

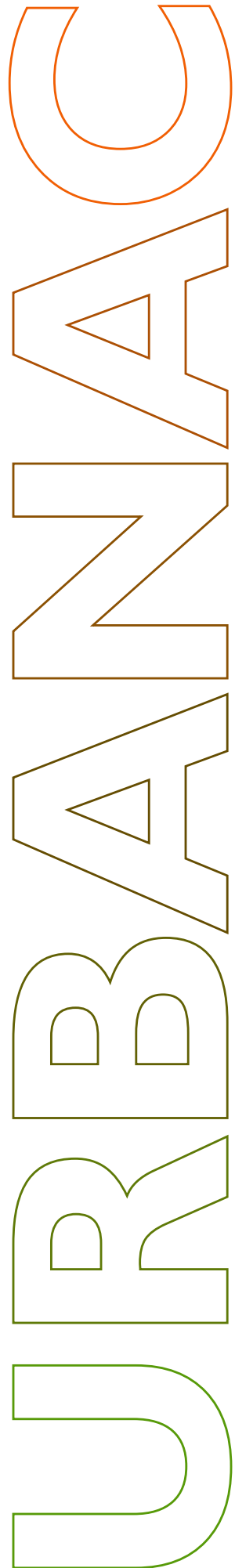
**URBANAC**

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**Proposed Subdivision  
Lot 5 DP1225356  
Sealark Road, Callala Bay NSW**

# **Urban Design Report**

**January 2024**



# Abbreviations

Council	Shoalhaven City Council
ADG	NSW Apartment Design
APZ	Asset Protection Zone (Bushfire)
DCP	Shoalhaven Development Control Plan 2014
EEC	Endangered Ecological Community
EP&A Act	Environmental Planning and Assessment Act 1979
LEP	Shoalhaven Local Environmental Plan 2014
RFB	Residential Flat Building
the subject land	Lot 5 DP 1225356, located on Sealark Road, Callala Bay, NSW.
the site	The western part of the subject land fronting Sealark Road

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**Document Control**

Issue	Date	Details	Approved
01	20/12/2023	Draft for Internal team review	AC
02	17/1/2024	Final for issue	AC

# Contents

**Executive Summary ..... 1**

**1 Overview ..... 2**

    1.1 Background..... 3

    1.2 Structure and Methodology..... 3

**2 The Site..... 4**

    2.1 Key Site Attributes..... 5

    2.2 Surrounding development ..... 5

**3 Current Planning Context ..... 7**

    3.1 Current Statutory Planning Context..... 8

**4 Urban Design Analysis..... 9**

    4.1 Major Constraints..... 10

    4.2 Defining a Development Site..... 11

    4.3 Site Analysis ..... 12

    4.4 Built Form ..... 16

**5 Urban Design Guidelines ..... 17**

    5.1 Urban Design Guidelines..... 18

    5.2 Proposed Rezonings ..... 19

    5.3 Indicative Subdivision Plan..... 20

**6 Conclusions ..... 21**

# Executive Summary

Urbanac Pty Ltd is engaged by PRM Architects + Town Planners to undertake an urban design analysis underpinning a planning proposal for the subject land at Callala Bay, at the north western shore of Jervis Bay on the NSW South Coast.

The Planning Proposal seeks to rezone the subject site from C3: Environmental Management to R1: General Residential and C2: Environmental Conservation. The Strategic Planning Panel of the Southern Regional Planning Panel has determined that the proposal should proceed to Gateway determination because the proposal has demonstrated strategic merit and may be capable of demonstrating site specific merit.

The Panel recommends that prior to submitting the planning proposal for a Gateway determination, the planning proposal should be revised to address a number of matters including:

- An Urban Design Report is to be prepared to identify and address built form outcomes having regard to flooding, earthworks – cut and fill, bushfire management and Asset Protection Zones (APZs), and subdivision layout and road design. The Urban Design Report should also identify the need for any site specific provisions that should be applied to the site
- If required, prepare a site-specific development control plan (DCP) for the site to support the proposal, which is to be exhibited with the Planning Proposal.

This report documents the urban design analysis and process to identify and address built form outcomes for the subject land.

- Section 1, this section, provides an overview and background to the report.
- Section 2 provides a description of the subject land and its context.
- Section 3 provides an overview of planning context, and focuses on the primary planning controls for built form on the subject land.
- Section 4 provides an urban design analysis of the subject land focusing on the built form and the interfaces with the subject site to identify how development on the site can deliver a high quality urban design outcome
- Section 5 draws together the observations and responses flowing from the preceding urban design analysis to recommend a set of urban design guidelines for use in the design of a built form on the site and for consideration in subsequent development assessment.

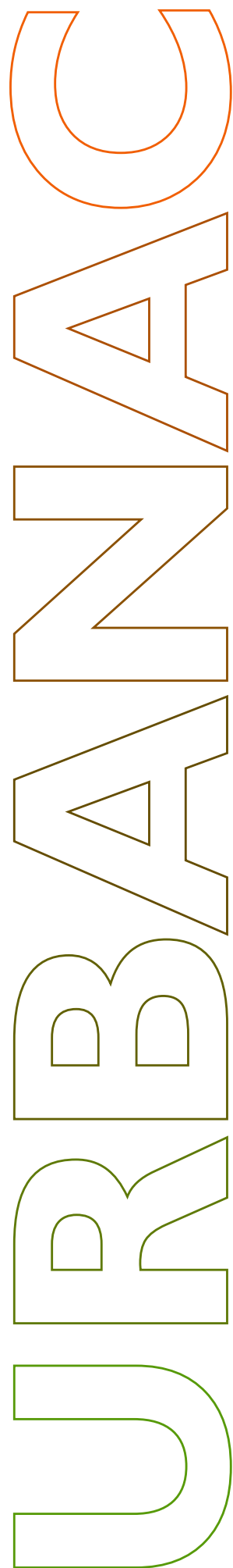
This report examines the urban design context and documents the process to identify and address built form outcomes for the planning proposal to rezone the subject land to provide new residential lots, associated roads, improved drainage and a significant dedication to grow the area of the Jervis Bay National Park.

The report has found the land can effectively provide:

- Protection in perpetuity of the Endangered Ecological Community comprising the Bangalay Sand Forest and the riparian land of Wowly Creek by dedicating approx. 4.5 ha to the Jervis Bay National Park through a VPA.
- 12 lots for single dwellings at around 525m<sup>2</sup> zoned R1 north of the open drainage channel with land zoning and minimum lot size matching the controls on the opposite side of Sealark Road.
- 2 lots for single dwellings at around 600-700m<sup>2</sup> zoned R2 at the southern part of the site of the open drainage channel with land zoning and minimum lot size matching the controls on the opposite side of Sealark Road and Monarch Place.
- A single larger lot for multi-dwelling housing zoned R1 south of and including the open drainage channel with appropriate strata management arrangements to maintain the drainage channel and a recreation/landscape space east of the road.
- New perimeter roads containing the proposed residential subdivision and constructed to effectively resolve potential flooding.
- Improved drainage including a high quality visually attractive open drainage channel that will address existing outflow limitations to resolve existing flooding at the Sydney Road/Sealark Road intersection benefitting the wider community.
- Effective management of the site's bushfire, flooding, earthworks, cut and fill, road design and built form constraints.

The Report has also found that there is no need for a site specific DCP for the site due to the relatively small scale of the subdivision together with limited options for the location of built form within the subdivision blocks. There is also a desire to maximise consistency with nearby development in terms of built form controls, setbacks, etc. by using the Shoalhaven DCP as well as a desire to avoid unnecessary complexity in the planning framework for the land.

The Proposal is accordingly recommended the Southern Regional Planning Panel and the Department for favourable consideration as it completes its assessment of the development application.



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# 1 Overview

## 1.1 Background

Urbanac Pty Ltd is engaged by PRM Architects +Town Planners to undertake an urban design analysis underpinning a planning proposal for the subject land at Callala Bay, at the north western shore of Jervis Bay on the NSW South Coast.

The Planning Proposal seeks to rezone the subject site from C3: Environmental Management to R1: General Residential and C2: Environmental Conservation.

The R1: General Residential zone would be applied to the western 1.7ha of the subject land and would include the existing drainage channels, and include:

- Amendment to the height limitations from 11.0m to 8.5m
- Amendment to the minimum lot size from 40ha to 500m<sup>2</sup>
- Works prior to development including:
  - Stage 1: involves excavation and widening of an existing open drainage channel which discharges existing stormwater from Sealark Road into Wowly Creek, plus the filling of a secondary drainage to be replaced by a culvert draining from near the intersection of Sydney Avenue to the western end of the open drainage channel along Sealark Road
  - Stage 2: involves the filling across the area to achieve a flood free area for construction, typically 1% AEP flood level plus 500mm freeboard. The proposed filling will be on average 700-800mm, with up to 1.8m required for the eastern portion of the site.

The Land to be rezoned C2: Environmental Conservation being the residual eastern 4.55ha of the subject land is to be dedicated via a Voluntary Planning Agreement (VPA) to be included as part of Jervis Bay National Park to the north of the subject site.

The Strategic Planning Panel of the Southern Regional Planning Panel has determined that the proposal should proceed to Gateway determination because the proposal has demonstrated strategic merit and may be capable of demonstrating site specific merit.

The Panel recommends that prior to submitting the planning proposal for a Gateway determination, the planning proposal should be revised to address a number of matters including:

- An Urban Design Report is to be prepared to identify and address built form outcomes having regard to flooding, earthworks – cut and fill, bushfire management and Asset Protection Zones (APZs), and subdivision layout and road design. The Urban Design Report should also identify the need for any site specific provisions that should be applied to the site
- If required, prepare a site-specific development control plan (DCP) for the site to support the proposal, which is to be exhibited with the Planning Proposal.

## 1.2 Structure and Methodology

This report documents the urban design analysis and process to identify and address built form outcomes for the subject land.

Section 1, this section, provides an overview and background to the report.

Section 2 provides a description of the subject land and its context.

Section 3 provides an overview of planning context, and focuses on the primary planning controls for built form on the subject land.

Section 4 provides an urban design analysis of the subject land focusing on the built form and the interfaces with the subject site to identify how development on the site can deliver a high quality urban design outcome

Section 5 draws together the observations and responses flowing from the preceding urban design analysis to recommend a set of urban design guidelines for use in the design of a built form on the site and for consideration in subsequent development assessment.

The purpose of this report is:

- To address the Panel's requirements for an Urban Design Report
- To consider whether there is a need for a site specific DCP
- To understand what form future development on the site should take to deliver the desired future character for this area in transition to higher density
- To respond positively to the key features of the site
- To review the detailed planning controls that apply to the site and, if appropriate, recommend alternative options to deliver the key outcomes with equivalent or improved urban design outcomes
- To advise on ways to manage and mitigate any potential impacts arising out of the built form that can be reasonably conceived on adjacent sites, and
- To understand how best to respond to development on adjacent sites to achieve a harmonious fit and identify any challenges and impacts that might arise for the design to address.

