



ASSESSMENT OF FUTURE HOUSING, COMMUNITY FACILITIES AND OPEN SPACE NEEDS

**Prepared for
Paclib Management**

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Appendix 1: Community Facilities and Services in the Boolaroo area

1. INTRODUCTION

This report has been prepared for Paclib Management as part of the background studies for the preparation of a master plan for the former Pasminco Cockle Creek Smelter site, and Incitec site at Boolaroo in the Local Government Area (LGA) of Lake Macquarie.

The report has two interrelated purposes. Firstly to provide background to the existing social environment, identify community issues and present findings of the assessment of future community facility needs of the new population, and the surrounding area. The report will also explore the housing forms appropriate for the residential component of the redevelopment, having regard to population trends and projections for the City of Lake Macquarie and the implications for the demand for dwelling types and densities. Dwelling types and densities for the Pasminco site are also influenced by policy directions of State Government and Council, including the directions from Lifestyle 2020 Strategy.

1.1 Scope

New housing needs to designed to not only meet the anticipated needs of new residents but also to address the broader planning strategies in place for the region. In turn the new residents will require access to suitable community infrastructure.

Community infrastructure is critical to the development of healthy, cohesive neighbourhoods. Adequate provision must be made for this infrastructure so that it is available when needed by the community, taking into consideration the changing nature of the community over time.

1.2 Methodology

The methodology for the preparation of this community facilities and housing needs background report included the following key components. The two key components each required a specific and overlapping approach:

Community Facilities:

- § Review of community demographic profile;
- § Projection of population and development trends;
- § Inventory of existing community facilities;
- § Consultation with key stakeholders;
- § Needs assessment;
- § Strategies development.

Housing Needs:

- § Review local and regional strategic planning policies for housing in so far as they relate to the additional residential opportunities on the site;
- § Consider the existing and projected future demographic profile and associated housing requirements of the City of Lake Macquarie and Boolaroo suburb;
- § Examine the suitability of the site to accommodate a range of housing types;
- § Develop a housing mix for the planned residential development on the site.



1.3 Context

Pasminco Cockle Creek Smelter Pty Ltd (Subject to Deed of Company Arrangement) ("Pasminco") ceased operations at Cockle Creek in September 2003. Since that time, a number of activities have commenced, or have been completed, including demolition of buildings and structures, extensive ongoing remediation works, winding up operations and a range of strategic land use planning investigations.

Incitec Fertilisers Limited occupy land that was formerly part of the Pasminco site. Incitec have announced that it will be ceasing operations on the site in 2009 and will vacate the site in 2010. This provides the opportunity for an integrated planning approach for the future use and development of these former industrial sites.

The site is located approximately 13km south west of Newcastle and immediately north of the village of Boolaroo. The site is bound in the north by the railway line, in the south by existing detached housing in Boolaroo, in the east by Munibung Hill and in the west by TC Frith Avenue and Cockle Creek. Boolaroo is well located close to two major centres, Glendale and Charlestown and has ready access from main roads and is well located near major rail and bus public routes.

The closure of the Pasminco smelter and the Incitec operations creates an opportunity for a new strategic direction for the site reflecting the sustainability principles in the City of Lake Macquarie Lifestyle 2020 Strategy. There have been a series of strategic planning initiatives by the Council and by the owners of the Pasminco and Incitec sites to investigate new opportunities for the site.

1.4 Proposed Urban Structure

A number of planning studies, including the Pasminco Munibung Hill Land Use Strategy, found that the present industrial zoning, which allows a range of heavy industries based around the historic uses of the site, is no longer an appropriate employment zone for the site. Consideration has been given to a range of zonings of the site for alternative urban uses. The final zoning of the site may include a mixture of 2(1) Residential, 2(2) Residential (Urban Living) as well as employment zones and the retention of conservation zoning to protect the scenic qualities of Munibung Hill.

The site is large and is capable of accommodating a range of uses in different precincts more suited to particular forms of development. The more elevated lands in the east of the site are more suited to smaller residential buildings designed to blend into the topography with minimal excavation for cut and fill for building platforms. The land adjoining the existing residential area of Boolaroo is also suited to a variety of residential uses.

1.5 Relationship to Surrounding Areas

The surrounding land uses are residential, industrial and open space in nature. The following general uses are identified in the surrounding area.

The site is located within an established urban area and consequently is served by a range of transport networks. The site has access to the arterial road network with frontages to Lake Road which becomes T.C. Frith Avenue providing an eventual link to the north and the



Newcastle Freeway, and the centres at Glendale, Cardiff and Kotara, and to the south to Toronto, and other residential areas to the west of Lake Macquarie.

Immediately north is the Main Northern Railway, connecting the site with Newcastle in the north east, various areas of the Lake Macquarie region and Sydney to the south. The Cockle Creek train station is located in the north western corner of the site. Beyond the rail line is the residential suburb of Argenton, the Waratah Golf Course, the Mines Rescue Station and open space in Jack Edwards Reserve.

The Glendale centre contains a retail complex with 40,000m² of floor area, a regional athletics centre, a large hardware store, a campus of the Hunter Institute of Technology and the Glendale Technical High School.

To the south of the site is the village of Boolaroo. The urban structure of the township of Boolaroo is characterised by a grid street pattern through which runs Main Road providing access to suburbs to the south and Lake Macquarie. The township is effectively bounded to the west by TC Frith Avenue and to the east by Munibung Hill. To the south it merges with Speers Point extending to the northern foreshore of Lake Macquarie. Through traffic is encouraged to use the arterial road network bypassing Boolaroo, enabling a higher level of amenity within the township.

To the east, the east-west street system terminates in a regular grid pattern independent of topographical considerations. Streets end blindly at the property boundary (rather than as a cul-de-sac) indicating a potential to extend the streets and urban development further to the east.

To the east of the northern part of the site is Cardiff Industrial Park which forms part of the Glendale/Cardiff regional centre. Information provided by Council indicates that the Cardiff Industrial Park comprises 105 hectares of serviced industrial land, employing 7,500 persons and catering for over 500 businesses. The industries located at Cardiff Industrial Park include engineering companies, distribution and logistic companies and food processing and production businesses.

South of Cardiff Industrial Park is the Macquarie Hills residential suburb located within a residential zone that extends to the boundary of the site. This suburb is currently being developed, with land immediately adjoining the site being subdivided. Provision has been made in the design of this subdivision for a road connection to the site should this be required in the future. The Macquarie Hills residential suburb is separated from Cardiff Industrial Park along most of the common boundary by a small buffer area that is within an open space zone.

South of Macquarie Hills is largely vacant land comprising the foothills of Munibung Hill.

To the immediate west of the site is T.C. Frith Avenue, connecting the township of Boolaroo and others to the south to suburbs in the north such as Cardiff, Argenton and later Newcastle. Beyond TC Frith Avenue is land owned by Council used for a number of purposes such as a Council depot and intended for use as open space along Cockle Creek.

2. STRATEGIC PLANNING DIRECTIONS FOR HOUSING FOR BOOLAROO VILLAGE

2.1 Lower Hunter Regional Strategy

The Lower Hunter Regional Strategy has been prepared by the NSW State Government to guide population and economic growth in the region over the period 2006-2031. It covers the five local government areas of Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock.

The Strategy defines a hierarchy of regional centres, with a goal for the “majority of development to take place close to existing major centres and employment lands to make the most of the opportunities provided”. Newcastle City centre is identified as the Regional City. Development in Newcastle will focus on higher order activities including education and health. The four regional centres which will support Newcastle are: Charlestown, Cessnock, Maitland and Raymond Terrace. Two emerging town centres, Morisset and Cardiff-Glendale have also been identified. These will develop into new localised centres of population and commercial activity over time. The strategy identifies the need to develop a higher proportion of new housing development in these growth centres to boost economic growth and housing capacity. Overall the Strategy plans for an additional 160,000 new residents, 115 new dwellings and 66,000 new jobs across the Lower Hunter Region.

Population growth in the Lower Hunter has averaged approximately 1% per annum over the period 1991-2001 and increasing more recently to more than 6,200 persons in 2004-05. Overall development trends have still favoured low density dispersed development, which has become increasingly contrary to the concentration of employment and services within centres.

The Lower Hunter Regional Strategy contains a number of objectives and actions of relevance to the development of new housing in Boolaroo.

2.2 Lifestyle 2020 Strategy

The Lifestyle 2020 Strategy is the primary strategic planning framework for Lake Macquarie City Council to provide long-term direction for the overall development of the City and to provide tools for managing private and public development. The Strategy is structured around the four core values of sustainability, equity, efficiency and liveability. The Strategy aims to:

- Guide the development of urban communities which are compact, distinct and diverse with a range of housing types and activities
- To achieve a strong sense of positive community identity, through the development of local communities which are safe and liveable and offer diversity of use, economic opportunity and ready access to services.
- To integrate land use with the efficient provision of public and private movement systems.

Within the Strategy there are a number of strategic directions which relate directly to housing, the most significant of which is “*A Well Served and Equitable City*”, which aims to:

- *Maximise existing opportunities in order to limit the extent of urban expansion and to provide more efficient use of existing land and infrastructure; and*
- *Recognise community, commercial and investor needs through accommodating the City's projected population growth, where feasible, within Centres and established areas.*

The key objectives, design approach and performance criteria outlined in the document are analysed against the principles of planning used in Boolaroo Village.

As noted in the draft Pasminco LES prepared for Council, although the Strategy does not specifically refer to the Pasminco development area, it provides for the “strengthening” of the Boolaroo area through mixed use development and medium density housing. The Pasminco site is also strategically placed to increasingly support the Cardiff/Glendale subregional centre.

2.3 Meeting Key Planning Objectives

Table 2-1 below displays the variety of planning objectives extracted from the Lower Hunter Regional Strategy and the Lifestyle 2020 Strategy in relation to housing. Each of these objectives has been assessed with respect to the housing opportunities on the site, including how the precinct has the potential to meet the requirements of relevant planning strategies as part of the overall redevelopment of the site.

Table 2-1: Key Objectives of the Various Planning Strategies Applicable to Residential Development on the Site

	Strategic Planning Objectives	Response
1. Lower Hunter Regional Strategy:		
Population and Housing Challenges		
1.1	Provide sufficient land and development opportunities to provide housing for the future growth of the population	The site is capable of contributing to regional targets for infill housing.
1.2	Achieve higher residential densities in and around major centres to maximise proximity to employment and services and the use of existing infrastructure, while maintaining amenity	The site is capable of accommodating higher densities commensurate with its location close to public transport and to existing centres.
1.3	Provide housing choice and affordability in the right locations reflecting changes in population and associated reduction in household occupancy rates	The site has the capability to accommodate a range of housing types.
1.4	Ensure quality urban design and amenity that is sensitive to and complements the character and lifestyle of the Region's towns and new urban areas	This can be achieved by the application of Council's planning controls and policies.
1.5	Refocus the housing industry in the Region to increase the amount of total housing provided in the existing urban areas so that a more sustainable balance between the need for new Greenfield land releases and the ability of the existing urban areas to meet housing demands is created	The site has the capability to contribute to this objective.
1.6	Provide a framework for planning and delivering new and upgraded regional infrastructure and facilities for the growing population and ageing demographic	This is a matter for State government. Additional housing on the site can utilise existing infrastructure and can add new household to complement the existing demographic of Boolaroo.
(4) Centres and Corridors		
1.6	Centres hierarchy – the regional city (Newcastle) is supported by major regional centres (Glendale), specialised centres and town centres as well as a wide network of smaller neighbourhood centres and villages (Barrow).	The site is in close proximity to Glendale and will provide a boost to its primary trade area.
	The mid to lower order centres are integral to the network of	NA

	Strategic Planning Objectives	Response
	centres within the region and provide supporting housing and employment and services.	
1.7	Renewal Corridors – (Glendale to Edgeworth) link strategic centres and are situated along strategic transport routes, present opportunities for economic renewal and/or housing renewal and intensification	The site is on a strategic transport route (rail) and presents a major opportunity for economic renewal and housing renewal.
(5) Employment and Economy:		
1.8	The Lower Hunter requires employment land that not only accommodates its own economic growth but also contributes to meeting the employment land needs of the broader metropolitan region of Sydney	The site has the potential to accommodate additional employment opportunities to replace the heavy industry previously occupying the site.
1.9	Lower Hunter centres provide a range of sites for commercial and retail uses, however land is also required for more industrial employment uses.	The site can accommodate a range of industrial employment uses including an expansion of the Cardiff Industrial Estate.
1.10	Ensure a mix of housing types in proximity to employment to provide the necessary supply of labour locally. This includes housing for lower as well as higher income groups to fill the diversity of employment opportunities provided.	The site can continue the contribution made by the village of Boolaroo to the supply of labour.
(6) Housing		
1.11	60% of new dwellings will be provided in new release areas and 40% will be provided in existing urban areas	The site can make an important contribution to achieving this target.
1.12	New housing must have access to major centres and employment lands, minimising impacts on regionally significant agricultural lands and biodiversity corridors	The site readily satisfies this objective.
1.13	Where additional infrastructure is required to cater for the demand generated by new development, contribution to the costs associated with the provision of this infrastructure will be necessary.	Development on the site can make a reasonable and equitable contribution towards the costs of infrastructure the need for which is generated by the development.
	The development of increased densities within renewal areas should deliver quality architecture that respects local character. This will be achieved through well connected and useable public spaces supporting accessible and vital centres.	The master plan envisages a density of development appropriate to the characteristics of the site and its location and recognizing the existing character of Boolaroo.
	Local planning will be undertaken to enable increased housing densities in and around centre to support existing infrastructure and services and facilitate revitalisation.	The site can accommodate higher densities if considered appropriate by the Council.
	Local plans and strategies will provide for a mix of housing types and densities near jobs, transport and services and ensure that centres and corridors are planned to have the capacity to accommodate their agreed dwelling projects.	The site can readily achieve this objective by providing opportunities for additional housing at a range of densities close to transport corridors centres.
	Local planning will adopt the Neighbourhood Planning Principles and ensure that design implements those principles in new release areas.	This objective can be readily achieved by meeting Council controls for the area.
(7) Transport		
1.13	Concentrate employment and residential development in proximity to public transport to maximise transport access.	The site is close to existing and proposed public transport opportunities.
2. Lifestyle 2020		
A City Responsive to its Environment		
2.1	Minimising the distances or reducing the need to travel by private vehicle by incorporating integrated access to public transport, cycling and walking facilities and facilitating the development of mixed-use neighbourhoods.	The site is close to public transport and to existing centres and improved linkages with surrounding areas can be provided. The provision of access roads though the site will improve urban interconnectivity in the locality.
A Well Serviced and Equitable City:		
	5.2.1 Retains the social diversity across the City	
2.2	Provide a mixture of lot sizes and housing types that allow residents to meet their housing needs at different stages of their lifecycle, in one area if they so choose	The site is capable of accommodating a mix of lot sizes.
2.3	Encouraging opportunities for housing that meets special needs, such as older people or people with physical or psychological disabilities.	The majority of the site is gently sloped and is capable of accommodating the needs of older persons.
2.4	Encouraging a wide range of tenures to provide choice in	The development of the site will provide the opportunity for

