



**Shell Cove
Boat Harbour Precinct**

**Concept Plan Application
and Environmental Assessment
Appendix M - Social Infrastructure**

prepared by

LFA (Pacific) Pty Ltd

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Executive Summary

Overview

1. MacroPlan Australia has been commissioned by Australand Holdings Limited to assess the potential social infrastructure impacts of the Shell Cove development and in particular review any increased need for facilities such as schools, hospitals and community facilities.
2. This assessment looks at the social infrastructure required to services the needs of the new Shell Cove Boatharbour precinct. To ensure a detailed understanding of infrastructure needs is developed, all existing infrastructure within a 5 and 10km radius will be reviewed in addition to the Shell Cove development. Population forecasting within this radius will then be used to understand key drivers and opportunities within the Boatharbour precinct.

Project Objectives / Scope

3. The Shell Cove project is a large scale, masterplanned, urban development located on the New South Wales Coast in the Shellharbour City region and being jointly developed by Australand and Shellharbour City Council.
4. The overall project comprises development of over 3,000 residential dwellings with an estimated population of 9000 people, a 300 berth boatharbour, 18 hole championship golf course, district retail centre, community facilities and open space networks.
5. The Boatharbour precinct that is the focus for this assessment consists of:
 - Approximately 1,000 residential dwellings within a mix of development density including 3 to 4 storey apartments, medium density dwellings and detached housing,
 - A hotel with approximately 150 suites, restaurant, bar and conference facilities,
 - District retail centre incorporating a 3,000sqm supermarket and 6 - 8,000 sqm of specialty shops and commercial space,
 - Marina commercial and maintenance facilities,
 - Business Park with up to 30,000sqm GFA,
 - Foreshore reserves and promenade,



- 2 lane public boat ramp and car and trailer parking (approved under separate consent), and
 - Wetland reserves.
6. When completed, the hotel will have the ability to accommodate and service large number of visitors to the region for both business and holiday purposes.
7. This study involves the following tasks:
- Outline of social infrastructure guidelines
 - Review demographic profile of existing and future population to understand key drivers of needs for social facilities
 - Identify existing social infrastructure
 - Identify future social infrastructure requirements as a result of the proposed development
 - Undertake a needs/gap analysis
8. The study examines the Shell Cove precinct, with the 10km catchment drawing from the Local Government Areas (LGAs) of Shellharbour, Wollongong and Kiama

Demographic Context and Population Forecast

9. Population forecasts have been projected for a 10km radius around the site over the next 25-30 years. The area surrounding the site is a moderate growth area. This is shown in the table below.

Table 1. 10km radius Population and Dwelling Growth Forecasts – 2001 to 2031

	2006	2011	2016	2021	2026	2031
Population	74,928	78,916	82,045	84,450	86,486	88,090
Household Size	26,760	28,184	29,302	30,161	30,888	31,461
People Per Household	3.11	3.09	3.07	3.04	3.02	3.00

Source: MacroPlan Australia ERP (2008) 2006 are actuals.

10. Overall, the catchment and surrounding area was found to be very similar to regional NSW in most socio-economic and demographic indicators. As of the 2006 Census, the population of Shell Cove and the greater Shellharbour LGA area was characterised by:
- i. Household sizes slightly below state averages
 - ii. Household incomes in Shellharbour (LGA) and the 10km catchment are approximately 10% below the NSW State average



- iii. While there is some variation across the different geographic areas, generally age distribution is in line with regional averages with the exception of Shellharbour LGA's 5-15 age bracket which is above the NSW State average.
 - iv. The proportion of family types was broadly in line with NSW State proportions. The proportion of couple families with children was slightly higher in the 10km catchment and in the Shellharbour LGA than the NSW State average
 - v. The 10km catchment and Shellharbour (LGA) both have above average proportions of owner / purchaser households
 - vi. Shellharbour (LGA) and the 10km catchment have high proportions of low density dwellings
 - vii. A smaller proportion of people were born overseas for both the 10km catchment and Shellharbour (LGA) than the NSW State average. Although these proportions were higher than the NSW Regional average.
11. While there is an element of ageing population within the 10km catchment, with the proportion of seniors set to double from 7% in 2006 to 15% in 2031, there is also considerable growth forecast in the younger age cohorts. The young persons and families will still make up the greatest proportion of the population.

Community Infrastructure Best Practice, Approaches and Standards

12. There are various approaches to community infrastructure planning and provision. These include:
- Hierarchical provision (using a regional, local and state framework) – which allow provision to key market / community catchments and
 - Integrated approach which seeks to combine different facilities and which can leverage the benefits and synergies of different facilities.
13. In addition, a set of principles have been developed to help guide the development of community infrastructure. These include:
- Hierarchy of facilities / settings
 - Hubbing / co-location integration
 - Multiuse
 - Flexibility (change function over time)
 - Targeted to local needs / demands



- Activity generators (day / night) / active programming
- Access (disability access and transport)
- Visibility (highly visible location)
- Safety / security (passive surveillance)
- Avoid duplication
- Contribute to health, wellbeing and capacity
- Promote social equity
- Seek sustainable approaches to management, funding and maintenance (capital and operating) e.g. whole of life costs and
- Create local competitive advantage, uniqueness and identity

14. In order to assess the demand for community infrastructure in the area MacroPlan has developed community infrastructure standards that take into consideration:

- Community infrastructure standards from the Development Code produced by the GCC (October 2006). The standards relate a range of community infrastructure facilities to current and emerging populations
- Demand / population projections (also using specific groups where required, for example 70+ or children aged 0-4) in the precinct
- Estimates of current and future supply of community/social infrastructure within a 5km or 10km catchment and
- Previous lessons and experience in community infrastructure.



