

Community Facilities and Open Space Assessment - Marsden Park Final Draft Report

23 April 2012

Prepared for NSW Department of Planning & Infrastructure



Quality Assurance

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Final Report	Patricia Docherty	28/02/2012	Wayne Gersbach	18/04/2012

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Project Number: 84394

23 April 2012

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Executive Summary

This report has been prepared to inform the provision of open space, recreation and community facilities for the future population of the Marsden Park Precinct (MPP). The findings of this report are intended as input into the Indicative Layout Plan to be prepared for the precinct.

MPP occupies the south-western extremity of the North West Growth Centre (NWGC) and is separated from other precincts within the broader NWGC by Richmond Road.

MPP is approximately 1,800 hectares in area. It immediately adjoins the recently rezoned Marsden Park Industrial Precinct (MPIP) which will provide an employment base for up to 10,000 workers.

The precinct is currently serviced by an array of social infrastructure, some of which is expected to continue to service the release area once developed (e.g. existing hospitals and the nearby Marsden Park Primary School located on Garfield Road West, just outside the precinct).

The majority of community infrastructure need, however, is expected to be provided in concert with the progressive development and occupation of the precinct.

The basis of determining and allocating this future provision stems from the additional population the precinct is expected to accommodate. We estimate a future population for the precinct of 29,000 persons, occupying 10,000 dwellings, 60% of which are expected to be provided in a relatively 'low density' form of between 12.5-20 dwellings per hectare. This population estimate is based on our own demographic forecasts relating to population makeup, dwelling types and occupancies as well the concurrent precinct planning process for MPP.

From this population estimate we are able to determine need for specific social infrastructure and open space/recreation facilities.

Within MPP we estimate the need for the following community facilities:

- 1 youth centre
- 1 performing arts/cultural centre
- 1 district level community centre and 1 local centre
- 3 public primary schools
- 1 K-12 school

We note also that the threshold for a branch library (at 33,000 people) is approached and would be all-but met if the MPIP population was taken into consideration.

These facilities should, where possible, be co-located with other forms of social infrastructure and open space, creating community focal points within the precinct. This approach is supported by Blacktown Council's Community Resource and Recreation Hub (CRRH) policy.

We note however that an independent investigation regarding the appropriateness of the Grange Avenue waste disposal site for future recreational or other uses is being undertaken for Council and that any acceptance of this site as a potential CRRH is dependent on that report's findings. Obviously alternate sites would need to be identified should the waste disposal site be found to be unsuitable for open space or community facility purposes.

It may also be the case that the waste service site cannot be made immediately available, in which case an alternate provision (possibly on a temporary basis) may need to be incorporated

in earlier residential releases within MPP. For this purpose, we have provided a breakdown of the level of open space facilities that are required as the population of the precinct builds.

We note that specific types of social infrastructure are typically provided by the private sector. Government policy, for instance, supports the private provision of child care services on a competitive basis. Other services that are likely to be delivered privately include aged care services and accommodation and neighbourhood or district level medical services.

We also estimate, on the basis of accepted contemporary standards of provision, that a population of 29,000 persons for MPP generates a need for 82.07 hectares of open space, to be comprised of:

- 43.85 ha of local active open space; and
- 38.22 ha neighbourhood parks, including other passive land that connects recreational and community facilities or provides a stand-alone urban conservation/picnic purpose.

The actual amount of active open space, however, could increase if Council's requirement for double playing fields of 4.5 hectares each is applied.

Such an allocation would impact the amount of remaining passive open space provided within the precinct. Council's requirement at 4.5 ha for each double sports field would increase the sports park land take to 35.2 ha (and overall active open space requirement to and reduce the overall passive open space land take to 34.3 ha.

We note that the provision of district level facilities are required to service a population of 29,000 persons and that these are planned to be provided as part of a primary Community Resources and Recreation Hub (CRRH) located on the waste services depot site at Grange Avenue (subject to appropriate site clearances). This could be expected to include the colocation of the following facilities:

- 4 double sport fields;
- 1 large (district) aquatics centre;
- An indoor sports centre; and
- 8 hard courts, including 4 tennis courts and 4 basketball courts.

The remaining provision of open space is expected to be distributed throughout the precinct so as to provide access to residents and including:

- 4 double sporting fields, with a size of 4 ha each (noting that Council stipulates a higher minimum of 4.5ha for such a facility)
- A district level aquatic centre
- 7 hard courts, including 3 tennis and 4 basketball/netball courts
- 38.22 ha of passive open space, with a recommended minimum size of 0.3 hectares to ensure useability, and including connecting bikeways and walkways to linking different forms of open space and other services.

