

# SHELL COVE - THE WATERFRONT

## Precincts B2 and C2: Statement of Environmental Effects

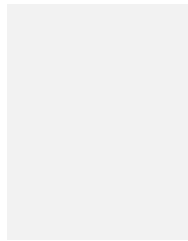
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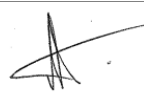

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# AUSTRALAND CORPORATION (NSW) PTY LTD SHELL COVE – THE WATERFRONT

## Precincts B2 and C2: Statement of Environmental Effects

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## 1 EXECUTIVE SUMMARY

The Minister for Planning granted approval to the Shell Cove Boat Harbour Precinct Concept Plan (MP 07\_0027) on 15 February 2011 under the Part 3A provisions (now repealed) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This Statement of Environmental Effects (Statement) describes the proposed subdivision of Precincts B2 and C2 of the Shell Cove Boat Harbour Precinct and makes an assessment of the proposal against the provisions of both the approved Concept Plan and an amendment to the Concept Plan Approval (MP07\_0027 MOD 1) which is currently being assessed by the Department of Planning and Environment (DPE).

This application is submitted to Shellharbour City Council (Council) for determination by the Joint Regional Planning Panel (Southern Region) under Part 4 of the EP&A Act. The proposed subdivision of Precincts B2 and C2 has been designed in accordance with the Concept Plan Approval and comprises:

- total of 9 superlots – 7 of which are designated for future medium density integrated housing development and 2 for future residential flat buildings;
- 2 residue lots;
- civil infrastructure – road construction, stormwater drainage and water quality treatment devices;
- earthworks;
- public domain works including street tree planting and footpaths within the subdivision.

This Statement provides an assessment of the proposed development in accordance with the matters for consideration in Section 4.15 of the EP&A Act. The proposed subdivision has been designed to be consistent with the Concept Plan Approval and in response to the topography and physical characteristics of the site.

Surface water flows and potential impacts have been considered with a water cycle scheme that ensures off site flood impacts are mitigated and stormwater flows treated during both construction and future operation. Runoff will be addressed during construction works through the implementation of sediment and erosion controls. Once operational, a water quality treatment system involving the use of GPTs, and Jellyfish systems is proposed.

These systems will assist in achieving the stormwater quality targets of the overall Shell Cove development, which include ensuring post-development pollutant loads do not exceed pre-development loads and pollutant reduction targets are met.

The proposed road design has been designed in accordance with the requirements of Roads and Maritime Services, Council and the terms of the Concept Plan Approval. The cumulative traffic impacts from the operation of all existing and future precincts (including Precincts B2 and C2) have been examined in the context of the revised (increased) yields currently being considered by the Department of Environment and Planning as part of a proposed modification to the Concept Plan Approval (MP07\_0027 MOD1).

Based on the revised traffic volumes, the updated traffic impact assessment has determined that all intersections will operate satisfactorily without placing undue stress or pressure on the existing road system or adjoining uses. Furthermore, the pedestrian, cycle and bus networks accord with the Concept Plan Approval and will provide connectivity both within the Shell Cove Boat Harbour Precinct and to the surrounding areas.

Based on the section 4.15 assessment of the proposal, it is concluded that the relevant statutory requirements have been satisfied. Whilst the land subdivision and associated civil works will have some environmental impacts, these have been assessed and subject to the implementation of mitigation measures identified within this Statement and the supporting specialist reports, it is considered that these impacts are within reasonable limits.

The proposed development can also be reasonably expected to have positive socio-economic impacts for the Illawarra region through job creation during the civil works associated with the subdivision and construction of future dwellings, as well as playing an important role in meeting the housing needs of the Region as identified by the Illawarra Shoalhaven Regional Plan (DP&E, 2015), which identifies the need for 35,400 new dwellings in the Region by 2036.

The completion of the Precinct A subdivision will progress the completion of the Boat Harbour Precinct, which will provide additional access to the harbour and assist in the achievement of the overall place making targets for the wider project.

It is therefore requested that the proposed subdivision of Precincts B2 and C2 in the Shell Cove Boat Harbour Precinct be supported and recommended to the Joint Regional Planning Panel (Southern Region) for approval.

## 2 INTRODUCTION

This report has been prepared by Arcadis Design and Consultancy (Arcadis) and Helen Mulcahy Urban Planning on behalf of Australand Corporation (NSW) Pty Ltd (Australand) to accompany a development application (DA) submitted to Shellharbour City Council for Precincts B2 and C2 of Shell Cove - The Waterfront (the proposal).

This application seeks approval for subdivision and civil works in Precincts B2 and C2 which will facilitate the continued development of the Shell Cove project in accordance with the Shell Cove Master Plan and the Boat Harbour Concept Plan approval.

The report constitutes a Statement of Environmental Effects and examines the proposed development in terms of its compliance with the heads of consideration under Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Statement:

- Provides an analysis of the existing site conditions including land ownership and title, existing and adjoining land uses, landform, geotechnical conditions, contamination, flora and fauna, heritage, hydrology and drainage, bushfire, traffic and access, and views;
- Describes the development proposal in detail including subdivision principles, proposed yield and product mix (note that this DA does not seek approval for built form), street network, open space network including overland flow channels, pedestrian and public transport, landscaping;
- Describes the current development intention for super lot sites within Precincts B2 and C2 which will be subject to subsequent development approval, noting that these are provided for consideration of traffic impact, utilities servicing and subdivision design;
- Assesses and describes the development controls that apply to the site, provide summary of key matters, provide a schedule which provides compliance verification for all conditions of approval and statement of commitment requirements;
- Provides justification for any proposed deviations from the Concept Plan Approval;
- Assesses the environmental impacts of the proposal including but not limited to geotechnical, acid sulfate soils, earthworks, contamination, flora and fauna, heritage, hydrology, drainage and flooding, bushfire, access and traffic, utilities and servicing, acoustics, CPTED, social, economic, and the public interest; and
- Describes consultation that has taken place in respect of the application.

The project area (Figure 2.1) comprises two separate areas:

- Precinct B2 defined by proposed road MC03, The Promontory Drive and Wharf Parade; and
- Precinct C2 which occupies the area north of Wharf Parade, between proposed Road MC03 and MC24 & MC25. Precinct C2 is located adjacent to the Town Centre.



**Figure 1. Site location plan**

Precincts B2 and C2 cover a total area of 4.50ha in the central section of the Shell Cove Boat Harbour Precinct. The planning framework for the development of Precincts B2 and C2 is governed by the Shell Cove Boat Harbour Precinct Concept Plan which was approved in 2011 under Part 3A (since repealed) of the EP&A Act.

## 2.1 Background and site context

Shell Cove is a master planned estate being developed by Australand Corporation (NSW) Pty Ltd. Upon completion, the development will yield approximately 3,000 dwellings and will include a range of facilities including a championship 18-hole golf course, a 300 berth Boat Harbour, commercial development including a Town Centre, a business park, associated open space, as well as a range of environmental and social facilities.

The Waterfront comprises the Boat Harbour and Marina Precinct. It provides for short term accommodation as well as residential, retail, open spaces, commercial marina and dry berth/workshop facilities. Construction of the first residential precincts within The Waterfront (Precincts B1 and C1) commenced in 2015, and the first stage of the Town Centre retail is under construction and due for completion in 2018.

To date approximately 2,100 lots have been developed, the golf course and clubhouse completed, open space and community facilities have been delivered. Construction of Stages 2 and 3 of the Boat Harbour are in progress.

The current Shell Cove Master Plan is provided in Appendix A. Development west of Harbour Boulevard is largely complete with the focus now shifting the precinct east of Harbour Boulevard (The Waterfront Precinct). Precincts B1 and C1 were completed in 2017.

The first stage of the Town Centre retail is due to be complete in late 2018.

Surrounding land use is predominantly residential with completed stages of Shell Cove to the west on the opposite side of Wharf Parade, the historic Shellharbour Village located approximately 1km to the north and the new Shell Cove Town Centre



Precinct to the northwest. Killalea State Park lies further to the south of the Shell Cove development, Bass Point to the south east and Shellharbour South Beach to the east.



**Figure 2. Precinct B2 and C2 Locality Plan**

## 2.2 Boat Harbour Concept Plan Approval

The Minister for Planning granted approval to the Shell Cove Boat Harbour Precinct Concept Plan (MP07\_0027) on 15 February 2011. The Concept Plan Approval provides the planning framework for the future development of The Waterfront Precinct at Shell Cove, describing the arrangement and configuration of the various land uses and urban infrastructure.

The Concept Plan Approval comprises the following documents:

- The Part 3A submission prepared by LFA, including various specialist studies;
- The Preferred Project Report prepared by LFA and associated specialist studies which provides responses to public submissions and DOP assessment of the Part 3A submission; and
- Concept Approval (MP07\_0027) including the Statement of Commitments, issued on 15 February 2011.

The Concept Plan Approval (MP07\_0027) states that:

*Pursuant to section 75P(1)(b) of the EP&A Act, approval to carry out the project or any particular stage of the project is to be subject to the provisions of Part 4 or Part 5 of the EP&A Act, except where it meets the criteria in Schedules 1 or 2 of the Statement Environmental Planning Policy (Major Development) 2005.*

An amendment to the Concept Plan Approval (MP07\_0027 MOD 1) was submitted to the Department of Planning and Environment (DPE) in August 2017. The application was exhibited between 15 September and 20 October 2017, with further exhibition of the Proponent's Response to Submissions conducted between 13 and 27 March 2018. The concept plan modification was approved on 18 March 2019. Further details about the proposed modifications are detailed in Section 5.8 of this Statement.

The development application will be referred to the Joint Regional Planning Panel (JRPP) pursuant to Clause 3 of Schedule 7 of State Environmental Planning Policy (State and Regional Development) 2011. Council is the owner of the land upon which the proposed development is to be carried out, which has a capital investment value (CIV) of \$6.09M, exceeding the \$5M threshold for development on Council-owned land to be determined by the JRPP.

## 2.3 Development for which approval is sought

The proposed development comprises:

- total of 9 superlots - 7 of which are designated for future medium density integrated housing development and 2 for future residential flat buildings;
- 2 residue lots;
- civil infrastructure – road construction, stormwater drainage and water quality treatment devices and utility services connections;
- earthworks;
- public domain works including street tree planting and footpaths within the subdivision.

It is proposed that Precincts B2 and C2 will be delivered concurrently and will yield a total of 75 medium density dwellings and 200 apartments.

## 2.4 Relationship to other consents

A number of DAs have been submitted to Council for the detailed development of elements of the Concept Plan, as follows:

DA 411/2013 (approved by Council on 4 November 2013) for site preparation and servicing works for the Concept Plan site. The approval also included the creation of 88 residential lots, 14 superlots, parkland, open space links, local streets and laneways in Precincts B1 and C1.

DA 651/2015 (approved by Council on 12 January 2016) for Stages 97 and 98 in Precinct B1 comprising of the subdivision of Lots 2039 and 2040 in Lot 206 in DP 857030 to create 23 Torrens Title allotments, and the construction of a mix of attached, detached, semi-detached, and studio dwellings on each allotment with associated landscaping works.

DA 0032/2016 (approved by JRPP on 10 October 2016) for Stages 89-92 in Precinct C1 comprising the subdivision of Lots 2046, 2047, 2044, and 2049 in DP 1203745 to create 40 Torrens Title allotments, and the construction of a mix of attached, semi-detached, and studio dwellings on each allotment with associated landscaping works.

DA 0012/2016 (approved by JRPP on 10 July 2017) for the first stage of the retail component of the Shell Cove Harbour Precinct, including supermarket, liquor tenancy and approximately nine specialty tenancies; construction of retail plaza, carpark at ground and basement.

DA0100/2016 (approved by JRPP on 10 October 2016) for Stages 99-100 in Precinct B1 comprising the subdivision of Lot 1279 in DP1175512 to create 24 Torrens Title allotments, and the construction of 24 townhouses with garages and landscaping works.

DA0494/2016 (approved 7 August 2018) for subdivision to create the Stage 1 retail development lot.

DA0143/2016 (approved 8 March 2018) for subdivision of the Shell Cove Town Centre to create the Stage 1 road network and sites for future development.



DA0444/2016 (approved 6 June 2017) for bulk earthworks in residential Precinct E.

DA0118/2017 (approved by JRPP on 14 March 2018) for development of residential Precinct E, Wetland 6 and a superlot site outside the approved Concept Plan boundary (known as the 'Northern Lands'). The proposed subdivision includes 58 land lots, nine superlot sites, three residue lots.

DA0097/2017 (approved by JRPP on 10 July 2017) for Stages 93 - 94 in Precinct B1 comprising of the subdivision of Lot 2043 DP1203745 and Lot 2116 DP1203746. To create 18 Torrens Title allotments and a mix of attached and semi-attached dwellings with garages and landscaping works.

DA0619/2017 (currently being assessed by Council) for development of residential Precinct A. The proposed subdivision comprises 58 residential lots, 6 superlots, 1 lot for the future boat and maintenance facility, 1 lot for the landscaped area enclosed by road numbers 32, 33 and 29 and 1 residue lot.

Separate to the Concept Plan Approval for Boat Harbour Precinct, but integral to the wider development at Shell Cove is DA 337/2007 which was approved by Council on 27 November 2007. This consent allows for the construction of Harbour Boulevard.

## 3 SITE ANALYSIS

### 3.1 Land ownership and title

The land the subject of this application is legally described as Lot 4002 and Lot 4003 DP1235539. The registered owner of the land is Shellharbour City Council.

### 3.2 Existing and adjoining land use

Precinct B2 and C2 are bordered:

- to the north by the future Shell Cove Marina Precinct;
- to the south by the approved Precinct B1 and C1 (civil subdivision complete);
- to the east by the future Precinct A (DA0619/2017 currently being assessed by Council); and
- to the west by the Shell Cove Town Centre.

The land comprising Precincts B2 and C2 was previously open farmland.

There are no existing buildings or other structures on the land comprising Precincts B2 and C2. However the land is currently subject to temporary uses associated with construction of the Shell Cove Boat Harbour.

### 3.3 Site analysis – Precincts B2 and C2

The land comprising Precincts B2 and C2 has been modified as part of the works associated with the construction of Shell Cove Boat Harbour including surcharge mounding works.

#### 3.3.1 Landform

The existing topography falls generally from the south to the north towards the coast, with existing ground levels ranging from approximately 7.8m AHD to 2.0m AHD across the site.

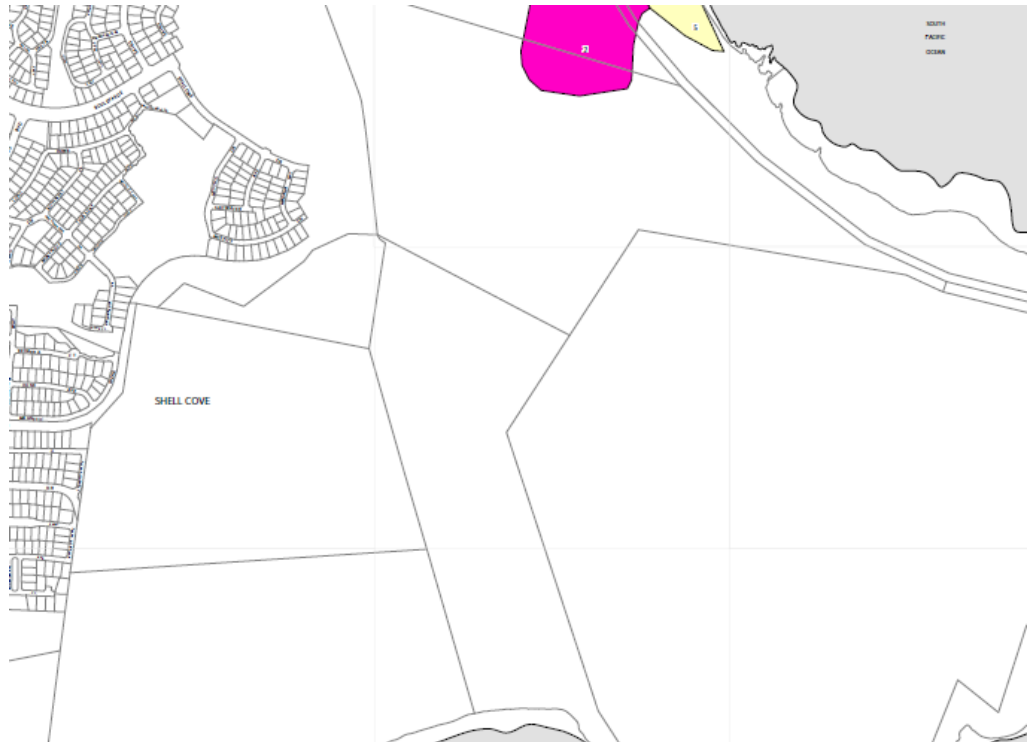
#### 3.3.2 Geotechnical

The geotechnical conditions associated with the subject site comprises unconsolidated Quaternary Sediments overlaying Bumbo Latite which is a basalt-like rock formed from lava flows.

The Quaternary Sediments include silt sediments of the former swamp area which extend to sandy clay alluvium in low lying areas.

The Shell Cove Boat Harbour Precinct Geotechnical Study, prepared by Coffey Geotechnics Pty Ltd in 2009 identified the likelihood of estuarine sediments and clean fill, together with the risk of Acid Sulfate Soil, in the north-eastern sector of the wider development area. This is confirmed in Shellharbour LEP 2013 (see extract below) which indicates that the north eastern part of Precincts B2 and C2 are likely to be subject to Class 2 and Class 3 Acid Sulfate Soils.

The Shell Cove Boat Harbour Precinct Geotechnical Study requires the preparation of a site-specific Acid Sulphate Soil Management Plan (ASSMP) for Precincts B2 and C2.



**Figure 3** Extract from Shellharbour LEP 2013 ASS Map

SMEC Australia Pty Ltd has prepared an ASSMP for Precincts B2 / C2 which specifically addresses mitigation and management of ASS, including Actual Acid Sulfate Soils (AASS) and Potential Acid Sulfate Soils (PASS). It is intended to act as a guide for construction planning, as ASS mitigation relies on co-operation from staff and sub-contractors in relation to ensuring preventative and treatment measures are being implemented and that awareness is maintained. A copy of the ASSMP is included at Appendix I.

### 3.3.3 Contamination

Contamination has been considered and assessed as part of Boat Harbour Precinct Concept Plan (MP07\_0027). A Phase 2 Site Contamination Assessment of the Boat Harbour Precinct was submitted with the Preferred Planning Report for the Concept Plan application which concluded that a Remedial Action Plan (RAP) was required for the former golf course and at the location of a former farm structure.

In February 2016, Douglas Partners carried out a targeted site investigation<sup>1</sup> for contaminated land within the Boat Harbour Precinct (Precincts D and E and Wetland 6). This report presented the results of additional investigations of the near-surface soils within the former tees, greens and fairways of the former golf course, which were identified in the Phase 2 Site Assessment as requiring further investigation for potential heavy metals and pesticide contamination.

Douglas Partners has prepared advice in relation to Precincts B2 and C2 (**Appendix B**) to accompany the DA. The correspondence confirms that Precinct B2 and C2 has

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<sup>1</sup> Report on Targeted Site Investigation, Former Golf Course, Boat Harbour Precinct (Precinct D and E, and Wetland 6) Shell Cove, Project 78999.10.Rev1 dated 11 February 2016

not been identified as having any contamination issues and does not require any further investigation.

### **3.3.4 Flora and Fauna**

#### **Flora**

Due to the previous development of a golf course on the Shell Cove site the flora is classified as disturbed. The predominant vegetation consists of non-natives such as Kikuyu grass with denser vegetation populating drainage lines.

The Flora and Fauna Study prepared by Kevin Mills and Associates in 2009 in support of the Concept Plan found that the Shell Cove Boat Harbour Precinct, including Precincts B2 and C2, contained no Critical Habitat or any Schedule 2 Koala food trees.

#### **Fauna**

The aforementioned Flora and Fauna Study found that no endangered populations or critical habitat occur in the area proposed to be developed as Precincts B2 and C2.

The investigations also found that the proposal area does not contain any important habitat nor support an ecologically important population, although some internationally protected migratory species occur on the subject land periodically.

An Endangered Ecological Community of Saltmarsh has been identified associated with the Shellharbour Swamp (outside the boundaries of Precincts B2 and C2). These communities have been addressed in the approvals associated with the Boat Harbour and off-set through construction of the compensatory wetlands at Shadforth (known as the Myimbarr wetlands).

The Flora and Fauna Study prepared as part of the Concept Plan identified that some threatened species have potential habitat in the subject lands and that the Green and Golden Bell Frog (GGBF) may be impacted by development of the Shell Cove Boat Harbour Precinct.

In accordance with the Concept Plan Approval a further Fauna Survey for the GGBF was undertaken by Kevin Mills and Associates and was submitted to Council in 2013 as part of the Subdivision DA for Precincts B1 and C1 of the Shell Cove Boat Harbour Precinct.

The Survey concluded that the Shell Cove Boat Harbour Precinct has no critical habitat for the GGBF and confirms that no specimens of the GGBF were located within the area occupied by Precincts B2 and C2.

A copy of the GGBF Survey Report is included at Appendix C.

### **3.3.5 Heritage**

The Cultural Heritage Review submitted in as part of the Concept Plan and prepared by National Heritage Consultants (2009), found that there were no European Heritage elements or Non-European (Indigenous) sites within the wider Shell Cove Boat Harbour Precinct area.

No Aboriginal or (protected) non-Aboriginal objects or structures were identified on the slopes adjacent to the Shellharbour Swamp. The study concluded that the proposal site has low archaeological sensitivity.

Registered Aboriginal objects / sites are known to occur within the wider area. However, only part of one of these sites, AHIMS 52-2-207, is assessed as having relatively high heritage value. This site is a shell midden within a foredune on the beachfront on the ocean side of Bass Point Tourist Drive and is not in proximity to Precincts B2 and C2.

An Archaeological and Heritage Protection Plan has been developed for the Shell Cove boat harbour/marina and a combined Consent and Permit (No. 2534) has been granted under sections 87 / 90 of the *National Parks and Wildlife Act 1974*. A copy of these documents is included at Appendix C.

Having regard to the above, no further heritage impact assessment is considered necessary in relation to Precincts B2 and C2. Notwithstanding, in the event that any significant items are found during the construction process a stop work action will be put in place until a heritage specialist is available to conduct an inspection of the site and submit an appropriate assessment.

### **3.3.6 Hydrology and drainage**

Currently the site sheets towards temporary construction open drains and eventually collects at the site of the new Boat Harbour. A concept for erosion and sediment control measures has been developed in accordance with Managing Urban Stormwater Soils and Construction' (Landcom, 2014). These measures will mitigate the impacts of land disturbance on soils, landforms and receiving waters during construction.

A preliminary Erosion and Sediment Control Plan (ESCP) is shown schematically in the Arcadis Earthworks strategy, Road Design, ASS, Erosion and Sediment Control report. The proposed control measures include dirty water diversions, sediment fences and sediment basins. It is expected that this plan will be updated during detailed design, prior to the commencement of the construction works to consider construction staging more closely.