15. It is noted that the demand / supply balance uses different catchments (with the supply catchment covering a larger area). Hence, care must be taken in interpreting the results as the number of facilities provided by the economic model (the balance between supply and demand) must take into account possible usage and travel patterns (which will be determined in part by distance and the nature of the facility). For example, some residents may consider facilities 5km too far. Hence, this may require a smaller facility closer to a local population. This is most evident in the provision of community infrastructure such as primary schools or public open space where a small neighbourhood park can meet local needs within a 500m radius, while a regional park will attract users from larger distances.

Shell Cove Boatharbour Development Community Infrastructure Assessment

16. Due to the small residential size of the Boatharbour precinct development, there are limited community infrastructure requirements when only considering the development site that include:

- A primary school
- 6 hospital beds
- High and low aged care facilities
- Child and afterschool care
- 8.49ha of open space that includes 1 – 2 neighbourhood parks

These infrastructure requirements are already being addressed through planned infrastructure in the Boatharbour Masterplan or surrounding community infrastructure in the 10km catchment radius as outlined in the below point.

10km Catchment Community Infrastructure Assessment

17. The results of the overall community infrastructure assessment for the Shell Cove Boatharbour precinct are shown in the table overleaf. As noted above, surrounding infrastructure within the 10km catchment radius will address some of the infrastructure requirements such as hospitals and aged care facilities. The below summary also highlights identified infrastructure needs within the broader catchment area, some of which are already being addressed through the Shell Cove development. Further Identified needs will need to be considered by appropriate authorities and may be addressed anywhere in the 10km catchment area (including the boatharbour precinct development).



Table 2. Policy / Strategy Summary

Community Infrastructure Type	Comment / Recommendation
NSW Fire Stations	<i>There is adequate supply of fire stations in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.</i>
NSW Ambulance Service	<i>There may be an inadequate supply of Ambulance Service in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.</i>
NSW Police Service	<i>There may be an inadequate supply of Police Service in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.</i>
Primary schools	<i>According to provision ratios, there is high levels of supply of primary schools in the area. The recent development of a new primary school in the broader Shell Cove development in addition to a new private school that caters to all age groups will meet the needs of the Shell Cove Boathourbour population.</i>
Secondary schools	<i>There is a future projected undersupply of secondary schools in the catchment area in 2011. The development site will not require a high school according to MacroPlan Australia's community infrastructure standards, and the NSW Department of Education has made allowance for a new high school with a site allocated in Flinders to cater for future demand (within 1km of the Shell Cove project).</i>
Community Health Facility	<i>Recommendation: According to MacroPlan Australia's community infrastructure standards, there will not be a need for a community health facility to be incorporated into the development site. Provision ratios demonstrate a strong need for community health facilities in the 10km catchment radius, this demand could be met either within the Shell</i>

	<i>Cove project or other local areas in the catchment radius by the relevant authorities.</i>
Regional Health Facilities	<i>There is a good level of supply of current regional health facilities with limited demand predicted into the future.</i>
Aged Care Centre	<i>There will be adequate supply of aged care facilities in the catchment area.</i>
High Care Nursing Homes	<i>High care facilities might need to be constructed in the short term but the private sector could meet this demand. Government should facilitate private investment in the catchment area. If retirement product is developed in the site, consideration should be given to incorporating high care nursing homes within the mix.</i>
Low care	<i>Low care facilities might need to be constructed in the short term but the private sector could meet this demand. Government should facilitate private investment in the catchment area. If retirement product is developed in the site, consideration should be given to incorporating low care nursing homes within the mix.</i>
Youth facility	<i>According to MacroPlan Australia's community infrastructure standards, there will not be a need for a youth centre to be incorporated into the development site. Although provision ratios demonstrate a need for youth centre in the 10km catchment radius, there is already a Youth Centre located in Flinders (within 1km of the Shell Cove development) The demand should be met within other local areas in the catchment radius by the relevant authorities.</i>
Community Centre	<p><i>There is inadequate supply of community centres within the catchment area. According to provision ratios there will be a need for a local community centre within the development site. There is the opportunity for this to become a district community centre to cater to undersupply within the catchment area.</i></p> <p><i>The temporary Community Centre currently operating in Shell Cove should be able to meet demand until the new planned permanent Community Centre is developed within the Boathabour precinct.</i></p>

Child care	<p><i>Child care facilities will need to be constructed in the short term. Consideration should be given to developing child care facilities in the development site. Although specialist providers will eagerly facilitate this supply, consideration should also be given to managing any facilities in-house due to high yield returns.</i></p> <p><i>Although there is identified need for after school facilities to be constructed in the short term within the 10km catchment radius, the existing arrangement at Shell Cove Primary School for after school care will meet this identified need within the development site.</i></p>
Library	<p><i>There are adequate levels of library services within the catchment area.</i></p>
Performing arts / cultural centre	<p><i>There is adequate supply of performing arts / cultural facilities in the catchment area.</i></p>
Tertiary facilities	<p><i>There are adequate supplies of tertiary facilities in the catchment area.</i></p>
Open space	<p><i>8.49 ha of useable open space will need to be set aside in the development site. This should include at least one and potentially two local parks that incorporate playground and passive play areas. The remainder can be made up of foreshore, bushwalking or bike riding areas.</i></p>
Recreation	<p><i>There are currently good levels of supply of sport and recreation amenity in the catchment area. Provision ratios suggest a need for local tennis facilities</i></p> <p><i>This demand is likely to be catered for in the broader area, although consideration should be given to the inclusion of local tennis facilities in the development site. These facilities have the potential to be hubbed with community centre or hotel developments.</i></p>

Aquatic facilities	<i>There is currently adequate supply of aquatic facilities in the catchment area.</i>
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1 Introduction / Overview

1.1 Overview

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The Boatharbour precinct that is the focus for this assessment consists of:

- Approximately 1,000 residential dwellings within a mix of development density including 3 to 4 storey apartments, medium density dwellings and detached housing,
- A hotel with approximately 150 suites, restaurant, bar and conference facilities,
- District retail centre incorporating a 3,000sqm supermarket and 6 - 8,000 sqm of specialty shops and commercial space,
- Marina commercial and maintenance facilities,
- Business Park with up to 30,000sqm GFA,
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When completed, the hotel will have the ability to accommodate and service large number of visitors to the region for both business and holiday purposes.