	Strategic Planning Objectives	Response
	housing.	a range of tenures.
2.5	Providing a mixture of housing types to serve a range of income levels.	It is envisaged that a range of housing types will be provided on the site. It is also envisaged that the redevelopment of the site will encourage redevelopment in Boolaroo and Argenton.
	5.2.2 Focuses activities at Centres to maximise accessibility	
2.6	Developing communities of sufficient size to support a range of local needs	Residential development on the site will add to the population in the area and support the provision of additional facilities.
2.7	Maximising access to local community needs, through an interconnected street system, walk ways and cycle paths	The site provides the opportunity to improve access in the area by the provision of through site links connecting Cardiff Industrial Estate with TC Frith Drive and Macquarie Hills with Boolaroo.
	5.2.3 Facilitates the supply of adequate land and housing	
2.8	Encouraging housing in locations that support public transport and Centres	The site is close to Glendale, Boolaroo and to public transport as discussed above.
2.9	Encouraging mixed use development that incorporates housing within a 5 and 10 minute walk of Centres and public transport nodes or stops	The site is generally within 5 to 10 minute walk to Cockle Creek train station. The site is suitable for mixed use development.
2.10	Maximising redevelopment and infill opportunities for medium density housing within a 5 and 10 minute walk of Centres and public transport nodes or stops	As above.
2.11	Facilitating the consolidation of under developed lands to contribute to the supply of residential, commercial and industrial allotments	Not relevant
2.12	Encouraging a diverse range of allotments and housing types in new and emerging urban areas	This objective can be achieved as discussed above.
A Well Serviced and Equitable City:		
	5.5.1 Promotes an efficient, accessible and environmentally responsible pattern of development	
2.13	Encourage a range of dwelling types together with compatible mixed-use development in proximity to all Centres	This objective can be achieved as discussed above.
2.14	Encouraging development to locate so that it supports accessibility, convenience and efficiency of public transport	This objective can be achieved as discussed above.
2.15	Encouraging development so that it reduces the need for people to travel long distances for daily activities	This objective can be achieved as discussed above.
2.16	Ensuring that services and facilities are accessible from existing and emerging residential areas by a range of transport modes, including walking and cycling	This objective can be achieved as discussed above.
2.17	Design development to ensure internal movement systems consider the needs of pedestrians and cyclists and avoid conflict between these modes, and between these and vehicular traffic	This objective can be achieved as discussed above.
2.18	Ensuring that neighbourhoods are easily accessible and are easy to find one's way around	This objective can be achieved as discussed above.
2.19	Maximising internal and external access by incorporating a highly interconnected road, pedestrian and cyclist network in existing and emerging neighbourhoods	This objective can be achieved as discussed above.
2.20	Ensuring development maintains and enhances connectivity with existing and emerging areas	This objective can be achieved as discussed above.
	5.5.4 Facilitates the provision of a public transport system capable of meeting the needs of the City's residents	
2.21	Facilitating a more compact urban form that maximises opportunities for public transport use	This objective can be achieved as discussed above.
2.22	Encouraging mixed-use and medium density residential development and redevelopment with a 5 and 10 minute walk of Centres and transport nodes or stops.	This objective can be achieved as discussed above.
Source: NSW Department of Planning (2007) Lower Hunter Regional Strategy, Lake Macquarie City Council (2001) Lifestyle 2020 Strategy		

2.4 Relationship to Glendale/Cardiff

2.4.1 Proposed Growth in Glendale/Cardiff

Glendale is one of the Hunter's largest employment zones, combining industrial and commercial property, with residential and recreational areas. Glendale Stockland has expanded to become a significant subregional shopping centre featuring many national chains and an eight-screen cinema complex.

Council is currently developing plans for the Lake Macquarie Integrated Transport Centre, to be located adjacent to Glendale Cardiff regional centre and the Cardiff Industrial Park. This will include a new railway station, bus interchange and commuter carpark in addition to a new link to the F3 freeway, which will improve the currently congested regional road network. It is anticipated that the new transport centre will facilitate the ongoing expansion of specialised industries in the area, with an estimated 2,800 new jobs linked directly with the ITC and up to another 1,000 indirect jobs. It has been estimated that the site could contribute approximately 18% of the direct jobs¹.

The ITC will also provide potential as an attraction to entice new residents and businesses to the local area. The Pasminco site will be strategically located to meet this new demand.

The Lower Hunter Regional Strategy has adopted job and dwelling targets for regional centres, indicating that Glendale/Cardiff should achieve 6,200 jobs and 4,000 dwellings by 2031.

The draft Urban Structure Plan for Glendale/Cardiff, prepared in 2004 by Dickson Rothschild notes the following in relation to the Cardiff Planning District:

- *The population of the planning district is expected to increase by only 700 people to provide a total population of 35,000 by 2020;*
- *Due to the continued trend toward fewer people living in each house in the planning district, there will be a need for approximately 1500 further dwellings to accommodate the current population and 300 dwellings for the additional population over the period to 2020;*
- *1200 of the 2000 residential dwellings should be medium density or aged person accommodation;*
- *Glendale and Cardiff will merge to form a sub-regional centre that will provide an increased commercial, retail and employment focus for the Lower Hunter and*
- *A target of 21,000 jobs by 2020 has been proposed representing an increase of 7200 positions (p B1).*

It is noted that this may not reflect the increased target densities for the region which emerged from the Lower Hunter Regional Strategy.

¹ Geolink and Hassall & Associates (2006) *Boolaroo Village Development: Preliminary Economic Report*, prepared for Lake Macquarie City Council

2.4.2 Implications for Housing Demand

The Village of Boolaroo has an important role to play in relation to the sub-regional centre of Glendale/Cardiff. The Lifestyle 2020 Strategy defines a hierarchy of Centres for the City of Lake Macquarie:

- Sub-Regional Centres – Charlestown and Cardiff/Glendale
 - o Serve City and Regional business and residential communities
 - o Provide high-order speciality retail and business activities, entertainment, social services and community facilities
- Town Centres – eg Warners Bay
 - o Serve a number of surrounding business and residential communities
 - o Provide a range of retail and commercial activities, social services and community facilities
- Local Centres – neighbourhoods, villages and transport nodes
 - o Predominantly serve a local business and residential community
 - o Provide retail and business services and may also include social services or community facilities.

Boolaroo, as a local centre, will provide residential opportunities to support the nearby Glendale/Cardiff sub-regional centre, where a full range of employment, commercial and community services can be efficiently and sustainably provided.

2.5 Lower Hunter Regional Strategy Sustainability Criteria

The Lower Hunter Regional Strategy examines the pattern of settlement in the Hunter Region, noting that in recent decades, “the great majority of housing (at least 75 per cent) has been provided in the form of single detached cottages in new housing estates on the urban fringe” leading to a dispersed pattern of settlement with people living in areas removed from major centres of employment and removed from the commercial and services centres where essential services are located. This pattern of settlement also presents difficulties and additional expense in providing services and infrastructure.

The focus of the Strategy is to refocus the development trends, from a current pattern of 75% of all new housing being in new release areas and 25% in existing urban areas, to a new balance of 60% in new release areas and 40% in existing urban areas.

The Strategy identifies the location of proposed new release areas across the region, based on the hierarchy discussed previously. However, the Strategy does allow that other release sites, not currently identified in the Strategy, may be considered if “it can demonstrated that the proposal satisfies the Sustainability Criteria”, as long as they are not situated within the identified green corridors.

The Strategy also identifies a set of *Neighbourhood Planning Principles* which will be relevant to any housing proposal. These include:

- *A range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space.*
- *Easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops.*

- *Jobs available locally and regionally, reducing the demand for transport services.*
- *Streets and suburbs planned so that residents can walk to shops for their daily needs.*
- *A wide range of housing choices to provide for different needs and different incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples.*
- *Conservation lands in-and around the development sites, to help protect biodiversity and provide open space for recreation.*
- *Public transport networks that link frequent buses into the rail system.*

The Lower Hunter Regional Strategy seeks to achieve an outcome whereby 40 per cent of new housing is provided in greenfield areas with the remaining 60 per cent being in established areas in order to improve the efficiency of towns and their support services.

The Strategy defines a number of *Sustainability Criteria* to guide decision making on urban settlement in the Lower Hunter. The Strategy requires that any development proposal satisfy these criteria, in addition to the proposal being assessed by the LEP Review Panel and public exhibition.

The following table sets out the *Sustainability Criteria* in the Lower Hunter Regional Strategy, presenting an indicative assessment of residential development on the site against these criteria.

Threshold Sustainability Criteria	Measurable Explanation of Criteria	Assessment of Proposal
1. Infrastructure Provision <i>Mechanisms in place to ensure utilities, transport, open space and communication are provided in a timely and efficient way</i>	• Development is consistent with any regional strategy, sub-regional strategy, State Infrastructure Strategy or section 117 direction • The provision of infrastructure is costed and economically feasible based on Government methodology for determining infrastructure development contributions • Preparedness to enter into developer agreement	The site is located in an established area with access to utilities transport and a range of open space and community facilities opportunities. Notwithstanding the location within an existing urban area and the current zoning of most of the site for urban purposes or urban investigation purposes, the owner has indicated a preparedness to enter into discussions on a planning agreement in lieu of S94 contributions.
2. Access <i>Accessible transport options for efficient and sustainable travel between homes, jobs, services and recreation to be existing or provided</i>	• Accessibility of the area by public transport and/or appropriate road access in terms of: - Location/land use – to existing networks and related activity centres. - Network – the area's potential to be serviced by economically efficient transport services. - Catchment – the area's ability to contain, or form part of the larger urban area which contains adequate transport services. Capacity for land use/	The site is in close proximity to a rail line and rail station, the Glendale Regional Centre, an existing neighbourhood centre and bus transport. It has the potential to augment the road network by the provision of a strategic road connection from Munibung Road to TC Frith Drive. There is the opportunity to provide for cyclists and to connect to Council's existing cycleway network in the vicinity of the site.

	transport patterns to make a positive contribution to achievement of travel and vehicle use goals. No net negative impact on performance of existing subregional road, bus, rail, ferry and freight network.	
3. Housing Diversity <i>Provide a range of housing choices to ensure a broad population can be housed</i>	Contributes to the geographic market spread of housing supply, including any government targets established for aged, disabled or affordable housing.	The site will provide land for residential development in an accessible location for seniors housing and affordable housing. The range of landscapes provided on the site and its proximity to Boolaroo and Glendale and to Lake Macquarie make the site suitable for a range of dwelling types.
4. Employment Lands <i>Provide regional/local employment opportunities to support the Lower Hunter's expanding role in the wider regional and NSW economies</i>	- Maintain or improve the existing level of subregional employment self-containment - Meets subregional employment projections - Employment related land is provided in appropriately zoned areas	The site has the potential to provide additional employment opportunities in industries for which there is a demand for land. Existing heavy industrial zoning will be replaced by new employment land controls ensuring the jobs lost through the closure of the smelter operations will be replaced.
5. Avoidance of Risk <i>Land use conflicts and risk to human health and life avoided</i>	- No residential development within 1:100 floodplain - Avoidance of physically constrained land eg high slope or highly erodible. - Avoidance of land use conflicts with adjacent existing or future land use as planned under relevant subregional or regional strategy. - Where relevant, available safe evacuation route (flood and bushfire)	The site is currently being remediated and the owners have prepared a Lead Abatement Strategy. This will significantly reduce the risks from previous land uses. Detailed consideration has been given to the capability of the site for urban development including land stability and slope and development is restricted to those areas suitable for development.
6. Natural Resources <i>Natural resource limits not exceeded/environmental footprint minimised</i>	- Demand for water within infrastructure capacity to supply water and does not place unacceptable pressure on environmental flows - Demonstrates most efficient/suitable use of land: - Avoids identified significant agricultural land - Avoids productive resource lands – extractive industries, coal, gas and other mining and quarrying - Demand for energy does not place unacceptable pressure on infrastructure capacity to supply energy – requires demonstration of efficient and sustainable supply solution.	The site is located in an established urban area and is currently provided with utility services capable of sustaining the previous heavy industrial uses on the site. The site is a typical brownfields site capable of making a significant contribution to the orderly and economic use of land in the Lower Hunter.
7. Environmental Protection <i>Protect and enhance biodiversity, air quality, heritage and</i>	- Consistent with Government approved Regional Conservation Plan (if available) - Maintains or improves areas of	Detailed consideration has been given to protecting the environmental and scenic qualities of Munibung Hill which has regional scenic qualities.