### **3.3.7 Bushfire**

The proposed development is surrounded by pre-existing urban areas and is not identified as being bushfire prone land.

### **3.3.8 Traffic and access**

The site of Precincts B2 and C2 is accessed by temporary roads which provide construction access for plant, haulage and earthworks associated with the Boat Harbour construction.

It is noted that Wharf Parade, which delineates the south western edge of Precincts B2 and C2 has been constructed.

The subdivision plan for Harbour Boulevard Stage 1 has been registered with Land and Property Information NSW and now contains a public road.

## 4 THE PROPOSAL

This section of the Statement should be read in conjunction with the Precinct Infrastructure - Civil Works DA Design Drawings prepared by Arcadis and included at Appendix E.

The proposal provides for the subdivision of Precincts B2 and C2 including:

- total of 9 superlots - 7 of which are designated for future medium density integrated housing development and 2 for future residential flat buildings;
- 2 residue lots;
- civil infrastructure – road construction, stormwater drainage and water quality treatment devices;
- earthworks;
- public domain works including street tree planting and footpaths within the subdivision.

Precincts B2 and C2 are expected to yield in the order of 275 dwellings (subject to future applications), as follows:

- 75 medium density dwellings; and
- 200 apartments.

As described previously in this Statement Precincts B2 and C2 are located to the south of the commercial precinct and have frontage to Boat Harbour.

Characterised by its curvilinear frontage and mix of medium and high density housing types, Precincts B2 and C2 provide for apartment typologies on the northern blocks addressing the harbour foreshore park and medium density housing addressing the lower densities to the south, which provide a transition to lower densities achieved to the south and west.

The general arrangement of medium and higher density within Precincts B2 and C2 is illustrated at Figure 4 below.



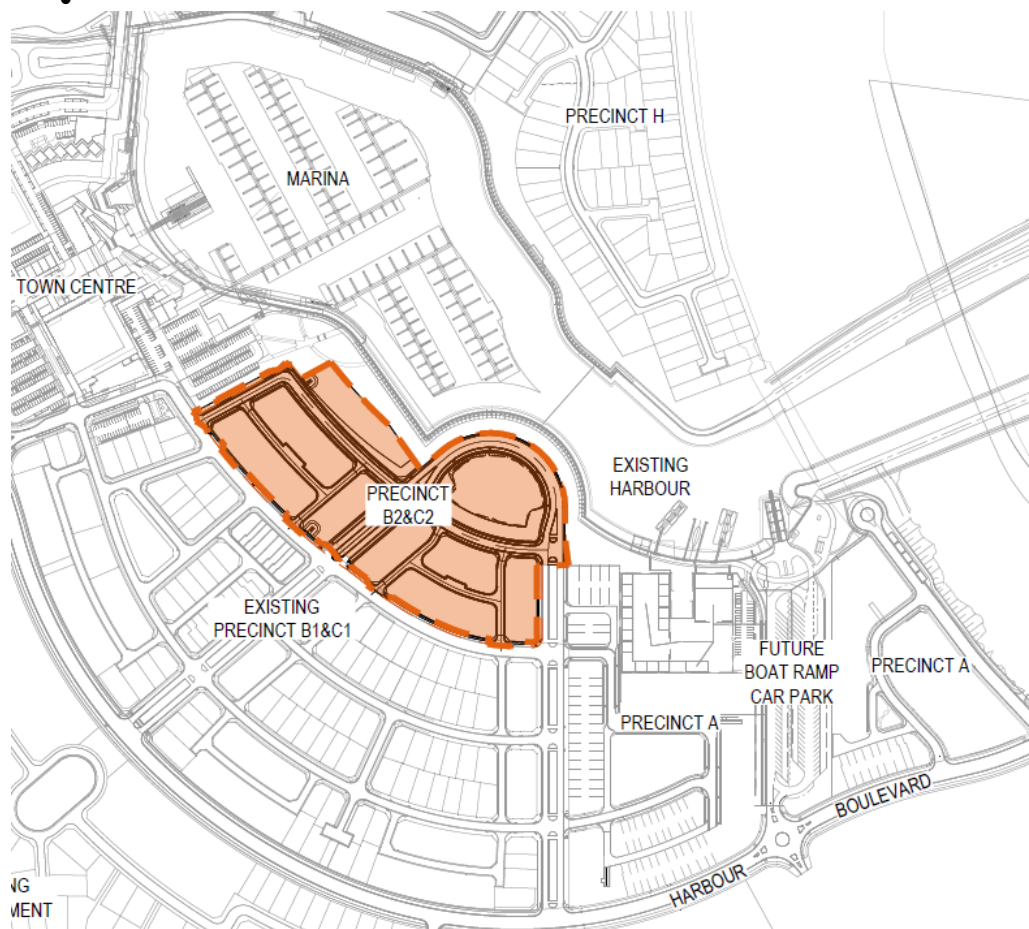
**Figure 4. Precincts B2 and C2 illustrating context of medium and higher density residential development**

## 4.1 Subdivision principles

The proposed pattern of subdivision is based on the approved Part 3A Concept Plan and has been refined in collaboration with the specialist Project Team.

Key principles of the proposed subdivision include:

- A clear street pattern creating legible access for vehicles, cyclists and pedestrians, providing a high level of connectivity within the wider Boat Harbour Precinct between existing and future development at Shell Cove;
- Limited block lengths to increase connectivity;
- Pedestrian and cycle connections to Harbour Boulevard, bus routes and the main cycleway;
- View corridors along Road MC24 & MC25, Road MC03 and The Promontory Drive from Wharf Parade towards Boat Harbour;
- A series of clear vistas along the road alignments throughout Precincts B2 and C2 to increase opportunities for incidental surveillance;
- A series of superlots designed to accommodate future medium and high density residential development, to encourage diverse housing options and opportunities for more dynamic community interactions;
- Lot orientation facilitates the construction of future medium and higher density development that overlook the public domain to increase passive surveillance opportunities; and
- All lots to be integrated into the mainstream lifestyle of the Shell Cove community.



**Figure 5. Precincts B2 and C2 Concept Plan**



## 4.2 Subdivision Details

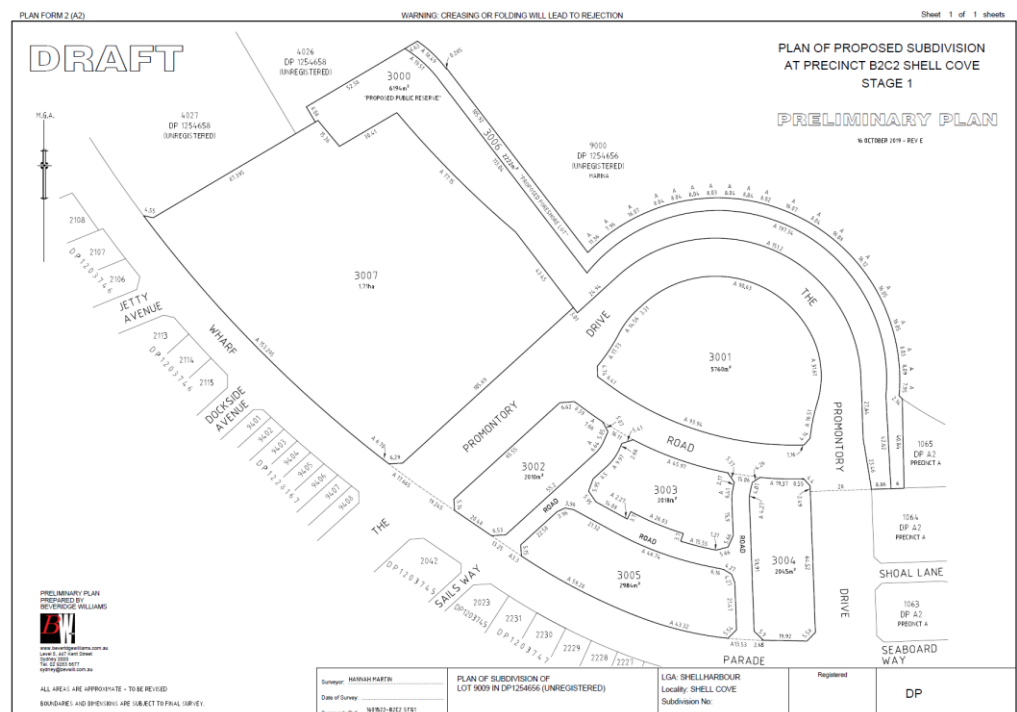
The draft Plans of Subdivision included at Appendix F illustrates the proposed subdivision of Precincts B2 and C2. The subdivision has been designed to optimise solar access to future dwellings, with the majority of the super lots having a north-south or east-west orientation. Precinct B2/C2 will be delivered in 2 stages, as shown in the plans of subdivision.

Lot sizes range between 2,010m<sup>2</sup> and 5,760m<sup>2</sup>. Table 4.1 below provides a schedule of the proposed lots and their corresponding areas.

**Table 4.1 Precincts B2 and C2 - proposed lot sizes**

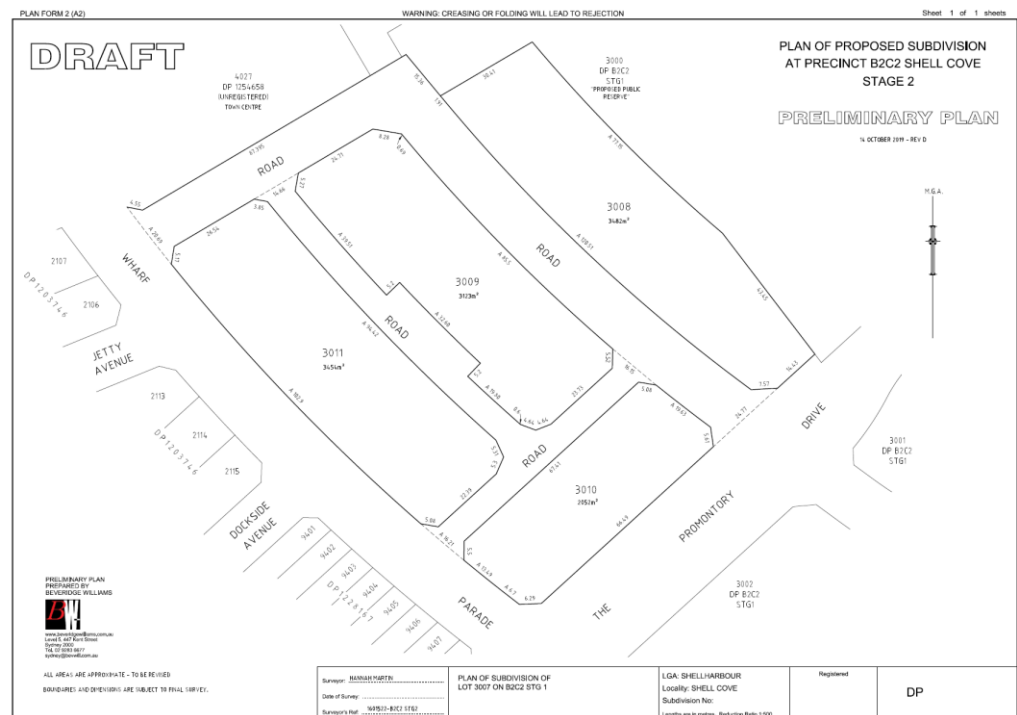
Lot No.	Area (m <sup>2</sup> )	Lot No.	Area (m <sup>2</sup> )
3000	6,194	3006	2,222
3001	5,760	3008	3,482
3002	2,010	3009	3,123
3003	2,018	3010	2,052
3004	2,045	3011	3,454
3005	2,984		

Lot 3000, 3006 and 3007 are residue lots created in Stage 1. Residue lot 3007 is proposed to be further subdivided in Stage 2 to create superlots 3008 to 3011 inclusive. Residue lots 3000 and 3006 will be developed under a future development application. Figures 6 & 7 illustrates the proposed lot layout in Precincts B2 and C2.



**Figure 6. Proposed Stage 1 lot layout in Precincts B2 and C2.**





**Figure 7. Proposed Stage 2 lot layout in Precincts B2 and C2.**

### 4.3 Street network

Precincts B2 and C2 are located immediately to the southwest of Boat Harbour, to the west of Precinct A and south east of Precinct D (Town Centre), as illustrated in Figure 8 below.

These Precincts will be accessed via Wharf Parade from Harbour Boulevard and The Promontory Drive.

Five key intersections along Harbour Boulevard are expected to be impacted by the proposed development, including:

- Shellharbour Road / Harbour Boulevard / Wattle Road signalised intersection
- Addison Street / Harbour Boulevard signalised intersection
- Brigantine Drive / Harbour Boulevard roundabout intersection
- Cove Boulevard / Harbour Boulevard roundabout intersection
- Road A / Harbour Boulevard roundabout intersection



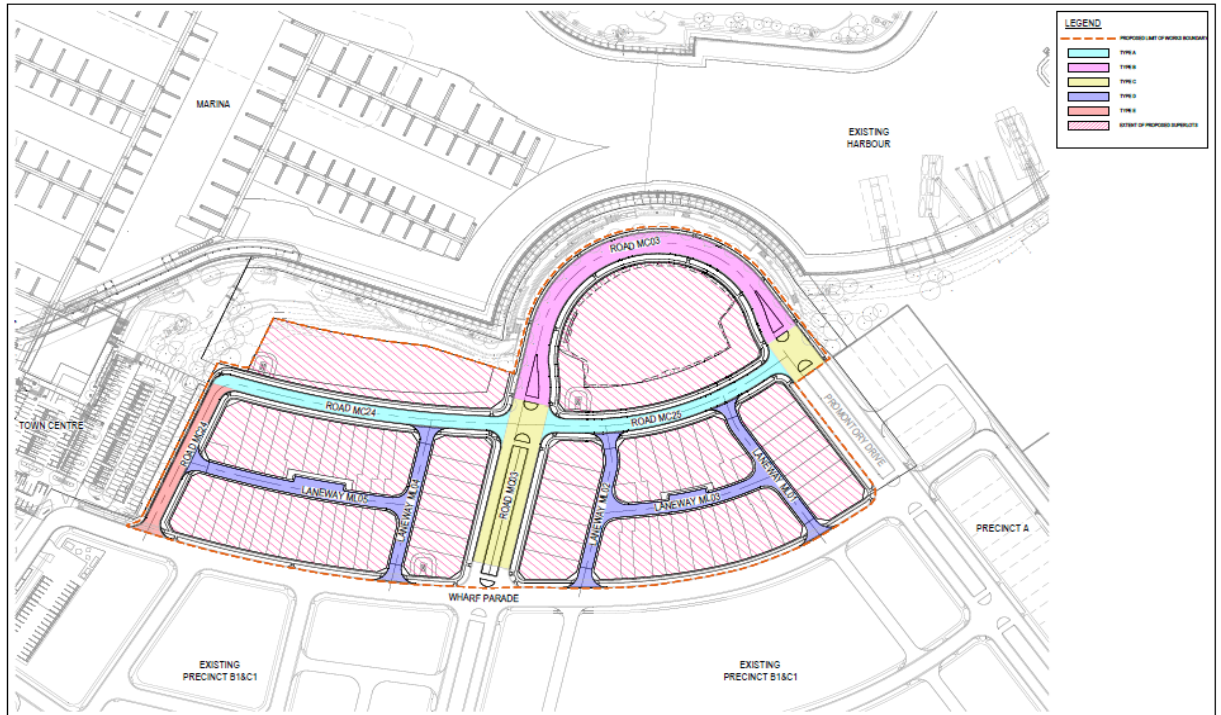
**Figure 8. Shell Cove Master Plan - Precinct Locations**

### 4.3.1 Road hierarchy

Five street typologies are proposed to be utilised in Precincts B2 and C2 to provide connectivity within the proposed subdivision and to / from the surrounding areas. All medium density land lots are proposed to be adjacent to street types that contain either segregated on-street car-parking or combined parking / travel lanes.

The proposed road hierarchy for Precincts B2 and C2 is presented in Figure 9.

A description of each of the five proposed street types along with a typical cross section is provided in Section 4.3.1.1 below.



**Figure 9. Precinct B2 and C2 Road Hierarchy and Lot Layout**

### 4.3.1.1 Precinct Street Types

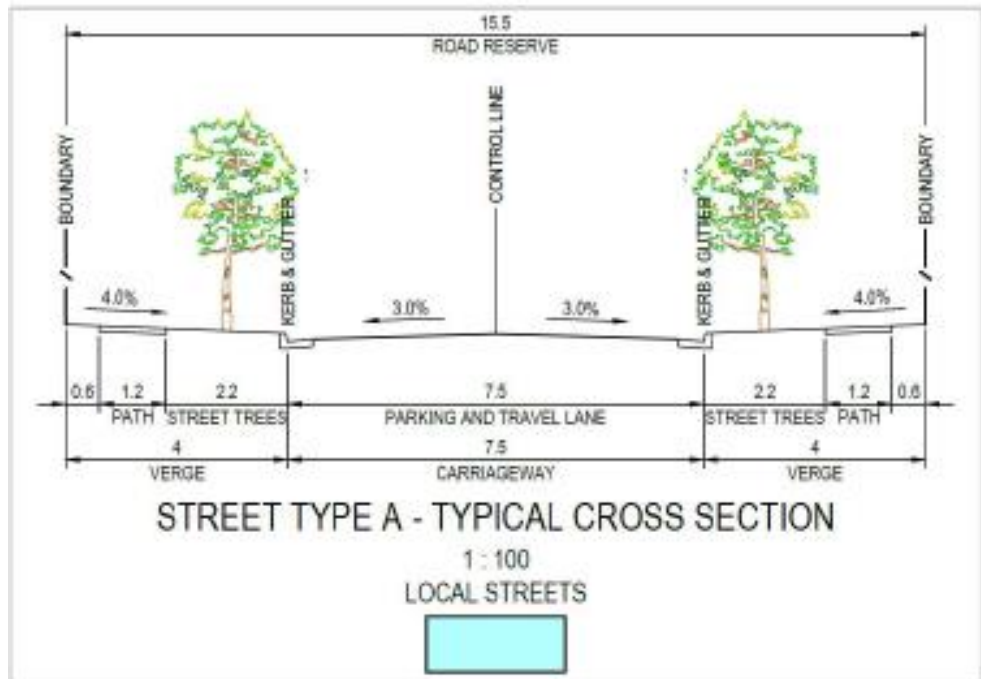
#### 4.4.1.1.1 Street Type A

Street Type A is considered a local street type consisting of:

- 1.2m footpaths and street trees contained within an approximate 4m wide verge on each side
- Two 3.75m wide traffic lanes contained within an approximate 7.5m wide carriageway which includes on-road parking availability

Street Type A is proposed to be applied for part of Road MC24 & MC25 only and will service medium density or apartment sites throughout Precincts B2 & C2 as a road connecting to major connecting lanes. On-street parking will be provided within the travel lane and it is not considered as a major issue based on the purpose for this type of road. A passing car is able to pull into an available space to the side of the road (e.g. adjacent to a driveway) and allow a service truck to continue past when needed.

A typical cross section of Street Type A is provided below in Figure 10.



#### 4.4.1.1.2 Street Type B

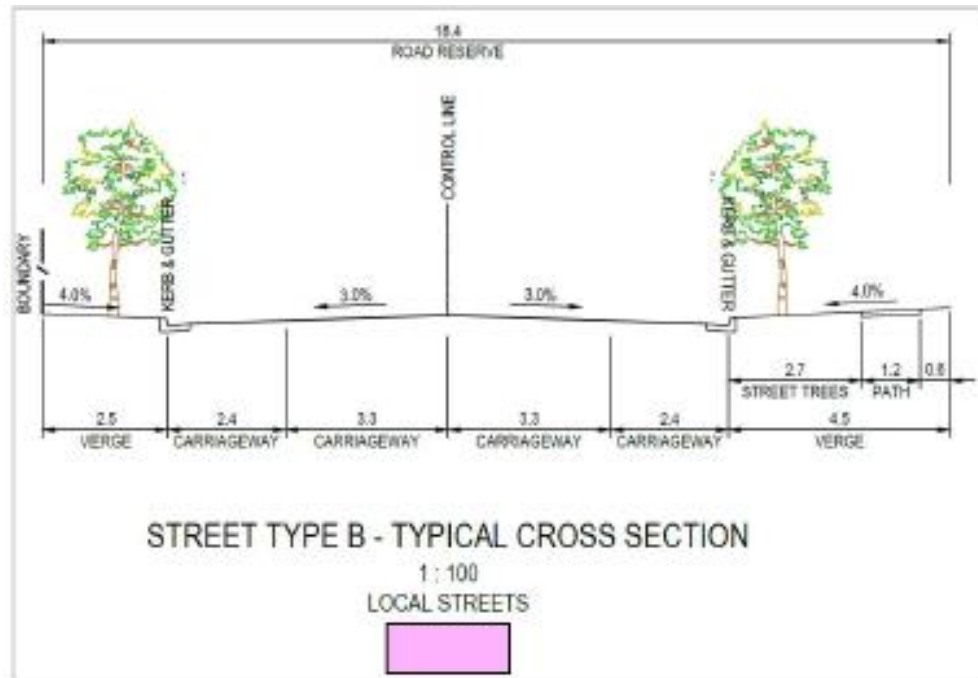
Street Type B is a local street consisting of:

- 1.2m footpaths and street trees contained within an approximate 4.45m wide verge on one side and street trees only contained within a 2.5m (approx.) verge on the opposite site; and
- Two 3.3m wide traffic lanes and two 2.4m wide traffic lanes contained within an approximate 12m wide carriageway
- No on-street car parks are provided

Street Type B is proposed to be applied for part of Road MC03 which will also provide the primary connectivity to the Road MC24 & MC25. As such this laneway will not be provided

with on-street parking which will result in minimal vehicle conflicts occurring, in particular for service vehicles. The proposed lane widths for this laneway are considered adequate to allow for a service vehicle and standard vehicle to pass each other without any conflict occurring.

A typical cross section of Street Type B is provided below in Figure 11.



**Figure 11. Street Type B typical cross section**

#### 4.4.1.1.3 Street Type C

Street Type C is a corridor street type consisting of:

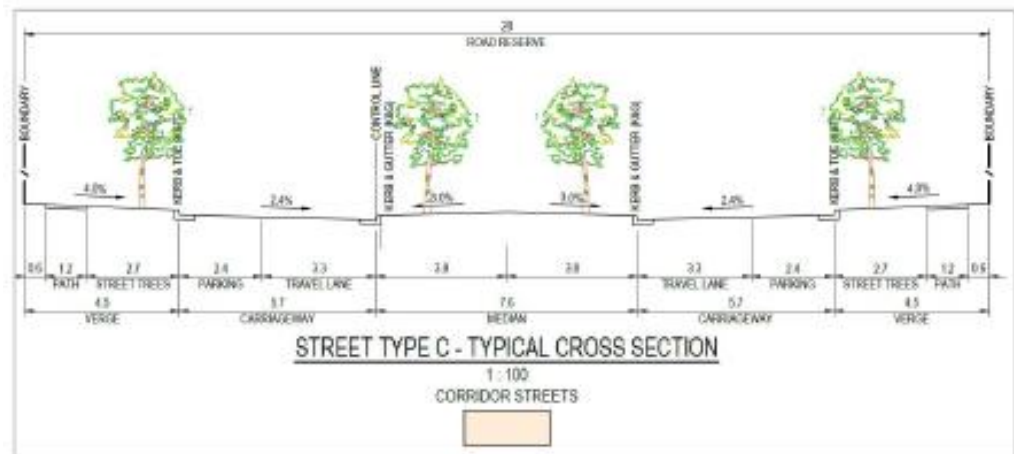
- 1.2m wide footpaths and street trees contained within an approximate 4.5m wide verge on each side
- 7.6m wide median incorporating tree planting
- One 5.7m wide traffic lane contained within an approximate 7.5m wide carriageway which also includes on-road parking availability on each side of the central median

This street type will be applied to part of Road MC03 and will connect as a corridor to Road MC24 & MC25 and Wharf Parade.

