

Comment: The proposed subdivision is entirely contained within an existing 2(a) Residential zone and has been anticipated in planning schemes for more than 22 years.

(e) any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore,

Comment: The development will not have any detrimental impact on overshadowing or views.

(f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,

Comment: Public perimeter roads and footpaths will enhance public access to scenic assets.

(g) measures to conserve animals (within the meaning of the *Threatened Species Conservation Act 1995*) and plants (within the meaning of that Act), and their habitats,

Comment: The subdivision footprint is placed well within the 2(a) zone boundary in order to conserve a habitat area at the east of the subdivision. Habitat areas within the subdivision will be retained and enhanced in parks and in large lots. Refer to flora and fauna assessment for details.

(h) measures to conserve fish (within the meaning of Part 7A of the *Fisheries Management Act 1994*) and marine vegetation (within the meaning of that Part), and their habitats

Comment: It is proposed to improve the quality of water in the central channelized watercourse, and provide stormwater retention prior to discharge. An extensive network of bioretention filters is proposed. Assessment indicates that subject to application of WSUD techniques in the drainage areas, the development will not adversely impact on marine life (refer to Appendix C for details).

(i) existing wildlife corridors and the impact of development on these corridors,

Comment: The protection and expansion of the undeveloped bushland area at the east of the site, and retention of native vegetation in strategic areas, will support wildlife movement. Refer to Appendix C for details.

- (j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,

Comment: The land is not subject to coastal processes and hazards. Refer to Appendix E for details.

- (k) measures to reduce the potential for conflict between land-based and water-based coastal activities,

Comment: There is some recreational small boat usage of Simpsons Creek, but there are no organised tours or activities. The increased resident population will probably result in an increased recreational usage, but the low overall population is not considered likely to generate conflicts.

- (l) measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,

Comment: Assessment and consultation has been undertaken in accordance with Office of Environment and Heritage (OEH) guidelines. Refer to Appendix F for details.

- (m) likely impacts of development on the water quality of coastal waterbodies,

Comment: Subject to the application of appropriate Water Sensitive Urban Design techniques within the subdivision, as generally described in the engineering assessment, water quality in Simpsons Creek will not be adversely affected by the development.

- (n) the conservation and preservation of items of heritage, archaeological or historic significance,

Comment: There are no items of significance to conserve on the site.

- (o) only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,

Comment: Not applicable.

- (p) only in cases in which a development application in relation to proposed development is determined:
- (i) the cumulative impacts of the proposed development on the environment, and
 - (ii) measures to ensure that water and energy usage by the proposed development is efficient.

Comment: Cumulative impacts accruing from the expansion of existing subdivision into an area that has anticipated residential development for a considerable time. Water and energy usage will be subject to the provisions of BASIX.

Clause 14 Public access

A consent authority must not consent to an application to carry out development on land to which this Policy applies if, in the opinion of the consent authority, the development will, or is likely to, result in the impeding or diminishing, to any extent, of the physical, land-based right of access of the public to or along the coastal foreshore.

Comment: Simpson's Creek is defined as a "coastal foreshore" for the purpose of SEPP 71. There is informal and unregulated access to Simpsons Creek at the southeast of the subject site. The current proposal acknowledges the existence of this access and proposes to provide some car parking spaces and facilities in this locality. The development will not impede or diminish public access to or along the coastal foreshore.

Clause 16 Stormwater:

The consent authority must not grant consent to a development application to carry out development on land to which this Policy applies if the consent authority is of the opinion that the development will, or is likely to, discharge untreated stormwater into the sea, a beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or onto a rock platform.

Comment: Stormwater will be treated on the site prior to discharge to infiltration areas in the coastal sandy plain or to channels leading from the site into Simpson's Creek. Untreated stormwater from hard surfaces will not be discharged untreated into the receiving environment.

There are no areas of non-compliance with SEPP 71.

8.2.3 Type of Subdivision

2.4 Identify the type of subdivision proposed across the site, that is, community, Torrens, strata.

It is proposed that all subdivision will be under Torrens title. This does not preclude strata or community title subdivision of future developments, particularly the medium density lot. The type of subdivision will be considered at the time, taking market conditions and contemporaneous planning guidelines into account.

Byron DCP 6 Bayside Brunswick proposes that large areas of bushland at the east of the site be held as common property in a Community Title or strata title development. This is a very specific outcome that presents some challenges to the long term management of the land, and its enjoyment by the general community. The long term ownership of this land is to be negotiated with Council and State government agencies.

8.2.4 Built Form Controls

2.5 Provide details of potential building envelope, built form and design quality controls and the means for implementing them.

The DGR's for this project were originally compiled in 2006, prior to the adoption of the NSW Housing Code. Given that all proposed lots exceed the minimum lot size 450m² to which the Housing Code applies, it is expected that the majority of future development will be complying development.

The Code provides adequate guidance on building envelope, built form and design quality. Where the Code does not apply and a development application is required, the provisions of the Coastal Design Guidelines, North Coast Design Guidelines and Byron DCP 2002 will apply.

SEPP 65 Design Quality of Residential Flat Development is unlikely to be relevant to future applications due to the prevailing two storey height limit.

Even though the Concept Plan proposes a residential subdivision, the provisions of SEPP Seniors will continue to apply. The Concept Plan cannot preclude the possibility of a future development proposal under SEPP Seniors, although the Concept Plan does provide a clear indication of environmental constraints and developable land on the site.

Two large residential lots are proposed at the western fringe of the development. Both contain substantial areas of native vegetation which would be owned and

managed by private landowners. These environmentally sensitive areas were also identified in Council's 2008 draft LEP and proposed to be zoned for conservation. The provisions of Planning for Bushfire Protection, DCP 2002 and the North Coast Urban Design Guidelines provide sufficient guidance for the location and design of houses on these lots, such that it is not considered necessary to prescribe a building envelope or building exclusion area on these lots.

8.2.5 Staging

2.6 Provide details of any staging that demonstrates the lots will be released in an orderly and coordinated manner.

Fig. 5 (Section 2.5) shows a staged release program. Four existing streets terminate at the site boundary; these will be extended into the proposed development and connected to form the internal street network.

Market conditions have been distorted by the lack of land release for several years, and by economic conditions and other factors. It is difficult to predict development take up rates. Given that residential land has not been available to the market at Brunswick Heads (in fact, all of Byron Shire) for many years, demand is expected to be high.

Residential lots will be released in response to market conditions, in an orderly rollout that will extend from the existing urban area and will provide all urban services (roads, drainage, footpaths, sewer, water, electricity, telecommunications).

8.2.6 Open Space

2.7 Outline the long-term management and maintenance of any areas of open space or conservation including ownership and control, management and maintenance funding, public access, revegetation and rehabilitation works and bushfire management.