<i>waterway health</i>	- regionally significant terrestrial and aquatic biodiversity (as mapped and agreed by DEC) - Maintain or improve existing environmental condition for air quality - Maintain or improve existing environmental condition for water quality - Protects areas of Aboriginal cultural heritage value	Provision has been made for the protection of species of Inopina within a proposed park reserve and for environmental corridors. Air quality in the area has improved and continues to improve with the on-going remediation activities. The remediation of the site has made a positive contribution to the environmental qualities of the locality.
8. Quality and Equity in Services <i>Quality health, education, legal, recreational, cultural and community development and other Government services are accessible</i>	- Available and accessible services: - Do adequate services exist? - Are they at capacity or is some capacity available - Has Government planned and budgeted for further service provision? - Developer funding for required service upgrade/access is available.	The site is located in an established urban area in close proximity to existing services. The site is close to the Glendale regional centre which will be a focus for further investment in commercial and community infrastructure.

2.6 Suitability of the Site for a Range of Housing Types

The Lower Hunter Regional Strategy seeks to achieve an outcome whereby 40 per cent of new housing is provided in greenfield areas with the remaining 60 per cent being in established areas in order to improve the efficiency of towns and their support services. The site has characteristics of greenfield sites (release area) and infill development as it adjoins an existing residential community and is close to an existing train station. This site has a number of attributes that make it suitable for a range of housing types:

- § **the proximity to public transport** - The NSW Ministry of Transport, Service Planning Guidelines, indicate the interstate and international walking distance criteria for bus and rail routes is between 400 to 500 metres during the day and between 800 and 1,000 metres at night;
- § **proximity to arterial road network** - the site is located adjacent to the arterial road network;
- § **proximity to employment zones** – employment zones are planned for the site encouraging mixed use of the area and integrating with Cardiff West Industrial Estate. The site is also close to the emerging Glendale regional centre;
- § **proximity to existing communities and facilities** – the site adjoins an existing community and can integrate with and revitalise the existing community. Residents of the site will use existing schools and other available facilities.

2.7 Affordable Housing

Affordable housing is defined in the EP&A Act to mean *housing for very low income households, low income households or moderate income households, being such households as are prescribed by the regulations or as are provided for in an environmental planning instrument*. There are no provisions of the Regulation prescribing such households and no provisions of the relevant environmental planning. There is no definition in the

Standard Instrument. SEPP No 70 – Affordable Housing (Revised Schemes) defines affordable housing to mean:

for the purposes of the definition of affordable housing in section 4 (1) of the Act, very low income households, low income households and moderate income households are those whose gross incomes fall within the following ranges of percentages of the median household income for the time being for the Sydney Statistical Division according to the Australian Bureau of Statistics:

<i>Very low income household</i>	<i>less than 50%</i>
<i>Low income household</i>	<i>50 or more but less than 80%</i>
<i>Moderate income household</i>	<i>80–120%</i>

The Lower Hunter Regional Strategy acknowledged that housing is more affordable in the Lower Hunter than in other parts of the Greater Metropolitan Region, with lower housing costs and higher home ownership rates illustrating this fact. However the Strategy “recognises that housing affordability is an issue for current and future households within the Region”. Trends elsewhere in the metropolitan region may also have a significant impact on demand in Lake Macquarie.

2.7.1 Affordable Housing Benchmarks

The 2006 ABS Census of Population and Housing found that the median household income in Lake Macquarie LGA was \$922 per week and \$718 in the suburb of Boolaroo.

Using these median household incomes, affordable housing benchmarks can be calculated, based on the general standard that the maximum acceptable expenditure on housing should be no more than 30% of household income.

Table 2-2: Maximum Affordable Rent or Mortgage Payable (\$2006)

	Boolaroo	Lake Macquarie LGA
Low Income	\$107.70	\$138.30
Low-Moderate Income	\$172.32	\$221.28
Moderate Income	\$258.48	\$331.92

In June 2007, the median weekly rent in the Lake Macquarie LGA ranged from \$145 per week for a 1 bedroom flat to \$318 per week for a 3 bedroom detached house. In the postcode 2284 (which includes the suburb of Boolaroo²), weekly rents were around \$230 for all types of dwellings.

² Postcode 2284 comprises the suburbs of Argenton, Boolaroo, Booragul, Marmong Point, Speers Point, Teralba and Woodrising.



Table 2-3 below shows the current rental prices in the Lake Macquarie LGA and postcode 2284, at the June Quarter 2007.

Table 2-3: Median Weekly Rents, Lake Macquarie LGA and 2284 postcode, June 2007

Type of Dwelling	No. bedrooms	Weekly Median Rent (\$)	
		2284	Lake Mac LGA
All dwellings	1 bed	-	148
	2 bed	220	220
	3 bed	250	260
	4 bed	-	318
Separate houses	2 bed	-	220
	3 bed	250	260
Flats/Units	1 bed	-	145
	2 bed	230	220

Source: Department of Housing, Rent and Sales Report No. 80.

Note: Data is not released where the number of new bonds was 10 or less.

From this, it can be seen that on average, all dwellings in postcode 2284 are affordable to moderate income households. Two bedroom separate houses and all flats are likely to be affordable for low- moderate income households in the LGA.

In March 2007, the median price for a non-strata dwelling in Lake Macquarie was \$325,000 and the median price for a strata dwelling was \$307,000, as shown in Table 2-4 below. In the Boolaroo postcode the median price for non-strata dwellings was \$291,000.

Table 2-4: Median Sales Prices, Lake Macquarie LGA and 2284 postcode, March 2007

Area	All Dwellings	Non Strata Dwellings	Strata Dwellings
	\$'000	\$'000	\$'000
2284	296	291	-
Lake Macquarie LGA	323	325	307

Source: Department of Housing, Rent and Sales Report No.80,

Note: Strata title properties usually include town houses, villas/terraces, flats/units. Data is not released for small numbers of sales.

There has been a slight downturn in dwelling sales prices in both the LGA and the 2284 postcode over the period March 2006 - 2007, with the postcode experiencing an annual decline of -4.4% and the LGA -0.6%. However, as can be seen in the table below, there has been considerably more variation in the sales prices in the LGA than in the broader Hunter region (excluding Newcastle SLA).

Table 2-5: Median Rent and Sales Prices, 2001-2005

	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05
Median Sales Price \$'000					
Lake Macquarie LGA	185	249.5	314.95	320	318
Newcastle SSD	176.2	235	304	315	301
Median Weekly Rent \$					
Lake Macquarie LGA	160	160	180	185	200
Newcastle SSD	165	165	190	205	215

Source: Dept of Housing Rent and Sales Reports

Note: Median House Price (All Dwellings) for 4th Quarter. House Price not available for sales

Based on a standard loan³, the average weekly repayments for a non-strata dwelling in postcode 2284 would be approximately \$496 per week and for all dwellings it would be \$504 per week. The average weekly mortgage repayment in the LGA would be \$550 for all dwelling types. This would suggest that whilst house purchase prices in Boolaroo are significantly more affordable the LGA overall, they are still unlikely to be affordable for low or moderate income earners.

However, the proposed rezoning and development of the site will contribute to affordable housing through:

- adding to the supply of housing in the area which, given existing demand, will reduce pressure on prices;
- some medium density housing is proposed which is likely to be more affordable than detached housing;
- the higher percentage of medium density housing is likely to mean higher than average rental housing opportunities with the area being better placed to meet the needs of lower income households.

2.7.2 Housing Stress

Housing Stress is defined as low to moderate income households which pay more than 30% of their household income in rent or mortgage repayments. The NSW Department of Housing has recently released the *Local Government Housing Kit* which provides access to key tables and data to enable an analysis of the housing market in a local government area and to provide regional comparisons.

The *Local Government Housing Kit* provides the following explanation on the calculation of affordable rental and purchase stock:

- *Rental affordability indices have been calculated at 40th percentile household incomes. The income benchmarks are different for Greater Metro and Rest of NSW. Average Weekly Earnings (AWE) are used to index the 40th percentile income. A dwelling is counted as affordable if the rent charged is no more than 30% of the household income.*
- *Affordable purchase is based on sales transferred in the last 2 quarters. A property is regarded affordable if the loan repayment is less than 30% of 40th percentile census household income. The income benchmarks are different for GMR and Rest of NSW. A 25-year loan period and 10% deposit are assumed. Average interest rate during the last two quarters of each period is used. % of affordable purchase is reported only where 30 or more properties are sold. Please note that transfer date is used instead of contract date.*

The table below shows the proportion of low to moderate income households calculated to be in housing stress in the Lake Macquarie LGA, based on 2001 Census data. The proportion of households in rental stress is similar in the LGA and the broader Statistical Division. The proportion of households with difficulties in repaying mortgages is slightly higher in the LGA than in the Hunter region.

³ Assuming an interest rate of 8.32%, 30 year term loan, loan being 90% of purchase cost.

Table 2-6: Low Income Households in Rental and Home Purchase Stress, 2001

Area	Households in Rental Stress		Households in Home Purchase Stress	
	No	%	No	%
Lake Macquarie LGA	4,043	49	3,138	35
Hunter SD	15,417	48	8,992	31

Source: ABS 2001 Census of Population and Housing. Analysis generated through NSW Housing Kit Database

The *Local Government Housing Kit* also allows the calculation of the proportion of affordable housing stock in an LGA, for both rental and purchasing. As can be seen in the table below, the proportion of affordable rental dwellings in the Lake Macquarie LGA declined considerably over the period 2001-2005 and has remained below the broader region. Similarly affordable purchase stock has also fallen dramatically, although not dissimilar to other regions. Whilst not directly comparable, the proportion of affordable purchase stock in the Sydney SD fell from 9% in December 2001 to 4% in December 2005.

Table 2-7: Proportion of Affordable Rental and Purchase Stock, 2001-2005

	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05
% Affordable Rental Stock					
Lake Macquarie	71	61	56	52	49
Newcastle SSD	69	60	53	48	47
% Affordable Purchase Stock					
Lake Macquarie	43	20	7	5	6
Newcastle SSD	-	-	-	-	-

Source: Valuers General (VG) and Rental Bond Board (RBB) Data. Analysis generated through NSW Housing Kit Database

* Newcastle SSD comprises the LGAs of Newcastle, Cessnock, Lake Macquarie, Maitland and Port Stephens. Data not available at the SSD level for purchases and affordability calculations are not made at the SD level.

3. Demographic Characteristics and Projections

3.1 Introduction

This section examines the demographic profile of the existing population of the suburb of Boolaroo, based on data from the Australian Bureau of Statistics (ABS) Census of Population and Housing for 2006. The profile is based on data for the State Suburb of Boolaroo and has been examined in the context of the Lake Macquarie LGA. At the time of preparation of this report, only preliminary data from the 2006 Census has been released. Information from the 2001 Census has been used where 2006 data was not yet available. This will be used to help assess how the proposed development might affect the surrounding suburb and to assist the development of population and dwelling projections for the area.

The Pasminco site lies to the north east of the suburb of Boolaroo. Boolaroo is an established community with good access to Lake Macquarie, to the south, and the sub-regional centre of Glendale, to the north. The village of Boolaroo is fully serviced and has a neighbourhood centre and facilities which are currently underutilised. Lake Macquarie Council offices are located in the village. The built form is primarily detached residential with some dual occupancy and townhouses. Boolaroo integrates with Speers Point and shares facilities such as active open space, schools and community facilities.

The proposed residential sectors of the overall site redevelopment will be located as a continuance of the existing urban form of Boolaroo, following the grid pattern of residential streets, allowing for high quality pedestrian and cycle movement. The population of Boolaroo has declined over the last decade or so, partly in response to the closure of the Pasminco mines and loss of employment associated with the site. The proposed residential expansion will have a significant role to play in boosting the population of Boolaroo to its previous levels.

3.2 Existing Community Profile

3.2.1 Population Characteristics

In 2006, 954 people lived in Boolaroo, a twenty percent reduction from 1,188 in 2001. The population of Boolaroo comprised approximately 0.5% of the Lake Macquarie LGA, which experienced a 3.4% increase from 177,185 in 2001 to 183,138 in 2006.

Age

- In 2006, Boolaroo had a lower proportion of children aged 0-14 years (17.2%) compared to the Lake Macquarie LGA (19.6%). The proportion of children in both Boolaroo and the Lake Macquarie LGA had decreased since 2001, however the decline was more significant in the suburb (3.7% versus 1.7%).
- The proportion of 15-24 year olds residing in Boolaroo increased from 11% in 2001 to 14.8% in 2006. The proportion of 15-24 year old remained steady in the Lake Macquarie during this period, constituting 12.6% of the population in both 2001 and 2006.
- The proportion of people aged 65 years and over in Boolaroo (17.0%) was slightly higher than the Lake Macquarie LGA (16.8%). However, this proportion had increased at a notably higher rate in Boolaroo than in the Lake Macquarie LGA (from 13.5% and 15.2% in 2001 respectively).
- The median age for both Boolaroo and the Lake Macquarie LGA was 40 in 2006.

Ethnicity

- The suburb, like the Lake Macquarie LGA as a whole, is relatively homogenous in terms of ethnicity, with 88.8% and 85.4% of residents respectively born in Australia.
- In 2006, 95.5% of the Boolaroo population spoke only English at home, slightly higher than the Lake Macquarie LGA as a whole (93.2%), suggesting there is not a large NESB community present in either location.
- Although small in number, the proportion of people who identified themselves as being of Aboriginal or Torres Strait Islander origin in Boolaroo was somewhat higher than the Lake Macquarie LGA (3.2% versus 2.3%).

Marital Status

- In 2006, the suburb had significantly fewer residents who were married (39.5%) compared to the Lake Macquarie LGA (52.9%) and correspondingly more residents who had never been married (35.5% versus 28.2%). The decrease in the proportion of married people in Boolaroo since 2001 (8.4%) was more significant than in the Lake Macquarie LGA (1.8%).