On-street parking will be provided within the travel lane and it is not considered as a major issue based on the purpose for this type of road. A passing car is able to pull into an available space to the side of the road (e.g. adjacent to a driveway) to allow a service vehicle to pass as required.

A typical cross section of Street Type C is provided below in Figure 12.





**Figure 12. Street Type C typical cross section**

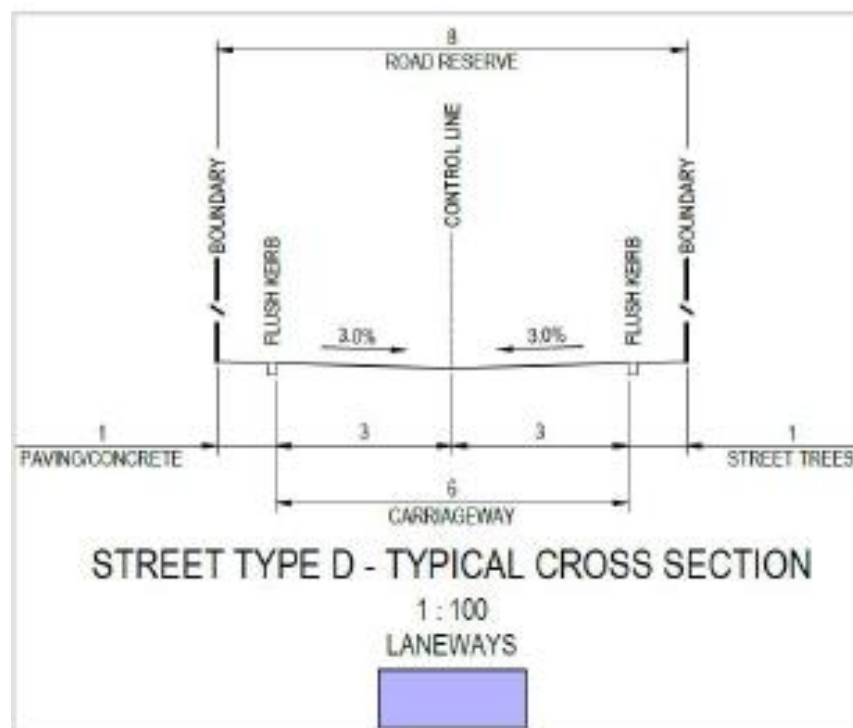
#### 4.4.1.1.4 Street Type D

Street Type D is a laneway street typology and comprises:

- 1m of pavement / concrete within a 1m wide (approx.) verge on one side and street trees only within a 1m wide (approx.) verge on the opposite side
- Two 3m wide traffic lanes contained within a 6m wide carriageway
- No on-street parking is provided

This street type will be applied to laneways ML01, ML02, ML03, ML04, ML05 and ML06 only and will service sections of medium density residential and studio development. No provision for on-street parking is made, thereby minimising the potential for vehicle conflicts, in particular for service vehicles.

A typical cross section of Street Type D is provided below in Figure 13.



**Figure 13. Street Type D typical cross section**

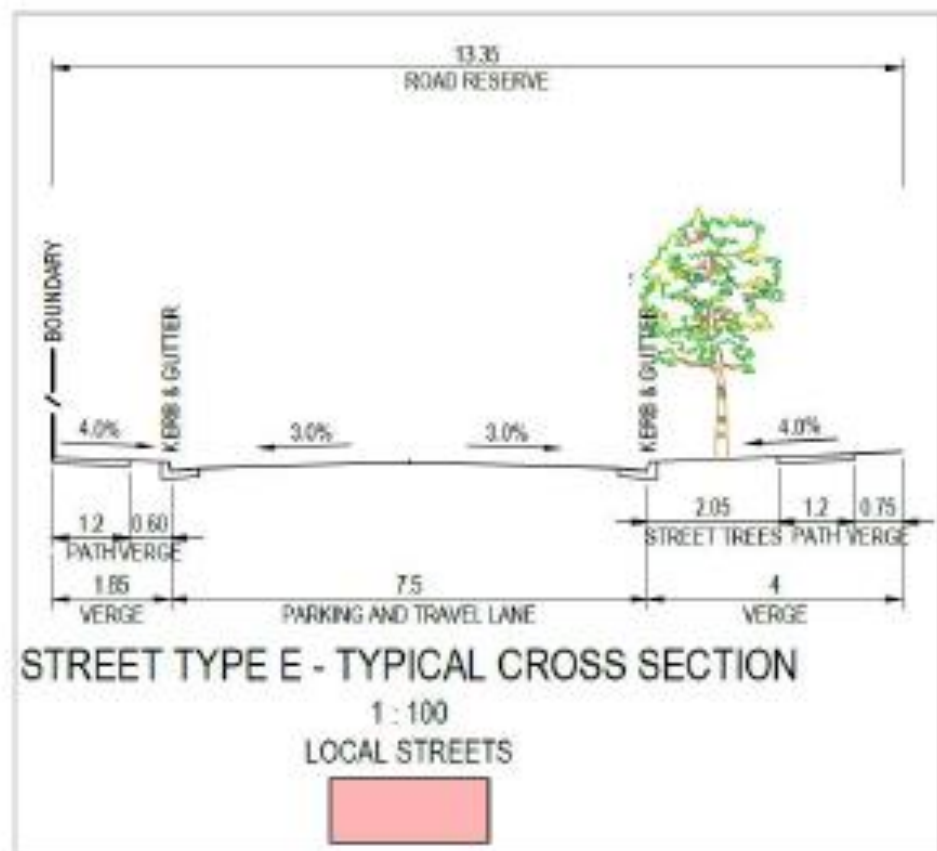
#### 4.4.1.1.5 Street Type E

Street Type E is a laneway and comprises:

- 1.2m footpath and street trees contained within an approximately 4m wide verge on one side and 1.2m wide footpath within a 1.85m verge (approx.) on the opposite side
- 7.5m wide travel lane which includes on-street parking

This typology applies to part of Road MC24 & MC25 only and will service medium density residential lots. On-street parking provided within the travel lane is not considered to be an issue, having regard to the purpose of this street typology. A passing car will be able to pull into an available space to the side of the road (e.g. adjacent to a driveway) and allow a service vehicle to pass when required.

A typical cross section of Street Type E is provided below in Figure 14.



**Figure 14. Street Type E typical cross section**

### 4.3.2 Parking

On-site parking for the future built form in Precincts B2 and C2 will be provided in accordance with Section 13.1 of the Shellharbour Development Control Plan (SDCP), 2016 (subject to future DAs).

Parking estimates for future residential development in Precincts B2 and C2 (both on-site and on-street parking) is provided in the Traffic Impact Assessment prepared by Arcadis and included at Appendix G.

### 4.3.3 Waste Collection

The appropriate placement of waste and recycling bins on collection day is essential to ensuring accessibility to bins by waste collection vehicles. The manoeuvrability of waste collection vehicles throughout Precincts B2 and C2 has been considered in the road network design to ensure that all bins can be readily accessed on collection day.

A swept path analysis has been undertaken for a 12.5m Rigid Truck for all intersections within Precincts B2 and C2 (refer Traffic Impact Assessment prepared by Arcadis, a copy of which is included at Appendix G). The swept path analysis demonstrates that all proposed intersections will provide adequate manoeuvrability for a service vehicle on the provision that no-parking clearance is provided adjacent to the intersection, in accordance with the Figure 5 of the 'NSW Transport Roads & Traffic Authority Technical Direction – Stopping and Parking Restrictions at Intersections and Crossings' (dated October 2011). Although the swept path analysis identifies that service vehicles would need to manoeuvre across the centre of the roads at a number of locations, it is not considered a major issue based on the low volume of the service vehicles anticipated in this area.

A sight distance assessment was also conducted which determined that all intersections within Precinct B2 and C2 will provide adequate sight distances and conform with Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections.

### 4.4 Open space network

There is no designated public open space located within Precincts B2 and C2, However the proposed subdivision provides connectivity between existing and future residential development and a range of passive and active open spaces, including the harbour edge, the beach and areas of future active open space (refer Figure 15).

### 4.5 Pedestrian, cycle and public transport

#### Active Transport

The proposed pedestrian and cycle network, as illustrated in Figure 14 below, will provide connectivity both within the Shell Cove Boat Harbour Precinct and to and from the surrounding areas.

The approved Concept Plan (Figure 15) shows an off-road pedestrian/cyclist path to the north of Precincts B2 and C2.

Within Precincts B2 and C2, the proposed shared path plan (Figure 16) will extend north along Road MC03 and then continue west along the Marina which will provide direct connectivity to the Shell Cove Town Centre. It also continues to the north of Precinct A.

The shared path will improve connectivity for the broader pedestrian/bicycle network for those living in medium to high density residential properties within the Proposal. The proposed shared paths have been designed in accordance with Shellharbour Local Government Area Shared Use Path Strategy 2010.



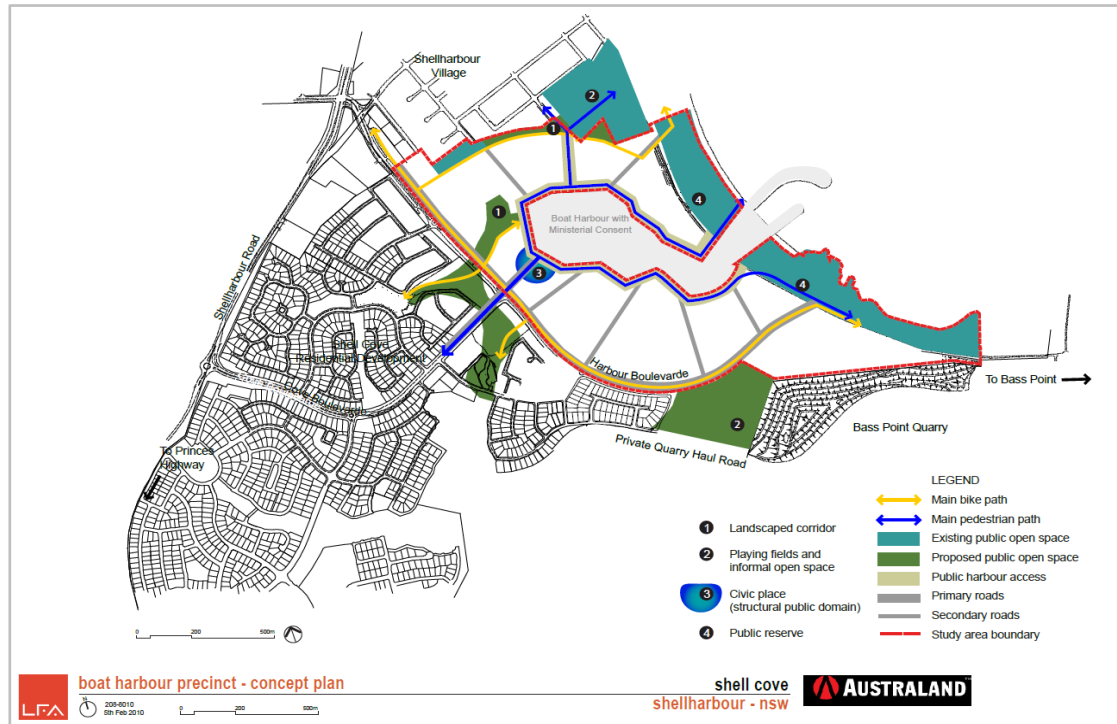


Figure 15. Concept Plan – Open space, pedestrian and bicycle network

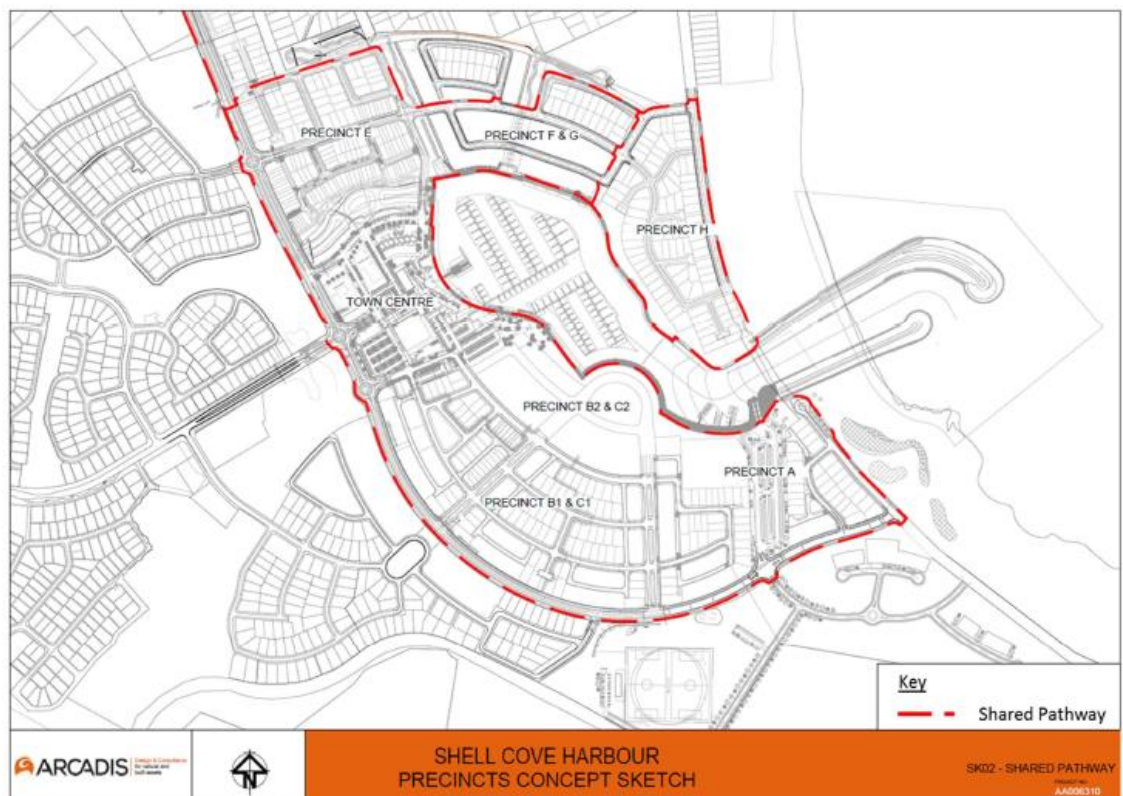


Figure 16. Proposed shared pedestrian / bicycle path network relative to Precincts B2 and C2

### Public Transport

The Shell Cove Boat Harbour Precinct has access to bus routes serviced by Premier Buses and the South Coast Line trains operating through the Shellharbour Junction station.

Premier Buses operates two routes within close proximity of the proposed Shell Cove Boat Harbour Precinct, as follows:

- Route 52 which provides a direct connection to Shellharbour Junction station; and
- Route 53 which provides a service to Warrawong and Wollongong.

The Shellharbour Junction train station is approximately 3km west of the Shell Cove Boat Harbour Precinct and provides connectivity to / from the Sydney CBD via the South Coast Line. The Shellharbour Junction train station was upgraded in November 2014 to include a “kiss and ride” zone, taxi and bus bays, bike racks and 105 parking spaces.

Current services operate every 25-40 minutes during the week as follows:

- 28 services to the Sydney CBD; and
- 29 services from the Sydney CBD.

## 4.6 Landscape concept plan

This section of the Statement should be read in conjunction with the Landscape drawing package and Design Statement prepared by Group GSA, a copy of which is included at Appendix H.

The proposed landscape treatment in Precincts B2 and C2 will create a high-quality environment for the new Residential and Foreshore Precinct. It will have a strong connection to the landscape character of the future adjoining development in Precincts A and existing and future development in Precincts B1 and C1.

Plant species and materials are consistent with previous stages of the development at Shell Cove and have been selected in cognisance of the maritime and coastal environment with the intention of creating a leafy residential character for the neighbourhood.

There are two principal design elements to the landscape scheme, as follows:

### 1. Streetscape

The streetscape treatment within Precincts B2 and C2 is consistent with the master plan for the development at Shell Cove.

Precincts B2 and C2 comprise two discrete areas – at the south and east side the landscape is a continuation of the adjacent Precincts B1 and C1 and Precinct A and tree selection and planting mix reflect the treatment in those precincts.

The northern part of the Precincts is oriented to the harbour. The proposed landscape treatment is designed to reflect a coastal and more formal character, providing a direct connection to the foreshore.

The verges incorporate street trees with areas of turf between, a footpath and mass planting along the boundary.

### 2. The Promontory Drive

The straight sections of The Promontory Drive incorporate an extensive green median which will be planted with native plant species and will include sandstone features. The median will provide a physical buffer and landscaped outlook for the nearest residents as well as presenting a strong character for the main road into the Precinct.

The Promontory Drive is also the only road which affords a view over the new marina. The paving treatment in the section around proposed Lot 3001 has been selected to enhance the “park-like” character and encourage a slower speed traffic environment. Street tree species have been selected to maximise the view through to the water and to emphasise the maritime character, providing an appropriate interface between the future residential development on proposed Lot 3001 and the adjacent foreshore promenade.

## 4.7 Earthworks

The extent of earthworks is presented on drawing C-B2C2-201, Bulk Earthworks Cut and Fill Plan. The Precinct B2 & C2 cut and fill volumes are 9,900 cubic metres, and 37,500 cubic meters, respectively. These volumes are based on a comparison between the existing and proposed landforms and result in a shortfall of approximately 27,600 cubic metres of fill material.

Refer to Appendix E for a copy of the B2 & C2 bulk earthwork drawings.

Bulk earthworks cut fill operations volumes are approximate only and are subject to change pending final coordination and detailed civil design. It should be noted the abovementioned cut fill operations volumes do not take into account:

- Bulk earthworks bulking factors; and
- Spoil generated from utility service and stormwater drainage trenching.

### 4.7.1 Acid Sulfate Soils

Acid Sulphate Soil Management Plan (ASSMP) for Precincts B2 and C2 has been prepared by SMEC Australia Pty Ltd.

The plan addresses the anticipated impacts associated with Acid Sulfate Soils and identifies appropriate mitigation and management measures to be implemented during the construction phase of the proposed Precincts B2 and C2 subdivision.

A copy of the ASSMP is included at Appendix I.

## 4.8 Utility Services

Arcadis has prepared a Proposed Utility, Sewer & Water Services Strategy in respect of Precincts B2 and C2 (Appendix K), which includes a review of existing service capacity, identification of necessary augmentation and new works to service the proposed subdivision of Precincts B2 and C2 and addresses indicative staging of the infrastructure works.

The report indicates that there are no utilities within Precincts B2 and C2 that will require diversion prior to the commencement of construction works and confirms that sewer, potable water, electability, gas and telecommunication services can be readily provided to accommodate the development of Precincts B2 and C2.

### 4.8.1 Sewer

Precincts B2 and C2 are located within the Sydney Water Corporation (SWC) service area. SWC has been consulted throughout the master planning of the Boat Harbour

Precinct and the sizing / grade and level were agreed with Sydney Water, based on the current proposed subdivision yields for each precinct within the Waterfront.

The new sewer collection system shall be designed and constructed in accordance with SWC requirements, which when completed will become SWC assets. The report proposes the construction of a gravity sewer trunk main through Precincts B2 and C2 along the alignment of Road MC24 & MC25 and branch lines to service the adjacent lots. The trunk main drains into the Precincts B1 and C1 sewer network to the south-west and will also service the development in Precinct A, the Boat Ramp development, and future business park catchments located to the east of Precinct B2 and C2. This trunk main line connects to existing pump station SP1196 located within Precincts B1 and C1. Pump station SP1196 pumps effluent to pump station SP1101 within the existing overall development.

The gravity sewer network within Precincts B2 and C2 will be designed in accordance with WSA Sewerage Code of Australia, Sydney Water Edition 1 – Version 3.

#### **4.8.2 Water**

Shell Cove is serviced by an existing trunk water main (DN375) located within the Cove Boulevard alignment to the west of the Boat Harbour Precinct. Sydney Water has confirmed that this infrastructure has the capacity to service the development at Shell Cove.

The Utility, Sewer and Water Services Strategy prepared by Arcadis (Appendix K) indicates that the existing DN150mm watermain along Wharf Parade will be extended into Precincts B2 and C2 where it is anticipated DN100mm watermains will then be provided to service the superlots.

Accordingly, it is anticipated that the demand for potable water generated by proposed Precinct B2 and C2 development can be accommodated.

This new reticulation pipework shall be installed to suit the development scheme planning. The reticulation pipework shall be designed in accordance with Water Supply Code of Australia (WSA03) – Sydney Water edition 2014, suitable for the water loading requirements for the development.

Upon completion, the new water service reticulation will become a Sydney Water asset.

#### **4.8.3 Electricity**

The Strategy indicates that Endeavour Energy has determined that additional HV feeders (potentially two) will be required to service any additional precincts within the Boat Harbour Precinct outside of Precincts B1 and C1, and Precinct E.

Endeavour Energy has also recently provided advice from a recent Technical Inquiry which recommends the development of the first new HV feeder (feeder SHD2/B) from Shellharbour Zone Substation to create sufficient capacity for Precincts A, B2 and C2. This new HV feeder will join into the existing HV feeder (feeder SHK2) which currently supplies Precinct B1 and C1 and the soon to commence Precinct D, thereby diverting the additional new load from the existing network.

The electrical design for the new feeder was certified by Endeavour Energy in February 2018. It is expected that the new HV feeder will be commissioned prior to the construction of Precinct B2 and C2.

The detailed electrical design for Precincts B2 and C2 will include the following:

- 3 padmount substations (final located to be determined as part of detailed design) including appropriate easements within privately owned land;
- reticulation of high and low voltage cabling within road reserves (including spare conduit); and
- street lighting.

#### 4.8.4 Gas

Previous consultation between Frasers Property Australia and Jemena has confirmed that natural gas is available in the development area and agreements are in place with Jemena to service the development at Shell Cove.

Gas supply is likely to extend from the existing 300kPa 50mm nylon gas main along Wharf Parade through the Precinct B2 and C2 development.

The Strategy anticipates that the proposed gas reticulation design will generally follow the electrical reticulation design routes and can be constructed to accommodate the delivery of Precincts B2 and C2. The alignment of the reticulation will be confirmed during detailed design.

#### 4.8.5 Telecommunications

NBN servicing was confirmed at the master planning stage of the proposed Boat Harbour development and agreements are in place with NBN co to provide telecommunications to the development of Precincts B2 and C2.