Two main areas of public open space are proposed:

1. Eastern bushland: this reserve will contain an existing vegetated swale that provides wallum froglet habitat, and will also provide a stormwater flow path for a small area of the eastern part of the subdivision. The swale area is often wet and is environmentally sensitive, and is not suitable for general public access. Visual amenity will be served by footpaths alongside roads, with views over natural areas. The long term ownership and management of this land is to be negotiated with Council and State agencies.
2. Central drainage area: this area will contain an existing watercourse that is currently channelized into a drain. The watercourse will be physically modified to provide a more natural environment, as well as stormwater

retention and infiltration areas. There will be one footpath across this drainage area. Most, if not all, of this area will be dedicated to Council as a drainage reserve.

3. Eastern bushland (Park 2): this is an area of approximately 10.37 hectares, between the eastern perimeter roads (Road 3 and Road 5) and Simpsons Creek. The majority of this land is zoned 7(b) Coastal Habitat, with some 7(a) Wetlands at the edge of Simpsons Creek and some ecologically constrained 2(a) Residential land at the west. The Park is separated from the proposed residential development by perimeter roads, and does not require vegetation clearing for bushfire asset protection zones or any other purpose. Ecologically it is in very good condition, with natural heathland vegetation and mangroves, and little weed growth. Discussions have been held with Council and with OEH about the long term ownership and management of this area but consensus has not been. Several options have been considered:
 - a) Retention in Codlea ownership – may not be practical or sustainable.
 - b) Community title ownership and management by a number of lots as indicated in DCP 6. This presents significant and specialised ownership and management issues, and is not considered a realistic goal. Private ownership is not appropriate for this land.
 - c) One large lot with a dwelling entitlement – would impose some burden on single landowners, particularly in terms of public liability given that the public movement is not physically restricted into the area. The site may offer an attractive environment for tourism accommodation but bushfire requirements for tourism developments are onerous, and the 2(a) zone does not support tourism activity other than bed and breakfast accommodation.
 - d) Dedication to the State as a reserve for public recreation or as an extension to Tyagarah Nature Reserve, which occupies land on the other side of Simpsons Creek.
 - e) Dedication to Council – a conventional outcome, consistent with Council's Biodiversity Conservation Strategy, and provides an opportunity for community engagement with Council regarding the future uses and management of the land through a Plan of Management.

The management and maintenance of lands to be dedicated to public authorities is expected to follow conventional practice. The developer will need to construct and maintain public reserves until their dedication at the time of registering a Subdivision Certificate, at which time they will become a Council asset. In this scenario there is no need for maintenance agreements.

8.3 Flora and Fauna

The requirements of DGR 8.3 are addressed in the ecological assessment by James Warren and Associates at Appendix C.

3.1 Assess the potential impacts of the development on flora and fauna taking into consideration impacts on any threatened species, populations, ecological communities and/or critical habitat and any relevant recovery plan in accordance with DECC's Guidelines for Threatened Species Assessment (2005), having particular regard for the wallum vegetation and Wallum Froglet identified on the site. Provide measures for the conservation of flora and fauna, where relevant.

The development footprint is located well inside the 2(a) zone to avoid impacts on sensitive native vegetation and habitat that extend from the 7(b) zone at the east.

Wallum froglet habitat has been conserved in the eastern swale within Park 1 and will be provided in the modified watercourse in the western drainage reserve (Park 2).

Some significant conservation areas are likely to be dedicated as public land.

3.2 Address impacts on migratory species, RAMSAR wetlands and species listed under Section 18 and 18A of the EPBC Act.

There are no Ramsar wetlands on or near the site.

3.3 Address impacts of clearing of native vegetation, and outline measures for the conservation of existing wildlife corridor values and/or connective importance of any vegetation on the subject land. Particular consideration should be given to minimising impacts on the creek line running north/south on the western side of the lot, in consultation with Council.

Tree removal has been minimised by the development footprint, street layout, lot layout and location of public land. The perimeter road at the east of the development is a minimum of 70 metres from Simpsons Creek.

The creek line running north/south is a channelized watercourse. It is proposed to modify the drain to a more natural profile, and introduce wallum froglet habitat and a stormwater retention area. Council has been consulted about this concept and has indicated support.

3.4 Address direct and indirect impacts on the riparian zone, and identify conservation (riparian) buffer zones between the development areas and adjoining vegetation, having regard to a recommended minimum 50m buffer width and findings, conclusions and recommendations of the Brunswick Estuary Management Study and Management Plan.

The development footprint has been set well back into the 2(a) zone such that the nearest part of the development (a perimeter road at the southeast of the site) is more than 100 metres from the edge of Simpsons Creek.

3.5 Address ownership of proposed conservation areas, riparian zones and buffer zones, and management regimes to be undertaken in these areas and zones.