As discussed above a greater land take for double sports fields could be accommodated at MPP with some adjustment to the above requirements.

On the basis of these requirements we have provided a high level cost estimate of their provision. We would expect that a more detailed (quantity surveyor) estimate of costs would

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inform any local Contributions Plan from which funding for the identified services will be sourced.

Further to our estimation of need generated by the Marsden Park Precinct alone, we have also considered the possible additional provision of community and open space facilities that arise from the underlying assumption of Blacktown Council's draft S94 Plan for MPIP that certain facilities will be located within the Marsden Park catchment. We suggest an upgrade of service facilities rather than a greater land take is the most appropriate way of dealing with this additional requirement.

1 Introduction

1.1 Background

The North West and South West Growth Centres are expected to provide for 181,000 homes over a 30 year delivery horizon.

The North West Growth Centre (NWGC) is within the boundaries of three local government areas - The Hills, Blacktown and Hawkesbury. It comprises 16 Precincts, is approximately 10,000 hectares in area and will contain about 70,000 new dwellings for 200,000 people.

The Marsden Park Precinct (MPP), located in the NWGC was released under the NSW Government's Precinct Acceleration Protocol in July 2011.

MPP totals some 1,800 hectares and is located adjacent to the planned employment lands in the Marsden Park Industrial Precinct (MPIP) which was rezoned for development in 2010. MPIP contains 445 hectares of employment lands and represents a significant industrial and business park concentration.

Marsden Park is located wholly within the Blacktown LGA. It is approximately:

- 13 kilometres from Richmond;
- 14 kilometres from Penrith;
- 8 kilometres from Mt Druitt;
- 11 kilometres from Blacktown;
- About 4 kilometres from the new Schofields railway Station; and
- 8 kilometres from the new Rouse Hill Regional Centre

Precinct planning for the MPP involves the following steps:

- Preparation of an Indicative Layout Plan (ILP) to guide planning and assessment of development options;
- An amendment to the Sydney Growth Centre State Environmental Planning Policy (2006), incorporating a formal rezoning;
- Creation of a Development Control Plan that specifies development outcomes;
- The development of an Infrastructure Staging and Delivery Plan; and
- The preparation of a Local Section 94 Contribution Plan.

This report is intended to establish the requirements for social infrastructure for the MPP, to inform the precinct's Indicative Layout Plan and Section 94 requirements.

1.2 Development Context

MPP will, according to projections included in this report, provide for a dwelling yield of some 10,000 homes and an eventual population of 29,000 persons.

The eventual layout of development within MPP, including the size and location of specific community and open space facilities, will be affected by expected project yields and other existing and potential 'physical constraints'. These include an extensive riparian network, the heritage listed Clydesdale House and two transmission easements.

We note that the purpose of this report is to project community and open space needs based on residential need. The report is being prepared alongside other precinct planning work that will identify and allocate developable land and how it can best be utilised. There will therefore be a need to correlate the findings of this report with final land allocations, i.e. the location and amount of developable residential land that is finally determined to be available will impact residential yields and final population estimates which will in turn influence our estimates of need.

1.3 Assessment Scope

This Community Facilities and Open Space Report provides specialist advice to support the preparation of the ILP for the Marsden Park Precinct with regard to:

- Demographic profiles for the precinct
- The human services, community facilities and open space requirements of the precinct, having regard to the regional context, the GCC Development Code, existing facilities and services and likely needs of the incoming residential and workforce populations
- Opportunities for more innovative and site responsive strategies, including co-located and shared facilities
- Identification of design, spatial and locational criteria for recommended social infrastructure and their application in the draft Indicative Layout Plan (ILP) for the precinct
- Preliminary costings and delivery strategies suitable to inform further Section 94 Plans / Voluntary
 Planning Agreement (VPA)
- Strategies to maximise the connectivity of the precinct with adjoining areas.

Preparation of this report has included:

- Discussions and meetings with representatives of the Department of Planning and Infrastructure (DPI), relevant state agencies and Blacktown City Council (BCC)
- Review of existing plans, policies and background studies from Blacktown City Council and NSW DPI
- Projection of population and demographic characteristics of the MPP, informing the requirement for social infrastructure
- Discussions with government agencies and service providers about existing services and future requirements of the forecast population
- Analysis of the demand for different forms of social infrastructure and recommendations on overall provision.