There is an existing NBN telecommunication network located within the vicinity of Precinct A, which will be able to service the proposed development via new connections to the existing network, together with new infrastructure along new streets and lead-in locations within Precincts B2 and C2 to provide connection to each lot.

It is anticipated that the proposed telecommunication reticulation designs will generally follow the electrical reticulation design routes and can be constructed to accommodate the proposed staging of development within Precincts B2 and C2.

Having regard to the above, it is considered that Precincts B2 and C2 can achieve access to telecommunications services. As with other utility services, the alignment of the reticulation will be confirmed during detailed design.

### 4.9 Stormwater

Advisian has prepared a Stormwater and Water Cycle Management Plan (Appendix L) which details the proposal for Precinct B2 and C2 and demonstrates compliance with the terms of the Concept Plan Approval and Statement of Commitments.

Precinct B2 and C2 stormwater flow will be conveyed within the piped drainage network and all flows during the 100-year ARI event will be conveyed within road reserves or designated reserve lots. The drainage networks for Precinct B2 and C2 discharge to two harbour outlets (Outlets 2 and 4). Further details are provided below.

#### Drainage to Outlet 2

Stormwater from the following areas will discharge to the boat harbour via Outlet 2:

- Precinct C2;
- Precinct D (Southern); and,
- Precinct C1.

The proposed stormwater network within Precinct C2 consists of pipes ranging in size from 375 mm diameter up to 750 mm diameter. Excess runoff during storms up to and

including the 100-year ARI event is proposed to be conveyed within the road reserves.

#### **Drainage to Outlet 4**

Stormwater from the following areas will discharge to the boat harbour via Outlet 4:

- Precinct B2 (Northern);
- Precinct B2 (Southern);
- Precinct A2 (Northern);
- Precinct A2 (Central);
- Precinct A2 (Southern);
- Precinct B1;
- A Rural ("Southern Catchment");
- Road MC02 and MCO3; and,
- Sub-catchment 10D2-10D5.

The proposed stormwater network within Precinct B2 (Northern and Southern) consists of pipes from 375 mm diameter up to 900 mm diameter. Runoff during storms up to and including the 100-year ARI event is proposed to be conveyed within the road reserves. Note, this network is separate to the Southern Catchment flood conveyance system whereby twin 1,800 mm diameter pipes have been installed to convey flows from the Southern Catchment to Outlet 4.

This has been developed in accordance with the requirements of the Shellharbour DCP 2013 and the Development Design Specification (Shellharbour City Council, 2004). Precinct C2 and B2 stormwater network is provided in the Precinct Infrastructure – Civil Works DA Design plans (Appendix E).

A stormwater treatment strategy has been developed for Precinct B2 and C2 and adjacent catchments which will involve measures including GPTs, rainwater tanks, grass swales, wetlands and various proprietary products, including the Stormwater360 JellyFish system and HydroCon porous concrete pipes.

These systems will assist in achieving the stormwater quality targets of the overall Shell Cove development, which include ensuring post-development pollutant loads do not exceed pre-development loads and pollutant reduction targets are met. The strategy includes various WSUD elements, which meets the relevant Concept Approval requirements for Ecologically Sustainable Development and Infrastructure.



## 5 STATUTORY PLANNING FRAMEWORK

### 5.1 Environmental Planning and Assessment Act 1979

Matters to be considered when determining development applications are set out in Section 4.15(1) of the EP&A Act. An assessment of the proposal against these matters is provided below.

Consideration and determination of a development application must be consistent with the relevant provisions of the EP&A Act, including the objects set out in Section 1.3 of the Act, as follows:

- (a) *To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*

The proposed subdivision will contribute to the proper management, development and conservation of the natural and other resources within the Shell Cove site. In particular, the Concept Plan (MP07\_0027) approved by the Minister for Planning on 15 February 2011 requires a range of measures to be implemented to ensure a sustainable outcome.

The proposal will promote the social and economic welfare of the community by providing a new, high quality urban environment.

- (b) *To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*

The development at Shell Cove has been assessed (and approved) as being in accordance with the principles of Ecologically Sustainable Development as set out in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

- (c) *To promote the orderly and economic use and development of land,*

The proposed subdivision facilitates the orderly and economic redevelopment of land by providing additional housing in the Illawarra Region in the context of the approved Concept Plan for the Boat Harbour Precinct at Shell Cove.

- (d) *To promote the delivery and maintenance of affordable housing,*

The wider development at Shell Cove allows for a range of housing products to provide greater housing choice. Producing smaller parcels of land and smaller dwelling sizes helps to reduce land and construction costs, and on-going running costs for dwellings, making these dwellings more affordable.

- (e) *To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*

The Flora and Fauna Study prepared by Kevin Mills and Associates in 2009 in support of the Concept Plan found that the Shell Cove Boat Harbour Precinct, including the lands comprising Precincts B2 and C2, contained no Critical Habitat or any Schedule 2 Koala food trees.

- (f) *To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*

The Cultural Heritage Review submitted in as part of the Concept Plan found that there were no European Heritage elements or Non-European (Indigenous) sites within the wider Shell Cove Boat Harbour Precinct area. The study also concluded that the proposal site has low archaeological sensitivity.

Registered Aboriginal objects / sites are known to occur within the wider area. However, only part of one of these sites, AHIMS 52-2-207, is assessed as having

relatively high heritage value. This site is a shell midden within a foredune on the beachfront on the ocean side of Bass Point Tourist Drive and is not in proximity to Precincts B2 and C2.

An Archaeological and Heritage Protection Plan has been developed for the Shell Cove boat harbour/marina and a combined Consent and Permit (No. 2534) has been granted under sections 87 / 90 of the *National Parks and Wildlife Act 1974*. A copy of these documents is included at Appendix D.

*(g) To promote good design and amenity of the built environment,*

The proposed subdivision is based on sound urban design principles to optimise amenity within the subdivision, including:

- a clear street pattern creating legible access for vehicles, cyclists and pedestrians, providing a high level of connectivity within the wider Boat Harbour Precinct between existing and future development at Shell Cove;
- limited block lengths to increase connectivity;
- pedestrian and cycle connections to Harbour Boulevard, bus routes and the main cycleway;
- a series of clear vistas along road alignments throughout Precincts B2 and C2 to increase opportunities for incidental surveillance;
- lot orientation facilitates the construction of future dwellings that overlook the public domain to increase passive surveillance opportunities; and
- All lots to be integrated into the mainstream lifestyle of the Shell Cove community.

Built form will be the subject of future development applications.

*(h) To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*

Noted, however the DA seeks approval for land subdivision. Built form within Precincts B2 and C2 will be the subject of separate applications.

*(i) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*

Extensive consultation has been undertaken with various levels of government and government agencies during the approvals process associated with the development at Shell Cove.

*(j) to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

It is anticipated that Council will undertake any required notification or consultation in accordance with its policies.

Having regard to the discussion set out above, the proposed subdivision is demonstrably consistent with the objects of the EP&A Act.

## 5.2 Environmental planning instruments

The environmental planning instruments, policies and other documents that are relevant to the proposed development are:

- State Environmental Planning Policy No 55 – Remediation of Land
- State Environmental Planning Policy (Coastal Management) 2018
- Shellharbour Local Environmental Plan 2013
- Concept Plan Approval - MP07\_0027
- Shellharbour Development Control Plan 2013
- Shellharbour City Council Section 94 Contributions Plan 2013
- Building Design Guidelines



- Approved Concept Plan Modification 18 March 2019

### 5.2.1 SEPP 55 – Remediation of land

Under the provisions of SEPP 55 the consent authority must not consent to the carrying out of any development on land unless it has considered whether that land is contaminated and if so, whether it is suitable for a proposed development or requires remediation.

Contamination has been considered and assessed as part of Boat Harbour Precinct Concept Plan (MP07\_0027). A Phase 2 site contamination assessment of the Boat Harbour Precinct was submitted with the preferred planning report for the Concept Plan application which concluded that a remedial action plan was required for the former golf course and at the location of a former farm structure.

In February 2016, Douglas Partners carried out a targeted site investigation<sup>2</sup> for contaminated land within the Boat Harbour Precinct (Precincts D and E and Wetland 6). This report presented the results of additional investigations of the near-surface soils within the former tees, greens and fairways of the former golf course, which were identified in the Phase 2 Site Assessment as requiring further investigation for potential heavy metals and pesticide contamination.

Douglas Partners has prepared advice in relation to Precincts B2 and C2 (**Appendix B**) to accompany the DA. The correspondence confirms that the original extent of the former gold course land was predominantly located to the south and west of Precincts B2 and C2. A small portion of the former golf course was located within the western portion of Precinct F.

Having regard to the above, it is considered that the requirements of SEPP 55 have been satisfied in relation to the subject land.

### 5.2.2 SEPP (Coastal Management) 2018

The Coastal Management SEPP applies to land and development within the coastal zone (clause 5) as defined by the *Coastal Management Act 2016*. Shell Cove Boat Harbour Precinct, including Precincts B2 and C2 are located within the coastal zone.

The SEPP gives effect to the objects of the *Coastal Management Act 2016* and specifies how development which is proposed within the coastal zone is to be assessed.

The SEPP defines the four coastal management areas described in the Act – Coastal Wetlands and Littoral Rainforests Area, Coastal Vulnerability Area, Coastal Environment Area and Coastal Use Area. Assessment criteria are set out for each coastal management area that consent authorities are required to consider when assessing proposals for development that fall within the mapped areas.

Part 2 of the SEPP sets out the development controls for the various coastal management areas. The eastern portion of Precincts B2 / C2 fall within the Coastal Use Area, which is defined as land adjacent to the coast, where development is or may be carried out.

Clause 14 of the SEPP provides that:

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<sup>2</sup> *Report on Targeted Site Investigation, Former Golf Course, Boat Harbour Precinct (Precinct D and E, and Wetland 6) Shell Cove, Project 78999.10.Rev1 dated 11 February 2016*

*Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:*

- (a) has considered whether the proposed development is likely to cause an adverse impact on the following:*
  - (i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,*
  - (ii) overshadowing, wind funnelling and the loss of views from public places to foreshores,*
  - (iii) the visual amenity and scenic qualities of the coast, including coastal headlands,*
  - (iv) Aboriginal cultural heritage, practices and places,*
  - (v) cultural and built environment heritage, and*
- (b) is satisfied that:*
  - (i) the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or*
  - (ii) if that impact cannot reasonably be avoided – the development is designed, sited and will be managed to minimise that impact, or*
  - (iii) if that impact cannot be minimised – the development will be managed to mitigate that impact, and*
- (c) has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.*

Whilst the proposed Precincts B2 / C2 subdivision is not inconsistent with the provisions of clause 14 of the SEPP, the terms of the Concept Plan prevails to the extent of any inconsistency, pursuant to clause 3B(2) of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*.

## **5.3 NSW Coastal Policy**

The principles of the NSW Coastal Policy have informed the environmental planning and urban design undertaken in relation to the Boat Harbour Precinct and the wider development at Shell Cove.

The broad planning and design responses to the goals identified in the NSW Coastal Policy are outlined below:

### **1. To protect, rehabilitate and improve the natural environment**

The development of the Boat Harbour Precinct, of which Precincts B2 and C2 are an integral part, will result in the improvement of natural environmental values on the development site and in the immediate vicinity, by virtue of the following:

- Provision of an area of constructed wetlands to be located in the open space immediately north of the Town Centre. The wetlands are an important element of the integrated approach to catchment management and the management of urban run-off.
- The development of the Shell Cove project has provided the impetus for the construction of the Myimbarr Wetlands.
- The development of the Boat Harbour Precinct will allow for the effective remediation of ASS.

### **2. To recognise and accommodate natural processes and climate change**

The analysis undertaken as part of the Concept Plan (Worley Parsons) notes that between 2009 and 2100 the Shell Cove Boat Harbour Precinct could expect a worst case scenario increase of 0.23m in localised flood levels.

This can be readily accommodated within the 0.5m freeboard (relative to the predicted 1 in 100-year flood level) which all habitable buildings within the precinct are required to provide.

### ***3. To protect and enhance the aesthetic qualities of the coastal zone***

The Boat Harbour Precinct has been designed to be sympathetic to the coastal landscape. Precincts B2 and C2 are not located on prominent ridgelines nor in an area which has been identified in any regional or local policy as an area of visual significance or vulnerability.

The Urban Design Guidelines prepared in respect of Precincts B2 and C2, which form part of the DA documentation (Appendix M), establish a series of design principles for the medium density housing and apartments which includes materials, colours, scale and form. These guidelines form a “manual” for design and development and are part of the approval process for future development.

Consistency of development with the Guidelines will ensure that it is complementary to the visual landscape of the Shellharbour coast and immediate hinterland.

### ***4. To protect and conserve cultural heritage***

Aboriginal heritage was investigated as part of the Concept Plan and the archaeological sensitivity of the area was considered low. The consent issued in respect of Boat Harbour (DA 411/2013) includes conditions which require appropriate management of Aboriginal objects during the excavation and construction of land surrounding the boat harbour.

### ***5. To promote Ecologically Sustainable Development and use of resources***

#### ***6. To promote ecologically sustainable human settlement***

The proposed development of Precincts B2 and C2 within the Boat Harbour Precinct at Shell Cove is considered to be consistent with the principles of ecologically sustainable development in that:

- It incorporates stormwater, erosion and sedimentation controls to minimise environmental impact, particularly on the boat harbour, the dunal system and Shellharbour South Beach;
- It will provide regional economic benefits through additional housing supply and employment opportunities; and
- Water quality control measures will be implemented employing best practice WSUD principles.

### ***7. To provide for appropriate public access and use***

Public access to the new Boat Harbour and the ocean foreshore will be established, maintained and enhanced as part of the wider development at Shell Cove. A series of parks, boardwalks and streetscapes will establish opportunities for public access around the perimeter of the harbour. A number of streets are located perpendicular to the harbour and will enhance access to the harbour foreshore from surrounding, non-waterfront areas and establish visual connections to the harbour.

### ***8. To provide information to enable effective management***

#### ***9. To provide for integrated planning and management***

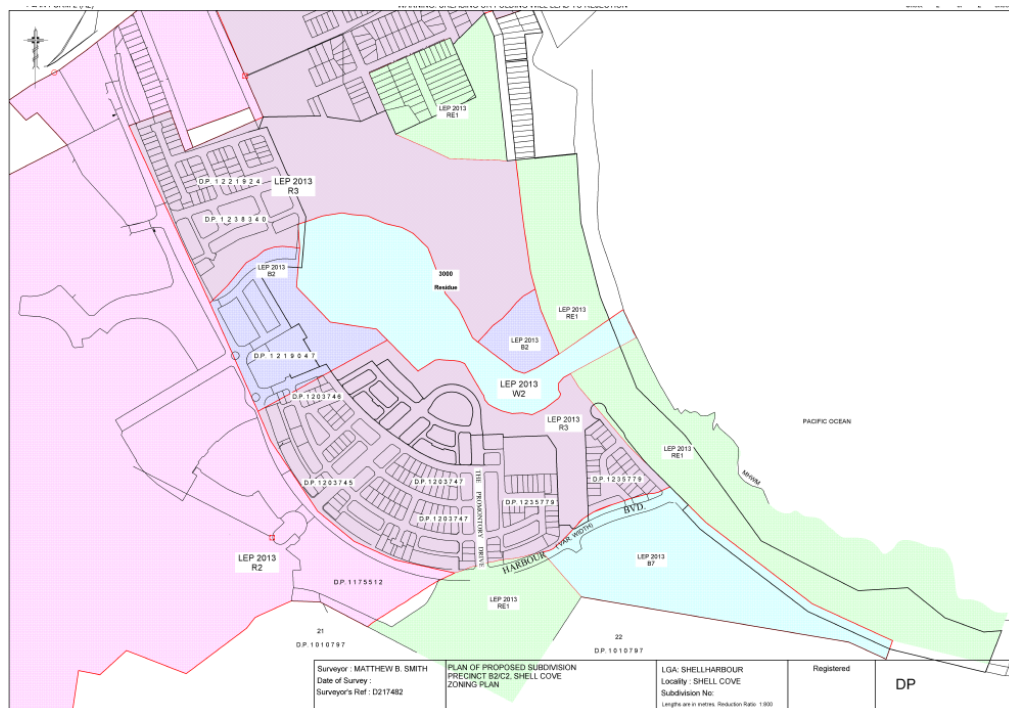
The development of the Shell Cove Boat Harbour Precinct is being undertaken in a controlled manner, consistent with the objects of the EP&A Act and in accordance with the Concept Plan Approval (MP07\_0027) and subsequent development consents for the various stages of the development.

Having regard to the above, it is considered that the proposed subdivision of Precincts B2 and C2 is consistent with the NSW Coastal Policy.

## 5.4 Shellharbour Local Environmental Plan 2013

### 5.4.1 Land Zoning / Permissibility

The land is zoned R3 Medium Density Residential under the provisions of Shellharbour LEP 2013 (Figure 17).



**Figure 17. Plan of Proposed Subdivision for Precinct B2 and C2 – Shell Cove Zoning Plan**

The R3 zone permits a range of residential uses, including dwelling houses, semi-detached dwellings and attached dwellings and secondary dwellings with consent.

The objectives of the R3 zone are as follows:

- To provide for the housing needs of the community within a medium density residential environment.
- To provide a variety of housing types within a medium density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

The proposed subdivision is consistent with the objectives of the zone by virtue of the fact that it will contribute to the range of housing types available in the Shellharbour LGA within a contemporary master planned estate.

It is also noted that land subdivision is permitted with consent pursuant to clause 2.6 of SLEP 2013.

## **5.4.2 Other Relevant SLEP 2013 Provisions**

The development standards embodied in SLEP 2013, including floor space ratio, minimum lot size, building height, also extend to the land to which the Concept Plan Approval applies, however the Concept Approval prevails.

The Concept Plan Approval establishes indicative dwelling numbers, types and number of storeys and an assessment of the Precincts B2 and C2 proposal against the Concept Plan is included at Section 5.6 of this Statement.

### **5.4.2.1 Development within Coastal Zones (cl. 5.5)**

Clause 5.5 details the provisions for assessing development within the coastal zone. The proposal is considered to be consistent for the following reasons:

- the proposed subdivision facilitates public access to the foreshore;
- the proposal is suitable in its relationship with the surrounding area, and does not adversely impact the natural scenic quality due to the site proximity to the foreshore, and the likely bulk, scale and character of the future built form;
- the proposed subdivision facilitates views to / from the foreshore;
- the proposal does not cause any unreasonable impact on the visual amenity and sea view qualities of the coast;
- bio-diversity and ecosystems are not affected by the proposal;
- the proposed subdivision is acceptable having regard to the cumulative impact of the proposal in combination with other development on the coastal catchment; and
- the proposed subdivision is sited in a manner that ensures it is not significantly affected by coastal hazards, such as foreshore erosion, or by sea level rise, nor does it increase the risk of coastal hazards in relation to the subject land or surrounding properties.

### **5.4.2.2 Heritage Conservation (cl. 5.10)**

As discussed in Section 3.3.5 of this Statement, the studies undertaken as part of the Concept Plan application suggests that the site of Precincts B2 and C2 does not contain any items of European heritage, conservation areas or Indigenous places or objects.

Aboriginal heritage significance was also investigated as part of the Concept Plan and the archaeological sensitivity of the area was considered low.

An Archaeological and Heritage Protection Plan has been developed for the Shell Cove boat harbour/marina and a combined Consent and Permit (No. 2534) has been granted under sections 87 / 90 of the *National Parks and Wildlife Act 1974*. A copy of these documents is included at Appendix D.

Having regard to the above it is considered that clause 5.10(1) heritage conservation objectives are unlikely to be undermined by the proposal.

### **5.4.2.3 Acid Sulfate Soils (cl. 6.1)**

The objective of clause 6.1 is to ensure that development does not disturb, expose or drain ASS and cause environmental damage.

As discussed previously in this Statement, ASS were investigated as part of the Concept Plan application and for most of the land to be developed, the risk of encountering ASS was low. However it is noted that parts of Precincts B2 and C2 are identified as being subject to Class 2 and Class 3 ASS.

SMEC Australia Pty Ltd has prepared an Acid Sulfate Soil Management Plan which forms part of the DA documentation (Appendix I). The plan addresses the anticipated impacts associated with ASS on the proposed development in Precincts B2 and C2 and identifies appropriate mitigation measures.

It is considered that the implementation of these mitigation measures will satisfy the requirements of clause 6.1.

#### 5.4.2.4 Earthworks (cl. 6.2)

The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.

The proposed development involves some earthworks associated with the civil works and in order to create the required levels for future dwellings. Impacts to surrounding developments are minor in nature and will not detrimentally impact environmental functions and process.

Arcadis has prepared an Earthworks Strategy for Precincts B2 and C2 (Appendix J)

On this basis it is considered that the proposal is consistent with the objective of Clause 6.2 and the matters for consideration.

#### 5.4.2.5 Flood Planning (cl. 6.3)

The objectives of this clause are to minimise the flood risk to life and property, allow development on land that is compatible with its flood hazard and to ensure development does not create significant adverse impacts on flood behaviour and the environment.

Consent must not be granted unless the consent authority is satisfied that the development:

- (a) is compatible with the flood hazard of the land, and*
- (b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and*
- (c) incorporates appropriate measures to manage risk to life from flood, and*
- (d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and*
- (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.*

Advisian has prepared a Flood Assessment in respect of the proposed subdivision of Precincts B2 and C2 (Appendix N).

The flood risk assessment examines Precincts B2 and C2 in the context of the Concept Plan Approval and concludes that the proposed Precinct B2 and C2 development is consistent with the Part 3A Concept Approval Requirements.

It has also been shown that the proposed development of Precinct B2 and C2 will not cause any properties to be affected by the Flood Planning Area.

A sensitivity test which assessed the effects of sea level rise by Year 2100 was completed for the adjacent Precinct A development. It showed that a heightened tailwater will not cause an increase in flood levels at Precinct B2 and C2 or its access routes during events up to and including the 100-year ARI storm. An impact of less than 10 mm increase in flood levels is expected during the PMF sea level rise scenario, which will not manifest as any material change in flood conditions.

The flood assessment demonstrated that the post-development flood mapping is consistent with a flood emergency response strategy consisting of evacuation during events up to the 100-year ARI storm and shelter-in-place during more extreme events.

Having regard to the above, it is considered that the objectives of clause 6.3 are satisfied.

#### 5.4.2.6 Stormwater Management (cl. 6.4)

The objective of this clause is to minimise the impacts of urban stormwater on the land to which the DA applies, adjoining properties, native bushland and receiving waters.

Clause 6.4(3) provides that consent must not be granted unless the consent authority is satisfied in relation to the following matters:

- (a) is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and*
- (b) includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and*
- (c) avoids any significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters, or if that impact cannot be reasonably avoided, minimises and mitigates the impact.*

The Stormwater and Water Cycle Management Plan prepared by Advisian (Appendix X) includes a water sensitive urban design strategy for Precincts B2 and C2 so as to achieve the stormwater quality targets of the overall Shell Cove development, as referenced in the Concept Plan Approval.

