

NORTH COORANBONG ECONOMIC IMPACT ASSESSMENT

Prepared for
URS

on behalf of
Lake Macquarie City Council

July 2006

SYDNEY CANBERRA

independent
property **hillpda**
consulting

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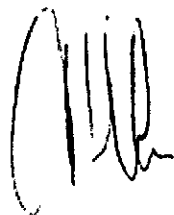
on behalf of
Lake Macquarie City Council

July 2006

QUALITY ASSURANCE

This document is for discussion purposes only unless signed and dated by a Principal of Hill PDA.

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REPORT ABBREVIATIONS

ABS	Australian Bureau of Statistics
CBD	Central Business District
DCP	Development Control Plan
DIPNR	Department Of Infrastructure, Planning and Resources
DoP	Department of Planning
EPI	Environmental Planning Instrument
EPA	Environmental Planning and Assessment Act.
EIA	Environmental Impact Assessment
FSR	Floor Space Ratio
GFA	Gross Floor Area
GLA	Gross Lettable Area
JTW	Journey to Work
LEP	Local Environmental Plan
LGA	Local Governmental Area
NSW	New South Wales
REP	Regional Environmental Plan
RTA	Roads and Traffic Authority
SD	Statistical Data
SEPP	State Environmental Planning Policies
SQM	Square Metres

1. EXECUTIVE SUMMARY

Introduction & Background (Section 2)

The report aims to provide an analysis of the likely impacts on the local community and surrounding land uses, of a proposed rezoning of rural land at North Cooranbong to residential. An appraisal of the likely costs and benefits to government of the rezoning and servicing of the subject site for urban development was undertaken.

The site includes various parcels of land under various ownerships, with the main land owner being the Seventh Day Adventist Church ('Church'). A total of 55 lots will be amalgamated to form the subject site, with the total development site area being approximately 348 hectares. It is anticipated that the proposed development will include the following:

- 2,500-3,000 residential dwellings;
- 17ha of land dedicated to Avondale School to meet their current and future expansion needs;
- Multipurpose hall and community centre on the land adjoining Avondale School;
- A possible commercial/community facility to include an alternative health care facility and child care centre;
- The potential for a small café or general shop in association with the community facility;
- Holistic health care facility; and,
- Various recreational facilities.

Planning Framework and Background Reports (Section 3)

There are a range of regional and local planning instruments affecting the subject site at North Cooranbong:

- Hunter Regional Environmental Plan (HREP) 1989;
- Draft Lower Hunter Regional Strategy 2006-31;
- Lake Macquarie City Councils Local Environmental Plan 2004; and,
- Lake Macquarie City Councils Lifestyle 2020 Strategy.

In addition, there are numerous State Environmental Planning that relate to the proposed rezoning of the subject site.

Analysis of Existing Land Uses (Section 4)

The town centre of Cooranbong includes a total floor space of 1,800sqm and is anchored by First Choice Welcome Mart of 180sqm. This also includes 16 specialities shops extending over a single level of floor space.

The Seventh Day Adventist Church is not only a large land holder in Cooranbong, but also a provider of college and school education (Avondale College and Avondale School), community services, employment (Sanitarium Health Food Company), aged care services, and accommodation.

Morriset is the primary centre of the Morisset Planning District which includes Cooranbong. Morisset is a neighbourhood centre of around 9,500sqm and currently has the following key developments in the pipeline:

- New 3,385sqm Woolworths supermarket with associated specialty retail (still with Council);
- New 4,000sqm Coles supermarket plus associated specialty retail (still with Council);
- Morisset Gateway Park, an industrial park located just off the freeway and the Morisset Interchange.

There are several other centres within the vicinity of the subject site including Toronto, Dora Creek, and Bonnells Bay.

Demographic Analysis (Section 5)

The population of the Lower Hunter region was 468,861 persons at the 2001 census. This is a growth rate of 1% per annum since 1996. Over the ten-year period, since 1991, the regional area population increased by some 41,888 people. The population of Cooranbong at the 2001 Census was 3,597, slightly ahead of Morisset (3,171) and Dora Creek (1,244).

Based on the demographic analysis the following conclusions can be made:

- Cooranbong as at 2001 had a high representation of young adults, most likely as a result of Avondale College;
- Cooranbong also had a high proportion of older people and retirees compared to other surrounding areas like Dora Creek and Toronto.
- Cooranbong has a low ethnic diversity;
- Detached housing is the housing structure that predominates in Cooranbong;
- Cooranbong and the surrounding suburbs have a lower level of rented accommodation in part is due to the lower proportion of investment flats units and apartments.
- The majority of households within Cooranbong are family houses; and,
- Household income levels in Cooranbong are slightly below the surrounding localities and the Lower Hunter region.

Based on an average household size of 2.7 persons per household, we anticipate the population of the new development at North Cooranbong to be approximately 6,750 persons.

Residential Market Analysis (Section 6)

Cooranbong is not as typically affluent as many of the lake-side suburbs around Lake Macquarie. Feedback has suggested that the re-development of the Avondale site could help improve the image and socio-demographic profile of the area. Based on a comparable analysis of end sales values of residential lots, we have assumed a sales price of \$225,000 for residential lots at the subject site.

Agents have expressed concern as to a possible current over supply of residential land to meet recent demand which has been attributed to the down turn in the housing market and also the supply of new residential land releases. However, it is desirable to have multiple development fronts illustrating differences in affordability and product range. In addition, our analysis of take up rates considers this possible short term oversupply, by lessening the number of lots initially released by the subject site

which will reduce an oversupply or flood of the market, and allows existing supply to be absorbed. Overall we therefore estimate a residential sales release program as follows

End Financial Year	No. of Lots	Lots per annum
2009 – 2010	100	50
2011-2013	300	100
2014 – 2019	900	150
2020 – 2025	1,200	200

Retail Demand Assessment (Section 4.11)

Household expenditure by commodity type is forecast in the table below.

Expenditure by Commodity Type	Year 2005	Year 2010	Year 2015	Year 2020	Year 2025
Supermarkets & Grocery Stores	\$10.4	\$12.9	\$20.9	\$31.5	\$45.0
Specialty Food Stores	\$2.8	\$3.6	\$5.9	\$9.1	\$13.1
Take-away Food Stores	\$2.2	\$2.8	\$4.7	\$7.3	\$10.7
Department Stores	\$3.0	\$3.7	\$6.2	\$9.3	\$13.1
Clothing Stores	\$1.9	\$2.3	\$3.9	\$5.9	\$8.3
Bulky Goods Retailers	\$5.5	\$6.6	\$10.8	\$16.1	\$22.5
Other Personal & Household Goods Retailers	\$4.0	\$4.8	\$7.9	\$11.8	\$16.6
Cafés and Restaurants	\$1.9	\$2.4	\$4.2	\$6.4	\$9.1
Other Personal Services	\$0.9	\$1.1	\$1.9	\$2.8	\$4.1
TOTAL Retailing	\$32.6	\$40.3	\$66.3	\$100.1	\$142.5

As shown in the above table expected growth in retail expenditure is significant – a fourfold increase over the next 20 years. This translates to strong demand for retail space. There will be sufficient expenditure in regular shopping (food, groceries, etc) to support a supermarket based village say between the years 2015 and 2020. A 2,500sqm Bi-Lo supermarket for example could sustainably trade at \$15m (\$6,000/sqm) in 2015 capturing 75% of the Cooranbong food and grocery expenditure. A 3,500sqm full-line supermarket with fresh food could capture 80% of the Cooranbong market by Year 2020 and trade sustainably at \$7,000/sqm.

In addition to the supermarket there would be demand for specialty shops of around 3,000sqm by 2015 and 4,500sqm by 2020. The specialty shops would provide a range of store types to serve regular shopping needs including specialty food stores, take-away foods and restaurants, personal services and non-food local shops such as chemists and newsagents. Around 15% to 20% of the shop front premises would be occupied by non-retailers such as banks, real estate agents, travel agents and the like.

Ideally, the supermarket based centre would be located within the existing Cooranbong town centre, not only to enhance the synergy of retail uses already established, but also as not to fragment the relatively small existing retail offer.

Discussion of the Methodology Used

The methodology used in the economic appraisal is cost benefit analysis generally as in accordance with NSW Treasury Guidelines except that only costs and benefits to the government sector were identified

and assessed. Using the discounted stream of costs and benefits the following decision measures should be calculated:

- Net Present Value (NPV) - the sum of benefits minus costs. A project is potentially worthwhile (subject to the availability of funds) if the NPV is greater than zero.
- Benefit Cost Ratio - a project is potentially worthwhile if the BCR is greater than 1 (i.e. the present value of benefits exceeds the present value of costs).
- Internal Rate of Return (IRR) - this is the discount rate at which the Net Present Value of a project is equal to zero (i.e. discounted benefits equal discounted costs). A project is worthwhile if the IRR is greater than the test discount rate.

Assuming:

- Full costs for water and sewerage and local external roads;
- Zero real escalation in land values - NSW Treasury Guidelines for Economic Appraisals 1997 notes that the cost benefit analysis should be expressed in constant dollar terms, stating zero inflation.

then the results of the cost benefit analysis are as follows based on a 7% discount rate:

Scenario	NPV (\$)	BCR
CBA to Government without GST & SD	-10.90	0.70
CBA to Government with GST & SD	43.34	2.21

Cost Benefit to the Broader Community (Section 9)

Assuming full costs for water and sewerage and local external roads and zero real escalation in land values then, the net present value is \$170.88million at a 7% discount rate. Therefore total benefits to the wider community brought about by the proposed development at North Cooranbong is greater than the costs.

The cost-benefit ratio depicts the total financial return for each dollar invested. In other words at a 7% discount rate, for every dollar invested in the development, \$2.26 would be returned to the wider community. The IRR on this CBA is 31%.

Employment Benefits & Sustainability (Section 10)

Our analysis of the labour force in the Hunter, Lake Macquarie, and Cooranbong revealed the following:

- Historically the Hunter region has been characterised by a large proportion of employment in traditional industries such as mining, steelmaking, shipbuilding and power generation.
- Over the 20 years to 2001, there has been a significant increase in the proportion of the labour force employed in: wholesale and retail trade; health, education and community services; finance, property and business services; and recreational and personal services.
- Cooranbong is characterised by a slightly higher proportion of people employed as managers, administrators and professionals than the Lower Hunter. Cooranbong has a slightly lower proportion of clerical, sales and service workers.
- Within Cooranbong, major employment providers include Avondale College, Avondale School and the Sanitarium Health Food Company. Employment projections provided by these institutions have revealed the following:

- Avondale College is applying for University status, and it is expected that the number of pupils will increase to a conservative projection of 1,500 students by 2012. The College currently has around 12.8 students per academic, and therefore we can assume that if the College maintained the current student/academic ratio, the number of academic staff would increase by 46 staff by 2012.
- Avondale School has acknowledged that it expects approximately 400 students to result from the subject development at North Cooranbong, increasing the number of students to 1,300 pupils. The School acknowledges that if student numbers increased to 1600, 150 staff members would be required however no physical expansion of the school would be required as a result.
- Sanitarium currently employs approximately 498 staff, being 353 full time staff, 40 part time staff, and 105 casual staff. Discussions with Sanitarium have revealed employee levels are currently at a maximum and there are no future plans to increase or decrease staff levels. If any foreseeable changes were to occur it would see new technology replace existing staff.

There are several emerging trends in employment and economic activity, which are having direct and indirect impacts on urban structure. The main forces acting on employment change are:

- Rationalisation of agriculture, mining and manufacturing industries
- Globalisation;
- Growth in knowledge based industries;
- Increasing reliance on transport efficiencies.

In property the response to these changes has been:

- The loss or relocation of traditional industries;
- The rise of business parks in regional centres;
- The rise of economic gateways around major infrastructure; and
- Growth in home based businesses and mix land uses.

The construction industry is a significant component of the economy. There are two types of multipliers:

- Production induced: which is made up of:
 - first round effect: which is all outputs and employment required to produce the inputs for construction; and
 - an industrial support effect which is the induced extra output and employment from all industries to support the production of the first round effect; and
- Consumption induced: which relates to the demand for additional goods and services due to increased spending by the wage and salary earners across all industries arising from employment.

Therefore the \$671m cost in construction translates to a further \$607m activity in production induced effects and \$646m in consumption induced effects. Total economic activity generated is equivalent to \$1,924m (see table 33 below).

It is also estimated that construction at the subject site will therefore generate 4,154 job years directly in construction over the project time frame. This equates to 244 job years per annum.

2. INTRODUCTION & BACKGROUND

2.1 The Brief

It is understood that Council has commissioned URS to manage and carry out the preparation of the required documentation for the rezoning of land at North Cooranbong. Hill PDA has been commissioned by URS on behalf of their client Lake Macquarie City Council for the provision of consultancy services to undertake an Economic Impact Assessment study of a proposed rezoning at North Cooranbong.

Under Section 74(2) of the Environmental Planning and Assessment Act 1979 (EP&AA) the Director General of the Department of Planning has directed Council to prepare a Local Environmental Study (LES) for the lands at North Cooranbong. It is understood that Council requires the preparation of a detailed economic assessment study of the rezoning proposal, to be incorporated into the LES.

The purpose of this study was to appraise the likely costs and benefits to government of the rezoning and servicing of the subject site for urban development. The underlying objective of State Government, for the rezoning of land for urban development is the minimisation of public sector costs in meeting market demand for housing, whilst achieving the provision of an appropriate level of physical and human services.

The brief required the analysis to be carried out in accordance with NSW Treasury Guidelines for Economic Appraisals 1997. This included an analysis and estimation of marginal infrastructure costs such as main roads, water, sewer and drainage major works, schools, community services and open spaces and an estimation of benefits to government in terms of developer contributions.

2.2 Methodology

The outcome of the study is to provide an Economic Impact Assessment regarding the implications of the intended rezoning.

To meet the requirements of the Project Brief, we undertook an approach broadly structured on the basis of the Project Brief, the key tasks of which included:

- A market analysis was undertaken, profiling key demographic characteristics with review of data derived from the ABS Census, DoP, Council and other sources. This also included an analysis of the prevailing property market and identify patterns of supply and demand for residential land, residential development land, as well as surveys of nearby retail and employment centres;
- Using expenditure modelling quantified the likely increase in demand for retail/commercial services from population projections;
- Quantified the costs of infrastructure amplification, including possible funding options for these services;
- Prepared a cost benefit analysis using discounted cash flow modelling incorporating all direct (and where possible indirect) costs and revenues from whole of government viewpoint, including scenario or sensitivity analysis testing;

- Completed an impact assessment on the broader economy, including impact of proposed rezoning on existing retail/commercial industry and established centres. As well as quantified (using multipliers) the potential flow on impacts on the rest of the local economy; quantified job years; identified opportunity costs; estimated the post construction employment opportunities; and, assessed the financial viability and impact of the closure of the former Cooranbong airport;
- Provided recommendations concerning appropriate initiatives that are likely to mitigate any negative impacts posed by the rezoning, as well as comment on specific issues identified from the assessment;

2.3 Project background

The site includes various parcels of land under various ownerships, with the main land owner being the Seventh Day Adventist Church ('Church'). Other owners include Johnston Property Group ('JPG'), and various owners of individual lots represented by JW Planning ('JWP'). A total of 55 lots will be amalgamated to form the subject site, with the total development site area being approximately 348 hectares.

The Australian Conference Association ('ACA') of the Church is the trustee for all the Seventh Day Adventist property in Australia. The ACA owns their site, although it is managed by Avondale College. Those lands owned by the ACA total approximately 278.3ha of the total development site at North Cooranbong.

Figure 1 - Triangle Lot Configuration



Source: Forest Fauna Surveys Pty Ltd, November 2005

There is an agreement between Avondale College and the ACA that the funds from the development will be put back into the future expansion of Avondale College. The ACA has entered into a joint venture agreement with JPG for the development of the site.

It is understood that JPG have purchased an adjoining lot (Lot 219, DP 755218) located at the north-west corner of the ACA affiliated land, totaling approximately 58 hectares of land.

It is understood that JWP are representing owners of lots adjoining the western side of the site, accounting for between 9-12ha of land.

2.4 Site Location

The subject site is located at North Cooranbong, within the Lake Macquarie Local Government Area ('LGA'). Approximately 100km from Sydney, and 45minutes from Sydney's northern suburbs, the subject site in North Cooranbong lies north west of Morisset and south west of Newcastle CBD.

The subject site is bounded by rural land and state forest to the north and west, by Cooranbong town centre to the south, and Avondale School and Avondale Road to the east. Existing uses on the subject site include chicken sheds to the south-west of the site, Avondale School to the east, and a small private airfield with two associate runways and various sheds (which ceased operations at the end of 2005).

The aerial photo below indicates the subject sites approximate location.

Figure 2 - Site Location



Source: Google Maps, 2006

2.5 Cooranbong Airport

Hill PDA has received written confirmation from Avondale College as to the reasons for closure of the Cooranbong Airport (see Appendix One).

Originally the 260 hectares of land attributed to the airfield was purchased by the Seventh Day Adventist Church for the use and benefit of Avondale College. The land is owned by the Seventh-day Adventist Church and controlled by the College.

In 1946 the Avondale College Board approved an airstrip on the site for use by aviation enthusiasts, on the understanding that the land would be returned for use by Avondale College whenever it was required.

A School of Aviation was established in 1977 by the College to train pilots for the mission work of the Seventh-day Adventist Church in the Pacific region, and a second runway was constructed.

Since then, the primary users of the airport have been the School of Aviation and some recreational pilots. The Adventist Aviation Association does not currently utilise the airport and hasn't for some time.

A key element of the strategic plan of Avondale College is to create a sizeable endowment fund, the earnings of which will help fund the future expansion and ongoing operation of the College. The result being the development of the airfield affiliated land for residential housing. The College envisages the development catering for the significant population growth projected for the Cooranbong area in the immediate future.

Initially the College investigated the possibility of retaining the airport and developing the remaining land, however these were neither compatible adjacent land uses (due to noise, safety etc) or cohesive from a planning perspective.

The College Council decided to relocate the School of Aviation to the Cessnock Airport and to close the airport at Cooranbong, with the School of Aviation having been operating from Cessnock since January 2006. Hill PDA understands that the Seventh Day Adventist Church has decided to cease involvement in aviation on a global basis not just at the subject site.

The College plans to recognise the history of the Cooranbong Airport and the contribution of aviation to the work of the Seventh Day Adventist Church by incorporating aspects of that history into the development plan for the land.

A *Heritage Impact Assessment* by Graham Brooks & Associates (January 2005), assessing the heritage significance of the airport found areas of the airfield are of historical significance, social significance, and the general landscape being of aesthetic distinction. The report reviewed the proposed original structure plan submitted by the proponents, concluding that the impact of the proposed development would in fact be positive by retaining the alignment of both the north-south and east-west airstrip and allowing significant interpretation of the airfield and its history within the proposed development.

2.6 Proposed Structure Plan

The vision for the subject site at North Cooranbong is to provide a development which: will respond to the environment; provide a diverse and well serviced community; provide a well designed and liveable community; encourage progress and prosperity; and, create an integrated accessible development. These objectives have been based on the Lake Macquarie Lifestyle 2020 Strategy (1998) in order to direct future detailed design and development of the site.

The subject site comes under Lake Macquarie City Council's LEP 2004 and it is understood that the proponent is seeking Council's approval to rezone the study area from 1(1) Rural (production), 7(1) Conservation (Primary), 7(2) Conservation (Secondary) and 10 Investigation zones to a mix of urban, infrastructure, environment and conservation zones. At the time of the zoning submission the proposed structure plan was as follows:

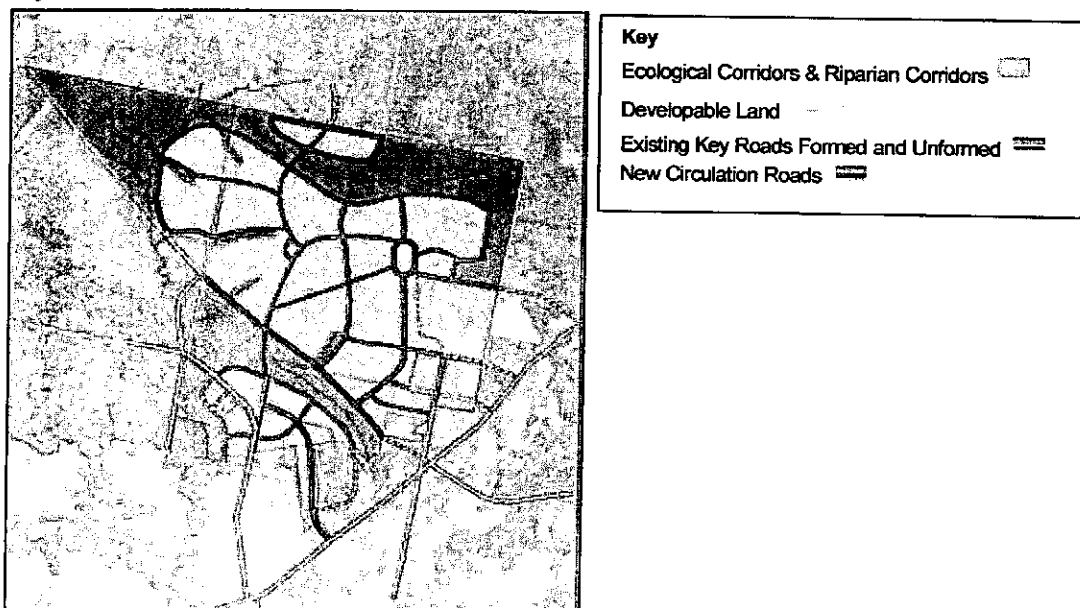
Table 1 - Proposed Rezoning Changes - North Cooranbong

Existing Zone	Proposed Zone
Environmental Protection 7(1) – Primary	Environmental Protection 7(1) – Primary
Environmental Protection 7(2) – Secondary	Environmental Protection 7(2) – Secondary
Investigation 10 – Urban/Conservation	Environmental Protection 7(3) – Tertiary
Investigation 10 – Urban/Employment/Recreation/Conservation	Residential 2(1)
	Infrastructure 5

Source: JPG, North Cooranbong – Rezoning Submission, 2006

JPG lodged a rezoning application for the subject lands, and the structure plan below was prepared by JPG on the basis of the rezoning being approved. This structure plan has not yet been approved by Council and has been used in order to gain an appreciation for the type of development envisioned by JPG and the Church for the site.

Figure 3 - Draft Structure Plan (as at June 2006)



Source: JPG, 2006

The rezoning application notes the following land uses and activities envisaged for the site at the date of the original submission:

Residential Lots

The original rezoning application considered a total number of 1,888 dwellings for the subject site, at approximately 12 dwellings per hectare. However, Hill PDA has since been advised verbally by JPG that between 2,500-3,000 dwellings are now expected for the subject site at North Cooranbong. This is mainly due to the addition of the JWP lands which will provide additional residentially zoned land.

Avondale School

The rezoning application notes that Avondale School (which includes the Senior School, Primary School, and Infants School) has determined their current and future needs can be met by a site of approximately 17ha. This land will be located adjacent to the existing School facilities to the southwest of the site.

To ensure this land remains available for the school, it is intended that the zone for this area changes from Investigation 10 to Infrastructure 5.

Community Facilities

A parcel of 1.5ha of land has been initially attributed to community uses at the subject site.

The *Retail Location Analysis* by Leyshon Consulting (February 2005), identified that a small convenience store/café should be located adjoining the Avondale School within the development site, whilst all other retail development should be focused around the existing Cooranbong retail precinct. As a result the potential for a small general store or café has been proposed within the community attributed land.

A number of community facilities have been considered for the development of the Avondale School attributed land. Indicatively the location of these facilities is at the south west corner of the site. This location allows communal use of the facility by the School and local community.

Community facilities that will be demanded or needed at North Cooranbong include:

- Multipurpose hall and community centre on the land adjoining Avondale School;
- A possible commercial/community facility to include an alternative health care facility and child care centre likely to be a Council facility funded through works in kind, with ultimate ownership passing to Council. The health care facility would be a commercial operation located in proximity to community centre;
- The potential for a small café or general shop, run as a commercial facility in association with the community facility.

Holistic Health Centre

HillPDA have received written confirmation from the Seventh Day Adventist Church (see Appendix One), that they are prepared to give favourable consideration to providing a holistic health facility on the subject development site at North Cooranbong based on the Church's interest in preventative health care.

The *Social Impact Assessment* by Key Insights (February 2005), notes that there are two medical practices with four doctors within Cooranbong, which Hill PDA have been informed are insufficient for a town the size of Cooranbong, and already .

Recreational Facilities

Recreational facilities that are being considered by JPG to be included within the retained landscape, open space and community facilities include: BBQ area(s); playgrounds; handball court(s); and half basketball court(s).