# 2

## The Site

This section provides an overview of the subject land and its context.

## 2.1 Key Site Attributes

The subject land is identified as Lot 5 DP 1225356, located on Sealark Road, Callala Bay, NSW.

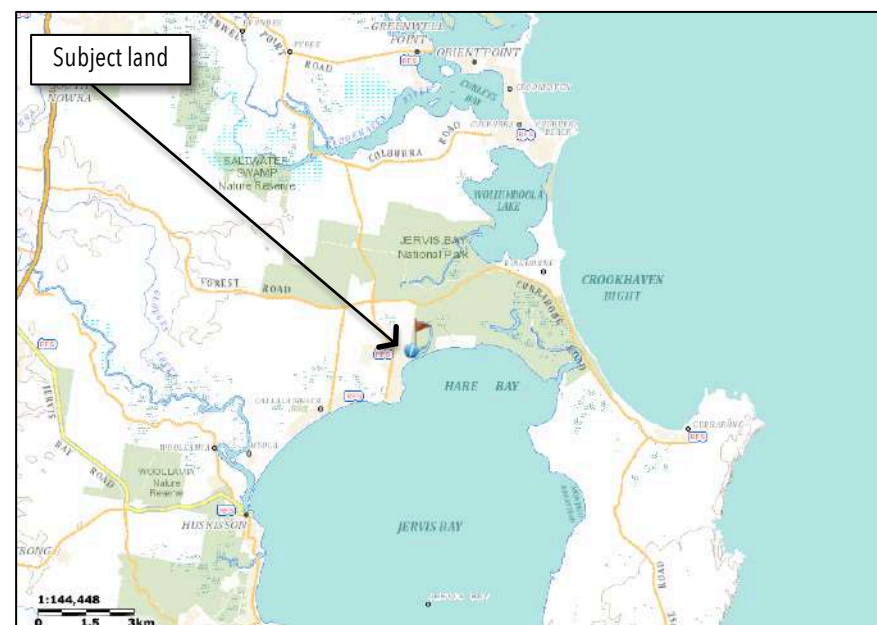
The subject land is somewhat rectangular, with the longest boundary along the north at approximately 400m, and the western boundary along the frontage to Sealark Road at approximately 185m. The eastern boundary of the subject land is defined by Wowly Creek. The southern boundary is formed by the Monarch Place road reserve owned by the Council. This frontage is stepped and approximately 210m in length, including the undeveloped part of the road reserve lot. The remainder of the southern boundary adjoins a public reserve.

Overall the subject land has an area of approximately 6.05ha.

The subject land adjoins part of Wowly Creek with associated riparian vegetation in the eastern part of the land and covering about half of land – the remaining part of the land on the western side along Sealark Road is cleared and undeveloped.

The subject land generally slopes in a north-westerly to south-easterly direction towards Wowly Creek. The levels over the site range from approximately RL6.0m AHD at the northwestern corner to approximately RL2.0m AHD along the eastern boundary adjacent to Wowly Creek.

The site is traversed by an open drain that discharges from two stormwater outlets under Sealark Road. This open drain discharges to Wowly Creek near the northeastern corner of the site.



**Figure 1 Site Location**

Source: NSW Spatial Service maps.six.nsw.gov.au

## 2.2 Surrounding development

The subject land is at the eastern edge of the coastal suburban/urban subdivision of Callala Bay at the interface with Hare Bay, part of Jervis Bay and the adjacent National Park.

North of the land and the east is the Jervis Bay National Park which also forms a boundary to the entire Callala Bay urban settlement.

The urban area west of the subject land is characterised by single detached dwellings generally of older stock of 1-2 storeys in a standard 20th Century suburban low-density residential subdivision.

South of the site is a more recent subdivision, generally in keeping with the overall pattern of subdivision, and containing recent single detached dwellings (some currently under construction) and larger footprint medium density residential development.



**Figure 2 The Site and Context - Aerial Photograph**

Source: NSW Spatial Service maps.six.nsw.gov.au

Like much of the NSW South Coast the area is a mix of residential uses, holiday houses and tourist accommodation including individual properties listed on AirBnB and other homestay platforms.

The area provides access to the shoreline of Hare Bay including the headwaters of Wowly Creek, which forms a popular safe and sheltered swimming spot known as Wowly Gully at high tide that is separated from the waters of the bay and is sought after by local residents.



**Figure 3 The Site - Detail Aerial Photograph**

Source: NSW Spatial Service maps.six.nsw.gov.au



**Figure 4 Views of the site - 1: The site, on the left of Sealark Road looking south**



**Figure 5 Views around the site - 1: Wowly Creek and Callala Bay/Jervis Bay beyond, 2: Looking east over Wowly Creek and Wowly Gully from the walking track, 3: Looking north east along Wowly Creek from the beach**



**Figure 6 Views around the site - 1: Looking south towards the Sealark Road cul de sac, 2: Recent medium density development on Monarch Place from the walking track, 3: Looking north on Sealark Road with the site on the right, 4: Looking west along Sydney Avenue**



# 3

## **Current Planning Context**

This section provides a brief overview of the local planning controls given in the LEP.

# 3.1 Current Statutory Planning Context

## 3.1.1 Shoalhaven Local Environment Plan 2014

### Zoning

The land is currently zoned C3 Environmental Management.

### Development Standards

The LEP does not adopt a maximum height of buildings development standard for the land. Pursuant to Section 4.3 (2A) if the Height of Buildings Map does not show a maximum height for any land, the height of a building on the land is not to exceed 11 metres

The LEP does not adopt a maximum FSR development standard for the land.

The LEP adopts a minimum lot size of 40ha for the land.

### Heritage

There are no items of environmental heritage listed in the LEP in proximity to the land.

### Biodiversity

The land shares boundaries with the Jervis Bay National Park and the Wowly Creek waterway – both areas are mapped for their biodiversity.

### Flooding

The land contains overland drainage pathways connecting into Wowly Creek, but is not identified as flood affected.

### Summary of controls

Lot Details: **Lot 5 DP 1225356**

Zoning (LZN): **C3**

Min Lot Size (LSZ): **AB4 - 40 ha**

Max Building Height (HOB): **No**

Incentive Max Building Height (IHB): **No**

Max Floor Space (FSR): **No**

Heritage (HER): **No**

Urban Release Area (URA): **No**

Land Reservation Acquisition (LRA): **No**

Biodiversity (BIO): **Excluded Land**

Riparian Lands and watercourses (WCL): **Riparian Land**

Scenic Protection (SCP): **No**

Lands (NRL): **No**

Acid Sulfate Soils (ASS): **Class 1, Class 5**

Buffers (BFR): **No**

Clauses (CLS): **CI 7.20**

Coastal Risk Planning (CRP): **No**

Land Reclassification Part (RPL): **No**

Shoalhaven DCP 2014 Area Specific Chapter & Value: **No**

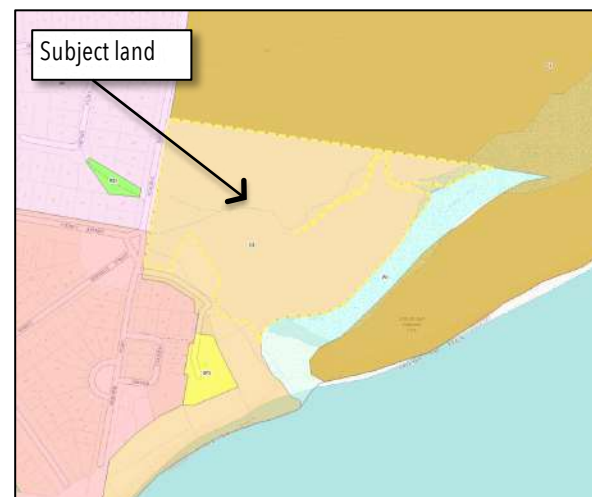
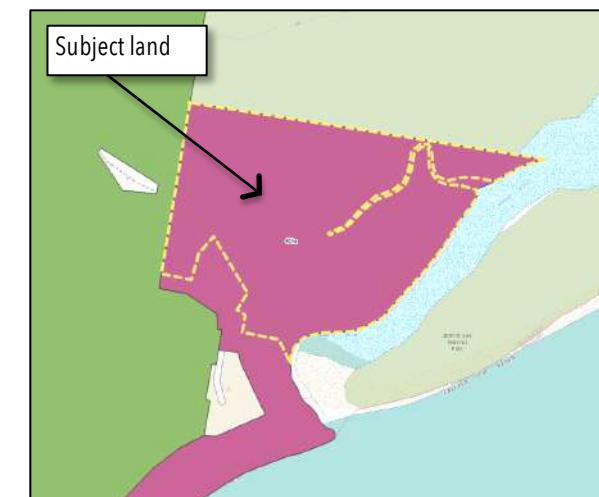