These targets include reducing post development pollutants to equal to and below predevelopment loads, in addition to the water quality targets identified in the Boat Harbour Development Consent.

The drainage system arrangement for Precincts B2 and C2 has been designed in accordance with *Appendix 10 (Stormwater Management) of Development Control Plan 2016* and the *Development Design Specification for Subdivision Drainage Design (Shellharbour City Council, 2004)*.

Having regard to the above it is considered that the proposed subdivision of Precincts B2 and C2 is consistent with the objective of clause 6.4 and satisfies the matters set out in sub-clause 3.

#### 5.4.2.7 Essential Services (cl. 6.9)



This clause requires the consent authority to be satisfied that any services that are essential for the development are either available or that adequate arrangements have been made to make them available when required.

As described in Section 4.8 of this Statement, the site is able to be serviced by all utility services, and on this basis, it is considered that the requirements of clause 6.9 are satisfied.

## 5.5 Shellharbour DCP 2013

The only provisions of the DCP relevant to the proposed subdivision of Precincts B2 and C2 are those pertaining to public notification. It is noted that Council will notify / publicly exhibit the DA in accordance with the DCP.

## 5.6 Consistency with the Concept Plan

The planning and design of the proposed subdivision of Precincts B2 and C2 has been developed within the constraints of the wider concept planning for Shell Cove Boat Harbour Precinct.

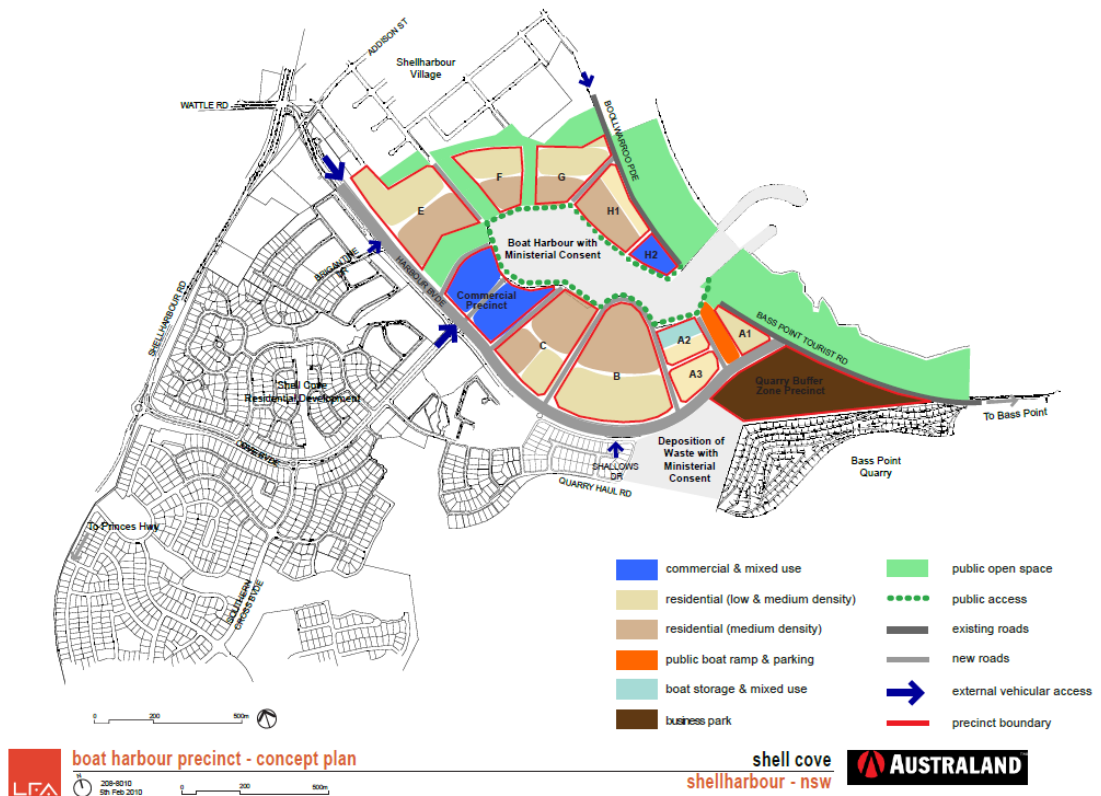


Figure 18. Boat Harbour Precinct Concept Plan

### 5.6.1 Land use

The proposed residential land use within Precincts B2 and C2 is consistent with the Concept Plan and PPR, providing a medium density environment.

Characterised by its curvilinear frontage and mix of medium and high density housing types, Precincts B2 and C2 include apartment typologies along the northern blocks which address the harbour foreshore park and medium density housing addressing the lower densities to the south in Precincts B1 and C1 and providing a transition in scale and form.

The medium density dwellings and apartments have been located to capitalise on the high level of amenity afforded by the proximity to the waterfront.

### **5.6.2 Landscape open space provision**

The proposed subdivision of Precincts B2 and C2 provides connectivity between existing and future residential development and a range of passive and active open spaces including the harbour edge and the beach.

As described in Section 4.4 of this Statement, no areas of public open space are provided within the Precincts B2 and C2 subdivision, which is consistent with the Concept Plan.

### **5.6.3 Pedestrian and bicycle network**

The pedestrian movement network is linked to the pattern of open space across the Boat Harbour Precinct. Bicycle paths are located to connect into existing major networks and at the same time to take advantage of convenient open space links.

A bicycle path will run from Bass Point along the proposed Harbour Boulevard through to Shellharbour Road and also link back to South Shellharbour Beach.

For Precincts B2 & C2, the proposed shared path plan will extend north along Road MC03 and then continue west along the Marina which will provide direct connectivity to the Shell Cove Town Centre. It also continues to the north of Precinct A.

The shared path will improve the connectivity for the broader pedestrian / bicycle network for those living in the future medium and higher density residential development within Precincts B2 and C2. Furthermore, it should be noted that the proposed shared paths have been designed in accordance with Shellharbour Local Government Area Shared Use Path Strategy 2010.

### **5.6.4 Distribution of dwelling density**

The proposed subdivision of Precincts B2 and C2 provides for a mixture of medium and higher density residential development that is broadly consistent with the principles established in the Concept Plan Approval and PPR.

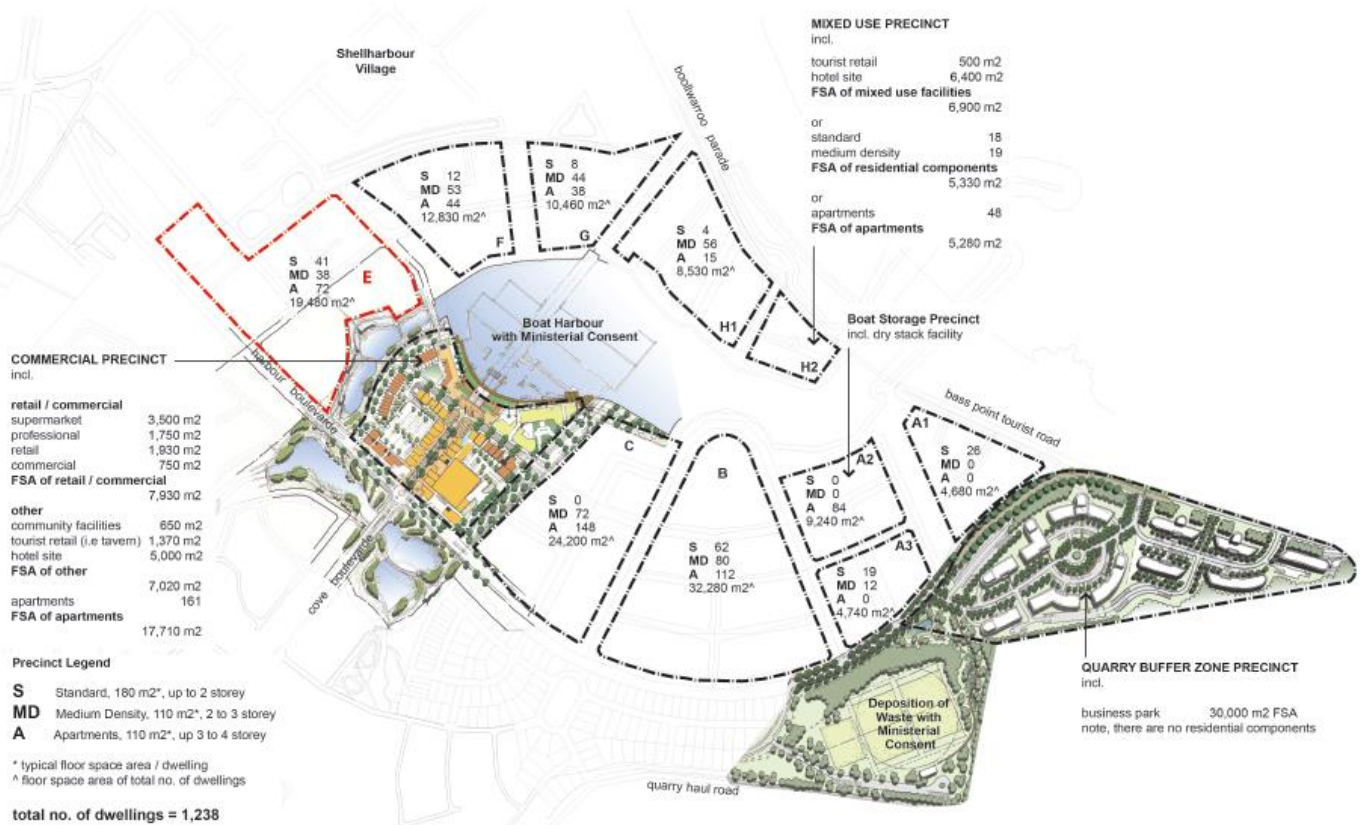
Superlots designed to accommodate future medium density housing (subject to subsequent DAs) are located between proposed Road MC24 & MC25 and Wharf Parade while the two superlots designated for future apartment development are located adjacent to Boat Harbour to take advantage of the high level of amenity afforded by the waterfront location.

### **5.6.5 Building heights**

This proposal seeks approval for subdivision of land, no approval is sought for buildings. Future built form within Precincts B2 and C2 will be subject to detailed design in accordance with the Urban Design Guidelines (Appendix M) and separate development approval.

### **5.6.6 Indicative dwelling yields**

Figure 19 illustrates the indicative dwelling numbers and floor space area for each precinct, as described in the approved Concept Plan for the Boat Harbour Precinct.



**Figure 19. Indicative dwelling numbers and floor space area per precinct**

A summary of the anticipated dwelling yield of the proposal together with the 'Indicative Dwelling Numbers' identified in the Concept Plan Approval is set out in table 5.1.

*Table 5-1 Allowance for dwellings within Precincts B2 and C2*

Dwelling type	Precinct B			Precinct C		
	Concept Plan	B1 Approved	B2 Proposed	Concept Plan	C1 Approved	C2 Proposed
Standard	62	50	0	0	24	0
Medium density	80	105	35	72	69	32
Apartments	112	0	120	148	0	80
Total	254	155	155	220	93	112
Combined Indicative Yield	254	310		220	205	

As shown in Figure 19 above, the Concept Plan did not contemplate sub-precincts for Precincts B and C. In order to provide a more direct comparison, the dwelling yields approved for Precincts B1 and C1 have been incorporated, together with the

estimated dwelling yields for each of the superlots proposed as part of the Precincts B2 and C2 subdivision.

As can be seen from the figures set out in Table 5.1 above, the proposed subdivision of Precincts B2 and C2 is expected to result in an increase (approximately 56) in the number of dwellings in Precinct B and a decrease (approximately 15) in Precinct C. This translates to a net increase in overall number of dwellings across the combined Precincts B and C of 41.

It is noted that the increase in overall dwelling yield is contemplated in the S75W application to modify the Concept Plan (MP0027 MOD1) which is currently being assessed by DP&E. Further discussion in this regard is included at Section 5.8.1 of this Statement.

The built form typologies vary from that which was approved as part of the Concept Plan in both Precincts B and C, however this is, in part, the result of approvals granted by the JRPP in respect of DA0032/2016 for Precinct C1 and DA0100/2016 and DA0097/2017 issued in respect of Precinct B1.

### 5.6.7 Street network

Precincts B2 and C2 will be accessed via Wharf Parade from Harbour Boulevard and The Promontory Drive.

The proposed road layout for Precincts B2 and C2 is generally consistent with the Concept Plan Approval.

### 5.6.8 Stormwater strategy

The framework established by the Stormwater Strategy prepared by Worley Parsons as part of the Concept Plan Approval (Figure 20) has been further refined as the detailed planning and development of the Shell Cove Boat Harbour Precinct has developed.

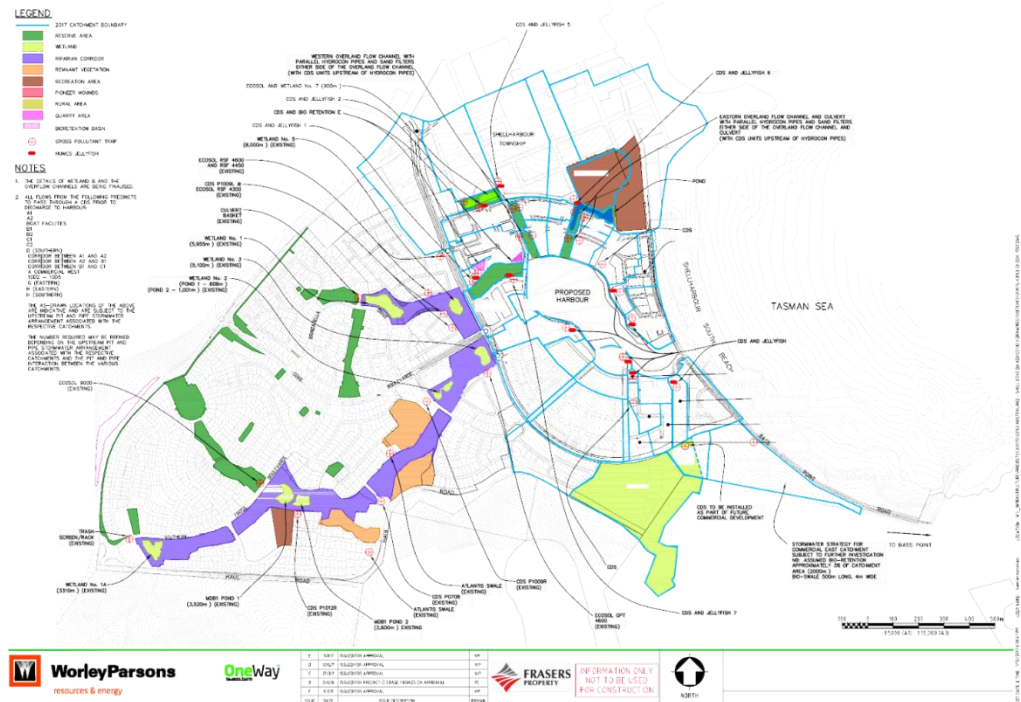


Figure 20. Stormwater Management Plan

Advisian has prepared a Stormwater and Water Cycle Management Plan (Appendix L) which details the proposal for Precincts B2 and C2 and demonstrates compliance with the terms of the Concept Plan Approval and Statement of Commitments.

## 5.7 Consistency with Concept Plan Approval (MP07\_0027)

The Concept Plan Approval issued in respect of MP07\_0027 under Part 3A (repealed) of the EP&A Act states:

- (c) *All future applications (under Part 3A and Part 4 of the EP&A Act) are subject to further environmental assessment requirements (as specified in Schedule 3 of this approval) in accordance with sections 75P(1)(a) and 75P(2)(c) of the EP&A Act.*

The Concept Plan Approval specifies various conditions that are required to be satisfied by future development applications within the Boat Harbour Precinct at Shell Cove. The Statement of Commitments submitted with the Concept Plan is part of that approval. The following table provides an assessment of the proposal against the Concept Plan Approval and Statement of Commitments.

The terms of the Concept Plan Approval required a number of studies to be prepared and submitted as part of the first Development Application, including:

- Coastal Hazard Study prepared by Haskoning Australia; and
- Fauna Survey for the Green and Golden Bell Frog prepared by Kevin Mills and Associates Pty Ltd.

It should be noted that these documents were included in the DA for Precincts B1 and C1, approved in November 2013 (DA 411/2013). The terms of the Concept Plan Approval and Statement of Commitments also require a range of specialist studies and urban design components to be prepared and submitted to address successive stages of the Shell Cove Boat Harbour Precinct (The Waterfront Shell Cove).

To address these requirements of the Concept Plan Approval and Statement of Commitments the following studies have been undertaken in respect of Precincts B2 and C2:

- Coastal Hazards Report
- Precincts B2 and C2 Urban Design Guidelines
- Landscape Plans
- Utilities and Services Strategy
- Earthworks Strategy
- Flood Assessment
- Stormwater and Water Cycle Management Plan
- Acid Sulfate Soils Management Plan
- Traffic Impact Assessment

The following table provides a schedule of the conditions of the Approval and Statement of Commitments and provides an assessment of the compliance of the proposed subdivision of Precincts B2 and C2, including where relevant, a summary of relevant specialist studies.

The assessment concludes that the Consent Conditions and Statement of Commitments have been fully addressed and that the proposed subdivision is consistent with the Part 3A Consent.

The assessment concludes that the Consent Conditions and Statement of Commitments have been fully addressed and that the proposed subdivision is consistent with the Concept Plan Approval.



## Shell Cove Boat Harbour Precinct Terms of Approval Schedule 2

Part A – Terms of approval	Applicability	Comments and response
<p>Approval for the Boat Harbour Precinct</p> <p><i>Except as modified by this approval, Concept Plan approval is granted only to the carrying out of development within the Concept Plan area as listed below and in more detail in Shell Cove Boat Harbour Precinct Concept Plan Application and Environmental Assessment 26 February 2010, as amended by the Preferred Project Report:</i></p> <p><i>(a) Up to 1,238 dwellings with a total gross floor area of approximately 150,000m<sup>2</sup> comprising single dwellings, medium density and apartments;</i></p> <p><i>(b) a business park with a maximum gross floor area of 30,000m<sup>2</sup>;</i></p> <p><i>(c) retail/commercial hotel/community development with a maximum gross floor area of 22,000m<sup>2</sup>;</i></p> <p><i>(d) public open space and wetlands; and</i></p> <p><i>(e) associated drainage, stormwater infrastructure and roads.</i></p>	Applicable	<p>The introduction contains a descriptions of the key elements of the approval.</p> <p>The DA for Precincts B2 and C2 is consistent with the scope of development approved as part of the Concept Plan.</p>
<p>Approved Plans and Documentation</p> <p><i>The project shall be generally in accordance with the following plans and documentation:</i></p> <p><i>(a) Shell Cove Boat Harbour Precinct Concept Plan Application and Environmental Assessment, dated 26 February 2010, prepared by LFA (Pacific) Pty Ltd, Including Volumes 1 and 2 and Appendices A to P;</i></p> <p><i>(b) Shell Cove Boat Harbour Precinct Preferred Project Report, dated November 2010 prepared by LFA (Pacific) Pty Ltd, including Appendices 1 and 2; and</i></p> <p><i>(c) Statement of Commitments (Schedule 4)</i></p> <p><i>Except as otherwise provided by the terms of this approval.</i></p>	Applicable	<p>This schedule addresses the proposal for Precincts B2 and C2 against the Terms of Approval (Schedule 2), Further Assessment Requirements (Schedule 3) and the Statement of Commitments (Schedule 4).</p> <p>Section 5.2 of this Statement provides a detailed assessment of the proposal against the Concept Plan Application, Environmental Assessment and Preferred Project Report (PPR).</p> <p>The DA for Precincts B2 and C2 has been prepared in cognisance of the approved plans and documentation.</p>

Part A – Terms of approval	Applicability	Comments and response
<p>Limits on Approval</p> <p><i>This approval does not allow any components of the Concept Plan to be carried out without further approvals or consents being obtained.</i></p>	Applicable	Complies. Any consent issued in respect of this DA for the subdivision of Precincts B2 and C2 will facilitate the next stage of development in the Boat Harbour Precinct.
<p>Lapsing of Approval</p> <p><i>Approval of Major Project No. 07 0027 shall lapse 5 years after the date of determination unless works the subject of any related application have been physically commenced, on or before that lapse date. The Director General may extend this lapse date if the proponent demonstrates to the satisfaction of the Director-General that the project remains current appropriate and reflective of the best use of the site at the date the approval would otherwise lapse.</i></p>	Applicable	Noted. The Concept Plan Approval issued in respect of the Shell Cove Boat Harbour Precinct is current and physical commencement has been achieved with construction commenced on Precincts B1 and C1 in October 2015.
<p>Inconsistencies</p> <p><i>In the event of any inconsistency between:</i></p> <p><i>a) the terms of this approval and the Statement of Commitments, the conditions of this approval prevail; and</i></p> <p><i>b) the terms of this approval and the documents referred to In Part A-condition 2, the conditions of this approval prevail.</i></p> <p><i>(2) If there is any Inconsistency between the terms of the approval of the concept plan and any project approval or development consent, this concept approval shall prevail to the extent of the inconsistency.</i></p>	Applicable	Noted.
Part B - Modifications to the Concept Plan	Applicability	Comments & Response
<p><i>There are no modifications required to the Concept Plan outlined in the Shell Cove Boatharbour Precincts Preferred Project Report.</i></p>	Applicable	Noted



## Schedule 3 Part C – Further Environmental Assessment Requirements

The following environmental assessment requirements apply to the entire project and the requirements specified below must be submitted and approved by the relevant approval authority with the first application made under Part 3A or Part 4 of the EP&A Act.

