

PROPOSED SUBDIVISION OF LOTS 46/47 DP 751395 (NO 52/54) MILES ST, YAMBA

Consisting of:

- 277 Low Density Residential Lots
- 1 Medium Density Residential Development Lot
- 1 Commercial Development Lot
- 1 Low Density Development Lot
- 3 Drainage Reserve Lots
- 1 Open Space Reserve Lot

INTEGRATED DEVELOPMENT UNDER THE:

- **WATER MANAGEMENT ACT 2000**
- **RURAL FIRES ACT 1997**

STATEMENT OF ENVIRONMENTAL EFFECTS



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1. Introduction

Kahuna No. 1 Pty Ltd owns Lots 46 and 47 DP 751395 jointly referred to as No. 52-54 Miles Street, Yamba and located in the West Yamba Urban Release Area (WYURA).

A subdivision application, SUB 2019/0030, was originally submitted in August 2019 for 295 low density lots on Lot 46 alone. Following lengthy and detailed negotiations with Council, this was amended in June 2021 to a 310 lot subdivision covering both Lots 46 and 47 and including 2 stormwater detention basins of 1.167ha and 2.067ha. SUB 2019/0050 was formally withdrawn on 13 September 2022. A new application SUB 2023/0001 was submitted on 23 December 2022. Council then issued a request for further information and as a result the December application has been amended to reflect those comments. Accordingly, this application now differs from the previous application of 2021 as follows:

- Decrease low density lots to 277, including 3 lots over 800m² and suitable for multi-unit housing.
- Provide a medium density precinct (Lot 279, 8001m²).
- Provide a commercial precinct (Lot 278, 2000m²).
- Provide a low-density residential development lot (Lot 900, 1.553ha) in the south-west corner.
- Expanded floodway (Lot 903, 10.563ha)
- Provide an edge road around the southern and eastern boundaries including 2.5m wide shared pathway which links to the shared pathway network along the collector road and adjacent to the 2nd order stream which links to Miles St at both intersections and to Carrs Drive.
- Modify the stormwater management system incorporating inter-allotment drainage on lots and biopods within road reserve verges.
- Redesign the road network to provide an intersection with Carrs Drive south of Miles St and an intersection and roundabout at the eastern end of the development which will align with the collector road to be provided on Lot 18 DP 1090409 on the northern side of Miles St.
- Provides a Local Park with internal pathway (Lot 904 5066m²).

The property has an area of 42.5ha, and the subdivision footprint is 27.13ha including detention basins, which represents 63.8% of the property. Excluding the basin areas, the urban development footprint is 24.5ha (57.8%).

The site contains 3 classified streams under the Water Management Act 2000 and so the application is classified as Integrated Development. The one classified as a 2nd order stream is to be retained along with its 40m wide vegetated buffer which was approved by the Natural Resources Access Regulator (NRAR) under CAA 30CX324288/A024687 dated 23/12/2020 (attached).

It is proposed to remove the southern 1st order stream and that section of the eastern 1st order stream located outside of the floodway and in the development footprint. This requires approval under the Act.

The site also contains bushfire buffer and so is also an Integrated Application under the Rural Fires Act 1997.

WYURA is subject to specific controls contained in Schedule XI of Part X of the Clarence Valley Residential Zones Development Control Plan 2011. This is addressed in Section 4.2 of this report, where variations are sought from the following provision of Schedule X1.

- Figure X1.3 Conceptual Stormwater Network Plan: delete south-west drainage reserve and replace with western detention basin and 2nd order stream; add eastern detention basin and increase area of floodway.
- Part X3 C9 and C10. Road 3 is a cul-de-sac; its end point is not visible from its access point; see comments under those controls.
- Part X Natural and environmental hazards – Flood and Fill Management. The Background section requires an accessible refuge area above the Probable Maximum Flood (PMF) height of 3.8m AHD. 3.4 hectare for the finished site is above this level, but the 2022 Lower Clarence Flood Model Update adopts a PMF of 7.2m AHD. None of the site is above that level and a variation is requested based on reports from Council that this is estimated to be a 1 in 90,000 year event. In addition, it is not required as the Evacuation Plan is based on total evacuation to either Yamba Hill or Maclean.

WYURA developed out of studies undertaken by the Maclean Shire Council (MSC) which initially established the potential for urban development in the vicinity of Carrs Drive south of Yamba Road.

In 1995 MSC incorporated this land into its Strategic Land Use Plan and in 1996 commissioned a 2 stage Local Environmental Study (LES) of 690ha.

Stage 1 of the LES concluded that around 50% of the 690ha was of high conservation value and 25% of medium conservation value, leaving approximately 170ha for potential urban development.

Stage 2 was completed in 1997 and focussed on the 170ha, which then became known as the West Yamba Urban Release Area (WYURA).

**Figure X1.1**

Figure 1 - Figure X1.1 - WYURA Locality Plan (CV Residential Zones DCP - Part X)

In December 2011, Clarence Valley Local Environmental Plan 2011 (CVLEP 2011) came into effect and 119.8ha (excluding roads) of WYURA was zoned R1 General Residential. The balance of WYURA was variously rezoned:

- R5 Large Lot Residential
- E2 Environmental Conservation
- E3 Environmental Management
- RE1 Public Recreation

The land subject to this development application is wholly zoned R1 General Residential.

2. Subject Site

2.1 Property Description

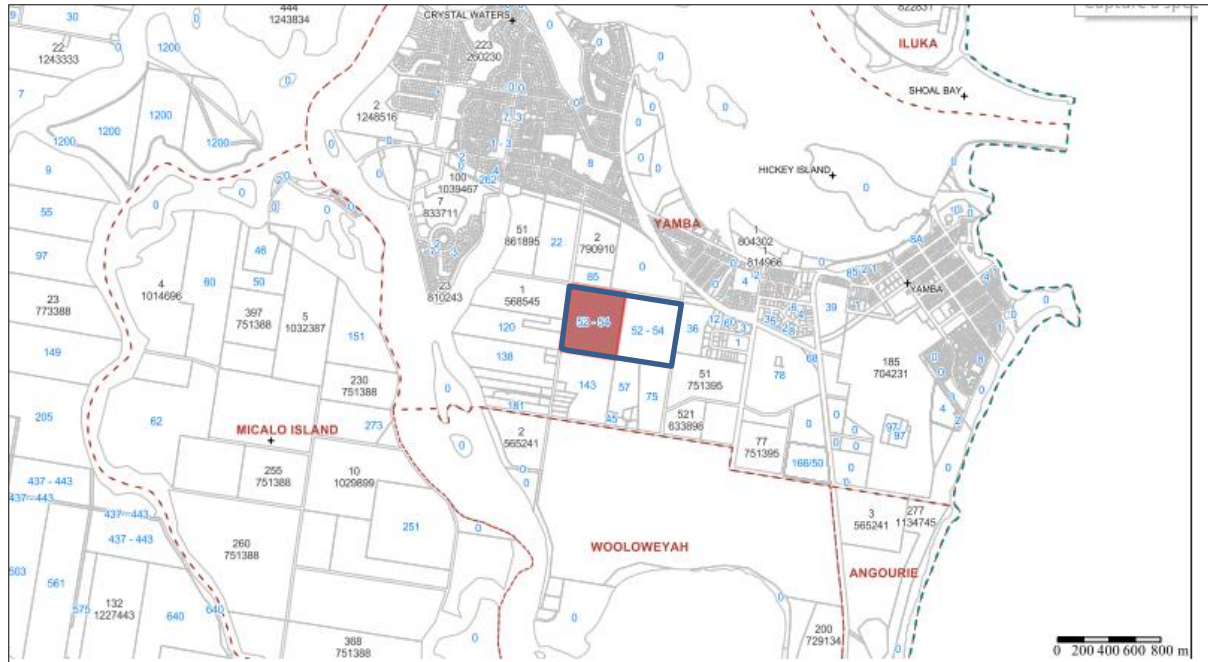


Figure 2 - Site Plan

The subject site is described as Lots 46/47 DP 751395 and has an area of 42.5ha.

2.2 Site Location

The subject site is located south of Yamba Road and approximately 4kms from the centre of Yamba township. It has 505m frontage to Carrs Drive which connects to Yamba Road, 840m to the unformed Miles Street, and 505m to Golding Street.

To the north on the opposite side of Miles St is St James Primary School (western end) and further WYURA land (eastern end); to the west is Lot 1 DP568545 on which a 200 unit manufactured home estate has been approved; to the south, land zoned R5 Large Lot Residential and E3 Environmental Management; and to the east is Golding St.

2.3 Site Zoning

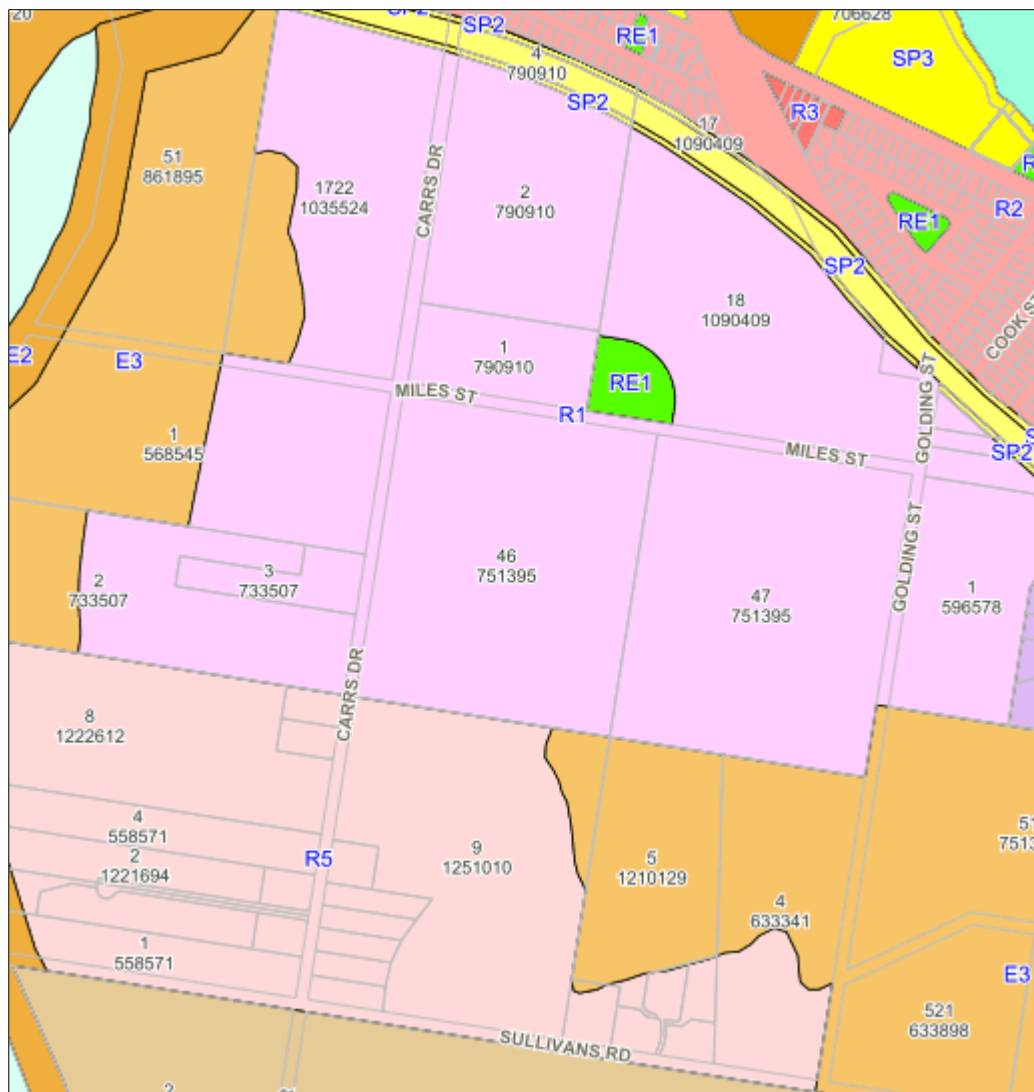


Figure 3 Zoning Map

2.4 Site Characteristics

The site contains 2 dwellings which will be removed as part of the development. The site has been modified by filling operations approved by Council covering approximately 12ha. Previously the site was flat with levels ranging from 1.10m AHD to 1.60m AHD within the development footprint. It was, and still is to a limited extent, used for cattle grazing with extensive areas of improved pasture.

The expanded floodway (Lot 903) contains a variety of vegetation communities and will be retained in its current state as will be the 2nd order stream (part of Lot 901). All vegetation in the development footprint will be removed to allow for either filling or the construction of the detention basins – see Biodiversity Development Assessment Report and Section 4.2 of this report.

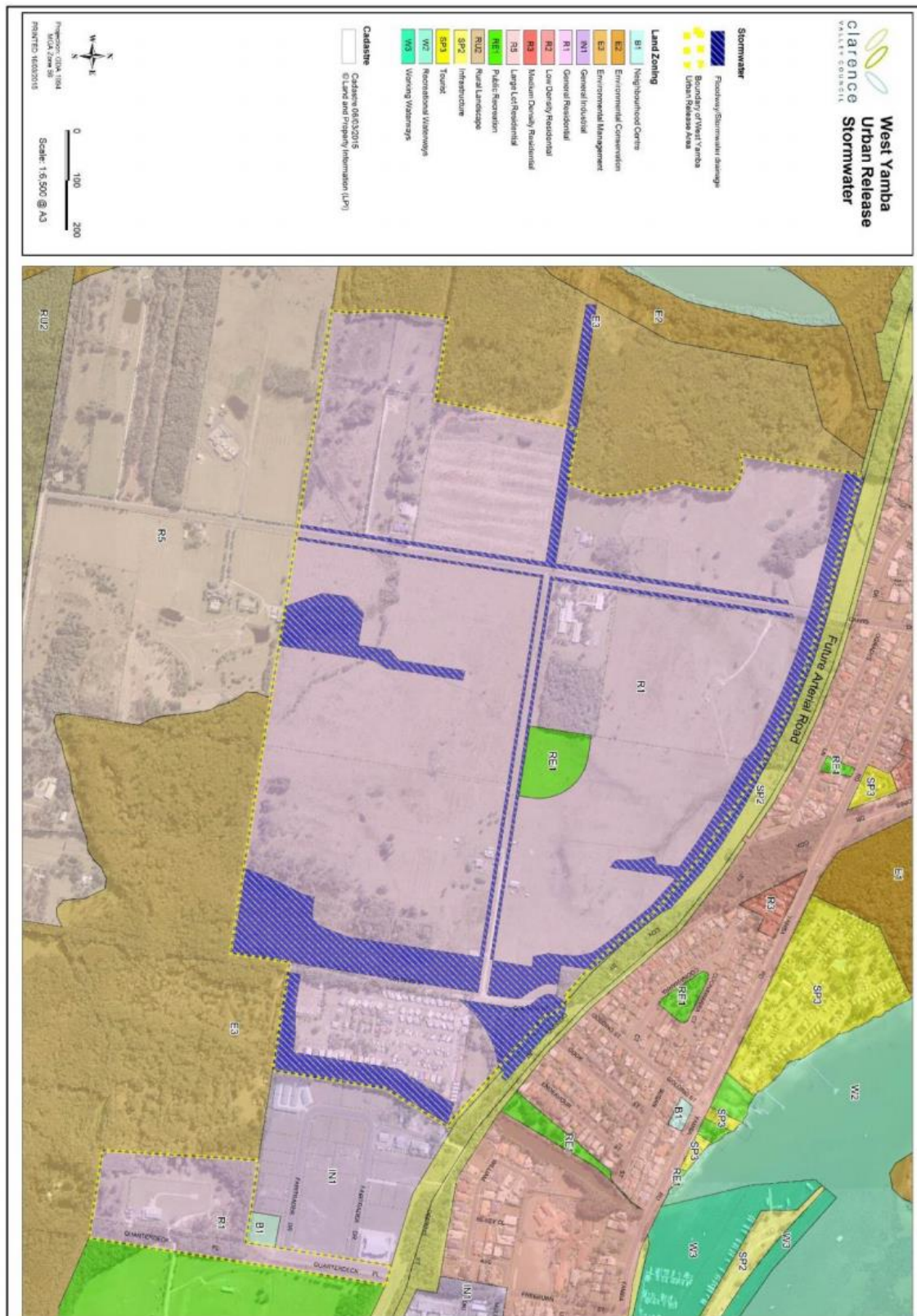


Figure X1.3 - conceptual Stormwater Network Plan

Figure 5- CV Residential Zone DCP Part X

A number of flood studies have been undertaken to assess the impact of the extensive fill required and the effectiveness of the floodway, including:

Draft West Yamba Flood Impact Assessment (BMT WBM, May 2014)

This was submitted to Council though it has never proceeded beyond the draft stage.