Figure 7 LEP Land Zoning Map

Source: NSW Planning Portal



Minimum Lot Size Map 10

Source: NSW Planning Portal

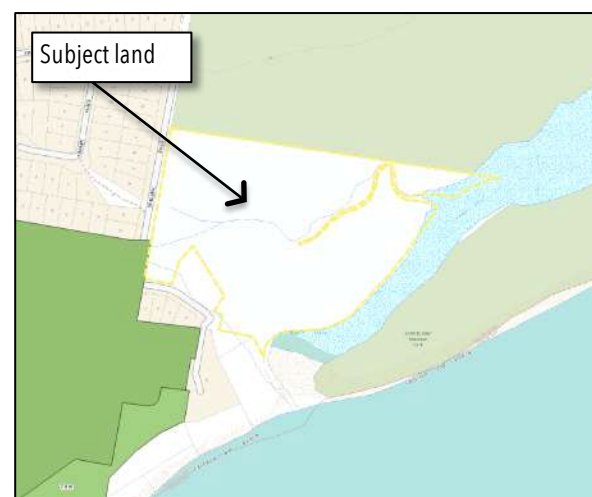


Figure 8 LEP Height of Buildings Map

Source: NSW Planning Portal

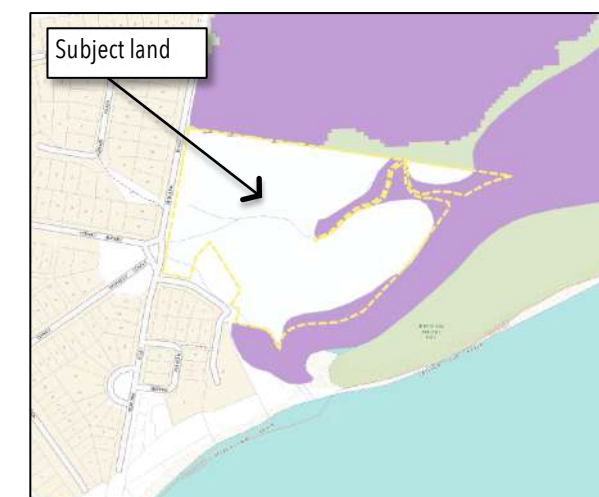


Figure 11 Biodiversity Values Map

Source: NSW Planning Portal

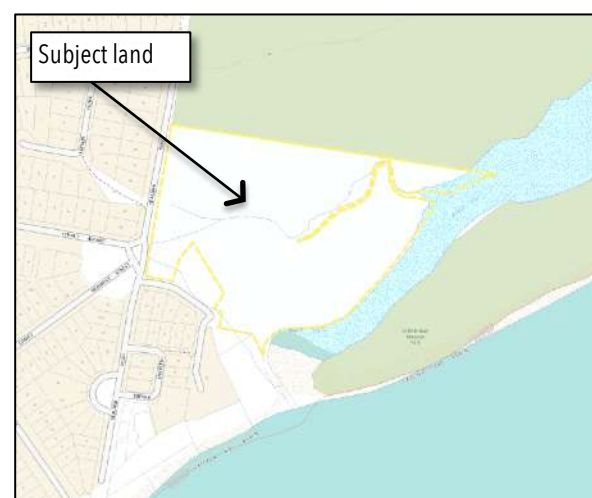


Figure 9 LEP FSR Map

Source: NSW Planning Portal

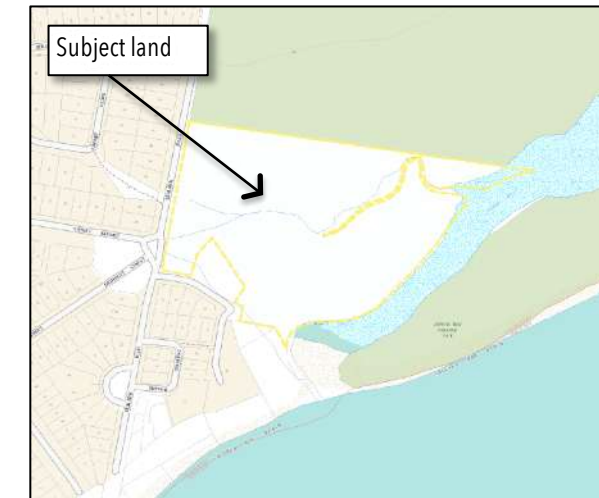


Figure 12 Heritage Map

Source: NSW Planning Portal

# 4

## Urban Design Analysis

This section provides an urban design analysis of the subject land at a range of scales to identify the key elements of the site influencing the built form.

## 4.1 Major Constraints

### Riparian

The subject land has a boundary a waterway, which extends deep into the land. The watercourse is a part 2nd part 3rd order watercourse type with associated 20m/30m riparian buffers measured from the top of the banks required to ensure its protection in accordance with the Water Management Act 2000.

*Note: The riparian buffers are fully contained within the EEC Biodiversity buffers and so do not require further separate consideration from an urban design perspective as neither can be significantly developed.*

#### Observations/Response

- The riparian buffer zones restrict development of the eastern edges of the site.

### Biodiversity

The land includes areas of high biodiversity, the Bangalay Sand Forest Endangered Ecological Community, generally in proximity to the waterway with an area of approximately 28,800m<sup>2</sup>. The EEC also requires a 20m buffer zone taking up a further 7,500m<sup>2</sup>.

#### Observations/Response

- The biodiversity buffer zones restrict development of the eastern edges of the site to a further degree than the riparian buffers.
- The riparian buffer zones are fully contained within the biodiversity buffer zones

### Bushfire

Biodiversity areas and their buffers cannot be managed as part of an APZ, so adding asset protection zones to the maximum extent of the biodiversity and riparian protection buffers gives the maximum potentially developable land.

The biodiversity and riparian protection buffers include vegetated areas that are both upslope and downslope, with associated APZs of between 15m (where the hazard is upslope) and 29m (where the hazard is downslope).

#### Observations/Response

- The maximum extent of potentially developable land is the residual of the subject land when the biodiversity and riparian protection buffers are removed, plus their associated minimum bushfire asset protection zones



Figure 13 Riparian Protection Plan Diagram



Figure 14 Riparian Protection Plan Diagram



Figure 15 Bushfire APZ Plan Diagram

## 4.2 Defining a Development Site

The major constraints on the subject land act together to define the part of the subject land that has developable potential – i.e. the site. These include:

- **Riparian:** The subject land has a boundary a waterway, which extends deep into the land. The watercourse is a part 2nd part 3rd order watercourse type with associated 20m/30m riparian buffers measured from the top of the banks required to ensure its protection in accordance with the Water Management Act 2000.
- **Biodiversity:** The land includes areas of high biodiversity, the Bangalay Sand Forest Endangered Ecological Community, generally in proximity to the waterway with an area of approximately 2.08ha. The EEC also requires a 20m buffer zone taking up a further 0.7ha. The riparian buffers are fully contained within the EEC Biodiversity buffers.
- **Bushfire Asset Protection Zones:** Adding asset protection zones to the maximum extent of the biodiversity and riparian protection buffers gives the maximum potentially developable land. The biodiversity and riparian protection buffers include vegetated areas that are both upslope and downslope, with associated APZs of between 15m (where the hazard is upslope) and 29m (where the hazard is downslope). Biodiversity areas and their buffers cannot be managed as part of an APZ.

### Observations/Response

#### The east of the site

- When the above major constraints are taken into account, they act cumulatively to prevent development of the eastern two-thirds of the land
- There is also a theoretically developable strip of land in the centre of the eastern part of the site, but its dimension is too narrow to be sensibly developed (due to the extensive length of perimeter road that would be required to service only 2-3 lots). This narrow strip, which has an area of around 0.7ha including the adjacent APZ buffers, effectively has no real development potential and does not require further development investigation.
- Accordingly the eastern 4.55ha of the subject land is unable to be developed
- This land is to be dedicated via a Voluntary Planning Agreement (VPA) to be included as part of Jervis Bay National Park to the north of the subject.

#### The west of the site

- The relatively unconstrained part of the subject land is along the western edge and fronting Sealark Road. The total area of the residual site is in the order of approximately 1.7ha depending on the precise locations of the APZs and perimeter roads.
- This part of the subject land is considered appropriate for development. The remainder of the urban design analysis focuses on this land.

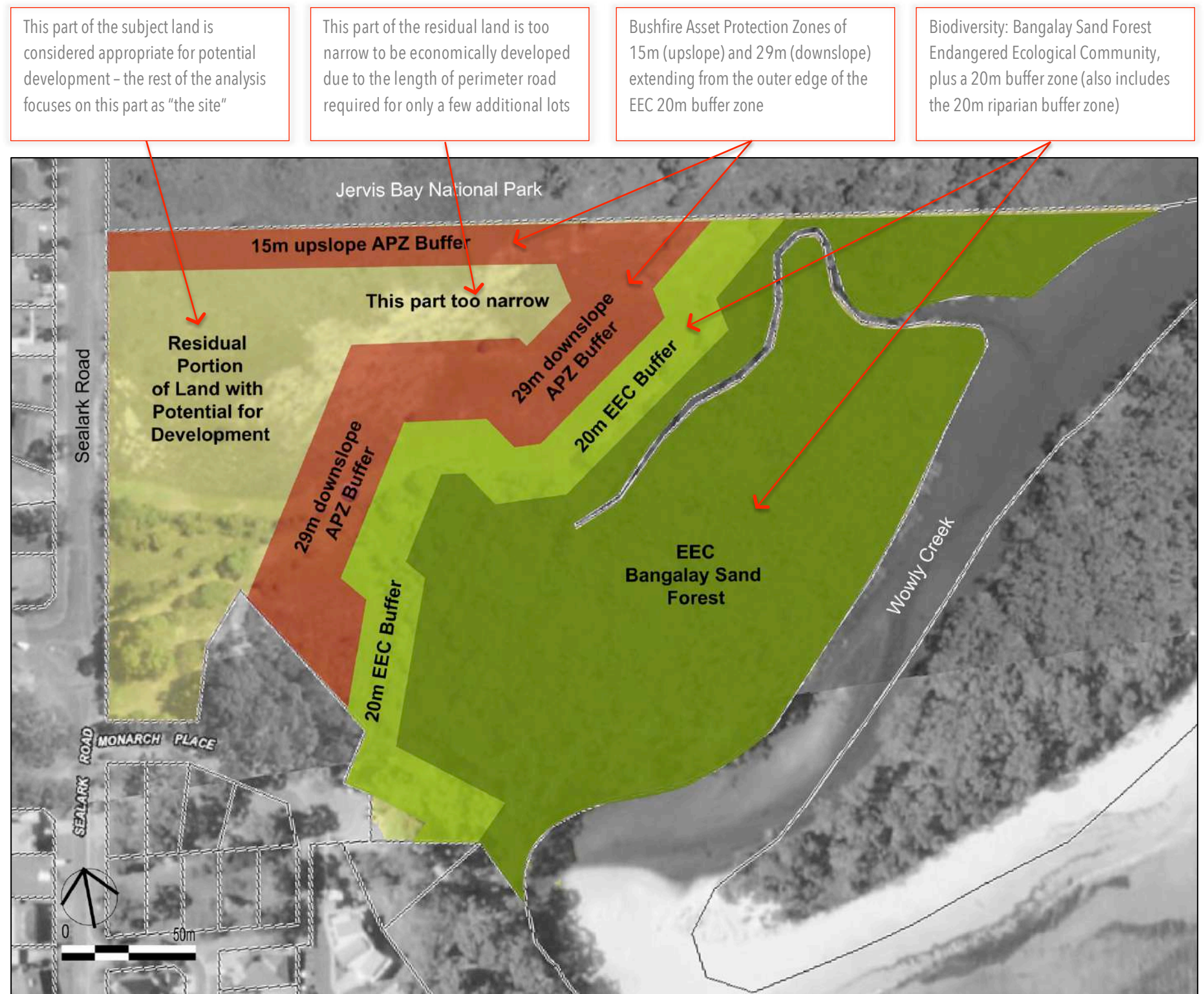


Figure 16 Plan Diagram Showing Major Development Constraints on the Subject Land

Source: NSW Spatial Service maps.six.nsw.gov.au

## 4.3 Site Analysis

### Physical

The key attributes of the site are:

- The frontage to Sealark Road is approximately 185m.
- The frontage to Monarch Place is stepped and approximately 210m in length, including the undeveloped part of the road reserve lot.
- Overall the subject land has an area of approximately 6.05ha of which the portion identified as having development potential ("the site") has an area of approx. 1.5ha.
- The site falls to the southeast of approximately RL 6.0m AHD to RL 2.0m