Part C - Further Environmental Assessment Requirements	Applicability	Comments & Responses
<p><b>Coastal Hazards Study</b></p> <p><i>A detailed Coastal Hazards Study, prepared by a suitably qualified person comprising a coastal hazard risk assessment for the project taking into consideration the requirements of the Shellharbour Coastal Hazard Study (April 2010), and complying with the NSW Government's coastal risk planning benchmarks. The study must include an assessment of adequacy of height of sea wall against the predicted impacts of sea level rise, inundation and more frequent and intense storms to the year 2100; and details of dunal stabilisation works to 4.5m AHD. It must also provide details of responsibility for implementation and funding of the operational phase of the Beach Nourishment/ Rehabilitation Management Plan.</i></p>	Applicable	<p>A Coastal Hazards Report was undertaken by Greg Britton of Royal Haskoning DHV (RHDHV) to address Consent Condition C1. A copy of this Study was submitted to Shellharbour Council as part of the subdivision DA submitted in respect of Precincts B1 and C1 on the 4th of November 2013.</p> <p>A further study has been undertaken by Greg Britton of Royal Haskoning DHV (RHDHV) 19 April 2018 as supporting information to Precinct B2 and C2.</p> <p>Coastal Hazard reports are provided in Appendix O.</p>
<p><b>Fauna Assessment</b></p> <p><i>A contemporary fauna assessment and survey for the Green and Golden Bell Frog undertaken in accordance with 'Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna - Amphibians, Department of Environment and Climate Change' (April 2009). If the assessment concludes that there will be an impact on the Green and Golden Belt Frog, appropriate mitigation measures and/or changes must be incorporated into the project as recommended by the assessment.</i></p>	Applicable	<p>A Green and Golden Bell Frog Habitat Survey was undertaken in 2010, together with a Fauna Survey for the Green and Golden Bell Frog (GGBF) in 2012. The surveys have been undertaken by Kevin Mills and Associates, in accordance with DECCW's 'Threatened species survey and assessment guidelines: field survey methods for fauna – Amphibians (DECCW, 2009)' for the entire Shell Cove Boat Harbour Precinct (The Waterfront Shell Cove).</p> <p>A copy of the Fauna Survey for the GGBF is included at Appendix C.</p> <p>A summary of the findings are set out below:</p> <ul style="list-style-type: none"> <li>The Habitat Survey concluded there is no critical habitat for the GGBF in the Shell Cove Boat Harbour Precinct (The Waterfront Shell Cove) study area. The Fauna Survey of the Shell Cove Boat Harbour Precinct (The Waterfront Shell Cove) did not find any GGBF in the study area and found that frogs in general were absent or uncommon in the majority of wetlands;</li> </ul>

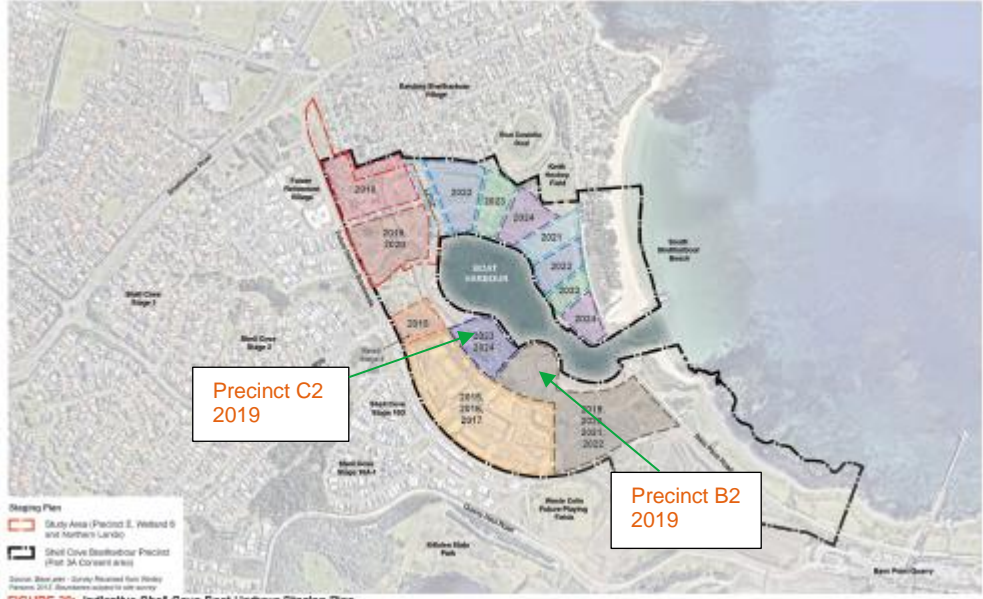
Part C - Further Environmental Assessment Requirements	Applicability	Comments & Responses
		<ul style="list-style-type: none"> <li>The surveys found that although the physical habitats appear suitable for Bell Frogs, the universal occurrence of large populations of introduced Plague Minnow (<i>Gambusia holbrooki</i>) militates against the presence of the species.</li> </ul> <p>Having regard to the above, it is considered that the proposed subdivision of Precincts B2 and C2 will have a neutral impact on the biodiversity values of species, with the potential for GGBF not likely to be impacted by the proposal.</p> <p>No specific mitigation measures are required.</p>

The following environmental assessment requirements apply, where relevant, to development of each stage/precinct of the project and must be submitted with any subsequent applications to the relevant approval authority made under Part 3A or Part 4 of the EP&A Act.

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
Urban Design		
<i>The proponent must submit detailed urban design guidelines for the project prepared by a suitably qualified architect or urban designer, for each stage. The guidelines must establish design controls which achieve the following where relevant to the particular stage:</i>	Applicable	<p>Ethos Urban has prepared Design Guidelines for the medium density housing and apartments within Precincts B2 and C2, a copy of which is included at Appendix M.</p> <p>All future DAs for built form on the superlots will be required to address compliance with the controls set out in the Guidelines.</p>
<i>Architectural diversity within all stages which complements the site's coastal context</i>	Not applicable	<p>This application seeks approval for subdivision only and provides the framework for coastal context.</p> <p>Built form within Precincts B2 and C2 will be the subject of separate application(s). To guide future development, Ethos Urban has prepared Design Guidelines for Precincts B2 and C2, a copy of which is included at Appendix M.</p>
<i>A variety of detailed designs which avoid monotones and repetition</i>	Not applicable	<p>This application seeks approval for subdivision only and provides the framework for coastal context.</p> <p>Built form within Precincts B2 and C2 will be the subject of separate application(s). To guide future development, Ethos Urban has prepared Design Guidelines for Precincts B2 and C2, a copy of which is included at Appendix M.</p>
<i>Design of the hotel building and public square in the commercial precinct which defines street and water edges, and create visual interest</i>	Not applicable	<p>None of these elements are located in Precincts B2 and C2.</p>
<i>A hotel building with tower angled to the east to maximise views to the coast the north and south and reduce impacts on the Boat Harbour and which may comprise a 3-4 storey high podium</i>	Not applicable	<p>None of these elements are located in Precincts B2 and C2.</p>

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>Demonstration of a mix of dwelling types and sizes for each residential precinct, including consideration of affordable and adaptable housing</i>	Not applicable	This application seeks approval for subdivision only. The subdivision provides the framework for diversity of future housing and consideration of affordable and adaptable housing.  Future residential development will be the subject of separate applications.
<i>Building separation, setbacks, solar access, visual and acoustic privacy, view corridors and an adequate level of environmental amenity</i>	Not applicable	As indicated above, the DA seeks approval for subdivision only.  Notwithstanding, the Design Guidelines prepared for Precincts B2 and C2, included at Appendix M, include provisions for future architectural character to reflect the site's coastal context, together with building setbacks, provisions for solar access, privacy and landscaping.
<i>Compliance with Crime Prevention Through Environmental Design (CPTED) principles</i>	Applicable	The draft plan of subdivision and Design Guidelines for Precincts B2 and C2 address the principles of Crime Prevention Through Environmental Design (CPTED) with the incorporation of a number of measures and provisions to enhance the security of Shell Cove. Further discussion in this regard is provided in Section 6.1.9 of this Statement.
<i>The location and distribution of public car parks</i>	Not applicable	There are no public car parks associated with the development of Precincts B2 and C2.
<i>Where applicable, that State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development principles and the Residential Flat Design Code Guidelines can be achieved</i>	Not Applicable	The DA is for the subdivision of Precincts B2 and C2. No built form is proposed. The State Environmental Planning Policy No.65 has been considered in relation to the proposal for future Residential Flat Buildings where applicable.
<i>Appropriate density, bulk, scale, textures and colours in relation to surrounding development, topography and streetscape</i>	Applicable	The DA is for subdivision only, no built form is proposed. Notwithstanding, the Design Guidelines prepared in respect of Precincts B2 and C2 (copy included at Appendix M) include controls for siting, design, materials and finishes etc.
<i>Consistency with the New South Wales Coastal Policy 1997 and Coastal Design Guidelines New South Wales in terms of visual impact, bulk, scale and amenity</i>	Applicable	The Shell Cove Boat Harbour Precinct (The Waterfront Shell Cove), is located within the Coastal Zone and is consistent with the Coastal Policy and the Coastal Design Guidelines. The proposed subdivision for Precincts B2 and C2 is consistent with the approved Concept Plan, the Coastal Policy and the Coastal Design Guidelines.  Further discussion in this regard is provided in Section 5.2.2 of this Statement.

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>Layout and design which satisfies the design considerations in Healthy by Design: A Planners Guide to Environment's for Active Living, National Heart Foundation of Australia</i>	Applicable	<p>The Subdivision Plan and Design Guidelines for Precincts B2 and C2 incorporate a range of design considerations that can reasonably be expected to result in a positive impact on the health of the new Shell Cove community including:</p> <ul style="list-style-type: none"> <li>• within walking distance of the future Shell Cove Town Centre;</li> <li>• close proximity of public transport; and</li> <li>• provision of green spaces and pedestrian walkways as well as shared cycle ways.</li> </ul>
<i>Healthy by Design</i>	Applicable	Pedestrian pathways through the proposed Precinct A subdivision will provide appropriate landscaping, lighting, seating, shade and signage for direct pathways along streetscapes and more leisurely pathways through open space elements.
<i>Clear addresses for buildings fronting public walkways along the harbour and direct access from walkways where possible</i>	Applicable	Precincts B2 and C2 include a key pedestrian and shared cycleway connection identified in the approved Concept Plan and Preferred Project Report, providing continuation of public access from the existing open space associated with the upstream wetlands to the new harbour and associated harbour side public domain.
<i>An indicative staging plan identifying the likely timing and sequence for each stage</i>	Applicable	An Indicative Shell Cove Boat Harbour Staging Plan is provided below. It is noted that this plan is indicative and is subject to a number of external market factors.

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
		 <p><i>Indicative staging plan</i></p>
<i>Buildings which address main avenues or boulevards and serviced by rear laneways / access ways to improve legibility and prevent gated communities</i>	Applicable	The subdivision plan includes streets and laneways to provide access to the rear of certain lots. Precincts B2 and C2 will not be a gated community.
<i>Design and layout to minimise noise impacts to sensitive residential areas near quarry boundary.</i>	Not Applicable	Precincts B2 and C2 are not within or near the Quarry Buffer Zone Boundary.
<b>Landscaping</b>		
<i>A landscape plan prepared by a suitably qualified landscape architect detailing the locations, types and treatments for</i>	Applicable	A Landscape Plan for the public domain has been prepared by Group GSA, a copy of which is included at Appendix H.

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>landscaping and Public Domain elements with consideration of Council's requirements.</i>		
<b>Noise Management Assessment</b>		
<p><i>A detailed Noise Management Assessment Identifying:</i></p> <p><i>Traffic noise mitigation measures for the road design;</i></p>	Applicable	<p>An assessment of Air Quality and Noise was prepared by Wilkinson Murray Pty Ltd in 2010, as part of the Concept Plan documentation. The report identified three key areas – traffic noise, noise associated with the future boat storage facility and quarry noise (operational and quarry haul road).</p> <p>All roads within Precincts B2 and C2 are classified as local roads and are not located within 40 metres of a collector road. As such no specific measures are required to mitigate noise associated with traffic.</p> <p>The future boat storage and maintenance facility located in Precinct A is located approximately 80m to the south east of the nearest residential lot in Precincts B2 and C2 (proposed Lot 3010). The Noise Impact Assessment prepared by Wilkinson Murray in relation to Precinct A includes recommendations for acoustic treatment associated with this facility (noise walls) to mitigate the impact on future residential development in Precinct A, which can also be reasonably expected to benefit Precincts B2 and C2.</p> <p>Noise associated with the operation of Bass Point Quarry was predicted to meet the noise criterion at all surveyed locations within the Concept Plan area. Similarly, noise from the quarry haul road was predicted to be satisfactory at all residential lots within the Concept Plan area.</p>
<p><i>Areas which require acoustic treatments to dwelling facades to provide satisfactory Indoor noise levels; and</i></p>	Not applicable	<p>This application seeks consent for subdivision only. Built form will be the subject of future applications.</p>
<p><i>Appropriate mitigation measures (the use of mounds and landscape buffers, not acoustic walls) for the design and layout of stages affected by truck noise from the Quarry Haul Road, dry boat storage and marina activities.</i></p>	Not applicable	<p>Precincts B2 and C2 are physically removed from the Quarry Haul Road and the future dry boat storage (approx. 730m and 150m respectively) and as such it is considered that no specific mitigation measures are required.</p>
<b>Utilities</b>		



Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>Address and document the existing capacity and requirements of the project for utilities including any necessary augmentation and staging of any infrastructure works, In consultation with relevant agencies.</i>	Applicable	<p>The Shell Cove - Precinct A Proposed Utility, Sewer &amp; Water Services Strategy prepared by Arcadis (Appendix K), includes a review of existing service capacity, identification of necessary augmentation and new works to service the proposed subdivision of Precincts B2 and C2 and addresses indicative staging of the infrastructure works.</p> <p>The report indicates that there are no utilities within Precincts B2 and C2 that will require diversion prior to the commencement of construction works and that sewer, potable water, electability, gas and telecommunication services can be readily provided to accommodate the development.</p> <p>Further discussion in this regard is included at Section 4.8 of this Statement.</p>
<b>Earthworks Strategy</b>		
<i>Provide a detailed Earthworks Strategy, prepared by a suitably qualified person which addresses erosion and sedimentation controls and includes measures to manage acid sulfate soils and stockpiling.</i>	Applicable	Arcadis has prepared an Earthworks Strategy in respect of Precincts B2 and C2 (Appendix J) which addresses erosion and sediment controls and Acid Sulfate Soils. An Acid Sulfate Soils Management Plan has also been prepared by SMEC Australia (Appendix I) to inform the management and mitigation of Acid Sulfate Soils.
<b>Remedial Action Plan</b>		
<i>A Remedial Action Plan is to be prepared for the former golf course area and the south-eastern area of the site at the location of the former farm structure by a suitably qualified person in accordance with Managing Land Contamination: Planning Guidelines SEPP 55 - Remediation of Land (DUAP/EPA, 1998), based on the recommendations and conclusions of the Phase 2 Contamination Assessment prepared by Douglas Partners dated October 2010 (Appendix 2D of the Preferred Project Report).</i>	Not applicable	The former golf course does not extend into Precincts B2 and C2 Refer to Appendix B Douglas Partners Letter (7 June 2018) Contaminated Land Comment for Proposed Precinct B2 and C2 Shell Cove.
<b>Flood Assessment</b>		

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>A detailed Flood Assessment prepared by a suitably qualified person identifying flood affected parts of the land and showing how the proposed project at each stage will comply with Shellharbour City Council Floodplain Risk Management Development Control Plan (April 2006), (except where it is inconsistent with NSW State Government policy and guidelines), and comply with and the government's sea level rise and climate change benchmarks, current at the time of preparation of the Flood Assessment. The findings of the Flood Assessment must inform the ultimate layout and design of each stage of the project.</i>	Applicable	<p>Advisian has prepared a detailed Flood Assessment for Precincts B2 and C2 (Appendix N) which addresses the provisions of Council's Floodplain Risk Management DCP and the NSW Coastal Planning Guideline: Adapting to Sea Level Rise.</p> <p>The proposed development is consistent with the Concept Plan Approval. The Assessment demonstrates that the proposed development of Precincts B2 and C2 will not cause any additional existing properties to become affected by the Flood Planning Area.</p> <p>A sensitivity test which assessed the effects of sea level rise by Year 2100 was completed for the adjacent Precinct A development. It showed that a heightened tailwater will not cause an increase in flood levels at Precinct B2 and C2 or its access routes during events up to and including the 100 year ARI storm. An impact of less than 10 mm increase in flood levels is expected during the PMF sea level rise scenario, which will not manifest as any material change in flood conditions.</p> <p>The assessment has demonstrated that the post-development flood mapping is consistent with a flood emergency response strategy consisting of evacuation during events up to the 100 year ARI storm and shelter-in-place during larger events.</p>
<i>The assessment must include a flood planning levels map, details of flood planning levels adjacent to the boat harbour and for the major overland flow paths; and mitigation measures to reduce Impacts on flood levels in vicinity of Ron Costello Oval.</i>	Applicable	Flood level maps are provided as part of the Advisian Shell Cove Boat Harbour Precincts B2 and C2 Flood assessment report (Appendix N).
<b>Stormwater and Water Cycle Management Plan</b>		
<i>Identify drainage, stormwater and groundwater management issues, on-site stormwater detention (if required), and drainage infrastructure to ensure achievement of the water quality targets identified In the Boat Harbour Development Consent 95/133 for each stage of the project consistent with Council's requirements.</i>	Applicable	<p>The 20 year ARI flow will be conveyed within the piped drainage network and all flows during the 100 year ARI event will be conveyed within road reserves or designated reserve lots. This has been developed in accordance with the requirements of the Shellharbour DCP 2013 and the Development Design Specification (Shellharbour City Council, 2004).</p> <p>A stormwater treatment strategy has been developed for Precincts B2 and C2 and adjacent catchments which will involve the use of GPTs, and JellyFish systems. These systems will assist in achieving the stormwater quality targets of the overall Shell Cove development, which include ensuring post-development pollutant loads do not exceed</p>

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
		<p>pre-development loads and pollutant reduction targets are met. The strategy includes various WSUD elements, which meets the relevant Concept Plan Approval requirements for Ecologically Sustainable Development and Infrastructure.</p> <p>No on-site detention systems are required for Precincts B2 and C2.</p> <p>The existing groundwater conditions are not expected to be significantly impacted as a result of the development in Precincts F&amp;G. The concentration of pollutants in the post-development runoff is expected to be higher than that in the pre-development scenario. However, given the significant reduction in expected infiltration across areas most likely to contribute to any increased pollutants, the existing groundwater is unlikely to be impacted significantly.</p> <p>A copy of the Stormwater and Water Cycle Management Plan is included at Appendix L.</p>
<b>Environmental Management Plan</b>		
<i>An Environmental Management Plan (EMP), prepared by a suitably qualified person demonstrating measures to mitigate potential impacts on aquatic habitats and aquatic species during the construction and operation periods. The EMP must be prepared in consultation with the Department of Environment Climate Change and Water.</i>	Not Applicable	<p>The development consent for the harbour works, granted on 26 November 1996, identified the requirement for Environmental Management Plans (EMP's) to be prepared for each of the aspects of the harbour works and required the construction of a new integrated wetland to compensate the removal of the Shellharbour Swamp wetland. This has been achieved by the completion of the Myimbarr Wetland complex.</p> <p>Under the terms of the development consent for the harbour works the remaining aquatic habitats within the Boat Harbour Precinct area, west of Boollwaroo Parade, including the Shellharbour lagoon are to be excised under existing construction approvals.</p>
<b>Construction Management Plan</b>		
<i>A comprehensive Construction Management Plan, including a Traffic Management Plan Identifying truck routes, vehicular frequency, hours of operation, use of equipment and measures to minimise dust, noise and vibration Impacts on surrounding areas, and ensure vehicular and pedestrian safety.</i>	Applicable	<p>A number of construction impacts have been reviewed and mitigation strategies established including the following reports:</p> <ul style="list-style-type: none"> <li>• Erosion and Sedimentation Control Plan</li> <li>• Acid Sulfate Soil Management Plan (ASSMP)</li> <li>• Traffic Management Plan</li> </ul> <p>The CMP will include a review of water quality impacts and develop strategies to address water quality issues during construction where appropriate.</p>

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<b>Ecologically Sustainable Development</b>		
<i>Demonstrate that any future development will incorporate ESD principles in its design, construction and ongoing operation phases, including water sensitive urban design measures, water re-use/recycling, energy efficiency, recycling and waste disposal.</i>	Applicable	A stormwater treatment strategy has been developed for Precincts B2 and C2 and adjacent catchments which will involve the use of GPTs, and JellyFish systems. These systems will assist in achieving the stormwater quality targets of the overall Shell Cove development, which include ensuring post-development pollutant loads do not exceed pre-development loads and pollutant reduction targets are met. The strategy includes various WSUD elements, which meets the relevant Concept Approval requirements for Ecologically Sustainable Development and Infrastructure.
<b>Acid Sulfate Soils</b>		
<i>An Acid Sulfate Soil Management Plan (ASSMP) for each stage of the project for actual and potential acid sulphate soils prepared by a suitably qualified person in accordance with the NSW Acid Sulfate Soil Manual (NSW Acid Sulfate Soil Management Advisory Committee, August 1998). The ASSMP must examine how the pre-loading process and treatment of ASS will be staged and managed throughout the life of each stage especially regarding the Impacts of trenches (for service and drainage) on groundwater and acid leachate.</i>	Applicable	<p>SMEC Australia Pty Ltd has prepared an ASS Management Plan for the Precincts B2 and C2 subdivision (Appendix I). The Plan examines how the pre-loading process and treatment of ASS will be staged and managed especially regarding the impacts of trenches (for service and drainage) on groundwater and acid leachate.</p> <p>The objective of the Plan is to reduce the potential environmental impacts associated with the disturbance of ASS within the area of the proposed works. It presents a framework for the approach and methodology of ASS management at the site to be followed by the contractor and its subcontractors.</p>
<b>Social Infrastructure</b>		
<i>Social infrastructure shall be provided in accordance with Council's Section 94 Contributions Plan. The details of any playground, local library and multi-purpose community centre shall be provided with each stage of the project.</i>	Not applicable	The subdivision of Precincts B2 and C2 does not include any social infrastructure.