3. PLANNING FRAMEWORK & BACKGROUND REPORTS

3.1 New South Wales Strategic & Statutory Planning Framework

Land use control is based on a hierarchical system of strategic and statutory (or legislative) land use planning, including a number of Environmental Planning Instruments (EPIs). These instruments are shown below in the order of hierarchy and are further detailed in Appendix Two:

- **Environmental Planning & Assessment Act 1979 (the Act)** (institutes a system for environmental planning and assessment in NSW, including strategic planning, approvals and environmental impact assessment);
- **Environmental Planning & Assessment Regulation 2000 (Regulation)** (contains details on practice and implementation of the Act);
- **State Environmental Planning Policies** (for state significant matters) including:
 - State Environmental Planning Policy No.11 – Traffic Generating Development; and,
 - State Environmental Planning Policy No. 55 – Remediation of Land
- **Regional Environmental Plans** (for matters of regional importance) including:
 - Hunter Regional Environmental Plan (HREP) 1989: The proposed development should give consideration to the provisions of the HREP especially with regard to housing, community services, commercial development, rural and urban land; and,
 - Draft Lower Hunter Regional Strategy 2006-31: The key purpose of the Draft Strategy is to ensure adequate land is available and appropriately located to sustainably accommodate the projected housing, employment and environmental needs of the Regions population over the next 25 years. The Strategy highlights Morriset as becoming an emerging major centre that is expected to grow and take on the role of a major centre in the future. Cooranbong is earmarked as a new release area, as a location of proposed major urban development, which although primarily residential may contain a mix of local open space and employment opportunities.
- **Local Environmental Plans** (that contain specific land use provisions including zoning and development standards at the local level); and
- **Development Control Plans** (which provide detailed provisions relating to development standards and controls that are not appropriate for incorporation into a Local Environmental Plan).

3.2 Lifestyle 2020 Strategy

Lake Macquarie City Council's Lifestyle 2020 Strategy, is the major planning initiative for the LGA which aims to provide strategies necessary to manage expected growth in population and employment up to the year 2020. The document underpins land use strategies upon which the Council's Local Environmental Plan 2004 ("LEP 2004") and various Development Control Plans ("DCPs") are based. It provides a forward planning tool for the community with regards to diverse aspects of the City, including land use planning, environmental management, and social and economic development.

Lifestyle 2020 acknowledges Cooranbong as being within the Morriset Planning District through increased accessibility, employment, urban amenity and medium and low density residential opportunities. According to the document, Morriset will continue to be the primary centre for the District. The strategy notes possible new major retail opportunities; the establishment of a TAFE; a multi-purpose sporting facility; the establishment of employment activity north of Morriset Railway; and, the establishment of a town square in front of Morriset Railway Station.

The strategy identified Cooranbong as a local commercial, retail, employment and educational provider serving the surrounding residential and rural area. It is acknowledged that some possible expansion of the Seventh Day Adventist Church is to be expected, with some medium and low density residential development within close proximity to the existing local centres. The proposed development at North Cooranbong is mooted in the strategy noting the project will facilitate future low density urban development.

8.3 North Cooranbong Rezoning Submission March 2005. Prepared for Johnston Property Group Architectural

The rezoning submission relates to the subject development site at North Cooranbong in the south west of the Lake Macquarie LGA. The land is currently zoned part 10 Investigation and part 7(2) Conservation (Secondary) under Lake Macquarie Local Environmental Plan 2004 and forms part of the Morriset Planning District.

The original rezoning submission (March 2005), prepared for Johnston Property Group by Architectus outlined a structure plan which indicated a proposal for 90ha of land for conservation purposes, land for approximately 1,888 dwellings, and an additional population of some 5,200 people.

The rezoning application noted no adverse effects that would prohibit the proposed development from being undertaken. However, it is noted that some work and considerations should be given to:

- Some remediation due to effluent treatments, facilities and storage related to the airfield, curial puts for animal waste, and septic tanks;
- Some potential for some adverse impacts such as erosion impacting on water quality; and,
- Potential for some flooding along the creek lines to the north and south of the site.

Various surveys and studies have been undertaken on the subject site to assess flora, fauna, creeks, and the value of the local ecosystem. As a result a number of issues have been highlighted regarding threatened species of flora and fauna, noxious weeds, and an endangered ecological community. As a result recommendations were made which have resulted in wide conservation corridors being realised within the proposed development site which will link vegetation areas with creek lines and protect riparian habitats.

An access and transport study undertaken by GHD for the rezoning application notes that there is an existing road network providing access to the site across most boundaries with adjoining land. An urban use of the site would result in a direct increase in traffic.

The rezoning application notes that the land can be serviced with reticulated sewer and water, with enhancement of the existing infrastructure system required for latter stages. There is no physical

impediment to the provision of infrastructure. Gas, electricity and communications are available to service an urban use of the land.

3.4 Economic Impact Assessment - Proposed Retail Development at Cooranbong, NSW - Leyshon Consulting Pty Ltd (February 2005)

A report was prepared by Leyshon Consulting Pty Ltd for JW Planning who acts for Avondale Greens Developments Pty Ltd, analysing the demand for additional retail/commercial floor space at Cooranbong. The report also considered the likely economic effects of the provision of retail/commercial floor space within the proposed new development area at North Cooranbong.

The report concluded that given the proposed residential development at Cooranbong a centre in the order of 4,770sqm anchored by a full line supermarket of around 3,000sqm would be appropriate. There are three retail centres which would be directly affected by the development, namely Cooranbong village shops, Morisset and Toronto. It predicts that all three will experience a down turn in trade in the short term however in the longer term it predicts that both Morisset and Toronto should be able to recover given the continued population growth predicted for those areas. The report sees the current Cooranbong village shops fulfilling a convenience retail role to local residents once the proposed centre is established, however this will depend greatly upon the new centres location.

3.5 Retail Location Analysis - Architectural Sydney Pty Ltd (March 2005)

The report analysed the possible location and structure for retail centres to serve the needs of the existing and future populations of the Cooranbong region.

The report looked at four different options for accommodating the future retail demand at Cooranbong being:

1. To concentrate additional retail development around the existing town centre;
2. Retail servicing in two separate centres one being the existing and the other being at one of three additional sites considered;
3. To enhance the existing centre but to have, in addition, small local stores within the site; and,
4. To accommodate all of the additional retail development on site within additional centres each within walking distance of residential development.

The report recommended that the additional retail space be accommodated within Cooranbong centre but with additional smaller facilities within walking distance of residential centres. It further recommended that a DCP with design guidelines be put in place as soon as possible to protect the future amenity of the Town Centre and prevent development which could reduce the overall opportunity for this site.

3.6 North Cooranbong Residential Development - Key Impacts - Key Impacts Pty Ltd (March 2005)

This report evaluates the likely impacts, opportunities and constraints of the proposed rezoning of a future urban precinct to the north of Cooranbong.

The report details the numerous benefits of the development to the local community. These include improved social mix, enhancement of housing options, increase in eligible volunteers, jobs during the construction phase of the project, the multiplier effect throughout the region, jobs in the supply industry and increased trade and economic activity in the surrounding area including more customers for the urban centre of Morisset. However it went on to detail negative issues including increased noise (particularly during construction/excavation phase), increased traffic, long term stress on government funded services and potential isolation from existing community if block size, aesthetics and design differs significantly from existing style and atmosphere.

In order to mitigate the potential negative impacts the report suggests that community, commercial and educative resources be shared in order to improve integration of new residents, the existing commercial centre be expanded which would assist in focusing the community, physical networking in the form of cycle ways, pedestrian paths which would help ease demarcation between new and old and finally the formation of a Cooranbong Community Development committee that is open to old and new residents.

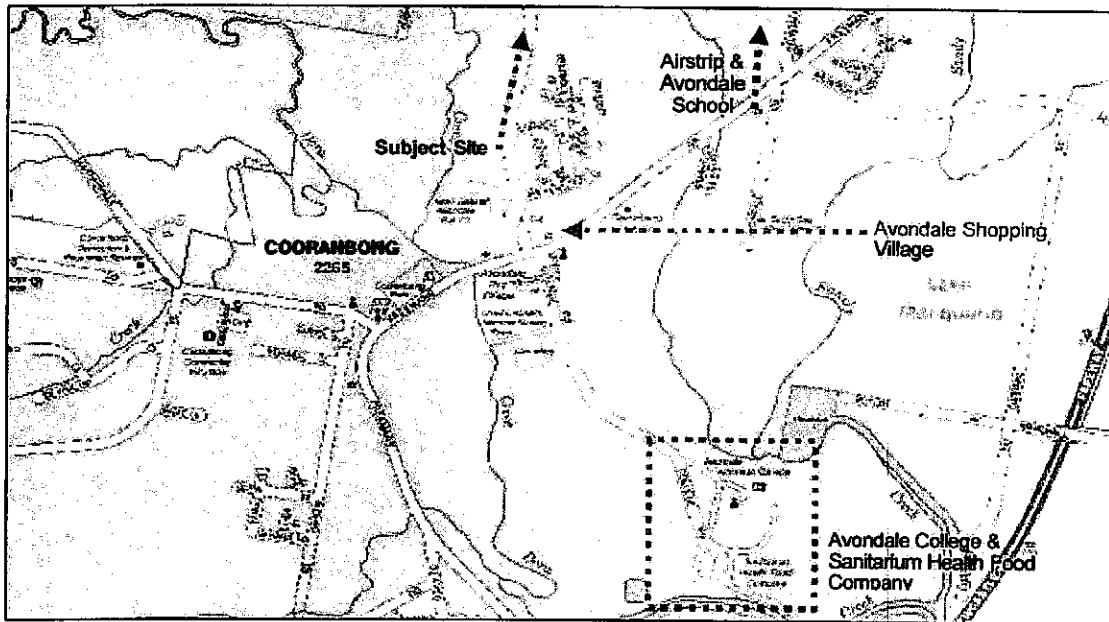
The report concludes that the proposed rezoning would deliver a net social and economic gain to the area with potential negative impacts being mitigated with careful strategic planning.

4. ANALYSIS OF EXISTING CENTRES

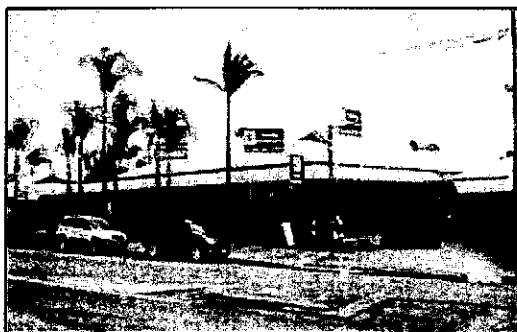
4.1 Cooranbong

Cooranbong is a short drive off the freeway at the Morisset Interchange. Avondale Shopping Village Cooranbong is described as your “top up shopping” centre. It is easily accessed due to its location on the corner of Freeman Drive and Alton Road. It is located approximately 4.8km from the nearest centre - Morisset Shopping Centre.

Figure 4 - Cooranbong Town Centre Map



Source: LBD, City Streets, 2005



South-west along Freeman Drive



North-east along Freeman Drive

Avondale Village centre has a total floor space of 1,800sqm and is anchored by a First Choice Welcome Mart of around 180sqm. The shopping centre consists of 16 specialties shops extending over a single level of floor space. The tenants in the centre include a mix of specialty retail including: cafes; chemist;

newsagency; hair dressers; bakery; medical centre; takeaway shop; gift shop; real estate agency; and other retailers. Vacancy rates suggest that the centre is trading very well with few changes to tenants over the last 5 years.

Seventh Day Adventist Church

The Seventh Day Adventist Church is not only a large land holder in Cooranbong, but also a provider of college and school education, community services, employment, aged care services, and accommodation.

The Seventh Day Adventist Church ("SDAC") incorporates a number of Union Conferences of which Australia is one. Cooranbong is part of the northern NSW Local Conference.

South Pacific Institutions of the SDAC include:

- Avondale College – has been located in Cooranbong since 1897 and is an education institution of the Seventh Day Adventist Church ('SDAC');
- Sanitarium Health Food Company – has one facility adjacent to Avondale College in Cooranbong. The Company's head office and main facility is in Berkley Vale. Many residents that live in Cooranbong travel to Berkley Vale to work at the head office;
- Adventist Media Centre;
- Adventist Relief;
- Sydney Adventist Hospital; and
- Signs Publishing Company.

In September 2005, the Church gained development approval for the development of a retirement village in Crawford Road, Cooranbong (Consent No. 2704/2004). The development application states approval for 14 independent living units and community centre (SEPP Seniors Living). However, the total area to be developed will be 70 acres, with the intention that 300 living units, a nursing home, hostel and dementia specific facilities will be provided on the property. Consent on the application will lapse on 21 September 2008.

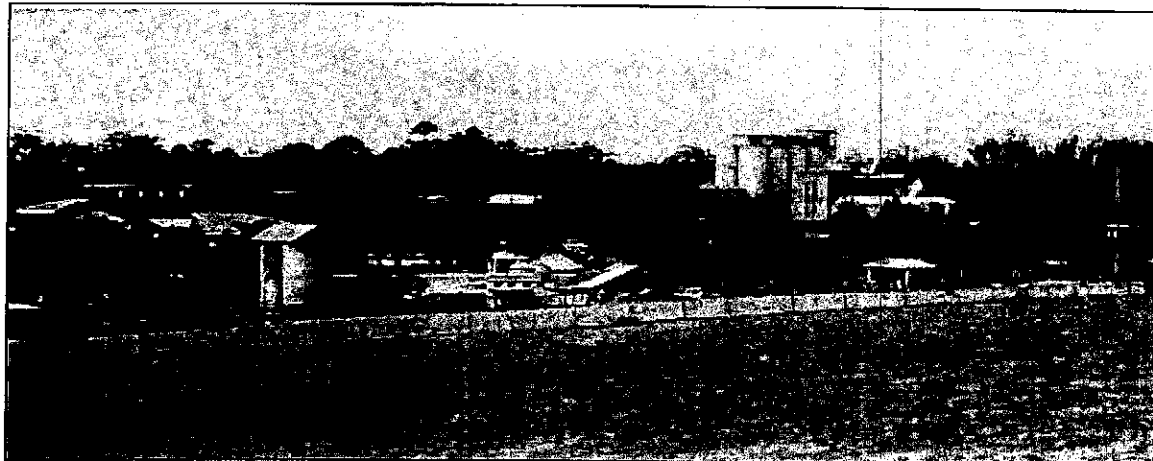
Avondale College

Avondale College ('the College') is located to the south-east of the town centre adjacent to the Sanitarium Health Food ('Sanitarium') facility.

Avondale is an education institution which also has in attendance a growing number of students of other faith traditions who desire higher education in a Christian context. The College has 48 degree programs, which are nationally accredited, of which the largest programs are the teaching degrees. Courses range from undergraduate to post-graduate (including PhD), and include: education; arts; business and information technology; nursing and health; lifestyle education; visual arts and graphic design; science and mathematics; and theology. Vocational courses are also provided including: aviation; business; and, outdoor recreation.

The College will be the main beneficiary of returns from the proposed development at North Cooranbong. It is intended that the financial returns will be passed to the College to aid in planned expansion of their residential and academic facilities.

Figure 5 - Avondale College & Sanitarium Health Food Company



Source: Hill PDA 2006

Currently 1,037 students are enrolled at the Lake Macquarie campus at Cooranbong. Commonwealth supported places at the College have helped drive an increase in enrollments as increased funding has been allocated to the students of the College. Since 2001, the student population has increased by more than 50% (15.6% growth from 2001-2005). The College anticipates a conservative projection of 1,500 students by 2012.

Of all enrollments at the college, 36% are not from Seven Day Adventists members. 15% of students in degree and vocational courses are from countries outside Australia and New Zealand; and over 60% of students are from outside the Lake Macquarie region. 58% of students either live at home or rent accommodation off campus; whilst there are a large proportion of married students. Most teaching staff live in the local area with the College providing loan funds for staff, to help them establish themselves in the area.

The College is currently seeking university status to give status to the institution proportionate with the range and quality of its programs. The College anticipates that the status will enhance the attractiveness of the College to new students.

Since 1998, \$6.6million has been spent on building and construction of the College. The College is planning a \$5.5million housing project for students, with an ongoing residential and academic building program planned over the next 20 years. The aim being that the North Cooranbong development is going to help fund these development plans.

Avondale School

Avondale School is located adjacent to the airstrip, north-west of Cooranbong town centre. Avondale School is run by SDAC. Currently the School includes 900 students and a total of 140 staff (90 professional and 50 support staff). 70% of current school students are not Seventh Day Adventists.

The School is currently embarking on the development of a \$4.5million multipurpose centre with another \$20-\$25million in additional buildings planned. The School anticipates that the proposed development at North Cooranbong will bring an additional 400 students into the school.

Hill PDA have been provided with written advice from the Church that Avondale School is committed to increasing the capacity to of the school by 400 students to meet demand anticipated to be generated by the development at North Cooranbong (See Appendix One).

Sanitarium Health Food Company

The Sanitarium Health Food Company has been located in Cooranbong since 1898, when large bakehouse equipment was installed in a large building which had previously been a saw mill. Sanitarium still remains at these premises which are located south east of the Cooranbong town centre and adjacent to the College.

Since its establishment in Cooranbong, Sanitarium has grown substantially, now employing 1,700 people in Australia and New Zealand, with a combined turnover of approximately \$300million.

At its Cooranbong facility, Sanitarium currently employs approximately 498 staff, being 353 full time staff, 40 part time staff, and 105 casual staff.

The Sanitarium site is also listed as a heritage item which places stringent constraints on the building making it very difficult to undertake any form of physical expansion.

12 Morisset

Morisset is the primary centre of the Morisset Planning District which includes Cooranbong. Located on the main northern rail line, Morisset is one of the busiest stations along the Hunter line with express services to both Sydney and Newcastle. The centre is 2.3km east of the Morisset turnoff from the Sydney Newcastle Freeway.

Traditionally Morisset was a base for coal mining and energy generation, however recently the area has attracted those residents pursuing a more rural lifestyle.

Many religious communities also are located within the Morisset district including the Seventh Day Adventist Church and Avondale College in Cooranbong, a Buddhist temple, the Saint John of God facility at Point Morisset; and, the Salvation Army at Bonnells Bay.

Adjacent to the freeway is the relatively new Gateway Industrial Estate, as well as the Morisset Mega Markets which is operational on weekends. Council have advised that in excess of 464 businesses currently operate in the Morisset/Cooranbong area. Major employers in the area include: Eraring Generation; Sanitarium Products, Centennial Coal; Yates Horticultural Products; Specialist Horticulture; Morisset Hospital; and Avondale College.

Morisset provides a range of services to residents in Dora Creek, Cooranbong, the Morisset Peninsula, Mandalong, Wyee Point and Wyee. North Cooranbong and the subject site are known to be situated within the Morisset trade area.



Dora Street looking west from the train station



Bi-Lo Supermarket from car park

Morisset is a neighbourhood centre of around 9,500sqm. It comprises 68 shop front premises of which 45 are being used for retailing, 19 are being used for commercial services and 4 are vacant. Anchor retailers include a 2,300sqm Bi-Lo supermarket, 400sqm Retravisson store and a 250sqm Go-Lo discount variety store.

The strip retail accommodation in Morisset fronts Dora Street for around 400m between Doyalson Street and Bridge Street adjacent to the railway station. The supermarket, Go-Lo and Retravisson stores are behind the Main Street in Short Street.

Morisset's trade area encompasses the localities of Morisset and Dora Creek but extends further northwards to Myuna Bay, westwards to Cooranbong and Martinsville and southwards towards Wyee. Currently it is a major destination for food and grocery shopping for residents on the Bonnells Bay Peninsula, Dora Creek and Cooranbong areas given the limited retail offer in these locations.

Morisset currently has the following key developments in the pipeline (see Section 8.2):

- New 3,385sqm Woolworths supermarket with associated specialty retail (still with Council);
- New 4,000sqm Coles supermarket plus associated specialty retail (still with Council);
- Morisset Gateway Park - This industrial park is located just off the freeway and the Morisset Interchange. The park has seen much development recently and is on going with many new warehouse units currently hitting the market. Recent development in the park includes a child care centre and carwash, as well as much new distribution firms and small businesses established.

The development of Morisset Gateway Park is establishing the town as a major industrial location. With good ramp access to the freeway and being located away from residential development, Morisset is joining Cardiff, Gateshead, Toronto, Warners Bay and Cameron Park as well established industrial areas.

4.3 Toronto

Toronto is the main district centre around 19km by road to the north of Morisset. It is 8.3km by road from the Toronto turnoff on the Sydney Newcastle Freeway. Toronto is the central point of the

Westlake's district and services the surrounding communities of Kilben Bay, Coal Point, Carey Bay, Rathmines, Wangi Wangi, Teralba, Booragul, Woodrising, Fennell Bay, Bolton Point, Fassifern and Blackfalls Park.

Council sees Toronto maintaining a focus on tourism, government services and coal mining, with ongoing development in retail, commercial and tourism facilities. The area will see continued intensification of housing and mixed commercial/housing opportunities.

Toronto has around 140 shop front premises of which around 90 are being used for retail purposes, 40 are being used for commercial purposes and eleven are vacant. There are also a number of commercial buildings adjacent to the retail centre. Toronto has a high proportion of commercial space for a centre of its size.

Most of the strip shopping fronts The Boulevard between Carey Street and Victory Parade. There are also strip shops fronting Victory Parade opposite Edward Gain Park. The centre has an attractive setting adjacent to the lake and Edward Gain Park.

Toronto currently has the following key developments in the pipeline:

- \$15.5million mixed used development
- \$10million seniors living development for 45 units
- Extensions to Catalina Motel
- Centennial Coal announced plans for further underground mining and an open cut mine to extend the life of Newstan and Awaba Coal Mines.
- Four storey mixed use commercial and residential development in Brighton Avenue.

Anchor tenants in Toronto include a 4,000sqm Coles supermarket, a 2,800sqm Woolworths supermarket and a 700sqm Go-Lo discount variety store.

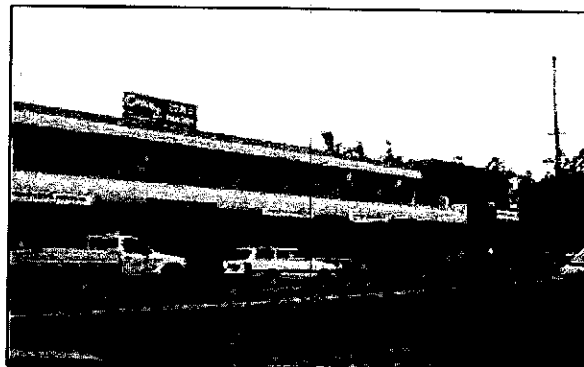
Total floor area in Toronto is around 21,000sqm of shop front retail of which 4,000sqm is commercial space and 1,000sqm is vacant. Being a district centre it has an extended trade area that extends from Wangi Wangi in the south to Teralba and Killingworth in the north.

1.4 Dora Creek

Dora Creek is primarily known for its relaxed atmosphere and natural attributes being located on the water. Dora Creek has a small 1,200sqm neighbourhood centre adjacent to the railway station comprising 13 shops with no anchor tenant.



Looking west up Doree Place



Looking south down Wangi Road

4.5 Bonnells Bay

Bonnells Bay is a local shopping centre of around 3,400sqm anchored by an IGA supermarket of 600sqm. Being a small supermarket it captures only a minority of the trade area's expenditure on food and groceries. Residents and tourists on the Bonnells Bay peninsula travel to Morisset, Toronto, Lake Haven and occasionally beyond to the regional centres to undertake food and grocery shopping.

The area is fast growing with household numbers increasing at around 3.5% per annum. Expenditure in food and groceries is reaching a critical level where a full-line supermarket is viable.

The owner of the shopping centre is seeking to replace the existing IGA supermarket with a larger full-line 3,200sqm supermarket to improve the sustainability of the centre. This will include a proposed medical centre.

5. DEMOGRAPHICS

This section provides a profile on population, household and employment statistics from ABS Census data in regional Cooranbong. Comparisons are made Dora Creek, Morisset, Toronto, Bonnells Bay and the Lower Hunter. This analysis is done to gain an appreciation of the context and labour related demand for land in Cooranbong town centre and the peripheral areas of the LGA.

Note: Relevant employment statistics and trends have been discussed in Section 10 of this report.

5.1 Lower Hunter Region

Over the past decade the population of NSW has grown faster than previously forecasted, leading to increased housing construction and demand for infrastructure. Most of this growth has been in the Sydney Region, but also in coastal towns and regional cities.

The population of the Lower Hunter region was 468,861 persons at the 2001 census. This is a growth rate of 1% per annum since 1996. Over the ten-year period, since 1991, the regional area population increased by some 41,888 people.

The Lower Hunter has experienced an increase in population from 1991 to 2001 as shown in the table below. However population growth is slightly below NSW.

Table 2 - Population Growth for the Lower Hunter

	1991	1996	2001	1991-2001
NSW	5,732,032	6,038,869	6,371,745	11%
Lower Hunter	426,973	448,663	468,861	10%

Source: Australian Bureau of Statistics Census, 1991, 1996, 2001

The population of the Lower Hunter region was 468,861 persons at the 2001 census. This is a growth rate of 0.9% per annum since 1996. Over the ten-year period, since 1991, the regional area population increased by some 41,888 people or 10%.

The table below outlines population growth for Cooranbong and surrounding localities from the 2001 census.

Table 3 - Population Growth & Dwelling Size for Cooranbong vs. Surrounding Areas

Characteristics	Cooran-bong	Dora Creek	Morisset	Toronto	Bonnells Bay	Newcastle	Lower Hunter
Population and Dwellings							
Total Population	3,597	1,244	3,171	30,910	12,079	7,077	468,860
Total Dwellings	1,345	595	426	12,544	5,077	3,260	197,639
Occupied Private Dwellings	1,265	502	398	11,469	4,668	2,703	181,191
Occupied Private Dwellings (%)	94.1%	84.4%	93.4%	91.4%	91.9%	82.9%	91.7%
Average Household Size	2.8	2.5	2.6	2.7	2.6	2.6	2.6

Source: Australian Bureau of Statistics Census 2001

The above figures are based on the same census collector districts as those census figures in Councils Lifestyle 2020 Strategy. The Strategy indicates that the number of people living in each house is reducing. In 1991, the average number of persons per household was 2.87, which in 1996 had reduced to 2.69 and by 2020 is expected to be 2.3.