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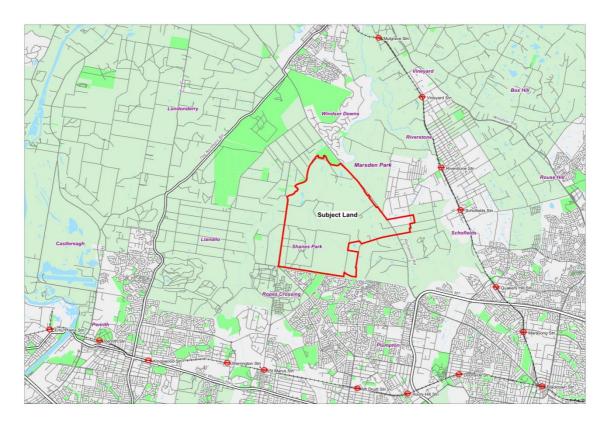
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Figure 1. Marsden Park – Regional Context

Source: MacroPlan (2011)





Source: MacroPlan (2011)

2 Policy Framework

A number of policies have been examined as part of this study to provide context and guidance for the planning and delivery of community facilities, human services and open space for the Marsden Park Precinct (MPP).

The policy review has considered:

- Metropolitan Plan for Sydney 2036;
- Sydney Metropolitan Development Program;
- North West Subregional Strategy;
- State Environmental Planning Policy (Sydney Region Growth Centres) 2006;
- Growth Centres Commission Development Code (2006); and
- Strategic and social planning policies of Blacktown City Council.

2.1 Strategic & Land Release Context

Metropolitan Development Program (MDP)

The Blacktown LGA has traditionally been a major source of greenfield land in western Sydney, historically contributing up to a third of total greenfield supplies.

In recent years, in response to a shortage of new land opportunities and partly due to the economic slowdown, the total production of greenfield land in Sydney has slowed.

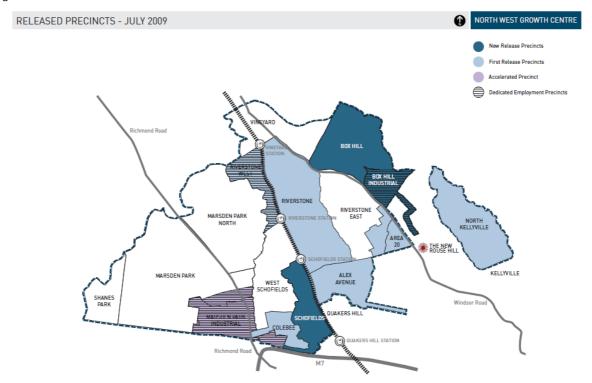


Figure 3. NW Growth Centre Released Precincts

 $Note: Marsden\ Park\ was\ released\ in\ July\ 2011\ and\ is\ now\ included\ with\ the\ above\ release\ areas.$

Source: NSW DPI Website (2011)

The latest update of the NSW Government's MDP, issued in 2010, addresses land production and housing activity for the 2008/2009 period and beyond.

According to the report overall dwelling production for Sydney in 2007/08 was a mere 14,795. The 2007/2008 MDP report notes that "this is expected to be the bottom of the current cycle". It forecasts that dwelling production will increase to 18,612 in 2008/09 then to 27,121 in 2012/13.

More recently, there has been a roll-out of land releases intended to boost the contribution to Sydney's new housing from greenfield areas. The precinct acceleration of MPP is part of this recent focus to increase overall housing supplies.

As a result of the decreasing total supplies Blacktown's current contribution to greenfield stocks has increased. Currently almost half of Sydney's greenfield supplies are in Blacktown, predominantly around its northern boundary with Baulkham Hills, centred on the Kellyville and Rouse Hill areas. In this context the MPP release represents an important addition to land stocks both locally and in the overall Sydney market.

Northwest Subregion Draft Subregional Plan

The draft North-West Subregional Strategy applies to the LGAs of the Hills Shire, Blacktown, Blue Mountains, Hawkesbury and Penrith. Although superseded by the more recent Metropolitan Strategy the Subregional Strategy provides a glimpse of expected housing and employment provisions at a sub-regional level. It suggests an additional 140,000 new dwellings within the North-West Subregion by 2031, representing almost a quarter of Sydney's total dwelling target.

Over 40% of these dwellings are to be located within the North West Growth Centre, whilst the vast majority of dwellings are to be located in other established areas within the subregion.