3.2.2 Household Characteristics

Family Type

- There have been a number of notable changes to household structures in Boolaroo between the 2001 and 2006 Censuses. In 2006, there was a lower proportion of couple families with children (34.8% compared to 44.7% in 2001). Correspondingly, there was an increase in the number of couple families without children (from 30.2% in 2001 to 34.8% in 2006) and an increase in single parent families (from 22.4% to 28.5%). While each of these trends were also present in the Lake Macquarie LGA, the change was relatively small (generally less than 2% for each family type). In 2006, Lake Macquarie had a higher proportion of both couple families with children (43.6%) and couple families without children (38.4%) compared to the suburb of Boolaroo. However, there was a significantly lower proportion of single parent families than Boolaroo (16.8% versus 28.5%). There were also proportionately fewer lone person households in the Lake Macquarie LGA (22.4%) than the suburb (30.1%).

Household Mobility

- In 2001, 84.9% of Boolaroo residents had resided at the same address one year previously, similar to the Lake Macquarie LGA (84.2%). A total of 58.3% of Boolaroo residents and 59.7% of Lake Macquarie LGA residents had lived at the same address for the five years prior to the 2001 Census.

Travel

- In 2001, a higher proportion of households in Boolaroo (15.3%) did not have access to a motor vehicle compared to the Lake Macquarie LGA (9.5%). A lower proportion of Boolaroo households had access to two or more vehicles compared to the Lake Macquarie LGA (38.3% and 45.6% respectively).

3.2.3 Housing Characteristics

Types of Housing

- The total number of dwellings in Boolaroo declined from 514 in 2001 to 429 in 2006, a 16.5% decrease. Conversely, the Lake Macquarie LGA as a whole experienced a 3.8% increase in the number of dwellings, from 71,986 in 2001 to 74,740 in 2006.
- The predominant housing stock in Boolaroo in 2006 was separate houses (94.9%), a higher proportion than for the Lake Macquarie LGA (87.0%). Flats, units and apartments comprised 4.3% of Boolaroo's housing stock, up from 2.7% in 2001, and there were no semi-detached, terrace or townhouses in Boolaroo at the time of either the 2001 or 2006 Censuses. Overall, the dwelling mix in the Lake Macquarie LGA remained relatively constant.
- In 2006, the occupancy rate for Boolaroo (2.4 persons per dwelling) was lower than the Lake Macquarie LGA as a whole (2.6 person per dwelling).

Tenure

- The number of Boolaroo residents who were renting their homes has increased from 17.1% in 2001 to 23.8% in 2006. The number of Lake Macquarie residents living in rented housing increased slightly, from 21.0% in 2001 to 21.9% in 2006.
- In 2006, 70.4% of residents in Boolaroo owned their own home or were in the process of purchasing it, a slightly lower proportion than the Lake Macquarie LGA (72.0%).
- According to the 2006 Census, there were no public housing properties located in Boolaroo. However, in the Lake Macquarie LGA, public housing represented 22.3% of all rental dwellings.

Median Rent & Mortgage

- In 2006, the median weekly rent in Boolaroo was \$180, which was marginally lower than the Lake Macquarie LGA (\$185).
- Boolaroo had a considerably lower median monthly housing loan repayment than the Lake Macquarie LGA (\$1,096 versus \$1,300).
- In the June Quarter of 2007⁴, the median weekly rent in both the Lake Macquarie LGA and the postcode 2284⁵ for all two bedroom dwellings was \$220.

3.2.4 Economic Indicators

Education

- Residents of Boolaroo were generally less educated than the wider Lake Macquarie LGA population, with only 39.0% having obtained some form of post-school qualification in 2001 (versus 45.9% in the Lake Macquarie LGA). A total of 72.0% of Boolaroo residents had left school at or before the end of Year 10, compared to 58.2% in the Lake Macquarie LGA.

Employment

- In 2001, the largest employment industries in both Boolaroo and the Lake Macquarie LGA were Retail Trade (19.5% and 17.7% respectively), Manufacturing (16.3% and 12.3% respectively) and Health and Community Services (13.4% and 12.0% respectively).

⁴ Source: Department of Housing (2007) *Rent and Sales Report No. 80*

⁵ Includes the suburbs of Argenton, Boolaroo, Booragul, Marmong Point, Speers Point, Teralba and Woodrising.

- In 2001, 58.9% of Boolaroo residents (aged 15 years and over) were participating in the labour force, marginally higher than the Lake Macquarie LGA (58.2%).
- In 2001, the most common occupations held by Boolaroo residents were Tradespersons and Related Workers (19.2%); Intermediate Clerical, Sales and Service Workers (18.4%); and Elementary Clerical Sales and Service Workers (13.0%). The largest occupation category in the Lake Macquarie LGA in 2001 was Professionals (16.9%), followed by Intermediate Clerical, Sales and Service Workers (16.6%) and Tradespersons and Related Workers (14.9%).
- Boolaroo had a relatively high rate of unemployment (12.2%) in 2001, compared to 9.5% in the Lake Macquarie LGA. The rate for the LGA had decreased to 5.1% in March 2007⁶. The unemployment rate for Boolaroo is likely to have also decreased since the 2001 Census⁷, but would be expected to have remained higher than the LGA average.

Income

- In 2006, the median individual income for Boolaroo was \$367, slightly less than the Lake Macquarie LGA (\$394).
- The median weekly household income in Boolaroo was \$718, considerably less than the Lake Macquarie LGA (\$922).

SEIFA

- In 2001, the median SEIFA Disadvantage Index for Boolaroo was 913, indicating that generally the residents of Boolaroo were relatively more disadvantaged than NSW as a whole. In comparison the Disadvantage Index for Lake Macquarie LGA was 985.

3.2.5 Conclusion

The population of Boolaroo is declining having fallen by 20% between 2001 and 2006 and by more since 1996. Boolaroo has a relatively homogenous profile, and contains a higher proportion of 15-24 year olds and people over 65 years of age compared to the Lake Macquarie LGA. The household structure in Boolaroo is characterised by a declining proportion of couples with children and a corresponding increase in couples without children. There has also been a considerable increase in both single parent families and a slight increase in lone person households. The majority of Boolaroo households are fully owned or being purchased and dwellings are predominantly separate houses, with few apartment-style structures in the suburb. Boolaroo is characterised by relatively higher levels of disadvantage, with lower levels of education and median household income, as well as a higher rate of unemployment.

3.3 Expected Population Growth and Change

Research into changing household structure and population characteristics is important to identifying the potential for the site to accommodate the expected demand for household types and associated dwelling types. However, Lake Macquarie also sits within the larger Hunter Region, which is also facing significant growth and changes, much of which relates to the State Government's strategic planning directions. These projections will also affect the LGA and suburbs within it.

⁶ Commonwealth Department of Employment and Workplace relations (2007) *Small Area Labour Markets Australia*. Retrieved from <http://www.workplace.gov.au/>

⁷ Employment data is not yet available for the 2006 Census and the Small Area Labour Markets data is not available for Boolaroo.

The following section presents an overview of population and housing growth trends in the Lower Hunter Region as well as Lake Macquarie LGA and Boolaroo, as the basis for developing an appropriate housing mix on the site to meet the future population needs.

3.3.1 Lower Hunter Region

The Lower Hunter Regional Strategy, released by the NSW Department of Planning in October 2006, is a strategy that guides planning in the five local government areas of Lake Macquarie, Newcastle, Port Stephens, Maitland, and Cessnock for the period 2006 – 31, to be reviewed every 5 years.

The following population targets have been set by the State Government for the region. It is important to distinguish between population projections and population targets. Population targets are a goal that the Government has set itself and the community, and is often coupled with focussed policy actions to assist in meeting the target. In contrast, population projections are a view of future populations based on historical trends, current settlements patterns, and demographic modelling techniques⁸.

Table 3-1: Population, Dwellings, Jobs and Town Centre Targets

Area	Additional People	New Homes	New Jobs	Regional Centres
Lower Hunter	160,000	115,000	66,000	6 major regional centres, 1 regional city
Lake Macquarie	60,000	36,000 (ref table below for breakdown)	12,200	3 major regional centre, 6 main town centres, 2 renewal corridors

Source: www.lakemac.com.au

These overall targets will be met in a variety of locations and dwelling types, both within the LGA and in the Lower Hunter Region.

Table 3-2: Dwelling Capacity Targets

Area	Centres and Corridors	Urban Infill	Total Infill	New Release	Total Dwellings
Lake Macquarie	14,000	7,000	21,000	15,000	36,000
Lower Hunter	32,000	16,000	48,000	69,200	117,200
Lake Macquarie as a percentage of the Lower Hunter	43.8%	43.8%	43.8%	21.7%	30.7%

Source: www.lakemac.com.au

The Strategy aims to achieve a density of 12 dwellings per hectare or higher in new release areas.

⁸ Source: www.lakemac.com.au/CityStatistics

The Strategy notes that the Lower Hunter has a high level of employment self sufficiency and accordingly sets significant targets to create new employment options in order to maintain current rates of employment to match the anticipated population growth.

More specific projections estimate that the Glendale/Cardiff Sub-Regional Centre will generate an additional 6,200 jobs and 4,000 dwellings⁹.

3.3.2 Lake Macquarie Population Projections

Lake Macquarie Council's Social Plan 2005-2007 contains a demographic profile of the LGA based on 2001 Census population. Population projections are discussed on Council's website and utilise the Department of Planning's Transport and Population Data Centre projections, 2005 release.

Council is currently in the process of updating the Social Plan, however no new population projections or data relating to catchments has been prepared at the time of writing this report. The projections below are based on the PTDC 2005 projections and other existing data.

Whilst Lake Macquarie Council has prepared housing and population projections for the LGA overall, specific detailed work has not yet been carried out for Boolaroo. The following section will examine a number of different data sources in order to make some assumptions on expected future trends.

As discussed in Section 3.2, the population of the Lake Macquarie LGA increased by 3.4% between 2001 and 2006. The Estimated Residential Population¹⁰ (ERP) (preliminary) in Lake Macquarie LGA in 2006 was 189,596, and the median age for the LGA has risen from 38.2 in 2001 to 40 in 2006. Care must be taken in comparing population figures and projections as the 2006 Census changed the basis of the population count from place of enumeration to place of usual residence.

An adjustment of the total population count to reflect the place of usual residence in the Lake Macquarie LGA indicates that the LGA population has grown from 170,495 in 1996 to 177,619 in 2001 and 180,126 in 2006¹¹.

The Transport and Population Data Centre at the Department of Planning has prepared population projections (2005 release) for each LGA in NSW, based on 2001 Census figures, as shown in the table below. However, based on the findings from the 2006 Census, as stated above, it appears that the 2005 release of the NSW Department of Planning Population Projections may be slightly overestimated.

However to date, Lake Macquarie Council has based their future planning estimates on the following table.

⁹ NSW Department of Planning (2007) Lower Hunter Regional Strategy, p18.

¹⁰ The estimated resident population (ERP) of an area is the estimate of the number of persons who usually reside in that area irrespective of where they were on the date of the estimate. The ERP is the official ABS population figure and is based on adjusting the results of the latest Population Census, which was 2001 for these figures.

¹¹ Source: ABS 2006 Census Time Series Profile, Table T01

Table 3-3: Lake Macquarie LGA Population Projections, 2001-2031

	Population 2001	Population 2006	Estimated Population 2016	Estimated Population 2031	Estimated Increase 2001-2031	Percentage Increase 2001-2031	Estimated Annual Growth Rate
Lake Macquarie LGA	187,800	191,050	204,000	221,530	33,730	18.0%	0.55%
Hunter SD	588,820	613,950	663,930	731,210	142,390	24.2%	0.72%

Source: TPDC Population Projections, 2005 Release

As can be seen in the above table, both Lake Macquarie LGA and the Hunter SD are projected to grow considerably, however Lake Macquarie will grow at a slightly lower rate than the wider region. It is anticipated that the majority of new growth in the LGA will be in the major centres such as Glendale/Cardiff and Charlestown.

The figure below shows the projected changes in population age structure in both the Lake Macquarie LGA and the Hunter SD between 2006 and 2031. As can be seen, the population in the LGA will age at a slightly greater rate than the wider region, with the working age population decreasing over time.

