

Appendix B Open Space Assessment

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Ambarvale/ Rosemeadow Open Space Review

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urbis

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1 Introduction

The purpose of this open space review is to provide support for the preparation of a Spot Rezoning Application to Campbelltown Council. This open space review outlines current open space provision, sub regional demographic profile, population projections, community values and potential future open space requirements.

2 Quantitative analysis of open space in Ambarvale/Rosemeadow

2.1 Open Space in Campbelltown

An audit previously conducted by Urbis revealed that the total Council and non-Council open space within Campbelltown LGA is a total of approximately **26,540 ha** within the LGA boundaries.

- A total of 17,645 ha of open space had high or medium biodiversity value, with an additional 922 ha of open space requiring further investigation to ascertain its biodiversity value.
- A total of 4,677 ha of open space accommodated endangered ecological communities (EECs), including Shale Sandstone Transition Forest (2,392 ha), Cumberland Plain Woodland (1,814 ha), Sydney Coastal River Flat Forest (308 ha), Sydney Turpentine Ironbark Forest (86 ha), Moist Shale Woodland (61 ha), and Western Sydney Dry Rainforest (5 ha).
- Approximately only **1,748ha** of the total open space supply in the LGA is Council owned, publicly accessible land. This highlights the vast supply of open space areas which are not within Council ownership that surround the main residential settlements. These are owned by the Department of Defence, Department of Planning or Department of Education and Training.
- Excluding road verges/median strips, the quantity of Council owned land equates to **12.2 ha per 1000** population as of 2006 census population forecast to reduce to **8.90 ha per 1000** as of 2031 taking into account the population increase over this period.^[2]
- The largest proportion of Council owned open space within the LGA is bushland (589ha) which equates to 34% of total open space. 25% of all open space is active sportsgrounds.
- The smallest categories of open space are Regional Parks with only 0.2% of the total supply. This however is indicative of the fact that the parks have not been correctly classified by Council in terms of their catchment.
- Pocket Parks only contribute 4.3% of the total supply and therefore contrary to popular opinion this type of space is actually fairly minor compared with amenity green space which is greater in quantity.

2.2 Open Space in Rosemeadow and Ambarvale

Rosemeadow and Ambarvale fall within the Southern District of Campbelltown Council. The following highlights key points in relation to the supply of Council-owned open spaces across the District.

Within the Southern district, the largest proportion of space is Sportsgrounds (38%), followed by Green Corridors (19.5%). 19% of the total open space in the district is Bushland with significant sites including:

- Noorumba Reserve (52 ha)
- Flynn Reserve (11.6ha)

District and Local Parks in the area include:

- Mandurama Reserve (3.7ha)
- Denfield Green (1ha)

Pocket Parks include:

- Abington Reserve (3.3ha)

- Fieldhouse Park (2.8ha)

Key Sportsgrounds in the district include:

- Rosemeadow Playing Fields (13.5ha)
- Campbelltown Golf Club (65ha)
- Mary Brookes Baseball Field (11.5ha)
- Ambarvale Sporting Complex (20.3ha)

Table 1: Summary of Southern district supply

Southern District									
Area (M)	Area (Ha)	% of LGA Open Space	Ha per 1,000 Popn (2006)	Ha per 1,000 Popn (2011)	Ha per 1,000 Popn (2016)	Ha per 1,000 Popn (2021)	Ha per 1,000 Popn (2026)	Ha per 1,000 Popn (2031)	Type of open space
569,000	56.90	19.0%	2.10	2.18	2.18	2.16	1.97	1.82	Bushland
164,500	16.45	5.5%	0.61	0.63	0.63	0.63	0.57	0.53	Pocket Parks
1,140,000	114.00	38.1%	4.20	4.37	4.36	4.33	3.94	3.64	Sportsgrounds
48,000	4.80	1.6%	0.18	0.18	0.18	0.18	0.17	0.15	Local Parks
37,000	3.70	1.2%	0.14	0.14	0.14	0.14	0.13	0.12	District Parks
0	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.00	Regional Parks
582,900	58.29	19.5%	2.15	2.23	2.23	2.22	2.02	1.86	Green Corridor
205,400	20.54	6.9%	0.76	0.79	0.79	0.78	0.71	0.66	Amenity Green Space
219,600	21.96	7.3%	0.81	0.84	0.84	0.83	0.76	0.70	Road verge / Median strip
25,900	2.59	0.9%	0.10	0.10	0.10	0.10	0.09	0.08	Undeveloped
2,992,300	299.23	100.0%	11.02	11.46	11.45	11.38	10.35	9.55	Total

2.3 Adequacy of overall provision

Table 1, below summarises basic recommended provision levels for recreation and sporting open space for areas of a similar urban density to Campbelltown LGA throughout Australia.

It is clear that in comparison with these standards, there is a significantly higher level of provision of open space in Campbelltown LGA and within Ambarvale and Rosemeadow (currently 11.02 ha/1000 population) than is recommended in these areas at present.

Table 2 – Recommended Provision Levels throughout Australia compared with Campbelltown current supply

Local Government Area	Ratio – ha per 1,000 population
Campbelltown (NSW)	12.2 ha / 1,000
Logan (QLD)	3.7 ha / 1,000
Wyndham* (WA)	2.6 ha / 1,000
Brimbank (VIC)	4 ha / 1,000
Brisbane (QLD)	5 ha / 1,000
Casey (VIC)	5 ha / 1,000

Source: Urbis 2008

* Note that Wyndham's assumes that all sports fields are co-located with schools.

Table 2, below, compares the supply of open space in Campbelltown LGA with that of neighbouring LGAs. At 12.2 ha per 1000 population currently, Campbelltown LGA has a higher provision of open space than nearby LGAs.^[3] Even when excluding all of the bushland areas (the category that generally comprises the largest sites), the LGA still has larger open space provision than surrounding LGAs and is still well in excess of the only existing Australian standard provision for open space of 2.83 ha per 1000 persons.

Table 3 – Comparison of open space supply with that of neighbouring LGAs

	Population (2006)	Total ha non-regional open space*	Ratio – ha per 1,000 population
<i>Campbelltown LGA (total space)</i>	147,661	2015 ha	12.2 ha / 1,000
Liverpool LGA	164,603	1,034 ha	6.3 ha/1000
Fairfield LGA	179,893	527 ha	2.9 ha/1000
Bankstown LGA	170,489	538 ha	3.2 ha/1000
Baulkham Hills LGA	159,391	1253 ha	7.9 ha/1000

Source: Quoted in Liverpool City-wide Recreation Strategy 2020 updated with current population figures by Urbis

This synthesis of current provision suggests that, in the proposed redevelopment plans for the study area, there is potential to consider open space rationalisation, facility co-location or complementary uses which may assist in delivering improved appropriateness and quality of provision for residents as well as cost-benefits for the providers of assets.