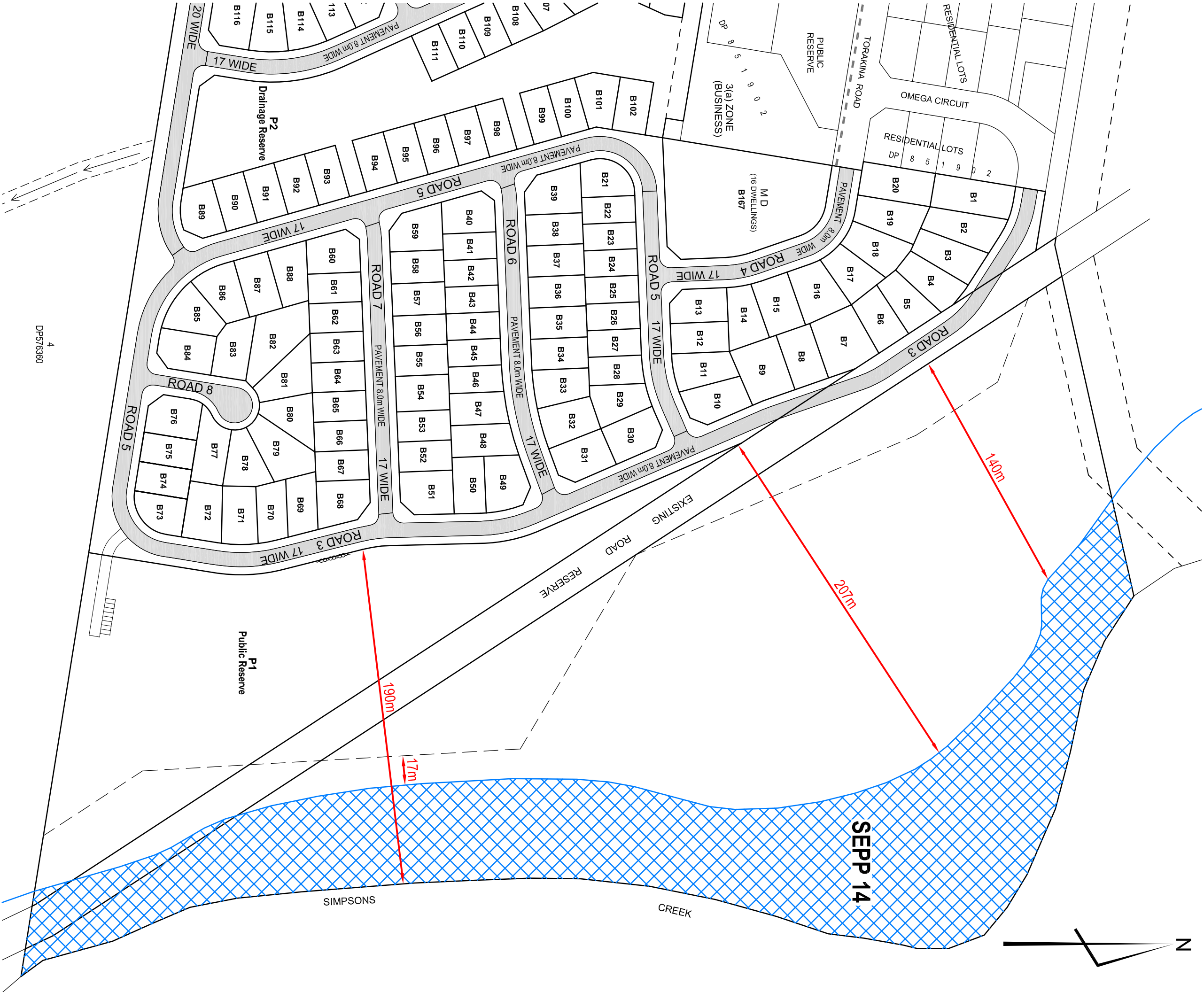
The ownership of the 7(a) and 7(b) land at the east has not been clearly resolved. The land has the qualities of a public asset and is proposed to be dedicated to a public authority. Further liaison is required with Council and OEH.

3.6 Address the preliminary design for the footbridge over Simpson's Creek and its potential impacts on aquatic habitat, including any requirements of Department of Primary Industries (Fisheries) regarding this habitat.

The footbridge is no longer proposed.

3.7 Address potential impacts of the proposed beach access through Tyagarah Nature Reserve and any requirements of the Department of Environment and Climate Change (DECC).

Due to the combined environmental authority of the Nature Reserve and Cape Byron Marine Park, beach access is considered too challenging to achieve and is no longer proposed.



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DISTANCES TO SEPP 14
BAYSIDE BRUNSWICK
PROPOSED URBAN SUBDIVISION
BAYSIDE WAY, BRUNSWICK HEADS
LOT 1 DP 871039
for CODLEA Pty Ltd

SCALE: 1 : 2000 at A3
LGA: Byron
LOCALITY: Brunswick Heads
SURVEYED: GC
DRAWN: SS
APPROVED: 17.08.2011
DATE: na
COCO: LM080082-DR32C
Dwg. No.

8.4 Water Cycle Management

4.1 Address potential impacts on the nearby SEPP 14 wetlands; on local surface water and groundwater hydrology; and the potential of the proposal to contaminate groundwater quality or impact on groundwater dependent ecosystems.

Comment: It is not proposed to clear, drain or fill any land within SEPP 14 wetlands. The development footprint is approximately 17m (at its closest) to 207m (at its furthest) from the SEPP 14 boundary, as shown on Fig. 23. The potential impact of the proposal on SEPP 14 is addressed in detail in the report at Appendix D (Surface and Groundwater Assessment). The assessment recommendations have been incorporated in the layout design wherever possible.

The stormwater concept proposes catchments that will drain away from SEPP 14. Construction of the subdivision will require management strategies to minimise erosion and sedimentation. Water Sensitive Urban Design solutions, designed and built to specifications, will ensure that surface water is retained, treated and discharged at natural flow rates so that receiving environments are not adversely affected.

The stormwater concept identifies areas of poor drainage. Areas of cut and fill across the site have been adapted to the subdivision layout and drainage areas to minimise excessive engineering solutions. The 'package' of solutions will minimise disturbance of ground water hydrology.

Stormwater from hard surface areas on large lots will be discharged via bioretention systems, overland flow and natural infiltration. A stormwater retention area in the central drain will treat water flows prior to discharge into the downstream watercourse.

The potential for adverse impacts on groundwater dependent ecosystems has been minimised by (a) the location of the development footprint on the landscape, with regard to natural drainage areas and ecosystems, and (b) use of Water Sensitive Urban Design strategies to manage water quality and discharge. The proposal will introduce additional wallum froglet habitat in the central drainage area. Refer to Appendix C (Flora & Fauna) and Appendix D (Surface and Groundwater) and Appendix L (Water Cycle Management) for details.

4.2 Address and outline measures for Integrated Water Cycle Management (including stormwater) based on Water Sensitive Urban Design principles and which addresses impacts on the surrounding environment, drainage and water quality controls for the catchment, particularly overland flows from the site to the local waterways (including the creek referred to at Section 3.3) and potential impacts of stormwater run off to adjoining land and watercourses.

Comment: This requirement is addressed in the report at Appendix L (Water Cycle Management Stormwater Concept), and that report is informed by the Surface and Groundwater Assessment at Appendix D. The stormwater concept applies WSUD principles to ensure that water quality is appropriately treated prior to discharge in to the receiving environment. Strategies include:

- Utilisation of natural drainage patterns.
- Remodelling of the channelized watercourse to provide more natural topography and incorporating wallum froglet habitat areas.
- Overland flows into the remodelled watercourse at the centre/west of the site will be discharged to the existing downstream watercourse after treatment in a retention basin.

Refer to Appendices for details.

4.3 A concept erosion and sedimentation control plan or drawing plan that shows the nature and location of all erosion and sedimentation control measures to be utilised on the site is to be provided.

An erosion and sedimentation control plan as shown on Fig. 21 (section 7.1.1.8) has been prepared – refer to Appendix L for detail. The plan illustrates the location of:

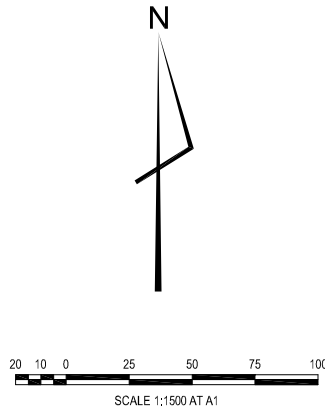
- temporary sediment basins with overflow filtration;
- sediment fences;
- stabilisation of site access at the extension of existing streets;
- straw bale filters;
- catch drains.