5.2 Age Profile

Cooranbong, Dora Creek, Morisset, Toronto and Bonnell's Bay, as at 2001, had a similar age distribution compared to the Lower Hunter as depicted in the table below.

Table 4 - Age Profile of Cooranbong in comparison to Dora Creek, Morisset, Toronto, Bonnell's Bay and Lower Hunter 2001

Population at Census						
Age Bracket	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
0-14	20.2%	21.9%	14.9%	22.4%	22.5%	20.9%
15-29	19.1%	15.4%	14.2%	17.2%	17.6%	19.7%
30-44	18.2%	19.7%	17.5%	19.9%	20.7%	21.4%
45-59	17.1%	20.9%	20.2%	19.7%	18.2%	18.8%
60-74	12.4%	17.4%	19.8%	12.7%	15.5%	12.2%
75+	12.9%	4.7%	13.3%	8.1%	5.4%	7.0%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<i>Median Age</i>	39.3	39.7	47.1	38.5	37.3	36.8

* Excludes Overseas Visitors

Source: Australian Bureau of Statistics Census 2001

Consistent with the Lower Hunter, Cooranbong has an ageing population. This is a result of families selecting to have fewer children, delay having children or have no children at all. It is also a result of people living longer.

The most mobile age groups are the 15-29 years and 20-34 years. In Cooranbong it represents 37.3% of the population which is typical of many smaller urban localities. In the Lower Hunter region it represents 41.1%. The largest age bracket in the trade area falls in the 0 to 14 years bracket.

5.3 Ethnicity

With only 15.9% of Cooranbong population born outside Australia and Oceania, ethnic diversity is considerably lower than NSW. The NSW ratio of non-Australian and Oceania born residents is strongly influenced by Sydney SD (35%) and is a reflection of the trend of overseas migrants generally settling in the capital cities. However Cooranbong is consistent with the Lower Hunter.

Table 5 - Ethnicity of Population for of Cooranbong in comparison to Dora Creek, Morisset, Toronto, Bonnells Bay and Lower Hunter 2001

World Region	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
Oceania & Australia	84.1%	87.0%	84.1%	88.0%	86.3%	86.6%
Europe	7.2%	8.0%	9.1%	6.1%	7.3%	6.4%
North Africa & Mid-East	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%
Asia	2.4%	0.5%	1.0%	0.7%	0.8%	1.2%
Americas	1.0%	0.2%	0.3%	0.4%	0.5%	0.4%
Sub-Saharan Africa	0.7%	0.2%	0.1%	0.1%	0.4%	0.3%
Other/ Not Stated	4.4%	4.0%	5.4%	4.6%	4.6%	5.0%
Total	100%	100%	100%	100%	100%	100%

* Excludes Overseas Visitors

Source: Australian Bureau of Statistics Census Data 2001

4 Dwelling Structure

Detached housing is the housing structure that predominates in Cooranbong. In 2001 Cooranbong had the same percentage of all other types of dwellings (17.3%) as the Lower Hunter (17.3%).

Table 6 - Dwelling Structure in of Cooranbong, Dora Creek, Morisset, Toronto, Bonnells Bay and Lower Hunter 2001

	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
Separate house	82.6%	94.6%	71.4%	89.6%	97.7%	82.7%
Semi-detached, row, terrace, townhouse	14.6%	0.6%	12.0%	4.6%	0.6%	7.5%
Flat, unit, apartment	2.3%	1.8%	0.7%	3.0%	0.3%	7.3%
Other dwelling	0.2%	0.6%	15.4%	1.9%	0.9%	1.8%
Not stated	0.2%	2.4%	0.5%	0.9%	0.5%	0.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Australian Bureau of Statistics Census Data 2001

5.5 Tenure Type

Cooranbong and the surrounding suburbs have a lower level of rented accommodation than the Lower Hunter as shown in the table below. This in part is due to the lower proportion of investment flats units and apartments.

Table 7 - Tenure Type in Cooranbong, Dora Creek, Morisset, Toronto, Bonnells Bay and Lower Hunter 2001

	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
Owned or Being Purchased	66.0%	75.1%	69.9%	70.9%	73.9%	68.8%
Rented	22.9%	18.9%	14.4%	23.0%	21.1%	25.0%
Other type/ Not stated	11.1%	6.0%	15.7%	6.0%	5.0%	6.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Australian Bureau of Statistics Census Data 2001

5.6 Household Type

Household structure in Cooranbong is similar to the Lower Hunter. As depicted in the table below, the majority of households within Cooranbong are family houses, followed by lone person houses and then group households.

Table 8 - Household Type in Cooranbong, Dora Creek, Morisset, Toronto, Bonnellis Bay and Lower Hunter 2001

Household Type	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
Family households	74.6%	73.1%	69.9%	76.6%	77.3%	71.9%
Lone person households	23.1%	24.6%	28.4%	21.7%	20.3%	24.7%
Group households	2.3%	2.3%	1.7%	1.7%	2.3%	3.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Australian Bureau of Statistics Census Data 2001

Household structure has changed over time with Cooranbong, Dora Creek, Morisset, Toronto, Bonnellis Bay, and NSW all showing a decline in traditional or nuclear families as a proportion of total households.

During the 1950s and 1960s the fertility rate in Australia exceeded 2. This rate has progressively declined to a point where today it is 1.6 to 1.7 and still falling. There has been growth in couples without children and considerable growth in lone person households. Couples are deciding to have children later in life, have fewer children and have no children at all. There has also been some growth in marriage breakdowns or separation. All these trends are resulting in declining occupancy rates and an ageing of the population.

5.7 Household Income

Household income levels in Cooranbong are slightly below the surrounding localities and the Lower Hunter region. Cooranbong trade area is a low to middle class area with a median household weekly income of \$630 in 2001. This is lower than the Lower Hunter median (\$667).

Table 9 - Weekly Household Income 2001

Income Bracket	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
\$0-\$299	12.3%	15.3%	18.3%	13.3%	12.0%	15.0%
\$300-\$599	29.2%	27.0%	34.6%	26.6%	28.2%	25.4%
\$600-\$999	20.7%	21.8%	15.8%	19.7%	21.4%	19.6%
\$1,000-\$1,499	15.4%	12.3%	9.6%	15.0%	14.8%	15.4%
\$1,500-\$1,999	6.3%	8.8%	6.0%	8.4%	8.2%	8.3%
\$2,000+	3.2%	4.4%	2.6%	5.8%	4.5%	5.5%
Partial income Stated	8.8%	8.4%	7.4%	7.6%	7.4%	7.1%
All incomes not stated	4.1%	2.1%	5.7%	3.5%	3.4%	3.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Median Income	\$630	\$632	\$469	\$671	\$672	\$667

Source: Australian Bureau of Statistics Census Data 2001

6. RESIDENTIAL MARKET APPRAISAL

6.1 Rezoning Proposal

The rezoning of the subject site considers the designation of residential zoned land (Residential 2(1)) to a large proportion of the site. The initial rezoning application recognised that approximately 1880 dwellings would be considered for the site, however it is now anticipated that this new residential zone would accommodate approximately 2,500-3,000 new dwellings. For the purpose of expenditure modelling and population projections within this report we have assumed a total of 2,500 dwellings for the subject site at North Cooranbong.

Hill PDA has been advised by JPG that it's anticipated that work will commence by July 2008, with 50 lots to be released per stage (aim of 200-300 lots per year).

It is anticipated that 3-5% of the development will be under an affordable housing scheme allowing people who may not normally be able to enter the home buyers market to purchase homes within the estate. Eligible purchasers are able to purchase 50% of their home with the developer retaining the other 50% for 5 to 10 years while the new home owner builds equity in their purchase.

Whilst the initial proposed density target for the site was approximately 10 dwellings/hectare, this may change depending on dwelling location. For example there may be higher densities surrounding the proposed community facility.

It is intended that any community facility will be constructed and completed before the first dwelling is built. JPG anticipate a 14 week construction period for a single residential dwelling. A range of dwellings will be provided being from the affordable to the executive. JPG will sign off on all house approvals and construction proposals.

JPG are proposing to set the building code for the site, especially with regard to design of housing, landscaping, and the selection of builders to undertake work on the site.

There will be a predetermined mix of local builders who will be the sole contractors allowed to construct homes on the site. Each builder will be required to employ a certain number of apprentices.

It is understood that JPG has met with various infrastructure providers (e.g. Hunter Water) and commenced negotiations regarding developer agreements for the provision of infrastructure.

6.2 Residential Market in Cooranbong

The purpose of this section is to review market evidence of residential land values in Cooranbong and surrounding suburbs. Hill PDA has undertaken research using PIMS, RPData, as well as discussions with agents, developers, and Council.

Cooranbong is not as typically affluent as many of the lake-side suburbs around Lake Macquarie. Feedback has suggested that the re-development of the Avondale site could help improve the image and socio-demographic profile of the area. However agents have expressed concern as to a possible current

over supply of residential land to meet recent demand which has been attributed to the down turn in the housing market and also the supply of new residential land releases.

Hill PDA understands a rezoning application, prepared by GHD on behalf of the Administrator of Koornpathoo, has been submitted to the Lake Macquarie Council with regards to the "Koornpathoo Land Holdings" south of the Great Northern Railway at Morisset. Council has informed Hill PDA that the applicant is currently preparing an LES study. The original application was submitted for 'urban development'. It is estimated that at maximum development the site will consist of 1,840 residents and 1250 residential dwellings. Whilst it is not yet known the timing of the Koornpathoo project, it may result in a release to the market at a similar time to the subject site at North Cooranbong.

However, whilst numerous residential lots are currently for sale and whilst projects in the pipeline may be released on the market at the same time, it is desirable to have multiple fronts. This results in multiple developments being on the market at one time illustrating differences in affordability and product range.

In addition, our analysis of take up rates (analysed further within this section) considers this possible short term oversupply, by lessening the number of lots initially released by the subject site as stipulated by JPG. This will reduce an oversupply or flood of the market, and allows existing supply to be absorbed. Our cost benefit models (see Section 8 and Section 9 of this report) also considers an even lower take up rate again by sensitivity testing.

We have reviewed DIPNR's forecast population growth for the Lake Macquarie LGA and based upon the anticipated growth rates it is anticipated there will be an ongoing demand for residential sites into the future. Any release of employment lands is likely to support continued residential development.

Since 2003 Lake Macquarie Council has received a total of 455 new DA's for proposed residential dwellings and subdivisions, in the catchment area of Morisset, Dora Creek, Toronto, Cooranbong and Bonnells Bay, equating to around 151 dwellings per year.

Research by Hill PDA has indicated Lake Macquarie is growing at a rate of 900 dwellings per annum (based upon average longer term occupancy of marginally over 2.2 persons per household). From this data we can establish there is a need for more residential dwelling in the immediate area with currently only 16.7% of new residential dwellings coming from the catchment area stated above.

The following data on residential values is presented for background purposes:

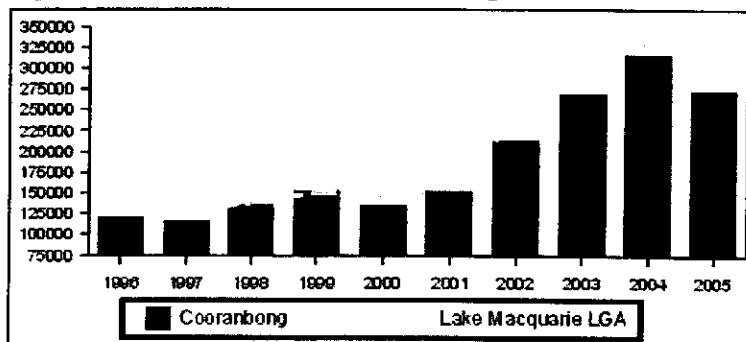
Table 10 - Median House and Unit Prices for the September Quarter 2005

	Cooranbong	Morisset	Newcastle	Sydney SD
All Dwellings				
Median Price	\$273,000	\$295,000	\$300,000	\$417,000
Annual Movement	n/a	-24.9%	-0.8%	-4.1%
Non Strata				
Median Price	\$352,000	\$318,000	\$300,000	\$467,000
Annual Movement	n/a	-19.2%	-2.7%	-5.7%
Strata				
Median Price	n/a	n/a	\$290,000	\$375,000
Annual Movement	n/a	n/a	1.8	-1.3%

Source: NSW Department of Housing, Rent and Sales Report, No. 72, September Quarter 2005

The graph below illustrates the rate of capital growth for houses in Cooranbong over the past 10 years.

Figure 6 - Capital Growth for Cooranbong, June 95 - June 06



Source: RP Data, 2006

There is a relatively strong correlation between house price movements in the suburb of Cooranbong and the wider Lake Macquarie LGA over the past 10 years.

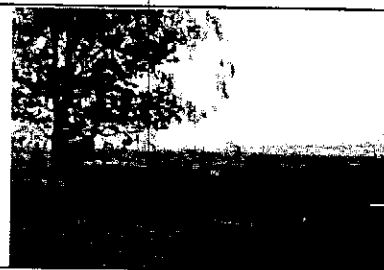
The above data shows the strong growth from 2001 to 2004, when the median house price increased from approximately \$150,000 to \$320,000. This however dropped off in 2005 to around \$275,000 as the residential market generally declined across most regional and metropolitan markets.

Comparative Analysis - New Residential Lots

We have also had regard to the sale of new residential lots in order to confirm values adopted.

Hampton Ridge, Cooranbong

Accommodation:	Vacant Residential Land
Description:	34 allotments of 1600sqm parcels, offering a rural lifestyle surrounded by 9ha of bushland.
Sale Price:	from \$245,000 to \$260,000
Status:	For Sale. Project has been on the market since April 2006. 1 lot has been sold thus far.



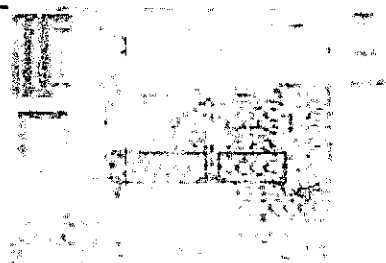
Ellenborough Park, Cooranbong

Accommodation:	Vacant Residential Land
Description:	33 allotments of 1500-1615sqm parcels. 17 have already been sold been on the market for two years.
Sale Price:	from \$210,000 to \$350,000
Status:	For Sale. Project has been on the market for two years. 17 lots have already been sold.



Oaklands, Cooranbong

Accommodation:	Vacant Residential Land
Description:	140 house and land packages released over three stages first stage have been released.
Sale Price:	from \$300,000 to \$400,000
Status:	For Sale. 5 have sold within the first 12months of release.



Other examples within the LGA include:

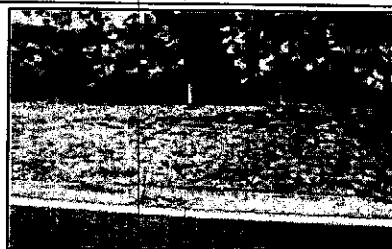
Minmi Road, Cameron Park

Accommodation:	Vacant Residential Land
Description:	The 324 hectare Northlakes Estate has the potential to yield approximately 1,300 lots. Within the next ten years, Northlakes will provide a primary school, high school, shopping centre (a supermarket and around 6 specialty shops), parks and playgrounds, and community centres. There will also be playing fields, a BMX track, cycle ways and a family tavern. We have reviewed all sales over the past 12 months. These sales range between 557-851sqm. \$125,000-\$210,000 or \$147-\$319/sqm. Relatively even blocks: \$200,000 to \$220,000. Higher gradients can reduce this to \$150,000.
Sale Price:	



Paddock and Robinia Close, Elmore Vale

Accommodation:	Vacant Residential Land
Description:	These vacant building blocks range in size from 710-850sqm and are located within the Paddocks Estate. The estate includes vacant blocks as well as house and land packages.
Sale Price:	\$225,000-\$245,000 or \$290-\$330/sqm for near level blocks.
Status:	For Sale and Sold. The project has been on the market for 18months and 27 out of the 37 lots have sold



1 and 8 Ellerdale Drive, Glendale Heights

Accommodation:	Vacant Residential Land
Description:	Located within a subdivision of approximately 15 lots.
Sale Price:	Lot 1: \$189,000 or \$338/sqm Lot 8: \$198,000 or \$254/sqm
Status:	For Sale. The subdivision went on sale approximately 2 years ago with these the two final lots. Since the subdivision first went on sale, the prices have been considerably reduced.



The above analysis indicates that lots of relatively even contour produced sales values of approximately \$180,000 to \$400,000 per lot dependent on whether vacant lots or house and land packages. Based on the above analysis we have assumed a sales price for residential lots at the subject site at North Cooranbong to be \$225,000.

Comprehensive Analysis - Resale of Improved Lots

We have also reviewed sales of improved lots. We note that the improved sales are typically older style dwellings and are considered in order to reflect values nearing land value. The following sales have been used to provide confirmation of the englobo values assessed in the previous section.

Table 11 - Market Research of Individual Site Sales

Address	Zoning	Land use	Price	Area	Sale Date
4a Avondale Rd Cooranbong	Residential	Improved	\$300,000	1195 sqm	12/01/2005
30 Crowth Rd Cooranbong	Residential	Improved	\$245,000	1062 sqm	22/02/2006
28 Crowth Rd Cooranbong	Residential	Improved	\$285,000	1062 sqm	16/02/2006
16 Cadillac Close Cooranbong	Residential	Improved	\$237,000	627sqm	15/02/2006
762 Freemans Dr Cooranbong	Residential	Improved	\$262,000	1248sqm	14/12/05
275 Freemans Dr Cooranbong	Residential	Improved	\$350,000	1922 sqm	07/02/2006
16 Glenrose Cr Cooranbong	Residential	Improved	\$240,000	740 sqm	09/02/2006
2a Kurrell Rd Cooranbong	Residential	Improved	\$320,000	839sqm	14/02/2006
8 Illawa St Cooranbong	Residential	Improved	\$278,000	607sqm	09/12/05
17 Newport Rd Cooranbong	Residential	Improved	\$285,000	582sqm	16/12/05

Source: RP Data

The above evidence suggests improved values of \$240,000-\$300,000. We note that the improved values are typically higher than for unimproved sites, reflecting the ongoing value placed on the older style improvements in this area. The improved sales suggest underlying land values in the order of \$150,000 to \$260,000 depending on the location and size of the lots.

Residential Lot Take Up Rates

Hill PDA has undertaken research into predicted residential lot take up rates for the subject proposed development at North Cooranbong.

Feedback suggests that the current sluggish residential lot sales rate will need to increase in the medium to longer term in order to maintain the viability of the larger estates.

The ultimate sales rate will depend upon the timing of the residential land releases. Sales rates at present are slow, with many estate and land releases indicating negligible or very few sales per month. This is forecast to continue into the immediate future.

However, at some point a recovery is likely to improve these rates to figures more in tune with the longer term averages. This is likely to be attributed to current supply being met, as well as other areas like Bonnells Bay and Dora Creek being built out, with no new and available land capable of residential subdivision.

At this point it is likely that take up rates for subject site at North Cooranbong will increase as a result, and maintain higher sales rates into the future until such point as the site is fully sold.

Lake Macquarie Council indicates that the population of the LGA is estimated to increase by some 40,000 over the next 20 years¹. This equates to an average growth of 2,000 people per annum, or approximately 900 dwellings per annum based upon average longer term occupancy of marginally over 2.2 persons per household). It is considered reasonable for the subject site to be attracting in the order of 2% of this annual estimated take up over the initial years, increasing to 810% once the estate is established.

The Lifestyle 2020 Strategy notes that the Morisset Planning District is estimated to have a housing requirement of 4,692 dwellings by 2020, 74% of which will be for detached housing. Therefore we can assume that the proposed development could fulfil half of that need.

We provide the following evidence of take up rates within various residential estates, being Green Hills at Maitland, Bagnalls Beach at Newcastle, Melaleuca at Maitland and Fennel Bay at Lake Macquarie.

Fennel Bay, Lake Macquarie	
Number of lots:	60
Take up rate:	7 lots in first month; 30 lots have been sold since the initial release in 2003.
Sale Price:	Prices range from \$110,000- \$130,000 lot.
Status:	For Sale and Sold
Green Hills, Maitland	
Number of lots:	200 lots ranging from 560-724sqm
Take up rate:	Typically selling 2-3 per month. Lots have been released over a 6 year period.
Sale Price:	Prices range from \$162,000- \$171,000 per lot range from \$110,000- \$130,000 lot.
Status:	9 lots are still remaining. Prices have been reduced due to the down turn in the market.
Bagnalls Beach, Newcastle	
Number of lots:	500 lots ranging from 659- 854sqm
Take up rate:	Typically selling 2 per month. Lots have been released over a 10 year period.
Sale Price:	Prices range from \$233,000-\$283,000per lot.
Status:	Nine lots are still remaining. Prices have been reduced due to the down turn in the market
Melaleuca, Maitland	
Number of lots:	400 lots ranging from 550- 600sqm
Take up rate:	Typically selling 3 per month.
Sale Price:	Prices range from \$110,000-\$130,000per lot.
Status:	Recently finished selling.

The research indicates that take up rates for the residential estates are in the order of 30-50 lots per annum. This is in contrast to the suggested release plan of 200-300 lots per annum as advised by JPG. However, Hill PDA suggest that 50-200 lots will be released per annum over the life of the project dependent on demand levels and the rate of absorption of lots.

Initially, the market may require only 50 lots per annum to be released, as existing residential subdivision projects may remain on the market in Cooranbong and surrounding areas. As these existing

¹ http://www.lakemac.com.au/business/city_profile_residents.asp

Overall we therefore estimate a residential sales release program as follows

Table 12 - North Cooranbong Release Rates

End Financial Year	No. of Lots	Lots per annum
2009 – 2010	100	50
2011-2013	300	100
2014 – 2019	900	150
2020 – 2025	1,200	200

The above staging plan considers a 16 year project time frame. This is more than the ten year plan anticipated by JPG. However, based on the above analysis of take up rates, it is felt this staging plan accurately reflects the current market and future demand for residential lots on the subject site.

[illegible]

The majority of properties available at (and nearby to) the town of Cooranbong continue to be traditional detached houses on a single allotments. Higher density forms of housing such as units, townhouses and villas are relatively untested within the area, although there is evidence of a growing acceptance for this form of housing.

Reasons for this growing acceptance include:

- An ageing population looking for lower maintenance housing;
- Increased affordability compared to traditional housing;
- Location rather than housing type; and
- Associated facilities with high-density housing such as proximity to transport, shopping centres and convenience retail.

Our observations indicate that some 'villa' development is occurring at Cooranbong, with examples including: along Freemans Drive and Kennedy Close. We did not observe any townhouse or unit development in the vicinity of the subject site.

Medium density housing has traditionally allowed for 35 to 40 dwellings per hectare and resulted in lots not greater than 250sqm. Many lots containing single detached dwellings in the more populous urban areas of NSW are rapidly approaching such sizes with lot sizes between 400sqm and 500sqm now common.

It is considered, however, that the viability of medium density (35 to 40 dwellings per hectare) at Cooranbong could be implemented to support elderly retirees, students and staff accommodation which would be ideally located around the retail / activity centre and open space.

The shift to medium density is a significant pressure that has certainly changed the nature of housing choices in many areas. Furthermore, for many purchasers the acquisition of medium density accommodation is seen not as a preference, but rather as a compromise in order to achieve other goals (such as location). At Cooranbong it is considered that the majority of purchasers will have a preference

for detached housing and in our opinion purchasers will be less likely to compromise on this aspect of their purchase due to the relative affordability of land.

Nevertheless, medium density lots should be considered an important and strategic component of the proposed subdivision plan, which will allow for a wider range of residents, students occupants, as well as catering for those same residents as their stage in life changes.

7. RETAIL DEMAND ASSESSMENT

7.1 Reasoning Proposal

Hill PDA has been advised verbally by JPG that between 2,500-3,000 dwellings can be expected for the subject site at North Cooranbong. For the purpose of expenditure modelling within this report we have assumed 2,500 dwellings.

A number of community facilities have been considered for the subject site at North Cooranbong. Indicatively the location of these facilities is at the south west corner of the site. This location allows communal use of the facility by the School and local community. A convenience store or café has also been considered at this location.

Whilst the impact of the proposed convenience store or café is likely to be minor and will in fact be positive, the impact of the new residential population on the existing retail facilities at Cooranbong is considered and measured. This analysis is undertaken through retail expenditure modelling.

7.2 Current Market of Land currently in use

Currently the retail market is strong in both Morisset and Cooranbong. There are currently two major retail development applications with Council and which are discussed further below, proposing a new Coles and Woolworths in the Morisset town centre.