Figure 3-1: Population Projections by Age Group, Lake Macquarie LGA and Hunter SD, 2006-2031

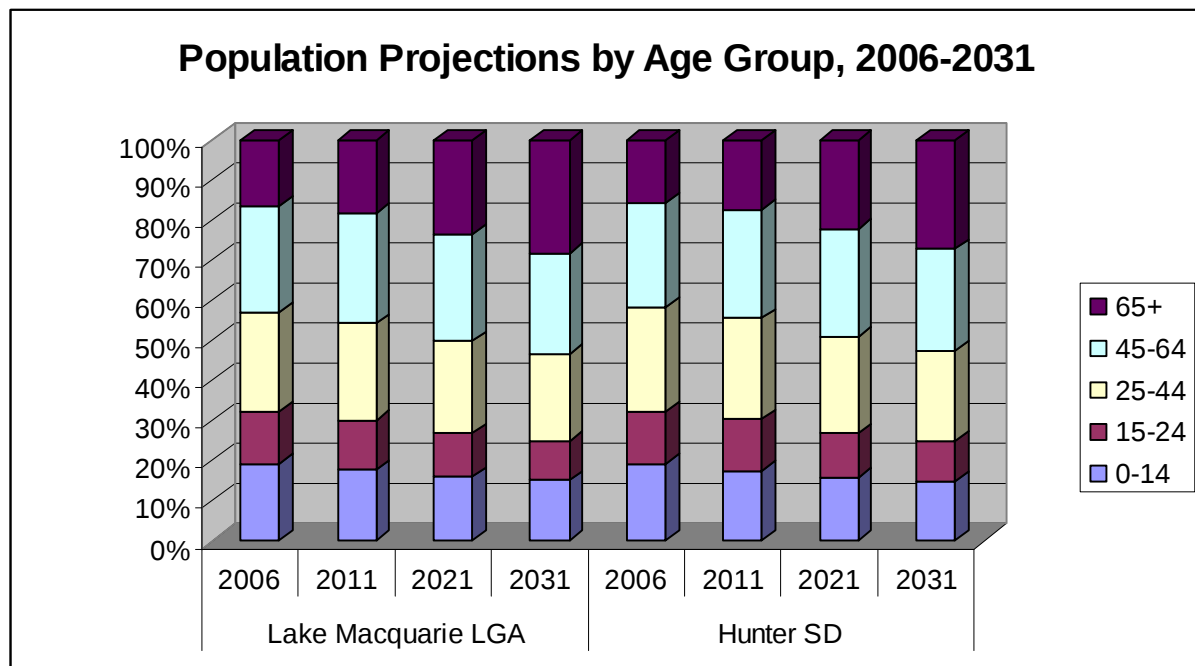
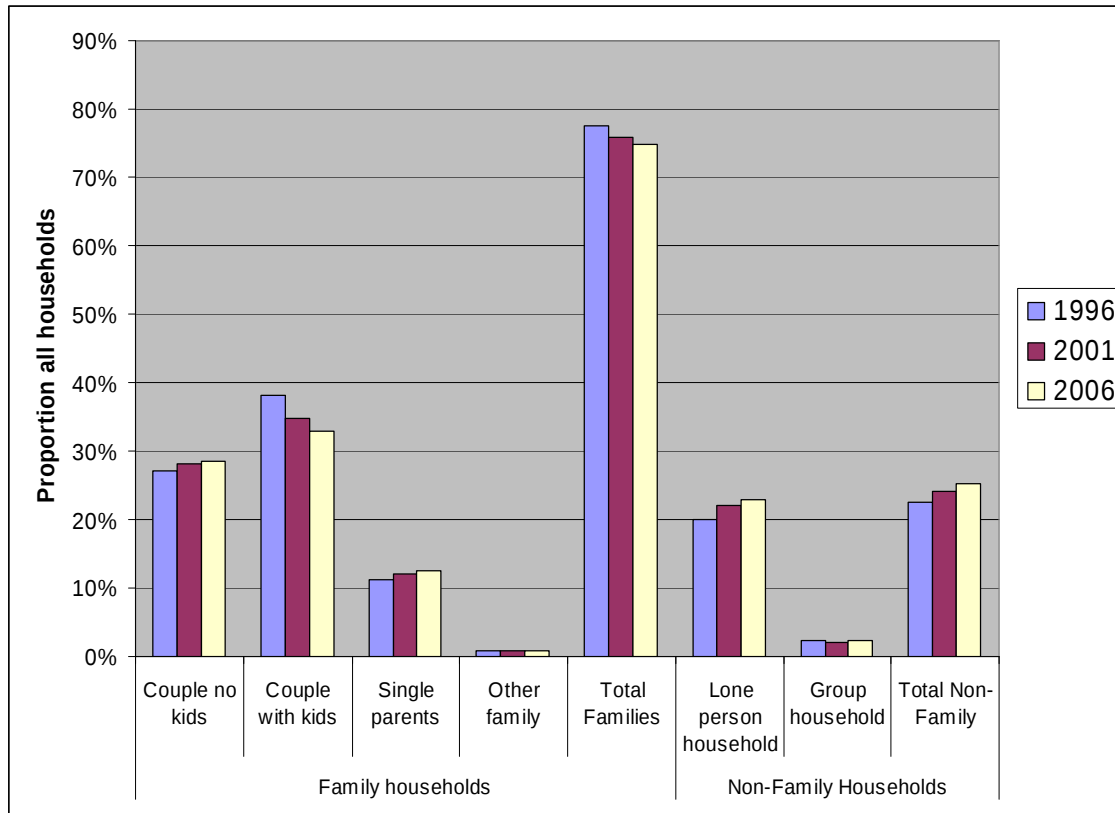


Figure 3-2: Trends in Household Types, Lake Macquarie LGA, 1996-2006



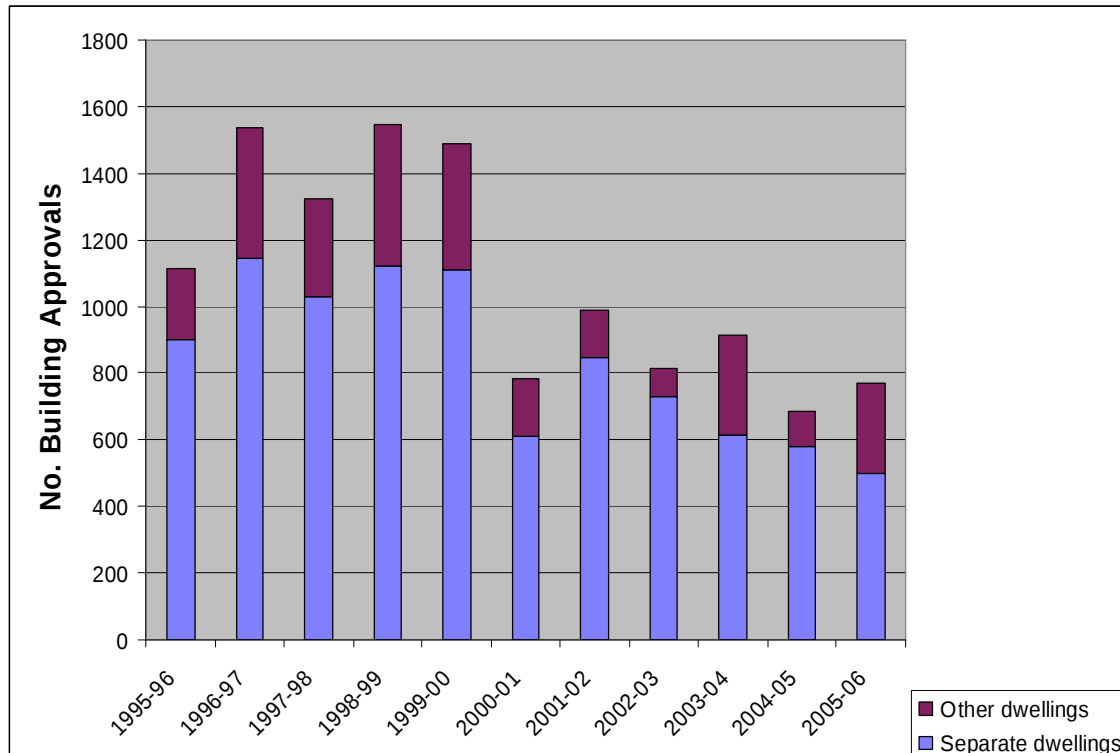
Source: ABS 2006 Census of Population and Housing, Census Tables, Dwelling Structure by Household and Family Composition, Time Series Analysis, June 2007 release.

Council is currently undertaking a detailed evaluation of its Citywide Section 94 Plan in order to address the changing population targets and new development demands. However at the time of preparing this report, no updated material was available from Council, who advised that the existing (2004) plan be used.

3.3.3 Lake Macquarie Housing and Development Trends

Council's development approval figures show that for the last few years, overall construction has decreased considerably and the proportion of "other" dwellings, ie those that are not separate houses, including flats, townhouses and terraces, has varied from year to year.

Figure 3-3: Building Approvals Trends, Lake Macquarie LGA, 1995-2006



Source: Lake Macquarie Community Profile, accessed from Hunter Councils Regional Profile, at www.id.com.au/huntercouncils

Another factor to consider in conjunction with the increase in population and dwellings in the LGA is the corresponding decline in occupancy rates, a recognised trend across Australia as household sizes decrease. Table 3-4 below shows the shift in average household size in both the Lake Macquarie LGA and the Hunter SSD between the 1991 and 2006 Censuses.

Table 3-4: Occupancy Rate Trends, Lake Macquarie LGA and Hunter SSD, 1991-2006

	Average Household Size			
	1991	1996	2001	2006
Lake Macquarie LGA	2.9	2.7	2.6	2.6
Hunter SD Bal	2.8	2.6	2.5	2.5

Source: Lake Macquarie Community Profile, and 2006 Census Quickstats

Table 3-5 shows that the predominant dwelling types have not changed considerably over the past 10 years, with separate houses remained the dominant dwelling type. With changing population characteristics this may reveal a current lack of flexibility in the housing types available in the LGA.

Table 3-5: Dwelling Type Trends, Lake Macquarie LGA, 1996-2006

	1996		2001		2006	
Separate house	53,057	86.7%	56,752	86.3%	58,819	87.2%
Semi detached/terrace	3,131	5.1%	4,729	7.2%	4,631	6.9%
flat/unit	2,702	4.4%	2,491	3.8%	3,030	4.5%
Total	61,164	100%	65,727	100%	67,442	100%

Source: ABS Census of Population and Housing 2006, Time Series Profile, Table T15.

3.3.4 Housing and Development Projections

Development projections prepared by Council for the basis of the Lake Macquarie Citywide Section 94 Plan (2004) have been prepared according to the future housing requirements contained in the *Lifestyle 2020 Strategic Plan* over a nominal 5 year period and based on an occupancy rate of 2.5.

Table 3-6: Lake Macquarie Development Projections by Planning Area, 2004-2009

Planning District	Projected Housing Requirements	Projected Population
Belmont	536	1,399
Cardiff	489	1,221
Charlestown	670	1,675
Morisset	967	2,417
Toronto	548	1,369
West Wallsend	42	104
Windale	371	929
Total	3,623	9,054

Source: Section 94 Contribution Plan No 1. Citywide (2004)

Note: These projections do not include the projected growth for the Northlakes Urban Release Area and North Wallarah Peninsula.

The Plan also identifies the anticipated characteristics of the incoming population, giving an indication of the age structure, based on previous census data (Table 3-7).

Table 3-7: Anticipated Characteristics of Incoming Population, 2004-2009

Age Group	Projected Increase	Age Group	Projected Increase
0-4	646	50-54	538
5-9	672	55-59	425
10-14	705	60-64	387
15-19	640	65-69	401
20-24	569	70-74	354
25-29	561	75-79	241
30-34	623	80-84	152
35-39	696	85-89	75
40-44	681	90+	32
45-49	657	Total	9,054

Source: Section 94 Contribution Plan No 1. Citywide (2004)

The projected population increases are expected to have a significant impact on demand for housing in Lake Macquarie. Significantly, the ageing population is likely to require a broader range of housing choices, through a greater mix of dwelling types, in accessible locations.

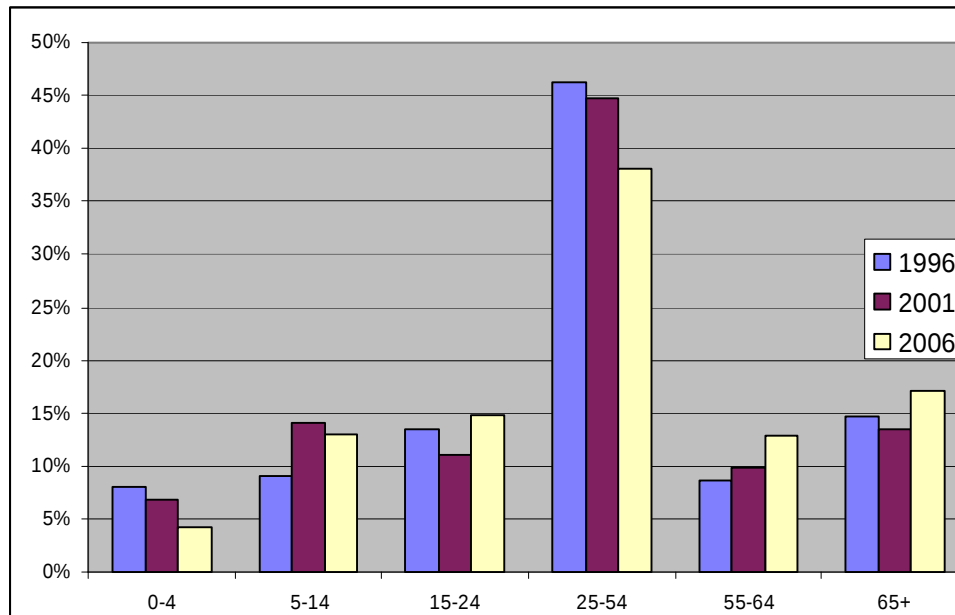
3.3.5 Boolaroo

Current Population Trends

The population of Boolaroo has declined in recent years, from 1,384 in 1996 to 1,188 in 2001 and 954 in 2006, a decrease of -19.7%.

The following graph shows the shift in age structure which the suburb of Boolaroo has seen over the period 1996 – 2006. Significantly, there has been a considerable drop in the working age population and there has also been a significant fall in the proportion of young children, suggesting that young families are not moving to the area. The proportion of older persons has increased, suggesting a trend of early retirees moving to the area.