4.4 Prepare conceptual design layout plan for preferred stormwater treatment train showing location, size and key functional elements of each part of the system. The plan should also include details of any major overland flow paths through the site and any discharge points to the street drainage system.

A stormwater treatment concept has been prepared (Refer to Fig. 24 & Appendix L). It shows the location and approximate dimensions of:

- Network infrastructure including pits, pipes and discharge points
- Drainage flow directions
- Froglet habitat
- Stormwater catchment boundaries
- Bio-retention treatment areas
- Existing natural drainage depressions, typically around high conservation value vegetation

An existing crossing on the dirt track inside the eastern Crown road reserve will need to be rehabilitated to return the swale to natural flow characteristics.



WARNING NOTE:
This draft concept plan was prepared for the exclusive use of Codlea Pty Ltd as part of a preliminary assessment of site constraints and possible lot yield and as an aid to early discussions with Byron Shire Council and is not to be used for any other purpose or by any other person or corporation. The proposed development footprint, street layout and drainage pattern shown herein are subject to detailed site assessment and also to the requirements of Byron Shire Council and any other authority which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. LandPartners Limited accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this plan in contravention of the terms of this warning note. This note is an integral part of this plan.

E	AMENDED LOT NUMBERS	WF	WF	17.08.11
D	AMENDED LAYOUT	WF	WF	14.05.11
C	FOR COMMENT	WF	WF	24.02.11
B	FROGLET HABITAT ADDED	WF	WF	21.02.11
A	CONCEPT SUBMISSION	WF	WF	01.12.10

Iss	Description	Des	Drw	Date	Appd
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CODLEA Pty Ltd
BAYSIDE BRUNSWICK
PROPOSED URBAN SUBDIVISION
BAYSIDE WAY, BRUNSWICK HEADS
LOT 1 DP 871039

PROPOSED SUBDIVISION
STORMWATER CATCHMENT
AND CONCEPT LAYOUT PLAN

Scale: 1:1500 at A1 CAD file: LM080082-DR23E.dwg
Datum: AHD CIVICAD file: -



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4.4 In consultation with Council address appropriateness of the wetland and detention ponds adjoining the proposed park, particularly having regard to potential mosquito habitat. The on-site detention is to be integrated with the proposed landscape design. Site discharge calculations should be provided.

This refers to the original concept of 2006, which has been abandoned. The new design is more sensitive to the existing landform and is integrated with landscape design. Refer to Appendix L for discharge calculations.

8.5 Hazard Management and Mitigation

5.1 Address coastal hazards and the provisions of the Coastline Management Manual. In particular consider impacts associated with wave and wind action, coastal erosion, sea level rise and more frequent and intense storms.

The site is sufficiently set back from the coast to be unaffected by coastal processes. Sea level rise has been factored into flood modelling. Refer to the "Flooding and Coastal Advice" report at Appendix E for details.

5.2 Identify any contamination on site and appropriate mitigation measures in accordance with the provisions of State Environmental Planning Policy (SEPP) 55 – Remediation of Land.

Contamination has been assessed and is not present on the site. Remediation action is not required. Refer to Appendix J for the detailed assessment.

5.3 Identify the presence and extent of acid sulfate soils on the site and, where relevant, appropriate mitigation measures.

The site is underlain by potential acid sulfate soils but earthworks to construct the subdivision will be limited to 1.3 metre cut off the top of a dunal formation. It is not expected that potentially acidic material will be disturbed. Remodelling of the drain may require preparation of an ASS management plan – this will be resolved at DA stage when more specific assessments will be undertaken.

5.4 Address the requirements of Planning for Bush Fire Protection 2006 (RFS).

Bushfire planning requirements have been addressed – refer to Appendix H for detailed assessment. Perimeter roads around the edge of the subdivision will provide Asset Protection Zones as well as access for hazard control and egress. APZ's have been nominated on the large lots at the west of the subdivision, for confirmation at DA stage. Building envelopes are not considered necessary at this stage of the process but may be proposed in a future development application.

5.5 Provide an assessment of any geotechnical limitations that may occur on the site and if necessary, appropriate design considerations that address these limitations.

Geotechnical capability has been assessed. Preliminary investigations indicate that standard foundation designs and conventional footing and slab construction will be required over the site. There are no limitations to conventional construction. Refer to Appendix B for detailed assessment.

5.6 Provide an assessment of any flood risk on site in consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of sea level rise and an increase in rainfall intensity.

Flood risk has been modelled under various scenarios, including climate change and sea level rise. The proposed development footprint avoids floodprone land. Refer to Appendix E for details.

5.7 Consider the potential impacts of any filling on the flood regime of the site and adjacent lands.

The development footprint avoids floodprone areas, so filling will have negligible impact. Filling and site shaping for subdivision works will modify local drainage but this has been amply addressed in the proposed stormwater concept.

8.6 Traffic and Access

6.1 Prepare a 'Traffic Impact Study' in accordance with the RTA's Guide to Traffic Generating Development and in particular address road design requirements adjacent to the proposed child care centre.

A traffic impact study has been prepared – refer to Appendix M.

Some improvements are recommended to the existing intersection of Bayside Way and the Old Pacific Highway:

- Kerbing
- Raised concrete median
- Street lighting
- Stop control

The existing road near the pre-school is 15 metres wide. This is excessive and will be reduced in the proposed development with a road reserve 17m wide with an 8.0 metre pavement.

Extension of bus services into the area is recommended.

6.2 Road design should be in accordance with the Brunswick Heads Settlement Strategy 2004 and street layout designed to discourage speeding.

The *Brunswick Heads Settlement Strategy 2004* provides some guidance about using roads as buffers to significant vegetation and fire hazard. This is consistent with contemporary urban design guidelines.

Perimeter roads have been provided around the edge of the proposed subdivision, with the exception of some areas at the west where house lots back on to rural residential site or to large sites within the development. In those areas the urban development footprint is defined by adjoining developments.

Street layout is in accordance with AUSSPEC and will be subject to a 50km/h speed limit.

6.3 Identify available public transport, additional demands for such transport, and means of meeting those demands.

Bus services utilise the Old Pacific Highway a few hundred metres to the northwest of the subject site. Bus services are not currently available within the existing Bayside development but may become viable when the subject development is completed. This will be particularly relevant for school children. Taxi services are available in the area.

6.4 Illustrate pedestrian and cyclist linkages in the vicinity of the site and provide additional walkway/cycleway facilities, where appropriate.

There are pedestrian footpaths within the existing Bayside development. Footpaths terminate at the site boundary at the end of Torakina Road and Kingsford Drive near the pre-school.