Woolworths Morisset

The proposed development will be located at the corner of Dora, Doyalson and Yambo Streets, Morisset. The development details are below:

Table 13 - Woolworths DA Details

Application Details	Details								
Site Area:	6.52ha								
Existing development on site:	Vacant land and shops, including a vacant undeveloped lot currently owned by Council. An agreement exists between the developer and Council as to the acquisition of the Council owned land upon development consent.								
Proposed development:	Two existing retail buildings on site will be retained and incorporated into the new development. The uses will include a lower ground floor gymnasium, upper ground floor speciality shops, and first floor office space. A new 3 level building will be constructed at the rear of the existing, with access via an improved Dora Street frontage. The new building will consist of a full line supermarket, restaurant, speciality shops and form part of the expanded gymnasium space. An internal car park over two levels will accommodate 186 cars.								
Areas existing:	<table> <tr> <td>Speciality shops</td><td>1,685sqm</td></tr> <tr> <td>Gymnasium</td><td>555sqm</td></tr> <tr> <td>Commercial</td><td>525sqm</td></tr> <tr> <td>Total GFA</td><td>2,765sqm</td></tr> </table>	Speciality shops	1,685sqm	Gymnasium	555sqm	Commercial	525sqm	Total GFA	2,765sqm
Speciality shops	1,685sqm								
Gymnasium	555sqm								
Commercial	525sqm								
Total GFA	2,765sqm								

Application Details	Details	
Areas new:	Supermarket	3,385sqm
	Speciality shops	1,425sqm
	Gymnasium	45sqm
	Commercial	-225sqm
	Restaurant	240sqm
	Total GFA	4,870sqm
Total development areas:	Supermarket	3,385sqm
	Speciality shops	3,110sqm
	Gymnasium	600sqm
	Commercial	300sqm
	Restaurant	240sqm
	Total GFA	7,635sqm

Source: Dickson Rothschild SEE for Proposed Retail Development. DA 05/2889, December 2005.

Based on the above project details we can estimate the number of employment positions to be anticipated from this development.

The average rate of one employee per 21.5sqm for anchor tenants and one employee per 30sqm of speciality floor space is drawn from the ABS Retail Survey 1998-99 for combined full and part time staff. An average rate of one employee per 20sqm has been adopted for commercial space.

Research carried out by Hill PDA shows that the employee numbers generated at a gymnasium facility did not reflect the floor space ratio per square metre. It is difficult to pinpoint an exact figure as there are generally low numbers of permanent staff, with the majority of employees being fitness instructors and personal trainers which are classified as subcontractors.

Based on Hill PDA research an average 1,600m² gym generates 19 employees. Based on this assumption employment in the gym operations onsite at the above development would generate 7 staff.

The table below indicates the approximate employment generation from the abovementioned project:

Table 14 - Woolworths Development Employment Generation

Use	Area	Rate	Employment Numbers
Supermarket	3,385sqm	1 employee per 21.5sqm	157
Speciality shops	3,110sqm	1 employee per 30.0sqm	103
Gymnasium	600sqm		7
Commercial	300sqm	1 employee per 40.0sqm	7.5
Restaurant	240sqm	1 employee per 20.0sqm	12
Totals	7,635sqm		286

Source: Hill PDA Research

Therefore based on the above analysis, the Woolworths development has the potential to generate 286 full time and part time jobs.

Coles and Coles Myer Property Developments Ltd

Coles Myer Property Developments Ltd lodged a DA with Council in December 2005, for demolition of existing buildings, consolidation of allotments, and the development of a proposed Coles

Supermarket. Total construction costs being \$21million. As at June 2006, the application was still with Council pending further information being provided to Council.

The proposed development will front Dora Street and be bound by Station Street, Yambo Street, Bridge Street and Newcastle Streets. The development details are below:

Table 15 - Coles Myer DA Details

Application Details	Details										
Existing development on site:	A Bi-lo Supermarket and at grade car park are located on the eastern end of the site. An existing car park is located under the Bi-lo Supermarket. There are five existing dwellings and a small office building proposed to be demolished.										
Proposed development:	Extend the existing building further to the west to accommodate a Coles Supermarket and to incorporate a Liquor Land outlet with separate entrance. Establish a Country Target store in the location of the existing Bi-lo Supermarket. Retain existing at grade car park located adjacent to the Bi-lo for staff parking. Add new retail and commercial floor space. Extend the shopping complex south of Lindon Lane and incorporate the existing Morisset Square into the proposed expansion by way of a pedestrian bridge. Retain the existing underground car park and construct an additional two level car park for 209 cars under the proposed Coles Supermarket including a link to Lindon Lane linking the proposed car parks. The existing Bi-lo building will be retained and treated with architectural elements of the extension.										
Areas new:	<table> <tr> <td>Coles Supermarket</td><td>4,000sqm</td></tr> <tr> <td>Country Target</td><td>1,600sqm</td></tr> <tr> <td>Speciality shops</td><td>2,500sqm</td></tr> <tr> <td>Commercial/external shops</td><td>572sqm</td></tr> <tr> <td>Total GFA</td><td>8,675sqm</td></tr> </table>	Coles Supermarket	4,000sqm	Country Target	1,600sqm	Speciality shops	2,500sqm	Commercial/external shops	572sqm	Total GFA	8,675sqm
Coles Supermarket	4,000sqm										
Country Target	1,600sqm										
Speciality shops	2,500sqm										
Commercial/external shops	572sqm										
Total GFA	8,675sqm										

Source: GHDS for Proposed Retail Development, DA 05/2739, December 2005.

The development application notes that it is anticipated that 250 full time or part time jobs will be created as a result of this development.

Hill PDA recognises that the expansion of Morisset's retail centre would result in it serving a larger area across the Lower Hunter, as opposed to the existing centre. The expansion of the centre's role would change whereby it would no longer be considered as a village but as a town centre under the new Metropolitan Strategy typology of centres hierarchy.

The proposed opening of the new Woolworths and Coles is not likely to cause an oversupply problem as could be initially feared. Anecdotally the problems may be more felt in other retail centres such as Bonnells Bay. According to local agents rents are strong and vacancy rates are low. Evidence has suggested that speciality shops in Cooranbong are achieving rents of \$230-\$280/sqm per annum and sales have shown values of \$2,000-\$2,630/sqm. Morisset is achieving rents of \$350-\$500/sqm per annum; which is likely to increase with the introduction of new supermarket anchor tenants as currently within the development pipeline.

There has been some suggestion of BiLo at Morisset relocating its premise to Cooranbong behind the existing retail village which will in turn impact the existing local centre. Currently Cooranbong village is known as a "top up shopping" centre. An anchor tenant of the same capacity as BiLo at Morisset would ultimately change the centre into a sub-major food and grocery shopping destination for the majority of residents west of Cooranbong taking a fare slice out of Morisset's trade area. There is also a question of

whether there is sufficient expenditure in the Cooranbong catchment to sustain such a supermarket. This has been discussed further below (see Section 7).

7.3 Trade Areas

Demand for retail space within a trade area is dependent upon household expenditure. Household expenditure is dependent upon population, the number of households and the socio-demographic characteristics of those households. Most notably there is a strong positive correlation between household income levels and expenditure.

In order to measure need and undersupply of retail space we first have to define the trade area. The following sections of the report define the trade areas likely to be served by the proposed development, details the existing and forecast trade area population and the demand for supermarket floor space generated by that population.

A centre's trade area refers to a geographical area with a boundary whereby the majority of expenditure within that area is captured by the subject retail centre. Alternatively it refers to a major proportion of expenditure where trade areas overlap. There may be different trade areas for different types of retail stores or commodities.

For food and grocery shopping people generally choose a retail centre closer to where they live provided that the retail offer is good.

Top up shopping is often referred to as shopping for a few items of food and groceries when needed quickly. Here the selection is a lot broader and residents patronized numerous centres, petrol stations, convenience stores and other outlets all around.

The choice of retail centres for clothing shopping is more limited. In this case shopping for clothes is quasi-entertainment rather than a chore. Often it's a case of comparing items in different stores and so shoppers will travel further to centres with a greater retail offer.

In this case the major destinations for clothes shopping are the larger regional, major centres.

The definition of the trade area served by any shopping centre is determined by a number of factors including:

- The strength and attraction of the centre in question, determined by factors such as the composition, layout, ambience/atmosphere and car parking in the centre.
- Competitive retail centres, particularly their proximity to the subject centre and respective sizes, retail offer and attraction.
- The location and accessibility of the centre, including the available road and public transport network and travel times.
- The presence or absence of physical barriers, such as rivers, railways, national parks and freeways.

Having regard to:

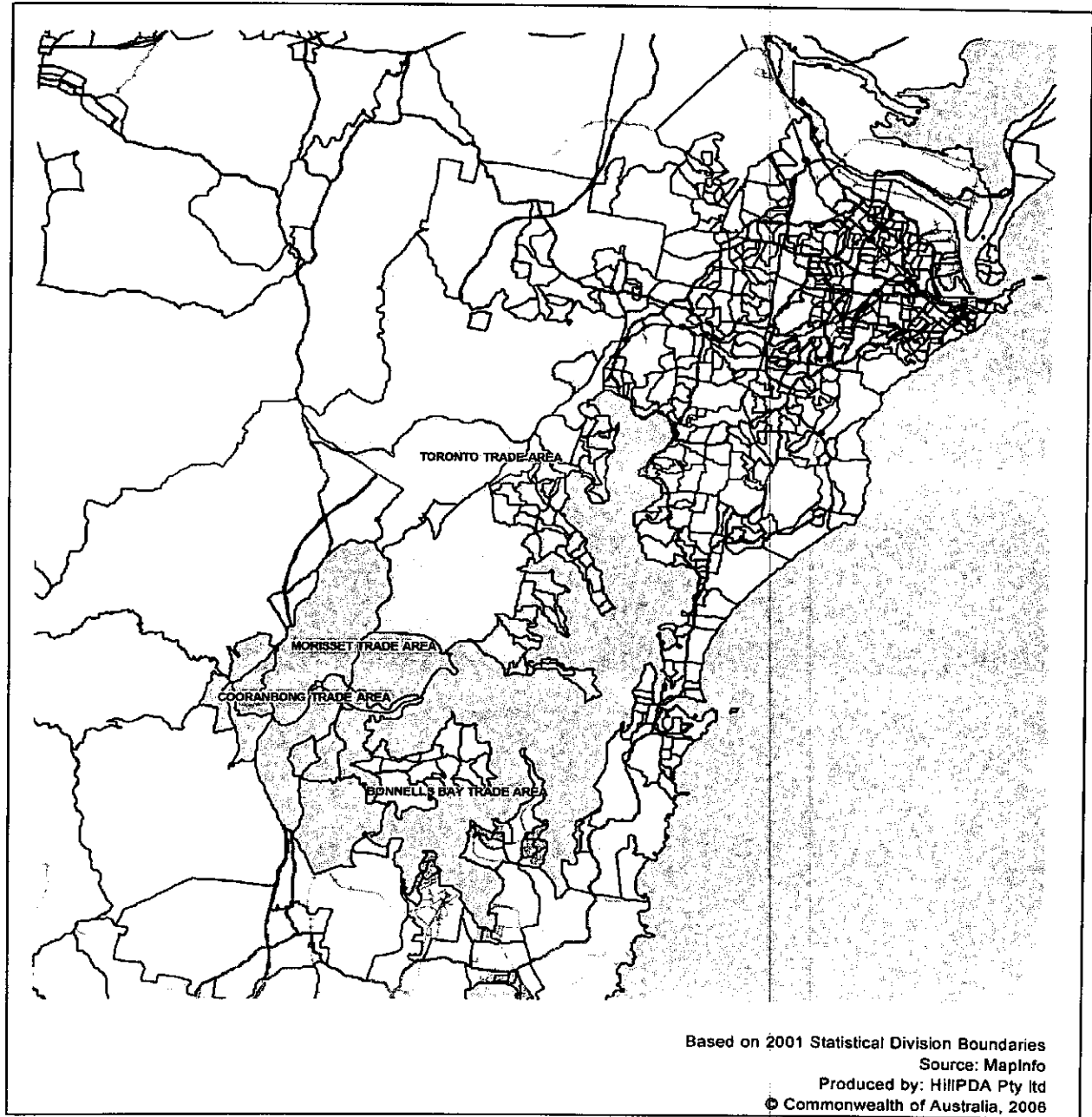
- each of the factors detailed above;
- inspection of the site and surrounding retail centres; and
- our experience with a large number of studies in similar sized centres --

we have identified the following trade areas.

- The Cooranbong trade area encompasses Cooranbong, Avondale and Martinsville;
- The Morisset trade area encompasses the localities of Morisset and Dora Creek but extends further northwards to Myuna Bay, westwards to Cooranbong and Martinsville and southwards towards Wyee;
- The Bonnells Bay trade area encompasses Bonnells Bay and the suburbs east of Bonnells Bay on the peninsula;
- The Toronto trade area extends from Wangi Wangi in the south to Teralba and Killingworth in the north;

A map identifying the trade areas is shown below:

Figure 7 - Trade Areas



Source: Hill PDA & Map Info, 2006

Whilst the Cooranbong trade area includes Cooranbong, Avondale, and possibly Martinsville, a larger proportion of expenditure is escaping Cooranbong shops. At the moment Cooranbong shops otherwise

known as Avondale Shopping Centre is primarily used for top up shopping and the use of local services like (e.g. post office).

The NSW Department of Planning has recently released the Sydney Metropolitan Strategy which is a broad framework to facilitate and manage growth and development over the next 25 years. The plan identifies how local government will work with State Government to translate the aims and actions into local plans. It also aims to improve the city's sustainability in terms of transport, energy demand, affordability and infrastructure provisioning.

The Centres policy establishes a typology/hierarchy of centres (as defined in the table below). Whilst the Metropolitan Strategy covers a geographic area of over 10,000sqm, and includes Wyong and Gosford LGA, Lake Macquarie lies outside its boundaries. However, its hierarchy of centres, forms the basis from which the Draft Lower Hunter Regional Strategy classifies centres within the Hunter Region. As such, the following retail hierarchy is suggested based on the centre definitions in the Metropolitan Strategy and Draft Lower Hunter Regional Strategy:

Table 18: Types of Strategic Centres

Centre Typology	Characteristics	Examples
Major Centres	The major shopping and business centre for the surrounding area with a full scale shopping mall, council offices, taller office and residential buildings, central community facilities and a minimum of 8,000 jobs.	Tuggerah, Charlestown
Town Centres	A large group of shops and services which include 1-2 supermarkets, sometimes a small shopping mall, some community facilities eg: local library, medical centre and a variety of specialists shops.	Lake Haven, Morisset
Villages	Area containing a small supermarket, a strip of shops for daily shopping eg. Butcher, hairdressers, café, restaurants and some take away food. Some of the services that may exist include health, bank, library and a post office. Also more than 10 retail spaces.	Toronto
Small Villages	A small strip of shops for daily shopping eg. Butcher, hairdressers, café, restaurants and take away food. Contains 5-30 retail spaces.	Bonnells Bay
Neighbourhood Centres	Small group of 25 shops supplying daily needs eg milk bar and newsagent. A public transport point and child care centres, schools and other compatible activities in the immediate vicinity. The centre includes some medium density housing, townhouses and villas.	Cooranbong

Source: Sydney Metropolitan Strategy

7.5 Population and Household Growth

Lake Macquarie is one of the fastest growing areas of the Hunter region with an annual population growth of around 0.8%. From 1996 to 2001 the Morisset District was the second fastest growing district with around 2.1% per annum growth. From 2001 Morisset is forecast to pass West Wallsend as the fastest growing district. The Bonnells Bay Peninsula was, and is forecast to be, the fastest growing area within the Morisset district with an annual growth rate of around 3.7%². Toronto is expected to grow slowly at an indicative rate of 1.2% per annum.

Information from JPG indicates approximately 2,500 new single residential dwellings will be located in the new development, converting to approximately the same number of households. Based on staging, provided by JPG, 200-300 lots will be taken up per annum. However, for the purpose of our modelling and based on our analysis of residential take up rates (see Section 7.2 of this report), we have adjusted the phasing of the development to reflect existing market trends in the area to be as follows:

Table 17 - North Cooranbong Release Rates

End Financial Year	No. of Lots	Cumulative Lots
2009	50	50
2010	50	100
2011	100	200
2012	100	300
2013	100	400
2014	150	550
2015	150	700
2016	150	850
2017	150	1000
2018	150	1150
2019	150	1300
2020	200	1500
2021	200	1700
2022	200	1900
2023	200	2100
2024	200	2300
2025	200	2500

In order to accurately predict future populations of Cooranbong, consideration needs to be given to the new population that will result from the proposed development at North Cooranbong.

The Lifestyle 2020 Strategy indicates that the number of people living in each house is reducing. In 1991, the average number of persons per household was 2.87, which in 1996 had reduced to 2.69 and by 2020 is expected to be 2.3. However for the purpose of calculating forecast population for the proposed development at North Cooranbong an average household size of 2.7 persons per household has been used.

Therefore based on this household rate, we can assume the population of the new development at North Cooranbong as follows:

². Lake Macquarie Council Section 94 Contributions Plan Citywide 2004

Table 18 - North Cooranbong Draft Staging Plan

End Financial Year	No. of Lots	Population
2009 – 2010	100	270
2011-2013	300	810
2014 – 2019	900	2,430
2020 – 2025	1,200	3,240
Total	2,500	6,750

Source: JPG and Hill PDA,

Having regard to the above we forecast household numbers as follows:

Table 19 - No. of Households by Trade Area

Trade Area	2001	2005	2010	2015	2020	2025
Cooranbong TA	1,231	1,338	1,548	2,230	3,076	4,084
Morisset TA	3,423	3,495	3,568	3,643	3,720	3,798
Bonnells Bay TA	2,703	2,803	2,907	3,014	3,126	3,241
Toronto TA	11,469	11,607	11,746	11,887	12,030	12,174

Source: Census 2001, Lake Macquarie Council Section 94 Contributions Plan Citywide 2004 and Hill PDA Estimate

The above table utilises both the growth rates as mentioned previously, as well as the predicted future population of the proposed residential subdivision at North Cooranbong.

Whilst the income levels of the existing population at Cooranbong are relatively lower than other areas of the LGA, it is expected that the new population that resides in North Cooranbong will have not only higher income levels but higher skill levels as well. As such the expenditure modelling for the new population has taken into account this higher income level when calculating and analysing potential retail expenditure.

Households within the trade areas will generate retail expenditure. This is estimated from an expenditure model developed by Hill PDA using data from:

- ABS Household Expenditure Survey 1998-99 which provides household expenditure by broad commodity type by household income quintile; and
- Marketinfo 2004 database which is generated by combining and updating data from the Population Census and the ABS Household Expenditure Survey (HES) using “micro simulation modelling techniques”.

Marketinfo combines the data from the Census, HES and other sources to derive total HES by commodity type within a geographical area. This data, which was validated using taxation and national accounts figures, quantifies around 16% more expenditure than the HES.

For the purpose of this study we have assumed that growth in real expenditure will continue at 1% per annum for food, groceries and meals in restaurants and 0.5% for all other commodities. Forecast expenditure by retail store type by trade area is provided in the following table.

Household expenditure by commodity type in 2005 is provided in the table below showing the total amount of expenditure by those located within the Cooranbong trade area. However, this is based on the 2001 census figures for households by household income quintiles. We have assumed growth for 2001-2005 of 2.1%pa for Cooranbong's existing households based on Council's Section 94 Contributions Plan Citywide 2005 declining to a growth rate of just 0.6% beyond 2020.

Table 20 - Total Household Expenditure, Cooranbong Trade Area (in constant 2005 \$m)

Expenditure by Commodity Type	Year 2005	Year 2010	Year 2015	Year 2020	Year 2025
Supermarkets & Grocery Stores	\$10.4	\$12.9	\$20.9	\$31.5	\$45.0
Specialty Food Stores	\$2.8	\$3.6	\$5.9	\$9.1	\$13.1
Take-away Food Stores	\$2.2	\$2.8	\$4.7	\$7.3	\$10.7
Department Stores	\$3.0	\$3.7	\$6.2	\$9.3	\$13.1
Clothing Stores	\$1.9	\$2.3	\$3.9	\$5.9	\$8.3
Bulky Goods Retailers	\$5.5	\$6.6	\$10.8	\$16.1	\$22.5
Other Personal & Household Goods Retailers	\$4.0	\$4.8	\$7.9	\$11.8	\$16.6
Cafés and Restaurants	\$1.9	\$2.4	\$4.2	\$6.4	\$9.1
Other Personal Services	\$0.9	\$1.1	\$1.9	\$2.8	\$4.1
TOTAL Retailing	\$32.6	\$40.3	\$66.3	\$100.1	\$142.5

Source: Hill PDA Estimate based on 2001 Census, ABS Household Expenditure Survey 1998-99 and Marketinfo

7.7 Expenditure on Retail Space

As shown in the above table expected growth in retail expenditure is significant – a fourfold increase over the next 20 years. This translates to strong demand for retail space.

Expenditure in comparative goods (clothing, department stores, bulky goods, etc) will never be strong enough to support this type of retail in Cooranbong. Expenditure on comparative goods will always escape Cooranbong to the higher order centres of Morisset, Toronto, Lake Haven, Tuggerah, Charlestown, etc.

However there will be sufficient expenditure in regular shopping (food, groceries, etc) to support a supermarket based village say between the years 2015 and 2020. A 2,500sqm Bi-Lo supermarket for example could sustainably trade at \$15m (\$6,000/sqm) in 2015 capturing 75% of the Cooranbong food and grocery expenditure. A 3,500sqm full-line supermarket with fresh food could capture 80% of the Cooranbong market by Year 2020 and trade sustainably at \$7,000/sqm. Whilst \$8,000 to \$8,500/sqm is a more appropriate level of turnover, competition between Coles and Woolworths results in a willingness for these retailers to trade at below target levels for the first few years in expectation of growth in the trade area in order to secure the local market.

In addition to the supermarket a village centre in Cooranbong could capture a high proportion of expenditure on specialty food, meals, personal services and other items normally spent in local shops (chemists, newsagents, etc).

Finally in village centres there are non-retailers that occupy shop front space (around 20% of specialty shops). These include real estate agents, travel agents, banks, etc.

Assuming:

- 65% capture of all specialty food and meals on premises expenditure;
 - 40% capture of personal services and other personal and household goods expenditure (excluding clothing, department store and bulky goods);
 - \$6,000/sqm target turnover for specialty food retailers; and
 - \$4,000/sqm target turnover for personal services, personal and household goods;
 - 20% of specialty stores to be occupied by non-retailers; then
- the local or village centre could support around 3,000sqm of specialty shops by 2015 or 4,500sqm by Year 2020.

We understand there has been some suggestion of BiLo at Morisset relocating its premise to Cooranbong behind the existing retail village. The current BiLo at Morisset is 2,300sqm. A BiLo of this would need to turnover around \$13million to be sustainable. It is unlikely to achieve this sought of turnover until close to 2015.

Ideally, the supermarket would be located within the existing Cooranbong town centre, not only to enhance the synergy of retail uses already established, but also as not to fragment the relatively small existing retail offer.

Overall there is a low proportion of commercial space relative to the population in Cooranbong because there is no substantial commercial precinct in the trade area. As a result there is a significant migration of workers out of Cooranbong.

IBCON Data (2004) indicates that of total shopfront space within the Sydney Metro Regional Area approximately 6.6% is vacant and 16.3% is occupied by non-retail/commercial users. As the expenditure model calculates projections based on occupied retail space demand figures need to be grossed up to accommodate commercial space and a healthy level of vacancy (say 5%). In high trading indoor centres commercial space occupies around 5% to 6% of specialties. In older strip shopping centres the proportion may be as high as 40%, although 20% is more common.

Agents have suggested that the centre is in need of more commercial and retail space with the emergence of new residential estates looming in and around the immediate area. Agents and residents have expressed their desire for a bank and another major tenant to attract more shoppers to the centre. Shop top commercial has not been tested in Cooranbong but has been successful in Morisset town centre, and with the new influx of residence residing in and around Cooranbong, demand for this type of property is likely once the subject development at North Cooranbong is well underway.

In the short term most commercial space is better met in Morisset or even Toronto. Toronto is home to government agencies and an agglomeration of commercial space, therefore attracting commercial users for whilst also being higher in the hierarchy of centres in Lake Macquarie.

However, there has been an increase in the number of commercial properties arising in new industrial precincts in the area, with several industrial lots having a 50/50 commercial/industrial component. Although the majority of land is being utilised for industrial purposes the bulk of industrial units have some form of commercial office suits attached. This can be seen within the Gateway development at Morisset.

Reference is also made to the existing strong home based business sector of Lake Macquarie, which is further analysed in Sections 10.1 (Employment Trends) and 10.6 (Employment Strategies) of this report.

7.9 Demand for Industrial Space

Our market research has revealed the lower Hunter industrial market is currently very buoyant, and land prices have increased sharply over a relatively short period. This is a direct result of a number of converging local, national and international factors. Importantly, the land value differentiation between Sydney and the Hunter remains substantial adding to this strong demand. Increasing land prices will eventually lead to higher rents. However, rents are currently being held back slightly due to heavy owner occupier activity.

The region has a robust industrial sector which is forecast to continue. The demand outlook for the industrial land in the region is positive because of the growth and diversification of the local economy away from a reliance on BHP. It is now being driven by the success of local coal, horticultural, grapes/wine and other crops. Strength in the education, health and tourism industries have also served to improve the market.

Freight and transport infrastructure has been improved in recent years amplifying demand. The F3 Freeway provides significant access opportunities between Brisbane, Newcastle and Sydney. This is further improved by the M7 Orbital. The Port of Newcastle is also due to undergo a major upgrade with the development of a new container terminal to handle an additional 1 million containers per annum by 2008.