3 Sub-regional Demographic Profile

3.1 Rosemeadow Demographic Profile: Implications for Open Space

A review of the ABS statistics and in particular the 2006 Census data reveals some important information about Rosemeadow. Rosemeadow is a relatively disadvantaged suburb within the Campbelltown LGA. It has a Socio-Economic Indexes for Areas (SEIFA) index of 925.4¹. This indicates a greater level of disadvantage than the whole area of Campbelltown City (954.5) and surrounding suburbs including Glen Alpine (1109.7) and St Helens Park (1001.3) but a greater level of advantage than nearby Ambarvale (902.1).² Over half of the housing in Rosemeadow (52.0%) is being purchased (including under rent/buy scheme). In Rosemeadow, 35% of the population have completed Year 12 or equivalent. This is lower when compared to NSW as a whole, which has 43.8% of its population having attained the same level of education. This low level of education may reflect the suburb's level of disadvantage, the type of employment in which the residents work and their income levels.

Rosemeadow has a slightly higher proportion of Indigenous persons (2.4%) within its population compared to NSW (2.1%). Key languages spoken at home include English, Spanish, Arabic, Vietnamese, Lao and Samoan (see **Table 4**). Given culturally diverse background of Rosemeadow's residents, open space should therefore be culturally relevant. This includes providing activities which pertain to, and involve different cultural groups and should involve both design and management strategies.

While the majority of the Rosemeadow population is Australian born, a significant proportion of Rosemeadow residents were born overseas. Other countries of origin include:

- England, 2.8%
- New Zealand, 2.4%
- Chile, 1.7%.

As shown by **Table 5**, the community of Rosemeadow is predominantly young (with 16.5% of the population aged 15-24 years, compared with 13.3% for NSW as a whole). Furthermore, the suburb has a significantly high proportion of children (18.9% aged 5-14 years; compared with 13.4%, for NSW as a whole). The high proportion of young people suggests that there will be a fundamental need for both passive and active recreational areas as well as affordable options for participation in organised recreational activities in open space.

Table 6 shows that the median household income for Rosemeadow is \$1,093, which is slightly higher than the NSW average of \$1036. However, Rosemeadow has a relatively high proportion of unemployed persons (7.9% compared to the NSW rate of 5.9%) may mean that provision of affordable open space and activities is still a key issue when planning the recreational needs for Rosemeadow despite the slightly higher median income of the suburb. The high proportion of one-parent families (24% compared to 16.1% in NSW) suggests that any open space in Rosemeadow should be safe, including having adequate lighting and design for safety. Recreational playgrounds in open spaces should be adequately equipped and shaded.

The suburb also has a slightly higher proportion of females (51.8%) to males (48.2%) compared with NSW as a whole (50.7% and 49.3%); never married (36.1%) or separated/divorced persons (11.9%) compared with NSW as a whole (32.7% and 11.0% respectively). Employment is a potential issue. Rosemeadow has a high number of unemployed persons (7.9%, with 5.9% for NSW as a whole), however the proportion of those engaged in full-time work is slightly higher for Rosemeadow (62.8%) than for NSW as a whole (60.8%) and the proportion of people in part-time employment, at 22.9%, is slightly lower than that for NSW as a whole (27.2%), suggesting less opportunities around creation of part-time or family-friendly employment hours.

¹ <http://profile.id.com.au/Default.aspx?id=208&pg=244&gid=10&type=enum>

² Ibid.,

In Rosemeadow, the most common responses for occupation for employed persons usually resident were Technicians and Trades Workers 17.7%, Clerical and Administrative Workers 16.1%, Labourers 13.4%, Machinery Operators and Drivers 13.2% and Sales Workers 10.9%. The proportion of Technicians and Trades Workers is slightly higher than the NSW average of 13.6% as well as the number of Clerical and Administrative Workers (the NSW average is 15.4%). Moreover, the most common industries of employment for persons aged 15 years and over were Road Freight Transport 4.4%, School Education 3.8%, Supermarket and Grocery Stores 3.6%, Cafes, Restaurants and Takeaway Food Services 3.3% and Hospitals 2.8%. These statistics indicate that road freight transport, school education and supermarket and grocery stores are significant employment industries found in Rosemeadow.

3.2 Ambarvale (including Englorie Park) Demographic Profile: Implications for Open Space

A review of the ABS statistics and in particular the 2006 Census data reveals some important information about Ambarvale (including the suburb of Englorie Park). Ambarvale is a relatively disadvantaged suburb within the Campbelltown LGA. It has a Socio-Economic Indexes for Areas (SEIFA) index of 902.1³. This indicates a greater level of disadvantage than the whole area of Campbelltown City (954.5) and surrounding suburbs including Rosemeadow (925.4), Glen Alpine (1109.7) and St Helens Park (1001.3).⁴ Over a third of the housing in Ambarvale and Englorie Park (35.9%) is being purchased (including under rent/buy scheme), 41.5% of housing in Ambarvale and Englorie Park is being rented. In Ambarvale and Englorie Park, 33.7% of the population have completed Year 12 or equivalent. This is lower when compared to NSW as a whole, which has 43.8% of its population having attained the same level of education. This low level of education may reflect the suburb's level of disadvantage, the type of employment in which the residents work and their income levels.

Ambarvale and Englorie Park have a slightly higher proportion of Indigenous persons (4.3%) within the population compared to NSW (2.1%). Key languages spoken at home include English, Spanish, Arabic, Samoan, Tagalog and Hindi (see Table 4). Given culturally diverse background of Ambarvale and Englorie Park residents, open space should therefore be culturally relevant. This includes providing activities which pertain to, and involve different cultural groups and should involve both design and management strategies.

While the majority of the Ambarvale and Englorie Park population is Australian born, a significant proportion of residents were born overseas. Other countries of origin include:

- England, 3.3%
- New Zealand, 2.6%
- The Philippines, 1.9%.

As shown by Table 5, the community of Ambarvale is predominantly young (with 18.9% of the population aged 15-24 years, compared with 13.3% for NSW as a whole). Furthermore, the suburb has a significantly high proportion of children (17.0% aged 5-14 years; compared with 13.4%, for NSW as a whole). The high proportion of young people suggests that there will be a fundamental need for both passive and active recreational areas as well as affordable options for participation in organised recreational activities in open space.

Table 6 shows that the median household income for Ambarvale is \$1020 (Englorie Park is \$900) is \$1,093, which is slightly lower than the NSW average of \$1036. Ambarvale and Englorie Park have a relatively high proportion of unemployed persons (9.5% compared to the NSW rate of 5.9%) which may mean that provision of affordable open space and activities is a key issue when planning the recreational needs for Ambarvale and Englorie Park. The high proportion of one-parent families (28.9%

³ <http://profile.id.com.au/Default.aspx?id=208&pg=244&gid=10&type=enum>

⁴ Ibid.,

compared to 16.1% in NSW) suggests that any open space in Ambarvale and Englorie Park should be safe, including having adequate lighting and design for safety. Recreational playgrounds in open spaces should be adequately equipped and shaded.