8.7 Visual Impact

7.1 *address the visual impact of the proposal in the context of surrounding development and relevant mitigation measures.*

The development will expand on the existing Bayside residential area. Visual impact will be mitigated by the bushland backdrop at the edge of the development, by internal open space and parks, and by internal landscape works. Refer to Appendix I for details.

7.2 *provide a view analysis including artist's impressions, photomontages, etc of the proposal in the context of the surrounding development.*

Refer to the graphics in Appendix I.

7.3 *provide a landscape concept plan or drawing that shows the basic detail of planting design and plant species to be used, listing botanical and common names, mature height and spread, number of plants to be utilised, tree removal/retention, built elements and surface treatments 9i.e. pavers, lawn etc).*

Refer to the graphics in Appendix I.

8.8 Heritage and Archaeology

8.1 *Identify whether the site has significance to Aboriginal cultural heritage and identify appropriate measures to preserve any significance. Aboriginal community consultation should be undertaken in accordance with the draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DECC 2005).*

A cultural heritage assessment, including stakeholder consultation, has been undertaken in accordance with DECC guidelines – refer to Appendix F for details. The site does not have significant heritage values.

8.2 *Identify any items of non-indigenous heritage significance and, where relevant, provide measures for the conservation of such items.*

There are no items of non-indigenous significance.

8.9 Social Impact

9. Provide a social impact assessment for the proposal. Address the social and economic context of the proposal in terms of infrastructure requirements, public transport, community services and facilities (including schools and medical services) and provision of any affordable housing.

8.9.1 Spatial Context

The physical context of the development is established by the extent of the 2(a) Residential zone. This also translates to the social context, whereby the subject development will extend from an existing developed urban area and utilise existing social services. There is an existing central node at the edge of the existing area, which will become the centre of the completed estate. At that centre, there is an existing pre-school and a park with some play facilities.

Also located in the future centre, and adjacent to the subject site, is a vacant site that is zoned 3(a) Business zone. Bayside is self-contained – there is no through road and no passing trade to capitalise on, so the development of this commercial site for a neighbourhood shop or other commercial service will be reliant on the population catchment of the completed estate.

These existing central facilities and services and zones were designed to accommodate the future expansion of Bayside Brunswick.

8.9.2 Community Profile

According to the 2006 Census for Brunswick Heads:

- there were 1,613 persons usually resident in Brunswick Heads (Suburb): 49.0% were males and 51.0% were females. Of the total population in Brunswick Heads (Suburb) 1.0% were Indigenous persons, compared with 2.3% Indigenous persons in Australia.
- 15.1% of the population usually resident in Brunswick Heads (Suburb) were children aged between 0-14 years, and 37.2% were persons aged 55 years and over. The median age of persons in Brunswick Heads (Suburb) was 47 years, compared with 37 years for persons in Australia

AGE	Selected Region	% of total persons in Region	Australia	% of total persons in Australia
Age groups:				
0-4 years	77	4.8%	1,260,405	6.3%
5-14 years	167	10.4%	2,676,807	13.5%
15-24 years	143	8.9%	2,704,276	13.6%

25-54 years	625	38.7%	8,376,751	42.2%
55-64 years	227	14.1%	2,192,675	11.0%
65 years and over	373	23.1%	2,644,374	13.3%
Median age of persons	47	-	37	-

- the most common responses for occupation for employed persons usually resident in Brunswick Heads (Suburb) were Technicians and Trades Workers 19.5%, Labourers 16.8%, Professionals 16.3%, Community and Personal Service Workers 11.7% and Managers 11.0%.
- there were 892 occupied private dwellings: 46.9% were separate houses, 4.8% were semi-detached, row or terrace houses, townhouses etc, 25.9% were flats, units or apartments and 22.4% were other dwellings.
- 45.5% of occupied private dwellings were family households, 35.3% were lone person households and 4.0% were group households
- there were 416 families in Brunswick Heads (Suburb): 28.6% were couple families with children, 44.0% were couple families without children, 25.5% were one parent families and 1.9% were other families.
- the median weekly rent was \$200, compared to \$190 in Australia.
- The average household size was 2.0.
- the most common industries of employment for persons aged 15 years and over usually resident in Brunswick Heads (Suburb) were Cafes, Restaurants and Takeaway Food Services 6.5%, School Education 5.8%, Accommodation 4.1%, Specialised Food Retailing 3.2% and Building Completion Services 2.7%.
- the median weekly individual income for persons aged 15 years and over who were usual residents was \$339, compared with \$466 in Australia. The median weekly household income was \$548, compared with \$1,027 in Australia. The median weekly family income was \$750, compared with \$1,171 in Australia.

Synopsis:

- Higher than average median age
- Lower than average median income
- Higher than average median rent
- Lower than average persons-per-dwelling

The proposed development is likely to be attractive to young families and first home owners which may skew the demographic toward the shire or regional averages, but it remains to be seen whether market conditions support that trend. Perhaps some existing home owners in Brunswick Heads or elsewhere in the Shire will relocate to Bayside and retain their existing properties for rental income.

8.9.3 Community Services and Development

The Brunswick Heads community is quite active in its economic and cultural development:

- *"Brunswick Heads – Simple Pleasures"* is a multi-faceted community-based development campaign, implemented through a variety of actions including a local photography competition. "Simple pleasures" is also the tag line for the website www.brunswickheads.org.au. This website provides a wide range of information on economic, social and cultural activities, maps of local features and services.
- The community is in the process of preparing an **economic development strategy** under the auspices of a State government program managed by the Department of Industry and Investment. The proposed Bayside development is known to the Chamber of Commerce, and will be factored into the new process.
- Council's Community Economic Development Policy identifies "Industry sectors and activities which foster the prosperity of the Shire through sustainable job creation while in keeping with Council's environmental and cultural ethos, including:
 - a) Agriculture and food
 - b) Building and construction
 - c) Creative industries
 - d) Eco-forestry
 - e) Education
 - f) Green industry
 - g) Health and natural therapies
 - h) IT and Communications
 - i) Tourism

The proposed residential development will provide housing for people engaged in these sectors, supporting their growth and development in the Shire.

Public transport is available in the form of bus services which pass by the site on the Old Pacific Highway, near the Bayside Way intersection approximately 600 to 800 metres from the subject site. It may eventually be commercially viable to extend bus

services into the site but this is unlikely to occur until Bayside is fully developed. Taxi services are available in the area.

The Brunswick Heads Public School provides primary school **education** and is located in the centre of the Brunswick Heads village. Secondary schools are available at Mullumbimby, Byron Bay and other regional centres.

Feedback from the community open day suggested that the existing Brunswick Heads primary school may be nearing capacity. This will need to be checked in consultation with the Department of School Education.

Brunswick Heads has several **health services** including:

- Medical centre
- Dentist
- Osteopath
- Pharmacy
- Acupuncture

There is a community rehabilitation service, community health services, home care, meals on wheels and an early childhood program.

