even if the development goes ahead in its current form, how much of the S94 fees paid by the developer will go towards upgrades in our village. It is about time that we receive something

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substantial from Council - improved road surfacing, bike & walking paths and exercise equipment from NW to Swansea, a skate ramp at Cams Wharf, an enclosed swimming section at Cams Wharf are suggestion.

• **Developer wants to withdraw previous commitments** to the Nords Wharf community – no upgrade to Branter Rd boat ramp, no extra parking for the boat ramp, no upgrade to Gathercole park, no contribution to the pre-school or playgroup - these agreements were in the original agreement. This was surely an important factor in accepting the development in the first place.

Please take all this into consideration when you make your submission. A traffic light at the top of Awabakel Drive is the most logical decision. Most problems will disappear if that exit/entrance to Nords Wharf has a traffic light.

Kind regards,

Sue Ehinger

25 Nords Wharf Rd, Nords Wharf

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Level 6, 10 Valentine Avenue Parramatta NSW 2150 Locked Bag 5020 Parramatta NSW 2124 DX 8225 PARRAMATTA Telephone: 61 2 9873 8500 Facsimile: 61 2 9873 8599

heritagemailbox@environment.nsw.gov.au

www.heritage.nsw.gov.au

File No: EF10/24812 Ref No: DOC17/279185

Ms Emma Butcher
Planning Officer
Modification Assessments
Department of Planning & Environment
GPO Box 39 SYDNEY NSW 2001

Sent by e-mail to: emma.butcher@planning.nsw.gov.au>

Dear Ms Butcher

#### MODIFICATION REQUEST - MP10\_0088 MOD 1 - NORDS WHARF CONCEPT PLAN

Reference is made to your email received on 17 May 2017 requesting comment from the Heritage Council of NSW (the Heritage Council) for the above modification proposal.

Previous advice via letter dated 17 December 2010 regarding this matter noted that the site does not have any inherent European historic heritage value nor does it contain items of historical heritage. Therefore, the proposed development is unlikely to have an adverse impact on any known historical heritage items. It was recommended that an 'unexpected finds' condition be placed on the development. It was also recommended that an Interpretation Plan for the former Kanagra Scout Camp site be required to be submitted to the Department with the first subdivision application.

The documents provided in the links with your email have been reviewed. It is noted that the modification application involves revision of the layout of the proposed subdivision and various traffic management measures including modification of existing or proposed traffic intersections.

It is considered that the proposal is unlikely to have any impacts on historic heritage items or historical archaeology. Therefore, no further recommendations for matters to be included in any Conditions of Approval for the Modification are made.

If you have any questions arising from this letter, please contact Siobhan Lavelle, Senior Team Leader, Archaeological Heritage at the Heritage Division, Office of Environment and Heritage on telephone (02) 9873 8546 or by e-mail: siobhan.lavelle@environment.nsw.gov.au.

Yours sincerely

Rajeev Maini

Acting Manager, Conservation Heritage Division

Office of Environment & Heritage

As Delegate of the Heritage Council of NSW

14 June 2017



DOC17/280390-2 MP10 0088 MOD 1

Ms Emma Butcher
Planning Officer, Modification Assessments
Department of Planning and Environment
emma.butcher@planning.nsw.gov.au

Dear Ms Butcher

#### Modification Request - Nords Wharf Concept Plan - MP10 0088 MOD 1

I refer to your email dated 17 May 2017 seeking comment from the Office of Environment and Heritage (OEH) in relation to the above mentioned modification. OEH has reviewed the supplied documents and provides the following comments.

ALL VILLE

OEH understands that the Department of Planning and Environment has received a request from Urbanise Consulting (the Proponent) to modify the Concept Plan MP10 0088 for the Nords Wharf Residential Development (Southern Estate). The modification request seeks to modify the concept plan relating to the number of lots, intersection works, Statement of Commitments and Bank Guarantee amount; and alter the intersection designs associated with the project.