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The study examines the Shell Cove precinct, with the 10km catchment drawing from the Local Government Areas (LGAs) of Shellharbour, Wollongong and Kiama.

1.3 Information Sources

This report draws on a wide range of information sources. The more important information sources include:

- Population Projections, Department of Infrastructure, Planning & Natural Resources (2007).
- Census of Population and Housing, Australian Bureau of Statistics (2001 & 2006).
- Market Commentary, Residex Report (2007).
- Australian Bureau of Statistics.
- Relevant experience throughout Victoria and Australia, with particular reference to socio-economic profiles, area trends, and recent market performance.

1.4 Abbreviations

The following abbreviations are used in this report

ABS Australian Bureau of Statistics

LGA Local Government Area



SLA Statistical Local Area

1.5 Report Limitations

This report is prepared on the instructions of the party to whom it is addressed and is thus not suitable for the use other than by that party. As the report involves future forecasts, it can be affected by a number of unforeseen variables. It represents for the party to whom or which it is addressed the best estimates of MacroPlan Australia Pty Ltd, but no assurance can be given by MacroPlan Australia Pty Ltd that the forecasts will be achieved.



2 Location and Catchment Context

2.1 Overview

This section discusses location and catchment context.

2.2 Shellharbour City Council

Shellharbour is one of the state's youngest cities, having been gazetted in January 1996, but today ranks as one of the most progressive non-metropolitan communities in New South Wales.

The LGA serves a community of 63,000 residents across an area of 154 square kilometres with anticipated community growth of more than 75,000 by 2010.

2.3 Locational Setting

The site sits within the Shellharbour Statistical Local Area, (as defined by the ABS), and is located 17km south of Wollongong.

As illustrated in the map below, the site is located adjacent to the Pacific Ocean with frontage to Shellharbour beach. The site is accessed via Shellharbour Road, which intersects with the Princess Highway at Dunmore.



Figure 1. Regional Location Map



Source: MacroPlan Australia, 2006

2.4 Development Details

The overall project comprises development of a community with over 3,000 residential dwellings, a 300 berth boatharbour, 18 hole championship golf course, district retail centres, community facilities and open space networks.



Figure 2. Site Position



Source: Australand

The current masterplan for development of the Shell Cove project includes the following elements:

**BOATHARBOUR PRECINCT**

Boatharbour	<ul style="list-style-type: none"> 300 Floating berths
Boat Maintenance	<ul style="list-style-type: none"> Travel lift Hardstand for 12 to 14 boats Small commercial building of approximately 400sqm housing repair and maintenance services, ship chandlers, etc Fuelling wharf Sewer pump out
Dry Stack (under review)	<ul style="list-style-type: none"> Potential dry stack for up to 150 boats
Public Boat Ramp	<ul style="list-style-type: none"> 2 lane public boat ramp with car and trailer parking
Retail	<ul style="list-style-type: none"> Main Street mixed use district centre 5,800sqm retail including supermarket of 3,500sqm 1,000sqm of commercial space 1,200sqm of tourism based retail – eg tavern, restaurants, etc
Hotel	<ul style="list-style-type: none"> 4 Star hotel with 150 suites with supporting restaurant, bar, conference, reception and service areas
Residential	<ul style="list-style-type: none"> 422 Apartments 405 medium density dwellings 231 detached houses
Business Park (employment generating lands)	<ul style="list-style-type: none"> 30,000sqm GFA of commercial space in business park
Community Uses	<ul style="list-style-type: none"> Community Centre to be located within main street retail centre

BALANCE OF SHELL COVE PROJECT

Residential	<ul style="list-style-type: none"> 2010 dwellings comprising 1,764 residential allotments and 246 medium density dwellings. Note- to date approximately 1,200 residential lots have been developed
School	<ul style="list-style-type: none"> Public Primary school developed by Dept Education – year K to 6
Childcare	<ul style="list-style-type: none"> 3 Child care centres

2.5 Catchment Definition

The following maps show the Shell Cove development location in context to surrounding LGA boundaries and 10km catchment area. The 10km catchment radius takes in suburbs from the LGAs of Kiama, Wollongong and Shellharbour. The suburbs are:

**Table 3. 10km Catchment Suburbs**

Minnamurra	Yallah	Kiama Downs	Shell Cove	Primbee
Albion Park	Lake Illawarra	Oak Flats	Mount Warrigal	Dunmore
Warilla	Albion Park Rail	Bombo	Windang	Shellharbour
Barrack Heights	Croom	Blackbutt	Kiama	Barrack Point
Flinders				

Figure 3. Shell Cove LGA Boundary Context Map

Source: CData (2008) and MacroPlan Australia (2008).



Figure 4. Shell Cove 10km Catchment Area Map



Source: CData (2008) and MacroPlan Australia (2008).

2.6 Study and Modelling Assumption Limitations

The study is based on a series of assumptions and principles on which the modelling and other work is based upon.

As such, the forecasts should be used as a guide in the development of future plans for the community over time and it is important to recognise that changes in the assumptions and the surrounding environment could influence the results. These changes could include release of new land and / or the development of new housing opportunities elsewhere locally or in NSW, a shift in the demographic profile in the area (for example, an exit of the older population and a stronger than expected increase in the number of families entering the region).