The most established area of industrial activity in Lake Macquarie is in Cardiff, an industrial park containing 500 businesses located in the north of Cardiff town centre. Other established industrial areas are at Gateshead, Toronto and Warners Bay. Adjacent to the freeway new industrial parks have been located in the south at Morisset and in the north at Cameron Park. Both these sites have ramp access to the freeway and are located away from residential development.

Industrial DAs lodged with Lake Macquarie Council since 2003 have resulted in a large proportion of industrial construction being focussed along Mandalong Road in the Morisset Gateway Industrial Park. The Gateway Industrial park has more than doubled in size over the past two years⁹ with the initial development consisting of around 46ha of subdivided industrial land into 50 lots.

Morisset is to be encouraged as the major centre of the Morisset Planning District as dictated by Councils Lifestyle 2020 Strategy, and therefore higher order industrial uses (e.g. light manufacturing) are to be encouraged away from Cooranbong and in Morisset.

Morisset has seen a general shift in land values for small serviced industrial sites, with analysis of sales indicating that land values of serviced industrial lots (1,000 to 5,000 sqm) are currently trading between \$150-250/sqm.

⁹ Lake Business Edition 8- Autumn 2005

Cooranbong Industrial Park is located at Currans Road Cooranbong, south east of the subject site. The Park currently includes 15 warehouse units housing a variety of light industrial users including those specialising in: furniture; kitchens; automotive services and products; welding services; and other light industries.

An examination of Councils DA register has indicated that there has not been much activity in the development of industrial property in Cooranbong for some time. This can be mainly attributed to the development of Morristown Gateway which has promoted Morristown as a major industrial hub within the Lower Hunter. As such, focus has been moved away from other areas, with Cooranbong's industrial space currently focussed on home services and light industrial uses.

This type of industrial use is likely to continue in Cooranbong, however it is unlikely Cooranbong will attract other industrial uses that currently have the option of basing themselves amongst the agglomeration of industrial space in Morristown. For more industrial space to be located at Cooranbong, significant incentives would need to be instigated in Council's planning tools and to prospective occupiers by developers.

Future industrial users within Cooranbong may come from the new population at North Cooranbong. With the right planning incentives in place, those who relocate to the new residential estate in North Cooranbong, may have the impetus to move their business as well.

8. COST BENEFIT TO GOVERNMENT

8.1 Introduction to Cost Benefit Analysis

The NSW Treasury Guidelines for Economic Appraisals (1997) notes that costs and benefits should be valued in real terms over at least a 20 year period. That is, they should be expressed in constant dollar terms, and should not include nominal increases due to inflation.

Quantifiable costs and benefits over the project life are expressed in Net Present Value terms. The Guidelines dictate the stream of costs and benefits should then be discounted by a real discount rate of 7%, with sensitivity testing using discount rates of 4% and 10%.

The discounting process takes account of the fact that initial investment costs are borne up front, while benefits or operating costs may extend far into the future. Discounting the value of future costs and benefits brings these back to a common time dimension-present value-for the purpose of comparison. The process of discounting is simply a compound interest calculation worked backwards.

Using the discounted stream of costs and benefits the following decision measures should be calculated:

- Net Present Value (NPV) - the sum of benefits minus costs. A project is potentially worthwhile (subject to the availability of funds) if the NPV is greater than zero.
- Benefit Cost Ratio - a project is potentially worthwhile if the BCR is greater than 1 (i.e. the present value of benefits exceeds the present value of costs). It has become conventional to deduct ongoing costs from benefits to produce a net benefit stream, and to use initial capital costs as the denominator. This is the required basis on which results should be provided.
- Internal Rate of Return (IRR) - this is the discount rate at which the Net Present Value of a project is equal to zero (i.e. discounted benefits equal discounted costs). A project is worthwhile if the IRR is greater than the test discount rate.

A sensitivity analysis should be undertaken to test the robustness of results under different scenarios, using different assumptions about some or all of the key variables.

8.2 Cost Benefit to Government

The impact of the proposed development at North Cooranbong on government has been measured using Cost Benefit Analysis ('CBA').

Hill PDA analysed the required infrastructure, both physical and human services, to service the expected population of North Cooranbong. This includes quantifying the costs of infrastructure amplification, and identifying how these costs are to be funded. Both the costs and the benefits of the subject development have been examined on a government basis.

This section also analyses the required revenue, to be gained from servicing the expected population of North Cooranbong.

A cash flow was produced using a discounted cash flow model incorporating all costs and benefits from the whole of government viewpoint. Sensitivity testing was also undertaken using various different discount rates.

Hill PDA understands that numerous consultations between the developers and Hunter Water Corporation ('HWC') have occurred in relation to the subject development at North Cooranbong. To date, it is believed HWC have had no objection to the proposed development, having identified various connection points to existing sewer and water assets.

Prior to February 2005, HWC and the developers agreed that considering the size of the development at North Cooranbong, staging over time would allow the development to be fully serviced in line with future HWC upgrades⁴ to existing infrastructure. HWC is understood to be considering strategies to amplify existing infrastructure in the Cooranbong Area, making allowances for the proposed development of North Cooranbong.

In Patterson Britton Partners (PBP's) June 2006 report⁵ it was noted that the HWC recently commissioned a Water Supply Servicing Masterplan for the Morisset area. Due for release in late 2006, the Masterplan considers the proposed development at North Cooranbong, although it is only considered with regard to the ultimate development scenario within the supply system (post 2028).

HWC have advised PBP that and the subject site will require either a high level supply tank, or an onsite reservoir to service the expected water demands from the proposed development. HWC have also indicated that connection to the existing water supply system should be made at either the Dora Creek Reservoir or the junction of two Nominal Diameter (DN) 375mm Cast Iron-Cement Lined (CICL) water mains near the Dora Creek Bridge.

Hill PDA understand that HWC are currently undertaking a review of the capacity of the Dora Creek Wastewater Treatment Works ('Dora Creek Works') to determine any augmentation works required to cater for expected growth in the catchment works. Works undertaken were to commence in 2005, available by 2008/9. In the meantime existing spare capacity at the Dora Creek Works may cater for the initial stages of the development. Any future upgrades to the Dora Creek Works will be funded by Developer Servicing Charges and managed by HWC.

PBP were commissioned by JPG to undertake an analysis of feasible options for servicing of the proposed development at North Cooranbong, with bulk water supply and wastewater transportation infrastructure. All proposed bulk servicing options investigated involved the connection of the proposed development to the existing HWC water supply network and wastewater transportation systems as discussed previously.

Several on-site servicing options (on-site reservoirs and high level systems) were considered by PBP, after which they recommended servicing options S1 and W3B be adopted which are inline with those recommended servicing strategies of HWC. These options have been used for the purpose of modelling the CBA.

⁴ Letter to Jason Wasiak of JW Planning, from Patterson, Britton & Partners Consulting Engineers, dated 17/02/05

⁵ Patterson, Britton & Partners, North Cooranbong Bulk Water and Wastewater Servicing Study DRAFT, June 2006.

For the purpose of this CBA it is assumed that the developers will undertake the capital costs of undertaking the waste water servicing and water supply infrastructure.

Option S1 considers direct connection to the Dora Creek Works via an onsite WWPS and rising main. Based on preliminary designs a total capital cost has been evaluated at \$3.001million (excluding on costs). Option W3B considers the positioning of a reservoir onsite. Whilst additional land purchases will not be required under this option, the onsite positioning of the reservoir will reduce the amount of developable site area. The cost estimate of this option based on preliminary design is evaluated at a capital cost of \$3.801million excluding on costs.

Summarised the costs of both options are provided below:

Table 21 - PBP North Cooranbong, Budgetary Cost Estimates Water Supply & Waste Water Servicing Options

Works to be Undertaken	\$
OPTION S1	
Sewer Rising Main	2,157,000
WWPS	844,000
TOTAL	3,001,000
OPTION W3B	
Trunk Supply Mains	2,097,000
Dora Creek WPS	170,000
Reservoir	851,000
On-Site WPS (to HLT)	101,000
High Level Tank	483,000
On-Site Variable Speed Booster WPS	99,000
TOTAL	3,801,000

Source: Patterson, Britton & Partners, North Cooranbong Bulk Water and Wastewater Servicing Study DRAFT, June 2006

It is estimated that including approvals, and design, construction of the infrastructure required for the initial stage of W3B and the construction of Option S1 would take in excess of 100 weeks from approval of the strategy by HWC. Construction of the proposed reservoir / reservoirs and pump stations would require HWC approval and a Review of Environmental Factors (REF).

It is expected that a Section 94 plan will be developed specifically for the subject site at North Cooranbong by Council. In the absence of drainage contributions for the subject site, we have assumed a capital cost of \$3,000/lot. This however is subject to change, upon a formal agreement or site specific Section 94 plan being completed.

The proposed development would generate a significant amount of additional traffic in the local area. The intersection and roads most affected by the proposed development as stated in GHD's February

2005 report⁶ are Freeman Drive and Alton Road; and Freeman Drive, Avondale Road and Newport Road.

GHD have stated that the major components of the required upgrades to the local transport network are the reconfiguration of the two intersections stated above, located along Freemans Drive. The advised changes are the possibility of a realignment and signalisation of these intersections as an opportunity to improve the traffic flow, safety for motorists, pedestrians and cyclists.

It has been proposed that it would be beneficial to reconfigure the intersections of Newport Road with Freemans Drive to include a new link that connects with Avondale Road, which will then form a four-way intersection. This would service the significant thoroughfare movement that is anticipated between the development area and Dora Creek. The implication of such a design would appear to provide suitable sight distances, improve existing intersection arrangements along this section of Freemans Drive and reduce the potential safety concerns created from the current configuration of the Avondale Road intersection.

Also the opportunity to reconfigure the existing Freemans Drive staggered T-intersections arrangement with Alton Road and Central Road is also advantageous, as it would improve the efficiency of the traffic corridor and reduce the number of potential conflict points along this section of Freemans Drive.

It has been noted that more planning would need to be undertaken when correct dwelling numbers and staging times are fixed.

It is also possible that the RTA will want to investigate a new interchange with the F3 Freeway at Newport Road or elsewhere but costs would likely be set in a developer's agreement. There is another probability which has been used in the metropolitan growth areas which is currently been mooted by the Cabinet as the State Infrastructure Levy however none currently applies to the Cooranbong area.

In regards to cost associated to these proposed road changes. All roads are local government owned. Council has suggested that the developer would have to provide all up front costs which have been linked as a direct result of the development. Section 94 contributions would not allocate for these costs.

GHD assessed the impacts of the development on the performance of the local government external road network based on the following assumptions:

- Traffic distribution is based on 2001 Journey to Work data for Cooranbong;
- Traffic movement to Morisset by road can be undertaken via either Newport Road or Freemans Drive;
- Traffic movement to the F3 Freeway would be undertaken via Freemans Drive from North Cooranbong and will be redistributed along other downstream road links;
- Some onsite trip containment will occur; and
- Traffic will be redistributed as a result of constructing and opening the proposed internal road network.
- The evaluation of traffic generation assumes that outbound traffic movement represented 90% of all road trips generated by the development with 10% representing inbound traffic movement.

⁶ GHD, North Cooranbong Rezoning, Traffic Implications - Stage 2 - Final Report, Feb 2005

The above combined with further assumptions outlined within a letter to JPG from GHD in response to issues raised from the rezoning application⁷ indicate a number of infrastructure upgrades would be required in order to maintain acceptable traffic conditions on the external traffic network. The likely timing indicated may vary depending on the staging and internal access arrangements within the proposed development.

Table 22 - Summary of Recommendations Road Infrastructure

Location	Upgrade	Likely Timing	Estimated Cost (PV)
Intersection of Freemans Dr and Alton Rd	Upgrade from priority control to traffic signals	2010	\$1,000,000
Freemans Dr, south of Deaves Rd	Minor downstream isolated capacity improvements.	2013	\$750,000
Intersection of Freemans Dr, Avondale Rd and Newport Rd	Upgrade from priority control to traffic signals	2015	\$3,000,000
Avondale Rd, north of Freemans Dr	Minor upstream isolated capacity improvements.	2015	\$250,000
Newport Rd east of Freemans Dr	Minor downstream isolated capacity improvements.	2017	\$1,500,000
Alton Rd, north of Freemans Dr	Minor upstream isolated capacity improvements.	2017	\$250,000
Intersection of Freemans Dr, Avondale Rd and Newport Rd	Additional approach lanes required.	2018	\$500,000
Freemans Dr, South of Deaves Rd	Significant downstream isolated capacity improvements, such as intersection upgrades and widening works.	2019	\$2,000,000
Avondale Rd, North of Freemans Dr	Significant upstream isolated capacity improvements, such as intersection upgrades and widening works.	2020	\$500,000
Freemans Dr, South of Avondale Rd	Minor downstream isolated capacity improvements.	2020	\$1,000,000
Intersection of Freemans Dr and Alton Rd	Additional right turn lanes required.	2021	\$500,000
TOTAL			\$11,250,000

Source: GHD, 29/6/2006

The above results indicate that road capacity improvements are required along the external road network as a result of the development. Hill PDA has been provided with an estimated cost of such works totalling \$11.25million.

Local Land Service

Under Council's City Wide Section 94 Contributions Plan No. 1 (2004) as amended Council levies development for open space land acquisition and facilities at an average rate of \$8,219 and \$5,212 per dwelling respectively. However in the case of the subject site, we have assumed dedication of open space, and therefore need only to take into account the cost of embellishment of the open space being \$5,212 per dwelling.

Council have advised that a similar rate would apply to the subject site at North Cooranbong subject to a Section 94 Plan being prepared for the area and that its Section 94 expenditure will run more or less parallel with revenue received. Development will therefore have zero net benefit to government in present value terms.

⁷ Letter to Paul Hedge of JPG, from Gordon Hughes GHD, dated 29/6/2006

7.2.2.2. Education

The Department of Education and Training (DET) have indicated to HillPDA that as a result of the proposed development in North Cooranbong there would be added pressure placed on the local education system.

The Department of School Education have advised HillPDA that the following thresholds would be the most appropriate to estimate demand for public schools in Cooranbong:

- 2,000-2,500 new dwellings = 1 primary school (3 hectares)
- 5,000-8000 new dwellings = 1 high school (6 hectares)

These thresholds will vary a little depending upon the socio-economic level of the expected population. A higher socio-economic level requires a higher threshold given that a higher proportion of the population will use private schools.

DET has informed Hill PDA that it has an existing public primary school in Cooranbong located on a 3.5ha site. DET acknowledged that this school is in need of an upgrade, and has the potential to be expanded for an influx of students. The school currently caters for 200 students and could be expanded to cater for double the students. DET advised that the capital cost of a public primary school for 400 students is approximately \$12 - \$15 million. A school with this construction cost will cater for an influx of students over a 5 -10 year period and be based on a 5ha site.

The likely influx of new residents would not warrant the need for a new public high school based on DET ratios. However DET has suggested that they would consider increasing the permanent accommodation capacity of Morisset High School in the first instance to cater for additional enrolments. We have assumed that the expansion of the High School at the existing site would be in the range of \$1.5million.

Another consideration of demand for primary and secondary schools are other proposed developments in the area. Lake Macquarie Council has received a total of 455 new DA's for proposed residential dwellings and subdivisions in the catchment area of Morisset, Dora Creek, Toronto, Cooranbong and Bonnells Bay. This equates to around 151 dwellings per year. With a large portion associated to Cooranbong this would have added to the pressure of the need for a new Primary School and expansion of Morisset High School.

Avondale School which is located on the subject site at North Cooranbong, have already expressed their desire to expand. Avondale School currently accommodates infancy, primary and high school classes. 70% of those students who attend Avondale School currently do not belong to the Seventh Day Adventist Church; as such it would be reasonable to assume that this trend would continue.

Within this proposal the dedication of 17ha of the subject site for the purpose of the schools expansion should see Avondale sufficiently cope with any influx of new students as a result of the residential development in North Cooranbong. The School currently has 900 pupils and has indicated that expansion is only necessary once pupil numbers reach 1,600. The School anticipates an increase in student population of 400 and hence no physical expansion would be necessary.

Table 23 - Age Profile of New Urban Release Areas & Lake Macquarie LGA as at 2001

Age Bracket	Stanhope Garden	Rouse Hill	Narellan	Lake Haven	Kellyville	Glenwood	Harrington Park	Lake Mac LGA
5-14	10.9%	14.7%	17.7%	14.9%	17.5%	14.4%	17.9%	14.8%
15-19	4.7%	4.6%	8.3%	7.0%	7.2%	5.5%	5.9%	7.2%

* Excludes Overseas Visitors

Source: Australian Bureau of Statistics Census 2001

The above table indicates the percentage of school children in new urban release populations during the 2001 Census. This table aids in the analysis of the possible schooling population to come out of the proposed development at North Cooranbong. Based on comparisons of new populations in urban release areas we can assume a possible 15% of the new population at North Cooranbong will be aged 5-14 years and 5% of the population will be aged 15-19 years. This equates to approximately 1,300 people aged 5-19 years of age.

However, Department of Education guidelines indicate that for new populations 10% will attend primary schools and 7% will attend high schools. Based on these figures we can assume that with a potential new population of 6,750 persons, 675 children will attend primary schools and approximately 472 will attend secondary schools.

The *Social Impact Assessment* prepared by Key Insights have also identified that existing schools in the area have the capacity to expand. With students from the proposed development likely to take up places at a variety of places including Avondale High School, Hunter Grammar, St Paul's Catholic High School, and a variety of independent schools in both Newcastle and Lake Macquarie LGA it is reasonable to assume a new high school would not be needed to cope with the possible new schooling population at North Cooranbong.

Based on the above analysis, it is envisioned that there will be sufficient primary and high school facilities (whether public or private) in Cooranbong to handle prospective students that may arise from the subject development. We have assumed that an expansion of Morisset High School would be approximately \$1.5million.

State Community Facilities

Hill PDA has been advised by the Morisset Department of Community Services (DOCS) branch, that the Morisset region is experiencing an oversupply of preschools. However, there is no population determination of how many childcare facilities are required in a specific community.

For a child care centre to commence operation a license needs to be obtained and a certain criteria needs to be met. The criteria mainly relates to: the suitability of the premises; staffing; and, selected children's programs.

DOCS note the existing preschool in Morisset caters for 56 children and currently has 20 vacancies. Bonnells Bay preschool is currently being sold to ABC as is running at a significant vacancy rate.

Three child care facilities exist in the Cooranbong area, all which are running at a vacancy rates, some up to a 50% vacancy rate.

However, if an application was lodged for a childcare facility in the North Cooranbong area, which met all licensing requirements, it would likely be approved, although its success would be at the owners own risk

Based on the above information, high vacancy rates for childcare in the area have indicated that the impact of the subject development would not result in new childcare centres having to be developed. As such we have not included such a facility within the cost benefit to government.

Local Community Facilities, Landscaping and Services

Under Council's Section 94 Contributions Plan No. 1 (as amended) Cooranbong is situated within an area identified as West Lakes. As such the following community facilities are proposed within this area:

Table 24 - Local Community Facilities West Lakes

Facility	GFA (sqm)	Site Area (sqm)	Construction Cost (\$)
Child Care Centres	419	1,903	\$3,016/m ²
Outside School & Vacation Centres	37	135	\$3,016/m ²
Youth Facilities	80	875	\$2,800/m ²
Library (expansion at Morriset District Branch)	189	606	\$2,800/m ²

Source: Lake Macquarie City Wide Section 94 Contributions Plan No. 1 (2004) as amended

Payment for these facilities will be via Section 94 of the EPA Act. Council will need to prepare a Section 94 plan for the subject development at North Cooranbong. Whilst there will be an assumed dedication of land for the purpose of local community facilities the capital cost attributed to this use in the West Lakes district is at a Section 94 levy rate of \$2,029/dwelling.

It is expected that Section 94 expenditure will run more or less parallel with revenue received and so development will have zero net benefit to the government in present value terms.

Notwithstanding this there are recurrent expenses in operating and maintaining these facilities. This however will be funded by rates uplift in the area. Further, it should be noted that the "do nothing" option requires the expected 6,700-8,000 people to live elsewhere in the LGA and/or in other local government areas where the same recurrent expenses would occur.

Emergency Services

The *Social Impact Assessment* by Key Insights (Revised July 2006) notes that the primary ambulance response to Cooranbong currently comes from services at Morriset ambulance station, with secondary response from Doyalson. Whilst there are no immediate plans to expand these services, it is expected that the increasing population in North Cooranbong may lead to upgrading of emergency services to the area. As such, we have assumed a capital cost of around \$1.7million per service on a 2,000sqm site.

8.4 Benefits

Water and Sewer

Currently the contribution to water and sewer has been identified as above, whereby it is assumed that the developers will undertake the capital costs of undertaking the waste water servicing and water supply infrastructure.

Hence, under Option S1 and WB3 of PBP's recommendations the benefit of new water and sewer infrastructure is in the order of \$6.802million.

Local External Roads

GHD has indicated that a number of infrastructure upgrades would be required in order to maintain acceptable traffic conditions on the external traffic network. The likely timing indicated may vary depending on the staging and internal access arrangements within the proposed development. It is estimated that the total value of this works will be in the order of \$11.25million.

It is assumed for the purpose of this CBA, that the developer will undertake the development and construction of this infrastructure.

Section 64 Contributions

Contributions to be received as revenue by government include the following:

- Local Open Space Amplification @ \$5,212/lot;
- Drainage @ \$3,000/lot; and,
- Local Community Facilities @ \$2,029/lot.

Stamp Duty and GST

The rezoning and servicing of the subject site at North Cooranbong will generate considerable property sales providing a strong benefit to State Government in terms of stamp duty and land tax revenue.

The difficulty in measuring the net benefit is determining the do nothing case because arguably the same revenue can be achieved with other options including urban consolidation infill development. Because of this we have calculated net benefit with and without the stamp duty and land tax component.

Stamp duty on developed land was calculated at \$5,705 per lot (based on a selling price of \$225,000 per lot). GST on the end sales value was calculated at \$20,227 per lot.

Total stamp duty and land tax revenue amounts to \$64.83million through the project life.

GST on construction costs of the dwellings has also been included. A base construction cost of \$220,000 per dwellings has been assumed, with total revenue to government from GST on home construction totalling \$48million.

9.5 Cost Benefit Cash Flow Analysis

The cost-benefit technique balances costs against benefits to show the estimated net effects of a plan. The net benefit to government refers to the differences in present value of total benefits and costs between options. The do nothing option is included as the base case since some infrastructure works may be required in any case.

Section 9.1 summarised the infrastructure and services required for the option of rezoning and servicing of the subject site at North Cooranbong. It should be recognised that all release areas enjoy some degree of subsidisation in terms of infrastructure and services by government.

The methodology used in the economic appraisal is cost benefit analysis generally as in accordance with NSW Treasury Guidelines except that only costs and benefits to the government sector were identified and assessed. The cash flow tables are attached as Appendix Three.

Using the NPV Method

Using the NPV method a potential project should be undertaken if the present value of all cash benefits minus the present value of all costs (which equals the net present value) is greater than zero.

A key input into this process is the interest rate or “discount rate” which is used to discount future cash flows to their present values. If the discount rate is equal to the required rate of return, any $NPV > 0$ means that the required return has been exceeded, and the additional benefit (profit) can be expected that has a present value equal to the NPV.

We have calculated net benefit with and without the stamp duty and land tax, as in the do nothing case the same revenue can be achieved with other options including urban consolidation infill development.

Assuming:

- Full costs for water and sewerage and local external roads;
- Zero real escalation in land values - NSW Treasury Guidelines for Economic Appraisals 1997 notes that the cost benefit analysis should be expressed in constant dollar terms, stating zero inflation.

then the results of the cost benefit analysis are as follows based on a 7% discount rate:

Table 25 Cost Benefit to Government with and without Stamp Duty and GST

Scenario	NPV (\$)	BCR
CBA to Government without GST & SD	-10.90	0.70
CBA to Government with GST & SD	43.34	2.21

Projects associated with an NPV of zero will recuperate only the cost of the capital required to make the investment. Projects associated with negative NPVs represent a loss. However, as stated above the vast majority of fringe urban areas enjoy some subsidisation from government and the subject site is acceptably manageable largely due to the provision of the bulk of infrastructure, human and physical, being funded by the developer.

8.6 Sensitivity Analysis

A number of options were modelled which considered varied assumptions.

The cost benefit to Government without stamp duty and GST was tested using varied discount rates, namely at 4%, 7% and 10%.

The cost benefit to Government with stamp duty and GST was tested varying the following assumptions:

- Varied discount rates of 4%, 7% and 10%.
- Varied take up rates at low, medium and high which are based on the following having assumed a six month servicing timeframe, with sales to commence mid 2009:
 - Low take up rate: 25-180 lots per annum to the year 2018;
 - Medium take up rate: 50-200 lots per annum to the year 2025 (the base case with staging as per Section 8.6 of this report);
 - High take up rate: 200-300 lots per annum to the year 2030.
- Varied end sales values at 10% more/less than the assumptions (or base case) of an end sales value of \$225,000 per lot. This would alter outcomes for the CBA to Government with regard to stamp duty and GST.