Brunswick Heads will benefit from construction of the sub-regional **hospital** at Ewingsdale, 10km to the south.

Other **community services** available in Brunswick Heads include Outside of School Hours Care, and after school care and vacation care.

8.9.4 Local Events and Meeting Places

The following events and festivals are held in Brunswick Heads:

- Fish 'n Chips Festival
- The Kites and Bikes Festival - held every second year
- Mullum to Bruns Paddle – a new event
- The Old and Gold Festival
- Byron to Bruns Beach Run
- The Simple Pleasures Photography Competition
- Family Triathlon
- The annual East Coast Blues & Roots Festival is held on a site about 4km south of Bayside Brunswick.

Meeting places include:

- Brunswick Valley Community Centre
- Memorial Hall

- RSL Hall
- Uniting Church Hall
- CWA Hall
- Girl Guides Hall
- Scout Hall
- Housie Shed
- Bowling Club
- Brunswick Heads hotel

In addition:

- A community noticeboard is located next to the Library
- The Brunswick Heads beach is patrolled by a surf club
- There are several "family friendly" recreational areas and playgrounds
- Sportsfields a few hundred metres to the northwest, including a skatepark

These services cater to a very wide range of demographic sectors.

8.9.5 Housing Affordability

Australian Property Monitors' online home price guide indicates that median house sale price for the 12 months to November 2010 was \$665,000 in Brunswick Heads compared to a Byron Shire median of \$570,000.

The draft Byron Local Environmental Study (2008) indicated that Brunswick Heads has the highest proportion of renters in "housing stress" (as defined):

Brunswick Heads	65.3%
Mullumbimby	64.8%
Suffolk Park	64.4%
Byron Bay	62.9%
Ocean Shores	60.7%
Bangalow	57.7%

Source: draft Byron LES 2008 Table 5-6

Brunswick Heads also has the highest proportion of residents living in a flat, unit or apartment (29.5%).

In the 2006 census, the median weekly individual income for persons aged 15 years and over who were usual residents was \$339, compared with \$466 in Australia. The median weekly household income was \$548, compared with \$1,027 in Australia. The median weekly family income was \$750, compared with \$1,171 in Australia (Source: ABS).

Housing market conditions are somewhat distorted in Brunswick Heads due to the absence of new residential land release for more than 10 years. In that time, the cost of housing (both purchase price and rental) has more than doubled in Byron Shire. The proposed development will not be marketable for at least 12 months, so it will be entering the market in slightly unusual circumstances.

The proposed development will provide residential land in the desirable market sector of detached housing, and will also provide for medium density housing and dual occupancy development. There is also the possibility, under the NSW Housing Code for secondary dwellings but the market take-up of this option is untested in the area. This combination of dwelling type will provide choice in the market and mitigate affordability issues to some extent.

8.9.6 Estimated Population

The proposed development will yield 178 conventional housing lots plus a medium density lot. Several population estimates are possible:

Low:

178 lots + 16 units = 194 dwellings at 2.0 persons per dwelling (average for whole of Brunswick Heads according to 2006 census) = 388 people.

High:

208 dwellings at 2.4 persons per dwelling (Shire average) = 500 people.

There will be relatively few small single-person units and apartments in Bayside compared to the older part of the village, so the average occupancy is likely to be higher than Brunswick Heads' census average of 2.0 per dwelling. Conversely, the maximum dwelling yield may not be achieved as the lots that are large enough for dual occupancy may simply be used as large house lots.

A mid-way estimate is therefore 200 dwellings at 2.2 persons per dwelling = 440 people.

8.9.7 Conclusion

The proposed development will have net positive social impacts due to:

1. Employment opportunities in construction stages over several years;
2. Additional opportunities for home based businesses and employment to other sectors in the community;
3. Consolidation of an existing sense of community identity;

4. Design aspects that encourage a safe neighbourhood;
5. Increased patronage of existing services, particularly child care;
6. Increased population base to support and contribute to local economic and cultural development;
7. Provision of diverse housing stock including detached dwellings, medium density development, dual occupancy and secondary dwellings;
8. Catering for diverse demographics including young people, elderly, families, and single person or shared households;
9. Increased population catchment to assist commercial viability of a neighbourhood store and perhaps other commercial services, and the viability of bus services into the estate. Note: if a neighbourhood shop is not developed on the 3(a) zoned land adjacent to the subject site, the residents of the Bayside development will rely on a nearby fruit & vegetable shop on the Old Pacific Highway, and on shops and other services in the village centre;
10. Improved access to Simpsons Creek for recreational pursuits;
11. Payment of development contributions for embellishment of local open space;
12. No adverse impacts on Aboriginal cultural heritage.

8.10 Infrastructure Provision

10.1 Address existing capacity and requirements of the development for sewerage, water, electricity, waste disposal, telecommunications and gas in consultation with relevant agencies. Identify and describe staging, if any, of infrastructure works.

Comment: Infrastructure requirements are addressed in Appendix K. Services are available and within the capacity of existing infrastructure, subject to detailed design work at DA stage. Reticulated gas is not available to the site. Staging and associated infrastructure rollout has been described earlier in this report.

10.2 Address and provide the likely scope of any planning agreements and/or development contributions with Council/Government agencies (including relevant community/state infrastructure contributions).

Comment: Current development contributions in the local catchment are approximately \$19,000 per lot for Section 94 and approximately \$16,500 water and sewer. It is understood that bulk water contributions to the regional water authority Rous Water may increase by approximately \$1,900 in early 2011.

It is expected that contributions for open space (currently approximately \$7,000 per lot) will be offset by provision of surplus open space areas. The valuation of land and related details will be resolved at DA stage.

Council has a draft Section 94 plan in preparation which proposes substantial increases to the contribution rates. It remains to be seen how this plan will fare in view of the \$30,000 per allotment limit prescribed by legislation.

The development is a conventional subdivision release and can be implemented through conventional contributions plans and conditions of consent. Planning agreements are not proposed.

9. Consultation

9.1 Agencies and Authorities

The DGR's require consultation with agencies or other authorities including:

- *Commonwealth Department of Environment, Water, Heritage and the Arts; JWA to advise*
- *Byron Shire Council;*
- *NSW Department of Environment and Climate Change; JWA to advise*
- *NSW Department of Primary Industries (Fisheries); JWA to advise*
- *NSW Department of Water and Energy;*
- *NSW Department of Lands;*
- *NSW Rural Fire Service;*
- *Roads and Traffic Authority;*
- *Cape Byron Marine Park Authority;*
- *Northern Rivers Catchment Management Authority; JWA to advise*
- *Local Aboriginal Land Council/s and other Aboriginal community groups;*
and
- *Relevant service providers.*

The majority of State agencies, when contacted during the preparation of the various studies, indicated that no resources were available for review of draft reports and advised that they will provide evaluation when the EA is referred for comment by the Department of Planning.