The suburbs also have a slightly higher proportion of females (51.4%) to males (48.6%) compared with NSW as a whole (50.7% and 49.3%); never married (40.8%) or separated/divorced persons (13.0%) compared with NSW as a whole (32.7% and 11.0% respectively). Employment is a potential issue. Ambarvale and Englorie Park have a high number of unemployed persons (9.5%, with 5.9% for NSW as a whole), however the proportion of those engaged in full-time work is slightly lower for Ambarvale and Englorie Park (60.1%) than for NSW as a whole (60.8%) and the proportion of people in part-time employment, at 23.8%, is slightly lower than that for NSW as a whole (27.2%), suggesting less opportunities around creation of part-time or family-friendly employment hours.

In Ambarvale and Englorie Park, the most common responses for occupation for employed persons usually resident were Clerical and Administrative Workers 17.3%, Technicians and Trades Workers 14.4%, Labourers 12.7%, Professionals 12.1% and Sales Workers 12.0%. The proportion of Technicians and Trades Workers is slightly higher than the NSW average of 13.6% as well as the number of Clerical and Administrative Workers (the NSW average is 15.4%). Moreover, the most common industries of employment for persons aged 15 years and over were School Education 4.5%, Cafes, Restaurants and Takeaway Food Services 4.0%, Hospitals 3.5% and Supermarket and Grocery Stores 3.1%. These statistics indicate that school education and cafes, restaurants and takeaway food services are significant employment industries found in Ambarvale and Englorie Park.

3.3 Selected Demographic Indicators

Table 4 – Selected Demographic Indicators 2006

Characteristic	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Rosemeadow	Ambarvale	Englorie Park	Bradbury	St Helens Park	Glen Alpine
Total Population	6,549,177	4,119,190	143,076	49,645	7,415	7,345	579	9,239	6,136	4,403
No. Private Dwellings	2,728,719	1,643,675	50,218	16,973	2,390	2,507	228	3,506	2,039	1,296
% Born Overseas	23.8%	31.7%	26.2%	15.5%	25.5%	22.7%	27.5%	21.8%	19.7%	24.4%
Languages spoken at home Other than English	Arabic (2.5%) Cantonese (2.0%) Mandarin (1.5%) Italian (1.3%)	Arabic (3.9%) Cantonese (3.0%) Mandarin (2.3%) Greek (1.9%)	Arabic (2.7%) Spanish (1.7%) Samoan (1.7%) Hindi (1.6%)	Italian (1.6%) Spanish (0.8%) Arabic (0.7%) Cantonese (0.7%)	Spanish (3.9%) Arabic (2.4%) Vietnamese (2.1%) Lao (1.8%)	Arabic (1.9%) Spanish (1.8%) Samoan (1.5%) Tagalog (0.9%)	Spanish (2.9%) Samoan (2.1%) Persian (1.2%) Japanese (1.2%)	Spanish (2.1%) Samoan (1.3%) Spanish (1.2%) Italian (0.6%)	Spanish (2.2%) Lao (1.2%) Arabic (1.0%) Hindi (0.9%)	Cantonese (1.3%) Spanish (1.2%) Dari (1.2%) Hindi (1.2%)
% Indigenous	2.1%	1.1%	2.7%	1.3%	2.4%	4.4%	3.3%	2.7%	2.1%	0.7%

(Source: ABS Census 2006)

3.4 Age Profile

The table below details the age profile of the Bonnyrigg Estate in the context of the surrounding areas.

Table 5 – Age Profile 2006

Age Profile (BO4)	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Rosemeadow	Ambarvale	Englorie Park	Bradbury	St Helens Park	Glen Alpine
0-4 yrs	420,434	270,814	10,657	4,234	627	601	48	647	625	210
% 0-4 yrs	6.4%	6.6%	7.4%	8.5%	8.5%	8.2%	8.3%	7.0%	10.2%	4.8%
5-14 yrs	878,483	534,214	23,363	8,453	1,400	1,258	90	1,327	1,166	678
% 5-14 yrs	13.4%	13.0%	16.3%	17.0%	18.9%	17.1%	15.5%	14.4%	19.0%	15.4%
15-24 yrs	871,714	569,896	23,735	6,695	1,226	1,393	108	1,379	897	834
% 15-24 yrs	13.3%	13.8%	16.6%	13.5%	16.5%	19.0%	18.7%	14.9%	14.6%	18.9%
25-54 yrs	2,753,218	1,816,105	60,240	21,687	3,163	3,073	249	3,642	2,805	1,894
% 25-54 yrs	42%	44.1%	42.1%	43.7%	42.7%	41.8%	43.0%	39.4%	45.7%	43.0%
55-64 yrs	719,551	422,182	14,471	4,355	553	653	54	1,237	439	543
% 55-64 yrs	11.0%	10.2%	10.1%	8.8%	7.5%	8.9%	9.3%	13.4%	7.2%	12.3%
65 yrs +	905,778	505,979	10,609	4,223	448	367	28	1,008	204	243
% 65 yrs +	13.8%	12.3%	7.4%	8.5%	6.0%	5.0%	4.8%	10.9%	3.3%	5.5%

(Source: ABS Census 2006)

3.5 Income and Loans

The following table compares data on loan repayments, rent and household income.

Table 6 – Selected Demographic Indicators 2006 (Means)* (Occupied Private Dwellings)

Selected Means	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Rosemeadow	Ambarvale	Englorie Park	Bradbury	St Helens Park	Glen Alpine
Median Age (years) (B04)	37	35	32	32	29	28	27	34	28	37
Mean Monthly Housing Loan Repayments (B33)	\$1,517	\$1,800	\$1,500	\$1,800	\$1,396	\$1,408	\$1,241	\$1,500	\$1,517	\$1,842
Median Rent	\$210	\$250	\$185	\$250	\$195	\$180	\$220	\$195	\$220	\$370
Median Household Income (B28)	\$1,036	\$1,154	\$1,066	\$1,353	\$1,093	\$1,020	\$900	\$1,066	\$1,154	\$1,965

(Source: ABS Census 2006)

3.6 Family Type

Table 7 – Family Type

Characteristic	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Rosameadow	Ambarvale	Englorie Park	Bradbury	St Helens Park	Glen Alpine
Total Families	1,716,220	1,063,384	37,901	13,539	1,927	1,962	160	2,539	1,619	1,223
% Couple Family with children	46.2%	49.3%	50.7%	56.6%	53.3%	49.2%	40.0%	44.0%	54.1%	64.7%
% Couple Family without Children	36.0%	33.2%	25.3%	28.5%	21.3%	20.6%	30.6%	33.2%	25.1%	25.9%
% One Parent family	16.1%	15.6%	22.6%	14.0%	24.0%	28.8%	29.4%	21.2%	20.0%	8.4%
% Family Households	67.9%	68.1%	76.9%	81.4%	80.9%	80.1%	73.3%	75.5%	79.5%	92.0%
% Lone Person Households	22.8%	21.6%	16.8%	13.7%	13.8%	14.2%	19.8%	18.1%	12.7%	4.0%
% Group Households	3.5%	3.9%	1.9%	1.7%	1.8%	1.9%	5.1%	2.4%	1.9%	0.6%