West Yamba Urban Release Area Flood Impact Assessment (BMT, January 2018)

This was prepared on behalf of the developers of the approved 161 lot subdivision on No. 22 Carrs Drive, diagonally opposite the subject site. It updated an earlier report by modelling the filling of the whole of WYURA, with the exception of the easterly floodway, to the 100-year ARI flood level. It made a number of conclusions, including:

- *Mitigation of the WYURA relies principally on a large floodway located outside the site area.*
- *The mitigated 100-year ARI event shows some impacts (increases in peak flood level) greater than 0.03m limited to the perimeter of the WYURA. These are not predicted to affect existing dwellings or other receptors within the tolerance shown.*

This report then made a number of recommendations, including:

1. *Assumptions have been made with regard to the development in neighbouring land to the east. This includes assumptions about fill extents and swale dimensions. It is recommended that consultation is undertaken with neighbouring parties to determine whether these assumptions are consistent with latest designs.*
2. *The design of the proposed floodway should be refined and reassessed at the detailed design stage following any proposed modifications. If design events and their underlying assumptions, such as allowances for storm surge, are updated then the development should be assessed with the updated design events.*

West Yamba Further Flood Assessment (BMT, October 2018)

As a result of recommendations 1 and 2 contained in the January 2018 Report this further assessment was prepared taking into account an updated Digital Evaluation Model (DEM) for Lots 46 and 47 and the latest design for the floodway.

Yamba Gardens Flood Impact Assessment (BMT, February 2020)

A further report was prepared by BMT dated 27 February 2020 which incorporates the following significant changes:

- A reduced extent of filling within the east section of the site, increasing the width and area of the previous floodway
- Removal of the formalised floodway, leaving this area in its natural state to preserve the existing landform and vegetation.

Whilst the floodway is no longer proposed as a formalised floodway, the land is low lying and will function as a natural floodway during significant flood events.

The report modelled 2 options, the first only filling Lots 46 and 47 plus the approved filling of No. 22 Carrs Drive (Yamba Parklands Estate) and the second the filling of the whole of WYURA to above the 1 in 100-year level.

WYURA Flood Impact Assessment (BMT, 22 Nov 2021)

This Assessment used Council's 2014 flood model which was updated and refined with additional detail and higher resolution in the vicinity of West Yamba.

Council engaged WMA Water to peer review this FIA. This review was forwarded to BMT for response. Further FIA was prepared by BMT in November 2022 which was peer reviewed and a response to that review was prepared in May 2023.

WYURA Flood Impact and Risk Assessment (BMT, October 2023)

In June 2022 Council adopted the Lower Clarence Flood Model Update 2022 which superseded the 2014 Model upon which all the previous WYURA Flood Impact Assessment Reports had been based. The 2022 Model adopted the following levels for WYURA:

1 in 20 year: 1.3m AHD (previously 1.66m AHD)

1 in 50 year: 2.0m AHD (previously 1.86m AHD)

1 in 100 year: 2.1m AHD (previously 2.09m AHD)

1 in 100 year Climate Change (CC1): 2.9m -3.0m AHD (not previously modelled)

Extreme: 7.2m AHD (previously 3.8m AHD)

The Model indicates that the 1 in 100 year climate change level for the subject property is 2.9m AHD.

Council is in the process of adopting the 1 in 100 year climate change level plus 0.5m as the interim planning design level which in the case of the subject property is 3.45m AHD.

Council requested that a new FIA be prepared addressing these new levels, which this report does. It concluded:

"No flood impacts of the proposed development (ie whole of WYURA) were observed on residential properties in any of the analysed flood events."

This issue is discussed in detail in Sections 4.1 and 4.2 of this report.

2.5.2 Bushfire

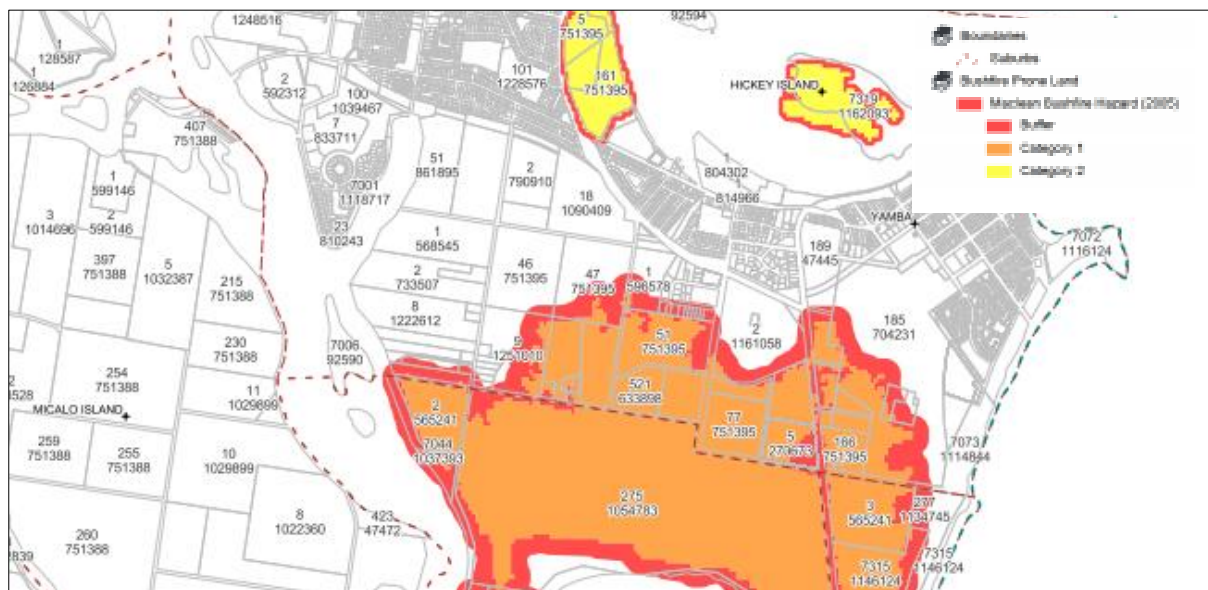


Figure 6- Bushfire Prone Map

The Clarence Valley Bushfire Prone Land Map indicates that land in the south and east of site is classified as bushfire buffer and with a smaller portion classified Category 1 bushfire prone land.

A Bushfire Risk Management Plan (Bushfiresafe (Aust) Pty Ltd, December 2022) is attached.

It proposes Asset Protection Zones of either 20m or 25m width along the southern and eastern boundaries and adjacent to the 2nd order stream which utilise road reserves in all instances except for the southern boundary which utilises the 24.2m wide road reserve plus 0.8m of the lots' front building line area which will be enforced through easements on affected lots.

2.5.3 Acid Sulfate Soils

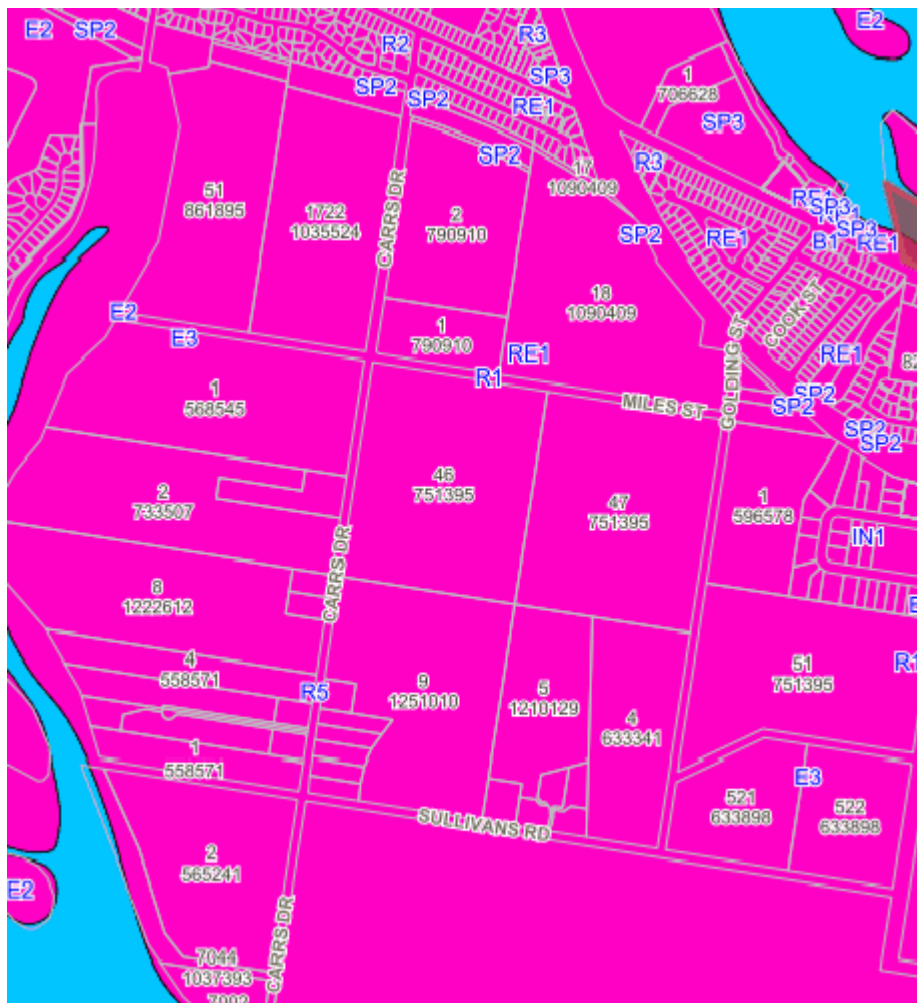


Figure 7- Acid Sulphate Soils Map

The Clarence Valley Acid Sulphate Soils Map classifies the entire site as Class 2 ASS.

An Acid Sulphate Soils Assessment (Regional Geotechnical Solutions, 5 March 2020) is attached.

The proposed development involves stripping the development footprint of 100mm of topsoil which is, and will be, stockpiled and spread over the finished lots. This has previously been approved for 12ha of the 42.5ha site under consents to DA's 2018/0553 (MOD2019/0011), 2019/0181, and DA 2019/0492.

These consents contain the following condition:

“Earthworks are to comply with the Acid Sulphate Soil management provisions of the Clarence Valley Local Environmental Plan 2011. Treatment of Acid Sulphate Soils are to be generally in accordance with the Management Plan contained in the report titles “Proposed Residential Development – 52-54 Miles Street, Yamba NSW – Acid Sulphate Soil Assessment” dated 7th November 2018 prepared by Regional Geotechnical Solutions.”

Stripping, stockpiling and filling within the 12ha portion has been completed. Topsoil will be spread over these areas as finished levels are reached.

The ASS Assessment also includes an Acid Sulphate Soil Management Plan which has been compiled with in respect of current operations. The Management Plan includes:

"1. Prepare stockpile area. This should involve:

- Construct a bund around the designated area(s). The stockpile area should be at least 50m from any water courses*
- Spread lime over the exposed soils at a nominal rate of 2kg/m²*
- Lightly roll to reduce water infiltration" and*

"3. Spread topsoil over the finished lots and when complete spread lime at a nominal rate of 0.1kg/m² across surface to assist revegetation." (p 5).

Recommendation 1 has been implemented for topsoil currently stockpiled and Recommendation 3 will be implemented when filling works are completed in each stage.

3. Development Proposal

The application proposes a 277 low density residential lot subdivision plus:

- Lot 279: 8001m² medium density development lot
- Lot 278: 2000m² commercial development lot
- Lot 900: 1.553ha, to be retained by current owner and not proposed for development at this stage.
- Lot 901: 4.558ha, includes the western detention basin (2.067ha) and the watercourse plus vegetated buffers (2.491ha) classified as a 2nd order stream under the Water Management Act 2000. This will be dedicated to Council.
- Lot 902: 1.167ha, includes the eastern detention basin to be dedicated to Council.
- Lot 903: 10.563ha, the expanded floodway with retained vegetation, to be dedicated to Council.
- Lot 904: 5066m² public park to be dedicated to Council.

The 277 low density lots consist of:

- 81 lots less than 450m², the smallest lots being 404m²
- 98 lots between 450m² and 480m²
- 55 lots between 480m² and 600m²
- 43 lots greater than 600m²

Of the 37 lots greater than 600m², 3 (Lots 1, 162 & 163) are over 800m² and so are suitable for multi-unit housing.

The 81 lots (29.2%) at 450m² or less exceeds Councils affordable housing target of 10% of total lots.

The site, excluding detention basins, the floodway and 2nd order stream with buffer, will require filling to a minimum level of 3.0m AHD to meet the 1 in 100 year Climate Change (CC1) level. All houses in the Estate will be required to have their primary habitable floor level at 3.5m AHD to meet Council requirements. This necessitates the provision of retaining walls along Carrs Drive and Miles St up to 3m above the floor level of the adjacent swales. These will be stacked sandstone boulder walls on a shallow concrete strip footing.

Eleven stages are identified with Stages 1 and 2 containing 41 lots with the medium density lot, commercial lot, western detention basin and Local Park, plus the connection to Carrs Dr (Road 1) and Miles St (Road 2).

Miles St will be constructed in stages with Stage 1 being:

- Construct Carrs Drive intersection and associated drainage.
- Construct Miles Street to Chainage 160 just past entry to Stage 1 to allow construction of culverts under Road 2 and on the northern side.
- Construct bed of swale and low flow 900 wide concrete invert on southern side of Miles Street east until Chainage 375. Turf line swale.
- The balance of Miles St to Golding St will be constructed as gravel track for emergency access only as per the Bitzios TIA. Miles St will be fully constructed to the proposed roundabout at the eastern end of the loop road prior to the trigger point for connection to Golding St via the collector road through Lot 18 DP 1090409 being reached.

Features of the development include:

- Two access points from Miles St, 140m from Carrs Dr in the west and adjacent to the floodway in the east and one access point from Carrs Drive south of Miles St. All these intersections are designed to cater for turning buses and so are suitable for future bus routes. An indicative bus stop is shown at the collector road (Road 1) adjacent to the main park. The eastern Miles St intersection includes a roundabout.
- Miles St road reserve having variable width ranging from 36m to 25m, with 11m carriageway. Dedication of land in the subject property for this road ranges from 16m in the west and 0m adjacent to floodway.
- Dedication of 3.5m along the Carrs Dr frontage.
- Road reserves along the southern and eastern boundaries of the estate (Roads 1 & 11) ranging from 24.265m to 30.9m to assist with achieving the required Asset Protection Zone.
- A 2.5m wide shared network along the collector road, the eastern side of the 2nd order stream and the southern and eastern edge roads all connecting to the shared pathway in Miles St and then Carrs Drive (attached).
- All local roads have 1.2m footpath on one side.
- Lots filled to minimum 3.0m AHD to meet the adopted 1 in 100 year Climate Change (CC1) level.