OEH notes that the direct impacts of the intensified development appear to be contained within the land already zoned for residential development. As impacts to biodiversity were offset at the rezoning stage, OEH has no further comment in relation to direct impacts within the R2 zoned land.

However, the submitted documentation fails to provide sufficient analysis or assessment of the potential indirect impacts from the increased lot yield to the adjoining national park reserve. This includes:

- analysis and impact assessment of increases to stormwater run-off and changes to drainage in relation to swamp sclerophyll forest on coastal floodplains endangered ecological community (EEC)
- the impact to the visual amenity directly adjoining the national park reserve caused by changes to the proposed lot and road layout
- analysis of direct and indirect impacts caused by the proposed change from fill/cut batters to retaining walls directly adjoining the national park reserve.

Development directly adjoining national park reserves may impact on the natural and cultural heritage values close to the bushland interface. This is particularly emphasised in small reserves such as the Lake Macquarie State Conservation Area that has suffered ongoing pressure and damage caused by

illegal clearing, illegal access, dumping, introduction of weeds and the impact of pets, particularly dogs, on native wildlife.

The ring road around lots 301-308 in the development layout in the approved Concept Plan ensures there is a defined management boundary between the development and sensitive bushland, including EECs. The submitted documentation fails to identify and mitigate impacts associated with having development directly adjoining the reserve.

OEH recommends that the full ring road is reinstated around the edge of the development and that all Asset Protection Zone requirements are contained within the R2 zoned land.

If you have any enquiries concerning this advice, please contact Anne Browett, Conservation Planning Officer, on 4927 3160.

Yours sincerely

RICHARD BATH

Senior Team Leader Planning, Hunter Central Coast

1.5 JUN 2017

Regional Operations





The Director General NSW Department of Planning and Environment GPO Box 39 Sydney NSW 2001 Your reference: D17/1541 Our reference: MP10 0088

26 May 2017

Attention: Emma Butcher and Natasha Harras

Dear Sir/Madam,

# Modification to an Approved Subdivision Concept Plan- Nords Wharf Residential Development (Southern Estate)

Reference is made to correspondence dated 17 May 2017 seeking input regarding the preparation of Secretary's environmental assessment requirements for the modifications to the above development in accordance with the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has reviewed the submitted documentation and advises that insufficient information has been provided to demonstrate compliance of the proposed public road layout with Section 4.1.3 (1) of *Planning for Bush Fire Protection 2006*. The proposed modifications to the subdivision plan indicate that Lots 301- 308 are not separated from the unmanaged bush fire prone vegetation by a perimeter road. As such, the proposed subdivision plans are required to be amended to include the provision of a perimeter road. This is in recognition that the proposed development will be impacted by unmanaged vegetation in all directions.

If you have any queries regarding this advice, please contact Emma Jensen, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese

afrane Yohn

Acting Team Leader, Development Assessment and Planning

Planning and Environment Services (East)

NSW Rural Fire Service Records Management Locked Bag 17 GRANVILLE NSW 2141 Street address

MARKALLINIA

NSW Rural Fire Service Planning and Environment Services (East) 42 Lamb Street GLENDENNING NSW 2761 T 1300 NSW RFS F (02) 8741 5433 E csc@rfs.nsw.gov.au www.rfs.nsw.gov.au



Ms Emma Butcher
Planning Officer
Modification Assessments
NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

#### Modification request – Nord Wharf Concept Plan (MP10 0088 MOD1)

Dear Ms Butcher

Thank you for your recent correspondence requesting Transport for NSW (TfNSW) provide comment on the modification application for the subject site.

TfNSW has reviewed the modification request and have a number of concerns. To ameliorate traffic impacts of the development, the proponent has suggested to; signalise the Pacific Highway/Nords Wharf Road intersection; and, change the Pacific Highway/Awabakal Drive intersection to a left-in/left out (LILO) arrangement. The signalisation is a matter for Roads and Maritime Services (RMS), however, any redesign of the signals should ensure that Transit Stop Numbers (TSN) 228113 and 228137 are accommodated and retained, as they service multiple school routes and public route 99.