(Source: ABS Census 2006)

Note 1: All data from QuickStats tables

Note 2: Household data calculated as a % of private occupied dwellings

4 Indicative population projections and social mix

According to the 2009 *Local Asset Management Plan* prepared for Housing NSW Greater Western Sydney Division by Resitech there is currently high demand for two and three bedroom accommodation in Fairfield and Liverpool LGAs allocation zones. Campbelltown allocation zone experiences comparatively reduced waiting times for all bedroom categories. There is the potential to meet the demand for housing in Fairfield and Liverpool LGAs in the proposed land to be rezoned in Rosemeadow and Ambarvale.

The Rosemeadow Affordable Housing Strategy outlines the provision of affordable housing in Rosemeadow. The site is bounded by Copperfield Drive, Cleopatra Drive and Julius Road. Six of the existing roads are to be extended and a new Torrens Title Subdivision with rezoning of open space is planned. The following development is planned:

- 50 existing dwellings will be upgraded and sold to low to moderate income households at a discounted price.
- 80 new building lots will be created for sale to low to moderate income households at a discounted price.
- 40 dwellings will be upgraded and retained for Social Housing.
- 75 dwellings will be demolished.

This is being done with the support of Commonwealth HAF funding. Staging is outlined in Figures 1 and 2 below.

The Ambarvale Upgrade Program outlines a ten year program to provide affordable housing opportunities for low to moderate income families from creation of new building lots and Torrens Title subdivision. This will include:

- The upgrade of 550 properties internally and externally.
- The extension of some roads.
- Creation of Torrens Title subdivision.
- Demolition of some existing dwellings.
- Landscaping and street tree planting.

The Urban Design of the upgrade program is pictured in Figure 3 below.