3 Policy Context

3.1 Overview

This section discusses the key policy drivers affecting the current study.

Illawarra Regional Strategy

The Illawarra Region is framed by the natural features of the Illawarra Escarpment and coastline. It is home to more than 280,000 people, a \$6 billion manufacturing sector, and the regional city of Wollongong. The southern portion of the region is characterised by cultural landscapes and agricultural lands that provide a long-term resource for sustainable food production.

By 2031, the region's population is expected to increase by 47,600 people. The regional strategy aims to ensure that adequate land is available and appropriately located to sustainably accommodate the region's projected housing and employment needs over the next 25 years. The strategy also aims to protect the region's magnificent natural features such as the Illawarra Escarpment, Lake Illawarra and the Minnamurra estuary.

The NSW Government's 25-year land use strategy aims to:

- Ensure an adequate supply of land strategically located to support economic growth and the capacity for an additional 30,000 new jobs. In particular, the strategy supports a land-use planning framework which captures employment benefits from the \$140 million Port Kembla port expansion.
- Provide 38,000 new dwellings by 2031 to cater for the region's growing population and changing demographics, mainly through the revitalisation of Wollongong City Centre, urban renewal around centres and the development of West Dapto.
- Protect high value environments including coastal lakes, estuaries, aquifers, threatened species, vegetation communities and habitat corridors by ensuring that new urban development minimises impacts on these important areas and their catchments.
- Prevent development in places constrained by coastal processes, flooding, wetlands, important primary industry resources and significant scenic and cultural landscapes.
- Ensure that existing and proposed transport corridors are protected to support freight transport and improve network efficiencies.



The strategy guides local planning in the three local government areas of Wollongong, Shellharbour and Kiama. The strategy will be reviewed every five years. The strategy will work in conjunction with a city centre planning vision for Wollongong, produced by the Department of Planning's Cities Taskforce.



4 Demographic Context

4.1 Overview

This section discusses the current and emerging demographic context of the precinct under investigation.

4.2 Current Demographic Profile and Composition

Overall, the catchment and surrounding area was found to be very similar to regional NSW in most socio-economic and demographic indicators. As of the 2006 Census, the population of Shell Cove and the greater Shellharbour LGA area was characterised by:

- Household sizes slightly below state averages
- Household incomes in Shellharbour (LGA) and the 10km catchment are approximately 10% below the NSW State average
- While there is some variation across the different geographic areas, generally age distribution is in line with regional averages with the exception of Shellharbour LGA's 5-15 age bracket which is above the NSW State average.
- The proportion of family types was broadly in line with NSW State proportions. The proportion of couple families with children was slightly higher in the 10km catchment and in the Shellharbour LGA than the NSW State average
- The 10km catchment and Shellharbour (LGA) both have above average proportions of owner / purchaser households
- Shellharbour (LGA) and the 10km catchment have high proportions of low density dwellings
- A smaller proportion of people were born overseas for the both the 10km catchment and Shellharbour (LGA) than the NSW State average. Although these proportions were higher than the NSW Regional average.

The Key Indicators are provided in the figure overleaf. This includes a comparison of each of the socio-economic characteristics in the 10km catchment and Shellharbour (LGA) to NSW State averages.



Figure 5. Shell Cove Key Indicator Table – 2006 Census

	10km catchment	Shellharbour LGA	Sydney Metropolitan Area	New South Wales Regional Balance	New South Wales
Headline Indicators (2006)					
Population and Households					
Persons	74,265	60,337	4,119,190	2,419,813	6,549,177
Households	29,549	22,923	1,521,465	948,984	2,470,451
<i>Average Household Size</i>	2.51	2.63	2.71	2.55	2.65
Socio-Economic Snapshot					
Income and Wealth					
<i>Average Household Income</i>	\$57,216	\$56,969	\$72,038	\$50,523	\$63,663
variation from NSW State average	-10.1%	-10.5%			
<i>Average Income Per Capita</i>	\$30,008	\$29,589	\$37,910	\$28,918	\$34,542
variation from NSW State average	-13.1%	-14.3%			
Occupation					
	0				
Clerical and Administrative Workers	14%	14%	17%	13%	16%
Community and Personal Service Workers	11%	11%	8%	10%	9%
Labourers	12%	12%	8%	13%	10%
Machinery Operators And Drivers	10%	11%	6%	7%	7%
Managers	9%	9%	13%	15%	14%
Professionals	15%	13%	24%	17%	22%
Sales Workers	11%	12%	10%	10%	10%
Technicians and Trades Workers	18%	18%	13%	16%	14%
Demographic Snapshot					
Age Distribution					
0-4 years	7%	7%	7%	6%	6%
5-14 years	15%	16%	13%	14%	13%
15-24 years	13%	13%	14%	12%	13%
25-54 years	40%	41%	44%	39%	42%
55-64 years	11%	11%	10%	12%	11%
65 years and over	14%	12%	12%	17%	14%
Family Types					
Couple family with children	36%	38%	36%	29%	34%
Couple family without children	27%	26%	24%	29%	26%
One parent family	13%	14%	11%	12%	12%
Other Family	1%	1%	1%	1%	1%
Lone Households	21%	19%	23%	26%	24%
Group Households	2%	2%	4%	3%	4%
Tenure Type					
Owner	39%	35%	33%	41%	36%
Purchaser	34%	37%	34%	31%	33%
Renter	26%	27%	32%	28%	31%
Other	1%	1%	1%	1%	1%
Dwelling Type					
Separate House	82%	84%	62%	85%	71%
Semi-detached	0%	0%	12%	7%	10%
Flat, Unit, Apartment	7%	6%	26%	9%	19%
Birthplace					
Australia	76%	76%	60%	84%	69%
Overseas	24%	24%	40%	16%	31%

Source: MacroPlan Australia (2008) and Census (2008)



5 Community Infrastructure Trends, Principles and Standards

5.1 Overview

This section provides a theoretical and practical framework to help guide the development of community infrastructure.