### Observations/Response

- The relatively unconstrained part of the subject land is along the western edge and fronting Sealark Road considered appropriate for development

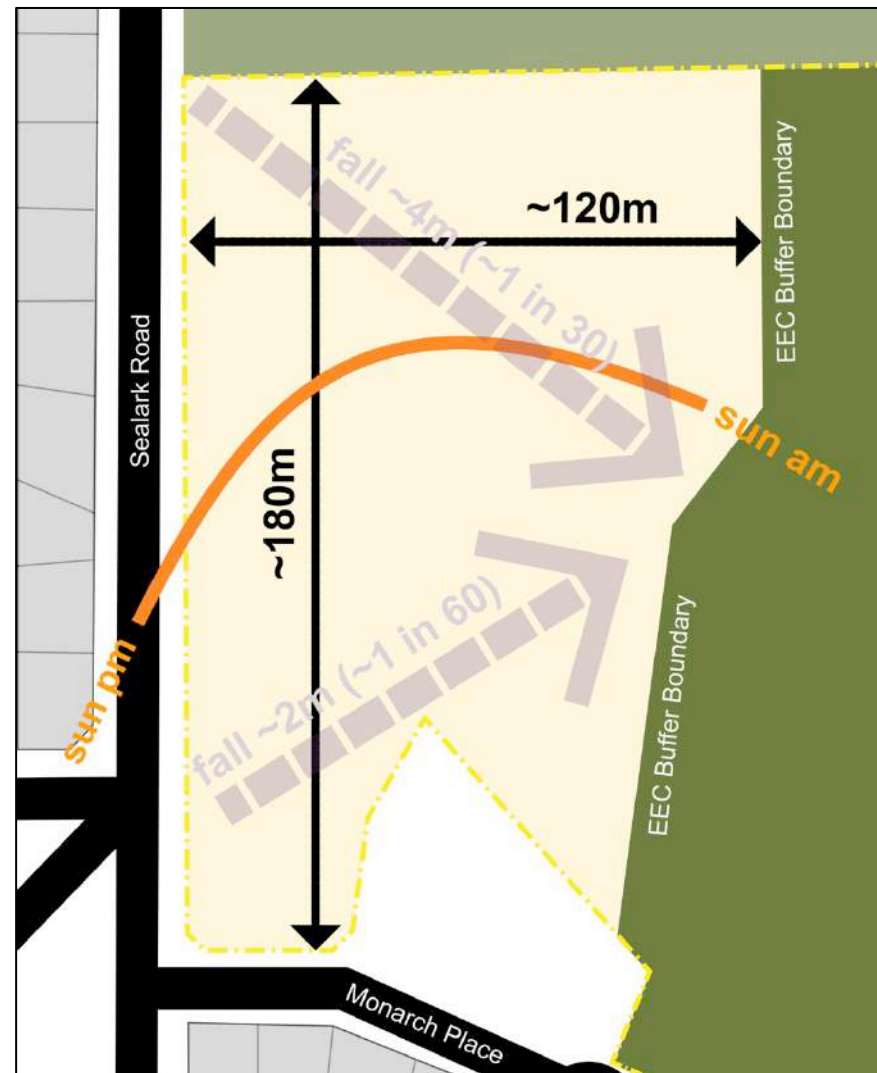


Figure 17 Physical Attributes Plan Diagram

## Flooding & Drainage

The Flood Study Report prepared by Footprint Sustainable Engineering demonstrates:

- Flooding within the Wowly Creek estuary is dominated by oceanic flooding rather than catchment derived flooding.
- Flooding on the site occurs predominately from the runoff derived from the existing residential catchments to the west of the site which discharge onto the site via two separate culverts under Sealark Avenue and that these flows exceed the capacity of the existing channel causing flooding within the overbanks.
- Except for overbank flooding the site is relatively free from flooding and is therefore considered suitable for residential development.

The Report proposes increasing the capacity of these drainage channels combined with floodplain filling to minimise the area of land inundated by flooding and to create flood free land above the flood planning level. These changes would also provide increased serviceability within Sealark Road to the benefit of the wider community.

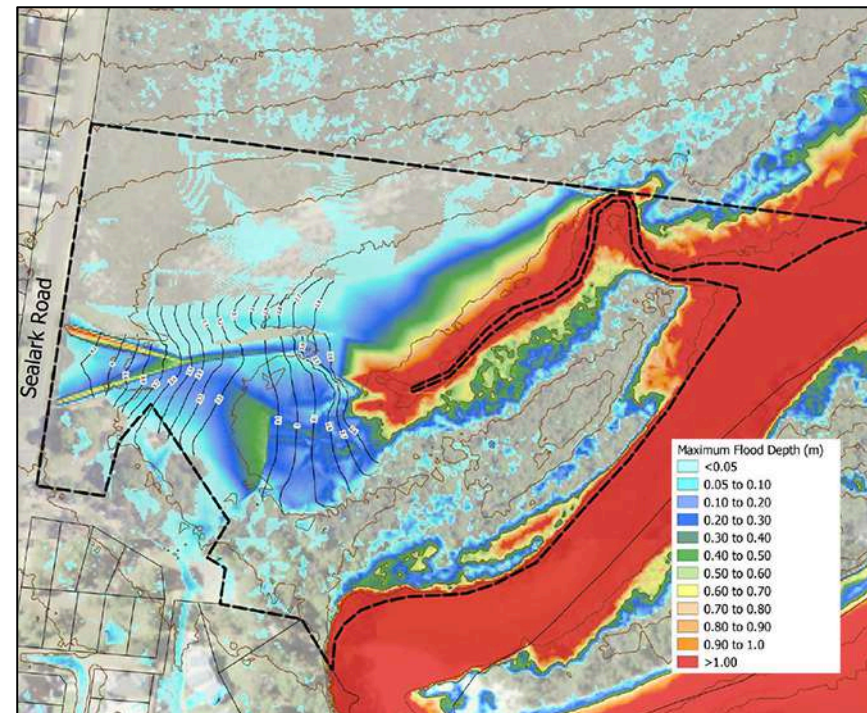


Figure 18 Maximum Flood Levels and Depth 1% AEP

Source: Footprint Sustainable Engineering

### Observations/Response

- The open drainage channel proposed for increased capacity should function as a high quality landscaped space benefitting the site owners and occupiers and contain elements to encourage use such as informal stepping stone crossings, small bridges etc.
- The open drainage channel will need to be maintained to ensure it functions as a bushfire Asset Protection Zone with low managed vegetation consistent with APZ guidelines. A funding source is required for the ongoing maintenance of the land. A strata arrangement associated with an adjacent multi dwelling development on the same lot is considered to be an appropriate standard funding mechanism to achieve this.
- The open drainage channel should not be fenced.
- Realign the channel edges to be aligned with the road and lot layouts
- The secondary drainage from Sealark Street to Wowly Creek via the eastern end of the open drainage channel should be filled and drainage provided via a culvert to maximise the developable area in the southwest part of the site.



Figure 19 Indicative Drainage Chanel Illustration

Source: Footprint Sustainable Engineering

# Road Design

## Neighbourhood Scale

The street pattern of Callala Bay at a neighbourhood scale is irregular.

- There is an emerging grid rhythm to the street subdivision scale at the southern part of the township (one that is earmarked to continue westwards from the main road Lackersteen Street and south of Emmet Street) with an as yet unbuilt subdivision.
- West of Lackersteen Street and north of Emmet Street is a late 20th Century subdivision pattern of cul de sacs and small blocks separated from through roads with blocks having a regular size, however this bears little relationship to the street grid to the south.
- East of Lackersteen Street and north of Emmet Street in proximity to the subject land is an odd mid 20th Century hybrid subdivision of cul de sacs and 45 degree streets that respond in part to the coastal topography, but which also create difficult intersections.
- South of the subject land, Monarch Place is a recent subdivision of small looped roads and cul de sacs.

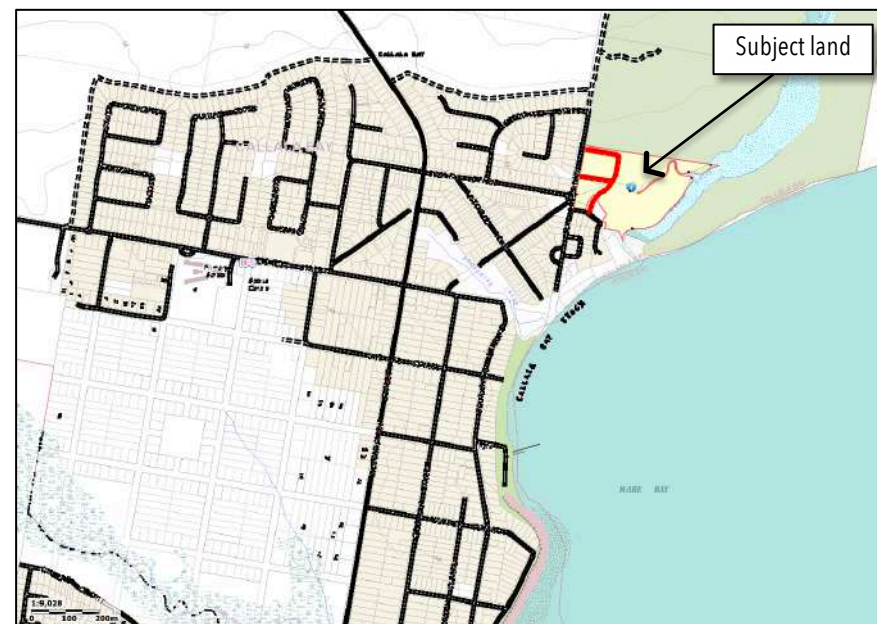


Figure 20 Neighbourhood Scale Road Plan Diagram

## Site Scale

The land has street access to Sealark Road and to Monarch Place.

The Rural Fire Service typically requires that new development fronting a flame zone is provided with a perimeter road and at least two entry points as this provides access around assets for emergency services vehicles and facilitates creating back burning and 'defensible spaces' outside of residential land and is an effective use of land identified for asset protection zones. For most of the site this requires construction of new roads on the subject land to ring the proposed new subdivision lots.

At the south of the site, the Monarch Place Road reserve directly adjoins south and south east corner of the site. Monarch Place is designated as a public road under the *Roads Act 1993*. It is developed as a public road on the south of the site, but is undeveloped east of the site. The land of the road reserve is zoned C3 Environmental Management under *Shoalhaven Local Environmental Plan 2014*, and development for the purposes of a road is permitted with development consent in the zone.