- Two large centrally located detention basins west discharging into 2nd order stream: east discharging into floodway wetlands.
- Approximately 108 biopods providing water quality treatment prior to discharge into the detention basins.
- Retention of all existing vegetation in the floodway in the eastern section which will be managed in accordance with its Vegetation Management Plan (attached). Retention of the 2nd order stream and its protected regenerated buffers in the south-west corner.

4. Statutory Provisions

4.1 Clarence Valley Local Environmental Plan 2011 (CVLEP 2011)

Clause 2.3 Zone Objectives & Land Use Table

Zone R1 General Residential

1. Objectives of zone

- *To provide for the housing needs of the community*
- *To provide for a variety of housing types and densities*
- *To enable other land uses that provide facilities or service to meet the day to day needs of residents*

2. Permitted without consent

Home-based childcare; Home occupations; Home occupations (sex services)

3. Permitted with consent

Attached dwellings; Boarding houses; Caravan parks; Centre-based child care facilities; Community facilities; Dwelling houses; Educational establishments; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Food and drink premises; Group homes; Home businesses; Home industries; Hostels; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Residential accommodation; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation.

4. Prohibited

Rural workers dwellings; Any other development not specified in item 2 or 3.

The R1 zone permits an extensive range of uses including dwelling houses, residential flat buildings, multi-unit housing, neighbourhood shops and shop top housing. The latter two uses are referenced in Figure X1.2 of the Clarence Valley Residential Zones Development Control Plan Part X Urban Release Area Controls Schedule X1 – West Yamba Urban Release Area which identifies a “possible future Neighbourhood Centre”

and “Preferred location for medium density housing” on the subject site. These are provided by Lot 278 and Lot 279 respectively. Potential medium density sites are also provided by Lots 1, 162 and 163.

The objective “to provide for a variety of housing types” is addressed at Section 4.2.2.

Clause 5.21 Flood Planning

The 2022 FIRA shows a 1 in 100 year Climate Change level on the subject property of 2.95m AHD and it is proposed to fill the site to a minimum 3.0m AHD to achieve the minimum primary habitable floor level of 3.45m AHD for future dwellings. Accordingly, the proposal is subject to the provisions of this clause.

1) The objectives of this clause are as follows—

- (a) to minimise the flood risk to life and property associated with the use of land,*
- (b) to allow development on land that is compatible with the flood function and behaviour on the land, taking into account projected changes as a result of climate change,*
- (c) to avoid adverse or cumulative impacts on flood behaviour and the environment,*
- (d) to enable the safe occupation and efficient evacuation of people in the event of a flood.*

COMMENT: These are addressed below.

(2) Development consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development—

- (a) is compatible with the flood function and behaviour on the land,*

COMMENT: Filling the development area of the subject site (i.e., excluding floodway, detention basins, 2nd order stream and Lot 900) will ensure that all future buildings will achieve a minimum habitable floor level of 3.45m AHD. This ensures the proposed development is internally compatible with flood function and behaviour while compatibility with external areas is assessed below.

- (b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties,*

The elements of flood behaviour that are applicable are:

Flood Velocities

The FIRA (BMT October 2023) report states (p20):

“The changes in flow velocity are summarised as follows:

- No changes in flow velocity were observed in the 10% and 5% AEP events.*
- Increases in flow velocity ranging between 0.1m/s and 0.3m/s were observed along the drain located on the northern boundary of the development in the 1% and 0.5% AEP events.*

- *An increase in flow velocity of 0.18m/s was observed along Carrs Drive in the section which was upgraded as part of the Yamba Parklands development in the 0.5%, 0.2%, 1% AEP CC1 and PMF events. However, no changes in flood hazard category affected this section of Carrs Drive between the pre- and post-development scenarios as the level of the road has increased resulting in a lower flood depth.*
- *An Increase in flow velocity up to 0.4 m/s along a section of Miles Street was observed in the 1% AEP CC1 and PMF events. However, this section of the road is affected by a reduction in flood hazard of 1 category from H4 in the pre-development scenario to H3 in the post-development scenario as the level of the road has increased resulting in a lower flood depth."*

Flood Duration

The FIRA (BMT October 2023) report states (p21):

"Changes in Duration of Inundation

The changes in duration of inundation are minimal when compared to the duration of inundation in the pre-development scenario. The following key changes in the duration of inundation are observed:

- *A significant reduction in duration of inundation of 75% was observed along Miles Street and a reduction of 65% was observed along Carrs Drive in the 1%, 0.5%, 0.2% AEP and 1% AEP CC1 events. This improvement is associated to the proposed road designs, which are characterised by higher ground elevations and by two lateral swales located on both sides of the roads that collect and discharge the stormwater runoff more efficiently than in the pre-development scenario.*
- *An increase in duration of inundation of 15% was observed along Golding Street in the 1% AEP event. It is noted that the duration of inundation affecting this road in the pre-development conditions ranges between 48 and 60 hours. The increase in duration is due to the low-lying ground elevations characterising this road, which create a pond where the water runoff is trapped a bit longer than in the pre-development scenario. It is noted that this road is affected by flood hazard category H3 (i.e., unsafe for vehicles, children and the elderly) in both the pre- and post-development scenarios.*
- *An increase in duration of inundation of 2% was observed at the Yamba Community Garden in the 1% AEP CC1 event."*

Changes in Frequency of Inundation

The FIRA (BMT October 2023) states:

"No changes in frequency of inundation were observed throughout the study area."

Changes in Flood Extent

The FIRA (BMT October 2023) states:

“No increase in flood extent were observed in any of the analysed flood events. The areas of the site characterised by the proposed filling which were shown to be inundated in the pre-development scenario are now shown to be dry.”

Changes in Flood Hazard Category

The FIRA (BMT October 2023) states:

“The changes in flood hazard category are summarised as follows:

- No changes in flood hazard category were observed in the 10% and 5% AEP events.*
- A reduction in flood hazard category from H3 in the pre-development scenario to H2 in the post-development scenario was observed along Carrs Drive and Miles Street in the 1% AEP event.*
- An increase in flood hazard category from H2 to H3 was observed within the new floodway expansion located east of Lot 18 DP1090409 in the 0.5%, 0.2% AEP and 1% AEP CC1 events.*
- A reduction in flood hazard category from H3 to H2 was observed in some sections of Miles Street in the 0.5% and 0.2% AEP events. Even though there is an improvement in the overall flood hazard classification along Miles Street, it is noted that some sections of Miles Street still remain classified as H3 category, i.e. unsafe for vehicles, children and the elderly during the 0.5% and 0.2% AEP events.*
- A reduction in flood hazard category from H4 to H3 was observed in a section of Miles Street in the 1% AEP CC1 event. Even though there is an improvement in the overall flood hazard classification along Miles Street, it is noted that some sections of Miles Street still remain classified as H4 category, i.e. unsafe for people and vehicles during the 1% AEP CC1 event.*
- No changes in flood hazard category were observed in the PMF event. The reduction in flood hazard category affecting the proposed development fill areas is due to a reduction in flood depths occurring between the pre- and post-development conditions as a result of the filling.”*

Changes in Flood Level

The FIRA (BMT October 2023) states:

“No increase in flood levels affected residential properties in all the analysed flood events. The changes in flood levels affecting non-residential properties can be summarised as follows:

- No changes in 10% AEP flood level were observed in any adjacent properties. An increase in 10% AEP flood levels of 20mm was observed in the drain located along the south-east boundary of Golding Street MHE.*
- No changes in 5% AEP flood level were observed in any adjacent properties. An increase in 5% AEP flood levels of 33mm is observed in*

the drain located along the south-east boundary of Golding Street MHE. A localised increase in flood levels of 28mm was observed on a 35m long section of Carrs Drive in proximity of the drain included in the Clifton Lifestyle MHE development. However, this increase in flood level did not change the flood hazard category of the road in this location, which is classified as H1 (i.e., generally safe for people and vehicles) in both the pre- and post-development scenarios.

- *No changes in flood level affected any residential properties in the 1% and 0.5% AEP events. A reduction in 0.5% AEP flood levels of 12mm was observed along the drain and portion of floodway located north of Lot 18 DP1090409.*
- *An increase in 0.2% AEP flood levels of 13mm was observed on the property surrounding St James Catholic Primary School located at 87 Carrs Drive. The increase in 0.2% AEP flood levels mainly affected the property surrounding the school and did not affect the school building footprint. The school grounds were already affected by flooding in the pre-development scenario, with 0.2% AEP flood depths ranging between 0.6m and 0.75m. Given that the increase in flood levels is very small compared to the pre-development flood depths, the flood hazard classification affecting the school did not change between the pre- and post-development scenarios. It is noted that the school property was affected by flood hazard category ranging between H2 (i.e., unsafe for small vehicles) and H3 (i.e., unsafe for vehicles, children and the elderly), therefore, the school should already be evacuated during a flood event of this magnitude.*
- *St James Catholic Primary School was also affected by an increase in flood levels of 24mm in the 1% AEP CC1 event. In this event, the property is affected by pre-development flood depths ranging between 0.8m and 1.3m and flood hazard category of H3 (i.e., unsafe for vehicles, children and the elderly). As such, it is expected that the school would be already closed or evacuated during a flood event of this magnitude. No changes in flood hazard category affected the school property between the pre- and post-development scenarios.*
- *A reduction in PMF flood levels ranging between 10mm and 22mm was observed on a series of residential properties located north-east of the proposed WYURA development."*

In respect of St James School (3rd & 4th dot points), Council flood map indicates that the School has floor levels of between 2.455m AHD and 2.617m AHD. Under the 2022 model, the pre-development 1 in 100 year Climate Change level is 2.9m AHD so it is already inundated without the complete filling of WYURA, and as stated above would not be occupied in the event of flooding.

(c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood,

COMMENT: The *Clarence Valley Local Flood Plan* (NSW SES) classifies Yamba as a 'high flood island'. Volume 3 of the *Plan SES Response Arrangements for Clarence Valley* at 8.1 (p 43) addresses the Yamba Sector and is attached.

Following consultation with SES Headquarters the West Yamba Flood Evacuation Plan (BMT, August 2023) was prepared and is attached. It addresses evacuation from land owned by the West Yamba Landowners Consortium, being

- Lots 46 and 47 on DP751395, referred to as 'Yamba Gardens'.
- Lot 21 on DP1277589 fronting Carrs Drive, referred to as 'Northern Developments'.
- Lot 18 on DP1090409 fronting Miles and Golding Streets, also referred to as 'Northern Developments'.

It states in its conclusion:

"The proposed development, comprising Yamba Gardens and the northern developments will increase the number of dwellings that may require evacuation from 2,775 to 3,345. An assessment of the time needed for evacuation has been undertaken using the NSW SES evacuation timeline approach. This has been compared to the available warning time. This demonstrates that the total number of dwellings (including the proposed development) have sufficient time to evacuate when required. When considering the full WYURA there also remains sufficient time to evacuate."

The Plan was forwarded to the SES who responded on 11 March 2024 and raised no concerns.

The Maclean Gauge is the key warning gauge for Yamba with levels of:
Minor: 1.6m, Moderate: 2.2m, and Major 2.5m.

Residents wishing to leave Yamba need to do so before a height of 2.1m is reached on the Maclean Gauge.

The evacuation route in Yamba is Yamba Rd to the evacuation centre at Yamba Bowling Club. The evacuation routes from the Estate to Yamba Rd are: Carrs Dr, the future collector road through Lot 18 DP 1090409 to Golding St and the future extension of Deering St to Angourie Rd or Coldstream St. Residents in the estate will not be affected by 1 in 100-year Climate Change flood as all dwellings will have their primary habitable floor levels a minimum 0.5m above this level.

In any instance, residents would make their own decisions on how to react to approaching floods, noting there is usually 2-3 days notice of the likelihood and likely severity of riverine floods in Yamba, and would follow instructions from SES.

A Memorandum prepared by BMT dated 31 October 2023 is also attached. It states:

“The West Yamba Flood Evacuation Plan does not rely on flood model results to determine areas for evacuation. It conservatively assumed that all dwellings, excluding those on Yamba Hill, would require evacuation. As such, the calculated ‘total time needed for evacuation’ is unchanged due to the model update.

The West Yamba Flood Evacuation Plan also does not rely on model results to determine the ‘actual available time (for riverine flooding)’. The actual available time is informed by the Bureau of Meteorology’s Service Level Specification for Flood Forecasting and Warning Services which states a ‘Target warning lead time’ of 24 hours at the Maclean Gauge for a gauge level of 3.3m or greater.

Therefore, the actual available time for evacuation is unchanged as a result of the updated flood model.

Overall therefore, the original conclusions of the West Yamba Flood Evacuation Plan are unchanged and the plan demonstrates that the development proposal will not exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood.”

(d) incorporates appropriate measures to manage risk to life in the event of a flood,

COMMENT: See comments above.

(e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

COMMENT: Duration is generally the same. Q100 velocity is in the range of 0.3 to 0.7m/s. this would be stable for established vegetation. Turf will do up to 1 m/s. Areas within the development are proposed to be stabilised etc.

(3) In deciding whether to grant development consent on land to which this clause applies, the consent authority must consider the following matters—

(a) the impact of the development on projected changes to flood behaviour as a result of climate change,

COMMENT: The 2022 Model 1 in 100 year Climate Change level is in the process of being adopted by Council as its interim flood level.

(b) the intended design and scale of buildings resulting from the development,

COMMENT: Future building will consist of a range of dwellings plus a small commercial development.

(c) whether the development incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood,

COMMENT: See Flood Evacuation Plan.

(d) the potential to modify, relocate or remove buildings resulting from development if the surrounding area is impacted by flooding or coastal erosion.

COMMENT: This is a matter for future individual owners but is not a requirement of Council or any other authorities.

Part 6 Urban Release Areas

Part 6 consists of 4 clauses:

- Clause 6.1 which requires satisfactory arrangements to be made for the provision of designated state public infrastructure before land in the URA is subdivided which must, if it is relevant, have previously been resolved as Council has issued approval for the 161-lot development at No 22 Carrs Dr.
- Clause 6.2 which is dealt with below.
- Clause 6.3 which requires a development control plan to be prepared which is Part X Schedule XI of the Residential Zones DCP and is assessed at length in this report.
- Clause 6.4 which is administrative.

Clause 6.2 Public utility infrastructure

Development consent must not be granted for development on land in an urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required.

Council has adopted the West Yamba Development Servicing Plans – Water Supply Services and Sewerage Services (Hunter h₂O, July 2019), which is addressed in Section 4.2.2.

Clause 7.1 Acid Sulphate Soils

The entire site is identified as Class 2 ASS which required an ASS Management Plan for any works below the natural ground level or which may lower the water table.

This issue is addressed at Section 2.5.3 above.

Clause 7.2 Earthworks

Clause 7.2(3) states:

(3) Before granting development consent for earthworks, the consent authority must consider the following matters—

(a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,

COMMENT: Filling of the balance of the site will disrupt existing on-site drainage system patterns which will be replaced by the proposed stormwater management system. There will be no impact on external drainage patterns as the

system meets Council's requirements in respect of pre- and post-development flows.

(b) the effect of the proposed development on the likely future use or redevelopment of the land,

COMMENT: The earthworks will facilitate the proposed development of the land.

(c) the quality of the fill or the soil to be excavated, or both,

COMMENT: The owners of the subject land and others in WYURA have engaged consultants to investigate the option of dredging sections of the river to obtain fill for this property and other properties in WYURA. Approval to dredge is a complex process involving numerous government authorities and there is no guarantee that it will be obtained. Alternatively, fill will be sourced from approved quarries.