Figure 1: Rosemeadow South Urban Design Staging

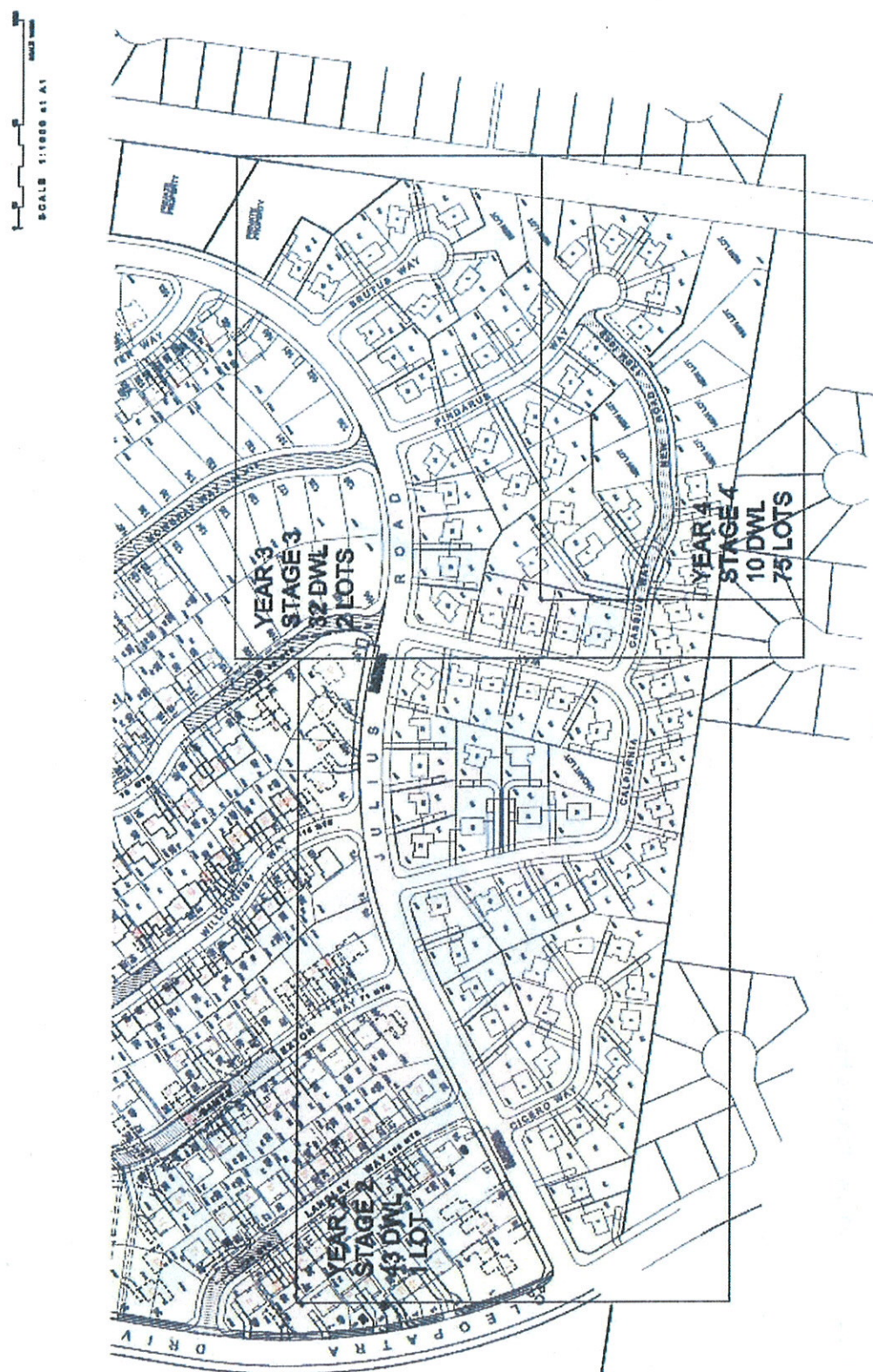


Figure 2: Rosemeadow Affordable Housing

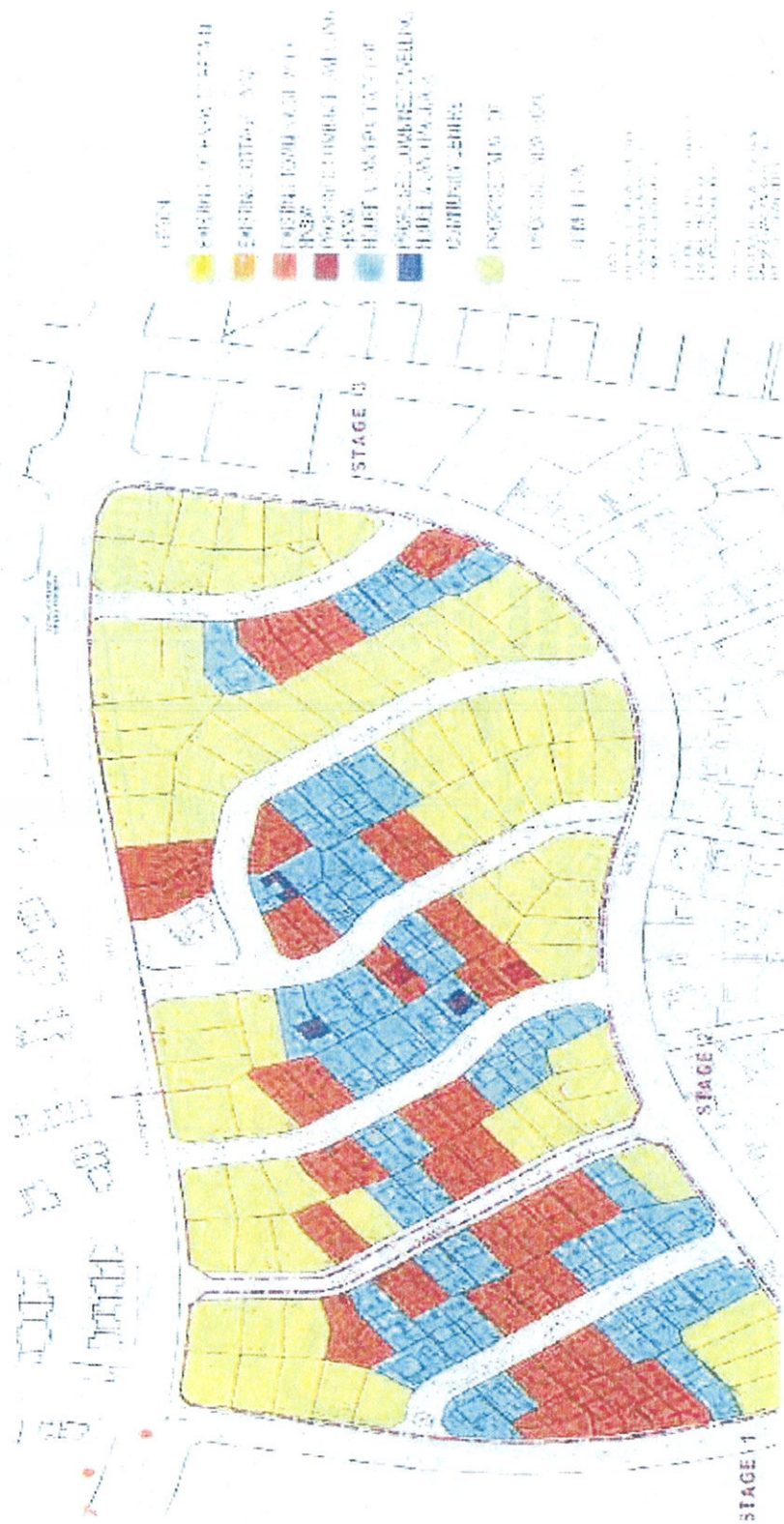


Figure 3: Ambarvale Urban Design

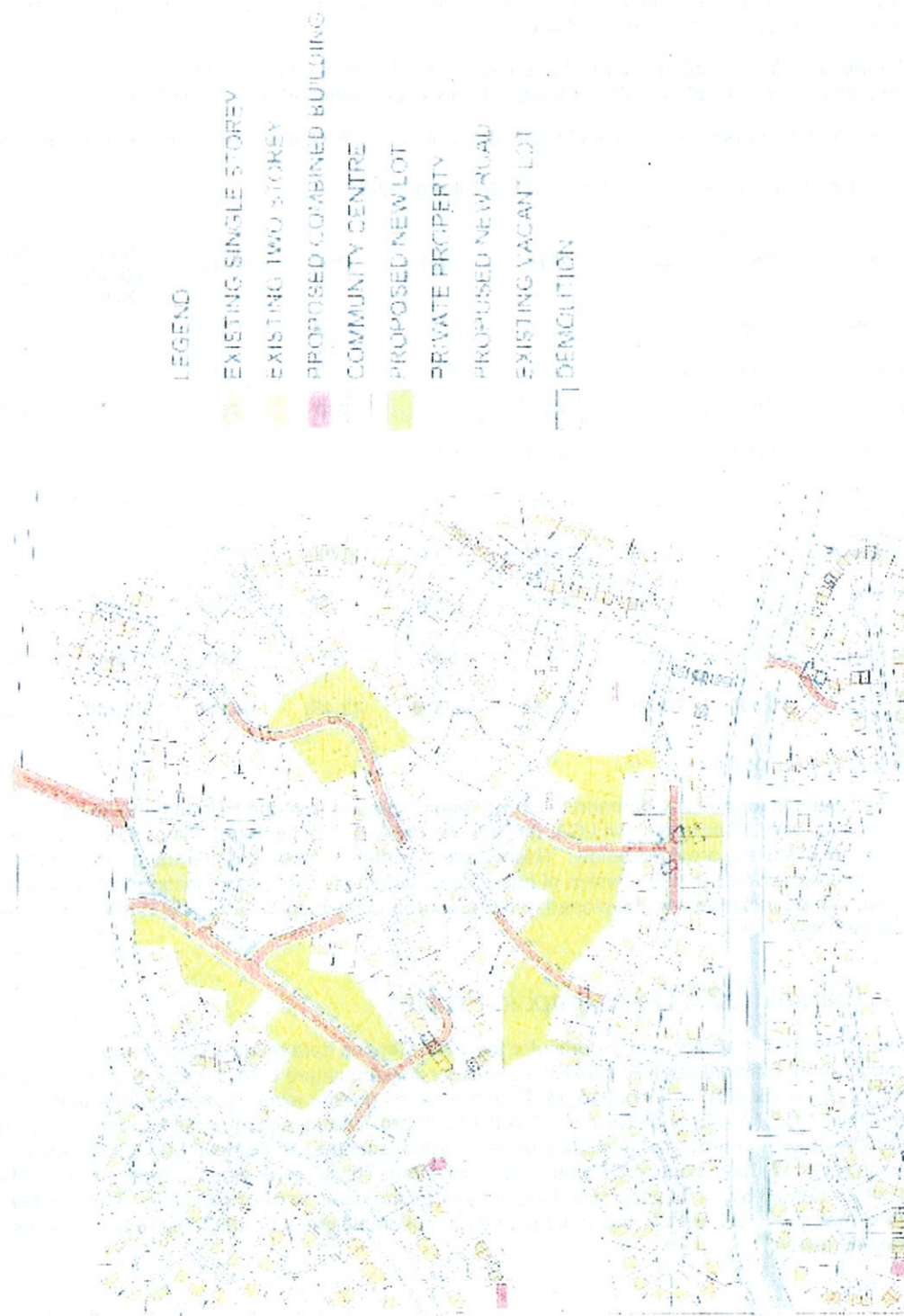


Table 8 shows that the Southern district:

- Is forecast to experience the greatest proportional change in terms population within the LGA with a 15,497 population increase (54%) in population forecast to 2031.
- Suburbs expected to see the largest population growth (in terms of actual numbers) are Menangle Park (+ 13,186) and Glenfield (+ 4,545).
- Suburbs expected to see the largest population growth (relative to their 2006 population) are Menangle Park, 13,186 (1035%), Gilead, 366 (93%) and Wedderburn, 284 (87%).
- Population decreases are forecast for Englorie Park (-30), Ambarvale (-67) and Glen Alpine (-55).