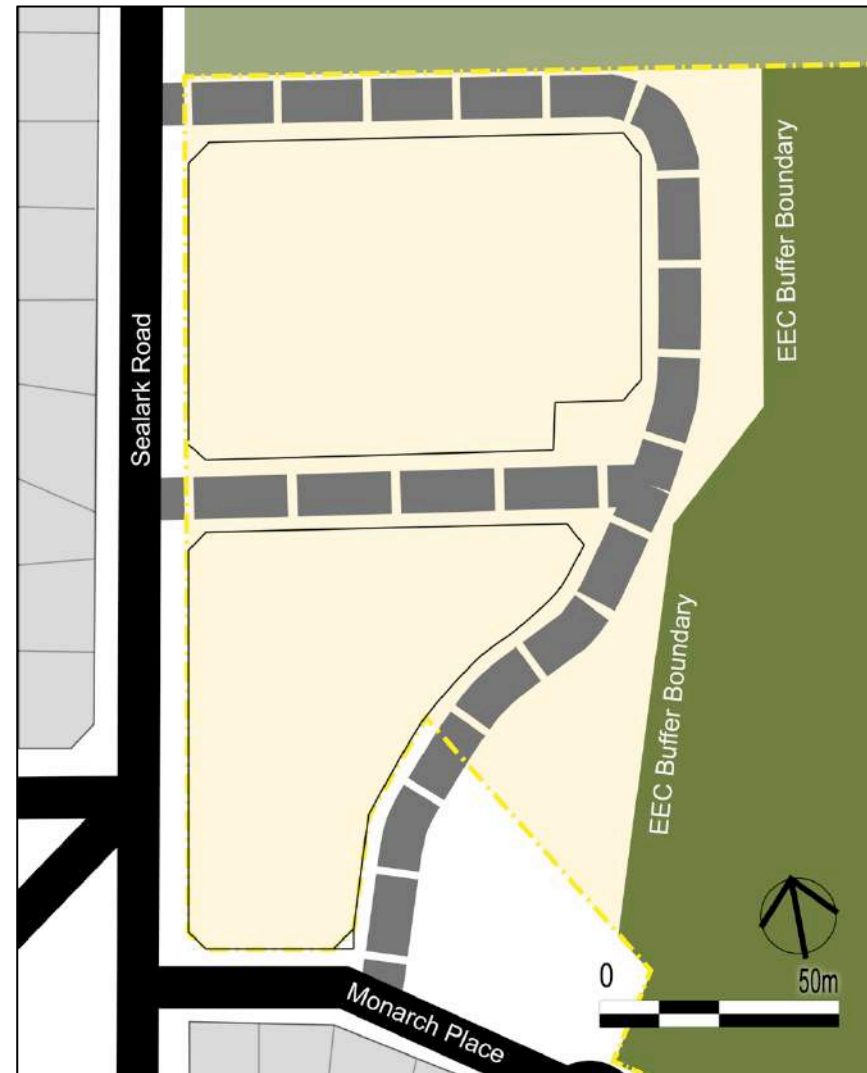


Figure 21 Road Plan Diagram

## Observations/Response

- Provide a perimeter road around the site collocated with Asset Protection Zones and connecting into Sealark Road and Monarch Place
- Use land already designated as a public road to provide the land for the perimeter road at the south and south east of the site, with the responsibility of the construction to be determined in consultation with the Council. It would be a perverse, disorderly and inefficient use of land to require the construction of the perimeter road on the subject land where it adjoins land already identified as a road reserve.
- Do not align new roads with existing intersections given the complex existing Sydney Avenue/Sealark Road intersection design
- Provide for visitor parking along new road reserves

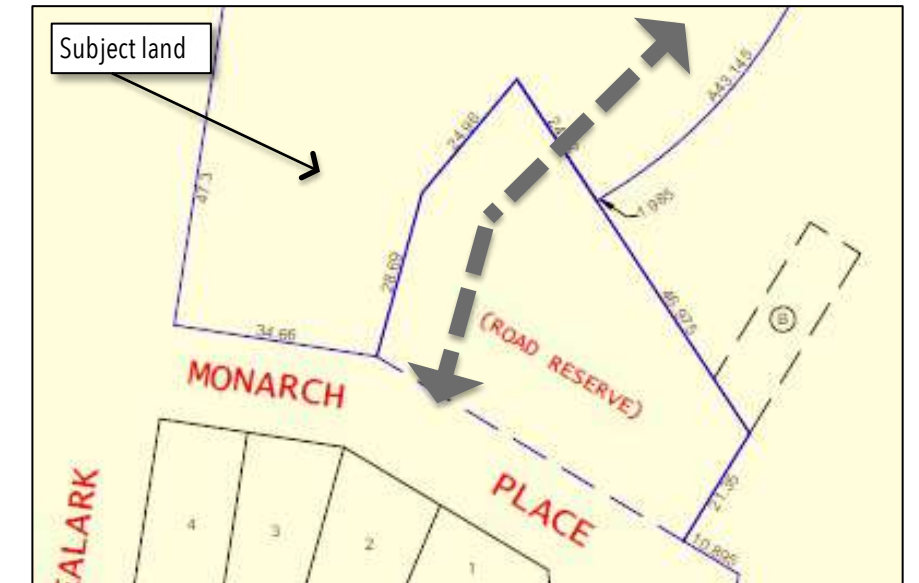


Figure 22 Extract of Survey by S. H. Appleby Showing Proposed Road Alignment

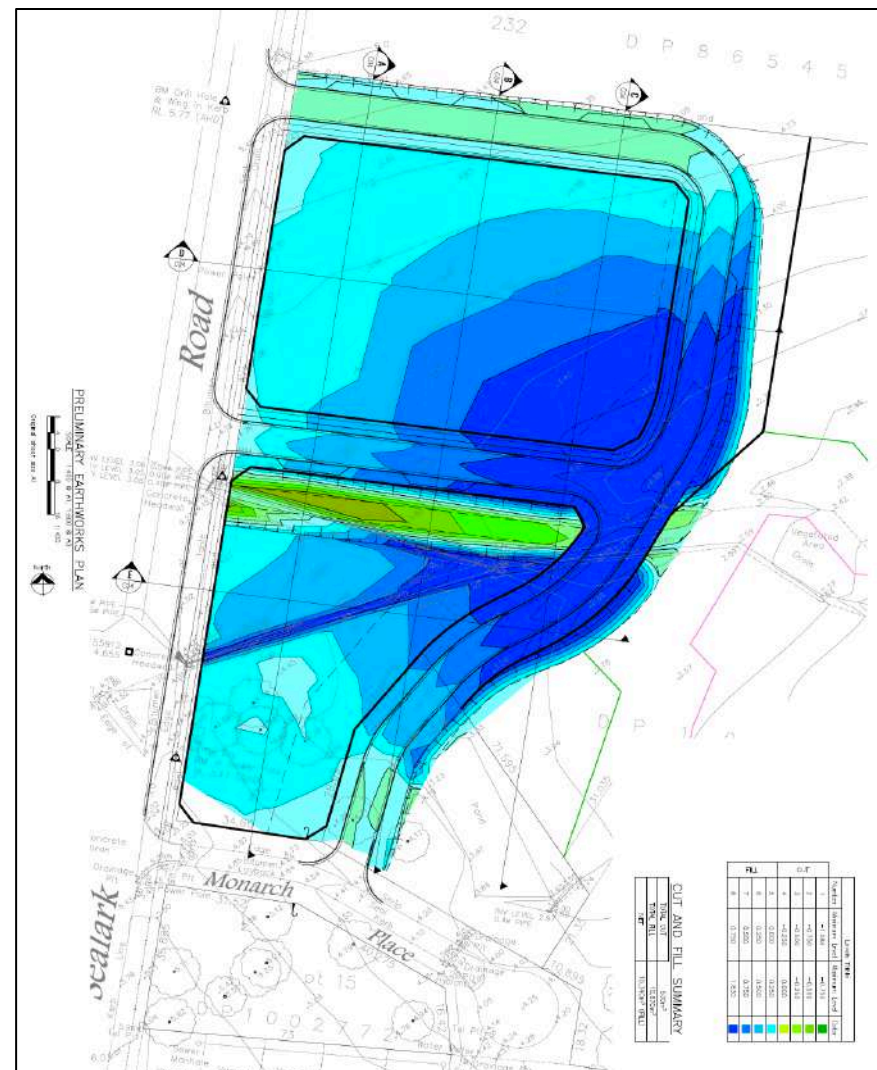
## Earthworks

The residential use is required to be 500mm freeboard above the nominated flood level. In addition, the proposed roadway is similarly required to be 500mm freeboard above the nominated flood level. This floodplain filling will minimise the area of land inundated by flooding and create flood free land above the flood planning level.

The total cut is 860m<sup>3</sup>. The total fill is 10,540m<sup>3</sup>. Along Sealark Road, the amount of fill ranges from 0mm to 500mm. This provides the required levels for the proposed road and subdivision lots.

### Observations/Response

- Manage cut and fill on the site to raise the area of land within and including the road perimeter to be above the flood planning level
- Minimal impact is expected from fill when viewed from Sealark Road where the fill is less than 500mm with areas having greater levels of fill located to the other side of the site 100m away where any potential visual impact is reduced.