The results of this sensitivity analysis are provided in the table below:

Table 26 - Sensitivity Testing of Cost Benefit to Government

	NPV			BCR		
	@4%	@7%	@10%	@4%	@7%	@10%
Option One - without GST & SD						
Base Case	-13.51	-10.90	-8.86	0.70	0.70	0.69
Option Two - with GST & SD & Variances to Take Up Rates						
Low Take Up	34.31	24.34	17.74	1.82	1.72	1.65
Base Case Take Up	59.78	43.34	32.28	2.33	2.21	2.11
High Take Up	74.48	61.72	51.78	2.60	2.63	2.66
Option Three - with GST & SD & Variances in End Sales Values						
Base Case less 10%						
Low Take Up	31.35	22.15	16.08	1.75	1.66	1.59
Base Case Take Up	55.23	39.98	29.72	2.23	2.12	2.02
High Take Up	69.11	57.26	48.04	2.49	2.51	2.54
Base Case plus 10%						
Low Take Up	37.27	26.53	19.40	1.89	1.79	1.71
Base Case Take Up	64.29	46.70	34.84	2.43	2.31	2.20
High Take Up	79.85	66.17	55.53	2.72	2.75	2.78

9. COST BENEFIT TO THE BROADER COMMUNITY

The impact of the proposed development at North Coorانبong on the whole community has been measured using:

- Cost Benefit Analysis ('CBA'); and
- Employment impacts based on job years and post construction opportunities.

Hill PDA analysed the required infrastructure, both physical and human, to service the expected population of North Coorانبong. This includes quantifying the costs of infrastructure amplification, and identifying how these costs are to be funded. Both the costs and the benefits of the subject development have been examined on whole of community basis.

This section also analyses the required revenue, to be gained from servicing the expected population of North Coorانبong. This includes quantifying the end values of the subject residential lots and associated sites, and identifying how these costs are to be funded.

A cash flow was produced using a discount cash flow model incorporating all costs and benefits from the whole of government viewpoint. Sensitivity testing was also undertaken using various different discount rates.

3.1.2. Costs

The costs for this CBA consider some of the same costs as considered in the costs to government. These include the costs of: water and sewer amplification; local open space; external road works; drainage; and, local community facilities. Additional costs to be considered include:

3.1.2.1 Opportunity Cost

Opportunity cost is a term used to mean the cost of something in terms of an opportunity forgone (and the benefits that could be received from that opportunity), or the most valuable forgone alternative. Assessing opportunity costs is fundamental to assessing the true cost of any course of action.

In the case where there is no explicit accounting or monetary cost (price) attached to a course of action, ignoring opportunity costs may produce the illusion that its benefits cost nothing at all. The unseen opportunity costs then become the hidden costs of that course of action.

In the case of the subject site at North Coorانبong, the opportunity cost formed by the closure of the airport and rezoning of land in place for a new residential development needs to be taken account of as a cost in the CBA. Even though the decision to close the airport was already established prior to the subject development being considered, there is an opportunity cost of the land associated to its rural value after the airport closed. It is this value which is taken account of in the cost benefit analysis.

Hill PDA has been informed by JPG that the total site value for the land at North Coorانبong based on its "current" or "as is" use is approximately \$30million.

Direct Land Subdivision Costs

We have assumed a cost of \$35,000 per lot for direct land subdivision costs. We have been advised from JPG that 2,500-3,000 dwellings are proposed. For the purpose of this analysis we have assumed 2,500 dwellings to be subdivided. It is intended that subdivision of the lots will commence mid 2008.

Health and Care Facility

Hill PDA understand that there will be a revised Social Impact Assessment, however in its absence at this stage we refer to the previous report by Key Insights (February 2005). The report evaluated the key impacts, opportunities and constraints of the proposed rezoning of a future urban precinct at North Cooranbong.

The report notes that the provision of Community Facilities needs to be investigated in light of the current Avondale School proposal which includes the provision of a large multipurpose centre and recreational facilities (2 basket ball courts, possibly a swimming pool) within the vicinity of Avondale School.

With respect to the childcare centre, typically a 60 place centre would be provided for each 7000 persons, which works back to be about 1 in 20 children. That being the case, Hill PDA has been advised that a childcare centre is proposed onsite and therefore the land required would be around 2500m² (a floor area of around 1200m²), with construction costs of around \$2million including outdoor areas.

Infrastructure Costs

Infrastructure costs such as water and sewer amplification, roads upgrading, open spaces, human services, etc have been quantified in the previous section.

8.2 Benefits

The benefits of the subject development to the wider community involve the following:

Sale of Residential Lots

The benefits of particular infrastructure and services are reflected in the end sales values of residential lots in the CBA i.e. an increase in new community services or upgrading of local roads, may see improved sale prices for surrounding residential lots as amenity is improved.

Therefore we have attributed an average sales value to all proposed lots on the subject site at North Cooranbong based on a comparable analysis of like proposed developments undertaken previously within this report. As such, we have attributed an end sales value to the proposed 2,500 dwellings of \$225,000 per lot.

We have assumed a six month servicing timeframe (sales to commence mid 2009), after which lots will be released based on the staging plan discussed in Section 8.6 of this report:

Table 27 - North Cooranbong Release Rates

End Financial Year	No. of Lots	Cumulative Lots
2009	50	50
2010	50	100
2011	100	200
2012	100	300
2013	100	400
2014	150	550
2015	150	700
2016	150	850
2017	150	1000
2018	150	1150
2019	150	1300
2020	200	1500
2021	200	1700
2022	200	1900
2023	200	2100
2024	200	2300
2025	200	2500

End Value of School Site

The benefit of the proposed 17ha school site to the broader community is measured in the end value of the land attributed to this use. Based on comparable sales analysis for similar sites we have assumed an end value of \$1.2million per hectare. It is assumed that the year completed for this parcel of land will be 2014.

End Value of Community Site

The benefit of the community site to the broader community is the end value attributed to that land. The community dedicated land is 1.5ha under the current structure plan. We have assumed for the purpose of this CBA that the year completed (i.e. saleable time) will be 2014, and the end value of this land will be in the vicinity of \$1million per hectare.

10.3 Overall Benefit/Cash Flow Results

The cost-benefit technique balances costs against benefits to show the estimated net effects of a plan. The net benefit to the whole community refers to the differences in present value of total benefits and costs between options. Section 10.2 summarised perceived benefits to the community for the option of rezoning and servicing the subject site at North Cooranbong.

The methodology used in the economic appraisal is cost benefit analysis generally in accordance with NSW Treasury Guidelines except that only costs and benefits to the government sector were identified and assessed. The cash flow tables are attached as Appendix Four.

10.4 NPV

Using the NPV method a potential project should be undertaken if the present value of all cash benefits minus the present value of all costs (which equals the net present value) is greater than zero.

A key input into this process is the interest rate or “discount rate” which is used to discount future cash flows to their present values. If the discount rate is equal to the required rate of return, any $NPV > 0$ means that the required return has been exceeded, and the additional benefit (profit) can be expected that has a present value equal to the NPV.

Assuming full costs for water and sewerage and local external roads and zero real escalation in land values then, the net present value is \$170.88million at a 7% discount rate. Therefore total benefits to the wider community brought about by the proposed development at North Cooranbong is greater than the costs.

The cost-benefit ratio depicts the total financial return for each dollar invested. In other words at a 7% discount rate, for every dollar invested in the development, \$2.52 would be returned to the wider community. The IRR on this CBA is 31%.

9.4 Sensitivity Analysis

A number of options were modelled which considered varied assumptions, namely:

- Varied discount rates of 4%, 7% and 10%.
- Varied take up rates at low, medium and high which are based on the following:
 - Low take up rate: 25-180 lots per annum to the year 2018;
 - Medium take up rate: 50-200 lots per annum to the year 2025 (base case);
 - High take up rate: 200-300 lots per annum to the year 2030.
- Varied development costs at 10% more/less than the assumptions (or base case) as described above.
- Varied end sales value at 10% more/less than the assumptions (or base case) as described above.

The results of this sensitivity analysis are provided in the table below:

Table 28 - Sensitivity Testing of Cost Benefit to Community

	NPV (\$)				BCR		IRR
	@4%	@7%	@10%	@4%	@7%	@10%	
Option One - Variances in Take Up Rates							
Low Take Up	141.76	94.56	62.33	2.26	2.00	1.76	21%
Base Case Take Up	244.17	170.88	120.64	2.80	2.52	2.28	31%
High Take Up	299.09	241.95	197.09	3.02	2.88	2.73	62%
Option Two - Variances in Development Costs							
Base Case less 10%							
Low Take Up	147.14	98.74	65.66	2.38	2.09	1.84	22%
Base Case Take Up	251.58	176.63	125.20	2.96	2.66	2.37	32%
High Take Up	307.59	249.16	203.28	3.20	3.05	2.88	63%
Base Case plus 10%							
Low Take Up	136.39	90.37	59.01	2.16	1.92	1.69	0.20
Base Case Take Up	236.76	165.12	116.08	2.66	2.40	2.16	0.30
High Take Up	290.59	234.74	190.91	2.86	2.72	2.59	0.60

	NPV (\$)			BCR			IRR
	@4%	@7%	@10%	@4%	@7%	@10%	
Option Three - Variances in End Sales Values							
Base Case less 10%							
Low Take Up	118.02	77.01	49.05	2.05	1.81	1.60	19%
Base Case Take Up	207.86	143.91	100.12	2.53	2.28	2.05	28%
High Take Up	256.04	206.22	167.08	2.73	2.60	2.46	56%
Base Case plus 10%							
Low Take Up	165.51	112.11	75.62	2.47	2.19	1.93	24%
Base Case Take Up	280.47	197.84	141.16	3.07	2.76	2.47	34%
High Take Up	342.13	277.69	227.10	3.31	3.15	2.99	67%

10. EMPLOYMENT TRENDS & GENERATION

Lake Macquarie forms part of what is known as the Lower Hunter which also includes Port Stephens, Cessnock, Maitland and Newcastle.

Lake Macquarie comprises two major industries being coal (as dominated by Centennial Coal), and electricity (as dominated by Raring Electrical and Delta Electrical). The poultry industry has and will remain a very popular industry in the LGA, and is moving further south of the Lake Macquarie LGA.

According to the Hunter Valley Research Foundation⁸ the most notable changes and trends in primary, secondary and tertiary industries in the Hunter and Lake Macquarie have included the following:

- Agriculture is a relatively small sector in the Hunter Region's economy, accounting for just 2% of all employment in 2001.
- The 2001 Census noted there were 6,809 people employed in mining in the Hunter, 26% fewer than five years earlier in 1996. The bulk of this employment was in the Lower Hunter (60%), in mines located in the Cessnock and Lake Macquarie LGAs. Within the Region's mining sector, 88% in 2001 was in coal mining. The number of jobs in this sub-sector declined by 23% from 1996-2001, with the decline proportionally greater in the Lower Hunter.
- At the 2001 Census there were 25,656 people employed in manufacturing in the Hunter, 6% fewer than in 1996. The vast majority of this employment was in the Lower Hunter (89% in 2001).
- The most notable change in Lake Macquarie is the cessation of commercial operations from late 2002 when the area was assigned to only recreational fishing. There was a similar fall in the number of offshore operations, from 293 in 1997-98 to 182 in 2003-04.
- Lake Macquarie City Council is currently investigating urban land use strategies for the Glendale State Rail Authority land, the smelter site and southern slopes of Munibung Hill (known as the Hawkins Land).
- According to the 2001 Census there were 3,995 people employed in cultural and recreational services in the Hunter, 14% more than 1996. The bulk of this employment was in the Lower Hunter (85% in 2001).

10.1 EMPLOYMENT TRENDS 1991-2001

Total employment in the Hunter grew from 200,466 in 1991 to 220,642 in 2001, an increase of 10.1%.

Generally, the Hunter experiences employment growth which tends to lag the regional business cycle. The Hunter Valley Research Foundation (2005/06) tends to attribute this to:

- Employer hesitancy in taking on new employees until they are confident that growth will be sustained in the region in the medium term
- A lag between job vacancies being created and filled; and,
- The possibility that employers could not find suitably skilled people to fill vacancies.

Historically the Hunter region has been characterised by a large proportion of employment in traditional industries such as mining, steelmaking, shipbuilding and power generation. This was significant when the

⁸ Hunter Valley Research Foundation, *Newcastle and the Hunter Region Yearbook 2005/06*.

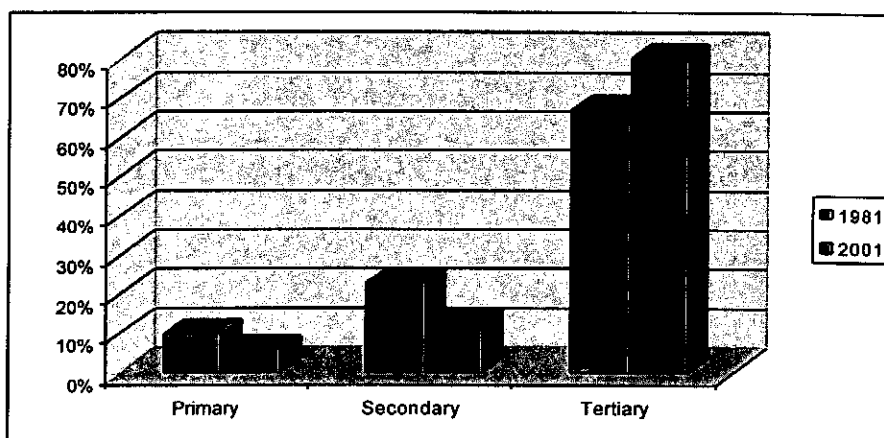
industries were less capital and technologically intensive and their labour intensiveness generated significant regional employment.

However, when trade barriers were relaxed in the late 1970s/80s, many industries underwent major structural change, using new production practices that often led to the replacement of capital for labour, and a fall in the number of people employed in traditional industries.

At the same time the Hunter was experiencing a growth in the tertiary sector, with the demand for education, health and tourism services stimulating employment growth in areas such as accommodation, café's/restaurants, and retail. Whilst these new industries were labour intensive they required a different skill base to the more traditional industries, resulting in an economic and social dislocation of some people. Those people, who were displaced from the manufacturing sector, did not necessarily possess those skills required by employment positions in the services sector.

The graph below indicates how the abovementioned trends continued through the 1980's and 1990's, with the proportion of people employed in primary industries almost halving.

Table 29 Proportion of Hunter Region Employment in Primary, Secondary and Tertiary Sectors 1981 & 2001



Source: ABS, Population Census 1981 & 2001

A study by the Hunter Valley Research Foundation⁹ (2005-06), indicated that over time there has been a general decline in the size of individual businesses, with around 75% of all businesses in 2003-04 in the region being organisations of up to 10 employees, and a further 20% of companies having 50 employees.

Over the 20 years to 2001, there has been a significant increase in the proportion of the labour force employed in: wholesale and retail trade; health, education and community services; finance, property and business services; and recreational and personal services. There has been a large decrease in employment in: manufacturing; transport and storage; mining; and, utilities.

⁹ Hunter Valley Research Institute, *Newcastle and the Hunter Region Year Book 2005/06*

Compared to NSW, the Hunter exhibits:

- A substantially higher proportion of employment in retail trade (17%) and mining (3%) compared to NSW (14% and 1% respectively). Mining figures are a reflection of the large concentration of coal reserves in the region.
- A substantially lower proportion of employment in property and business services (9%), and finance and insurance (3%) compared to NSW (12% and 5% respectively). This is as a result of the centralisation of corporate headquarters in capital cities, and lower skill levels exhibited in regional areas of the Hunter.

Lake Macquarie is one of the least industry dependent LGAs in the Hunter, with no single industry responsible for more than 3% of all resident employment. The Foundation found supermarkets and grocery stores were the main employers of Lake Macquarie residents.

Table 30 - Sectors employing the most residents of Lake Macquarie, 2001

	No.	% of total employed
Supermarket and grocery stores	2044	3.04%
Hospitals (except psychiatric)	1848	2.75%
Primary education	1548	2.30%
Secondary education	1486	2.21%
Takeaway food retailing	1437	2.14%
Black coal mining	1182	1.76%
Café's and restaurants	1148	1.71%
Road freight transport	988	1.47%
House construction	955	1.42%
Department stores	914	1.36%
Total residents employed 2001*	67185	20.17%

* The total number shown for each LGA or region is the total number of residents of that LGA/region who were employed at the time of the Census in 2001. The total percentage is the sum of the percentages shown for each LGA or region. This percentage sum provides a relative indication of the extent to which the area is dependent on the 10 major industries.

Source: Hunter Valley Research Foundation (2005/06); and ABS, Population Census 2001.

Of all LGAs in the Hunter Region, Lake Macquarie has the lowest dependence (20%) in the top ten industries. This means that employment within the LGA is fairly diverse when compared to other LGAs in the Lower Hunter like Port Stephens (29%), Cessnock (28%), Maitland (23%), Newcastle (22%) and other areas of the greater Hunter Region.

Table 31 - Proportion of Employment in Specified Industries in the Lower Hunter, 2001

	Lake Macquarie	Lower Hunter
Agriculture, forestry and fishing	0.6%	1.2%
Mining	2.0%	2.2%
Manufacturing	12.3%	12.4%
Utilities	1.4%	1.1%
Construction	8.5%	7.4%
Wholesale trade	4.8%	4.7%
Retail trade	17.7%	17.1%
Accommodation, cafes and restaurants	4.1%	5.4%
Transport and storage	4.0%	4.0%
Communication services	1.3%	1.3%

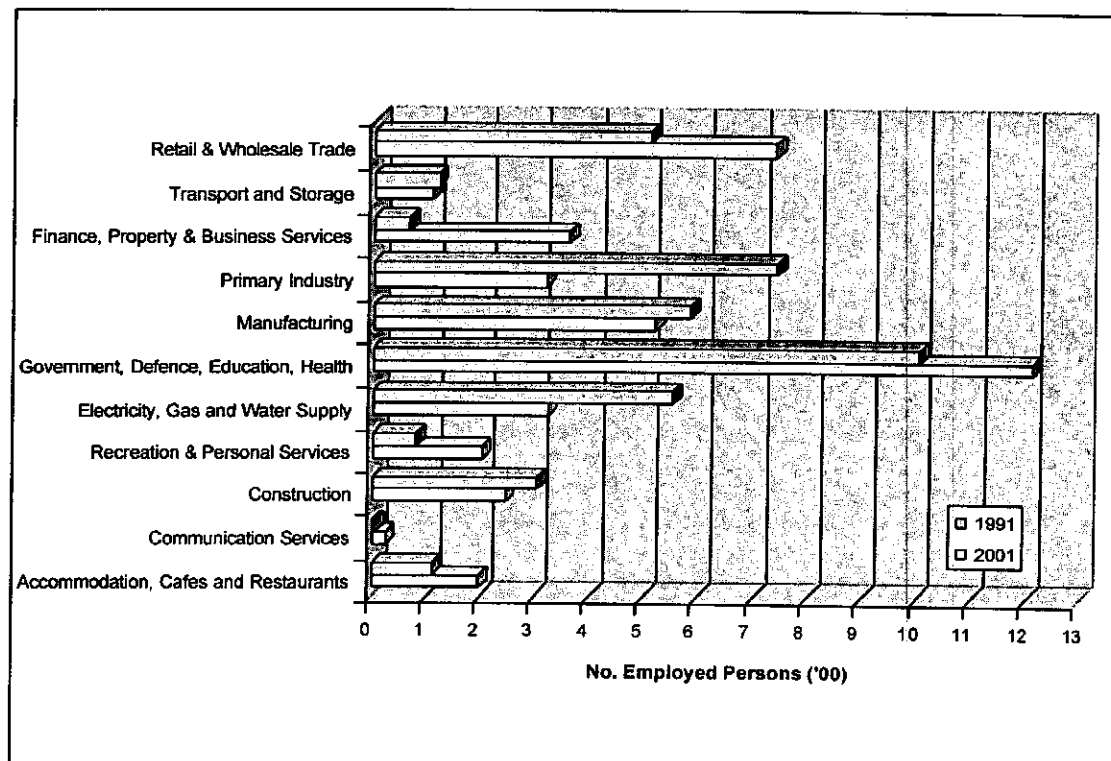
Finance and insurance	3.0%	2.7%
Property and business services	9.0%	9.1%
Govt administration and defence	3.5%	4.5%
Education	8.1%	7.6%
Health and community services	12.0%	11.8%
Cultural and recreational services	1.7%	1.8%
Personal and other services	3.8%	3.6%
Not classified/not stated	2.2%	2.1%
Total	100.0%	100.0%
Total Number Employed	70,111	184,687

Source: ABS, Population Census 2001

By comparison to other areas within the Lower Hunter (excluding Newcastle) Lake Macquarie has a proportionately higher concentration of employment in: utilities; construction; retail trade; health and community services; and, education.

The graph below provides the number of jobs in the Cooranbong, Toronto and Morriset areas combined in 1991 and 2001. Note that this refers to jobs provided in the local area and not the number of employed residents.

Figure 8 - Jobs in Suburbs of Cooranbong, Morriset, Mandalong, Bonnells Bay and Toronto by Industry Type in 1991 and 2001



Source: Journey to Work, NSW Department of Transport 1991-2001

The high growth areas shown in the above table have been in Government, defence, education and health; finance property and business services; and recreational and personal services. The traditional blue collar jobs in primary industries, construction and transport and storage have declined. Note that this does not translate to reduced demand for industrial floor space. Much of the decline in these jobs is attributable to increased automation in manufacturing and other blue collar industries.

Based on 2001 Census data, within the Hunter Region there has been a general decline in the relatively unskilled, specifically with regard to: labourers; elementary clerical, sales and service workers; and, intermediate production and transport workers. However there has been a large increase in those employed in intermediate clerical, sales and service workers.

Within the relatively highly skilled workforce, the Hunter Region has seen a decline in tradespersons and related workers, and an increase in the proportion of associate professionals and professionals.

Cooranbong is characterised by a slightly higher proportion of people employed as managers, administrators and professionals than the Lower Hunter. Cooranbong has a slightly lower proportion of clerical, sales and service workers.

Table 32 - Employment by Occupation Cooranbong, Dora Creek, Morisset, Toronto, Bonnell's Bay and Lower Hunter 2001

Occupation Type	Cooranbong	Dora Creek	Morisset	Toronto	Bonnells Bay	Lower Hunter
Managers & Administrators	6.3%	7.2%	5.2%	4.9%	5.4%	5.1%
Professionals	20.2%	15.7%	14.5%	15.2%	16.8%	15.2%
Associate Professionals	8.9%	9.8%	9.8%	9.8%	10.2%	10.1%
Tradespersons & Related	13.2%	13.9%	12.7%	13.2%	13.1%	13.1%
Clerical, Sales & Service	21.7%	22.3%	24.1%	27.9%	27.0%	28.1%
Intermediate Production & Transport	6.5%	9.2%	7.4%	8.3%	8.2%	8.5%
Labourers & Related	13.0%	9.6%	10.9%	7.7%	7.9%	8.1%
Inadequately described	1.8%	3.0%	3.9%	2.0%	2.7%	1.6%
Unemployed	8.4%	9.2%	11.6%	11.0%	8.6%	10.2%
Total	100%	100%	100.0%	100.0%	100.0%	100.0%

Source: Australian Bureau of Statistics Census Data 2001

Within Cooranbong, major employment providers include Avondale College, Avondale School and the Sanitarium Health Food Company. Employment projections provided by these institutions have revealed the following:

- Avondale College is a major employer of local residents, often with staff moving to the surrounding area of Cooranbong in order to work at the College. Currently 1,037 students are enrolled at the Lake Macquarie campus at Cooranbong with 250 staff (150 full time and 100 casual staff) employed at the College. With the College applying for University status, it is expected that the number of pupils will increase to a conservative projection of 1,500 students by 2012.

The College currently has around 12.8 students per academic, with the administrative and support staff numbers being approximately 48% of the academic staff numbers. Therefore we

can assume that if the College maintained the current student/academic ratio, the number of academic staff would increase to by 46 staff by 2012.

- Avondale School is located adjacent to the airstrip and is run by the Seventh Day Adventist Church. Avondale School currently caters for 900 students and employs 140 existing staff (90 professional, 50 support staff).

The School has projected a 33% increase of students from 2005-2010 totalling 1,200 students. It is expected that the existing number of staff would be able to cope with this increase in students. However, if student numbers increased to 1600, 150 staff members would be required however no physical expansion of the school would be required as a result. The School has acknowledged that it expects approximately 400 students to result from the subject development at North Cooranbong, increasing the number of students to 1,300 pupils.

- Sanitarium Health Food Company is a major industry and employer of local residents within Cooranbong. At its Cooranbong facility, Sanitarium currently employs approximately 498 staff, being 353 full time staff, 40 part time staff, and 105 casual staff. Sanitarium allows Avondale College students to work at their Cooranbong facility as a way of 'working their way' through college.

Discussions with Sanitarium have revealed that their facilities at Cooranbong are currently operating at near full capacity. Hill PDA has been advised that there are no future plans to expand operations or down size operations. Employee levels are currently at a maximum and there are no future plans to increase or decrease staff levels. If any foreseeable changes were to occur it would see new technology replace existing staff.

10.2 Summary, Employment & Economic Trends

There are several emerging trends in employment and economic activity, which are having direct and indirect impacts on urban structure; many of these can be seen through the employment analysis above. These impacts are particularly pronounced in Lake Macquarie where both structural and functional characteristics are being conditioned by substantial improvements to the transport infrastructure and the growing strategic importance of the areas location to Newcastle and Sydney, whilst being dissected by the main Sydney to Brisbane freeway link.

In this context, the planning and development of the Lake Macquarie region, and more specifically the Morisset Planning District should both reflect and be guided by the influences of rapid and fundamental change in the form and function of urban land, both in the local area, Sydney and Australia.