Table 8 – Population projections (2006-2031): Southern District

Suburb	2006	2011	2016	2021	2026	2031	Change (2006- 2031)	% Change (2006- 2031)
Ambarvale	7,067	7,100	7,000	7,000	7,000	7,000	-67	-1
Englorie Park	600	600	600	570	570	570	-30	-5
Gilead	394	400	480	600	710	760	366	93
Glen Alpine	5,255	4,800	4,900	5,000	5,100	5,200	-55	-1
Menangle Park	1,274	1,250	6,300	11,300	13,420	14,460	13,186	1,035
Rosemeadow	7,411	7,800	7,700	7,700	7,700	7,700	289	4
St Helens Park	6,132	6,700	7,000	7,200	7,428	7,656	1524	25
Wedderburn	326	290	400	500	570	610	284	87
Total Southern	28,459	28,940	34,380	39,870	42,498	43,956	15,497	54

Source: ABS Census 2006 / Urbis

Given the potential for housing demand to be met from migration from the Fairfield and Liverpool LGAs as well as from within Campbelltown LGA, the following overview of demographic profiles of Fairfield and Liverpool LGAs are provided below. This will be important in order to understand the potential profile of future residents and the design of future consultation processes with incoming populations which will both be inclusive and developed to more appropriately meet their needs in relation to open space provision.

4.1 Fairfield LGA Demographic Profile

A review of the ABS statistics and in particular the 2006 Census data reveals some important information about Fairfield LGA. Fairfield is a relatively disadvantaged LGA. It has a Socio-Economic Indexes for Areas (SEIFA) index of 915.36. This indicates a greater level of disadvantage than Campbelltown LGA (954.5) and Liverpool LGA (978). Approximately a third of the housing in Fairfield LGA (30.7%) is being purchased (including under rent/buy scheme). In Fairfield LGA, 39% of the population (over 15) have completed Year 12 or equivalent. This is lower when compared to NSW as a whole, which has 43.8% of its population having attained the same level of education. This low level of education may reflect a level of disadvantage, the type of employment in which the residents work and their income levels.

The Fairfield LGA has a significantly lower proportion of Indigenous persons (0.60%) within its population compared to NSW (2.1%). Key languages spoken at home include English 27.5% (English only), Vietnamese 17.0%, Arabic 6.4%, Assyrian 6.1%, Cantonese 5.6% and Spanish 4.3%.

Less than half (41.5%) of the population of The Fairfield LGA is Australian born. The majority of residents were born overseas including:

- 13.7% in Viet Nam
- 5.8% in Iraq
- 3.6% in Cambodia.

In order to cater to this population, housing in Ambarvale and Rosemeadow may need to be designed in a culturally appropriate and adaptable manner.

The community of The Fairfield LGA is predominantly young (with 15.2% of the population aged 15-24 years, compared with 13.3% for NSW as a whole). Furthermore, the LGA has a high proportion of children (14.9% aged 5-14 years; compared with 13.4%, for NSW as a whole). Housing provision will need to cater to families and be adaptable in the event of population change in the future.

The median household income for the Fairfield LGA is \$873, which is significantly lower than the NSW average of \$1036. The Fairfield LGA has a relatively high proportion of unemployed persons (10.5% compared to the NSW rate of 5.9%) which means there may be high demand for affordable housing in the area. The high proportion of one-parent families (21.4% compared to 16.1% in NSW) also suggests that there may be high demand for affordable housing.

The LGA also has a slightly lower proportion of people who have never married (32.0%) and a slightly higher proportion of separated/divorced persons (11.1%) compared with NSW as a whole (32.7% and 11.0% respectively). Employment is a potential issue. The Fairfield LGA has a high number of unemployed persons (10.5%, with 5.9% for NSW as a whole), the proportion of those engaged in full-time work is slightly lower for The Fairfield LGA (60.2%) than for NSW as a whole (60.8%) and the proportion of people in part-time employment, at 22.1%, is slightly lower than that for NSW as a whole (27.2%), suggesting less opportunities around creation of part-time or family-friendly employment hours.

In the Fairfield LGA, the most common responses for occupation for employed persons usually resident were Technicians and Trades Workers 16.9%, Labourers 15.9%, Clerical and Administrative Workers 15.5%, Machinery Operators and Drivers 12.7% and Professionals 11.6%. The proportion of Technicians and Trades Workers is slightly higher than the NSW average of 13.6% as well as the number of Labourers (the NSW average is 9.5%). Moreover, the most common industries of employment for persons aged 15 years and over were Cafes, Restaurants and Takeaway Food Services 3.4%, Road Freight Transport 2.8%, Manufacturing 2.4%, School Education 2.4% and Residential Building Construction 2.3%. These statistics indicate that cafes, restaurants and takeaway food services, road freight transport and manufacturing are significant employment industries found in Rosemeadow. The proportion of the population employed in the residential building construction industry may also benefit from the employment opportunities the development in Ambarvale may offer.

4.2 Liverpool LGA Demographic Profile and Implications for Open Space

A review of the ABS statistics and in particular the 2006 Census data reveals some important information about the Liverpool LGA. Liverpool is a relatively advantaged LGA. It has a Socio-Economic Indexes for Areas (SEIFA) index of 978. This indicates a greater level of disadvantage than Campbelltown LGA (954.5) and Fairfield LGA (915.36). Approximately a third of the housing in Liverpool LGA (39.1%) is being purchased (including under rent/buy scheme). In the Liverpool LGA, 41.4% of the population (over 15) have completed Year 12 or equivalent. This is lower when compared to NSW as a whole, which has 43.8% of its population having attained the same level of education. This low level of education may reflect a level of disadvantage, the type of employment in which the residents work and their income levels.

The Liverpool LGA has a lower proportion of Indigenous persons (1.3%) within its population compared to NSW (2.1%). Key languages spoken at home include English 47.1 (English only), Arabic 7.6%, Vietnamese 4.1%, Hindi 3.8%, Italian 3.2% and Spanish 3.1%.