**Figure 23 Cut and Fill Plan Diagram**  
Source: Footprint Sustainable Engineering

## Bushfire

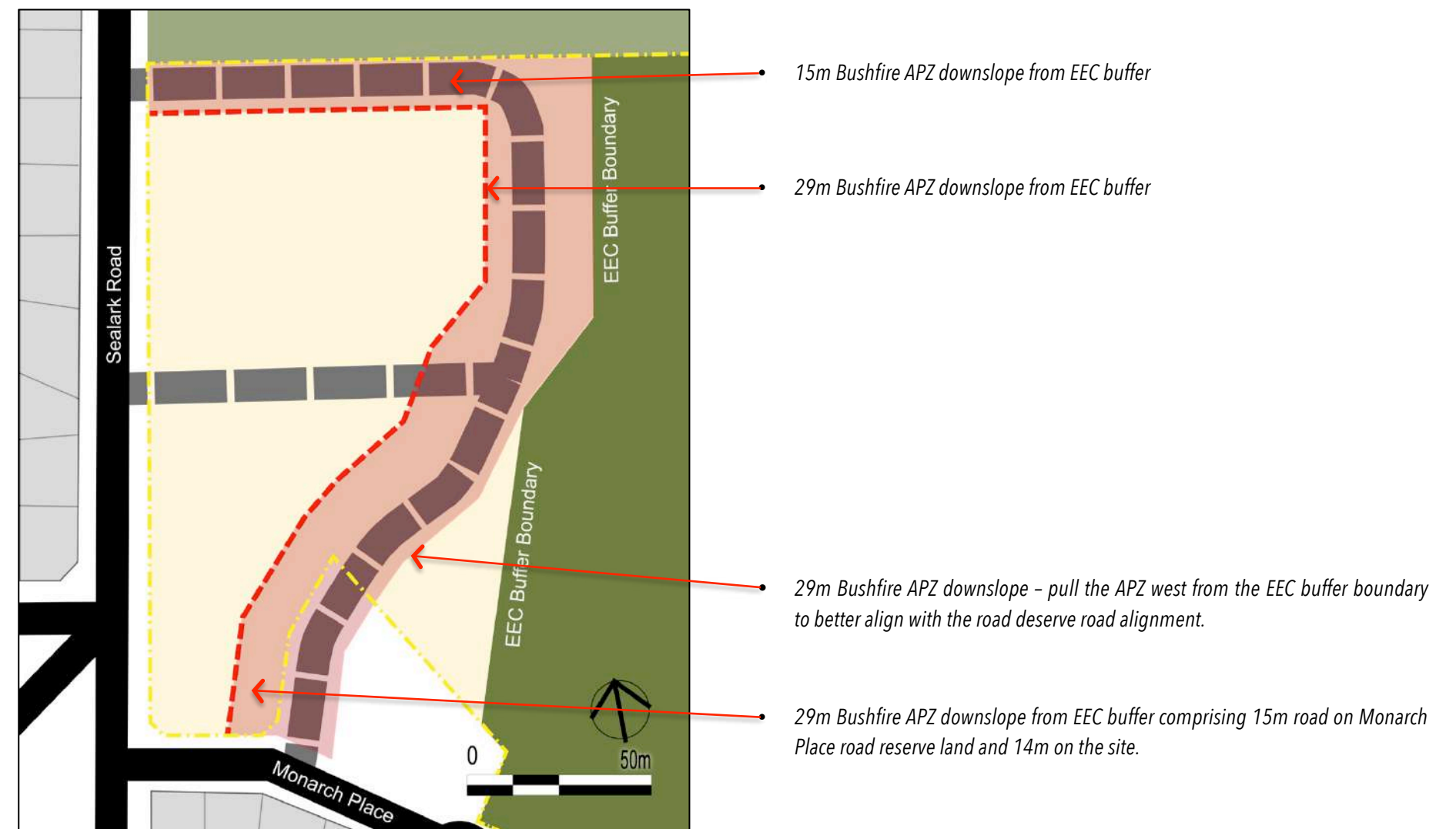
Asset Protection Zones ("APZs") of between 15m (where the hazard is upslope) and 29m (where the hazard is downslope) are required to protect future development from bushfire.

APZs cannot include biodiversity areas and their buffers.

The Rural Fire Service generally prefers that a perimeter road is provided to allow access around assets within the APZs.

### Observations/Response

- The APZs constrict the location of assets within the proposed lots
- The open drainage channel is not technically an APZ but should be managed as through it is one, to ensure it does not become a hazard source in future
- The APZ should be pulled away from the EEC boundary to better match the road reserve road alignment.



**Figure 24 Bushfire Asset Protection Zones Plan Diagram**



## Subdivision layout

### Neighbourhood Scale

The subdivision pattern of Callala Bay at a neighbourhood scale is reasonably regular.

- Most of the lots north of Emmet Street are mostly rectangular with areas of around 600-750m<sup>2</sup>
- South of the subject land, Monarch Place is a recent subdivision of small rectangular, lots with areas of around 425m<sup>2</sup>
- These areas are consistent with the Minimum Lot Size controls of the Shoalhaven LEP for 500m<sup>2</sup>

### Site Scale

- 12 lots for single dwellings at around 525m<sup>2</sup> zoned R1 can be provided north of the open drainage channel, with a north-south orientation. This zoning and minimum lot size matches the controls on the opposite side of Sealark Road. The two end lots closest to Sealark Road are proposed to be slightly larger at around 600m<sup>2</sup> closer to the typical 600-700m<sup>2</sup> existing lot sizes and ensuring a consistent interface.
- 2 lots for single dwellings at around 600-700m<sup>2</sup> zoned R2 can be provided at the southern part of the site of the open drainage channel. This zoning and minimum lot size matches the controls on the opposite side of Sealark Road and on Monarch Place.
- The remainder of the land south of and including the drainage channel should be retained as a single larger lot. This lot can support multi-dwelling housing taking advantage of the wide separation and high quality outlook afforded by the landscaped open drainage channel. A single larger lot can also include appropriate strata management arrangements to pay of the upkeep of the drainage channel and a recreation/landscape space east of the road. The proposed R1 zoning permits multi-dwelling housing with consent and is the same zoning as the land opposite on Sealark Road.

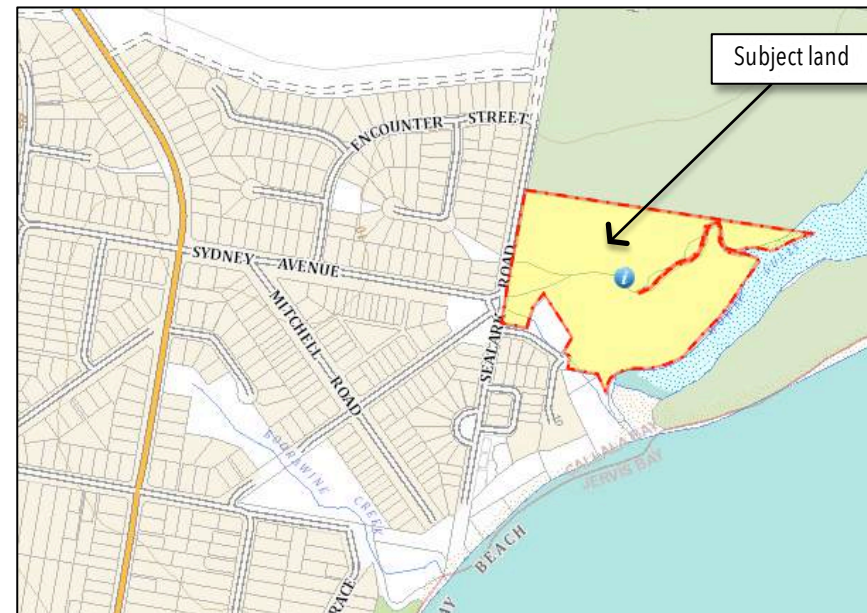


Figure 25 Neighbourhood Scale Subdivision Plan Diagram

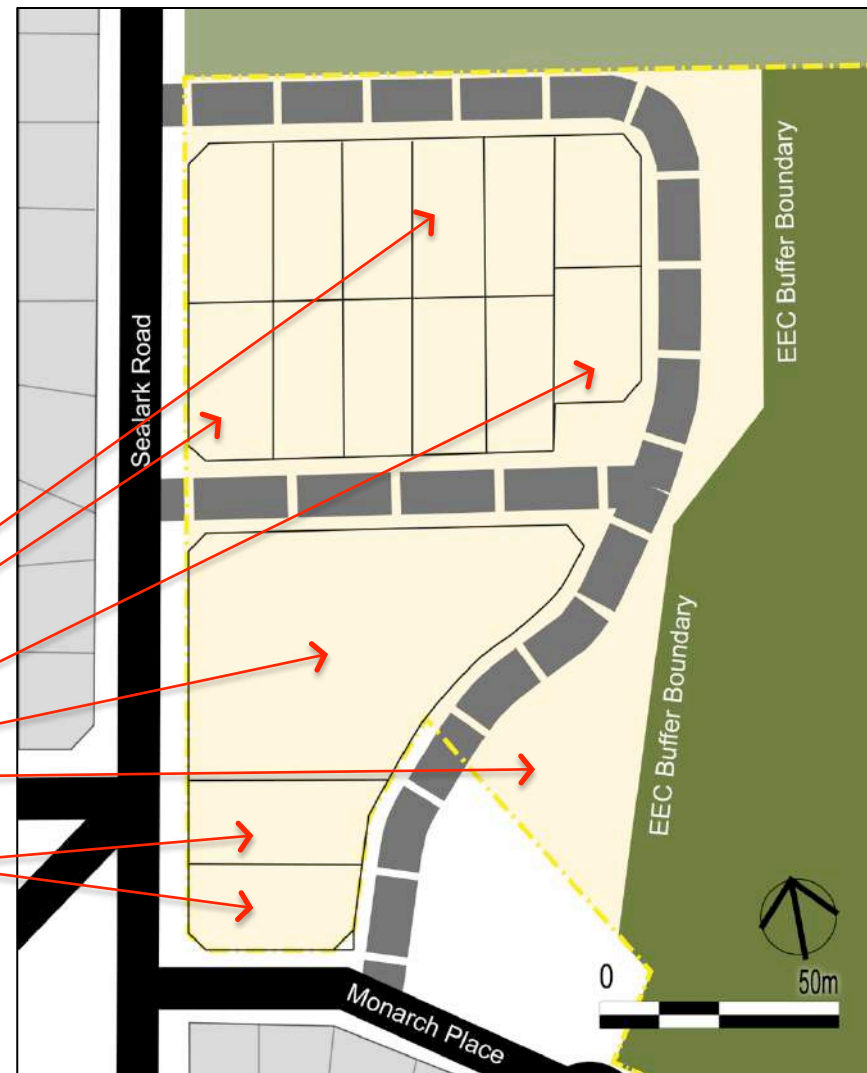


Figure 26 Site Scale Subdivision Plan Diagram

*Lots for single dwellings at 500m<sup>2</sup> or greater zoned R1*

*Corner lots fronting the Sealark Street can be slightly greater in area than the remainder to provide for dual occupancy with separate access.*

*The end lots are slightly reconfigured to allow built form to avoid the APZs*

*A single larger lot including the drainage channel zoned R1*

*Leftover portion of the land and the residual part of the c2 zoned land can be used for private recreation and landscaping consistent with the zoning.*

*Lots for single dwellings at 500m<sup>2</sup> or greater (approx. 600-700m<sup>2</sup>) zoned R2*

## 4.4 Built Form

The built form for the smaller lots should take the form of single detached dwellings with a height limit of 8.5m (providing for 2 storeys), consistent with adjacent land zonings.

The built form for the single large lot should take the form of multi dwelling housing with a height limit of 8.5m (providing for 2 storeys), providing for attached town houses, villas or equivalent, consistent with adjacent land zonings.

### Observations/Response

- The expected built form on the land is generally regular and in keeping with the existing pattern of built form in Callala Bay
- The two realigned lots on the east of the proposed single dwelling lots will have an offset built form in order to avoid APZs on the land. Whilst this is not ideal in an urban context, in this instance it is not considered to be an issue given the location of these lots, surrounded by national park at the far eastern edge of the urban settlement, which provides a landscape rather than built context for these forms.