In particular, the section discusses:

- Current emerging trends in community infrastructure
- Best-practice examples
- Principles
- Standards for consideration.

5.2 Community Infrastructure Approaches

There are various approaches to community infrastructure planning and provision. These include:

- Hierarchical provision (using a regional, local and state framework) – which allow provision to key market / community catchments and
- Integrated approach which seeks to combine different facilities and which can leverage the benefits and synergies of different facilities.

Often these approaches are combined. The current study suggests a combined approach to leverage the key benefits of each.

5.3 Community Infrastructure Principles

A set of principles have been developed to help guide the development of community infrastructure.

These include:



- **Hierarchy of facilities / settings** – regional, district and local facilities each perform a different role. As such, sizing and features will differ by the level of the community
- **Hubbing / co-location integration** - combining facilities helps to leverage the benefits of each and improves the product offering and financial viability of each. Activation is also improved through co-location
- **Multiuse** – A diversity of uses improves activation, diversity and the flexibility of facilities. Multiuse facilities also make facilities more dynamic making them more responsive to the needs and aspirations of the community
- **Flexibility (change function over time)** – changing community expectations require facilities to be flexible and adaptable. Facilities that are responsive will be used more intensively over their lifetime
- **Targeted to local needs / demands** – Each community is different and changes over time. Understanding and responding to the unique and individual circumstances of the community increases the appeal of community infrastructure
- **Activity generators (day / night) / active programming** – Social and community infrastructure are places of action and activity. These include both passive and active forms of recreation and leisure. People are increasingly attracted to places where they can be active and experience new things and infrastructure that meets these needs will be used more intensively
- **Access (disability access and transport)** – Providing easy access to facilities (through both better disabled access and transport) helps to ensure that a wider range of people are attracted to and able to visit the facilities
- **Visibility (highly visible location)** – visible facilities are more likely to be used and are better able to compete with other forms of leisure, recreation and social infrastructure
- **Safety / security (passive surveillance)** – the community expects that they and their children will be safe in their own facilities. Ensuring that this is the case (and perceived to be) will maximise the possibility that these facilities are used effectively and efficiently
- **Avoid duplication** – Minimising duplication will ensure that resources are utilised effectively and that each facility is unique thereby offering a better and attractive product and service to the community



- **Contribute to health, wellbeing and capacity** – Social / community infrastructure fulfils a critically important role in serving the needs and aspirations of the community. Health and well-being are two basic needs. Maximising 'capacity' (or the potential of each person and the community as a whole) will ensure that everyone can be the best they can be
- **Promote social equity** – A rapidly changing economy and society has meant that the gulf between people and communities has widened in recent years. Social / community infrastructure plays an important role in bridging this gap through a variety of means including through the establishment of networks and collaborative activity, decreasing isolation and promoting skills and education (through for example the use of the Internet and other technologies which helps to reduce the digital divide).
- **Seek sustainable approaches to management, funding and maintenance (capital and operating) e.g. whole of life costs** – Facilities that are sustainable in the long term are more likely to remain as key community assets and provide a better community service
- **Create local competitive advantage, uniqueness and identity** – Reflecting and serving the local community is important in an age where competitive advantage, uniqueness and identity are increasingly found in local things and where regions and areas compete globally for knowledge, resources and workers. Dynamic and responsive community / social infrastructure can help set a local community apart and provide new opportunities at a state, national and international level.

5.4 Community Infrastructure Standards

In order to assess the demand for community infrastructure in the area MacroPlan has developed community infrastructure standards that take into consideration:

- Community infrastructure standards from the Development Code produced by the GCC (October 2006). The standards relate a range of community infrastructure facilities to the current and emerging population
- Demand / population projections (also using specific groups where required, for example 70+ or children aged 0-4) in the precinct
- Estimates of current and future supply of community /social infrastructure within a 5km or 10km catchment and



- Previous lessons and experience in community infrastructure.

It is noted that the demand / supply balance uses different catchments (with the supply catchment covering a larger area). Hence, care must be taken in interpreting the results as the number of facilities provided by the economic model (the balance between supply and demand) must take into account possible usage and travel patterns (which will be determined in part by distance and the nature of the facility). For example, some residents may consider facilities 5km too far. Hence, this may require a smaller facility closer to a local population. This is most evident in the provision of public open space where a small neighbourhood park can meet local needs within a 500m radius, while a regional park will attract users from larger distances.

The table overleaf outlines the specific number of community facilities that would be required to cater to the proposed population of the Shell Cove Boatharbour development alone. When considered in conjunction with the boarder area, key recommendations can be developed for the site.

The following table highlights the community infrastructure requirements as determined by simple provision ratios. As can be seen, due to the size of the development, there are limited requirements when only considering the development site that include:

- A primary school
- 6 hospital beds
- High and low aged care facilities
- Child and afterschool care
- 8.49ha of open space that includes 1 – 2 neighbourhood parks