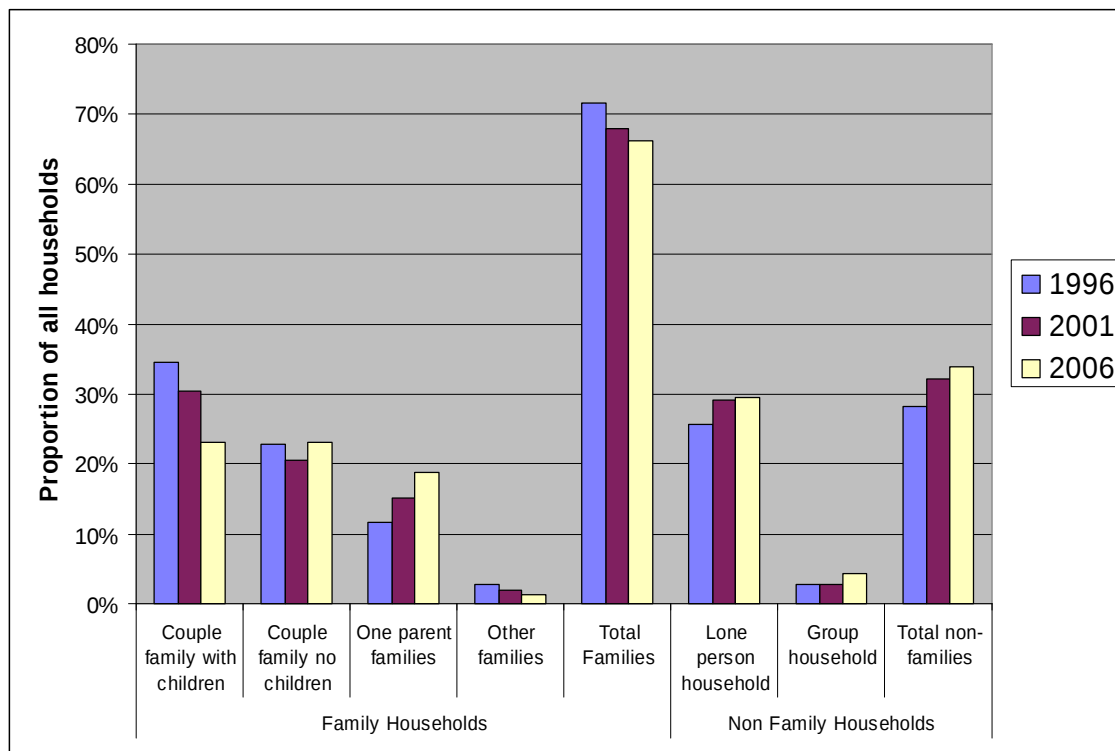
Figure 3-4: Boolaroo Proportionate Age Structure, 1996-2006



Current Housing Trends

As discussed in Section 3.2.3, the predominant housing type in Boolaroo is separate houses, a characteristic which has not changed significantly over time. The figure below shows the changes in household type in Boolaroo over the period 1996-2006.

Figure 3-5: Trends in Household Types, Boolaroo, 1996-2006



Overall, both Boolaroo and Lake Macquarie have seen a significant decrease in the proportion of couple family with children households over the past 10 years with corresponding increases in one parent families and lone person households particularly in Boolaroo.

In 2006 the average occupancy rate in Boolaroo was 2.4, lower than the LGA average of 2.6. The predominant housing form in Boolaroo was detached houses (375 dwellings, 94.7%). There were no semi-detached houses or terraces and only 18 flats or units. Overall there has been a decline in the number of detached dwellings from 467 in 2001.

Given the ageing structure of Boolaroo it will be essential to develop housing options which are attractive to a broader range of household types, particularly to families with children. A community with a more balanced structure will be more stable in the long term.

3.4 Future Housing and Demographic Profile of the Site

3.4.1 Predicted Dwelling Types

It is projected that the site can accommodate a range of dwelling types and lot sizes, with a total of approximately 800 dwellings, as presented in the following table. It is noted that this is an indicative proposed mix only, as the total developable area is likely to change as constraints are identified and the final rezoning determined.

Table 3-8: Indicative Proposed Dwelling Mix

Precinct Area	Area m2	density/ha	No. dwellings	Total Population ¹²
Medium Density	149,108	18	268	
Low Density	577,549	10	577	
	726,657		845	2,112

This mix is appropriate for the location and consistent with the emerging trends and needs in the area. It offers a significantly higher percentage of medium density housing compared with other release areas. The assumed density in the low density areas is influenced by larger lots on the sloping lands in the south east and east.

The housing types that can be accommodated within these density ranges will be influenced by the market perceptions and the intentions of the ultimate developer of the land. However the densities proposed can accommodate a range of dwelling types and sizes in the low to medium density range.

A range of lot types and dwelling types including townhouses, villas, courtyard housing, integrated housing, small-lot housing and traditional detached dwelling styles can be accommodated, providing options for a range of demographic groups, characteristics which are desirable for building a sustainable community.

3.4.2 Characteristics of the Future Population

A description of the likely characteristics of the future population has been prepared to assist in the process of planning for the provision of facilities to the future residents.

¹² Based on an average occupancy rate for the Lower Hunter of 2.5 persons per dwelling.

The age and household characteristics of the new population will be a reflection of:

- § The size, type and style of housing to be provided, and its cost;
- § The appeal of the area to different sections of the population;
- § The proximity to community facilities and infrastructure.

Based on the above housing projections, it is estimated that that site could house up to 2,000 additional residents, based on an average occupancy rate of 2.5 persons per dwelling, as shown in Table 3-8 above. However it acknowledged that this will likely be the upper limit, with household numbers likely to decrease over time, in line with national trends.

General population projections for the area suggest that there will be a higher proportion of young families moving to the area, to benefit from the lifestyle available in the area and the affordability and proximity to employment opportunities. However as the development matures it is likely that there will be an increase in the older population moving in, particularly if the proposed varied range of dwelling types is offered.

3.4.3 Household Types

Based on the dwelling yield proposed for the site, some estimates as to the likely household and family types have been made, as shown in Table 3-9 below. It has been assumed that the incoming population will be proportionally similar to the existing Boolaroo suburb. However it is unlikely that the relatively high proportion of lone person households will be achieved during the initial stages of development. Thus it is anticipated that there will be a slightly higher number of couples with children and single parent families, particularly in the short term, shifting to a pattern similar to that shown below in the medium to long term.

Table 3-9: Housing Typology and Household Structure in Lake Macquarie and Boolaroo in 2006

	Lake Macquarie LGA	Boolaroo suburb	Site	
	ABS 2006 %	ABS 2006 %	Est. %	No.
Dwelling Type				845
Separate house	87.2	94.7	68%	577
Semi-detached/townhouses	6.9	0	28%	237
Flat, unit or apartment	4.5	4.5	4%	38
Family Types (persons)				2,000
Couple family with children	43.6	34.8	32%	384
Couple family with no children	38.4	34.8	36%	432
One parent family	16.8	28.5	30%	360
Other families	1.1	1.9	2%	24
Household Types (persons)				2,000
Family Households	72.8	65.3	60%	1,200
Lone Person Households	22.4	30.1	36%	720
Group Households	2.1	4.3	4%	80

Source: ABS 2006 Census of Population and Housing, BBC Consulting Planners estimates.

Smaller lots, and the mix of medium density dwellings are more attractive to older people, both couples and single persons, offering a more affordable and more manageable housing option than larger detached dwellings. The convenience and accessibility of the site to

Glendale and the availability of local services in Boolaroo will likely prove attractive to young families.

It is likely that the residents of the site will have characteristics that are different from other typical release areas in the Lower Hunter and in Lake Macquarie because of the location of the site.

3.4.4 Age Profile

As a consequence of the proposed dwelling mix discussed above, it is likely that the site will attract:

- A higher proportion of young families with children than is currently the case in Boolaroo;
- A similar proportion of working age couples without children to existing Boolaroo; and
- Higher proportion of single parent families and aged persons that would be typically expected in new release areas.

On this basis, the likely age profile of the future population of the site has been estimated in Table 3-10 below, to provide an approximate indicator for planning purposes of the numbers of people in each age cohort to be expected in the area approximately five years post occupancy when household structures have become established. These projections should be taken as indicative only as they are not related to any specific housing product or developer intention.

Table 3-10: Projected Age Profile

	Boolaroo 2006		Lake Macquarie LGA 2006		Site Projections *		Lake Macquarie LGA 2016		LGA projected population (Council) 2004-2009	
0-4	41	4.3%	10,668	5.8%	160	8.0%	10,180	5.0%	646	7.1%
5-14	125	13.1%	25,205	13.8%	300	15.0%	23,570	11.6%	1377	15.2%
15-19	67	7.0%	12,879	7.0%	120	6.0%	12,850	6.3%	640	7.1%
20-24	77	8.1%	10,278	5.6%	100	5.0%	11,400	5.6%	569	6.3%
25-39	171	17.9%	31,325	17.1%	420	21.0%	34,650	17.0%	1880	20.8%
40-54	194	20.3%	39,065	21.3%	440	22.0%	40,270	19.7%	1876	20.7%
55-64	119	12.5%	22,967	12.5%	220	11.0%	27,990	13.7%	812	9.0%
65+	160	16.8%	30,753	16.8%	240	12.0%	43,090	21.1%	1255	13.9%
Total	954	100%	183,140	100%	2000	100%	204,000	100%	9055	100%

Source: ABS 2006 Census, Department of Planning Population Projections (2005 Release),

* BBC Estimate

4. Community Needs for Local Facilities and Services

The new population projected for the site will require access to a range of services and facilities to meet their social, cultural, recreational, educational, health, transport and shopping needs. These will include:

- § Children's services
- § Health services
- § Neighbourhood community centres/halls
- § Schools and other educational institutions
- § Cultural, entertainment and leisure facilities
- § Shopping and commercial services
- § Open space and recreation facilities
- § Welfare and support services for individuals and families
- § Public transport
- § Places of worship
- § Police and emergency services

As the site is located in an existing urban area and because the population of Boolaroo has been declining, many of the necessary facilities and services are available in the area. Others will be planned and provided by relevant authorities as part of their normal operations.

The extent to which this demand may be met by existing services and facilities in the area, or will give rise to a need for additional services and facilities, is examined in this section. This assessment has drawn on:

- § Lake Macquarie City Council Section 94 Contributions Plan No.1 – Citywide (2004)
- § Lake Macquarie Lifestyle 2020 Strategy
- § Lake Macquarie Social Plan (2005)
- § Department of Education, Demographic Division
- § Discussions with social planning staff at Lake Macquarie City Council
- § Service providers in the local community

4.1 Standards for the Provision of Community Facilities

The following section provides an overview of standards for the provision of community facilities in Lake Macquarie LGA as defined in the Lake Macquarie City Council Section 94 Contributions Plan No. 1 – Citywide (2004).

Table 4-1: Standard Benchmarks for Community Facility Provision in Lake Macquarie LGA

Facility	Standard	Required Size (m ² Gross Floor Area)
Children's Service Places	1 place: 5 children (0-4 years) 75% children in Centred based care (ie 1 place: 6.57 children 0-4 years) Internal floor area 10.22m ² per place External site area 46.6m ² per place 25% children in Family Day Care, ie 1 place: 20.75 children	If a child care centre is to be a stand alone building, the internal floor area standard must be met. The floor area per 1,000 population reflects the age composition. Child care services are increasingly being provided by the private sector with families using the services receiving some form of benefit from the Federal government and operators also obtaining assistance.
Before and After School Places	1:25 children (5-12 years) Internal floor area 3.25m ² per place External site area 12m ² per place	The floor area per 1,000 population reflects the age composition.
Vacation Care Places	1:60 children (5-12 years)	Included in area above
Youth Centre/Annex	1 facility: 13,000 population External site area 231m ² per 1000 population	The floor area per 1,000 population reflects the age composition
General Purpose/Family Activity Areas	External site area 715m ² per 1000 population	65m ² per 1000 population
Multipurpose Centre <i>Multipurpose Centres may incorporate any of the above specialised sections</i>	209.7m ² GFA per 1000 population. Site area 1,468m ² per 1000 population. This replaces all those above.	209.7m ² per 1000 population
Library	External site area 160m ² per 1000 population	50m ² per 1000 population

Source: Lake Macquarie City Council (2004) Section 94 Contributions Plan No. 1 – Citywide

The Lake Macquarie Social Plan (2005) identified a number of issues through consultation with stakeholders relating to community facilities, including:

- § The need to identify established suburbs or clusters of suburbs where demographic changes have occurred since the Review of Halls in 2001, in order to assess the facility needs of local communities;
- § The gap in the provision of appropriate offices and program delivery areas for community services funded by the state government;
- § The need to provide additional support to volunteers involved in managing community facilities;
- § The need to attract disadvantaged groups to Council's facilities.

4.2 Current Capacity of Community Facilities

A summary list of community facilities in Boolaroo and surrounding suburbs is attached at **Appendix 1**. The residential development on the site will be an extension to an existing community, which already has an established network of community facilities, both Council operated and a number of privately operated facilities.

The age and condition of existing facilities varies considerably with implications for accessibility and adaptability and on-going maintenance. The declining population and shift in characteristics of the community will also affect the current and future capacity of the facilities.

The Lake Macquarie Section 94 Contributions Plan No. 1 notes that:

“currently the City has a mix of housing of various types, a regional commercial shopping centre in Charlestown, district commercial service centres and local shopping areas and industrial areas. The geographic location can be a limiting factor in the provision of community facilities around the foreshores of a coastal lake with inadequate public transport links, particularly in the western area. For this reason, together with a lack of a City Centre, there has been a need to duplicate the provision of public facilities in order to provide accessibility for all residents. However these facilities have tended to be relatively small and therefore not able to provide the range of services required”.

The Plan emphasises Council's current strategy of concentrating on the development of larger multi-purpose community facilities in order that services may be co-located.

Community facilities provided through multipurpose centres currently funded through Section 94 Contributions in Lake Macquarie LGA are:

- § Children's Services, including day care, OOSH and children's services and programs
- § Youth Facilities
- § Facilities for Older People, People with a Disability and SEPP 5 developments
- § General Purpose/Family/Community Section

Contributions for library facilities are also collected across the LGA.

Community facilities are largely planned and provided for on a catchment basis, with the LGA divided into Eastlakes, Northlakes and Westlakes. Boolaroo falls within the Northlakes sector. Council has advised that they are soon to begin a comprehensive overview of the Citywide (2004) Section 94 plan, however it had yet to be finalised at the time of preparation of this report.

The current s94 plan identifies a number of new multi-purpose centres and children's facilities to be provided across the LGA, based on the projected incoming population. Within the North Lake Macquarie Planning Sector, in which Boolaroo lies, the following facilities are proposed:

- *Glendale – Youth and community centre incorporating general-purpose community activity area, disability services area and youth section*

- *Barnsley/West Wallsend Child Care – contribution towards new centre, or extension to existing facility (p59).*

The anticipated additional population will also place demands of library facilities in the LGA. With regards to the North Lake Macquarie Planning Sector, the s94 plan states:

"It is proposed to construct a new Regional Area library at Glendale to replace the Speers Point library that may either become a District (branch) library or be demolished. Both Cardiff and Edgeworth libraries may also be replaced due to site restrictions that do not allow for expansion" (p61).