(d) the effect of the proposed development on the existing and likely amenity of adjoining properties,

COMMENT: No impact, as no additional water will be directed to any adjoining properties.

(e) the source of any fill material and the destination of any excavated material,

COMMENT: See (c) above.

(f) the likelihood of disturbing relics,

COMMENT: This will be covered by a condition specifying the procedure for dealing with the disturbance of relics.

(g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.

COMMENT: Biopods and detention basins will ensure the quality of water being discharged off site into receiving waters will meet Council standards.

4.2 Clarence Valley Residential Zones Development Control Plan 2011

4.2.1 Part C General Development Controls for Residential Zones

Clause	Requirements	Response
C9. Minimum site area for dwelling houses	<ul style="list-style-type: none"> R1 minimum site area of 400m² Within this area it must be possible to fit a rectangle suitable for building measuring 10m x 15m behind the building line 	<ul style="list-style-type: none"> All lots exceed 400m², minimum is 404m². Drawings 804 to 807 show complying house designs including the 404m² corner lot. Drawings 806 and 807 show lots along Carrs Dr

Clause	Requirements	Response
	<ul style="list-style-type: none"> <i>Lots less than 560m² but more than 450m² must include concept design for a dwelling showing DCP compliance with the subdivision DA</i> 	<p>and Miles St respectively including retaining wall encroachments.</p> <ul style="list-style-type: none"> As above.
<i>C10. Minimum area for dual occupancies and semi-detached dwellings</i>	<i>800m² minimum area for dual occupancies, semi-attached dwellings</i>	3 lots are 800m ² or greater.
<i>C12 Minimum site area for residential flat buildings, attached dwellings, multi dwelling</i>	<i>800m² for all forms of multi housing</i>	3 lots plus the medium density lot (Lot 279), are 800m ² or greater and so are available for multi-dwelling housing.
<i>C24. Provision of Essential Services</i>	<p><i>Council is satisfied that all essential utility infrastructure is available or adequate arrangements have been made for:</i></p> <ul style="list-style-type: none"> <i>supply of water</i> <i>disposal and management of sewage</i> <i>supply of electricity</i> <i>provision of suitable road access</i> <i>stormwater management</i> <i>telecommunications</i> <i>street lighting</i> 	Adequate utility infrastructure will be provided, see Section 4.2.2 DCP Part X Assessment
<i>Part I Erosion and Sediment Control</i>	<i>Detailed Erosion & Sediment Control Plan to be submitted with subdivision application</i>	See Section 4.2.2 DCP –Part X assessment and Sheets 080-081.
<i>J6. Road network/street pattern</i>	<p><i>Relevant roads widths are:</i></p> <ul style="list-style-type: none"> <i>Access Street: 6m carriageway, 14m road reserve</i> <i>Local street: 7-9m carriageway, 15-17m road reserve</i> 	<p>Proposes:</p> <ul style="list-style-type: none"> No Access Street. Local Streets: Roads 2-14, minimum 7.5m carriageway, 17m road

Clause	Requirements	Response
	<ul style="list-style-type: none"> Collector street: 11m carriageway, 18m road reserve 	<p>reserve though part Road 11 has wider road reserves where it acts as an Asset Protection Zone.</p> <ul style="list-style-type: none"> Collector Street: Road 1, 11 m carriageway and minimum 22.6m road reserve though wider in east where it acts as an Asset Protection Zone. <p>Note: road reserve widths along the southern and eastern have sections of wider road reserve to achieve required Asset Protection Zones. Road 2 has wider road reserve and carriageway for use as bus route if required.</p>
J7. Lot Layout	<ul style="list-style-type: none"> A variety of sizes to meet market demand Battle axe blocks should be avoided and will only be considered under exceptional circumstances Battle axe blocks must have handle widths complying with NR Design Manual No more than 2 accesses per handle Designed to maximise solar access 	<ul style="list-style-type: none"> Low Density Lots range from 404m² to 1910m² with the majority being in the range of 420m² to 525m². 3 lots are battle axe, which are a practical solution in their location. All handles are 7m wide. All service a single lot. 140 lots (50.5%) run east-west and so have long northern boundaries which allows for significant window space in that elevation of dwellings and significant north-facing

Clause	Requirements	Response
		roof area for solar panels plus the ability to provide north-east or north-west private open space. The balance of 137 lots run north-south with 85 having north-facing rear yards, 52 having south-facing rear yards which still allow for south-easterly private open space area.
<i>J10. Stormwater</i>	<i>Design to be based on Water Sensitive Urban Design principles</i>	See 4.2.2 Item 7 and Stormwater Management Plan and Downstream Drainage Assessment Report.
<i>J11. Street Planting</i>	<i>Where road construction is involved, street landscaping and tree planting plan to be provided, utilising local indigenous species</i>	See 4.2.2 Item 4 and the Landscape Strategy
<i>J12 Provision of Services</i>	<i>Standard services to be provided</i>	See 4.2.2 Item 2 and Servicing Plan

4.2.2 Part D Floodplain Management Controls

Part D2 sets out the major steps in applying Part D.

Step 1: Determine the relevant floodplain.

COMMENT: Relevant Floodplain Risk Management Plan (FRMP) is Yamba FRMP.

Step 2: Determine the Floodplain Management Area.

COMMENT: Yamba FRMP does not include flood management areas, but the step notes that Fig 3.3 of the Grafton and Lower Clarence FRMP does. WYURA is mapped as 'General Floodplain' on that map.

Step 3: Determine if the property contains flood storage areas, enquire with Council if necessary.

COMMENT: Comments made by senior Council staff confirmed that WYURA does not contain flood storage as it is unaffected by the 1 in 5 year flood level, though this is addressed in further detail at Part D5.2 of the Residential Zones DCP 2011 (Section 4.2 of this report).

Step 4: Enquire with Council regarding existing flood risk mapping whether a site-specific assessment is warranted.

COMMENT: Flood Impact Assessment for WYURA has been prepared by consultants following consultation with Council staff.

Step 5: Determine the development category relevant to the proposed, confirming how it is defined in CVLEP 2011 and ascertain the applicable land use category from Schedule D4.

COMMENT: Land is zoned R1 General Residential under CVLEP 2011 and mapped as floodprone. The development of the site is classified 'Urban Residential & Associated Uses' in Schedule D4.

Step 6: Check if proposal will satisfy the prescriptive controls for different land use categories in different flood management areas as specified in this Part.

COMMENT: The prescriptive controls for Urban Residential & Associated Uses in General Floodplain are:

Floor & Pad Levels

1	<i>Unless otherwise specified all floor levels to be no lower than the 5 year flood level plus freeboard unless justified by site specific assessment.</i>
COMMENT	All buildings will be above the 1 in 100 year Climate Change level plus 0.5m freeboard.
2	<i>Primary habitable floor levels to be no lower than the 100 year flood level plus freeboard. The primary habitable floor levels for infill development in Grafton, South Grafton and the Heber Street Catchment may be reduced to no lower than 6.4, 7.1 and 8.0 metres AHD respectively where the development (i) would be otherwise incompatible in the streetscape; (ii) result in unacceptable visual, overlooking or overshadowing impacts on adjoining properties; or is not part of a larger proposal which does not need to conform with the height and character of existing surrounding development.</i>
COMMENT	Council will require all dwellings to have their primary habitable floor level above the Climate Change level plus 0.5m freeboard (3.45m AHD) for the subject property.

Building Components and Method

1	<i>All structures to have flood compatible building components below the design level of the primary habitable floor level.</i>
COMMENT	Any dwellings with areas below 3.45m AHD will require flood compatible materials below that level.

Flood Effects

2	<i>The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to: (i) loss of flood storage; (ii) changes in flood levels and velocities caused by alterations to the flood conveyancing; and (iii) the cumulative impact of multiple potential developments in the floodplain. An engineer's report may be required.</i>
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COMMENT	See assessment under Clause 5.21 of CVLEP 2011 and assessment under Part D5.2 of the Residential Zones DCP 2011 in respect of flood storage (Section 4.2 of this report).
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Evacuation

3	<i>The development is to be consistent with any relevant flood evacuation strategy, Flood Plan adopted by Council or similar plan.</i>
COMMENT	Following advice from SES, the West Yamba Flood Evacuation Plan has been prepared and is attached.

Management and Design

1	<i>Applicant to demonstrate that potential development as a consequence of a subdivision proposal can be undertaken in accordance with this DCP</i>
COMMENT	This is addressed throughout this Statement of Environmental Effects and is achieved.
2	<i>Site Emergency Response Flood Plan required where floor levels are below the design floor level, (except for single dwellinghouses)</i>
COMMENT	All primary habitable floor levels will comply with the minimum design floor level of 3.45m AHD for the subject property.

Part D3 requires development on floodprone land to comply with the following Performance Criteria:

(a) The proposed development should not result in any increased risk to human life.

COMMENT: Complies, all filled areas above the 1 in 100 year Climate Change flood level and evacuation will be in accordance with the SES's Yamba Section evacuation plan which is assessed in the West Yamba Flood Evacuation Plan prepared on behalf of the West Yamba Landowners Consortium.

(b) The additional economic and social costs which may arise from damage to property from flooding should not be greater than that which can reasonably be managed by the property owner and general community.

COMMENT: No damage to property except in extreme floods with costs managed by individual property owners.

(c) The proposal should only be permitted where effective warning time and reliable access is available for evacuation from an area potentially affected by floods to an area free of risk from flooding. Evacuation should be consistent with any relevant flood evacuation strategy.

COMMENT: The BMT Flood Evacuation Plan is based on 24hrs notice to evacuate which is sufficient to evacuate all of West Yamba including WYURA.

(d) Development should not detrimentally increase the potential flood effects on other development or properties either individually or in combination with the cumulative impact of development that is likely to occur in the same floodplain.

COMMENT: The 2023 FIRA concludes there are no detrimental impacts.

(e) Motor vehicles are able to be relocated, undamaged, to an area with substantially less risk from flooding, within effective warning time.

COMMENT: Vehicles can relocate to Yamba Hill if evacuation is required.

(f) Procedures would be in place, if necessary, (such as warning systems, signage or evacuation drills) so that people are aware of the need to evacuate and relocate motor vehicles during a flood and are capable of identifying an appropriate evacuation route.

COMMENT: Procedures for evacuation and warning managed by SES and individual residents.

(g) Development should not result in significant impacts upon the amenity of an area by way of unacceptable overshadowing of adjoining properties, privacy impacts (e.g. by unsympathetic house-raising) or by being incompatible with the streetscape or character of the locality.

COMMENT: Not applicable.

(h) Proposed development must be consistent with Ecological Sustainable Development (ESD) principles.

COMMENT: Addressed in Stormwater Management Plan and Downstream Drainage Assessment Report.

(i) Development should not prejudice the economic viability of any Voluntary Acquisition Scheme.

COMMENT: Not applicable.

Part D5 requires that filling of flood liable land comply with the following criteria:

D 5.1 Performance Criteria

(a) The filling of flood liable land must not increase the flood risk on other land within the floodplain.

COMMENT: See 2023 FIRA which concludes there will be no increase risk on other land.

(b) Filling and associated works must not have any unacceptable associated environmental impacts such as detrimental affects on the ecology of riparian corridors.

COMMENT: Approval has previously been granted to fill two 1st order streams and remove their riparian vegetation and for the protection of the 2nd order stream with 40m wide vegetated buffers. Approval under the Water Management Act 2000 is again sought for the removal of the 1st order streams where affected by filling.

D 5.2 Prescriptive Controls

D5.2.1 The flood impact of the development to be considered to ensure that the development will not increase flood affects elsewhere, having regard to:

(i) loss of flood storage;

COMMENT: The Yamba Floodplain Risk Management Study (Webb, McKeown & Associates Pty Ltd, Oct 2008) defines 'flood storage' as:

"Flood storage areas are those parts of the flood plain that are important for the temporary storage of floodwaters during the passage of a flood. The extent and behaviour of flood storage areas may change with flood severity, and loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation. Hence, it is necessary to investigate a range of flood sizes before defining flood storage areas."

The other classifications are 'Floodways' (i.e., the river) and 'Flood fringe'. It then states:

"Based on these definitions the majority of Yamba would be classified as flood storage with the Clarence River classified as floodway. However, at a local level there will be floodways within Yamba that take flood waters from the south to the Clarence River."

This study informed the Yamba Floodplain Risk Management Plan (Webb, McKeown & Associates Pty Ltd, Feb 2009). Section 22.3 of the Plan addresses the 'Proposed Rezoning at West Yamba' and in particular filling of the area. At page 12 it states:

"Two-dimensional Hydraulic modelling to assess the hydraulic impacts of the fill has been undertaken and this concluded that the possible adverse impacts can be negated through formation of a floodway (Figure 4). More detailed hydraulic modelling needs to be undertaken at a subsequent stage to assess whether:

- *There are affects on neighbouring areas in floods greater or smaller than the 100y ARI event?*
- *The use of a floodway (between Golding and Freeburn Streets) creates other issues such as an increase in flood hazard?"*

The floodway referenced on Fig 4 is the original flood way which is considerably narrower than that proposed in this application. The additional detailed hydraulic modelling referred to has been undertaken in various flood studies including BMT's 2023 FIRA.

Neither the study or the Plan map flood storage or flood fringe areas in Yamba, but the Grafton and Lower Clarence Floodplain Risk Management Plan (Bewsher Consulting Pty Ltd, June 2007) at Figure 3.3 maps WYURA as 'General Floodplain'.

If WYURA is flood storage, then the loss of that storage is negligible in respect of the capacity of the lower valley floodplain.

(ii) changes in flood levels and velocities caused by alterations to the flood conveyance; and

COMMENT: See comments in respect of Clause 5.21 of the LEP.

(iii) the cumulative impact of multiple potential developments in the floodplain. An engineer's report may be required to address potential impacts.

COMMENT: See BMT's 2023 FIRA.

Although it has not been definitely determined that the land subject to this development application is 'flood storage', Part D5.2.2 states:

i) where this occurs in conjunction with compensatory excavation, or

COMMENT: Compensatory excavation is not available and the mitigation of flood impacts from the proposed development on the subject land is by way of the expanded floodway.

ii) where, in Council's opinion, such impacts are likely to be negligible

COMMENT: The BMT reports and response conclude that there is no detrimental effects as a result of the filling of the whole of WYURA.

4.2.3 Part X Urban Release Area Controls

Schedule X1 – West Yamba Urban Release Area

Schedule X1 contains an extensive list of objectives and controls relating to the whole of WYURA of which the subject site is part. Some are general in nature, and some relate exclusively to the subject site.

The relevant sections are as follows.

2. Staging & Servicing

This section directly references land owned by the West Yamba Landowners Consortium, of which the subject site is part, as forming Stage 1 of WYRUA. It also notes that a development application for 161 lot subdivision has been lodged for Part Lot 1722 DP 1035524 (No. 22) Carrs Drive, Yamba. This application was subsequently approved and is currently under construction. A development application for a 200 manufactured home estate was approved by Council on 23rd April 2019, and filling works have now commenced.

Servicing for WYURA is addressed in the West Yamba Development Servicing Plans for Sewerage Services and Water Supply Services adopted by Council.

The Plans provide for a loop water main located in Carrs Dr, Miles St and Golding St, and connecting to existing mains in Harold Tory Dr and Yamba Rd, and a sewer pressure main linking to the Yamba Sewerage Treatment Plan via Miles St, Golding St, Deering St and Angourie Rd. The sewer main is now completed and no work has been undertaken on the water main.

A Water Network Plan for Yamba Gardens is attached.