Marine Park Authority (MPA):

Telephone discussion with the Marine Park Authority (Andrew Page *pers comm* 10 November 2010) indicated that the MPA had no in-principle concerns with public access to the foreshore of Simpsons Creek, subject to appropriate management of human movement.

NSW Office of Water (NOW):

NOW was consulted with regard to the need for an easement for stormwater over the watercourse through the middle of the site (proposed Park 2). The Department is not aware of any requirement for easements over watercourses (this is in relation to the watercourse that flows south out of the subject land through adjoining land to Simpsons Creek).

Modification of the channelized watercourse on Codlea's land will not require a Controlled Activity Approval if future subdivision is assessed under Part 3A (i.e. Project Plan). A CAA may be required if subdivision is assessed under a Part 4 (DA) process.

Works on the watercourse south of the subject site are likely to be necessary. These works will probably require a Controlled Activity Approval.

Byron Shire Council:

Byron Shire Council (BSC) planning and development staff were consulted in several ways:

1. Meeting on 10 July 2009 in Council offices; Council comments:
 - Sewerage should be available in late 2010.
 - Ecological assessment required re wallum vegetation and threatened species.
 - Acid sulfate soils and bushfire assessments were required.
 - Roads to be designed per Council standards and other requirements (bushfire, urban design guidelines).
 - Artificial wetlands and detention ponds need to be designed to Council standards.
 - Footbridge across Simpsons Creek – probably will not eventuate.
 - Contributions (s94) will be required prior to release of Subdivision Certificate.
 - Filling/shaping – Council would prefer minimum filling even where land is above Q100 flood level.
 - Street design – per current design requirements.
 - Landscape/street trees – identify existing significant vegetation that will be retained in the subdivision design.
 - Traffic – road widths shown on the plan submitted with the Preliminary Assessment are generally excessive and unlikely to be required. Road/street design near the child care centre should encourage slow traffic speeds.
 - Diversity of housing type is required – some medium density, some small lots, some larger lots at the edges.
 - Excavated north/south drain in the middle of the site is shown as a watercourse on Council's GIS). Stormwater should be able to discharge to "mapped watercourses" (blue line on 1:25,000 topographic map) without easements i.e. over adjoining land to the south.
 - Area at southwest is ecologically constrained, may be difficult to develop in view of ecology and bushfire; needs attention to design of roads, subdivision layout, lot sizes and housing design.
 - Council may take the Concept Plan into account as a submission to the draft LEP if it is available in time. Draft LEP is expected from DoP

imminently; may be on exhibition before Christmas 2009. Agreement on ecological issues would benefit all parties.

2. Site meeting 16 December 2009; Council comments:
 - Refer to State recovery plan for koalas
 - Refer to DEC guidelines for building near nature reserves
 - Would prefer to see significant trees on public land, this is more secure than on private lots.
 - Need to manage access to creek.
 - Supports diversity & some smaller lots.
 - Council will need some certainty about the need for an easement over land to the south for stormwater.
 - Treed area at west is problematic – road & lot layout would need to be sympathetic to trees, conventional lots unlikely to be supported due to likely clearing, need to consider bushfire risk, maybe medium density with units designed around trees.
3. On request, Council provided information and plans on the location of sewer and stormwater infrastructure in the existing Bayside development.
4. Emails and written correspondence to Council regarding the dedication of land were not replied. Note: the ownership of public land is unresolved and will require further liaison with Council and OEH.

Aboriginal stakeholders:

Local Aboriginal Land Council/s and other Aboriginal community groups were consulted in accordance with OEH guidelines. Refer to the Everick Consulting report for details at Appendix F.

9.2 Public

Community consultation was focussed on two interest groups: the local community of Bayside residents, and the local Chamber of Commerce.

When the concept layout and other details were nearing finality (but still a work in progress) a community open day was held, and is described in the following sections:

Venue:

Lillipilly pre-school, Kingsford Drive, Brunswick Heads. This venue is located at the border of the subject site, and at the edge of the existing Bayside urban area. It would be central to the completed Bayside settlement. It is well known to local residents and easily accessed.

Engagement technique:

Letterbox drop one week prior to the event, to all households in the existing Bayside development plus some houses and premises on the Old Pacific Highway. Approximately 180 delivered, 20 left at the local service station.

Pre-event community liaison:

One phone call was received prior to the event from a local resident unable to attend the event, but with various concerns:

- Traffic – existing problems with capacity of intersection at Old Pacific Highway – “needs a roundabout”.
- Traffic – concerned about capacity of Bayside Way as it is the only road in & out; needs traffic calming of some sort.
- Drainage – existing problems in Bayside should be resolved prior to additional development occurring; draining new development into the existing system would exacerbate the problem.

Resources provided:

- A1 and A3 plans of proposed subdivision with and without aerial photo; on wall and lay flat on table
- A1 landscape concept – photomontage, cross section of remodelled central drain area
- A3 conceptual cut and fill plan
- A3 flood model results plans
- A4 feedback forms

Seven feedback forms were received.

As the plans were a work in progress, take-away information packages were not provided. Several people requested that plans be emailed to them after the event.

Project Personnel on hand:

Adam McArthur (James Warren & Associates) – ecologist
Ken Buckley (LandPartners) – subdivision design
Paola Rickard (LandPartners) – project manager
Steven Smith (LandPartners) – town planner

Three of the property owners from Codlea also attended the event.

Time/day:

Wednesday 5 November, advertised on flyer as 12.00 to 6.00pm. First attendance was at 11.55am, the last people came in at 6.00pm. Venue closed at 6.15pm.

Attendance:

The attendance register recorded 78 people. A few people did not sign the register. Total attendance is estimated at approximately 85 people. Given the distribution to 180 households, this is considered to be a very high attendance rate.

Verbal comments and enquiries:

By a large margin, the most common enquiry was whether a footbridge would be built across Simpsons Creek to provide access through to the beach. This was proposed in the original development plan about 20 years ago.

Other issues raised, in diminishing frequency of occurrence:

- Traffic:
 - Deficient capacity of intersection with Old Pacific Highway; is the project considering building a second road access
 - Possible deficient capacity of streets, particularly Bayside Way (main/only road in)
 - Capacity of existing roundabout at intersection of Bayside Way and Torakina Drive
- Drainage – problems in the existing Bayside estate
- Timeframe – when is it going to happen? Some interest from existing owners and prospective owners
- Medium density site – what is proposed
- Ecological concerns (mature trees, frogs)
- What public facilities & amenities would be provided within the estate
- Insufficient school capacity (particularly primary school) for additional population
- Noise during construction
- Dust during construction
- One person was interested in forming a local group to get involved in the planning process, to provide innovative “best practice” outcomes.
- One person adjoining the development site was concerned about destruction of trees and the number of proposed neighbouring lots.