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<b>Local Infrastructure Contributions</b>		
<i>Contributions towards local infrastructure in accordance with the EP&amp;A Act 1979 must be provided.</i>	Applicable	Contributions are to be in accordance with Shellharbour Council's Section 94 Plan.
<b>Erosion and Sedimentation Control</b>		
<i>A detailed Erosion and Sedimentation Control Plan prepared in accordance with Managing Urban Stormwater: Soils and Construction, Landcom (March 2004) ('the Blue Book') detailing the design, construction and implementation of measures to manage stormwater, and erosion and sediment' control during the construction phases of each stage of the project.</i>	Applicable	<p>A concept for erosion and sediment control measures is included in the Earthworks Strategy report prepared by Arcadis (Appendix J) in accordance with <i>Managing Urban Stormwater Soils and Construction</i> (Landcom, 2014). These measures will mitigate the impacts of land disturbance on soils, landforms and receiving waters during construction.</p> <p>A preliminary Erosion and Sediment Control Plan is also included in the drawings prepared by Arcadis (Drawing No. C-B2C2-101 and C-B2C2-102 at Appendix J).</p> <p>The proposed control measures include dirty water diversions, sediment fences and sediment basins. It is expected that this plan will be updated during detailed design, prior to the commencement of the construction works to consider construction staging more closely.</p>
<b>Traffic Assessment</b>		
<i>An updated traffic impact assessment prepared by a suitably qualified person for each stage/precinct of the project which includes a cumulative impact assessment having regard to the status of the future construction of the intersection of Harbour Boulevard and Shellharbour Road.</i>	Applicable	<p>Arcadis has prepared a Traffic Impact Assessment for Precincts B2 and C2 (Appendix G) which considers the cumulative development scenario which is the operation of all existing and future precincts.</p> <p>Based on the revised traffic volumes it was determined that all intersections would operate satisfactorily with the exception of the Shellharbour Road / Harbour Boulevard / Wattle Road intersection. Additional mitigation measures are proposed for this intersection, as well as the Addison Street / Harbour Boulevard intersection.</p> <p>Further discussion in this regard is included in Section 5.6.7 of this Statement.</p>
<b>Public Access</b>		
<i>The detailed design and layout of the project must adopt the following principles:</i>		

Part D - Further Environmental Assessment Requirements	Applicability	Comments and Responses
<i>(a) direct, legible and inviting public pedestrian access from adjoining residential development and pedestrian connections which follow existing and proposed well-connected streets;</i>	Applicable	The subdivision plan provides for direct pedestrian and cycle networks between main roads, local roads and the harbour (refer to Figure 15. Proposed shared pedestrian / bicycle path network relative to Precincts B2 and C2).
<i>(b) clear and direct access from the public walkway around the harbour to streets that meet the harbour edge;</i>	Applicable	The subdivision plan provides for connection to the future proposed public walkway around the harbour by an open pedestrian network (refer to Figure 15. Proposed shared pedestrian / bicycle path network relative to Precincts B2 and C2).
<i>(c) clear, through site pedestrian links with active street frontages, direct and legible access to key points of interest, including Shell Harbour village, which are publicly accessible at all times; and</i>	Applicable	The subdivision plan provides for a pedestrian network to all future developments and key points of interest including the Shellharbour Village and the beach (refer to Figure 15. Proposed shared pedestrian / bicycle path network relative to Precincts B2 and C2).
<i>(d) consistency with the Shellharbour Shared Use path Strategy (Shellharbour City Council, 10 August 2010) unless otherwise justified.</i>	Applicable	<p>For Precincts B2 and C2, the proposed shared path plan (refer Traffic Impact Assessment at Appendix G) will extend north along Road MC03 and then continue west along the Marina which will provide direct connectivity to the Shell Cove Town Centre. It also continues to the north of Precinct A. The shared path will improve the connectivity for the broader pedestrian/bicycle network for those living in medium to high density residential properties within the Proposal. The proposed shared paths have been designed in accordance with Shellharbour Local Government Area Shared Use Path Strategy 2010.</p> <p>The proposed shared paths have been designed in accordance with Shellharbour Local Government Area Shared Use Path Strategy 2010.</p>

## Shell Cove Boat Harbour Precinct Statement of Commitments Schedule

Commitment	Comment Additional Information / Response
<b>General commitment</b>	
<p><i>"The Proponent undertakes to pursue the development in accordance with the Concept Plan and Preferred Project Report, which reflects the Shell Cove Masterplan, the Illawarra Regional Strategy, the Illawarra Regional Environmental Plan, the Shellharbour Local Environmental Plan, the Environment Protection and Biodiversity Conservation Act and the appropriate State Environmental Planning Policies".</i></p> <p><i>"The Proponent undertakes to obtain all necessary approvals required by State and Commonwealth legislation prior to undertaking subsequent stages of the development"</i></p>	<p>The subdivision DAs for Precincts B2 and C2 are in accordance with the Part 3A Concept Plan and Preferred Project Report. They reflect relevant planning controls and policies.</p> <p>As required under the Part 3A Approval the following environmental assessments were required to be undertaken as part of the part of the first application made for the development of the Shell Cove Boat Harbour Precinct:</p> <ul style="list-style-type: none"> <li>• Coastal Hazards Report; and</li> <li>• Fauna Assessment</li> </ul> <p>Both these studies have been completed and were submitted to Council on the 4 November 2013 as part of the DA for subdivision of Precincts B1 and C1.</p>
<b>Strategic Planning</b>	
<p><i>The Proponent undertakes to respond to relevant local, regional and State planning strategies.</i></p>	<p>The Subdivision DA is consistent with the Concept Plan Approval, which responds to relevant local, regional and state planning strategies.</p>
<p><i>The Proponent undertakes to consider the recommendations of the Shellharbour Local Government Area Retail/ Commercial Study and Employment Study, which includes:</i></p> <p><i>Enhancing public domains in support of Shell Cove as a creative and cultural hub.</i></p> <p><i>Establishing a retail centre and operating a supermarket.</i></p> <p><i>Establishing a Business Park</i></p>	<p>Not applicable – the retail precinct and business park are located outside the boundaries of Precincts B2 and C2.</p>
<p><i>The Proponent undertakes to demonstrate consistency with the Sustainability Criteria set out in Appendix 1 of the Illawarra Regional Strategy, which includes:</i></p>	<p>The subdivision of Precincts B2 and C2 is consistent with the Concept Plan Approval for the Boat Harbour Precinct that demonstrates consistency with</p>



Commitment	Comment Additional Information / Response
<p><i>Providing infrastructure.</i></p> <p><i>Enhancing access to and within the Boat Harbour Precinct.</i></p> <p><i>Providing employment opportunities.</i></p> <p><i>Encouraging both conservation and enjoyment of the natural resources and coastal environment of Shell Cove.</i></p>	<p>the Sustainability Criteria set out in Appendix 1 of the Illawarra Regional Strategy including:</p> <ul style="list-style-type: none"> <li>• Provision of infrastructure to support the future residential development;</li> <li>• Providing physical access to and within the Boat Harbour Precinct through the construction of a new road network;</li> <li>• Creation of employment opportunities throughout the construction phase of the project; and</li> </ul> <p>Inclusion of environmental safeguards (WSUD, landscape treatment and other embellishment works) which will contribute to the conservation and enjoyment of the coastal environment in this locality.</p>
Urban Design, Visual Impact and Sustainability	
<p><i>The Proponent undertakes to respond to the surrounding area by addressing bulk, scale, amenity (including noise) and visual amenity, with regards to the NSW Coastal Policy (1997), which includes:</i></p> <p><i>Implementing maximum building heights of 4 storeys (excluding the landmark hotel which is proposed to have a maximum height of 8 to 9 storeys).</i></p> <p><i>Adopting a contemporary coastal village materials palette.</i></p> <p><i>Providing parks and boardwalks which establish public access to the harbour perimeter</i></p> <p><i>Establishing visual connections between streets and open spaces and the harbour.</i></p> <p><i>The Proponent undertakes to respond to the surrounding area by addressing bulk, scale, amenity (including noise) and visual amenity, with regards to the Coastal Design Guidelines of NSW (2003), which includes:</i></p> <ul style="list-style-type: none"> <li>• <i>Incorporating visual and physical links to the natural environment, such as integrating wetlands.</i></li> <li>• <i>Providing an open space network.</i></li> <li>• <i>Maintaining the Shell Cove Town Centre as a visual landmark.</i></li> </ul>	<p>This application does not seek approval for built form.</p> <p>Ethos Urban has prepared Design Guidelines for medium and high density residential development in Precincts B2 and C2 (Appendix M) which detail a range of site specific design guidelines including materials palette, setbacks and other relevant development controls consistent with previously approved Precincts at Shell Cove.</p> <p>Compliance with the Design Guidelines will be required to be addressed as part of future DAs for built form.</p>

Commitment	Comment Additional Information / Response
<ul style="list-style-type: none"> <li>Managing increased local population and visitor access to the foreshore</li> </ul> <p>The Proponent undertakes to ensure that the relevant residential components of the development demonstrate compliance with SEPP 65 - Design Quality of Residential Flat Development, which includes providing:</p> <ul style="list-style-type: none"> <li>Private open spaces.</li> <li>Courtyards.</li> <li>Useable balconies.</li> <li>Decks.</li> </ul>	
<b>Landscape</b>	
<p>The Proponent undertakes to implement street tree planting in accordance with a landscape plan to be submitted as part of each Project Application</p> <p>The Proponent undertakes to implement planting and other works in areas of public open space as designated in the landscape plan to be submitted as part of each Project Application.</p>	<p>Concept Landscape Plans have been prepared by Group GSA (Appendix M), which illustrate public domain works in Precincts B2 and C2 including indicative street planting to be undertaken by the proponent.</p>
<b>Infrastructure Provision</b>	
<p>The Proponent undertakes to assess existing capacity and provide infrastructure requirements for sewerage, water, electricity, telecommunications and gas.</p> <p>The Proponent undertakes to adopt Water Sensitive Urban Design principles in the provision of infrastructure requirements.</p> <p>The Proponent undertakes to obtain and maintain all necessary licences, permits and approvals for the development prior to and during construction.</p>	<p>Arcadis has prepared a Utilities, Sewer and Water Strategy (Appendix K).</p> <p>The proposed development adopts a water sensitive design by following Ecologically Sustainable Development principles in the design of stormwater treatment devices proposed in Precincts B2 and C2.</p> <p>The DA seeks consent for land subdivision and associated infrastructure and civil works.</p> <p>Sewer, potable water, electricity, gas and telecommunications utilities can be provided as part of the construction of Precincts B2 and C2, and can be connected to the existing network.</p> <p>Further discussion in relation to utility services connections is included at Section 4.8 of this Statement.</p>

Commitment	Comment Additional Information / Response
<b>Traffic and Access</b>	
<p><i>The Proponent undertakes to implement a traffic management strategy- in relation to the capacity of the road network to cater for additional traffic generation including service vehicles, access to and within the site, and connectivity to existing developments –with particular emphasis on the following key intersections:</i></p> <ul style="list-style-type: none"> <li>• <i>Shellharbour Road/Harbour Boulevard/Wattle Road - revised layout.</i></li> <li>• <i>Addison Street/Harbour Boulevard- new traffic signals.</i></li> <li>• <i>Brigantine Drive/Harbour Boulevard- single lane roundabout.</i></li> <li>• <i>Cove Boulevard/Harbour Boulevard - single lane roundabout.</i></li> <li>• <i>Road A/Harbour Boulevard - single lane roundabout</i></li> </ul> <p><i>The Proponent undertakes to consider the impact of the development on existing public transport provision, identify pedestrian movements and implement appropriate provisions for shared path/cycleway/public transport routes to the existing and proposed road network, including a Pedestrian Shared Zone in the Town Centre</i></p> <p><i>The Proponent undertakes to incorporate parking in accordance with the requirements as part of subsequent Project Applications</i></p> <p><i>The Proponent undertakes to protect existing public access to and along the beach and coastal foreshore and provide new opportunities for controlled public access including providing continuous public access to the perimeter of the harbour.</i></p> <p><i>The Proponent undertakes to maintain good access to the Bass Point Reserve.</i></p>	<p>Arcadis has prepared a Traffic Impact Assessment in support of the DA for Precincts B2 and C2 (Appendix G).</p> <p>A review of previous traffic generation and SIDRA modelling determined that the revised yield for the Shell Cove Boat Harbour precinct would be 36% higher than the previously adopted traffic volumes. Based on the revised traffic volumes it was determined that all intersections would operate satisfactorily with the exception of the Shellharbour Road / Harbour Boulevard / Wattle Road intersection.</p> <p>Based on the outcomes of this TIA, Consent Conditions Schedule 4 – Statement of Commitment 4.6 Point 1 has been generally satisfied.</p>
<b>Hazard Management and Mitigation Coastal Processes</b>	
<p><i>Under the separate Boat Harbour approval the Proponent undertook to implement a Beach Nourishment/ Rehabilitation Management Plan which</i></p>	<p>Details of coastal processes are set out in Consent Conditions Schedule - Schedule 3 - Part 1 Coastal Hazards Study.</p>

Commitment	Comment Additional Information / Response
<p><i>identifies measures to protect and rehabilitate the Shellharbour South Beach dunal system.</i></p> <p><i>The Proponent undertakes to ensure that beach behaviour is monitored to provide information which will facilitate effective management of natural coastal processes.</i></p> <p><i>The Proponent undertakes to respond to potential sea level rise as a result of climate change by ensuring that all habitable buildings within the Boat Harbour Precinct adopt a freeboard of 0.5m and providing a sea wall with a height of 2.00m AHD.</i></p>	<p>The Coastal Hazard Report prepared by Royal Haskoning DHV (Appendix O) identifies the impacts of sea level rise.</p> <p>A Flood Assessment and Stormwater Management Report for Precincts B2 and C2 has been prepared by Advisian (Appendix L).</p>
<b>Contamination</b>	
<p><i>The Proponent undertakes to identify any contamination on site and apply appropriate mitigation measures in accordance with the provisions of SEPP 55 - Remediation of Land</i></p> <p><i>The Proponent undertakes to remove any residual landfill within the site associated with the Shellharbour Swamp.</i></p> <p><i>The Proponent undertakes to ensure that further investigations of the former golf course area and the south-eastern area of the site at the location of the former farm structures will be carried out based on the recommendations and conclusions of the Phase 2 Contamination Assessment prepared by Douglas Partners dated October 2010 (Appendix 2D of the Preferred Project Report), as part of the relevant Project Application investigations.</i></p>	<p>A detailed contamination assessment of the Shell Cove Boat Harbour Precinct was prepared by Douglas Partners in 2010.</p> <p>A Targeted Site Investigation (TSI) was undertaken for the lands associated with the former golf course in Precinct E and Wetland 6. Based on the analytical results the TSI found that the area associated with the former golf course is compatible with the proposed residential use, that no further assessment of the site is required from a contaminated land perspective and that the preparation of a Remediation Action plan (RAP) is not required.</p> <p>Precincts B2 and C2 are located outside the TSI area and therefore have been assessed to have no contamination.</p> <p>The landfill associated with the Shellharbour Swamp (the former Council refuse / tip site) is not located with the extent of Precincts B2 and C2.</p>
<b>Acid Sulfate Soils</b>	
<p><i>The Proponent undertakes to treat any disturbed ASS material in accordance with the ASS Management Advisory Committee Guidelines</i></p>	<p>An Acid Sulfate Soil Management Plan (ASSMP) has been prepared by SMEC Australia Pty Ltd in respect of the Precincts B2 and C2 subdivision (Appendix I).</p> <p>The ASSMP has been prepared in general accordance with the various guidelines published by the Acid Sulfate Soils Management Advisory Committee (ASSMAC).</p>
<b>Bushfire</b>	

Commitment	Comment Additional Information / Response
<p><i>The Proponent undertakes to implement an Asset Protection Zone from the revegetated dunal zone located to the east of the study area to any residential, commercial or retail buildings within the Boat Harbour Precinct in accordance with the Planning for Bushfire Prevention guidelines.</i></p>	<p>N/A</p> <p>Precincts B2 and C2 are not located on bushfire prone land or located in the vicinity of the revegetated dunal zone along the coastline.</p>
<b>Geotechnical</b>	
<p><i>The Proponent undertakes to preload areas of soft soil prior to construction in accordance with the separate Boat Harbour approval.</i></p> <p><i>The Proponent undertakes to ensure that following satisfactory preloading, the compacted preload is removed and extra compacted fill is placed, as required, to match the final design level.</i></p>	<p>N/A</p> <p>The Proponent has obtained approvals for implementing pre-loading of soft soil in the Boat Harbour Precinct under the framework of the Ministerial approval for the Boat Harbour (DA 95/133).</p> <p>These works have now been completed.</p>
<b>Flooding</b>	
<p><i>The Proponent undertakes to provide waterway corridors to be used as floodways - using Water Sensitive Urban Design principles and incorporating wetlands, natural creeklines and open space areas - to manage and contain flood hazards.</i></p> <p><i>The Proponent undertakes to implement a Flood Emergency Response which includes remaining on site during PMF events and maintaining safe pedestrian and vehicular access routes out of the Boat Harbour Precinct for events up to the 100yr ARI flood.</i></p> <p><i>The Proponent undertakes to respond to sea level rise by adopting Flood Planning Levels based upon the 100 year ARI flood level plus 0.90 m sea level rise (for the year 2100) plus 0.50 m (to comply with Council's freeboard requirement).</i></p> <p><i>The Proponent undertakes to prepare a FPL map in accordance with Figure 5 of the NSW Coastal Planning Guideline Adapting to Sea Level Rise for each Project Application when more detailed definition of final design levels is available. This will include localised flood modelling for each stage of the Boat Harbour Precinct to demonstrate compliance with the NSW Coastal Planning Guideline Adapting to Sea Level Rise.</i></p>	<p>Precincts B2 and C2 subdivision is consistent with the Concept Plan Approval.</p> <p>It has been shown that the proposed subdivision of Precincts B2 and C2 will not cause any additional existing properties to become affected by the Flood Planning Area.</p> <p>Advisian has prepared a detailed Flood Assessment for Precincts B2 / C2 (Appendix X) which addresses the provisions of Council's Floodplain Risk Management DCP and the NSW Coastal Planning Guideline: Adapting to Sea Level Rise.</p> <p>The proposed development is consistent with the Concept Plan Approval. The Assessment demonstrates that the proposed development of Precincts B2 / C2 will not cause any additional existing properties to become affected by the Flood Planning Area.</p> <p>A sensitivity test which assessed the effects of sea level rise by Year 2100 was completed for the adjacent Precinct A development. It showed that a heightened tailwater will not cause an increase in flood levels at Precinct B2 and C2 or its access routes during events up to and including the 100 year</p>

Commitment	Comment Additional Information / Response
<p><i>The Proponent undertakes to prepare an assessment of the impact of 0.9m sea level rise on the 5 year and 100 year ARI and PMF storm events during detailed design phases of the Boat Harbour Precinct associated with each Project Application.</i></p> <p><i>The Proponent undertakes to ensure that the development does not result in any significant increase in flood levels on adjacent properties. Flood impacts will not exceed those identified in Appendix F of the EA.</i></p> <p><i>The Proponent undertakes to ensure that flood risk will be assessed in each Project Application for consistency and compliance with the Concept Plan and compliance with the NSW Flood Plain Development Manual 2005 and Council's Flood Plain Risk Management DCP (except where inconsistent with NSW State Government Policies and Guidelines).</i></p>	<p>ARI storm. An impact of less than 10 mm increase in flood levels is expected during the PMF sea level rise scenario, which will not manifest as any material change in flood conditions.</p> <p>The assessment has demonstrated that the post-development flood mapping is consistent with a flood emergency response strategy consisting of evacuation during events up to the 100 year ARI storm and shelter-in-place during larger events.</p> <p>A copy of the Flood Assessment report prepared by Advisian is included at Appendix N.</p>
<b>Water Cycle Management</b>	
<p><i>The Proponent undertakes to mitigate the potential impact of the development on the environment through a Water Cycle Management Strategy which includes:</i></p> <p><i>Rainwater tanks.</i></p> <p><i>Grass swales.</i></p> <p><i>Vegetated drainage corridors.</i></p> <p><i>Bio-retention swales and basins.</i></p> <p><i>Gross pollutant traps.</i></p> <p><i>Wetlands.</i></p> <p><i>The Proponent undertakes to implement a Water Cycle Management Strategy which adopts Water Sensitive Urban Design principles and identifies measures to ensure protection of water quality within the sensitive near-shore coastal environment.</i></p> <p><i>The Proponent undertakes to provide multiple, connected freshwater wetlands to the north and west of the Town Centre in accordance with the Stormwater Quality Management Strategy.</i></p>	<p>A stormwater treatment strategy has been developed for Precinct B2 and C2 and adjacent catchments which will involve measures including GPTs, rainwater tanks, grass swales, wetlands and various proprietary products, including the Stormwater360 JellyFish system and HydroCon porous concrete pipes. These systems will assist in achieving the stormwater quality targets of the overall Shell Cove development, which include ensuring post-development pollutant loads do not exceed pre-development loads and pollutant reduction targets are met. The strategy includes various WSUD elements, which meets the relevant Concept Approval requirements for Ecologically Sustainable Development and Infrastructure.</p> <p>A copy of the Stormwater and Water Cycle Management Plan prepared by Advisian is included at Appendix L.</p>
<b>Heritage and Archaeology</b>	



Commitment	Comment Additional Information / Response
<p><i>The Proponent undertakes to progress works in accordance with the approved Archaeological and Heritage Protection Plans and the ss87/90 consent and permit (No 2534) of the NP&amp;W Act.</i></p> <p><i>The Proponent undertakes to protect the Shellharbour Aboriginal Objects (Sites) identified as being of relatively high archaeological value in accordance with the Archaeological and Heritage Protection Plan and the consent and permit granted by the Department of Environment and Climate Change.</i></p> <p><i>The Proponent undertakes to notify the National Parks and Wildlife Service immediately in the event that any previously unidentified Aboriginal relics (including human skeletal material) are discovered on the site.</i></p>	<p>The NP&amp;W Act ss 87/90 consent and permit no. 2534 were granted by the NSW Department of Environment and Climate Change (DECC) for the Shell Cove Project Area.</p> <p>The consent was to carry out destruction of an aboriginal object / place in the following locations:</p> <ul style="list-style-type: none"> <li>• Stone artefact scatter; (52-5-0436);</li> <li>• Stone artefact scatter and associated potential archaeological deposit (52-5-0437); and</li> <li>• Stone artefacts scatter (52-5-0438).</li> </ul> <p>These sites have been identified by DECC as having a low or no archaeological significance.</p> <p>Permit 2534 is to collect and / or excavate for the purpose of salvage the shell midden site, together with any human skeletal material, if and where uncovered across the entire Boat Harbour Precinct.</p> <p>The works associated with this consent and have been undertaken accordance with the consent.</p> <p>The Proponent undertakes to notify the National Parks and Wildlife Service immediately in the event that any previously unidentified Aboriginal relics (including human skeletal material) are discovered on the site.</p>
Flora and Fauna	
<p><i>In accordance with the Boat Harbour Ministerial Consent, the Proponent has undertaken to compensate for any impact of the development on aquatic and terrestrial flora and fauna and their habitats by the construction of the Myimbarr Wetlands.</i></p> <p><i>The Proponent undertakes to enhance the environment through the use of native flora in landscaped parklands and public spaces.</i></p> <p><i>The Proponent undertakes to mitigate the impact of construction on flora and fauna populations through erosion and sediment control measures including:</i></p> <ul style="list-style-type: none"> <li>• Diversion drains.</li> <li>• Rapid revegetation of cleared areas.</li> </ul>	<p>N/A</p> <p>The environmental compensation associated with the Myimbarr Wetlands formed part the ministerial approvals associated with the Shell Cove Boat Harbour. The Myimbarr Wetland and associated works have been completed.</p> <p>The proposed landscape treatment for the public domain within Precincts B2 and C2 incorporates native planting species.</p> <p>A detailed Landscape Plan has been prepared by Group GSA (Appendix H).</p> <p>The erosion and sedimentation controls for Precincts B2 and C2 include:</p> <ul style="list-style-type: none"> <li>• Clean and dirty water diversion pathways;</li> </ul>



Commitment	Comment Additional Information / Response
<ul style="list-style-type: none"> <li>• Silt fences.</li> <li>• Stabilising drains.</li> <li>• Use of temporary and permanent sediment traps.</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment fences;</li> <li>• Sedimentation basins;</li> <li>• Stabilised site access; and</li> <li>• Indicative stockpiles.</li> </ul>
<b>Noise Odour &amp; Air Quality</b>	
<p><i>The Proponent undertakes to mitigate any excessive noise impacts by implementing appropriate measures such as low noise pavements or incorporating noise reduction features on residential facades, which will be detailed in each Project Application.</i></p> <p><i>The Proponent undertakes to mitigate odour impacts by adopting odour control measures which comply with Sydney Water guidelines including the reduction in septicity levels.</i></p> <p><i>The Proponent undertakes to meet the objectives of the NSW Action for Air Plan by:</i></p> <ul style="list-style-type: none"> <li>• Minimising internal traffic generation.</li> <li>• Providing direct pedestrian and vehicle access to the harbour foreshore.</li> <li>• Providing continuous pedestrian access to the harbour edge.</li> <li>• Providing pedestrian and cycle paths that access key facilities.</li> <li>• Minimising through traffic to Bass Point and the Business Park.</li> <li>• Encouraging public transport.</li> <li>• Providing direct access to the arterial road network.</li> </ul>	<p>This DA is for the subdivision of Precincts B2 and C2 only and does not seek approval for built form, nor does it involve any odour producing infrastructure.</p> <p>The DA meets the objectives of the NSW Action Plan for Air quality by:</p> <ul style="list-style-type: none"> <li>• Encouraging pedestrian and cycle movement through a new access network, to minimise traffic generation;</li> <li>• Including visual and access corridors that will provide for direct access to the future harbour and harbour foreshore;</li> <li>• Providing for pedestrian links to the future extension of the public transportation network; and</li> <li>• Incorporating a road network that provides for access to the arterial road network.</li> </ul>
<b>Socio Economic Impacts</b>	
<p><i>The Proponent undertakes to respond to social and economic impacts through increased numbers of new jobs during construction, increased local job opportunities as a result of the Business Park, increased visitor expenditure, and new expenditure and employment in retail, conferencing, restaurants and tourism.</i></p>	<p>The subdivision of Precincts B2 and C2 will generate economic activity, with the movement into the region of new households and the ongoing income generated by the property as an asset, including the employment opportunities created during the construction phase. It will also contribute to meeting the projected housing needs of the Illawarra region.</p> <p>The expansion of the residential community in the Shellharbour LGA will contribute towards the growth of commercial and retail services.</p>
<b>Consultation</b>	

Commitment	Comment Additional Information / Response
<i>The Proponent undertakes to continue consultation with the relevant agencies, authorities and the public as pertains to each Project Application.</i>	The Proponent has undertaken continuing consultation with the relevant agencies, authorities and the public in the preparation of the DA for Precincts F&G, including Shellharbour City Council, Sydney Water, Endeavour Energy, Telstra and Jemena.
<b>Crime Risk</b>	
The Proponent undertakes to incorporate best practice Crime Prevention Through Environmental Design principles into all detailed design development.	The subdivision has been designed in cognisance of the principles of Crime Prevention through Environmental Design (CPTED) and incorporate measures to promote safety and security of residents of and visitors to Shell Cove (refer discussion at Section 6.1.9 of this Statement).