In respect of electricity, the local 11kVA powerlines on poles along the southern side of Miles St will eventually become redundant as the power is diverted into the estate and underground. The existing lines must be retained until the underground lines emerge back into Miles St at the eastern entrance, and this will require the existing

lines to be either underground or the poles relocated to within the service corridor on the southern side of Miles St. Preferred Energy Pty Ltd have been engaged to provide electrical engineering and telecommunication services (letter attached). the letter states:

"Please note that Essential Energy and NBN will not provide Design Information Packages on projects of this type until a DA has been approved by the relevant Council."

CV DCP 2011, Part X, Schedule X1, 2. Staging and Servicing - Controls:

C1. *Consent will not be granted for the subdivision of land unless it is generally consistent with the indicative Staging Plan.*

COMMENT: Council has issued a consent for the 200 unit MHE which is inconsistent with the staging plan.

C2. *A Servicing Strategy to the satisfaction of the consent authority to be lodged prior to consent being granted for a DA to subdivide land within the WYURA.*

COMMENT: Servicing Strategy for water and sewer approved by Council. Water Network Plan for Yamba Gardens attached.

C3. *The Servicing Strategy should address but not necessarily be limited to:*

- (a) The provision of hydraulic, telecommunication and electricity services.*
- (b) Proposed utilities networks and their relationship to adjacent properties, including links to adjacent properties.*
- (c) Capacities of the utility services and the impact of the proposed development on remaining service capacity.*
- (d) Options for utility service provision and a preferred option.*
- (e) Implications of the servicing options for other landowners in the release area.*
- (f) Proposed cost sharing arrangements with other landowners for any shared utility infrastructure including facility upgrades.*
- (g) Details of consultations with servicing authorities in the preparation of the Servicing Strategy.*

COMMENT: Water and Sewer addressed; application will be referred to Essential Energy.

C4. *Departures from the Servicing Strategy endorsed by Council may be permitted if justified by a supporting study to the satisfaction of the consent authority. At a minimum, the supporting study must address the environmental, capital and operational costs and implications of the variation including the implications for other development stages.*

COMMENT: Noted.

C5. *Developers are required to pay for the upgrade of lead in and other major infrastructure, such as carrier mains, pumping stations, reservoirs and treatment plants.*

COMMENT: Noted.

C6. Easements may need to be provided in certain circumstances and the need for such should be identified at an early stage in pre-DA and subdivision design in consultation with Council staff and if necessary other landowners.

COMMENT: External easements not required as all stormwater flows, including through No. 120 Carrs Drive south-west of the site, are restricted to pre-development levels and so existing drainage infrastructure on that property is the natural flow path. This flows into drainage easement on No 138 Carrs Drive and into Oyster Channel. To the east, stormwater flows into the floodway which will be dedicated to Council which then flows into the drainage easement on the land to the south of the site.

C7. All urban lots in WYURA are to be serviced by reticulated water and sewerage services unless an alternative servicing study and strategy is undertaken which justifies an alternative means of providing such services. The servicing strategy must be to the satisfaction of the consent authority prior to the granting of development consent.

COMMENT: Noted.

C8. Any offsite easements and infrastructure required to enable runoff from any stage of the URA to be conveyed to waterways in a managed fashion are to be registered and the infrastructure connected prior to the release of the subdivision certificate for that stage.

COMMENT: Noted but not required.

3. Transport Movement Hierarchy and Road Network Design & Provision

The DCP provides background information on transport/road network issues relating to WYURA up to 2015. Since that time, a roundabout has been constructed at the Yamba Rd/Carrs Dr intersection and Council has adopted the WYURA Road Infrastructure Developer Contribution Plan which allows Council to levy residential developments within WYURA to contribute to a proportion of the cost of the roundabout under section 7.11 of the *Environmental Planning and Assessment Act, 1979*.

The DCP list the following controls under this section.

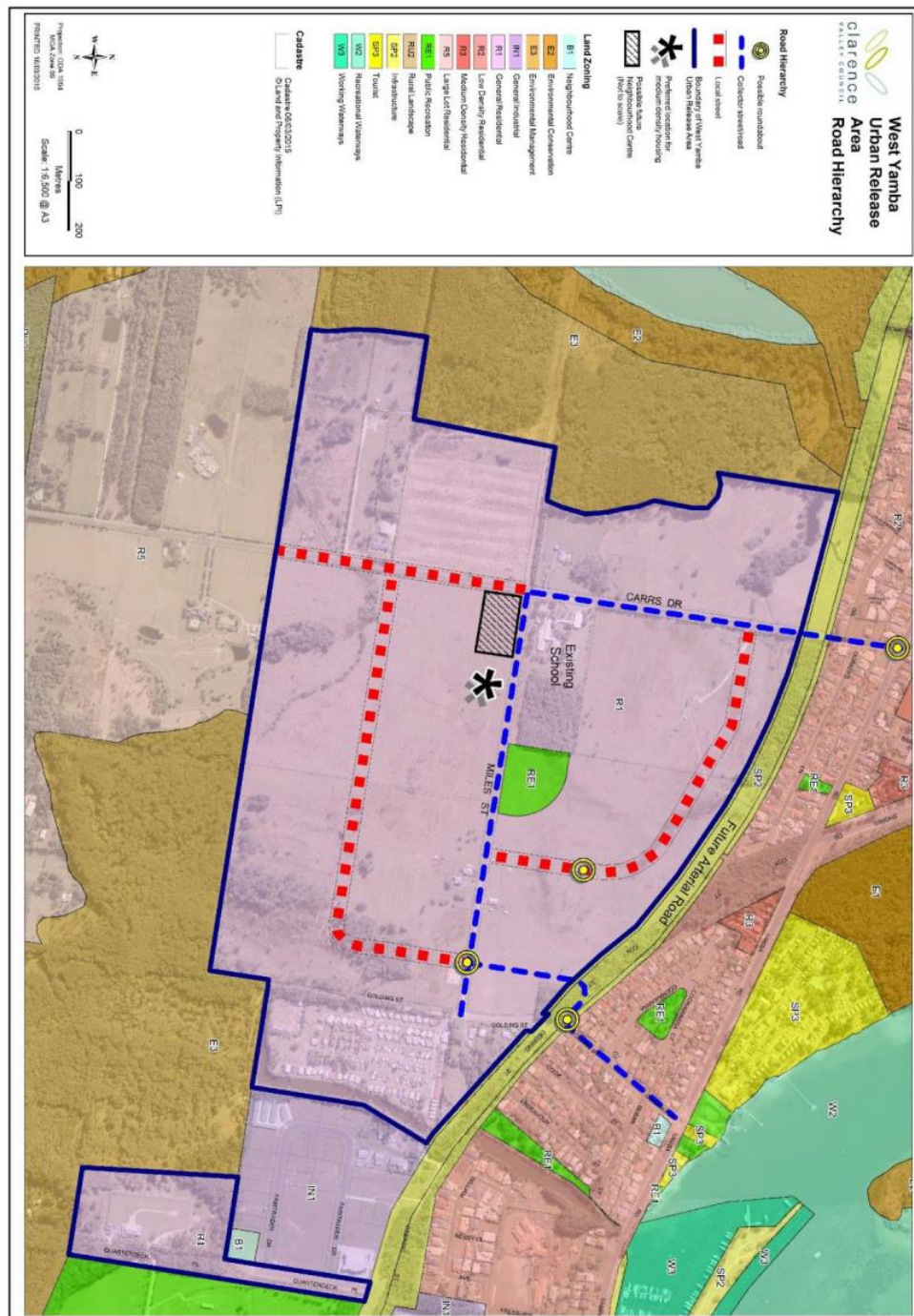


Figure X1.2 – indicative road hierarchy plan

Figure 8

C1. All development applications for subdivision are to be generally in accordance with the indicative Road Hierarchy Plan.

COMMENT: Figure X1.2 includes the main collector route of Carrs Dr, Miles St, a new road through Lot 18 DP 1090409, connecting to Deering St and then to Yamba Rd via Golding St. A road designated as a local street connects the eastern end of Miles St to the southern section of Carrs Dr, also classified as a local road. This road is located on the subject property.

It is proposed to provide the local road (Road 1) with a minimum road reserve width of 22.6m, and an 11m carriageway. In addition, a further connection onto Miles St (Road 2) is provided approximately 140m from the Carrs Drive/Miles St intersection with a 9m carriageway in a 21.5m road reserve.

It is proposed to dedicate land as road reserve along Miles St, varying in width between 16m in the west and 5m in the east and 0m adjacent to the floodway, including a 2.5m shared pathway on the northern side and a swale drain along the southern side. The variable width is due to:

- The fixed boundary of the school, from which land cannot be dedicated.
- The location of the 66kV lines opposite the school.
- The variable width of the swale, which increases as it heads west.
- Land can be dedicated on Lot 18 DP 1090409 west of the school when that lot is developed.
- For environmental protection reasons land cannot be dedicated for Miles St within the southern section of the floodway.

It is proposed to dedicate 3.5m along the eastern boundary of Carrs Drive in keeping with the dedication proposed for Lot 1 DP 568545 (manufactured home estate).

C2. Consent will not be granted to the subdivision of land unless a contemporary Transport Management Plan (TMP; or equivalent transport or traffic study) has been completed to the satisfaction of (and lodged with) the consent authority. Such plan/study should address a range of matters including:

- *traffic volumes*
- *triggers for the provision of infrastructure and upgrades including early staging of an eastern connection to the wider traffic network according to lot yields across the WYURA and/or development of land in proximity to that connection*
- *an assessment of the impact of the development on the road system internal and external to the site and URA*
- *proposed road hierarchy including access points and intersections associated with collector and key local roads within and adjacent to the WYURA*
- *pedestrian and cyclist networks*
- *identification of road upgrades*
- *intersection upgrades, and*
- *the cumulative impact of development on the road network*

COMMENT: The WYURA Traffic Impact Assessment (Bitzios, May 2023) is attached. Its conclusions include:

- The Yamba Rd/Carrs Dr intersection cannot cater for ultimate WYURA traffic volumes and as a result the Golding St connection is required to redistribute future WYURA traffic volumes via the Yamba Rd/Golding St roundabout. This intersection will operate within acceptable performance limits up to year 2033 however the theoretical capacity limits of the roundabout are exceeded in the 2043 AM peak. To offset the minor exceedance the study

recommends the Yamba Urban Bypass section between Golding St and Angourie Rd (for which Council collects developer contributions) should be completed by 2043.

The threshold for construction of the Golding St link to Yamba Rd (i.e., a second connection after Carrs Dr) for the 3 development properties east of Carrs Dr are:

- Development of the commercial site, medium density site and a maximum of 350 low-density residential lots.

Or

- Development of a maximum of 450 low-density residential lots.
- The design is consistent with the requirements of the Northern Rivers Design Manual in respect of footpaths which are not required on minor local roads/no-through roads.
- The proposed shared pathways provide a high level of active transport connectivity through the proposed development area.

In respect of the first dot point it should be noted that the subject application, even when completed, will not reach either of the trigger points for the Golding St link. In respect of the second dot point, although not required, 1.2m footpaths are provided in all local roads.

- C3. *The road, cycle and pedestrian network is to be generally consistent with the proposed road hierarchy plans identified in any TMP/traffic study; and should reflect the staging of and anticipated traffic flows for the WYURA over a 10-20 year period.*

COMMENT: Carrs Drive south of Miles Street is classified as a local road. Conditions attached to the consent for the manufactured home estate opposite require it to be upgraded to:

- 2 x 3.5m travel lanes
- 1m sealed shoulder with flush edge strip on western side
- Allow for table drains, service corridor and pedestrian/bike pathways
- 2.5m widening on eastern side opposite the entrance to the estate
- Adopt 1 in 20 ARI flood level at centreline (1.66m AHD)

It is proposed to dedicate 3.5m along the frontage to provide for drainage, with the service corridor and pathway on the western side.

The shared pathway network is indicated on the attached concept Shared Pathway Plan.

- C4. *Consent will not be granted for the subdivision of land unless a “Bike Plan and Pedestrian Access and Mobility Plan” (PAMP) has been completed to the satisfaction of (and lodged with) the consent authority. Such plan should:*
- a) *identify in design detail where footways and cycle ways are required so that provision can be made in the width of the road reserves*

- b) complement Council's existing Bike Plan and Pedestrian Access and Mobility Plan as it relates to Yamba including Carrs Drive from Yamba Road to Miles Street and the future second stage access proposal as well as integrate the Transport Movement Hierarchy into Councils current network mobility Plan.*
- c) Consider the recommendations and finding of any updated TMP/traffic study.*

COMMENT: WYURA is currently only served by a shared pathway from St James Primary School connecting to the footpath and on-road cycleway network in Yamba Road to which the Miles St shared pathway will connect north of St James School.

The cross-section of Miles Street shows a 2.5m wide shared pathway on the northern side of the road which will eventually extend the length of that road.

Internal shared pathway network will be provided along the internal collector road (Road 1), along the eastern side of the 2nd order stream and along the southern and eastern edges of the Estate. This network passes the proposed public park and the commercial centre and connects to Miles St at both intersections. A full Pedestrian Access and Mobility Plan (PAMP) has not been provided but the concept shared pathway plan has been prepared. The future PAMP will require inclusion of shared pathways for all development sites in WYURA and we are unaware of the facilities proposed by currently approved development sites and future development sites.

- C5. Alternative intersections/access points other than those identified in any updated TMP/traffic study are to be supported by a traffic study to the satisfaction of the consent authority.*

COMMENT: The additional intersection at Miles St/Road No. 1 is supported by the TIA.

- C6. The positioning and design of movement networks must give priority to:*
- a) Facilitating efficient walking, cycling and public transport networks;*
 - b) Providing destination points, encouraged by signage and directions, and*
 - c) Retaining and complementing natural topography, and utilising the extensive drainage reserve network throughout the WYURA*

COMMENT: The concept shared pathway plan shows a 2.5m wide shared pathway along the internal loop road and the southern and east edge roads. These link to the proposed shared pathway on the northern side of Miles St which links to the future collector road in the property to the north and hence to Yamba Rd via Golding St in the east and Carrs Drive in the west. Footpaths are provided in all local roads in the development.

In respect of public transport, the TIA states:

7.1 Public Transport

Future bus services within the WYURA will be subject to further consultation with TfNSW and Council. However, with the construction of future collector roads including Carrs Drive, Miles Street and the

recommended collector road within Lot 46 & 47, proposed residential lots will be located within 400m of a potential bus service. As such, the proposed development is considered to provide good opportunity for future public transport connectivity in line with WYURA planning requirements.

The pavement and road reserve widths in Miles St are capable of containing a formal bus stop in each direction while the internal collector road (Road 1) is suitable for school bus stops, with an indicative bus stop shown in front of the public park.

- C7. *A Subdivision certificate will not be issued to a specific stage of development unless pedestrian and cycle links are consistent and integrate with this Part and any TMP, updated TMP/traffic study and PAMP.*

COMMENT: Noted

- C8. *Any pedestrian path/s and cycleway/s identified by any updated TMP/traffic study are to be constructed at the developer's expense and are required to connect to any existing shared off road pedestrian paths/cycle-ways.*

COMMENT: Noted

- C9. *Road network designs are to allow for "permeability" throughout the subdivision to facilitate the cycle and mobility plan, with dead ends to be avoided.*

COMMENT: There is 1 cul-de-sac (Road 3) proposed which is short and services only 22 lots. A pathway is provided between this road and Road 1 for permeability.

- C10. *The length of any proposed cul-de-sacs is to be limited so the end point is visible from the access point to prevent drivers inadvertently turning into a dead end.*

COMMENT: The single cul-de-sac end is not visible to drivers entering. This could be amended to a through road connecting to Road 1, but the intersection would be close to that road's intersection with Carrs Drive which the DCP requires to be provided. A variation to this requirement is requested.