Children's Services

There are a range of children's services available in the LGA, provided through Council and the private sector. Lake Macquarie Council's Family Day Care service has carers in most suburbs throughout the city and generally has some vacancies.

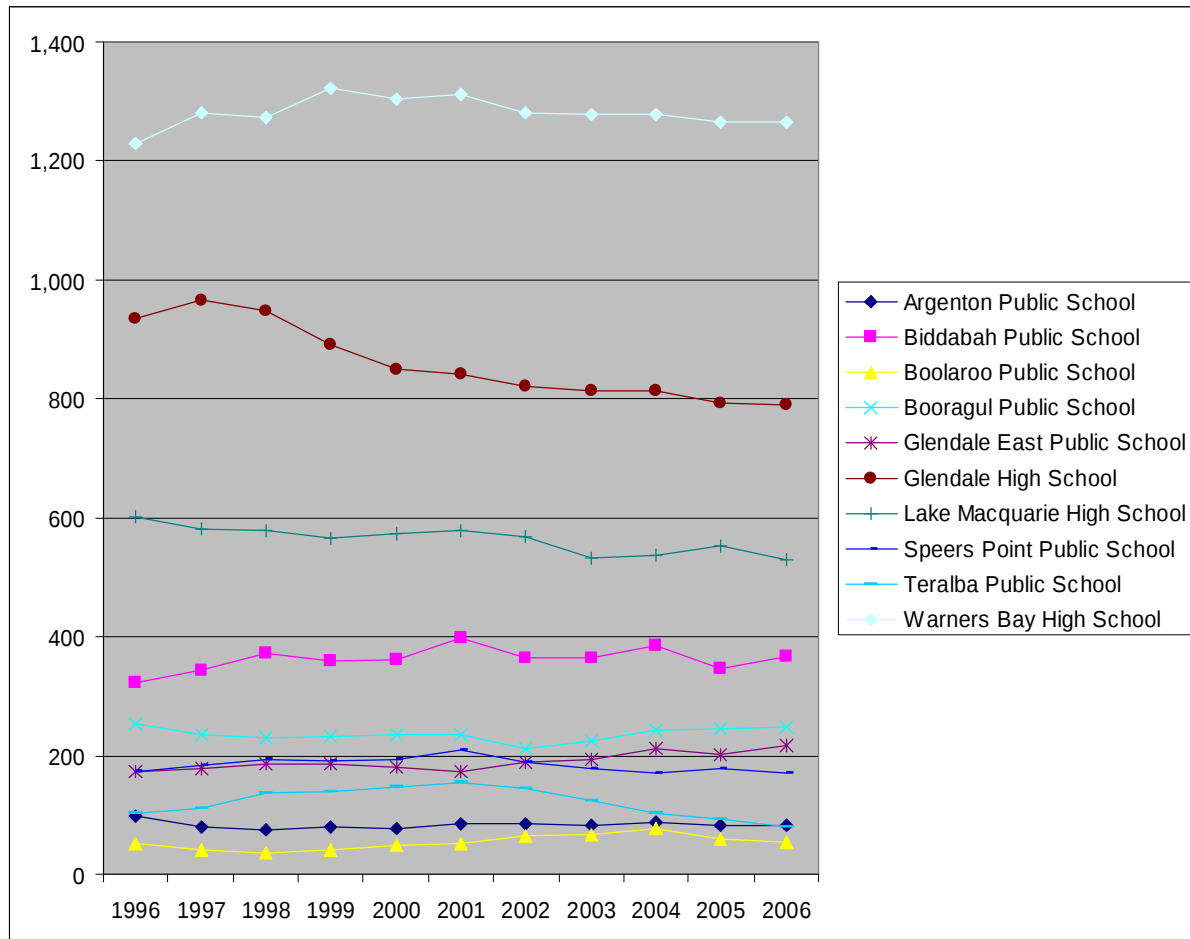
There are 4 pre-schools in Glendale and one in Argenton. Vacation care is provided at Boolaroo Primary School. The Boolaroo/Speers Point Community Kindergarten is a community operated pre-school for children. There is an increasing trend towards privately operated child care centres which is likely to continue.

The population forecasts in Section 7.2 suggest that there could potentially be 160 pre-school aged children on the site some of whom will require child care services. It is not possible to anticipate the number of childcare places such a population would require, as this will depend on the proportion of parents in the workforce. However it is likely that there will be some available capacity as the existing population ages. This figure is likely to be the peak demand also and would drop off over time as the population ages. Applying Council's standard of 1 space per 6.57 children, there would be a demand for 20 additional spaces for 0-4 year olds. This is not sufficient to warrant an additional centre to be built. Furthermore, based on the recent increase in privately funded child care centres, this demand is likely to be met by the private sector. There will be opportunities in the development for sites for private child care facilities.

Educational Facilities

The Department of Education was contacted to ascertain enrolment trends at government schools in the vicinity of Boolaroo. Figure 4-1 shows the patterns of enrolment over the ten-year period 1996-2006, showing that most schools have had steady or declining enrolments.

Figure 4-1: Government School Enrolment Patterns around Northlakes, 1996-2006



Source: NSW Department of Education and Training, Planning and Innovation, (2007) Mid Year Censuses 1996-2006

There are two government owned primary schools within close proximity to the site. Boolaroo Primary School currently has an enrolment of 55 and Argenton Primary has an enrolment of 82 students¹³. There are a number of other primary schools, private and public, which will be easily accessible to the new residents of the site.

Students will have the choice of attending one of several high schools in the area, including Glendale Technology High School, Lake Macquarie High School, Warners Bay High School and St Paul's Catholic High School. As can be seen in the figure above, Glendale High School has seen a significant drop in enrolments in recent years (791 in 2007).

The Hunter Institute of TAFE has a branch at Glendale, attached to the Glendale Technology High School, providing technical and vocational training, focussing on Business and Info Tech, Community Services, Health and Tourism and Manufacturing and Construction.

The DET Guidelines for the provision of schools in areas of new residential development are:

- one public school per 1,500 to 2,000 new dwellings;

¹³ As identified on <http://www.schools.nsw.edu.au/schoolfind/locator> , accessed 14 December, 2007.

- one public high school per 4,500 to 6,000 dwellings

The site does not meet either of these baseline figures. Consideration also needs to be given to spare capacity in existing facilities as a consequence of the ageing and declining population. Overall enrolment trends show declining numbers in most schools in the area and it is anticipated that the additional demand for education places created by the development can be adequately met through existing supply. This is expected in renewal areas where efficiencies in the provision of public amenities and services are seen as a major benefit of urban consolidation policies such as those incorporated into the Lower Hunter Regional Strategy.

Neighbourhood and Community Centres

The new residential population will require access to spaces for community activities and events. These spaces are usually provided in community centres or halls, and in addition to providing meeting and activity rooms, community centres can also provide a base for community development activities, training and continuing education opportunities.

The Boolaroo/Speers Point Senior Citizens Centre is located on Main Road in Boolaroo is a basic hall with a simple kitchen and is available for hire for activities.

Small community halls are also located in Warners Bay, Teralba and Argenton.

There is the opportunity to use smaller parks and open space areas for community meeting spaces for informal recreation and social activities. These spaces have the added benefit of complete flexibility in the range of potential uses and require very little infrastructure.

The former laboratory building on the site is considered suitable for future community use subject to Council identifying an appropriate use consistent with Council's facility provision strategy which is yet to be determined.

Based on a commonly accepted benchmark of 1 multi-purpose community centre per 10,000 persons, the development on the site will not generate a demand for a new centre but will contribute to the need for community space the need for which cannot be totally met by existing facilities.

Council has advised that the mode of delivery for community meeting and activity spaces has changed over the years, with a shift away from small locally based halls towards larger multipurpose centres which are designed to be flexible and to meet the needs of a much broader cross section of the community. The Section 94 plan notes that there is some capacity within existing halls and neighbourhood centres which will continue to provide access to incoming residents. However there is no capacity within multipurpose centres to cater to increased demand.

The Section 94 Plan identifies that a new Youth and Community Centre will be built at Glendale, incorporating general purpose community activity area, disability services area and a youth section. There is potential for residential development on the site to contribute towards this facility.

Youth Services

It is important to not overlook the provision of facilities and services for young people in the new community. The Lake Macquarie Council Youth Community Plan¹⁴ identified several key priorities in relation young people and leisure and culture, including:

- a need for increased entertainment and sporting options for young people;
- a need for libraries to expand their services to focus on young people; and
- lack of access to youth services after hours and on weekends.

There are currently no youth specific facilities in Boolaroo, Speers Point or Glendale. However, as noted above, the proposed Glendale Community Centre may have youth specific facilities and programs available. Furthermore, a number of cultural and entertainment facilities are available in Glendale, including cinemas and the Hunter Regional Sports Centre.

Health and Medical Services

As with any area, the provision of accessible health services will be of primary concern. Due to the dispersed nature of development in the Lake Macquarie LGA, health services are provided on a regional rather than local basis.

The location of the site in close proximity to both Charlestown and Newcastle town centres will mean that residents will have good access to a wide range of health services, including the new Royal Newcastle Centre, replacing the former Royal Newcastle Hospital. Community Health Centres in Toronto, Newcastle, Windale and Wallsend will provide more generalised support and services. At present there are only a few aged care facilities in the neighbouring suburbs, however this is likely to change in the future as development catches up with the ageing population trend.

There are two medical centres in Glendale and two general practitioners in Speers Point providing primary health care services to residents in the area.

The ratio of GPs to population in the Lake Macquarie LGA was 4.6 compared to 5.0 in NSW¹⁵, indicating that there is an acceptable level of provision of services in the area.

Services for Older People

The Boolaroo/Speers Point Senior Citizens Centre is a basic hall with a simple kitchen and is available for hire for activities. Programs are operated on a voluntary basis.

The preferred model of provision for services and facilities for older people has changed over the years, with a trend away from dedicated seniors facilities and focus instead on developing multi-purpose community spaces which can be used by the whole community for a variety of activities, including seniors specific programs.

¹⁴ Lake Macquarie City Council (2007) *Youth Community Plan 2007-2011 draft* p43.

¹⁵ As per NSW SLA Population Health Profiles, retrieved from www.publichealth.gov.au, based on 2001/2001 data.



The proposed Glendale Community Centre will be designed to consider the requirements of older people and people with a disability and programs will be offered to suit the needs of the local population profile.

Meals on Wheels services are offered through the Charlestown and District branch.

The proposed development may create an additional requirement for aged care services in the area, particularly as the population ages. The planned increase in population will allow service providers to apply for additional funding packages through HACC to expand their service provision.

Transport

Boolaroo is conveniently located on the Central Coast rail line, connecting Sydney to Newcastle. The closest station is at Cockle Creek, to the north east of the site, and this will be linked into the site and to Speers Point via the proposed cycleway along the creek.

Boolaroo is serviced by a regular bus service connecting Belmont to Newcastle, which includes Glendale and John Hunter Hospital. Numerous regional services operate through Glendale.

Additionally, the NSW State Government announced in March 2006 a proposal for the proposed Glendale rail/transport interchange, which will include a new railway station, bus interchange and commuter car park, will be located adjacent to Cardiff Industrial Park and Glendale Supacentre to the north east of the site.

Several new roads are being proposed as part of the redevelopment of the site which will allow a through connection to Macquarie Hills and the Cardiff West Industrial Area. These will facilitate better connectivity with the transport interchange and bus movements through the area.

Emergency Services

The Boolaroo Fire Station, operated by the NSW Fire Service is located on the corner of Main and Fourth Streets. The NSW Fire Service target response time is arrival of the first truck and crew within 10 minutes of the call being received, on 90% of occasions. It has been estimated that this level of service will be able to be met at the site. The closest Rural Fire Service is located at West Wallsend.

The development on the site comprises infill development in a location adjacent to an emerging sub-regional centre. It is therefore assumed that emergency services are available or can be readily augmented to meet any additional demand created.

Cultural, Entertainment and Leisure Facilities

The new population will contribute towards an increased demand for library services. Services for the Northlakes Planning District are currently provided in Speers Point (area library), Cardiff and Edgeworth (branch libraries). As noted above, the Section 94 Plan currently provides for a new Regional (Area) library to be constructed at Glendale to replace the Speers Point library which may either become a district or branch library or be demolished. Furthermore, there is no capacity to expand the Cardiff and Edgeworth libraries.

Shopping Centres

Local shops are important in defining a local community. Boolaroo contains a small neighbourhood shopping centre which cater to local, daily needs. Council has proposed a small northern extension of the commercial centre which will provide additional land for centre growth. The emerging regional centre of Glendale currently has a full range of retail and commercial outlets, and is likely to expand considerably under the new regional strategy.

4.3 Community Facility Needs

There is no definitive way of assessing what community needs might be in the future. Rather, it is a continual process of analysing existing provision, the changing demography, population projections and assessing demand as perceived by the community and those who provide services to them.

Applying a benchmarking or threshold approach to community facility planning, informed by the existing situation, suggests that the expected residential population would not justify or sustain the provision of any specific community facilities because the expected population is insufficient to support the provision of any such facilities.

In determining the community facility needs of the future residents of the site, the following factors are relevant:

- The physical separation between Boolaroo and Cardiff and Macquarie Hills to the east;
- The proximity to the existing neighbourhood centre of Boolaroo; and
- The proximity of to the broad range of facilities and services in the sub-regional centre of Glendale.

Population growth will generate a demand for additional community facilities and services of the type typically provided by Council, however the development of the site is unlikely to generate sufficient demand for the establishment of any one facility in the community. Instead, a number of needs have been identified including:

- a contribution to the need for additional library floor space and books;
- a need for child care services, recognising the role played by the private sector in the provision of child care services;
- a need for access to multi-purpose community centre space;
- a need for access to youth specific facilities;
- a need for informal meeting places which could be located with a well designed and safe neighbourhood park; and
- a need for community information to welcome new residents and inform them of the services and facilities available in the area.