## 5.8 Section 75W modification to Concept Plan

An amendment to the Concept Plan Approval (MP07\_0027 MOD 1) was submitted to the Department of Planning and Environment (DPE) in August 2017. The application was exhibited between 15 September and 20 October 2017. The concept plan modification was approved on 18 March 2019.

The key proposed modifications to the Concept Plan include:

- removing the maximum 150,000m<sup>2</sup> residential gross floor area limit;
- net increase in the overall maximum number of dwellings of 318;
- revising the housing densities and typologies across the site;
- reconfigurations to the town centre layout including relocating the landmark (hotel) building to the northern gateway;
- increasing the maximum building height in certain areas to permit:
  - a mixed use landmark (hotel) building up to 11 storeys in the town centre;
  - residential flat buildings up to six storeys in the town centre and on the promontory, and
  - residential flat buildings up to five storeys in other harbour waterfront locations;
- including 'serviced apartments' and 'residential accommodation' as permissible uses within the town centre landmark (hotel) building;
- removing the community and hotel uses from the maximum 22,000m<sup>2</sup> gross floor area cap;
- introducing an additional 5,850m<sup>2</sup> land (the northern lands) within Precinct E; and
- refinements to the road pattern and layout.

The modification also involves a minor administrative amendment to reflect the applicant's ongoing negotiations with Council to execute a VPA for the site.

### 5.8.1 Summary of changes to Precincts B2 and C2

The principles of the approved Concept Plan have been maintained. However, there are two key changes relevant to Precincts B2 and C2, as summarised in the following paragraphs.

#### Increases in Maximum Permissible Height

Precinct B2	Between Wharf Parade and proposed road MC24 & MC25	no change (up to 3 storeys)
	Between proposed road MC24 & MC25 and the waterfront	+ 2 storeys (up to 6 storeys)
Precinct C2	Between Wharf Parade and proposed road MC24 & MC25	- 1 storey at northern end
	Between proposed road MC24 & MC25 and the waterfront	+ 1 storey (up to 5 storeys)

#### Additional Dwelling Yields (approx.)

Precinct B	33 dwellings
Precinct C	12 dwellings
Total Additional Dwellings	45 dwellings

The built form strategy in the approved Concept Plan was to provide mid-rise apartments in the Town Centre, low to mid rise apartments and / or terraces on the waterfront, dropping back to lower density terraces and houses further away from the waterfront.

The proposed Modification seeks to amend the housing typologies and form within each Precinct to accommodate the proposed additional dwellings. However, it does not seek to alter the approved built form strategy and retains the same fundamental principles, and therefore built form character.

Council will note that development has already occurred in Precincts B1 and C1, the modest increase in dwelling yield will therefore be realised in Precincts B2 and C2, thereby minimising the impact of the changes on the established character of those areas.

As described in Section 5.6.6 of this Statement, the proposed Precincts B2 and C2 subdivision is expected to result in a net increase in overall number of dwellings across the combined Precincts B and C of 45 dwellings, which is generally consistent with the additional yields contemplated in MOD 1 as set out above.

The additional increase in height of 1-2 storeys only occurs along the waterfront of Precincts B2 and C2 closest to the boat harbour where the dwellings receive significant amenity as a result of their access to views and open space.

The modifications outlined above do not have any implications for the proposed subdivision of Precincts B2 and C2 but will be addressed in any future DA for built form.

## 6 SECTION 4.15 ASSESSMENT

Section 5.0 of this Statement has provided an assessment of proposed development against the relevant legislation and statutory controls, thereby fulfilling the requirements of section 4.15(1)(a) of the *Environmental Planning and Assessment Act 1979*.

The following sections provide an assessment against the other matters for consideration set out in section 4.15 of the EP&A Act.

### 6.1 Impacts on the Environment (S4.15(1)(b))

#### 6.1.1 Acid Sulfate Soils (ASS)

SMEC Australia Pty Ltd has prepared an ASSMP (Appendix I) which identifies appropriate measures to be implemented to mitigate the impacts of ASS and potential ASS in the proposed subdivision and subsequent development of Precincts B2 and C2.

#### 6.1.2 Construction Impacts

Construction of the proposed development will be undertaken in accordance with EPA and WorkCover Authority guidelines to ensure that impacts to nearby premises and their occupants are minimised and that the safety of workers is afforded the highest continued priority.

The building contractor engaged to undertake the project will be required to prepare a Construction Environment Management Plan (CEMP) that outlines the procedures that will need to be implemented in order to manage the possible impact of construction activities on the surrounding area.

The information contained in the Earthworks Strategy (Appendix J), Road Design (Appendix J), ASSMP (Appendix I), Erosion and Sediment Control Plan (Appendix E) will inform the preparation of the CEMP.

The CEMP will be consistent with current industry best practice and any specific Council requirements. On this basis it is considered that any impacts associated with the construction phase of the project can be managed and mitigated to acceptable limits.

#### 6.1.3 Hydrology, drainage and flooding

##### Stormwater

Advisian has prepared a stormwater quality management strategy for the proposed Precincts B2 and C2 subdivision (Appendix L).

The pollutant loads discharged to the Boat Harbour in catchment runoff from the ultimate development have been estimated for the purposes of predicting Boat Harbour water quality.

The management of runoff in the catchment represents industry best practice with emphasis on water sensitive urban design and a treatment train approach.

The proposed stormwater management strategy for the development will ensure the runoff water quality discharged to the ocean is maintained compared to pre-development conditions.

##### Flooding

The Flood Management Assessment prepared as part of the Concept Plan shows that the proposed development would not result in a significant increase in flood levels for the 5 year ARI, 100 year ARI and the PMF event on adjacent properties. The proposed development will be designed such that flooding would not have an adverse impact on the proposed development and will not be impacted by tidal inundation or sea level rise.

### **6.1.4 Access and traffic**

The Shell Cove Boat Harbour Traffic Study, prepared by Aecom / Maunsell in 2009 as part of the Concept Plan, identified that the highest traffic volumes in the vicinity of the study area will be along Harbour Boulevard, north of Brigantine Drive, with an estimated traffic volume 15,200 vehicles / day, decreasing southward toward the intersection with Cove Boulevard.

Arcadis has prepared a Traffic Impact Assessment (Appendix G) to identify the potential traffic impact of the Precincts B2 and C2 subdivision, as required by the Concept Plan Approval.

The cumulative traffic impacts from the operation of all existing and future precincts (including Precincts B2 and C2) have been examined in the context of the revised (increased) yields currently being considered by the Department of Environment and Planning as part of a proposed modification to the Concept Plan Approval (MP07\_0027 MOD1). Based on the revised traffic volumes, the updated traffic impact assessment has determined that all intersections will operate satisfactorily without placing undue stress or pressure on the existing road system or adjoining uses.

The key findings of the assessment are as follows:

- there is an anticipated 36% increase in daily traffic generation from the residential component of the Shell Cove Boat Harbour Precinct with a 2% reduction in the commercial/retail component. Based on the revised yield for each of the precincts it was determined that traffic generated from Precincts A, B and C would increase by 15%, Precinct D by 5% and Precincts E, F, G and H by 16%. The overall 36% increase was distributed accordingly between each of the zones.
- Based on the SIDRA modelling results, the proposed Shellharbour Road / Harbour Boulevard / Wattle Road intersection (as per RMS TCS2455) would not operate satisfactorily in either the AM or PM peak period, however, the proposed mitigation measure for this intersection resulted in the intersection operating satisfactorily in both the AM and PM peak periods. Improvement to the departure side storage lengths on the south approach of the Addison St / Harbour Boulevard intersection is proposed. All remaining assessed intersections are anticipated to operate satisfactorily.
- The proposed shared paths have been designed in accordance with Council's Shared Use Path Strategy 2010;
- Based on a 400m "as the crow flies" walking catchment, it is anticipated that all residents within Precincts B2 and C2 would have access to the proposed future bus route along Harbour Boulevard;
- A swept path analysis has been undertaken for a 12.5m Rigid Truck for all intersections within Precincts B2 and C2 which reveals that all provide adequate manoeuvrability for a service vehicle provided that no-parking clearance is provided adjacent to the intersection;

- A sight distance assessment was also conducted which determined that all intersections will provide adequate sight distances and conform with Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections.

Having regard to the above it is considered that the traffic impacts associated with the proposed development are within reasonable limits.

### **6.1.5 Urban Design**

The subdivision of Precincts B2 and C2 has been designed in accordance with the design principles identified below, which are consistent with the terms of the Concept Plan Approval and the outcomes achieved in previously approved Precincts at Shell Cove.

The following Design Principles have been adopted for Precincts B2 and C2, including:

- Maximising connectivity between residential areas, open space and amenities.
- Road layout seeks to optimise solar orientation and providing the opportunity to explore innovative house designs.
- Utilising materials relevant to the coastal location of the site.
- Providing a well-connected road network which responds to the existing and future features of the site, key open spaces, the Boat Harbour and future amenities, while minimising cut and fill where possible.
- Providing a legible road network designed to promote connectivity and ease of movement for pedestrians, bicycles and vehicles. This network also allows the opportunity for multiple routes orienting traffic to progressively higher order streets within the hierarchy.
- Landscape treatments in the public domain used to reinforce the existing natural character of the site and strengthen the visual recognition of the street hierarchy, pedestrian and cycle network.
- Create high quality streetscape and establish a strong neighbourhood character;
- Maximise north and east facing private open space;
- Provide development with consistent alignments, articulation, material selection and architectural character (through Design Guidelines); and
- Landscape elements such as fences, walls, plants and planting which matches or complements the design, scale, massing and details of the dwelling.

The proposed subdivision has been designed in accordance with the Concept Plan Approval for the Boat Harbour Precinct which is a master planned estate designed to provide a high quality urban environment, commensurate with contemporary market aspirations and expectations.

Having regard to the above it is considered that the Precincts B2 and C2 subdivision will have a positive impact in terms of urban design.

### **6.1.6 Utilities and services**

The Precincts B2 and C2 subdivision will be serviced by water, sewer, electricity and telecommunications, as described in Section 4.8 of this Statement and Appendix K.

Detailed design of the utility infrastructure will be undertaken in the construction certificate stages of the proposal.

### **6.1.7 Noise**



The Assessment of Air Quality and Noise prepared by Wilkinson Murray as part of the approved Part 3A Concept Plan in 2009 concluded that:

- Noise from Haul Road to the Bass Point Quarry will not impact on any residential lots in the Boat Harbour Precinct
- Residences within 40 metres of Harbour Boulevard road pavement will require acoustic façade treatment to meet the relevant internal acoustic criteria for residential dwellings. This may be reduced to 20m with the inclusion of low noise pavement along Harbour Boulevard.

The assessment also identified a range of appropriate noise mitigation measures for facades to residences within 40m of Harbour Boulevard (refer Consent Condition Schedule - Schedule 3 Part D 3. Noise Management Assessment).

No acoustic measures are proposed for the application of the subdivision of Precincts B2 and C2. Detailed design of dwellings will be subject to future DAs and approvals and will incorporate acoustic treatment where appropriate.

The Assessment of Air Quality and Noise from the Bass Point Quarry was predicted to exceed night time noise criteria levels at some of the residential areas closest to the quarry during adverse weather conditions. As Precincts B2 and C2 are in excess of 1.2km of the quarry no noise impacts are expected for future development in this area.

## **6.1.8 Waste Management**

Opportunities to minimise waste generation and maximise the use of existing resources on site will be implemented where possible.

Waste comprising scrap metal, timber, masonry, packaging materials and plastics generated during the construction phase would be collected in sorted skip bins on-site and would be removed by a licensed contractor. General waste generated by contractors working on site will be collected and recycled where possible or disposed at a licensed waste facility.

A Site Waste Minimisation and Management Plan (SWMMP) will be developed as part of the contractor's CEMP, designed to minimise waste generation and maximise reuse and recycling where possible during the limited demolition and subsequent construction works. The SWMMP will ensure that the appropriate measures are employed throughout the project to guide the disposal of waste.

## **6.1.9 Crime prevention through environmental design**

Safety and security were key principles used for the design of the proposed subdivision of Precincts B2 and C2. The draft plan of Subdivision (Appendix F) addresses the principles of Crime Prevention through Environmental Design (CPTED) and incorporate measures to promote the security of Shell Cove.

The road and pedestrian network will provide a clearly defined path of travel with clear sightlines between public and private places. Appropriate lighting of the public streets will be provided and will comply with relevant Australian Standards.

The subdivision design provides opportunities for future development to provide for natural surveillance of public spaces. Landscaping and street planting will be designed and provided to minimise the opportunities for concealment, while providing for a high level of amenity.

The proposed subdivision provides for:

- A clear grid of clear, legible access for vehicles, cyclists and pedestrians, providing a high level of connectivity within the wider Boat Harbour Precinct between existing and future development;

- Limited block lengths to increase connectivity;
- A series of linked public open spaces that provide for pedestrian movement across Precincts B2 and C2, access to the major pedestrian cycle network along the Marina front, proposed extension to the public transportation network and the future harbour edge open space network;
- View corridors from Wharf Parade along proposed Roads MC24 & MC25, MC03 and The Promontory Drive to the harbour;
- A series of clear vistas along road alignments throughout Precincts B2 and C2 to increase opportunities for incidental surveillance;
- Lot orientation facilitates the construction of future residential development that overlooks streets and the harbour promenade to increase passive surveillance opportunities of the public domain;
- A series of threshold treatments to lane ways are incorporated to reconfirm the primacy of pedestrian movement, slow traffic and increase opportunities for surveillance;
- A range of superlot sites for future medium and higher density development, to encourage diverse housing options and opportunities for more dynamic community interactions within the wider development at Shell Cove;
- Integrated and attractive public open spaces that encourage community interaction and cater for the needs of different community and visiting groups encouraging community guardianship of the development and public assets; and
- All lots to be integrated into the mainstream lifestyle of the Shell Cove community.

### 6.1.10 Social and economic impacts

The future development of the wider Shell Cove Boat Harbour Precinct is being undertaken in a manner sympathetic to the character of the locality and will result in a positive social and economic benefit through the provision of residential and community facilities as well as business opportunities.

The development of Precincts B2 and C2 will generate economic activity, with the movement into the region of new households and the ongoing income generated by the property as an asset, including the employment opportunities created during the construction phase. It will also contribute to meeting the projected housing needs of the Illawarra region.

The expansion of the residential community in the Shellharbour LGA will contribute towards the growth of commercial and retail services.

It is considered that the proposed residential subdivision will have a positive economic benefit to the Shellharbour LGA and the wider Illawarra Region.

## 6.2 Suitability of the site (s4.15(1)(c))

The NSW Government, through the approval of the Boat Harbour Concept Plan (MP07\_0027) and the more recent preparation of the Illawarra Shoalhaven Regional Plan has supported the development at Shell Cove and has identified the area as a regionally significant development area to achieve the dwelling targets for population growth in the Illawarra.

Having regard to the characteristics of the site and its location, the proposed subdivision of Precincts B2 and C2 is considered suitable as it:

- is generally consistent with the Concept Plan approval and Statement of Commitments (MP07\_0027). It is also consistent with the proposed modifications to the Concept Plan (MP07\_0027 MOD 1) currently being assessed by the Department of Environment and Planning;

- includes detailed Urban Design Guidelines prepared to in accordance with the terms of the Concept Plan Approval (Schedule 3, Part D);
- will provide a range of housing opportunities for the community in reasonable proximity to employment, regional transport networks, schools, retail and sporting / community facilities;
- the site has access to all utility services, which are being augmented / extended as required and in consultation with relevant utility authorities; and
- will not result in any unacceptable or material adverse environmental impacts.

### **6.3 Submissions (s4.15(1)(d))**

In accordance with Section 2.2 of Shellharbour DCP 2016, the application will be placed on public exhibition and submissions invited from any interested parties.

As part of the assessment process, Council will take into consideration any matters raised in any submissions received in response to the public exhibition period.

### **6.4 The public interest (s4.15(1)(e))**

Public interest is considered to be inherent in the design as it is consistent with the Concept Plan approval for the Shell Cove Boat Harbour Precinct. The proposal provides the framework for future development of the proposal site and will contribute the growth of local communities.

The proposed development:

- will provide additional residential land to meet the demands of the growing population in the Illawarra;
- will contribute to the achievement of regional housing construction targets as set out in the Illawarra Shoalhaven Regional Plan (DPE, 2015), which identifies the need for 35,400 new dwellings in the region by 2036; and
- can also reasonably be expected to have a positive impact on housing affordability in the region.

On this basis, it is considered that the subdivision of Precincts B2 and C2 of the Shell Cove master planned estate is in the wider public interest.

## 7 CONCLUSION

Approval is sought for subdivision of land legally described as Lot 4002 and Lot 4003 DP1235539 known as Precincts B2 and C2 within the Shell Cove master planned estate. The proposed development represents the next stage of the development approved under the Shell Cove Boat Harbour Concept Plan (MP 07\_0027).

The proposed development comprises:

- total of 10 superlots - 8 of which are designated for future medium density integrated housing development and 2 for future residential flat buildings;
- 1 residue lot;
- civil infrastructure – road construction, stormwater drainage and water quality treatment devices;
- earthworks;
- public domain works including street tree planting and footpaths within the subdivision.

The aim of this Statement has been to:

- describe the proposal and the prevailing site conditions;
- illustrate compliance of the proposed development with relevant statutory considerations; and
- provide an assessment of the likely environmental effects of the proposal.

The development has been designed to address the physical characteristics of the site, with lot orientation and road network designed to optimise solar access for future residential development as well as providing legible access, high levels of connectivity and visual connectivity to Boat Harbour.

A range of specialist reports has been prepared to address the potential impacts of the proposed development including traffic, noise, coastal hazards, acid sulfate soils management plan, geotechnical, flood management and water cycle management. Urban Design Guidelines have also been prepared to establish controls over future single dwellings in Precincts F&G, as required by the Concept Plan Approval.

The proposal has been assessed with reference to the matters for consideration set out in section 4.15 of the EP&A Act. It is concluded that the proposal satisfies the relevant statutory requirements. Whilst the land subdivision and associated civil works will have some environmental impacts, these have been assessed and subject to the implementation of mitigation measures identified within this Statement and the supporting specialist reports, it is considered that these impacts are within reasonable limits.

The proposed development can also be reasonably be expected to have positive socio economic impacts for the Illawarra region through job creation during construction of the subdivision and future dwellings, as well as playing an important role in meeting the housing needs of the Region as identified by the Illawarra Shoalhaven Regional Plan (DP&E, 2015), which identifies the need for 35,400 new dwellings in the Region by 2036.

The design of the subdivision for Precincts B2 and C2 is broadly consistent with the Concept Plan Approval and Statement of Commitments. The projected dwelling yield and built form (as described in the Design Guidelines at Appendix M) are consistent with the S75W application (MP07\_0027 MOD 1), currently being assessed by the DP&E.

It is therefore requested that the proposed Precincts B2 and C2 subdivision be supported and recommended to the Joint Regional Planning Panel (Southern Region) for approval.

## 8 GLOSSARY

AHD	Australian Height Datum
ASS	Acid Sulphate Soils
CHL	Commonwealth Heritage List
CO	Carbon monoxide
DO	Dissolved Oxygen
EC	Electrical Conductivity
EDR	Environmental Design Report
EPBC Act	Environmental Protection and Biodiversity Conservation Act
ERA	Environmentally Relevant Activities
ESCP	Erosion and Sediment Control Plan
EVNT	Endangered, Vulnerable and/or Near Threatened (EVNT)
National Heritage List	NHL
NEPM	National Environment Protection Measures
NO2	Nitrogen Dioxide
PM	Particular Matter
RE	Regional Ecosystems
REF	Review of Environmental Factors
TSP	Total Suspended Particles
VC	Vegetation Communities
WMP	Waste Management Plan



## **APPENDIX A**

### **SHELL COVE MASTERPLAN**



## **APPENDIX B**

### **CONTAMINATION**

## **APPENDIX C**

### **ECOLOGY**

## **APPENDIX D**

### **CULTURAL HERITAGE PROTECTION AND AHIP**

## **APPENDIX E**

### **DESIGN DRAWINGS**

## **APPENDIX F**

### **PLAN OF SUBDIVISION**

## **APPENDIX G**

### **TRAFFIC IMPACT ASSESSMENT**

## **APPENDIX H**

### **LANDSCAPE INTENT AND PLANNING**



## **APPENDIX I**

### **ACID SULFATE SOIL ASSESSMENT AND MANAGEMENT**

## **APPENDIX J**

### **EARTHWORKS STRATEGY, ROAD DESIGN, ASS, EROSION AND SEDIMENT CONTROL**

## **APPENDIX K**

### **UTILITY, SEWER AND WATER SERVICES STRATEGY**

## **APPENDIX L**

### **STORMWATER AND WATER CYCLE MANAGEMENT PLAN**

## **APPENDIX M**

### **PRECINCT B2 AND C2 URBAN DESIGN GUIDELINES**

## **APPENDIX N**

### **FLOOD ASSESSMENT**

## **APPENDIX O**

### **COASTAL HAZARDS**