- C11. *Required road, intersection, cycleway and pedestrian networks upgrades are to be upgraded at the expense of developers where there is no current section 94 Contributions Plan in place to cover the construction/upgrade of such facilities.*

Note: although updated TMP/traffic studies are likely to identify required road network upgrades, expected road network upgrades are likely to include but not be limited to the following:

External to the WYURA

- a) Roundabout – Carrs Drive/Yamba Road
- b) Roundabout – Deering Street (Yamba Bypass), near Golding and Cox Streets;

- c) *Possible Roundabout – Treelands Drive/Yamba Road – subject to updated Traffic Impact Assessment (TIA); and*
- d) *Possible Roundabout – Shores Drive/Yamba Road – subject to updated Traffic Impact Assessment*

Within the WYURA

- a) *Construction/upgrading of Carrs Drive and Miles Street as the collector roads to a minimum design level of 1.7m AHD or 20 ARI immunity; and*
- b) *Construction of all other proposed roads and streets servicing future subdivision and lots*

COMMENT: Noted, three of the external roundabouts already provided. Carrs Dr and Miles St west of the proposed roundabout will be constructed to minimum 20 ARI immunity; eastern section of Miles St will be retained as an emergency vehicle only access until such time as the link through the lot to the north connecting to Golding St is constructed.

- C12. *Direct access to proposed individual urban lots will not be permitted to/from Miles Street and Carrs Drive. All lots backing onto the roads are to be accessed via the internal street network.*

COMMENT: No direct access provided to Carrs Drive or Miles Street.

4. Landscaping Strategy – Biodiversity, Environmental Conservation and Management & Managing Visual Amenity

The DCP states that identified ecological endangered communities occur on the subject property (Lot 46/47).

It is proposed to retain all vegetation in the eastern floodway (Lot 903-10.563ha) and around the 2nd order stream in the south-west. A Controlled Activity Approval (CAA – A024687) has been issued for works within 40m of this stream, by the Natural Resource Access Regulator. This approval included the provision of a vegetated buffer with a total width of 40m measured from the banks of the stream. This buffer ranges from 20m either side of the stream to 30m one side and 10m the other as permitted under the *Water Management Act* Guidelines. A *Vegetation Management Plan* (Geolink, August 2020, updated August 2022) has been approved by NRAR for the establishment and initial maintenance of this buffer and is attached.

A second Vegetation Management Plan is also attached, addressing the floodway. It notes that replanting of native vegetation within the floodway is not possible as it needs to retain its current level of vegetation in order to operate as a floodway when required for that purpose. It also notes that the floodway has been subject to regular grazing and slashing for an extended period of time and that both species have survived that regime.

The Plan includes the following Prescribed Actions:

- Removal of cattle

- Tractor slashing 3 times annually (December, February, April) subject to ground conditions.
- Initial weed control: foliar herbicide treatment of all weeds.
- Ongoing weed control: foliar herbicide treatment twice annually (December, March).

Monitoring of the threatened species would be undertaken annually for 5 years as specified in the Plan and results reported to Council annually.

The area within the footprint of the subdivision (with the exception of Lot 900 which is to be retained in its existing state at this stage), requires clearing. This includes two 1st order streams which are addressed in Section 4.3 of this report. A *Biodiversity Development Assessment Report* has been prepared and is attached. This addresses both retained vegetation and that to be removed. It also identifies two threatened flora species (Rotala and Spider Orchid), and the layout design has been modified to ensure these and their buffers are not affected by the development.

The Landscaping Controls are:

- C1. *Consent will not be granted for the subdivision of land unless a Vegetation Management Plan (VMP) has been completed to the satisfaction of (and lodged with) the consent authority.*

COMMENT: VMP previously approved for 2nd order stream and the VMP for the floodway are attached. BDAR is attached. Approval previously granted for clearing of 12ha filled area.

- C2. *VMP requirements include:*
- (a) to be supported by a Freshwater Wetland Management Plan (FWMP) where new Wetland areas are proposed to be established.*
 - (b) to have regard to and integrate as far as possible stormwater management proposals in the stormwater management plan.*
 - (c) details of the location of significant vegetation, including habitat tree and trees with hollows; and management strategies for habitat trees to be retained.*
 - (d) the location of development and disturbance footprints (including proposed roads, drainage areas/structures, landfilling and likely/indicative future building footprints) relative to significant vegetation.*
 - (e) details of the clearing of native vegetation relative to the proposed development footprint to accommodate the proposed development.*
 - (f) details of the proposed ongoing vegetation management regime in the context of the proposed subdivision, which may include such measures as Section 88B instruments to designate building footprints.*
 - (g) native tree/shrub planting schedules outlining appropriate management practices to ensure the integrity of the remnant native vegetation (including EEC's) is maintained and to guide revegetation and new works.*

COMMENT: See BDAR. In respect of (a), no new wetland areas are proposed to be established.

- C3. *Submission of a Habitat Restoration Plan (HRP) that complies with Council's proposed Offsetting policy.*

COMMENT: See 2 VMP's.

- C4. *Consent will not be granted for the subdivision of land unless a Landscaping Strategy has been completed to the satisfaction of (and lodged with) the consent authority.*

Note: A Landscaping Strategy can be in the form of a concept plan at the DA stage and a detailed plan at the Construction Certificate stage (this should be confirmed with the consent authority prior to lodgement of a DA for subdivision).

COMMENT: Landscaping Strategy attached.

- C5. *Landscaping Strategy requirements include:*

- (a) details of the proposed landscaping of the public domain, such as tree planting, landscape treatments, including any paving and street furniture;*
- (b) a schedule of the species and the planting locations consistent with the List of Recommended Street Trees for Clarence Valley;*
- (c) technical details of the planting and initial maintenance regime;*
- (d) an assessment of ongoing maintenance requirements;*
- (e) the location of existing trees, highlighting those with hollows and those are proposed to be remove and retained;*
- (f) details of the restoration of any riparian areas; and*
- (g) Demonstration of consistency with:*

- *the required VMP as it relates to EEC and biodiversity requirements;*
- *stormwater management proposals in the stormwater management plan;*
- *Council's Tree Management Policy, Clarence Valley Urban Tree Management Strategy and Yamba Street Tree Master plan.*

Note: Consultation with Council's Open Spaces and Facilities section is highly recommended.

COMMENT: Landscaping Strategy was prepared in consultation with Council staff.

It identifies the following primary landscape areas:

- Three public use spaces:
 - Lot 904 (5066m²) Large formal area of open space located to the centre of the Estate and classified as a Local Park. Park to contain basic play equipment, shade, seating, informal active recreation half basketball court) and drinking fountain. Vehicular access to be restricted with bollards placed along the boundary at 1.5m spacings.
 - Informal public open space along eastern edge of 2nd order stream containing 2.5m shared pathway connecting into the shared pathway network and with potential to incorporate seating elements.
 - Rest Node Park (570m²) located between Road 1 and the 2nd order stream, containing a section of the 2.5m shared pathway, seating and shade structure.
- Existing retained vegetation areas (floodway and 2nd order stream): to be managed in accordance with the two Vegetation Management Plans.

- Detention basins: To be planted with appropriate Water Sensitive Urban Design (WSUD) plantings including tree, shrub and groundcover species on the basin batters and groundcover species with scattered trees on the basin floor. A 10m x 8m viewing platform is provide on the northern side of each detention basin.
- Biopods: to be planted with WSUD species.
- Streetscape: Traditional street tree plantings using species selected in accordance with the 'Yamba Street Tree Master Plan'.

It also includes technical details of the planting and initial maintenance regime.

The sandstone block retaining walls, which are wholly located on residential lots, will have landscape treatment similar to that in the photo below.



- C6. *Street trees are to be planted to:*
- (a) soften the streetscape;*
 - (b) act as traffic calming measures through perceived narrowing the road;*
 - (c) provide shade to footpaths and roads; and,*
 - (d) enhance amenity.*

COMMENT: Noted, see Landscaping Strategy.

- C7. *Natural watercourses are to be protected and revegetated where appropriate to enhance the visual amenity, prevent soil erosion, and to protect the quality of receiving waters with a treatment commensurate with their role in the water management system. Riparian vegetation along watercourses is to be re-established using locally occurring native species from locally sourced seed stock and in accordance with NSW Office of Water guidelines.*

COMMENT: 2nd Order stream protected under requirements of its Vegetation Management Plan which includes plantings and regeneration of existing species. Two 1st order streams to be removed where they are located in the development footprint as

approved by the Natural Resources Access Regulator issued on 21 February 2022.

5. Open Space and Recreation

The rezoning of WYURA included an area of 1.57ha on Lot 18 DP 1090409 (north of Miles St) zoned RE1 Public Recreation.

Part X states:

“Features of the longer term strategic planning leading to the zoning of West Yamba for urban development included that open space:

- also form part of the storm water management system; and*
- be visible and also accessible to housing areas and have road frontage.*

The West Yamba strategic planning did not envisage any active open space elements.”

The proposed subdivision includes 2 lots of 2.067ha and 1.167ha containing detention basins. These are dry basins (except in times of rainfall) and will be dedicated to Council. They will be planted in accordance with the Landscaping Strategy including scattered trees, shrubs and groundcover. When dry, these may be accessible as informal natural areas.

The floodway and 2nd order stream are also informal natural areas that may be accessible when dry.

Controls under this section are:

C1. Open space areas are to be linked by pedestrian and cycle paths to provide an accessible network of open space.

COMMENTS: Rest Node Park and informal public open space are located on the 2.5m shared pathway, and the Local Park has a crossing to the pathway and footpath access in Roads 1, 5 & 6.

C2. Open space/recreation areas are to be located and sized to maximise connections to adjoining land uses and local roads; provided open space is to have a road frontage.

COMMENTS: Local Park is centrally located with 3 road frontages.

C3. Open space shall also form part of the stormwater management system for the area but should not be the recipient of “end of pipe” stormwater treatment and management measures.

COMMENTS: This can be partially achieved if the basins are considered suitable for ‘natural’ open space noting planting requirements, but they are ‘end of pipe’.

C4. Proposed open space areas are to demonstrate ease of development and maintenance (short and long term).

COMMENTS: Detailed design of the three public spaces will be submitted with the Subdivision Works Plan and include maintenance provisions.

C5. *Tree and vegetation planting in open space areas are use native species to assist in stormwater management, biodiversity protection as well as enhancing local character.*

COMMENTS: See Landscaping Strategy for details.

C6. *Proposals for open space areas and management shall be clearly detailed and articulated in required Landscaping Strategies, Vegetation Management Plans and Stormwater Management Plans and should also be consistent with Council's "Clarence Valley Open Space Strategic Plan" (May 2012).*

COMMENTS: Addressed in Landscaping Strategy and two Vegetation Management Plans.

6. Natural & Environmental Hazards – Flood & Fill Management

Flood impacts are addressed at Section 2.5.1 with the November 2021 Flood Impact Assessment and BMT's response to the peer review.

The subdivision footprint will be filled to enable future dwellings to meet the minimum habitable floor level of 3.5m AHD. Actual fill levels are generally in the range of .90m to 2.70m, with average of around 1.40m.

Filling commenced over 12ha of the site under consents DA 2018/0553 (MOD 2019/0011), DA 2019/0181 and DA 2019/0492, though finished levels have not been achieved and further shaping will be required.

Prior to the commencement of filling works a Preliminary Geotechnical Assessment was prepared (RGS July 2018 – attached). This assessed both surface and subsurface conditions, identified geotechnical constraints and set out procedures for earthworks. It noted that there may be risk of consolidation settlement due to the loads imposed by the fill and stated that further investigation, testing and analysis would be required to determine potential risk. This Assessment was submitted to council with the 3 development applications for filling in the 12ha area which were subsequently approved.

A further Geotechnical Assessment (RGS August 2022 – attached) was subsequently prepared, assessing the following:

- “• *The potential for consolidation settlement due to the placement of between 1.5 and 3m of controlled fill;*
- *An estimate of potential consolidation settlement, and the approximate lateral extents to which the settlement is predicted to occur; and*
- *Potential influence of the fill surcharge on existing groundwater levels”.*

In respect of settlement it predicted the following:

- “• *Elastic settlement of up to about 15mm;*
- *Primary consolidation settlement of generally between about 10 and 15mm, with the*

areas around CPT3 being predicted to undergo 25mm of primary consolidation; and

- *Secondary consolidation settlement of less than about 5mm”.*

In respect of the influence of fill surcharge on ground water levels, it states:

“The marine soils below the groundwater level that underlie the site comprise two components – the soil particles themselves and water. Consolidation settlement occurs due to the reduction in volume of the saturated soil because of the increase in total stress and the drainage of excess pore water pressure. On this basis, at sites that experience large consolidation settlements there is the potential that the groundwater level surrounding the applied load/surcharge to be influenced and can rise.

Groundwater levels would be expected to fluctuate at the site by up to about 1m due to tidal influences and in response to rainfall and particularly extended rainfall events. On this basis and due to the limited predicted consolidation settlement, the influence of the fill surcharge on the groundwater levels on surrounding sites is expected to be negligible”.

The West Yamba Landowners Consortium have engaged Douglas Partners to undertake Groundwater Level Monitoring on a three-monthly basis at six bores, two of which are located on the subject property. A copy of their August and January reports are also attached. Further monitoring reports will be forwarded to Council as received.

Objective 02 states:

Minimise flood and drainage impacts of the development in the WYURSA on adjoining residential neighbourhoods and property including ensuring that there is no net increase in the number of existing dwellings whose habitable floor levels become inundated by the ultimate filling and development of the entire WYURA.

This current application does not result in any existing dwellings which are currently not inundated under the Base Case being inundated. The cumulative filling of WYURA, including all previous approvals, results in 1 dwelling being inundated that is currently dry under the Base Case. The solution is to raise this dwelling, which is achievable as it is on brick piers, a minimum of 7cm to be above the peak flood level or 90cm to take it to 3.0m AHD (1 in 100 year plus 0.9m freeboard). This is a WYURA wide issue and needs to be resolved as a WYURA wide basis.

Controls under this section are:

C1. The consent authority must not grant consent to the commencement of land fill or other earthworks associated therewith unless an Earthworks Management Plan (EMP) is prepared to ensure that level of finished lots are at least at the level of the 1 in 100-year flood event, whilst also maintaining an effective drainage network, overland flow path/s and meeting other development standards of Council.

COMMENT: Earthworks Management Plans approved for 12ha filling.

C2. Where surface soils are stripped and there is a potential for sulphate soils to be disturbed, measures are to be identified in the EMP and are to be in place to

manage this occurrence and neutralise any ASS contamination outside of the treatment site.

COMMENT: Addressed in ASS Management Plan and established for 12ha filling area.

C3. A EMP must include the following:

- (a) A statement of environmental effects/impacts including assessment and management acid sulphate soils.*
- (b) All required licencing approvals from State Government Authorities.*
- (c) Staging Plans and detail of finished survey levels for fill.*
- (d) Area and extent of fill requirements, supported by engineering design detail.*
- (e) dredge location/s and proposed pipe routes to WYURA.*
- (f) maintenance and management plan for the period of the dredging at and in the vicinity of the URA.*
- (g) The design and location of all stormwater drainage corridors.*
- (h) Overland flow paths to reach local estuaries/waterways (including Oyster channel) and the URA drainage reserve/floodways.*
- (i) The required widths/depths of overland flow paths.*
- (j) A program of works detailing actions and duration of filling activity and compaction.*

COMMENT: Addressed in EMP for 12ha and will be addressed in EMP for balance of site with future Subdivision Works Certificate applications. Dredging is subject to a different process that Council is aware of, and which requires an Environmental Impact Statement.

C4. *The consent authority must not grant consent to the erection of a building or the carrying out of works on land to which this plan applies, if the carrying out of the proposed development would:*

- (a) be inconsistent with an EMP; and,*
- (b) detrimentally increase the potential flood affectation on other development or property in WYURA or result in a risk to human life.*

COMMENT: Noted.