Table 4. Community Infrastructure Standards

Type of facility	Number Required*	Benchmark (Number per population)	Size (Site area)
Education			
Public Primary Schools	0 - 1	1:1,500 new dwellings (approx.)	3 ha / 2.3 ha (if joint use)
Public High Schools	0	1:4,500 new dwellings (approx.)	6-10 ha
Tertiary			
Health and Social Welfare			
Community Health Centre	0	1:20,000 people	2,000 sqm (for 80,000 people)
Hospital	6	2 beds: 1000 people	
Aged Care	0	1:10,000 (centre)	
Aged Care Housing		40 beds: 1,000 people	
High Care (Nursing home)	13	65 + years	
Low Care (Hostel) places)	16	48 beds: 1,000 people 65 + years	
Youth Centres	0	1:20,000 people	
Community Service Centre	0	1:60,000	
Childcare facility	42	1 place: 5 children 0-4 years	
After school care facility	18	1 place: 25 children 5- 14 years	
Culture			
Branch Library	0	1:33,000 people	2,400 sqm
District Library	0	1:40,000 people	2,400 sqm
Performing Arts / Cultural Centre	0	1:30,000 people	0.24 ha – 8 ha
Emergency Services			
Ambulance	0		To accommodate 2 ambulances
Fire Station	0		2,000 sqm min
Police Station	0		4,000 sqm (for first 10 years)
Community Centres			
Local	0	1:6,000 people	1,500-2,400 sqm
District	0	1:20,000 people	2,000-2,500 sqm
Open Space and Recreation			
	8.49 ha	2:83 ha: 1,000 people**	
Neighbourhood Open Space	1 - 2	1:2,000 people	1 ha
Local Open Space	0	1:10,000 people	2 ha
District Open Space	0	1:100,000 people	5 ha
Local Sports Ground	0	1:10,000 people	1 ha
District Sports Ground	0	1:30,000 people	2 ha
Regional Sports Ground	0	1:200,000 people	5 ha
Local Tennis Centre	1	1:10,000 people	1 ha
District Tennis Centre	0	1:30,000 people	1 ha
Equestrian	0	1:30,000 people	2 ha
Lawn Bowls	0	1:30,000 people	1 ha
Netball / Basketball Local	0	1:10,000 people	1 ha
Netball / Basketball District	0	1:30,000 people	2 ha
District Aquatic Centre	0	1:100,000 people	1 ha
Regional Aquatic / Indoor Sports Centre	0	1:300,000 people	2 ha

Source: Growth Centres Commission (2006) * Numbers set out by Structure Plan only. Will be further refined through

Precinct planning. May be refined through specific studies.



6 Community Infrastructure Supply and Opportunity Assessment

6.1 Overview

This section discusses the required social infrastructure in the precinct.

6.2 Methodology

The requirement for social infrastructure has been based on an economic model which seeks to understand the balance between:

- Demand / population projections (using specific groups where required, for example 70+ or children aged 0-4) in the precinct and
- Estimates of current and future supply of community /social infrastructure within a 5km or 10km catchment.

In addition, a range of other qualitative and quantitative factors are utilised to understand the nature, type and product requirement for social / community infrastructure.

It is noted that the demand / supply balance uses different catchments (with the supply catchment covering a larger area). In this sense care must be taken in interpreting the results as the number of facilities provided by the economic model (the balance between supply and demand) must take into account possible usage patterns (which will be determined in part by distance). For example, for some facilities 5km may be too far hence requiring a smaller facility closer to a local population. For this purpose, the analysis has utilised previous qualitative and quantitative research to make an assessment.

6.3 Scope of Community / Supply Facilities

The following facilities (consistent with the GCC Development Code) have been considered and assessed:

- Primary Schools
- High Schools



- Tertiary
- Health and Social Welfare
- Community Health Centre
- Hospital
- Aged Care Housing
- High Care (Nursing home)
- Low Care (Hostel) places
- Youth Centres
- Community Service Centre
- Childcare facility
- After school care facility
- Culture
- Branch Library
- District Library
- Performing Arts / Cultural Centre
- Emergency Services
- Ambulance
- Fire Station
- Police Station
- Community Centres
- Local
- District



- Open Space and Recreation

In many cases opportunities for integration and collocation have been recognised. This ensures that one facility with multiple functions can be used for a variety of functions.

6.4 Emergency Infrastructure

6.4.1 NSW Fire Stations Current and Future Supply

There are currently 1 fire stations located in the 5km catchment radius and 2 located in 10km catchment radius.

Recommendation: There is adequate supply of fire stations in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.

6.4.2 NSW Ambulance Service Current and Future Supply

There are currently 1 ambulance station located in the 5km catchment radius and 0 located in 10km catchment radius.

Recommendation: There may be an inadequate supply of Ambulance Service in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.

6.4.3 NSW Police Service Current and Future Supply

There are currently 1 police service located in the 5km catchment radius and 0 located in 10km catchment radius.

Recommendation: There may be an inadequate supply of Police Service in the catchment radius, further consultation will need to occur with appropriate authorities for provision in the future as growth occurs.



6.5 Primary and Secondary School Infrastructure

6.5.1 Primary School Current and Future Supply

There are currently 8 primary schools located in the 5km catchment radius and 13 located in 10km catchment radius. The large number of primary schools is likely due the high levels of young families in the catchment area.

		Primary Schools					
		2006	2011	2016	2021	2026	2031
Current supply		21	21	21	21	21	21
Required	1:1,500 new dwellings (approx)	-3	-2	-1	-1	0	0

Recommendation: According to provision ratios, there is high levels of supply of primary schools in the area. The recent development of a new primary school in the broader Shell Cove development in addition to a new private school that caters to all age groups will meet the needs of the Shell Cove Boathourbour population.

6.5.2 Secondary School Current and Future Supply

There are currently 3 secondary schools located in the 5km catchment radius and 3 located in 10km catchment radius.

		High Schools					
		2006	2011	2016	2021	2026	2031
Current supply		6	6	6	6	6	6
Required	1:4,500 new dwellings (approx)	0.4	1.4	2.7	4.9	6.9	8.9

Recommendation: There is a future projected undersupply of secondary schools in the catchment area in 2011. The development site will not require a high school according to MacroPlan Australia's community infrastructure standards, and the NSW Department of Education has made allowance for a new high school with a site allocated in Flinders to cater for future demand (within 1km of the Shell Cove project).