The two main forces acting on employment change are the globalisation of economic activity and a radical deepening in the knowledge-intensity of business products and processes. The key likely consequence of both is that development is likely to become more polarized with growth occurring in the primary core areas where opportunities permit, and in peripheral areas, which offer greater economies.

Globalisation

The required quantum and qualitative characteristics of demand for land and commercial real estate products are being significantly changed by an ever-increasing trend towards the globalisation of economic activity. Large and highly influential trans-national corporations are now operating in almost all countries of the world and are imposing an increasingly uniform set of key criteria in determining the most effective locations for their productive plants and head quarters.

The development and adoption of new technologies, the introduction of flexible production methods and the increasing use of the market mechanism for allocating economic resources and investment priorities is having a profound effect on where, and how, corporations will site their facilities. In essence, there is an increasing trend towards a greater flexibility in location choice, where corporate organisations are requiring large sites for consolidation of previously fragmented activities, and where opportunities to co-locate in specialised clusters of activity are being increasingly sought.

The result being, that many of these global organisations have chosen regional locations such as Newcastle and Albury/Wodonga to establish their international headquarters or plant facilities.

The industrialisation of emerging economies over the past two-three decades, together with the high pace of world trade growth has resulted in traditional manufacturing industries moving either off-shore to developing economies with lower production costs, or to the periphery of the metropolitan or regional towns where land costs are less.

Coincident with, and partly driving these processes has been the rapid development and take up of new technologies and processes, including information and communications technologies, materials, environmental and bio-technological sciences. In essence, the economic shift in developed economies has been away from low cost manufacturing towards the generation, distribution and use of intellectual capital and information.

With the technological advances in communications, corporations are locating themselves in agglomerated business park estates, rather than in traditional CBD and town centres. Demand is increasing for purpose-built facilities at well-located nodal points offering the benefits of agglomeration, corporate prestige, amenity, proximity to labour and cost-effectiveness.

Home-based employment

Home-based employment is becoming an increasingly significant characteristic of the economy. It is occurring in sectors ranging from manufacturing, professional occupations, retailing, high technology and telecommunications. The growth can be attributed to several interrelated trends including:

- A decline in primary and manufacturing industry;
- Growth in service and high technology industry;
- Increasing levels of competition and resulting needs to minimise costs;
- Out sourcing of non-core activities;
- Dramatic improvements in communications technology which has increased mobility and freed many jobs from centralised and often costly locations; and
- Increasing technological complexities and the need to access a wider range of skills that are provided by consultants rather than employees.

An examination of Census data reveals the significance and rapidity of the growth. In 1996 5% of all households carried out a home-based business (excluding people who occasionally work at home). By June 2000, the proportion had risen to 7.7%, equivalent to 692,600 people. In addition, another 135,000 people had a second job, which they conducted from home.

In a report prepared by the Australian Bureau of Statistics (1997), on the characteristics of home based businesses (as opposed to the wider category of home based employment) two categories were identified: "Businesses at home" (e.g. consultants, herbalists) and "Businesses from home" (e.g. Plumbers). It was found there were some 1.3 million people operating approximately 846,000 home-based businesses.

The Australian Bureau of Statistics also found that "property and business services" were the most common focuses of home-based employment (19.5% of employees), followed by "education" (12%), "construction" (10%) and light manufacturing. A key finding of the research was that the vast majority of home based business people (78%) cited low overheads as the principal reason for their decision to work from home, followed by lifestyle reasons. Significantly, it found that most worked at home by choice.

Lake Macquarie Council has seen a diverse range of people considering the option to work from home rather than more conventional commercial and industrial business locations. Council's response to this trend was to implement planning initiatives to help balance the needs of the home and business lifestyles.

4.2.2.2. Demand for Storage

In all likelihood, and as current evidence suggests, demand will be focussed on the development of high throughput distribution facilities and what has been termed "bulk fulfilment distribution centres", where large quantities of goods are broken down for distribution to consumers of small business markets. Locations for these facilities are being increasingly sought in hub/gateway areas in close proximity to major transportation infrastructure. In contrast there is likely to be reduced or stagnant demand for more traditional storage and commodity based industrial property.

Whilst this trend is less evident outside the metropolitan there are a growing number of industries that seek proximity to major transport nodes and there are regional cities and towns that offer these facilities such as Newcastle, Albury, Wagga Wagga, and Parkes. These regional cities have airports, railway and major high-speed highways between the capital cities that have made them attractive destinations.

4.2.2.3. Gateways

Of specific relevance to the present exercise is the increasingly significant role played by economic gateways in economies. Economic gateways are broadly defined as the exit/entry points to a region that supports the movement of commodities, products, services, information and ideas between itself and regions with which it has economic and commercial relationships. They are usually focussed on interaction points between the national and the global economy, but they can also be the interaction points between the metropolitan economy and other cities and regions of the national economy.

Specifically gateways are the physical infrastructure – such as airports and seaport, information technology and telecommunication systems – that facilitates the movement of tradable products, services, data and information and/or people. Over the past 23 decades a dramatic expansion of

production, trade, finance and the movement of people have resulted in a fundamental reorganisation of the global economy and widespread recognition of the need to reinforce the strategic role played by economic gateways.

In regional areas like Lake Macquarie this is evident in the growth of businesses around the freeway interchanges, as well as being evident in business growth around the transport hubs or inland ports of other regional cities.

Morriset Gateway Business Park is an example of the importance of the role of an economic gateway to the location decision of some firms, being strategically located just off the F3 Morisset Interchange, and close to the Hunter railway network.

Changes in Rural Australia

During the twentieth century inland rural Australia has continually declined in its share of the national population as farms became larger and small towns declined or disappeared. Mining and a small group of regional centres have been the focus of economic activity in inland Australia. Population growth in rural areas in the last twenty five years has been confined to a widening commuting area around the major cities and along the accessible coastal areas.

Small cities and rural areas like Lake Macquarie have been left with an increasingly aged population reliant on private transport. Within the Lower Hunter, Lake Macquarie has the second highest proportion of those aged 55 and over (22.8%), behind Newcastle (25.1%).

In contrast areas along the rainfall favoured coastal belts on the east; the south east and south west have experienced unprecedented growth based on retirement and leisure services.

Whilst agriculture output continues to grow in the long term its economics has changed significantly over the past couple of decades and is a trend that will continue in the foreseeable future. Yet it is a trend that is having significant impacts on rural communities. The transformation of farming areas is often a cause of disquiet in rural communities. Particular issues of concern are:

- The decline of population on farms and in rural small towns;
- The loss of young persons from farming and rural areas (and the associated increasing average age of the community);
- Incremental infringements upon a perceived 'right to farm'.

These are not isolated issues, but are different facets of the fate of agriculture in a modern economy.

Social, institutional, and political drivers can also influence the process of land use change in regions and communities and include:

- Land availability;
- Demographic changes;
- Power relationships and historic institutional arrangements in a region;
- Culture of the regional community;
- Government policy.

Cultural factors influence decisions that are made by landholders, as well as community decision making. Generational change brings new people and ideas into the area. There are also cultural influences on community reaction to policies of higher levels of government.

The Rise of Industrial and Business Parks

The above trends have resulted in the emergence of new nodes of commercial activity and industrial and business park estates.

Agglomeration of like uses represents activities taking advantage of increased interactions when they locate close to one other. Consequently, transportation and coordination costs are lower. Linkages between zones of agglomeration are generally serviced by high capacity transport corridors. If this process occurs for some duration, an industrial complex may emerge through cumulative agglomeration.

Regional areas like Albury, Wagga Wagga, Lake Macquarie and Orange have developed, or are developing, similar hybrid industrial/business park estates.

Within Lake Macquarie, a large agglomeration of industrial activity is located in Cardiff. This industrial park contains over 500 businesses, employing over 7,500 people on a land area of 105 hectares. Major industries located within the park include: transport; engineering; mining; distribution and logistics; food manufacturing. The site is also the base to the regional headquarters of various national companies.

Output Multiplier Generation from Multiplier Effects

The construction industry is a significant component of the economy accounting for 6.6% of GDP and employing almost 14.6% of the workforce at March 2003. The industry has strong linkages with other sectors, so its impacts on the economy go further than the direct contribution of construction. Multipliers refer to the level of additional economic activity generated by a source industry.

There are two types of multipliers:

- Production induced: which is made up of:
 - first round effect: which is all outputs and employment required to produce the inputs for construction; and
 - an industrial support effect which is the induced extra output and employment from all industries to support the production of the first round effect; and
- Consumption induced: which relates to the demand for additional goods and services due to increased spending by the wage and salary earners across all industries arising from employment.

The source of the multipliers adopted in this report is ABS and Australian National Accounts: Input-Output Tables 1996-97 (ABS Catalogue 5209.0). These tables identify first round effects, industrial support effects and consumption induced multiplier effects at rates of \$0.466, \$0.438 and \$0.962 respectively to every dollar of construction.

Therefore the \$671m cost in construction translates to a further \$607m activity in production induced effects and \$646m in consumption induced effects. Total economic activity generated is equivalent to \$1,924m (see table 33 below).

10.4 Employment Generation from Construction

It is estimated that one full time construction position for 12 months is created for every \$148,827 of construction work undertaken¹⁰. With an estimated construction cost at \$655m, it is estimated that construction at the subject site will therefore generate 4,154 job years directly in construction over the project time frame. This equates to 244 job years per annum.

The 1996-97 ANA Input-Output Tables identified employment multipliers for first round, industrial support and consumption induced effect of 0.33, 0.45 and 2.33 respectively for every job year in direct construction. We adjusted these multipliers to March 2004 using the building price index and these are provided in the following table. For every \$1 million in construction cost, a total of 26 job years could be generated in the economy and the proposed development as a whole will generate 17,304 job years.

Table 33 - Construction Multiplier Effect

	Initial Effects	Production Induced Effects		Consumption Induced Effects	Total
		First Round Effects	Industrial Support Effects		
Output multipliers	1	0.466	0.438	0.962	2.866
Output (\$million)	\$671	\$313	\$294	\$646	\$1,924
Employment No. per \$million adjusted to Mar-04 dollars	6.27	2	3	15	25.77
Total employee years created	4,154	1,389	1,895	9,810	17,304

Data Sources: Australian National Accounts: Input-Output Tables 1996-97 (5209.0), Price Index of the Output of the Building Industry - Producer Price Indexes (6427.0), CPI All Groups - RBA Bulletin (Table G2)

Note that the multiplier effects are national, and not necessarily local. The ABS notes that "Care is needed in interpreting multiplier effects; their theoretical basis produces estimates which somewhat overstate the actual impacts in terms of output and employment. Nevertheless, the estimates illustrate the high flow-on effects of construction activity to the rest of the economy. Clearly, through its multipliers, construction activity has a high impact on the economy".

10.5 Employment Generation Strategies

The encouragement and creation of appropriate employment lands is a complex issue, with a complex interrelationship between the various factors at play. For example, economic development will not necessarily be stimulated in the Cooranbong area by making an ever increasing supply of industrial land available to the market, especially given the tendency for focus of employment to remain in higher order centres. Therefore it is evident that this strategy alone will not lead to the desired employment growth no matter how much employment land is available.

The policies which have led to the current levels of supply have, in part, promoted an inefficient consumption of scarce public resources - in the form of land and capital. Developable land, in high population growth areas, has been allocated to accommodate low employment density industries, and capital is being diverted to fund the supporting infrastructure.

¹⁰. Source: ABS Australian National Accounts: Input-Output Tables 1996-1997 (ABS Pub: 5209.0). Shows 9 construction industry jobs directly created for every \$1 million of construction output. This equates to 1 employee for every \$111,111 of construction output in non inflated terms. Inflated to June 2004 dollars based on the Price Index of the Output of the Building Industry (ABS Pub: 6427.0 Table 15), this equates to \$148,827 per direct construction employee.

Consequently, key strategies have been identified which, interlinked, form an integrated policy framework for sustainable economic development. Details of these strategies are provided in the following sections.

10.6 Strategy One – Target Appropriate Industry Sectors

This strategy identifies the characteristics of the workforce which are likely to live in North Cooranbong, and how this information can be used to assess the types of employment which should be targeted for the area.

By matching the target employment types and opportunities with the likely characteristics of the resident workforce we can:

- Achieve greater integration between the resident community and workforce;
- Reduce commuting in and out of the new community; and subsequently,
- Achieve ecologically sustainable principles through time and travel savings and reduced dependence on private motor vehicle usage.

This strategy recognises the importance of creating a diverse and sustainable economic and employment base. The new community at North Cooranbong will be an evolving one in terms of demographic characteristic, workforce skills, employment and social aspirations. In order to insulate itself, as far as possible, from fluctuating employment markets, and in recognition of the changing nature of work, evolving workforce skill and education levels, the employment base must be broad.

A broad economic base and a diverse mix of employment are essential in order to provide continuing employment opportunities for residents and to allow multiple entry points and career opportunities in the local employment market.

Appropriate Industry Sectors

The statistical information in the above sections has highlighted the trends of employment over the last twenty to thirty years.

In order to identify a number of key target industries that may be potentially attracted to the subject site, a broad analysis of the key drivers of location selection for major industry groups has been included.

The locational factors considered include:

- Availability of workforce skill
- Accessibility to workforce, markets, suppliers and services
- Managerial preferences
- Cost of land and facilities
- Infrastructure availability and quality (e.g. water, telecommunications etc)
- Access to markets and customers proximity of competitors.
- Image & environment
- Linkages with similar organisations, academic institutions etc.

These factors have been applied to the traditional blue and white collar employment categories (such as agriculture, manufacturing, construction, wholesale/retail trade, and FIPB) together with a number of emerging industries such as environmental science based business, agri-business, community services and IT/Communications. The results are highlighted in the table on the following page which illustrates those factors which are of greatest importance for the different industry groups. The table also provides an indication of the intensity of land use or density of employment typical for the particular industry.

	Agriculture	Appl. science/ biotech	Manufacturing	Construction	Wholesale & Retail Trade	Transport & Storage	Finance, Property & Business Services	Community Services/ Health	Recreational Services	IT/Comm	Pharmaceutical & Medical	Environ-mental Science	Food Processing
Semi/ unskilled labour force													
Highly skilled labour force													
Accessibility													
Price													
Infrastructure (eg: water, telecom)													
Managerial preference													
Access to markets													
Proximity of competitors													
Image & Environment													
Linkages & proximity with similar organisations													
High density development													
Low density development													

Source: Employment Land Strategy, J.W. Atkins, 1998

A number of conclusions can be drawn from this analysis:

- Traditional industrial occupiers such as manufacturers, food processors, transport and storage, and agricultural firms require a relatively low skilled workforce, good accessibility, and are relatively price sensitive.
- High tech industries such as IT/Communications, Medical/ Pharmaceuticals, Agri-science/bio tech, environmental sciences etc are able to trade off price against other factors such as the need for a highly skilled workforce, image and environment, managerial preferences, and linkages with key organisations.

The present socio demographic profile of the Cooranbong area is characterised by a relatively young, skilled and mobile workforce, as well as a high proportion of retirees and older persons.

It is anticipated, however, that the socio demographic profile of the residents of the subject site will enjoy relatively higher levels of education, skills and income in comparison to the surrounding locality. This mix of profiles suggests a combination of both traditional industrial occupiers and emerging industries may relocate to the surrounding locales of Cooranbong (e.g. Morriset industrial estate) with supplied workforces from the likes of the new population at North Cooranbong.

In view of this, the relevance of various industry sectors to both the populations of the Hunter and the future community at North Cooranbong have been analysed. This analysis provides an important basis for indicating, in broad terms, those industry sectors most likely to produce the 'best fit' in terms of the projected demographic attribute and skill base of the workforce resident at North Cooranbong.

Lake Macquarie has a significant coal mining industry and smaller agriculture and manufacturing industries. However, with regards to employment retail, manufacturing, and health and community services employ the most residents of the LGA. Industry sectors considered to be highly relevant to Lake Macquarie are therefore:

- Mining;
- Manufacturing;
- Retailing and Wholesaling;
- Health and Community Services.

The industry sectors which are considered to be more specifically relevant to the likely future workforce of North Cooranbong are:

- Education;
- Finance, Property and Business services;
- High-tech industry;
- Recreation and personal services.

In order to achieve a diverse economic and employment base, it is important to recognise the substantial differences in the growth rates of various types of enterprises and to cater for their particular needs.

Small and Medium Enterprises – Overview

The most common type of enterprise in Australia is the so-called small business. Small businesses are defined as any business employing less than 20 persons in general, and less than 100 persons in the manufacturing sector. In New South Wales it is estimated that some 96% of enterprises fall into the small business category.

ABS figures indicate that in 1997-98, 50% of all job creation in Australia came from the small business sector and 33% came from large sized businesses. During 1996-97, 57% came from the small business sector and 32% from the large business sector. By contrast, large businesses during 1995-96 recorded a negative net employment change with the vast majority of generation (74%) coming from small business.

The contribution to total job generation in Australia in 1997-98 by small businesses was 492,000 persons (49%). From this, 268,000 came from continuing businesses which increased their employment during the year and 224,000 from new businesses starting up.

Small businesses are most common in the services sector but there are nonetheless significant numbers of small businesses in manufacturing.

Since the mid- 1980's small businesses in Australia have experienced significantly higher growth rates than have large businesses. Rationalisation of the labour force of large companies and the increasing tendency to out-source various components of large businesses, as well as the "spin-off" of non-core functions into smaller autonomous business units, have all contributed to the recent growth of small business in Australia.

Generally, we believe Cooranbong is suitably located for the promotion of small businesses by offering a range of business support services and an innovative and flexible land use zoning. These initiatives are specifically targeted to encourage the establishment of small businesses at Cooranbong. Small business enterprises (including home based businesses) are of significant importance because of their positive growth across virtually all industry sectors.

Home Based Businesses

As discussed earlier, employment generation is no longer simply a matter of attracting large companies, but rather attracting mobile workers who run their own businesses or subcontract their labour from home.

The trend towards home based business is certainly documented on a larger scale. There is evidence that the proportion of home based employment is continuing to increase under the combined influences of existing firms encouraging employees to increase the proportion of time they spend working at home, and the 'out sourcing' of services by many larger firms. Both are creating opportunities for home based businesses.

The home business sector is one of the fastest growing in the business sectors. Within Lake Macquarie there are approximately 6,875 home based businesses¹¹, representing 11.1% of occupied dwellings as at 2001.

¹¹ Novasolutions, 2001

The capacity to increase the proportion of home based businesses relates to the capacity to implement various strategic initiatives. We have identified the following principles relevant to the promotion of home based businesses:

1. Target the groups known to choose home business

Only a minority of people choose their housing with a view to its suitability for home based employment. Indeed, few people take up home employment (especially if they do so as a result of the loss of a job) at the same time as they move house. It will therefore be important to make the development attractive to those groups that are most likely to choose to take up home based employment. It is also important to recognise that for many of these people, working from home may be a future option rather than as an immediate choice. Many will initially wish to treat their home based work as a hobby or part time activity. Flexibility is therefore important.

Available evidence suggests that a choice to work from home is most often made by people setting up their own businesses (rather than by outworkers). This is the section of the population that should be targeted by the North Cooranbong development. These may well include people who spend a significant amount of time on the road, but can use their home office as their work base. We anticipate that the key fields in which interest in home based business has recently been high include:

- Manufacturing – i.e. home industries such as a seamstress;
- Creative industry – painting, glass blowing, glass staining, dress making, pottery, fashion design, writing, architecture, etc;
- Professionals – including accountants, IT consultants, web designers, etc;
- Retail – including crafts, assembled computers, etc;
- Professional suites – including general practitioner, dentist, acupuncturist, etc
- Teleworking – or virtual offices as part of a larger corporation.

There may be particular promise in appealing to:

- Entrepreneurial young adults, who may appreciate proximity to a university and to transport, and the availability of rental housing;
- People with existing home business (which may be in unsuitable premises in surrounding areas);
- Older professionals who are yet to retire but wish to downscale their business by working from home.

2. Provide premises suitable as home or home/business

It is important that any accommodation designed to appeal to home based workers should be equally suitable as residential accommodation, for the following reasons:

- People will move to the area primarily because it offers well located, suitable residential accommodation rather than simply because it offers particular scope for home employment;
- Many people will move to accommodation which offers the option of home based employment in future, utilising space which can be readily put to residential use in the meantime.

3. Minimise obstacles

The most significant obstacles to home based employment quoted by Business Support Centres and by research are regulatory barriers, particularly those imposed by Councils. These include:

- Zoning controls prohibiting home business;
- Prohibitions on employment of staff at a home business;
- Strict amenity controls preventing deliveries, client visits etc;
- Prohibition on home based craft or light industrial activities.

A large proportion of such controls are based on concerns about neighbouring amenity. If the development is to appeal as a location for home business, it will be important to ensure that, in those parts of the area where home business is to be encouraged:

- Design and layout should reduce the potential for amenity impacts between dwellings;
- Controls on employment, parking, deliveries etc should be kept to a minimum;
- Marketing should present the area as having mixed uses, so that people moving there should have an idea what to expect (experience in other areas suggests that a significant sector of the population see the benefits of living in a mixed use area as outweighing any drawbacks).

The minimisation of obstacles to the establishment of home based businesses, in combination with the flexibility permitted and encouraged under the DCP and LEP suggest a significant take up rate of home based businesses should be anticipated. We believe a take up rate of 20% of dwellings to be a reasonable assumption.

Such a take up is likely to rely upon the active marketing of:-

- The concept, capacity and flexibility of home based businesses; and
- The support services available to home business operators.

These points are discussed under Strategy Three.

Uff Strategy Three: Provision of Business Support

This strategy aims to attract businesses to the surrounding areas of the subject site by identifying the specific needs of business and required ancillary services.

Previous attempts at stimulating economic development have focused specifically on locational factors such as: proximity of raw materials, proximity of clients/customers, transport links, labour supply, and land cost and availability.

A number of these elements, particularly in relation to the availability of serviced industrial land, have seen some improvement. Despite this, employment growth has fallen behind labour force growth. This outcome suggests that a more sophisticated and comprehensive approach needs to be considered in relation to addressing the broad range of factors that ultimately influence businesses in their locational decision making.

Small business enterprises ('SBEs') and home-based businesses have a range of specific needs, many of which have not in the past been addressed by either private or public sector developers of employment land. For SBEs and home-based businesses, concerns such as access to capital, access to business advisory services and networking are important and cannot be addressed through the

creation of physical infrastructure only.

In recognition of the importance of these needs, the creation of business support infrastructure has been incorporated as a suggested strategy for employment generation, thereby offering a more coordinated and comprehensive approach to employment and economic development on the site.

Lake Macquarie Council actively supports home based business facilitating and organising a range of workshops and networking opportunities around the LGA. These provide ongoing assistance and home business information sessions. Detailed information sessions address topics such as Dealing with Council, Branding and Marketing, Taxation, Internet and Web Design, Professional Business Techniques, and Risk and OH&S. The Council also provides interested parties with external links and information sources including the Micro and Home Business Network and other external organisations.

It may also be possible for Avondale College to instigate a business support initiative where local home businesses can utilise certain services within the College, or maintained by the College (e.g. photocopy services, library services) for a small fee. This also provides another revenue stream for the College.

Furthermore, it is possible that the proposed development can, by implementing such strategies, differentiate itself to some extent from other employment areas in Greater Sydney, and the rest of the Hunter, and thus achieve higher rates of employment growth by providing a range of business support services.

Cabling and Telecommunications

Information technology is at the core of many home based businesses, and is an absolute prerequisite for some activities. However, many existing areas do not meet current expectations about access to telecommunications infrastructure, let alone future needs.

Most significant in the next few years will be the availability of high bandwidth Internet connections. This may be by cable (which may also carry cable TV) or ADSN/IDSN. These services are not currently available in many established areas, and recent practice even in newer areas has provided obstacles to provision of a full range of services. This applies in particular to:

- Underground ducted cabling. Where ducted cable is provided by a telecommunications company, it is common practice to install ducting which cannot be used by other suppliers in future. (eg ducting too narrow to take further cables). This inhibits competition (and hence choice) and may also add to the cost of provision of newer faster cabling in future.
- Apartments. If cable TV and telecommunications ducting is not supplied at the outset, it can be expensive (and depend on cooperation of all owners) to install it in future.

Flexibility is important, given the unknown nature of future technologies. For the foreseeable future, this will mean ensuring that future cabling needs can be met at North Cooranbong, preferably allowing consumers a choice of supplier.

10.9 Strategy Four – Identifying Resident Generated Employment

This strategy shows how the needs of the people living in the new community will generate employment. Resident generated employment refers to employment required to service the resident population in retail, education, personal and community services.

With between 2,500-3,000 dwellings planned for the subject site at North Cooranbong, we estimate a population of approximately 6,650 persons (on say 2,500 dwellings, with 2.7 persons per dwelling). 6,650 persons will generate demand for employment in retail, education and community services.

Based on the most recent ABS Retail Survey there was approximately 2sqm of retail space per capita in 1998-99. 6,650 people therefore generate a demand for 13,300sqm of retail space. In addition to this are commercial space users that generally locate in shop front retail space, but are not classified as retailers under ABS ANZIC code, such as real estate agents, travel agents, banks, etc. These users generally make up a further 30% to 40% floor space, which increases demand to approximately 17,290sqm.

Traditionally retail floor space was divided evenly between neighbourhood centres, district centres and regional centres. Of the 17,290sqm demanded by the resident population of North Cooranbong we would expect approximately 6,000sqm could be satisfied locally in convenience retail and commercial space.