The table below indicates the allocation of new dwellings within the North-West Subregion to 2031:

Table 1.	North-West Subregional Strategy – Dwelling Targets

Local Government Area	Additional Dwellings to 2031
Baulkham Hills	21,500
Blacktown	21,500
Blue Mountains	7,000
Hawkesbury	5,000
Penrith	25,000
North West Growth Centre	60,000
TOTAL	140,000

2.2 The Growth Centres SEPP & Development Code

SEPP (Sydney Region Growth Centres) 2006

SEPP (Sydney Region Growth Centres) 2006 is the statutory planning framework that governs new release areas within the Growth Centres. It provides broad planning controls for development. Relevant objectives include:

- Enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and high quality local amenity
- Provide controls for the protection of land that has conservation value
- Provide for the orderly and economic provision of infrastructure.

Growth Centres Development Code

The Growth Centres Development Code provides an indicative guideline for open space and community facilities within the Growth Centres. It seeks to achieve:

- Quality design of new communities
- Investment in infrastructure that provides for the staging of development
- A diversity in housing types that suits the community
- Walking scale access to shops that serve the daily needs of residents
- Accessible local centres
- The right mix of land-uses that that provide for the community in relation to employment, shopping, recreation and open space.

With regards to community facilities the Code specifies:

- Provision of community facilities that service the different needs of the community and are within walking distance to residents and transport nodes
- Open space and community facilities that are accessible to the community
- Facilitation of opportunities for joint and shared use.

The Code also seeks to maintain undeveloped land for both a recreational and stormwater management purpose, with the objective to:

- Promote water sensitive urban design, integrating water management with networked open space
- Provide a balance of useable and accessible open space with neighbourhood and district stormwater management
- Provide an interconnected network of open spaces.

In relation to open space the Code's objectives are to encourage:

- Public open space that is usable both during the day and at night and is safe and convenient
- Integration of open space with other uses, creating focal points for the delivery of open space and recreation within the community.

Quantifying these objectives the Code contains thresholds to ensure a reasonable level of community facilities and open space provision based on population, dwelling yields and the demographic breakdown of the area.

2.3 Section 94 Contributions

In March 2011 NSW DPI issued a planning circular providing advice on a new Section 94E Direction in relation to the capping of development contributions. For residential development the following caps apply:

- A cap of \$20,000 per dwelling/lot for established areas;
- A cap of \$30,000 per dwelling/lot for Greenfield areas; with
- The Minister to consider the specific application of higher amounts.

Contributions may be sought for:

- Capital costs, including land acquisition costs;
- Public facilities that a council reasonably has to provide; and
- Public facilities that are needed as a consequence or to facilitate new development.

A key change to the development contributions framework has been the exclusion of riparian land, unless used for a public purpose. Current policy (*Local Development Contributions Guidelines, NSW Planning, 2009*) distinguishes between riparian land and open space through the following principles:

- An open space corridor may include a riparian corridor that will be available and accessible by the public for recreational purposes;
- A riparian corridor will generally not be accessible to the public, or its accessibility is based on it providing purely a visual buffer between development areas;
- A stormwater drainage corridor will have the specific function of water quality treatment to manage water flows and minimise the impact of development on the water quality of receiving waters; or
- A riparian corridor is generally a buffer to protect the existing bed and banks of a water course without any engineering (overt or otherwise) to manage water flows or environmental quality.

While the provision of open space can take advantage of riparian corridors, the above makes a clear distinction between open space and land for riparian corridor purposes.

2.4 Blacktown City Council Studies & Policies

The study has also involved a review of the following Council reference documents:

- Blacktown City 2025 a strategic road map to 2025.
- Blacktown City Council Social Plan 2006-2010

Blacktown City 2025 identifies several strategies to guide the future direction of the city. Relevant to the current assessment are strategies to deliver:

- A creative, friendly and inclusive City
- Environmental sustainability and vibrant centres
- Clean green spaces and places
- A sporting City.

Importantly, the Blacktown City Social Plan identifies a number of social concerns for the LGA including a lack of support services and social exclusion.

As part of the process of building an understanding for the provision or expected provision of community and open space facilities within MPP MacroPlan has also considered a range of other professional reports (for adjacent release areas), Blacktown Council Section 94 Plans (draft and current) and similar plans/reports conducted for the adjoining Hills Shire with respect to its planning for release areas within the NWGC.