5. Open Space and Recreation Needs

5.1 Open Space and Recreation Standards

The following table sets out the current standards for the provision of open space and recreation facilities in Lake Macquarie. Using these standards, the potential additional demand for these facilities by the proposed incoming population of the site is calculated as an indicator of facilities which may be required. Feedback from Council as to the implications for actual provision of facilities and services, based on the capacity of existing facilities is also included.

Table 5-1: Standards for Provision of Recreation

Facility	LMCC s94 Provision Standard ¹ 1 facility per:	Demand from Site (2,000 people)	Comments of Provision in Area ²
Local Park (with facilities)	1,000	2	0.5ha, centrally located to the population it serves. Flat, useable land, include children's play equipment.
Play equipment	1,000	2	To be included in local park. May be reconsidered if off-road cycleway to Speers Point is provided, with good accessibility over Main Road.
Multi-courts	12,000	0.17	
Skate parks	12,000	0.17	New park to be located at Glendale
BMX	12,000	0.17	Could be located onsite, co located with facilities for mountain bikers and walkers.
Sports fields	1,200	1.66	Existing and proposed sports fields close by, therefore on-site provision not required
Roo ball fields	25,000	0.08	
Cricket wickets	3,000	0.66	Modify fields at New Tredinnick, Speers Point to accommodate a wicket and expand
Cricket practice nets	3,500	0.57	

Facility	LMCC s94 Provision Standard ¹ 1 facility per:	Demand from Site (2,000 people)	Comments of Provision in Area ²
			existing amenities. Off-road cycleway linkage required.
Tennis courts	2,000	1	No requirement on-site. Upgrade in area, add new netball court and car park at Wangi Wangi or connect with off-road cycleway to Speers Point.
Netball courts	1,500	1.33	
Cycleways (km)			Potential for contribution to a link with the Lakeside cycle path
Patrolled beaches	45,000	n/a	n/a
Swimming centres	30,000	0.06	Speers Point
Public wharf/jetty	6,000	0.33	New pontoon to be constructed at Speers Point to provide access for people with disabilities.
Public boat ramp	6,000	0.33	Speers Point
Dog exercise areas	6,000	0.33	

¹ Source: CityWide Contributions Plan No 1. (2004)

² Source: Memo from Susan Boyd, Community Land Planner, dated 24 May, 2007

The new population of the site will also require access to recreation facilities and open space. As stated in Section 7.2.2, the incoming population is likely to have a younger profile than the existing population of Boolaroo, influencing the type of facilities they are likely to require. Generally it is accepted that there are higher participation rates by younger people in most sport and recreation activities. The new residents are likely to generate demand for district scale facilities, such as playing fields, swimming pools, indoors sports etc in addition to local and neighbourhood scale facilities, however given the relatively small number of incoming residents they are unlikely to constitute sufficient numbers to justify the provision of all such facilities on site.

Local and Neighbourhood Passive Open Space and Facilities

Accessible, user-friendly local parks are important for all residents, and in particular for children and their families, and older people. As a general rule¹⁶, local parks should ideally be located within 500m walking distance from all residences. Local parks provide short-term play and rest opportunities primarily for local residents. They should be at least 4,000m², however whilst quantity is important, they must also be suitable and accessible.

¹⁶ As identified in the Lake Macquarie Section 94 Contributions Plan No. 1 – Citywide (2004) p39.

District Scale Passive Facilities

District scale passive parks provide for informal recreation activities including large social gatherings, large playgrounds etc which cannot be easily accommodated in local parks. Proximity to all residences is not as significant for district parks, however it is desirable they be within 2-3 kilometres of all households.

5.2 Existing Facilities

There are a number of recreation and sporting facilities located within a reasonable distance of the proposed Boolaroo site. As advised by Council¹⁷ these are:

Council owned:

Sporting fields: Speers Point, Glendale, Argenton
BMX racing track: Argenton
Netball courts: Cardiff, Warners Bay
Tennis courts: Lakelands, Cardiff, Teralba
Regional City Park (incl swimming pool): Speers Point
Hunter Regional Athletics and Gymnastics Centre: Glendale

Private facilities:

Golf course: Argenton
Bowling Green: Speers Point, Argenton
Fitness Centre: Argenton

Specific details of the facilities available in the playing fields in Boolaroo are detailed in **Appendix 1**.

5.3 Open Space and Recreation Needs

5.3.1 Passive Space

Local and Neighbourhood Open Space and Facilities

Residential development on the site will generate the need for local parks situated within the residential areas. There is the potential for the containment cells to be used for passive recreation also. This is subject to Council approval of the parks.

District Scale Facilities

The site is located approximately 1.5km from the significant district sports fields at Speers Point, which is currently planned for refurbishment and upgrading to meet the needs of future generations. It is considered to have sufficient capacity to meet the needs of the incoming residents of Boolaroo.

Munibung Hill, located to the south east of the proposed residential area has the potential to provide significant passive open space, with extensive walking and cycling trails and access to important regional views.

¹⁷ In a memo from Susan Boyd, Community Land Planner, dated 24 May, 2007.

5.3.2 Active Space

The incoming residents will not create the need for any one sporting or recreation facility and it is not proposed to establish any such facilities within the site. There is a preference to focus such activity in the Speers Point area which requires improvement to accommodate additional usage.

5.3.3 Cycleways

Specific targets for cycleways are not set, however it is recognised that cycleways and natural vegetated corridors play an important part in linking neighbourhoods and facilities and encouraging recreation. Providing safe and convenient pathways for both pedestrians and cyclists is important for improving access to open space and increasing the range of open space opportunities available to residents and visitors. Council has indicated that a cycleway/walkway network should include cycleways on-site and off-site in several directions linking key destinations.

Council¹⁸ has suggested that destinations for cycleways connecting with the site could include:

On-site

- The proposed local park located within the development site;

South

- Speers Point Park and the proposed city playground;
- Existing sporting facilities at Speers Point;
- Existing cycleway/walkway along the foreshore of Lake Macquarie;
- Boolaroo town centre;
- Boolaroo Public School.

North-East

- Argenton Public School;
- Kindyerra Park;
- Jack Edwards Oval;
- Cardiff Industrial Estate;
- Hunter Sports Centre and proposed skate park;
- Stocklands Super Centre;
- William Bower Field, Glendale;
- Glendale High School;
- Hunter Institute of TAFE, Glendale;

North-West

- Cockle Creek train station
- Proposed sporting facilities to be located at Griffen Road, Terabla

East

- Neegulbah Park, Macquarie Hills

¹⁸ Memo from Susan Boyd, Community Land Planner, dated 24 May, 2007



In most instances local streets can be used for cycle access and in other cases dedicated cycleways are preferred. There is potential for a link along Cockle Creek from the station to Lake Macquarie which will form part of an existing network and connect the site with Speers Point and the lake. There is some potential for this to extend to the north across the railway line to Glendale.

There is also the potential for cycle paths through the site.

6. Conclusion

This report has considered the community facilities and open space and recreation facilities that will be required to support the future residential population of the site. The master plan provides for approximately 770 dwellings and a resident population of up to 2,000. Additionally, the employment and industrial lands are likely to provide approximately 460 jobs. The new residents will generate the need for additional community and open space facilities. Some of this need may be met in existing facilities, however the remainder will need to be met through the provision of new facilities and services or through the augmentation of existing facilities and services.

Specifically, this report has identified that the following will be generated:

- a contribution to the need for additional library floor space and books;
- a need for child care services, recognising the role played by the private sector in the provision of child care services;
- a need for access to multi-purpose community centre space;
- a need for youth specific facilities;
- a need for informal meeting places which could be located with a well designed and safe neighbourhood park; and
- a need for community information to welcome new residents and inform them of the services and facilities available in the area.
- Access to local neighbourhood parks and other open space resources;

This report has also examined the housing forms which will be appropriate for the redevelopment, considering the population trends, population projections and strategic planning directions for the City of Lake Macquarie and the Lower Hunter Region. Additionally, it has been identified that there is the potential to contribute to meeting the needs for affordable housing in the region.



APPENDICES



APPENDIX 1



Boolaroo Community Facilities

Children's Services

ABC Child Care Glendale: 30 Oakland Street, Glendale

Awabakal Pre-School: 509 Main Road, Glendale

Boolaroo Vacation Care, Boolaroo Primary School, Main Road, Boolaroo

Cathy Lynne Pre-School: 1a Oakland Street, Glendale

Glendale Early Education Centre: 4 Stockland Drive, Argenton

Glendale Playtime: John Lavery Hall, Oakland Street, Glendale

Lake Macquarie Family Day Care: 51 Main Road, Boolaroo

Warners Bay OOSH Care, Warners Bay Primary School, Augusta Street, Warners Bay

Warners Bay Early Learning and Care Centre, Cnr King and Charlies St, Warners Bay

Educational Facilities

Primary Schools

Argenton Public School: Montgomery Street, Argenton

Biddabah Public School: Medcalf St, Warner's Bay

Booragul Primary School: Aspinall St, Booragul

Boolaroo Public School: Main Road and Second Street, Boolaroo

Glendale East Public School: 8 Margot Avenue, Glendale

Holy Cross Primary School: 30 Oakland Street, Glendale

Newcastle Rudolf Steiner School: 36 Reservoir Road, Glendale

Speers Point Public School: Bell Street, Speers Point

Teralba Public School: York Street, Teralba

High Schools

Glendale Technology High School: 2A Oaklands Street, Glendale

Lake Macquarie High School: Marmong St, Booragul

Warners Bay High School: Myles Ave, Warner's Bay

St Paul's Catholic High School, Toronto Road, Booragul

Tertiary Education

Hunter Institute of Technology, Glendale Campus: Frederick Street, Glendale

Neighbourhood and Community Centres

Argenton Community Hall: 7 Elizabeth Street, Argenton



Boolaroo / Speers Point Senior Citizens Centre: 60 Main Road, Boolaroo

Filipino Multi Purpose Centre: 27 Fourth Street, Boolaroo

Lakelands Community Hall, Ambleside Circuit, Warners Bay

Our Community Place (formerly Lake Macquarie Neighbourhood Information Centre): 32a First Street, Boolaroo

Teralba Community Hall, Anzac Parade, Teralba

Warners Bay Rotunda, The Esplanade Warners Bay

Services for Young People

Northlake Youth Project, Edgeworth

Health and Medical Services

General Practitioners

Dr V. Aseervatham, 171B Main Road, Speers Point

Dr. J.M Babla, 171 Main Road, Speers Point

Lake Macquarie Family Medical Practice, 281 Lake Road, Glendale

Glendale Medical Centre: Stockland Super Centre, Lake Road, Glendale

Dental Services

Macquarie Family Dental: 16 Main Road, Boolaroo

Glendale NIB Dental Care Centre: 593 Main Road, Glendale

Health Care Services

Eastlakes Community Health Centre, 19 South St, Windale

Newcastle Community Health Centre, 670 Hunter St, Newcastle West

Royal Newcastle Centre Hospital, Lookout Road, New Lambton

Toronto Community Health Centre, James St, Toronto

Warner's Bay Private Hospital, Fairfax Road, Warner's Bay

West Newcastle Community Health Centre, 15 Nash St, Wallsend

Aged Care Services

Lakeside Lodge Aged Care Facility: 27 Lake Cres, Teralba

Westlakes Miners Retirement Village: Pitt St, Teralba

CA Brown Anglican Village: Toronto Road, Teralba

Cultural, Entertainment and Leisure Services

Argenton BMX Track: Mary Street, Argenton

Boolaroo/Speers Point Bowling Club: Cnr Eighth and Bells Street, Boolaroo



Boolaroo/Speers Point RSL: Main Road, Speers Point
Hunter Sports Centre: Stockland Drive, Glendale
Lake Cinema: 62 Main Road, Boolaroo
Lake Macquarie City Library: Main Road, Speers Point
Lake Macquarie Performing Arts Centre: Cnr Lake St and The Esplanade, Warners Bay
Speers Point Boat Ramp Creek Reserve Road: Speers Point
Stockland Shopping Centre: Stockland Drive, Glendale
Teralba Petanque / Tennis: York Street, Teralba
Teralba Bowling Club: York Street, Teralba

Transport Services

Newcastle Buses (Argenton, Boolaroo, Glendale and Speers Point)
Toronto Buses (Boolaroo, Glendale, Speers Point and Teralba)
Sugar Valley Coachlines (University of Newcastle, Charlestown, Glendale, Edgeworth)
Cockle Creek Railway Station (CityRail Central Coast Line)
Lake Macquarie Community Transport
Northlakes Carers Community Transport
Awabakal Elders Service

Emergency Services

Boolaroo Ambulance Station, Main Street, Boolaroo
Boolaroo Police Station (Lake Macquarie LAC), 95 Main Street, Boolaroo
Boolaroo Fire Station, Cnr. Main and Fourth Street, Boolaroo
Teralba Fire Station, 54 William Street, Teralba.
Rural Fire Service, 1a George Booth Drive, West Wallsend

Open Space and Recreation¹⁹

Jack Edwards Oval : Soccer x 1 grade 3 soccer field with lights, 1 Roo Ball field, amenities and canteen. Also known as Kindierra Reserve
Old Tredinnick, Northlakes Shores: Soccer - 5 x Grade 2 fields with lights. Amenities/2 x canteens/storage.
Macquarie Field: Soccer - 1 x Grade 2 field with lights and 1 x training area with lights. Grandstand/Amenities/Canteen.
New Tredinnick Oval: Cricket - 1 x Grade 3 Concrete wickets. Soccer: 4 x Grade 3 fields - 3 with lights. Rooball - 1 x Roo Ball Field. Amenities/ Canteen/Storage.

¹⁹ As identified in Lake Macquarie City Council Community Directory, accessed from <http://www.lakemac.com.au/>