The section also requires an accessible refuge area above the Probable Maximum Flood Level of 3.8m AHD within WYURA but does not specify where and how it is to be developed. Approximately 3.5ha north of the basins and 0.83ha south will be filled above 3.8m AHD.

7. Stormwater Management and Water Quality

Stormwater Management Plan and Downstream Drainage Assessment (Biome, May 2023) and their response to additional information required (June 2023) are attached. The report addresses the management of stormwater quantity and quality. It also addresses stormwater issues raised in the WMA water peer review.

In respect of quantity, it proposes two formal stormwater detention basins with purpose-built outlet structures and detention volume controls to control discharge

from the site. In addition, detention will be provided within the drainage swale along Miles St. Modelling of the proposed detention measures and their associated outlet structures indicates that pre-development flows can be maintained for all nominated rainfall events.

In order to address the management of stormwater quality for the development, numerous streetscape bioretention systems (pods) have been proposed for incorporation within the road reserve areas of the development. This design concept will promote at source treatment of runoff from the road network.

Rainwater tanks have been included for the beneficial reuse of stormwater and are to be connected to the roof catchment area within each allotment. Overflows are to be directed to the dedicated inter allotment pipe network contained within 3m drainage easements.

The eastern basin discharges into the floodway and the western into the 2nd order stream. Total area of the basins is 2.592ha with a maximum detention volume of 20,420m³.

The report also estimates life cycle costings (Section 7.2.6) including establishment (acquisition) costs, maintenance costs and decommissioning costs based on a 25 year renewal period, noting that these are based on a single system and that there would be cost savings in maintaining multiple systems in close proximity as is the case in this instance. Establishment costs are borne by the developer and maintenance /decommissioning by Council.

Figure X1.3 – Conceptual Stormwater network Plan of the DCP indicates a stormwater drainage system in the south-west corner of the site, coinciding with the former farm dam and 2nd order stream. Mortons Urban Solutions investigated the use of this area as part of the stormwater management system and found it unsuitable due to the following:

“The existing drainage reserve in the South West corner of Lot 46 DP 751395 Carrs Drive has been investigated for potential inclusion in a stormwater treatment methodology for the site.

The area was found to be unsuitable due to the following:

- *Level criteria for Wetlands were not able to be met for best practice wetland design. Manual shaping of the area to meet such levels would entail total removal of existing formations and trees and full reshaping of site.*
- *The area would need to be totally reshaped to provide appropriate safety batters and macrophyte zones required by guidelines.*
- *The area wasn't of sufficient size to achieve target pollutant level reductions*
- *Provision of an impermeable clay liner as required would not be achievable without full removal of all existing strata.*

- *Maintaining the area as an existing wetland has negligible treatment effect due to small size, limited macrophyte treatment and poses significant public safety risk with existing batter slopes and levels.”*

The conceptual stormwater network plan shown on Figure X1.3 has been modified under the proposed subdivision layout by:

- The removal of the south-west drainage reserve as discussed above and its replacement with the two large detention basins and retention of the 2nd order stream.
- The increase in width and area of the eastern floodway to ensure it works as required without the need for shaping and vegetation removal which would have significant biodiversity impacts.

Accordingly, a variation to conceptual stormwater network plan is sought on the grounds that the proposed arrangement achieves the required outcomes with significantly less environmental impacts and greater protection of the property's biodiversity values.

The 2nd order stream and its buffers are retained and will continue to provide stormwater drainage from the western basin.

8. Hazard Management – Other Natural & Environmental Hazards

The Clarence Valley Local Flood Plan 2023, Volume 3 SES Response Arrangement for Clarence Valley prepared by NSW State Emergency Service indicates Yamba Road as the evacuation route to the assembly area and evacuation centre at the Yamba Bowling and Recreation Club. This is further addressed under Clause 5.21 of CVLEP 2011 – Section 4.1.

The controls under this section are:

C1. The consent authority must not grant consent to the carrying out of development within the WYURA unless the applicant provides documentary evidence that it has consulted with the SES with respect to any required updating (including details of those requirements) of the existing Clarence Valley Local Flood Plan (as it relates to the Yamba Sector) as a consequence of the future urban development of the WYURA.

COMMENT: A copy of the West Yamba Flood Evacuation Plan (BMT) was forwarded to NSW SES along with further supporting information. On 11 March 2024, the SES responded (copy attached), which states in part:

Our North Eastern Zone teams in the Northern Rivers have been working hard and the Yamba Sector of the Clarence Valley Flood Emergency Sub Plan has been updated and was tabled recently at the LEMC on Monday 26 February 2024. Please find the link to the current plan here Clarence Valley Local Flood Emergency Sub Plan 2023. Volume 3, Chapter 2: Clarence Valley NSW SES Locality Response Arrangements includes Yamba Sector on page 47. Evacuation triggers on page 8 of the BMT West Yamba Flood Evacuation Plan are consistent with the Local Flood Emergency Sub Plan Yamba Sector.

Their response makes no negative comments about either the BMT Evacuation Plan for West Yamba or WYURA.

It is considered that the SES response satisfies the requirements of C1 as it is documentary evidence that SES has been consulted and they do not require the 2023 CV Local Flood Map Yamba Sector to be updated in respect of WYURA.

C2. Any required updating of the existing Clarence Valley Local Flood Plan (as it relates to the Yamba Sector) should consider the findings and recommendations of contemporary flood impact assessments for the WYURA.

COMMENT: Noted, no updating of 2023 Plan required.

C3. DAs are to identify and document those activities associated with constructing and developing the subdivision and its component infrastructure and services that are likely to result in the disturbance of ASS.

Note: The WYURA is predominantly mapped as class 2 acid sulfate soils. See also section 6 of this Schedule for further ASS controls.

COMMENT: Noted, see ASS Report.

9. Urban Design

This section references the *NSW Coastal Design Guidelines*, which do not apply to the site as it is not shown as being in the coastal zone on Coastal Management Map.

The controls within this section of Schedule XI are:

C1. Subdivision layouts within the WYURA should feature a clear and identifiable road hierarchy to achieve permeability and inter-connectivity.

COMMENT: A clear road hierarchy is established with Miles St and Road 1, as collectors and all others being local roads though Road 2 has a 9m pavement. There is only 1 cul-de-sac in the layout, so permeability and inter-connectivity is high.

C2. Planning and design of subdivisions, neighbourhoods and built form development are to demonstrate consistency with NSW Coastal Design Guidelines and in particular Part 2 Design Principles for Coastal Settlements.

COMMENT: Not applicable.

C3. Lot layout and internal networks are to be inter-connected and designed to achieve maximum benefit from solar access and to encourage the provision of energy saving design solutions.

COMMENT: 140 lots (50.5%) run east-west and so have a longitudinal northern boundary. 85 lots (30.6%) have a northern rear yard and 52 lots (18.7%) have a southern rear yard with an easterly aspect.

- C4. *Whilst a range of residential lot sizes is encouraged, lot sizing and configuration should demonstrate, at the individual lot scale, capability to accommodate adequate onsite stormwater management.*

COMMENT: Residential lot sizes range from 404m² lots to 1910m². Water tanks will be required on all dwellings to meet BASIX requirements.

- C5. *No direct vehicular access will be allowed off either Miles Street or Carrs Drive being collector roads.*

COMMENT: Complies.

- C6. *Access to the WYURA is to be constructed off the existing access points (Yamba Road and Carrs Drive) and the internal road pattern is to provide a link between these two points. Over time further access points will be developed as the subdivision and road planning develops and a new roundabout is created at the northern end of Golding Street.*

COMMENT: Noted; there is already a roundabout at the northern end of Golding St at Yamba Rd. The Traffic Impact Assessment sets trigger points for the provision of the Golding St link which is not exceeded by this development.

- C7. *Native vegetation communities to be retained in WYURA are to be identified. New vegetation communities, street plantings and corridor plantings are to integrate with these existing areas to form cohesive landscaped communities.*

COMMENT: Vegetation in the expanded floodway and within the 2nd order stream buffer is to be retained and is addressed in the two Vegetation Management Plans; see Landscaping Strategy for details of street tree plantings.

- C8. *Special pavement and landscape materials are to be used to distinguish between pedestrian and cycle ways and connections to the proposed street network and landscaped communities.*

COMMENT: Noted.

- C9. *The drainage reserve areas are to incorporate an inter-connected, multi-purpose pathway with a 1.5m wide trail extending around the perimeter of the WYURA site and connecting to other bike and pedestrian corridors.*

COMMENT: It is proposed to provide a 2.5m wide shared pathway within Road 1, along the eastern boundary of the 2nd order stream and along the edge roads. This connects to a 2.5m shared pathway in Miles St which will link into the Carrs Dr shared pathway to the west and eventually into future developments on the northern side of Miles St and onto Deering St. Deering St in turn will eventually link into the Angourie Rd shared pathway.

- C10. *All costs associated with the construction of roads, bicycle and pedestrian networks are to be borne by the respective developer parties.*

COMMENT: Noted.

- C11. Dwelling design should incorporate screened outdoor living area that will protect against vector carried disease.*

COMMENT: Noted; responsibility of individual owners.

10. Neighbourhood Commercial Development

Controls are as follows:

- C1. A proposed WYURA neighbourhood centre should be located:*

- *in close proximity to the existing school;*
- *with pedestrian and cycle path accessibility; and*
- *as central as possible to the majority of future residential development.*

Note: Figure X1.2 depicts an indicative location of a future neighbourhood centre.

COMMENT: Is located in north-west near the Miles St/Carrs Dr intersection and fronting Road 2 which contains a shared pathway.

- C2. The local road system adjoining the neighbourhood centre is to be designed to accommodate or facilitate accessibility by public transport and its passengers (e.g. buses and bus stops).*

COMMENT: Miles St is a likely future bus route and Roads 1 & 2 are designed to be a bus route though Transport NSW will not approve a bus route in WYURA at this stage, see attached correspondence.

- C3. The design of the neighbourhood centre is to incorporate appropriate landscaping.*

COMMENT: Noted, this is the responsibility of the future developer of that site.

11. Public Infrastructure & Services

Controls are as follows:

- C1. The consent authority must not grant consent to the carrying out of any works unless there is in place for WYURA a Servicing Strategy, to Council's satisfaction, which outlines the sequencing, cost and program of water and sewer infrastructure requirements.*

COMMENTS: Water and sewer servicing are addressed in the *West Yamba Development Servicing Plan for Water Supply and Sewerage Services* (Hunter h₂O, July 2019).

- C2. Sewer design type throughout the WYURA is to be a "pressure sewer" design.*

COMMENTS: Pressure sewer system provided to WYURA.

- C3. Water network modelling will be required at detailed design stage to determine the size and location of trunk mains and provide details of any augmentation, duplication or upgrades to existing water infrastructure required as a result of future development.*

COMMENTS: A Water Network Plan for Yamba Gardens is attached which assesses that there is sufficient pressure to fully develop Yamba Gardens off the single connection at the corner of Miles St and Carrs Dr without the need for the loop being completed.

C4. Council must be satisfied, prior to releasing a construction certificate for any stage of the subdivision of the WYURA that satisfactory arrangements are in place with Essential Energy in relation to the underground supply of electricity to the land to be developed. Developers/applicants for DAs for subdivision should consult with Essential Energy as part of their DA preparation process and should include evidence of such consultation with the lodged DA.

Note: Essential Energy do not have any requirements in the medium term to change the existing 11KV or 66kV overhead infrastructure in the West Yamba area, between Carrs Drive & Golding Street. If there is a requirement from the Clarence Valley Council or developers to underground the existing 11KV or 66kV assets in the proposed development areas, Essential Energy will allow that requirement.

COMMENT: Noted, Preferred Energy Pty Ltd have been engaged to provide electrical engineering consultancy services.

C5. Any developer will be required to appoint a level 1 & 3 Authorised Service Provider (ASP) to request a Design Information Pack (DIP) to comply with the Essential Energy design standards and requirements for the under grounding of the overhead infrastructure.

Note: Essential Energy would be able to supply from its existing distribution network up to 1MVA of load in real terms which will service 25% of the proposed 1,000 new lots. The existing network needs to be upgraded to cater for the new subdivision and greater Yamba long-term requirements; this will require sufficient lead time from the developers to Essential Energy to install the distribution infrastructure to increase the required capacity.

COMMENT: Noted, Preferred Energy are a level 3 ASP for design services and the level 1 ASP is the constructor. Preferred Energy have advised that Essential Energy will not provide a DIP until the DA is approved but Preferred Energy will commence the process anyway once a DA number has been allocated by Council

C6. Council must be satisfied, prior to releasing a construction certificate for any stage of the subdivision of the WYURA that satisfactory arrangements are in place with Telstra and the NBN for pit and pipe infrastructure (including trenching, design and third party certification) that enables the area to be 'Fibre Ready'.

COMMENT: Noted.

12. Aboriginal Cultural Heritage

A *Cultural Heritage Assessment* (Everick Heritage Consultants Pty Ltd) was commissioned as part of the preparation of the WYURA Development Control Plan and is attached.

It concludes:

- *“No physical evidence of Aboriginal Objects or Places was identified within this Project Area.*
- *One registered site (Golding Road Midden) was listed on the AHIMS register. This site was unable to be identified during the field inspection.*
- *Other than the Golding Road Midden site, no other areas were identified that were considered reasonable likely to contain Potential Archaeological Deposits (PADS).*
- *Consultation with the Birrigan-Gargle LALC identified no places of cultural (spiritual) significance.*
- *No items of historical heritage significance were identified within the Project Area.*

No heritage items or places were identified during this assessment that may be considered to have an impact on the proposed Development Control Plan. The potential for unidentified significant cultural heritage items to exist within the Project Area is considered low.”

Correspondence from Birrigan-Gargle Local Aboriginal Land Council dated 9 September 2022 is also attached at Annexure H. It endorses the 2011 Everick report and concurs with the results and specifically Item 11 *Recommended Management and Mitigation Measures* of that report, which are:

Recommendation 1: Aboriginal Human Remains

It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Birrigan-Gargle LALC and the OEH Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the OEH should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties’ statutory obligations.

It is also recommended that in all dealings with Aboriginal human remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

Recommendation 2: Aboriginal Cultural Material

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:

- a) work in the surrounding area is to stop immediately*
- b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;*
- c) an appropriately qualified archaeological consultant is to be engaged to identify the material, and*
- d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines. Aboriginal Cultural Heritage Consultations Requirements for Proponents (2010).*

Recommendation 3: Notifying the OEH

It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to be registered as Sites in the Aboriginal Heritage Information Management System (AHIMS) managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 4: Conservation Principles

It is recommended that all effort must be taken to avoid impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community.

Recommendation 5: Golding Road Midden

It is recommended that, prior to any Development Applications being lodged with the Clarence Valley Council that may affect the general location of the Golding Road Midden (Figure 3), the Proponents consult with the OEH over management of the site. It may be that the OEH will be willing to list the midden as having been destroyed on the AHIMS register. Alternatively, an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the National Parks and Wildlife Act 1974 (NSW) may be required in order to develop in those areas. For planning purposes, it should be noted that if an AHIP is required, a minimum of six months should be allowed for to undertake community consultation in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010) and to allow the OEH to process the AHIP.

It is anticipated that any development consents issued in WYURA will be conditioned to address these recommendations.

4.3 Clarence Valley Local Strategic Planning Statement (2020)

The LSPS sets the direction for land use planning in the Clarence Valley and includes Priorities to manage growth and development and protect the environment and the character of spaces and places. The relevant priorities are:

Priority 1 – *Take a proactive approach to create great places suitable to our climate, culture and aspirations.*

COMMENT: The proposed subdivision includes features which create great places and responds to the relevant planning controls for WYURA and the aspirations of future residents including:

- Retention of extensive areas of open space including the 10.6ha floodway, the 2nd order stream and its buffers and the two large detention basins. All of these will be dedicated to Council and be available for future embellishment to encourage public use if Council so wishes or use in their natural state. The central location of the basins ‘breaks up’ the subdivision both visually and physically and creates a green spine.
- Extensive 2.5m wide shared pathway linking into the rest of WYURA and the Yamba pathway network.
- The provision of biopods and extensive street tree plantings which soften the streetscape and provide shading.