6.6 Community Health Facility

6.6.1 Current and Future Supply

There are currently 0 Community Health Facilities located in the 5km catchment radius and 1 located in 10km catchment radius.

		Community Health Centre					
		2006	2011	2016	2021	2026	2031
Current supply		1	1	1	1	1	1
Required	1:20,000 people	2.7	2.9	3.1	3.2	3.3	3.4

Recommendation: According to MacroPlan Australia's community infrastructure standards, there will not be a need for a community health facility to be incorporated into the development site. Although provision ratios demonstrate a strong need for community health facilities in the 10km catchment radius, this demand should be met within other local areas in the catchment radius by the relevant authorities.

6.7 Regional Health Facilities

6.7.1 Current and Future Supply

There are currently 0 hospitals located in the 5km catchment radius and 1 located in 10km catchment radius.

		Hospitals					
		2006	2011	2016	2021	2026	2031
Current Supply (Beds)		160	160	160	160	160	160
Required (Beds)	2 beds: 1000 people	-10	-2	4	9	13	16

Recommendation: There is a good level of supply of current regional health facilities with limited demand predicted into the future.



6.8 Aged Care High and Low Care Nursing Homes

6.8.1 High Care Current and Future Supply

There are currently 0 high care facility located in the 5km catchment radius and 2 located in 10km catchment radius.

		High Care (Nursing Home)					
		2006	2011	2016	2021	2026	2031
Current Supply	(Beds)	145.0	145.0	145.0	145.0	145.0	145.0
Required	40 beds: 1,000 people 70 + years	304.6	328.5	347.3	361.7	373.9	383.5

Recommendation: High care facilities might need to be constructed in the short term but the private sector could meet this demand. Government should facilitate private investment in the catchment area. If retirement product is developed in the site, consideration should be given to incorporating high care nursing homes within the mix.

6.8.2 Low Care Current and Future Supply

There are currently 0 low care facility located in the 5km catchment radius and 3 located in 10km catchment radius.

		Low Care (Hostel) Places					
		2006	2011	2016	2021	2026	2031
Current Supply	(Places)	180.0	180.0	180.0	180.0	180.0	180.0
Required	48 beds: 1,000 people aged 70 plus years	899.0	956.4	1001.4	1036.1	1065.4	1088.5

Recommendation: Low care facilities might need to be constructed in the short term but the private sector could meet this demand. Government should facilitate private investment in the catchment area. If retirement product is developed in the site, consideration should be given to incorporating low care nursing homes within the mix.



6.9 Youth Centres

6.9.1 Current and Future Supply

There are currently 1 youth centres in the 5km and 1 located in the 10km catchment radius.

		Youth Centres					
		2006	2011	2016	2021	2026	2031
Current Supply		2.0	2.0	2.0	2.0	2.0	2.0
Required	1:20,000 people	1.7	1.9	2.1	2.2	2.3	2.4

Recommendation: According to MacroPlan Australia's community infrastructure standards, there will not be a need for a youth centre to be incorporated into the development site. Although provision ratios demonstrate a need for youth centre in the 10km catchment radius, there is already a Youth Centre located in Flinders (within 5km of the Shell Cove development). Any further demand should be met within other local areas in the catchment radius by the relevant authorities.

6.10 Community Centre

6.10.1 Current and Future Supply

There are currently 1 community services centres in the 5km and 0 located in the 10km catchment radius.

		Community Service Centre					
		2006	2011	2016	2021	2026	2031
Current Supply		1	1	1	1	1	1
Required	1:60,000	0.2	0.3	0.4	0.4	0.4	0.5

Recommendation: There is adequate supply of community service centres within the catchment area.

There are currently 0 local community centres in the 5km and 3 located in the 10km catchment radius.

		Community Centre (Local)					
		2006	2011	2016	2021	2026	2031
Current Supply		3.0	3.0	3.0	3.0	3.0	3.0
Required	1:6,000 people	9.5	10.2	10.7	11.1	11.4	11.7



There are currently 1 district community centres in the 5km and 0 located in the 10km catchment radius.

		Community Centre (District)					
		2006	2011	2016	2021	2026	2031
Current Supply		1.0	1.0	1.0	1.0	1.0	1.0
Required	1:20,000 people	3.7	3.9	4.1	4.2	4.3	4.4

Recommendation: There is inadequate supply of community centres within the catchment area. According to provision ratios there will be a need for a local community centre within the development site. There is the opportunity for this to become a district community centre to cater to undersupply within the catchment area.

The temporary Community Centre currently operating in Shell Cove should be able to meet demand until the new planned permanent Community Centre is developed within the Boathabour precinct.

6.11 Child Care Facility

6.11.1 Definitions

It should be noted that the GCC standards consider two types of child care facilities:

- Childcare facility and
- After school care facility.

This report considers only the first type and assumes that pre-school care, family day care and long day care all serve the purpose of child care. The Department of Education and Training is currently providing child care centres to every new primary school under private public partnerships.

6.11.2 Current and Future Supply

There are currently 12 Childcare facilities located in the 5km catchment radius and 9 located in 10km catchment radius.



		Childcare facility					
		2006	2011	2016	2021	2026	2031
Current Supply	(Places)	649.0	649.0	649.0	649.0	649.0	649.0
Required	1 place: 5 children 0-4 years	400.0	455.8	499.6	533.3	561.8	584.3

Recommendation: Child care facilities will need to be constructed in the short term. Consideration should be given to developing child care facilities in the development site. Although specialist providers will eagerly facilitate this supply, consideration should also be given to managing any facilities in-house due to high yield returns.

There are currently 2 After-School care facilities located in the 5km catchment radius and 0 located in 10km catchment radius.