Just over half (53.8%) of the population of the Liverpool LGA is Australian born. The majority of residents were born overseas including:

- 3.2% in Fiji
- 2.8% in Viet Nam
- 2.0% in Iraq.

In order to cater to this population, housing in Ambarvale and Rosemeadow may need to be designed in a culturally appropriate and adaptable manner.

The community of the Liverpool LGA is predominantly young (with 14.5% of the population aged 15-24 years, compared with 13.3% for NSW as a whole). Furthermore, the LGA has a high proportion of children (16.6% aged 5-14 years; compared with 13.4%, for NSW as a whole). Housing provision will need to cater to families and be adaptable in the event of population change in the future.

The median household income for the Liverpool LGA is \$1,082, which is slightly higher than the NSW average of \$1,036. However, the Liverpool LGA has a slightly higher proportion of unemployed persons (7.1% compared to the NSW rate of 5.9%) which means there may be demand for affordable housing in the area. The high proportion of one-parent families (17.4% compared to 16.1% in NSW) also suggests that there may be high demand for affordable housing.

The LGA also has a slightly lower proportion of people who have never married (30.9%) and a slightly lower proportion of separated/divorced persons (10.3%) compared with NSW as a whole (32.7% and 11.0% respectively). Employment is a potential issue. The Liverpool LGA has a high number of unemployed persons (7.1%, with 5.9% for NSW as a whole), the proportion of those engaged in full-time work is slightly higher for the Liverpool LGA (64.3%) than for NSW as a whole (60.8%) and the proportion of people in part-time employment, at 22.0%, is slightly lower than that for NSW as a whole (27.2%), suggesting less opportunities around creation of part-time or family-friendly employment hours.

In the Liverpool LGA, the most common responses for occupation for employed persons usually resident were Clerical and Administrative Workers 17.5%, Technicians and Trades Workers 16.6%, Professionals 14.0%, Labourers 11.7% and Machinery Operators and Drivers 10.6%. The proportion of Clerical and Administrative Workers is slightly higher than the NSW average of 15.4% as well as the number of Technicians and Trades Workers (the NSW average is 13.6%). Moreover, the most common industries of employment for persons aged 15 years and over were School Education 3.5%, Road Freight Transport 3.3%, Cafes, Restaurants and Takeaway Food Services 3.0%, Hospitals 2.9% and Defence 2.4%. These statistics indicate that school education, road freight transport and cafes, restaurants and takeaway food services.

4.3 Selected Demographic Indicators

Table 9 – Selected Demographic Indicators 2006

Characteristic	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Fairfield LGA	Liverpool LGA
Total Population	6,549,177	4,119,190	143,076	49,645	179,893	164,603
No. Private Dwellings	2,728,719	1,643,675	50,218	16,973	58,730	55,065
% Born Overseas	23.8%	31.7%	26.2%	15.5%	51.5%	37.8%
Languages spoken at home Other than English	Arabic (2.5%) Cantonese (2.0%) Mandarin (1.5%) Italian (1.3%) 2.1%	Arabic (3.9%) Cantonese (3.0%) Mandarin (2.3%) Greek (1.9%) 1.1%	Arabic (2.7%) Spanish (1.7%) Samoan (1.7%) Hindi (1.6%) 2.7%	Italian (1.6%) Spanish (0.8%) Arabic (0.7%) Cantonese (0.7%) 1.3%	Vietnamese (17.0%) Arabic (6.4%) Assyrian (6.1%) Cantonese (5.6%) 0.6%	Arabic (7.6%) Vietnamese (4.1%) Hindi (3.8%) Italian (3.2%) 1.3%
% Indigenous						

(Source: ABS Census 2006)

4.4 Age Profile

The table below details the age profile of the Bonnyrigg Estate in the context of the surrounding areas.

Table 10 – Age Profile 2006

Age Profile (BO4)	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Fairfield LGA	Liverpool LGA
0-4 yrs	420,434	270,814	10,657	4,234	12,025	13,606
% 0-4 yrs	6.4%	6.6%	7.4%	8.5%	6.7%	8.3%
5-14 yrs	878,483	534,214	23,363	8,453	26,754	27,319
% 5-14 yrs	13.4%	13.0%	16.3%	17.0%	14.9%	16.6%
15-24 yrs	871,714	569,896	23,735	6,695	27,344	23,874
% 15-24 yrs	13.3%	13.8%	16.6%	13.5%	15.2%	14.5%
25-54 yrs	2,753,218	1,816,105	60,240	21,687	76,071	72,171
% 25-54 yrs	42%	44.1%	42.1%	43.7%	42.3%	43.8%
55-64 yrs	719,551	422,182	14,471	4,355	17,615	14,105
% 55-64 yrs	11.0%	10.2%	10.1%	8.8%	9.8%	8.6%
65 yrs +	905,778	505,979	10,609	4,223	20,085	13,559
% 65 yrs +	13.8%	12.3%	7.4%	8.5%	11.2%	8.2%

(Source: ABS Census 2006)

4.5 Income and Loans

The following table compares data on loan repayments, rent and household income.

Table 11 – Selected Demographic Indicators 2006 (Means)* (Occupied Private Dwellings)

Selected Means	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Fairfield LGA	Liverpool LGA
Median Age (years) (B04)	37	35	32	32	34	32
Mean Monthly Housing Loan Repayments (B33)	\$1,517	\$1,800	\$1,500	\$1,800	\$1,500	\$1,733
Median Rent	\$210	\$250	\$185	\$250	\$180	\$195
Median Household Income (B28)	\$1,036	\$1,154	\$1,066	\$1,353	\$873	\$1,082

(Source: ABS Census 2006)

4.6 Family Type

Table 12 – Family Type

Characteristic	NSW	Sydney SD	Campbelltown LGA	Camden LGA	Fairfield LGA	Liverpool LGA
Total Families	1,716,220	1,063,384	37,901	13,539	47,286	42,193
% Couple Family with children	46.2%	49.3%	50.7%	56.6%	53.8%	57.2%
% Couple Family without Children	36.0%	33.2%	25.3%	28.5%	22.8%	24.0%
% One Parent family	16.1%	15.6%	22.6%	14.0%	21.4%	17.4%
% Family Households	67.9%	68.1%	76.9%	81.4%	79.3%	77.4%
% Lone Person Households	22.8%	21.6%	16.8%	13.7%	14.8%	15.1%
% Group Households	3.5%	3.9%	1.9%	1.7%	1.9%	1.8%

(Source: ABS Census 2006)

Note 1: All data from QuickStats tables

Note 2: Household data calculated as a % of private occupied dwellings

5 Community values regarding open space

Open space in Campbelltown has been identified by Council as generally having poor urban design resulting in a lack of integration with the urban fabric. Examples of this include high private fences abutting open space and concrete blocks along a road to stop people driving cars onto open space. As a result, Council considers there is poor public surveillance of many open spaces by adjoining residents due to poor urban design.