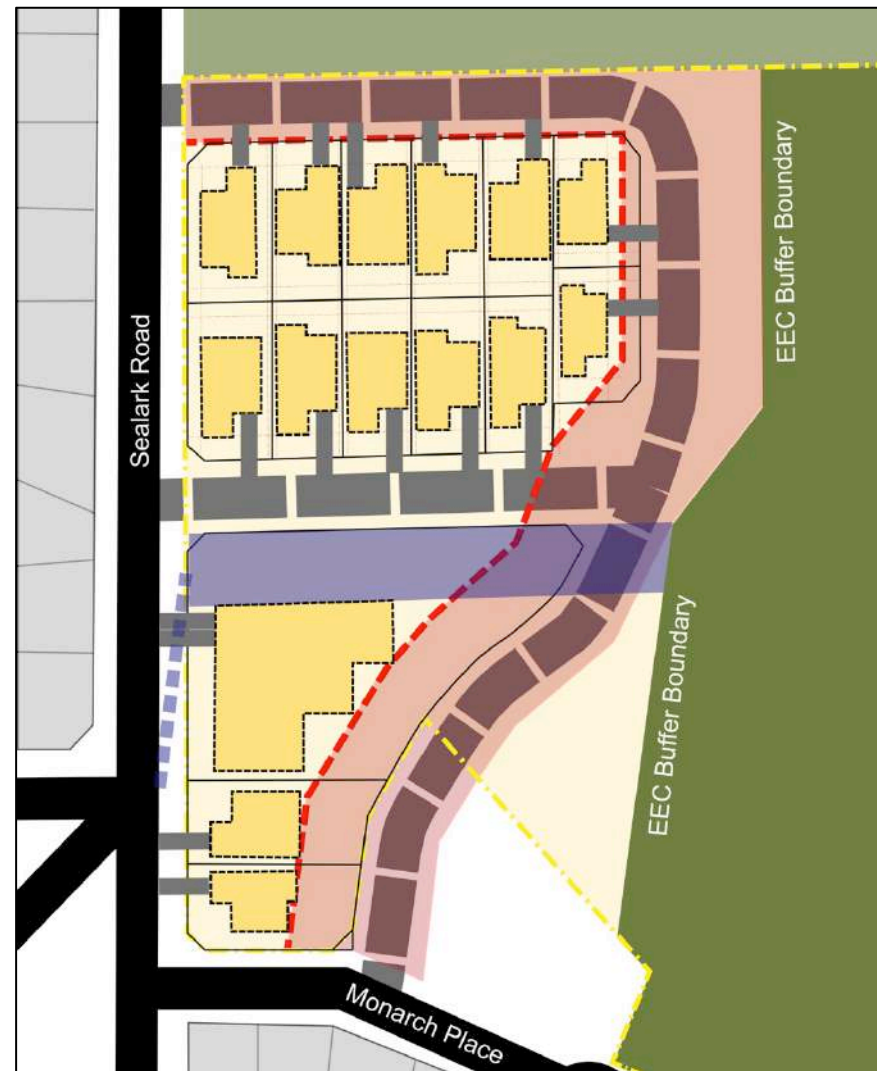


Figure 27 Built Form Plan Diagram

## Built Form Middle Lot

The single larger lot south of and including the drainage channel zoned R1 would be expected to be developed for multi- dwelling housing constructed. Using Shoalhaven Development Control Plan 2014 Chapter G13: Medium Density and Other Residential Development, the primary built form controls include:

- FSR (Table 1: Floor space ratio and gross floor area provisions): 0.5:1
- Landscaped Area (5.1.4 Landscaping): 10% formal plus 20% = 30% total
- Setbacks (Table 4: Multi dwelling housing, multi dwelling housing (terraces), attached dwellings, semi-detached dwellings, manor houses and integrated housing development)
  - Front: 5.5m Setback (4.5m awnings), 3m to a secondary road
  - Side: 2m (most onerous case)
  - Rear: 900mm.

The diagram below indicates an indicative typical built form layout for this lot based on achieving the above controls showing a floorplate of around 650m<sup>2</sup>.

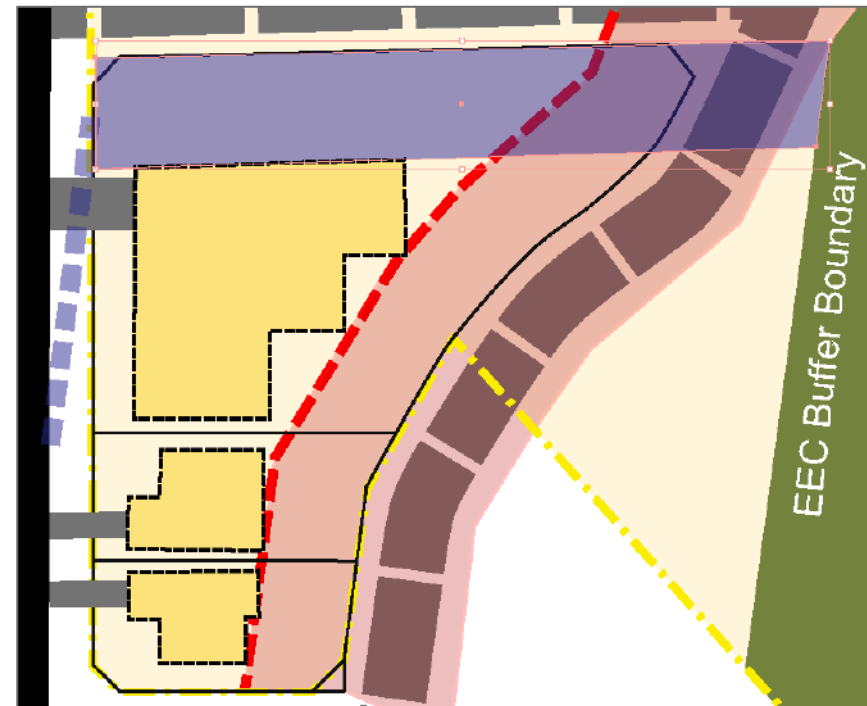


Figure 28 Built Form Envelope - Typical Lot - Plan Diagram

It is considered that the DCP provides an appropriate level of built form control for these lots. In particular the primary controls that would provide certainty regarding the built form relate to the Sealark Road and the southern side boundary setbacks as the northern setback is determined by the open drainage channel, and the eastern setback by the APZ. These controls together provide a clear envelope control that locates the potential building on the site.

## Built Form Typical Lots

Typical lots of approximately 525m<sup>2</sup> would be expected to be developed for single dwelling detached housing. Using Shoalhaven Development Control Plan 2014, Chapter G12: Dwelling Houses and Other Low Density Residential Development, the primary built form controls include:

- Landscaped Area (Table 3: Minimum landscaped area): 20%
- Setbacks (Table 2: Setbacks in the R1, R2 (< 2000m<sup>2</sup>), RU5 and SP3 zones):
  - Front: 5m Setback (4m awnings), 3m to a secondary road
  - Side: 900mm
  - Rear: 3m average.

The diagram below indicates an indicative typical built form layout for this lot based on achieving the above controls, for a selection of potential building envelopes of 180-235m<sup>2</sup>.

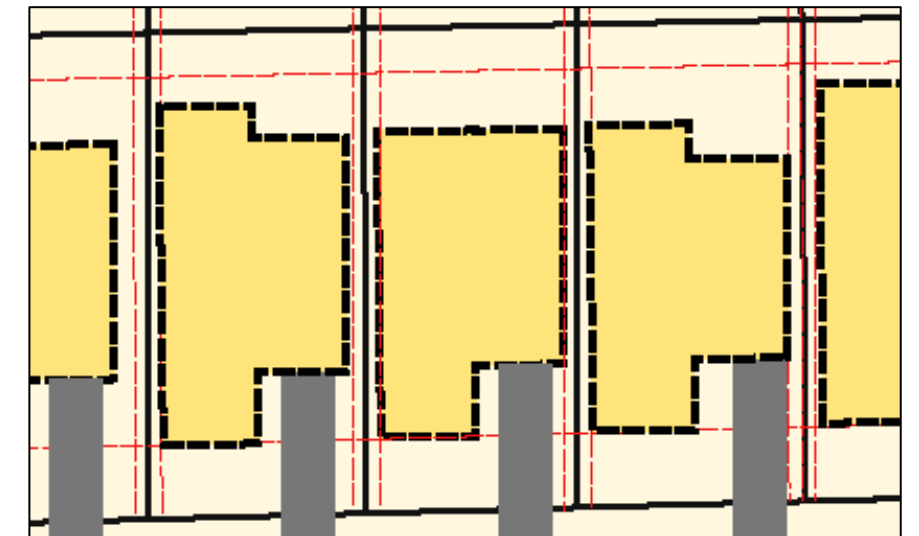


Figure 29 Built Form Envelope - Typical Lot - Plan Diagram

It is considered that the DCP provides an appropriate level of built form control for these lots - there would be no advantage in producing a site specific DCP for this land as it would complicate the planning context without adding any additional value or certainty.

Overall it is considered would be no advantage in producing a site specific DCP as it would complicate the planning context without adding any additional value or certainty. Further it is considered that a site specific DCP on this lot risks locking down design options without the benefit of a design brief, and that could act to unreasonably constrain rather than encourage good design.

# 5

## Urban Design Guidelines

This section draws together the observations and responses flowing from the preceding urban design analysis to recommend a set of urban design guidelines to appropriately manage built form on the site.

## 5.1 Urban Design Guidelines

### Eastern Portion

- A. The riparian, EEC and bushfire Asset Protection Zones define a significant proportion of the subject land that cannot be developed. This land to be dedicated to become part of the Jervis Bay National Park and rezoned C2.

### Western Portion

#### Roads

- B. Provide a perimeter road around the site collocated with Asset Protection Zones and connecting into Sealark Road and Monarch Place
- C. Use land already designated as a public road to provide the land for the perimeter road at the south and south east of the site, with the responsibility of the construction to be determined in consultation with the Council.
- D. Do not align new roads with existing intersections given the complex existing Sydney Avenue/Sealark Road intersection design
- E. Provide for visitor parking along new road reserves

#### Drainage, Cut and Fill

- F. Realign and improve the open drainage channel in the middle of the site
- G. Install a culvert to collect secondary drainage from the Sydney Road intersection
- H. Manage cut and fill on the site to raise the area of land within and including the road perimeter to be above the flood planning level, and minimise visual impacts of raising the level of the land when viewed from Sealark Road.
- I. The open drainage channel proposed for increased capacity should function as a high quality landscaped space benefitting the site owners and occupiers and contain elements to encourage use such as informal stepping stone crossings, small bridges etc. and should not be fenced.
- J. The open drainage channel will need to be maintained to ensure it functions as a bushfire Asset Protection Zone with low managed vegetation

#### Bushfire Asset Protection

- K. The APZs constrict the location of assets within the proposed lots
- L. The open drainage channel is not technically an APZ but should be managed as through it is one, to ensure it does not become a hazard source in future.