		After school care facility					
		2006	2011	2016	2021	2026	2031
Current Supply	(Places)	59.0	59.0	59.0	59.0	59.0	59.0
Required	1 place: 25 children 5-12 years	390.6	414.5	433.3	447.7	459.9	469.5

Recommendation: Although there is identified need for after school facilities to be constructed in the short term within the 10km catchment radius, the existing arrangement at Shell Cove Primary School for after school care will meet this identified need within the development site.

6.12 Library

6.12.1 Current and Future Supply

There are currently 3 branch library located in the 5km catchment radius and 1 located in 10km catchment radius.

		Branch Library					
		2006	2011	2016	2021	2026	2031
Current Supply		4.0	4.0	4.0	4.0	4.0	4.0
Required	1:33,000 people	-1.7	-1.6	-1.5	-1.4	-1.4	-1.3

Recommendation: There are adequate levels of library services within the catchment area.



6.13 Performing Arts / Cultural Centre

6.13.1 Current and Future Supply

There are currently 0 museum / cultural centre located in the 5km catchment radius and 2 located in 10km catchment radius.

		Performing Arts / Cultural Centre					
		2006	2011	2016	2021	2026	2031
Current Supply		2.0	2.0	2.0	2.0	2.0	2.0
Required	1:30,000 people	0.5	0.6	0.7	0.8	0.9	0.9

Recommendation: There is adequate supply of performing arts / cultural facilities in the catchment area.

6.14 Tertiary Facilities

6.14.1 Current and Future Supply

There are currently 1 tertiary facilities located in the 5km catchment radius and 0 located in 10km catchment radius.

Recommendation: There are adequate supplies of tertiary facilities in the catchment area.

6.15 Open Space and Recreation Supply and Opportunity Assessment

6.15.1 Current Supply

Open Space has been identified as:



- Neighbourhood Open Space – neighbourhood park that services a small population catchment of up to 2,000. Local amenity can include a small playground and seating. Size can range from a house block to 0.5ha.
- Local Open Space – local park that services a medium population of up to 10,000. Local amenity can include a medium sized playground, seating, rubbish bin and local sports ground. Size should be around 2ha.

There are currently 14 neighbourhood reserves located in the 5km catchment radius and 27 located in 10km catchment radius (including 4 Neighbourhood parks developed to date within Shell Cove)

There are currently 7 local reserves located in the 5km catchment radius and 7 located in 10km catchment radius (including one large reserve within Shell Cove providing a half basketball court, cricket pitch, minis soccer field, picnic areas and playground).

Recreation facilities have been identified as follows (sports ground can incorporate AFL / rugby / soccer / cricket / baseball or similar sports as identified by community need):

There are currently 6 local sporting grounds located in the 5km catchment radius and 8 located in 10km catchment radius (Additionally Council is presently developing the Myimbarr sporting complex which will include 6 sports fields when completed. Also a multi purpose (2 soccer fields) sports oval is currently being developed within Shell Cove).

There are currently 3 lawn bowls and 1 regional aquatic / indoor sports centre located in the 5km catchment radius and 1 local tennis facility located in 10km catchment radius.

6.15.2 Open Space Future Supply

Any provision of open space should be equitable across the area. In general, all residents should be within 400m of usable open space, which could include local parks, sports grounds, linear connection or accessible natural areas.

The local supply of open space to cater for the development site population is 25.47 ha.

Recommendation: 8.49 ha of useable open space will need to be set aside in the development site. This should include at least one and potentially two local parks that incorporate playground and passive play areas. The remainder can be made up of foreshore,



bushwalking or bike riding areas.

Shell Cove's current and future open space provision will exceed this recommended area.

6.15.3 Recreation Facilities Future Supply

Neighbourhood Open Space						
	2006	2011	2016	2021	2026	2031
Current Supply	41	41	41	41	41	41
Required 1:2,000 people	-3.5	-1.5	0.0	1.2	2.2	3.0
Local Open Space						
	2006	2011	2016	2021	2026	2031
Current Supply	14	14	14	14	14	14
Required 1:10,000 people	-6.5	-6.1	-5.8	-5.6	-5.4	-5.2
Local Sports Ground						
	2006	2011	2016	2021	2026	2031
Current Supply	14	14	14	14	14	14
Required 1:10,000 people	-6.5	-6.1	-5.8	-5.6	-5.4	-5.2
Local Tennis Facility						
	2006	2011	2016	2021	2026	2031
Current Supply	1.0	1.0	1.0	1.0	1.0	1.0
Required 1:10,000 people	6.5	6.9	7.2	7.4	7.6	7.8
Lawn Bowls						
	2006	2011	2016	2021	2026	2031
Current Supply	3.0	3.0	3.0	3.0	3.0	3.0
Required 1:30,000 people	-0.5	-0.4	-0.3	-0.2	-0.1	-0.1

Recommendation: There are currently good levels of supply of sport and recreation amenity in the catchment area. Provision ratios suggest a need for local tennis facilities

This demand is likely to be catered for in the broader area, although consideration should be given to the inclusion of local tennis facilities in the development site. These facilities have the potential to be hubbed with any community centre or hotel developments.

6.15.4 Aquatic Facilities

There are currently 3 district aquatic centres located in the 5km catchment radius and 1 located in 10km catchment radius.



District Aquatic Center						
	2006	2011	2016	2021	2026	2031
Current Supply	4.0	4.0	4.0	4.0	4.0	4.0
Required 1:100,000 people	-3.3	-3.2	-3.2	-3.2	-3.1	-3.1
Regional Aquatic / Indoor Sports Center						
	2006	2011	2016	2021	2026	2031
Current Supply	1.0	1.0	1.0	1.0	1.0	1.0
Required 1:300,000 people	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7

Recommendation: There is currently adequate supply of aquatic facilities in the catchment area.