We have also considered policies and approaches from Councils in the SWGC. References include:

- Blacktown Draft Section 94 Contributions Plan No.21 Marsden Park Industrial Precinct
- Box Hill Demographics and Social Infrastructure Assessment, Urbis, 2011
- Community Facilities and Open Space Assessment, Marsden Park Industrial Precinct, Elton 2009
- Blacktown Section 94 Contributions Plan No.20 Riverstone & Alex Avenue
- Camden Contribution Plan 2011
- Oran Park and Turner Road Section 94 Plan
- Liverpool Contributions Plan 2008 Edmondson Park

3 Existing Social Infrastructure

The MPP is currently a semi-rural area, however it is positioned amongst existing and planned urban precincts that currently contain or are expected to contain social infrastructure. It is important therefore to have regard for this existing and planned infrastructure, particularly if it is able to be accessed by future residents of MPP.

3.1 Existing Community Facilities

3.1.1 Schools

Marsden Park has access to a mix of both public and private primary and secondary schools. Some of the schools located within a 6km radius of the precinct are listed below. It should be noted that direct vehicular or pedestrian access from Marsden Park is not presently available to services located in the Shalvey/Plumpton area.

 Table 2.
 Existing School Provision, Marsden Park Locality

School	Range	Suburb	Postcode	Distance (km)	Enrolment 2008	Enrolment 2009	Enrolment 2010
Marsden Park Public School	K - 6	Marsden Park	2765	0.5	79	81	66
Australian Christian College	K - 11	Riverstone	2765	1.5	1049	697	533
Casuarina School	Special needs	Riverstone	2765	2.7	18	24	25
Riverstone Public School	P – 6	Riverstone	2765	2.9	283	290	294
Schofields Public School	K – 6	Schofields	2762	2.9	280	270	295
Norwest Christian College	K – 12	Riverstone	2765	3	454	380	361
St John's Primary School	K – 6	Riverstone	2765	3	178	163	139
Riverstone High School	7 - 10	Riverstone	2765	3.1	378	354	330
Vineyard Public School	K – 6	Vineyard	2765	4.4	57	65	60
St Joseph's Primary School (Schofields)	K – 6	Schofields	2762	4.5	314	266	242
Terra Sancta College (Schofields)	7 – 12	Schofields	2762	4.8	1,017	1020	968
Hassall Grove Public School	K – 6	Hassall Grove	2761	4.8	803	781	767
St Clare's Catholic High School	7 – 10	Hassall Grove	2761	4.9	717	765	763
Hambledon Public School	K – 6	Quakers Hill	2763	4.9	560	578	581
Shalvey Public School	K – 6	Shalvey	2770	5	486	477	434
William Dean Public School	K - 6	Dean Park	2761	5.1	329	320	287
Chifley College Bidwill Campus	7 - 12	Bidwill	2770	5.2	603	611	604
Bidwill Public School	P -6	Bidwill	2770	5.2	452	443	430
St Francis of Assisi Primary School	K -6	Glendenning	2761	5.3	645	655	726
Wyndham College	11 - 12	Quakers Hill	2763	5.4	645	655	726

The MPP is outside the typical neighbourhood catchment for the majority of public primary schools that presently service the locality (see below map). Private schools, however, usually have a wider catchment area and existing private schools may therefore attract students from the MPP.

Marsden Park is within the catchment of Riverstone High School, which caters for junior high school students and is located just over 3km from the precinct. Senior students may also be expected to enrol at other high schools in the area such as the Terra Sancta Catholic College at Schofields. The capacity of existing high schools as well as the current Marsden Park Primary School which is located outside the MPP on Garfield Road will be considered in the allocation of educational resources for the precinct.

3.1.2 Emergency Services

Existing emergency services in the locality include:

- Marsden Park Rural Fire Station at Garfield Road West
- Other Rural Fire Services at Schofields and Berkshire Park
- The Riverstone Police Station
- Riverstone Ambulance Service

Section 5 of this report outlines the provision of emergency and state services required for the MPP. It is expected that some demand for services will be met by the above current facilities.