#### Lot Design

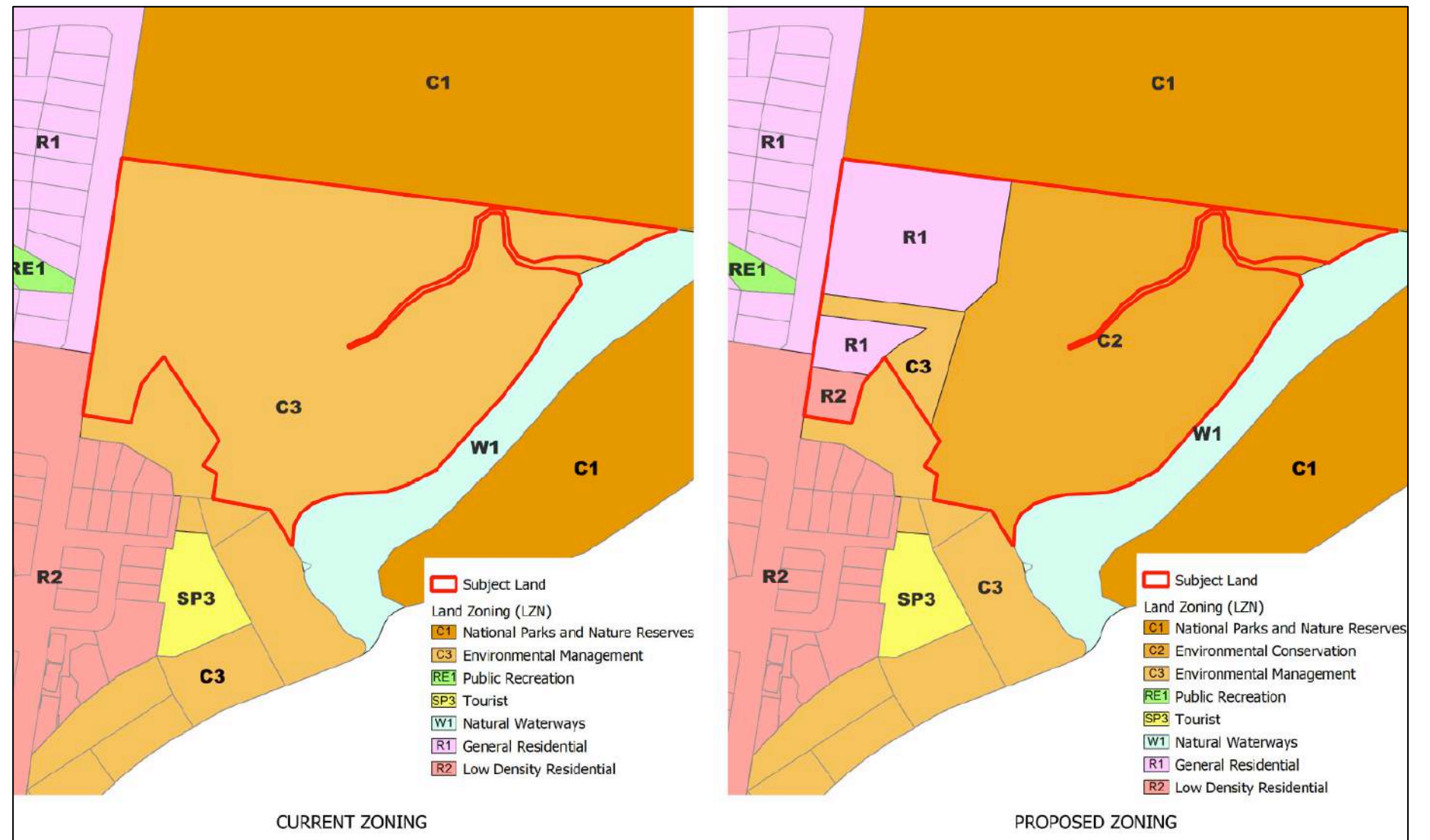
- M. 12 lots for single dwellings at around 525m<sup>2</sup> zoned R1 can be provided north of the open drainage channel.
- N. 2 lots for single dwellings at around 600-700m<sup>2</sup> zoned R1 can be provided at the southern part of the site of the open drainage channel.
- O. A single larger lot for multi-dwelling housing zoned R1 can be provided south of and including the open drainage channel with appropriate strata management arrangements to maintain the drainage channel and a recreation/landscape space east of the road.
- P. New roads to be dedicated to Council.



Figure 30 Urban Design Guidelines - Plan Diagram

## 5.2 Proposed Rezonings

The adjacent diagram shows the current and proposed rezonings, prepared by PRM Architects + Town Planners.



**Figure 31 Current and Proposed Rezonings Plan Diagram**

Source: PRM Architects + Town Planners

### 5.3 Indicative Subdivision Plan

The adjacent diagram shows the indicative subdivision plan, prepared by Footprint Sustainable Engineering, in support of the planning proposal, rotated 90 degrees to generally match the orientation of other drawings in this report.

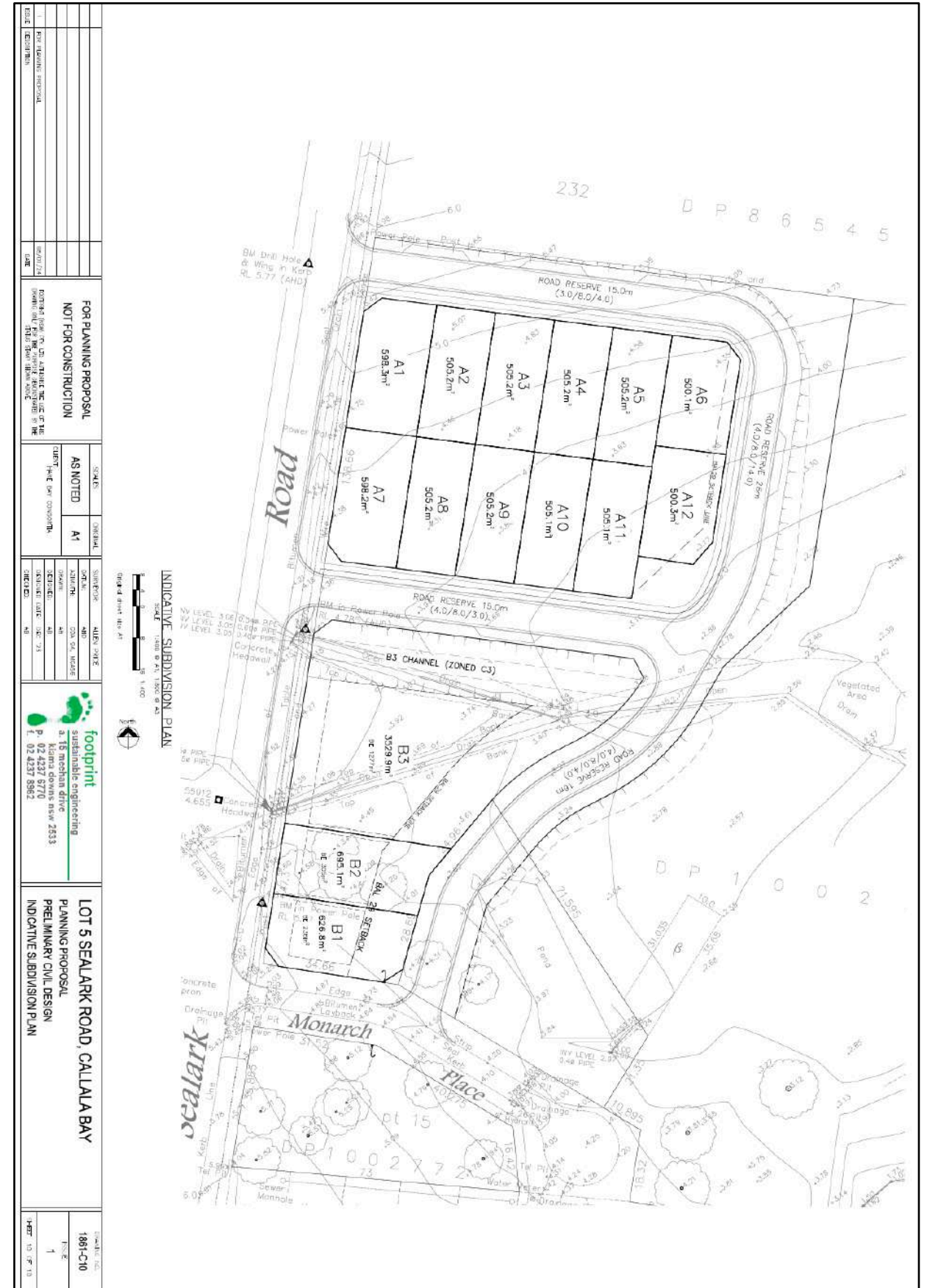


Figure 32 Indicative Subdivision Plan  
Source: Footprint Sustainable Engineering

# 6

## Conclusions

This report examines the urban design context and documents the process to identify and address built form outcomes for the planning proposal to rezone the subject land to provide new residential lots, associated roads, improved drainage and a significant dedication to grow the area of the Jervis Bay National Park.

The report has found the land can effectively provide:

- Protection in perpetuity of the Endangered Ecological Community comprising the Bangalay Sand Forest and the riparian land of Wowly Creek by dedicating approx. 4.5ha to the Jervis Bay National Park through a VPA.
- 12 lots for single dwellings at around 525m<sup>2</sup> zoned R1 north of the open drainage channel with land zoning and minimum lot size matching the controls on the opposite side of Sealark Road.
- 2 lots for single dwellings at around 600-700m<sup>2</sup> zoned R2 at the southern part of the site of the open drainage channel with land zoning and minimum lot size matching the controls on the opposite side of Sealark Road and Monarch Place.
- A single larger lot for multi-dwelling housing zoned R1 south of and including the open drainage channel with appropriate strata management arrangements to maintain the drainage channel and a recreation/landscape space east of the road.
- New perimeter roads containing the proposed residential subdivision and constructed to effectively resolve potential flooding.

- Improved drainage including a high quality visually attractive open drainage channel that will address existing outflow limitations to resolve existing flooding at the Sydney Avenue/Sealark Road intersection benefitting the wider community.
- Effective management of the site's bushfire, flooding, earthworks, cut and fill, road design and built form constraints.

The Report has also found that there is no need for a site specific DCP for the site due to the relatively small scale of the subdivision together with limited options for the location of built form within the subdivision blocks. There is also a desire to maximise consistency with nearby development in terms of built form controls, setbacks, etc. by using the Shoalhaven DCP as well as a desire to avoid unnecessary complexity in the planning framework for the land.

The Proposal is accordingly recommended the Southern Regional Planning Panel and the Department for favourable consideration as it completes its assessment of the development application.

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