Council has also identified that there is a surplus of open space resulting in its underutilisation and that complementary uses, which could increase utilisation of open space, are lacking. Council notes there is also general lack of adequate shading, seating and amenities; use of open space by sporting clubs is variable.

Council has issues associated with the increasing cost of maintaining facilities due to their age, poor location, lack of ancillary uses and inadequate size. They consider that safety may also be an issue in many open spaces as there is poor lighting.

Council has recognised that any development or rezoning will need to address the public/private interface to ensure that safety and public surveillance is increased. Council has suggested that there is a need for all boundary roads for all new residential development to be made a priority to address the current poor integration of open space into Campbelltown's urban fabric.

Council has acknowledged that the subject land is heavily rubbished and of little utility value to the local population except as a buffer from neighbouring residential areas. Council noted that the subject land has some narrow footpaths running through some of the land, but very little of other facilities of equipment to encourage better utilisation.

Council has recognised that the subject land may perhaps be of some ecological value; it acts as a natural water course. It is relatively steep throughout, with some mature trees.

Council has suggested that more comprehensive consultation with adjoining residents will be required to understand by whom and how the subject land is used. They are also interested in the improvements that will be made to nearby regional open space to offset the loss of the open space on the subject land. We would support this suggestion in the design process.

5.1 Net Community Benefit

This rezoning of open space is part being funded by a package worth almost \$40 million which will allow low income families to buy a home, revitalise public housing and improve the quality of life for the local communities of Rosemeadow and Ambarvale. Projected benefits of this project previously identified by Housing NSW include:

- Housing supply aligned to projected future needs.
- A reduction in the concentration of public housing and increasing the social mix of the area.
- Improvements in the physical environment, open spaces and urban amenity.
- Improvements in subdivision and dwelling design to increase surveillance, connectivity and activation which will reduce crime, vandalism and anti-social behaviour.
- Achievement of quality affordable housing outcomes, assistance and opportunities for the most vulnerable.
- Training and employment opportunities and provision of an environment where young people can reach their full potential.
- Allow older people to live within their area with the support of their neighbours.
- An increase in social and economic participation of social housing residents through employment and training strategies.

- Actively engaging residents and other community members in decisions that affect them and their communities.

6 Potential Future Open Space Requirements

The target market is likely to extend to these populations as described above. Therefore the future profile will likely include both ends of the population age spectrum (due to the ageing of populations in Fairfield and Liverpool): young, aspirational home buyers and those renting both in the private rental market and in public housing, and potentially increased numbers of older people.

6.1 Open Space Needs for Families and Young People (including those with low incomes)

This potential social mix suggests that, as the physical and social profile of the community changes, it will be critically important to ensure that there is flexibility built into planning for and design regarding specific types of open space provision. As indicated above, even with the proposed redevelopment, current open space provision is regarded as sufficient to 2026. Given the cultural diversity evident across the Campbelltown community (including in the study area), a key to meeting community needs will be engagement of local communities in future embellishment of existing open space, both to ensure cultural appropriateness of the types of proposed improvements and to encourage 'buy-in' and ownership of these communal spaces among community members.

This will require future planned consultations with respective population groups to ensure that their current uses and preferences for use of open space and community facilities is understood, respected and able to be accommodated both in design and in plans of management. Urbis has earlier suggested (in relation to related redevelopment areas) that Council and State government agencies may also wish to consider offering traineeship programs for young people, in partnership with TAFE, around landscaping, ground-keeping, grounds maintenance or bushcare. We consider these are potentially important for areas such as Ambarvale and Rosemeadow, where there are high numbers of young people and high unemployment rates. They are also important for urban infill projects, to help build bonds between new and existing communities.

District Parks are likely to be an important component of open space provision in Ambarvale and Rosemeadow, given that they can provide for a concentration of uses and for potentially increased demand for a range of activities in the one location. There are a number of benefits from so doing, in that increased intensity of uses involves greater numbers of users, hence greater investment in the quality of infrastructure provided, casual surveillance and the likelihood of less anti-social behaviour.

Community development techniques which both promote community engagement and assist in bridging gaps between existing and new communities are also considered important as community building processes. These may include, for example, activities involving promotion of sustainability measures such as water or energy saving, community gardens, etc. Further, open space development should reflect the distinctness and difference of each local place, around which community members can develop a sense of attachment and celebration. In this regard there will be a need to ensure local community engagement so that 'place-making', including community art, particularly relevant for culturally diverse groups as a means of engagement, may also be part of the community engagement and ownership-building process.

6.2 Co-Location

Co-location of sporting facilities with staffed multi-purpose community facilities (especially if operated through a community partnership model) is considered one approach to addressing vandalism and graffiti at sporting facilities which might otherwise be vacant or isolated for long periods.

It is also considered important to encourage complementary uses for open space, eg walking/cycling paths in APZs; detention basins in playing fields.

6.3 Street realignment

The proposed street realignment associated with the rezoning is likely to increase community safety due to the elimination of cul-de-sacs and walkways where opportunistic crime is a potential threat. However, there may be a need to undertake a CPTED (Crime Prevention Through Environmental Design) Assessment at the design stage to ensure that opportunities for crime prevention are maximised through appropriate mitigation measures.

Conclusion

As this study indicates, provision of overall open space within Ambarvale/Rosemeadow is considered adequate for current levels and to meet future population growth as a result of the proposed rezoning without generating additional demands in terms of open space requirements. That said, there will need to be ongoing discussions between Councils, Government agencies and community members in relation to mis-matched pressure on open space which results in certain areas being over-utilised and others being under-utilised. There are indications that, with effective planning and engagement, an appropriate balance of uses can be achieved. To take this a step further, an appropriate balance or diversity of uses will derive other positive benefits, in particular ensuring greater visual surveillance and less anti-social behaviour in relation to open space use. As this report outlines, positive community engagement around open space planning and improvement can also engender positive effects in terms of community-building around and community 'stewardship' of open space.

While engagement will be designed to address the needs of existing residents, any such processes will also need to meet the needs of incoming residents, hence the inclusion of a demographic overview of adjacent Fairfield and Liverpool Councils to more effectively target future stakeholder consultations regarding open space planning and provision.

The proposed rezoning is likely to engender benefits particularly in relation to an increased social mix leading to greater diversity and opportunities for community-building; affordable housing in a market where entry can be constrained and decreased opportunities for crime and anti-social behaviour (through improved design and street layout). These benefits can be embellished through the provision of employment and training opportunities for local young people during the construction phase, as well as the investigation by agencies of longer-term opportunities for traineeships and employment of young people in an area of high unemployment in regard to the maintenance of open space – not just in relation to playing fields, but also in relation to maintenance of road verges, bushland, etc.

Appendix C Stormwater Assessment