3.1.3 Medical

There are currently several hospitals relevant to the precinct:

- Blacktown Hospital
- Mount Druitt Hospital
- Minchinbury Community Hospital
- Nepean Hospital at Penrith
- Hills Private Hospital
- Hawkesbury District Health Service at Windsor

Figure 4. Local Schools

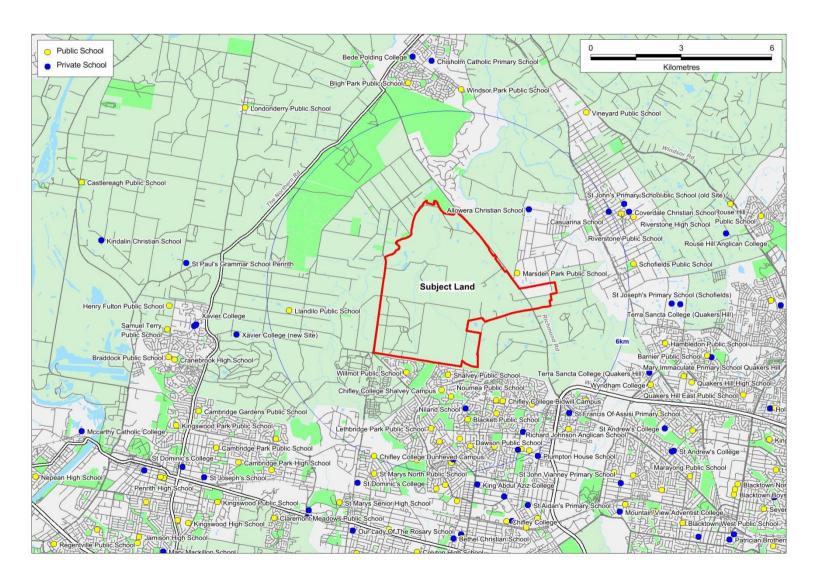
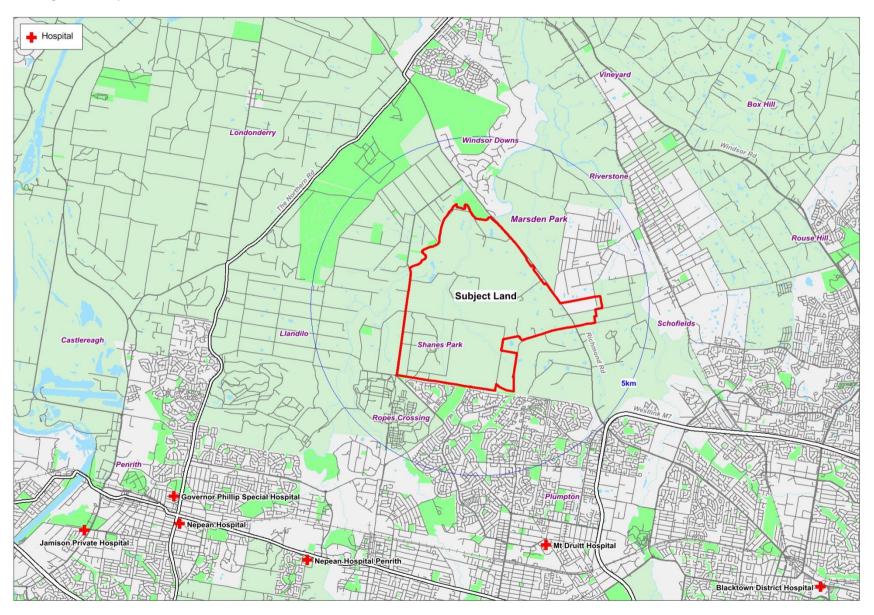


Figure 5. Hospitals



3.1.4 Local Facilities

The following existing local community facilities currently service the MPP locality:

- Riverstone has a number of local facilities including child care centres, a youth centre, an indoor sports centre and a library;
- Schofields has a council-owned multipurpose community centre; and
- Hassall Grove and Bidwill currently contain a neighbourhood community centre.

A range of religious and cultural facilities are located in the vicinity of Marsden Park, catering for a variety of religious and cultural backgrounds.

The figures below locate these community facilities in or close to the MPP.