The average rate of one employee per 21.5sqm for anchor tenants and one employee per 30sqm of speciality floor space is drawn from the ABS Retail Survey 1998-99 for combined full and part time staff. Therefore employment generated on site (e.g. convenience store or café) will be calculated using these ratios once defined retail spaces (if any) have been deduced.

In addition to this is employment off-site but in the local government area. This refers to the additional retail facilities generated by the resident population that will be located in district and regional centres. The majority of this will be in the greater LGA, Sydney and Newcastle. Based on the ABS Retail Survey 1998-99 this is calculated on an average 40sqm per employee and will be confirmed using this ratio once defined retail spaces (if any) have been deduced for the subject site at North Cooranbong.

In addition to the retail employment generated on site, jobs will also be created in the Education and Community Services areas. Given the size of the subject site it is most likely that employment generation in these areas will be off-site, but still within the LGA. However, some proportion of this employment will escape to Newcastle and Sydney.

With respect to Education, ABS 1996 Census Statistics suggest there were a total of 17,892,423 persons in Australia, with 3,822,714 aged between 5-19, and 540,063 persons employed in Education. Based upon an assessed population of the subject site of 6,650 persons, we estimate 763 persons between the ages of 5-19, with a requirement for 206 persons employed within the education sector. Given the existence of primary, secondary and tertiary education within the vicinity of the subject site in North Cooranbong, it is anticipated that the majority of this employment would be within the Morisset regional area.

With respect to Health and Community Services, the 1996 Census Statistics state there were a total of 725,178 employed persons in the Health and Community Services Sector in Australia, or one

employed person per 24.6 head of population. Based upon an assessed population of the subject site of 6,650 persons, we estimate a requirement for 270 persons employed within the health and community services sector. We estimate 50% of this employment would be located off-site but within the Lake Macquarie LGA (approximately 135 jobs), with the remaining 50% located on site or outside of Lake Macquarie LGA.

11. RECOMMENDATIONS

Based on the analysis included within this report, the following recommendations are made:

Plan Preparation

- It is recommended that a Local Environmental Plan ('LEP'), Development Control Plan ('DCP'), and Masterplan be prepared with regard to the subject site at North Cooranbong.
- These plans should be prepared in parallel and placed on exhibition simultaneously to provide and establish a clear vision for Cooranbong with regards to the proposed development.
- Each plan should address the expansion of the existing retail centre at Cooranbong, setting limitations for its expansion to protect the viability of Morisset as a town centre.
- The DCP should define an area for small business and home based businesses. Ensuring a component of buildings are designed for commercial and live/work purposes.
- The Infrastructure Zone and DCP will accommodate expansion of school, community facilities, and the other employment uses identified within this report.
- Prior to the LEP being on exhibition, Council should commence negotiations with the proponent with regard to a developer agreement for particular infrastructure works.

Expansion of the Retail Centre Cooranbong

- It is recommended that Council allow for expansion of the existing retail centre (Avondale Shopping Centre) through rezoning.
- The retail centre in Cooranbong will only capture around one third of total household expenditure. Therefore some benefit still remains for Morisset.
- The new development at North Cooranbong will generate demand for services (e.g. emergency services), which will see these services improve.
- The proposed development will aid in providing a critical mass of population which will upgrade and add essential services for the benefit of the existing population.

Expansion of Avondale School

- It is recommended that Council allow for expansion of Avondale School through rezoning allowing for community and recreational uses on site.

Developer Agreements

- Developer agreements are an appropriate model for funding local infrastructure where the negotiation effort is efficient and effective in achieving the objectives of a development or growth plan for typically high growth areas.
- In regards to the proposed development, Council should support those developer agreements which are made in the context of achieving the objectives of a growth plan for Cooranbong and this should be reflected in the contributions agreement.
- A Section 94 plan is suitable where there are many owners or developers involved. However, where there is either one owner (or developer) or one consortium, such as in the case of the subject North Cooranbong development, it's in the best interests of the Council to commence negotiations for a developer agreement.
- It is recommended that Council investigate the services that will be required by the proposed development at North Cooranbong, including quantifying the local infrastructure necessary for the local community. This will aid in any possible developer negotiations, whereby if entered into, Council incurs no cost themselves.

DISCLAIMER

This report is for the confidential use only of the party to whom it is addressed (the client) for the specific purposes to which it refers. We disclaim any responsibility to any third party acting upon or using the whole or part of its contents or reference thereto that may be published in any document, statement or circular or in any communication with third parties without prior written approval of the form and content in which it will appear.

This report and its attached appendices are based on estimates, assumptions and information sourced and referenced by Hill PDA and its sub consultants. We present these estimates and assumptions as a basis for the reader's interpretation and analysis. With respect to forecasts we do not present them as results that will actually be achieved. We rely upon the interpretation of the reader to judge for themselves the likelihood of whether these projections can be achieved or not.

As is customary, in a report of this nature, while all possible care has been taken by the authors to prepare the attached financial models from the best information available at the time of writing, no responsibility can be undertaken for errors or inaccuracies that may have occurred both with the programming or the financial projections and their assumptions.

This report does not constitute a valuation of any property or interest in property. In preparing this report we have relied upon information concerning the subject property and/or proposed development provided by the client and we have not independently verified this information excepted where noted in this report.

APPENDIX 1 - ADVICE FROM SEVENTH DAY ADVENTIST CHURCH



Seventh-day Adventist Church (North New South Wales Conference) Limited

13 June 2006

Dr J Cox
President
Avondale College
PO Box 19
COORANBONG NSW 2265

107 Lake Road, Avondale
Avondale NSW 2161 Australia
Telephone: (02) 4951 8088
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ISBN 14 174 288 156

Dear John

Re: North Cooranbong Development

Please find enclosed an approval for the development of a Retirement Village in Crawford Road Cooranbong. This development application only lists 14 independent living units at this stage. This was necessary to obtain the development of the property we have in Crawford Road. The total area to be developed is 70 acres. We are planning to place in excess of 300 Independent Living Units, Nursing Home, Hostel and Dementia Specific facilities on the property. We are seeking to develop a state of the art village on this property.

I would also like to confirm in writing our willingness to give favourable consideration to providing a holistic health facility in the new development at North Cooranbong. As the North New South Wales Conference of Seventh-day Adventists are very interested in all aspects of health, especially in the area of preventative health, we will certainly give favourable consideration to setting up such a facility.

We also are committed to increasing the capacity of the Avondale School to cater for an extra 400 students resulting from the development at North Cooranbong. This is already being put in place as we continually develop the strategic plan ten years in advance.

I trust that God is continuing to bless and guide in all that you do.

With kind Christian regards

JOHN A LANG
President

encl

preparing this summary, and will need to be considered by Council in implementing the recommendations of this Strategy.

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) institutes a system for environmental planning and assessment, including approvals and environmental impact assessment for proposed developments. It allows for the making of strategic plans to govern and guide land-use, contains a number of considerations and processes to be followed by consent authorities when determining development approvals, provides assessment procedures for critical infrastructure and institutes an enforcement system for land use.

The objectives of the Act are:

- (a) *"to encourage:*
 - i. *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - ii. *the promotion and co-ordination of the orderly and economic use and development of land,*
 - iii. *the protection, provision and co-ordination of communication and utility services,*
 - iv. *the provision of land for public purposes,*
 - v. *the provision and co-ordination of community services and facilities, and*
 - vi. *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - vii. *ecologically sustainable development, and*
 - viii. *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment."*

Part 3 of the Act relates to plan-making in NSW. It employs the hierarchical system referred to above to arrive at a series of EPIs that govern and guide land use in NSW. Part 3 advocates a collaborative and consultative approach to the plan making process and when preparing plans, Councils need to take into consideration Ministerial and Departmental directions.

There also must be consultation with authorities and government agencies to ensure that concerns are addressed at an early stage. Consideration of the plan making process is important when determining appropriate types of industrial land uses, as often this is the only stage in the development cycle where these issues can be looked at strategically and planned appropriately within an EPI.

APPENDIX 2 - PLANNING INSTRUMENTS

New South Wales Strategic & Statutory Planning Framework

Land use control is based on a hierarchical system of strategic and statutory (or legislative) land use planning, including a number of Environmental Planning Instruments (EPIs). These instruments are shown below in the order of hierarchy.

- **Environmental Planning & Assessment Act 1979 (the Act)** (institutes a system for environmental planning and assessment in NSW, including strategic planning, approvals and environmental impact assessment);
- **Environmental Planning & Assessment Regulation 2000 (Regulation)** (contains details on practice and implementation of the Act);
- **State Environmental Planning Policies** (for state significant matters);
- **Regional Environmental Plans** (for matters of regional importance);
- **Local Environmental Plans** (that contain specific land use provisions including zoning and development standards at the local level); and
- **Development Control Plans** (which provide detailed provisions relating to development standards and controls that are not appropriate for incorporation into a Local Environmental Plan).

In addition to these planning instruments, the Department of Planning (DOP) releases a number of Circulars, which are intended to provide Local Government with guidance in strategic planning and development of Local Environment Plans. These Circulars are intended to inform plan-making only and provide basic information to inform the town-planning process.

Proposed Reforms

The Minister for Planning, in 2004, announced a series of reforms for the NSW Planning System. These reforms will have a bearing on plan-making processes. The proposed reforms will streamline the local planning, approval and development process, will increase the role of Councils in development assessment and aim to provide increased certainty of development related outcomes.

The reforms aim to focus on strategic planning for growth areas; simplify planning controls; improve development assessment processes; and allow flexibility in the use of developer levies for local facilities and services.

Briefly, the reforms will entail:

- The production of standard LEP to be applied to all new LEPs in the State;
- A directive that new LEPs must be prepared within the next 5 years;
- A simpler system of State involvement in the planning process; and
- Greater certainty in the assessment process.

Details in relation to the proposed reforms are available from www.planning.nsw.gov.au.

The reforms will affect how local government develops plans for these areas and the processes by which strategic planning is undertaken. The provisions of these reforms have been considered in

State Environmental Planning Policies

SEPPs that may apply to development within the Lake Macquarie City LGA are listed below. It is important to note that not all SEPPs listed will apply to all (if any) proposals. However, they should be checked to ensure compliance or applicability prior to lodging a development application for any proposal on site.

State Environmental Planning Policy No. 11 - Traffic Generating Developments

The objectives of *State Environmental Planning Policy No. 11 - Traffic Generating Developments* are to ensure that the Roads and Traffic Authority (RTA) is made aware of the implications of developments likely to generate significant traffic impacts, and to provide the RTA an opportunity to make representations in respect of such developments.

Developments to which the Plan applies are listed in Schedules 1 and 2 of SEPP 11. Councils are required to consult with the RTA for projects listed in Schedules 1 and 2.

State Environmental Planning Policy No. 55 - Remediation of Land

The aims and objectives of SEPP 55 are to provide a state-wide planning approach to contaminated land remediation. It also promotes the remediation of contaminated land to reduce the risk of harm.

SEPP 55 requires planning authorities to consider contamination issues as part of zoning and rezoning proposals. Where a planning authority is satisfied that the land is suitable for uses under the proposed zone, or would be suitable if appropriate remediation were undertaken, land may be rezoned.

Regional Environmental Plans

Regional environmental plans (REPs) cover issues such as urban growth, commercial centres, extractive industries, recreational needs, rural lands, and heritage and conservation. REPs are made under the Environmental Planning and Assessment Act 1979 and provide the framework for detailed local planning by councils. All REPs are exhibited in draft form for public comment, and all submissions are considered before a final plan is gazetted and becomes legal.

Greater Regional Environmental Plan (HREP) 1989

The proposed development should give consideration to the provisions of the HREP especially with regard to housing, community services, commercial development, rural and urban land.

PART 2 - SOCIAL DEVELOPMENT - Division 1 - Housing

A principle of the strategy regarding housing notes that Councils, the Department and the Department of Housing should encourage urban consolidation through dual occupancy, infill, redevelopment, retention and restoration of existing housing stock and conversion of buildings in appropriate locations.

The objectives of this plan in relation to planning strategies concerning housing are:

- (a) To provide opportunities for adequate provision of secure, appropriate and affordable housing in a variety of types and tenures for all income groups throughout the region, and*
- (b) To ensure that the design and siting of residential development meets community needs, minimises impact on the natural environment and involves the quality of the region's built environment.*

PART 2 - SOCIAL DEVELOPMENT - Division 2 – Community Services

The objective of this plan in relation to planning strategies concerning health, education and community services is to encourage the co-ordinated provision of facilities and services designed to meet the needs of user groups and accessible to those groups.

PART 3 - ECONOMIC DEVELOPMENT – Division 2 – Commercial Development

The objectives of this plan in relation to planning strategies concerning commercial development are:

- (a) To ensure that commercial service centres are developed to suit the convenience of consumers and to optimise public and private investment, and*
- (b) To promote the distribution of employment in the tertiary sector in a manner compatible with the distribution of population.*

Councils should, in consultation with the Department:

- (a) Encourage retailing, office and associated service functions in the central business district and subregional and district centres,*
- (b) Provide for new or expanded centres in other locations to meet anticipated local and visitor needs, and*
- (c) Require the provision of social and community facilities, including environmental improvement, in centres appropriate to the location and scale of development.*

PART 4 - LAND USE AND SETTLEMENT - Division 1 - Rural land

The objectives of this plan in relation to planning strategies concerning rural land are:

- (a) To protect prime crop and pasture land from alienation, fragmentation, degradation and sterilisation,*
- (b) To provide for changing agricultural practices, and*
- (c) To allow for the development of small rural holdings and multiple occupancy on land capable of such developments in appropriate locations.*

PART 4 - LAND USE AND SETTLEMENT - Division 1 - Rural land

The objective of this plan in relation to planning strategies concerning urban land is to provide for sufficient urban land to meet anticipated growth in an orderly and efficient manner, having regard to:

- (a) Constraints of the natural environment,*
- (b) Urban capability of the land as defined by the Soil Conservation Service,*
- (c) Supply and demand for land for all urban purposes,*
- (d) Availability and cost of public utility services,*
- (e) Access to employment and commercial and community facilities, and*
- (f) Provision of a choice of locations and development types.*

Councils should, in consultation with the Department:

- (a) An adequate supply of residential land is rezoned to meet anticipated demand and, in particular, take account of the urban development program, and*
- (b) In locating and developing new residential areas, preference is given to areas in proximity to existing or proposed transport, public utility services and community facilities and services.*

Draft Lower Hunter Regional Strategy

The Draft Lower Hunter Regional Strategy ('the Draft Strategy') applies to the LGA's of Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock. The Draft Strategy compliments the Sydney Metropolitan Strategy.

The key purpose of the Draft Strategy is to ensure adequate land is available and appropriately located to sustainably accommodate the projected housing, employment and environmental needs of the Regions population over the next 25 years.

With a population of 505,000 in 2004, and growing by approximately 4,000 per year, the Department of Planning's (DoPs) growth scenario forecasting expects a regional population of 630,000 persons by 2031.

Their Draft Strategy will:

- Promote Newcastle as the key regional city, with a hierarchy of urban centres including mixed use regional and specialised employment centres;
- Provide for a forecast housing demand of up to 95,000 new dwellings by 2031, with up to 50% being contained within existing zoned areas;
- Identify new release areas which build on existing communities and create new ones;
- Ensure an adequate supply of employment land;
- Focus a higher proportion of new housing in centres which will reduce pressure on existing established suburbs;
- Enable the release of 5,300ha of rural land for a series of new communities and extensions to existing urban areas;
- Ensure the co-ordinated release of Greenfield land;
- Ensure the protection of biodiversity through a Regional Conservation Plan.

Of relevance to the subject site:

- Morisset will become an emerging major centre that is expected to grow and take on the role of a major centre in the future.
- Cooranbong is earmarked as a new release area, as a location of proposed major urban development, which although primarily residential may contain a mix of local open space and employment opportunities.

Lake Macquarie City Council's LEP 2004

Lake Macquarie's 2004 LEP includes updated land use zones, and controls on development and incorporates Council's Lifestyle 2020 Strategy.

Based on the LEP, the current zonings of the subject site are as follows:

Table 34 - Existing Site Zonings

Existing Zone
Environmental Protection 7(1) – Primary
Environmental Protection 7(2) – Secondary
Investigation 10 – Urban/Conservation
Investigation 10 – Urban/Employment/Recreation/Conservation

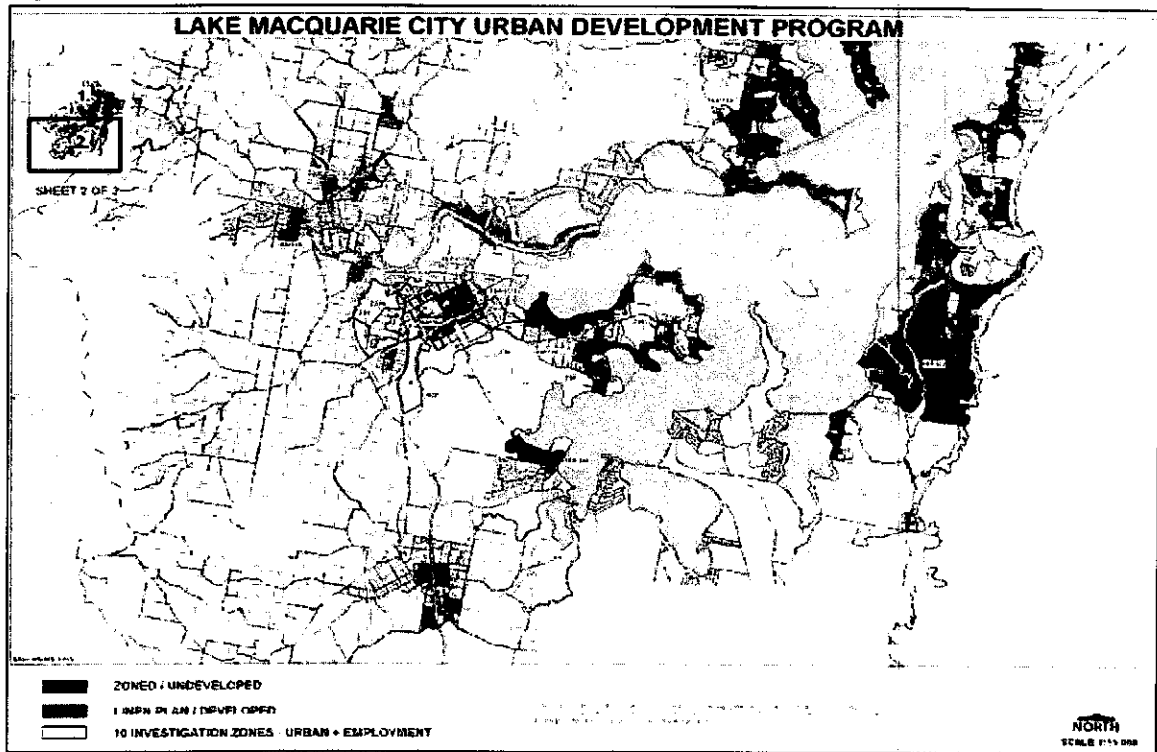
Urban Development Program (UDP)

The chief purpose of the program is to identify and estimate lot yields from greenfield land. It does not take into account infill development or small scale subdivisions. The lot and timing figures are based on various assumptions and should be taken as estimates only. The UDP tracks development potential and the supply of undeveloped land within the City.

There are 2 components to the Urban Development Program (UDP).

- UDP info – this outlines the land currently zoned as residential and undeveloped (ie. no linen plans for subdivision)
- Z10 Info – this information outlines those lands Zoned 10 Investigation under LEP 2004. These sites require further investigation/studies but are identified as having potential for urban development. As environmental studies and subsequent rezoning applications are the responsibility of land owners, it is difficult for Council to predict timing for the development of these sites.

Figure 9 - Lake Macquarie UDP Map



Source: Lake Macquarie Council 2006

APPENDIX 3 - COST BENEFIT TO GOVERNMENT

[illegible][illegible]

NPV @ 4% discount rate	-13.51 m
@ 7% discount rate	-10.90 m
@ 10% discount rate	-8.88 m
BCR @ 4% discount rate	0.70
@ 7% discount rate	0.70
@ 10% discount rate	0.69

COST BENEFIT MODEL FROM WHOLE OF GOVERNMENT VIEW

North Cooranbong Base Case

Revenue	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
Water & Sewer Levy			6.80																	
Section 94 Levy	-	-	0.54	1.54	1.08	1.08	1.83	1.61	4.86	1.61	3.38	2.11	3.61	3.65	2.85	2.15	2.15	2.15	2.15	6.80
GST & Stamp Duty Revenue	-	-	1.32	1.32	2.64	2.64	2.64	3.96	3.96	3.96	3.96	3.96	3.96	5.28	5.28	5.28	5.28	5.28	5.28	38.15
GST on Construction	-	-	0.50	1.00	1.50	2.00	2.00	2.50	3.00	3.00	3.00	3.00	3.00	3.50	4.00	4.00	4.00	4.00	4.00	65.94
TOTAL REVENUE	-	-	8.16	3.86	5.21	5.71	6.46	8.07	11.82	8.57	10.32	9.07	10.57	12.43	11.93	11.43	11.43	11.43	11.43	48.00
Costs																				158.90
Water & Sewer			6.80																	
Public Schools																				6.80
Local Open Spaces	-	-	0.26	0.26	0.52	0.52	0.52	0.78	0.78	0.78	0.78	0.78	0.78	1.04	1.04	1.04	1.04	1.04	1.04	16.50
Local External Roads	-	-	-	1.00	-	-	0.75	-	3.25	-	1.75	0.50	2.00	1.50	0.50	-	-	-	-	13.03
Drainage	-	-	0.15	0.15	0.30	0.30	0.30	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.60	0.60	0.60	0.60	0.60	11.25
Local Community Facilities	-	-	0.13	0.13	0.25	0.25	0.25	0.38	0.38	0.38	0.38	0.38	0.38	0.51	0.51	0.51	0.51	0.51	0.51	7.50
Ambulance/Fire Service	-	-	-	-	1.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.37
TOTAL COSTS	-	-	7.34	1.54	2.78	1.08	1.83	1.61	21.36	1.61	3.36	2.11	3.61	3.65	2.65	2.15	2.15	2.15	2.15	1.70
NET CASH FLOW	-	-	1.82	2.32	2.44	4.64	4.64	6.46	- 9.54	6.96	6.96	6.96	6.96	8.78	9.28	9.28	9.28	9.28	9.28	95.74

NPV @ 4% discount rate	59.76 m
@ 7% discount rate	43.34 m
@ 10% discount rate	32.28 m
BCR @ 4% discount rate	2.33
@ 7% discount rate	2.21
@ 10% discount rate	2.11

APPENDIX 4 - COST BENEFIT TO THE BROADER COMMUNITY

North Cooranbong

[illegible]

COST BENEFIT MODEL FROM WHOLE OF GOVERNMENT VIEW

North Cooranbong		Base Case																					
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL		
Revenue																							
Water & Sewer Levy		-	-	6.80																	6.80		
Section 94 Levy		-	-	0.54	1.54	1.08	1.08	1.83	1.61	4.86	1.61	3.36	2.11	3.61	3.65	2.65	2.15	2.15	2.15	2.15	38.15		
GST & Stamp Duty Revenue		-	-	1.32	1.32	2.64	2.64	2.64	3.96	3.96	3.96	3.96	3.96	3.96	5.28	5.28	5.28	5.28	5.28	5.28	65.94		
GST on Construction		-	-	0.50	1.00	1.50	2.00	2.00	2.50	3.00	3.00	3.00	3.00	3.00	3.50	4.00	4.00	4.00	4.00	4.00	48.00		
TOTAL REVENUE		-	-	8.16	3.86	5.21	5.71	6.46	8.07	11.82	8.57	10.32	9.07	10.57	12.43	11.93	11.43	11.43	11.43	11.43	158.90		
Costs																							
Water & Sewer		-	-	6.80																	6.80		
Public Schools		-	-							16.50											16.50		
Local Open Spaces		-	-	0.26	0.26	0.52	0.52	0.52	0.78	0.78	0.78	0.78	0.78	0.78	1.04	1.04	1.04	1.04	1.04	1.04	13.03		
Local External Roads		-	-	-	1.00	-	-	0.75	-	3.25	-	1.75	0.50	2.00	1.50	0.50	-	-	-	-	11.25		
Drainage		-	-	0.15	0.15	0.30	0.30	0.30	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.60	0.60	0.60	0.60	0.60	7.50		
Local Community Facilities		-	-	0.13	0.13	0.25	0.25	0.25	0.38	0.38	0.38	0.38	0.38	0.38	0.51	0.51	0.51	0.51	0.51	0.51	6.37		
Ambulance/Fire Service		-	-			1.70															1.70		
TOTAL COSTS		-	-	7.34	1.54	2.78	1.08	1.83	1.61	21.36	1.61	3.36	2.11	3.61	3.65	2.65	2.15	2.15	2.15	2.15	63.15		
NET CASH FLOW																							
		-	-	1.82	2.32	2.44	4.64	4.64	6.46	- 9.54	6.96	6.96	6.96	6.96	8.78	9.28	9.28	9.28	9.28	9.28	95.74		

NPV @ 4% discount rate 59.76 m
 @ 7% discount rate 43.34 m
 @ 10% discount rate 32.28 m
 BCR @ 4% discount rate 2.33
 @ 7% discount rate 2.21
 @ 10% discount rate 2.11