Priority 2 – *Engage and collaborate with Clarence Valley’s First Nations Community to Conserve First Nations heritage and respect their right to identify, determine, manage and participate in future strategic decision-making processes.*

COMMENT: A “Cultural Heritage Assessment” (Everick Heritage Consultants Pty Ltd, Sept 2011) was commissioned as part of the preparation of the WYURA Development Control Plan (now Part X Schedule XI of the Residential Zones DCP). It was undertaken with the assistance of representatives of the Birrigan-Gargle LALC as acknowledged in the Report.

Correspondence from Birrigan-Gargle Local Aboriginal Land Council dated 9 September 2022 is also attached. It endorses the 2011 Everick report and concurs with the results and specifically Item 11 *Recommended Management and Mitigation Measures* of that report, which are listed in this report at Section 4.2.2 Item 12.

Priority 4 – *provide housing choice to meet community needs, including social and affordable housing and the integration of liveability principles.*

COMMENT: Of the 277 low density residential lots, 81 (29.2%) are 450m² or less and so exceed Councils affordable housing target of 10% for lots of that size or less. A total of 153 lots (55.2%) are between 450m² and 600m² and 43 (15.5%) are greater than 600m² including 3 greater than 800m² which are suitable for multi-unit housing. The medium density precinct has capacity for around 30-35 townhouses, subject to the adoption of R3 development standards for the precinct and shop top housing could be provided in the commercial precinct.

This mix of lot sizes, densities and housing types provides choice to meet community needs.

Priority 5 – *provide for healthy, safe and well-connected communities, particularly providing for social infrastructure.*

COMMENT: The shared pathway network provides physical connection both in the Estate and into the broader Yamba community.

Lot 278, with an area of 2000m² is designated for neighbourhood shops which will become a focus for social interaction within the broader WYURA community.

The development will contribute financially towards community facilities and open space/recreation facilities under Council's S7.11 Clarence Valley Contributions Plan 2011, including a Community Centre, Neighbourhood Centre and Youth Space in the lower valley catchment.

Priority 9 – *Plan for resilient and sustainable infrastructure.*

COMMENT: the estate is located on fill to ensure full compliance with Council's minimum floor level on flood prone land. In additions, approximately 4.333ha of the estate has finished ground levels above the Probable Maximum Flood Level of 3.8m AHD.

Part of the property is classified as bushfire prone land and the design incorporates edge roads ranging in width from 24.265m to 30.9m along its eastern and southern boundaries to provide compliant Asset Protection Zones. All infrastructure on and off site will be constructed to Council's standards to ensure its sustainability.

Priority 10 – *Promote walking, cycling and improved mobility and accessibility.*

COMMENT: The shared pathway network and local road footpaths meets this priority and connects all of the estate to the commercial precinct and to the broader Yamba network.

Priority 18 - *Promote a low-carbon community.*

COMMENT: The shared pathway network and footpaths will promote bike and pedestrian use in the estate, WYURA and Yamba.

The commercial centre will reduce the need for some vehicle trips for various goods and services.

The Statement also references the following documents:

Urban Design for Regional NSW (NSW Government Architect)

The Guide includes the following urban design strategies for greenfield development in new neighbourhoods:

Strategy 1 – Engage with the history and culture of places*1. Manage connections between new neighbourhoods and surrounding uses*

COMMENT: The estate has strong internal and external interconnections by vehicles, bikes and pedestrians to Yamba CBD shopping centres and the coast and river. There are no identified Aboriginal or non-Aboriginal heritage sites on the subject property.

Strategy 2 – Integrate with the natural environment and landscape.*2. Connect and engage urban development with natural features.*

COMMENT: The estate has significant natural space in the floodway which visually and physically links to the 2 detention basins and the 2nd order stream, and the estate is in close proximity to the river at the southern end of Carrs Drive.

3. Embed green infrastructure as a network.

COMMENT: Street tree plantings and biopods in street verges. The open spaces to be dedicated to Council provide a mix of open space (formal and informal) and biodiversity areas with good connectivity.

4. Design public open spaces and streetscapes to support biodiversity.

COMMENT: The three areas of public open space will be embellished to ensure their utility value to the community and the floodway, the basins, and 2nd order stream provide informal areas supporting local biodiversity.

Strategy 3 – Prioritise connectivity, walkability, and cycling opportunities.*5. Plan for a network of interconnected streets to facilitate walking and cycling.*

COMMENT: Internal shared pathway network and footpaths will connect with the current and future external network. Land retained in floodway and 2nd order stream in public ownership. Commercial area connected to pathway network.

6. Support the viability of public transport and local town and village centres.

COMMENT: Collector road network designed as bus route which will connect to Yamba town centre when route is established.

Strategy 4 – Balance urban growth.*7. Limit low-density greenfield development on the urban fringe.*

COMMENT: WYURA development limits identified and established through the strategic planning process which led to its creation. Variety of lot size provided and commercial area accessible by pedestrians and cyclists.

Strategy 5 – Increase options for diverse and health living.*8. Guide the extent and type of new development to suit the anticipated new community.*

COMMENT: A range of lot sizes provided and with emphasis on smaller affordable lots reflecting the likely demographics of a mix of retirees and first home buyers. Significant green infrastructure provided to support mental and physical health.

9. *Reinforce economic and employment opportunities.*

COMMENT: Medium density precinct adjacent to commercial precinct with connectivity to major shopping centre 2 km from the estate.

10. *Encourage communal spaces withing residential developments.*

COMMENT: Local Park and informal open space provided; potential for communal space in commercial precinct by a future owner.

Strategy 6 – Respond to climatic conditions and their impacts.

11. *Guide and encourage higher standards of sustainable building design.*

COMMENT: The majority of these are subject to individual housing design, but the estate layout has the majority of lots with a long northern boundary plus street trees and extensive open space areas.

12. *Design the public realm to provide comfort and shelter during extreme heat.*

COMMENT: Street trees provided for cooling effect; design of commercial area will be the responsibility of future landowners.

13. *Protect against natural hazards.*

COMMENT: Floodway provided for flood mitigation. Flooding and bushfire protection requirements met.

Better Placed (NSW Government Architect)

Better Placed is a high-level document created to define the key considerations in the design of the built environment. It contains 7 objectives:

1. **Better fit** – *contextual, local and of its place.*

COMMENT: Good design in this built environment is informed by and derived from its location, context and social setting. In the estate much of this will be achieved through building design at individual home level but also within the commercial precinct and any community precinct that Council may develop in the future.

2. **Better performance** – *sustainable, adaptable and durable.*

COMMENT: All public infrastructure will be constructed to council standards to ensure maximum sustainability while the biopods connectivity to the basins will ensure environmental sustainability through water quality and quantity outcomes.

3. **Better for community** – *inclusive, connected and diverse.*

COMMENT: the range of lot sizes, medium density precinct and commercial precinct allows for a variety of housing types and a community hub.

4. **Better for people** – *safe comfortable and liveable.*

COMMENT: Public spaces should focus on safety and comfort which is reflected in built environment in Yamba township and its relationship with the river and the ocean.

5. **Better working** – *functional, efficient and fit for purpose.*

COMMENT: This relates to building design and functionality.

6. **Better value** – *creating and adding value.*

COMMENT: This relates to building design and functionality.

7. **Better look and feel** – *engaging, inviting and attractive.*

COMMENT: The retention of the floodway and 2nd order stream in their natural state connected by the open green space created by the basins, creates a pleasing natural environment.

4.4 Water Management Act 2000

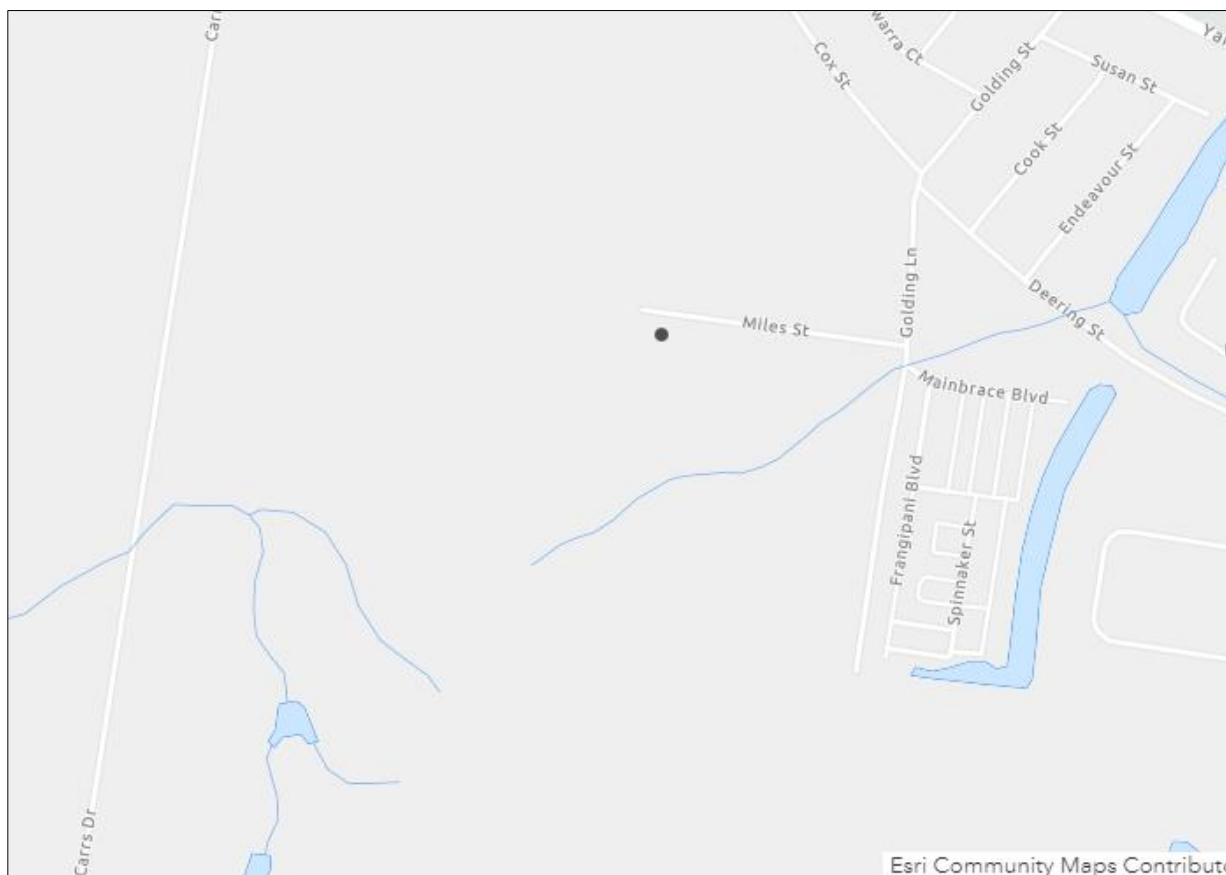


Figure 8 - Hydroline map

There are 3 mapped water courses on the property:

- The 2nd order stream in the south-west (2nd order is a higher order than 1st).
- The 1st order stream off the 2nd order stream.
- The 1st order stream heading into the floodway.

As a result of the presence of these streams, this application is Integrated Development.

On the 23rd December 2020, the Natural Resources Access Regulator (NRAR) issued a Controlled Activity Approval (CAA) for works within 40m of the 2nd order stream (see attached). The specified activity as the CAA was -

“Filling, bulk earthworks and riparian establishment for residential subdivision”

The works are to be undertaken in accordance with the plans specified in the CAA, and in accordance with the Vegetation Management Plan (Geolink, August 2020) for the vegetation of riparian buffers adjacent to the stream (see Plan 33801-PR2-030 in the DA plans).

These works plus the revegetation works are soon to commence.

This current application proposes the deletion of the southern 1st order stream and that section of the eastern 1st order stream located within the development footprint which will require further approval from NRAR.

4.5 State Environmental Planning Policies

4.5.1 State Environmental Planning Policy (Resilience & Hazards) 2021

Chapter 4 of the Policy deals with the remediation of land. A Stage 2 Site Contamination Assessment (Regional Geotechnical Solutions March 2020) is attached.

A further Stage 1 and 2 Contamination Assessment (Regional Geotechnical Solutions June 2023) was prepared for the floodway which is to be dedicated to Council. The only likely future use of the floodway is passive recreation (i.e. nature walks) on accessible sections and so the recreation ‘C’ Health Investigation Level was adopted.

The Assessment recommended that should there be any evidence of contamination uncovered in the future, then a site contamination specialist should be engaged, and concluded that:

“Based on the results obtained in this investigation, it is considered that the site is likely to be suitable in its current state for the proposed recreational land use with regard to the presence of soil contamination, provided the recommendations and advice of this report are adopted, and site works (if any) are conducted in accordance with appropriate site management protocols and legislative requirements.”

The Assessment follows on from their Stage 1 Preliminary Assessment Report which recommended sampling and testing for areas of concern.

The Stage 2 Assessment involved sampling 3 areas of concern on the property and identified one location where the acceptable level of hydrocarbons was exceeded, associated with a parked unregistered car. The Report notes that the area of contamination will eventually be filled as part of the development and so the risk of human exposure is very low.

The Report concludes that:

“Based on the assessment as presented herein, the site is considered to be suitable for the proposed residential development from a contamination perspective provided the recommendations of this report are adhered to.”

An addendum to this Assessment, (RGS 19 August 2022) tested a stockpile of material at the eastern end of Miles St in the Floodway and concluded that the material was suitable for use as general fill in the development and it will be removed and utilised elsewhere on the site.

4.6 Regional Strategies

The relevant document is the North Coast Regional Plan 2036.

WYURA is designated as an urban growth area in the plan (Figure 20 – Urban growth map for Clarence Valley Local Government Area).

Goal 4 of the plan is to deliver “Great housing choice and lifestyle options” and states: *“The region will accommodate an additional 76,200 people, which will generate the need for 46,000 new homes. Almost one-third of residents will be aged over 65 years, and couple-only and single-person households will represent the largest share of households. These changes will not only increase the demand for housing, but also the need for a greater variety of housing.”*

The plan sets out that this goal is to be achieved via the following directions:

Direction 22 Deliver Greater Housing Supply

This Direction includes demand for an additional 3550 dwellings in the Clarence Valley by 2036 to which WYURA, including the subject property, will contribute.

Direction 23 Increase Housing Diversity & Choice

This Direction states:

Providing housing diversity and choice will improve affordability, help meet the needs of an ageing population and support the reduction of household size.”

This is to be achieved in part by Action 23.1

“Encourage housing diversity by delivering 40 per cent of new housing in the form of dual occupancies, apartments, townhouses, villas or dwellings on lots less than 400 square metres, by 2036.”

Compliance with this action is discussed at Section 4.2.2 Part X Assessment.

4.5 Council Strategies

Affordable Housing Policy

The Policy requires 10% of residential lots in subdivision of 10 or more lots to be classified as affordable, defined as 450m² or less.

The proposal includes 81 lots of 450m² or less (29.2%).

5. Social & Economic Considerations

WYURA is a long-term growth strategy for Yamba recognising the physical and environmental constraints within and around the township and the limitations of service infrastructure.

Following the approval of the 161 lot residential development, and the 200 manufactured homes estate in Carrs Drive, and the 52 unit retirement village, this proposal represents the next step in the orderly development of this area.