Furthermore, the proposed LILO would have a significant impact on bus operations, as services cannot turn right. This will impact on the customer experience (with increased journey times and unnecessary journey extensions) and increase operational costs. TfNSW recommends that the proponent investigate transport access options in consultation with RMS, TfNSW and the bus operator that do not adversely affect bus operations.

Finally, the traffic review submitted by the proponent has limited information on the provision for public and active transport. TfNSW recommends that the proponent revises the traffic review taking into consideration public and active transport provisions within and to the site demonstrating connection to all relevant transport services, nearby settlements, and other key off-site locations.

Thank you again for requesting TfNSW comment on this proposal. If you have any

further questions, Mr Lee Farrell, Transport Planner at TfNSW, would be pleased to take your call on (02) 8202 2944. I hope this has been of assistance.

Yours sincerely

Mark Ozinga

Principal Manager, Land Use Planning and Development

Freight, Strategy and Planning

CD17/05678



5 July 2017

CR2017/001900 SF2012/014082 MJD

NSW Department of Planning and Environment Modification Assessments GPO Box 39 Sydney NSW 2001

Attention: Emma Butcher

# NORDS WHARF CONCEPT APPROVAL MODIFICATION - MAJOR PROJECT MP10\_0088 MOD1

Reference is made to the Department's email dated 17 May 2017 regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with the *State Environmental Planning Policy (Infrastructure)* 2007.

Roads and Maritime understands the development to be for the following amendments to the Concept Plan approval:

- Increase the number of approved lots from 90 to 101,
- Amend the requirement to upgrade the intersection of Pacific Highway and Awabakal Drive from a signalised seagull to a left in left out intersection,
- Upgrade the intersection of the Pacific Highway and Nords Wharf Road to a signalised seagull.

#### Roads and Maritime response & requirements

Roads and Maritime has reviewed the submitted information and object to the development in its current form. Roads and Maritime requests the traffic impact study be updated to assess the following:

 The impacts of the proposed altered intersection upgrades on the local area, in particular Nords Wharf Road, Marine Parade and Government Road. The study is to consult with relevant stakeholders, including Lake Macquarie City Council (LMCC) and the local community,

#### **Roads and Maritime Services**

- The impacts of the altered intersection upgrades on the Pacific Highway, to determine if the proposal is the optimal outcome,
- The impact that the proposed future connection of Murrays Beach to Cams Wharf by LMCC will have on the upgrade of the Nords Wharf Road proposal, as signalisation may draw motorists to this intersection and to the local school,
- Concept approval MP10\_0089 for the Middle Camp (Catherine Hill Bay) 222 lot subdivision required an upgrade at the intersection of the Pacific Highway, Cams Wharf Road and Flowers Drive, restricting Flowers Drive to left in, left out. It was further conditioned that a U-turn bay be provided on the Pacific Highway for traffic from Flowers Drive to be able to travel in the northbound direction. The U-turn bay is to be provided on the Pacific Highway or at Nords Wharf Road. Assess the impact that signalising the Nords Wharf Road intersection has on the U-turn bay required as part of MP10\_0089.

It is recommended that an updated Traffic Impact Statement include (but not be limited to) the following detail:

- o Current traffic counts for the intersections and routes within the study are,
- The distribution of the trips generated by the proposed development, and the redistribution of trips currently on the network as a result of the proposed upgrades and turn bans. This is to be shown diagrammatically,
- Traffic analysis of the proposed intersection using Sidra 7, including submission of electronic files.
- The peak hour traffic generation is to be taken at as the maximum from the RMS Technical Direction, and not the minimum. The minimum is not considered adequate for the residential trips as the site is isolated and it will be likely that residents will travel external to the site for shopping and employment.
- o Future expansion of the school to accommodate increased students from the development in the catchment

Should you require further information please contact Hunter Land Use on 4908 7688 or by email at development.hunter@rms.nsw.gov.au.

Yours sincerely

David Collaguazo

A/Manager Land Use Assessment

Hunter Region