Perceptions of community feedback:

The project team liaised through the day and discussed the enquiries and comments that were being heard. The consensus was:

- There was general acceptance that development would occur.
- General acceptance that the footbridge and path to the beach would not be built.
- Some interest in property purchase in the new development.
- Frustration at timeframes involved in planning and development processes.
- Positive response to the possibility of local shops (small general store, coffee shop) when there is sufficient population.
- General support for provision of amenities at the creek.
- Outright resistance to development was negligible.

Responses to issues arising:

Footbridge: This concept is not proposed in this Concept Plan and will probably never eventuate. Since the idea was first mooted in the mid-1980's, Simpsons Creek is now part of a Marine Park, and land between Simpson's Creek and the beach is a Nature Reserve. In lieu of the footbridge it may be possible to formalise what is already a well used access point to the foreshore; the nature of any such facilities will require consultation with the Marine Park Authority and Council and other stakeholders. Provision of public access to foreshores is a requirement of State government policy as expressed in SEPP 71 and the Coastal Design Guidelines.

Traffic: Traffic engineers for the project (TTM Consulting) have advised that the intersection of Bayside Way and the Old Pacific Highway is capable of handling the additional traffic (refer to report at Appendix M). Traffic consultants recommend some improvements to this intersection but a roundabout is not warranted. The need for traffic calming in Bayside Way and elsewhere may warrant further investigation at DA stage.

Drainage: The development will not introduce additional stormwater or overland flow into the existing residential area. The existing north/south drain central to the site will be modified to provide an improved gradient, as well as parkland amenity and stormwater treatment & retention area/s.

Ecological concerns: Ecological assessments have informed the subdivision and street layout, and stormwater arrangements. The proposed footprint and layout will retain the majority of mature trees on the site, and will conserve threatened species (wallum froglet) habitat.

Residential amenity during construction: A Construction Management Plan is warranted, to address potential impacts on existing residents due to such things as dust, noise and traffic management. A preliminary version of this plan should be submitted with the subdivision application.

Adjoining lots: One resident was concerned about tree removal having three lots "over the back fence" – this is at the west of the proposed subdivision. The lot configuration was subsequently modified to improve tree retention and create two lots where there were three. This is a reasonable outcome considering the length of the existing property boundary (about 35 metres).

The type of medium density development: This is a matter for future development applications, and possibly a different proponent. Medium density development could take several different built forms (e.g. detached villas, attached apartments, attached housing), and several different tenures (strata, community title or even Torrens title attached housing (terrace houses). Given that the scale of medium density development is probably going to be less than 20 units, it is not considered reasonable or appropriate to apply a strategic planning outcome in the Concept Plan.

School capacity: The local housing market may be distorted through lack of development in recent years, but even so it is expected that site will be attractive to young families. The Department of Education should comment on the capacity of existing schools through the formal Part 3A referral process.

9.3 Chamber of Commerce

The Chamber of Commerce was consulted in a meeting with Chamber representatives. Issues raised, and responses, were as follows:

- People will want to see the footbridge.
 - The footbridge is considered difficult on environmental grounds. The nature of facilities and access to Simpsons Creek is not yet resolved with the relevant authorities.
- What are the plans for street trees?
 - Street trees will be part of the landscape plan and will use native species
- Curious about the lot size breakup; there has been some discussion about smaller lots and diversity in the community
 - Approximately half (87) of the lots are below 600m².
- Will there be accommodation for single person households? Brunswick Heads has low occupancy rates per dwelling.

- The development of smaller dwellings is a matter for the individual landowner. Smaller dwellings may also be built as dual occupancy developments or secondary dwellings, and in the medium density development.
- What type of medium density development will it be? What design criteria will apply?
 - The Concept Plan is silent on this; it is a matter for future applicants to address. Diverse outcomes are possible.
- Will there be aged care as well as medium density?
 - There is no proposal for aged care. State planning legislation allows seniors developments including aged care in the 2(a) zone.
- Support for home based businesses.
 - Home based businesses will be permissible in accordance with the Byron LEP. Home occupations do not require consent.
- Need for disabled recreation facilities in the park near the child care centre.
 - This is a matter for Council to consider when it expends Section 94 contributions.
- Will there be any community consultation during the exhibition period?
 - No additional consultation is proposed at this stage. The proponent may be required to respond to written submissions.

Consultations have indicated a consistent set of issues that have been taken into consideration in the Concept Plan.

10. Conclusion

This Environmental Assessment indicates that subdivision of the land as proposed will be an orderly and economic development of land. The Concept Plan is an appropriate strategic step towards providing land for housing, which is in much demand. As proposed, the development will facilitate housing for approximately 440 people.

Adverse environmental impacts have been avoided and mitigated through a combination of subdivision design and layout, and the use of water sensitive urban design techniques. Community concerns regarding existing drainage problems have been addressed such that the proposed development will not increase the volume of stormwater drainage in the existing system.

Traffic volumes have been assessed and are considered within the capacity of existing streets and intersections. Improvements to the intersection of Bayside Way and the Old Pacific Highway are proposed.

Some issues have come to light which would best be resolved prior to subdivision proceeding:

- The ownership and management of natural bushland at the east of the subdivision. Discussions with Council and OEH have been fruitless. The applicant proposed to dedicate land to Council but there has been no indication that Council will accept the land.
- The type and nature of public facilities near Simpsons Creek, southeast of the subdivision.
- The existing street name of the eastern stub of Kingsford Drive. The proposed street network does not provide a lineal connection between the two ends of Kingsford Drive. It would be more appropriate to rename this section of Kingsford Drive as "Bayside Way," which currently terminates at a roundabout.

The Concept Plan warrants approval, subject to a Statement of Commitments that will provide guidance for future subdivision applications.

1. Appendices

Appendix A – Director-General Requirements (DGRs) dated 14 October 2010
Appendix B – Geotechnical Engineering Assessment
Appendix C – Flora and Fauna Assessment
Appendix D – Surface and Groundwater Assessment
Appendix E – Flood & Coastal Advice Report
Appendix F – Cultural Heritage Assessment
Appendix G – Acid Sulfate Soils Assessment
Appendix H – Bushfire Assessment
Appendix I – Visual Assessment
Appendix J – Stage 1 Preliminary Contaminated Land Assessment
Appendix K – Subdivision Design, Character & Servicing Report
Appendix L – Water Cycle Management Stormwater Concept
Appendix M – Traffic Impact Assessment Report
Appendix N – Extract of Local Environmental Study for Draft Shirewide LEP

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