Figure 6. Community Facilities

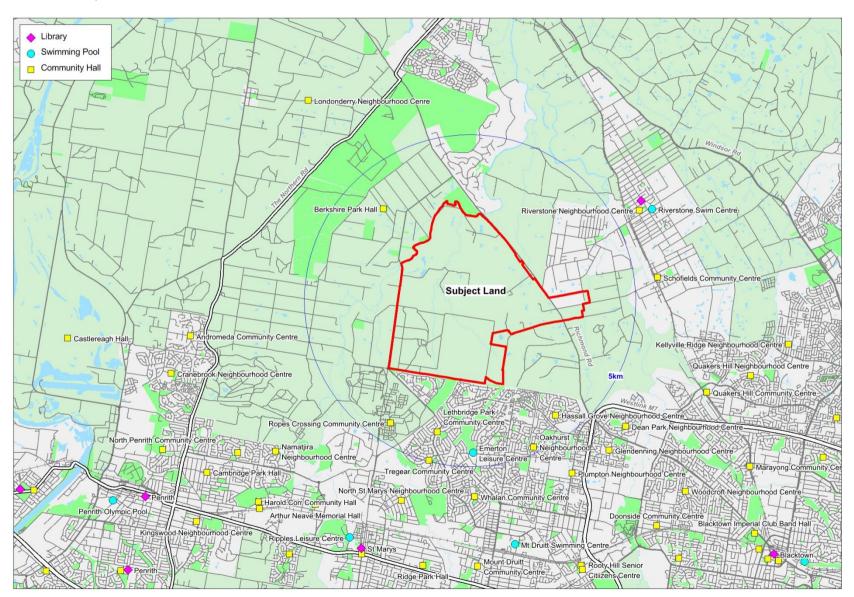
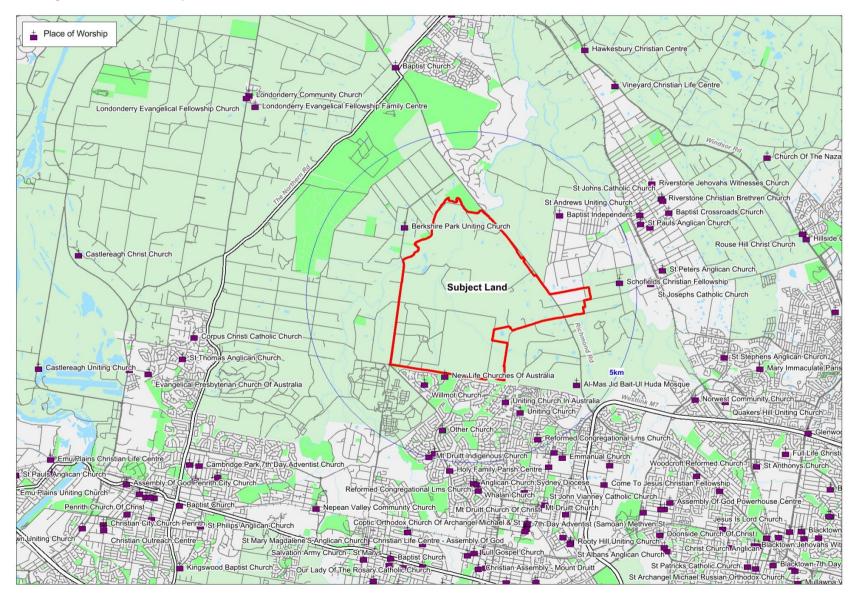


Figure 7. Places of worship



3.1.5 Open Space and Recreation

Open space that services the existing community is comprised of:

- The private Marsden Park Golf Academy on Richmond Road, a facility that is likely to be converted to urban land upon or following the rezoning of the release area
- The Riverstone Trotting Track
- Riverstone Park
- Grange Avenue Reserve
- Other private golfing facilities at Stonecutters Ridge, in nearby Colebee and at Windsor and Richmond.

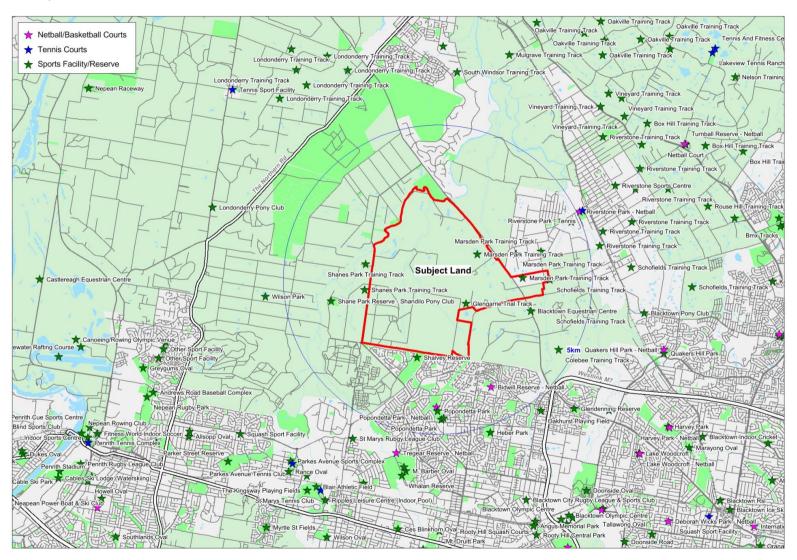
At a regional level there are a number of parks and conservation reserves that service the broader locality. Some of these are located in neighbouring LGAs. They include:

- Castlereagh Nature Reserve (495ha);
- Windsor Down Nature Reserve (340ha);
- Rouse Hill Regional Park (approx 49ha);
- Scheyville National Park (approx. 933ha); and
- The northern end of the Western Sydney Regional Parklands (approx. 5,280ha).

Also MacroPlan is aware that the presently unoccupied 560 hectare Air Services site located in the south-west corner of the precinct is intended to be preserved for environmental conservation purposes and will add to the regional open space that is available to service the NWGC.

There is a variety of other local neighbourhood and recreational facilities that exists or is planned to be provided in surrounding suburbs but most of this provision is of a local nature and serves its immediate catchment.

Figure 8. Sports facilities



4 Population & Demographic Forecasts

4.1 Projected Development Yields & Population

The indicative demand for open space, recreation and community facilities is derived from the expected population of the MPP. The forecast provided is based on the expected dwelling yields for the precinct and the assumed dwelling occupancy rate.

The process of deriving precise population forecasts for release areas is somewhat iterative, involving an initial estimate of potential dwelling yield and 'working back' once more specific information is known about the amount of developable land that is available, the nature of other constraints and expected housing product delivery.

For the purpose of our analysis we have started with NSW DPI's 2036 dwelling targets for MPP of 10,000 dwellings and have assumed a split between housing typologies based on the intended urban form. The results of this initial forecast are:

Dwelling Type	Dwelling p/Ha	p/Ha Proportion Number of dw		Area (ha)
High density	40+	10%	600	15
Medium density	20-40	30%	2,900	58 - 116
Low density	12.5-20	60%	6,500	81.25 - 130
Total			10,000	154.25 - 261

Table 3. Initial Population Forecast (Housing Typology)

The above breakdown assumes a housing typology that has a mix of density, with higher density dwellings intended to be located adjacent to identified neighbourhood and town centres, particularly the Marsden Park town centre proposed at the southern extremity of the precinct. A conservative estimate of dwelling typologies (i.e. not involving an over-estimation of high density development potential), based on recent greenfield experiences in Sydney, has been used.

A final review has further refined our yield estimates based on an adjustment of the percentage of likely dwelling formats and on the application of assumed dwelling occupancy rates. For this we have used 2006 Census data and rates applied by Blacktown City Council in its recent release area planning. The outcomes are summarised in the following table:

Dwelling Type	Proportion	Number of dwelling	People p/dwelling	Population
High density	10%	600	2.0	2,000
Medium density	30%	2,900	2.8	8,400
Low density	60%	6,500	3.1	18,600
Total		10,000	2.9	29,000

Table 4.Final Population Forecast for MPP

4.2 Demographic Characteristics of Release Areas

The expected demographic characteristics of MPP are driven by household formation and the profile of expected buyers of land release dwellings. The typical new land-release precinct attracts an influx of younger families and couples, many of whom are first home buyers.

First home buyers (FHB) are particularly affected by housing affordability, and typically more sensitive to housing prices than 'changeover' buyers who are not entering the market for the first time.

In 2009-2010 FHBs across Australia purchased dwellings with an average value of \$401,000 compared to changeover buyers whose average dwelling value was at \$553,000. This is reflected in the observed housing typology purchased by FHBs, as demonstrated in the table below:

Table 5. Housing Typology, FHB and Changeover Buyers

	First home buyer	Changeover buyer
Separate house	73.1	83.8
Semi-detached/row or terrace house	13.3	9.0
Flat/unit apartment	13.6	7.1

Source: ABS 2009-2010, Housing Occupancy and Cost

The two obvious implications are that the FHB market is sensitive to housing prices and has a greater propensity to live in higher density dwellings. These two observations are linked as higher density dwellings (or, in the case of release areas, a more compact form of detached or medium density living) tend to be less expensive than 'traditional' detached dwellings.

It reflects the state of housing affordability in Sydney's property market, resulting in housing product innovation, in the form of:

- New 'detached' Torrens title forms of row housing, typically with a 12.5 metre frontage or less;
- Detached dwellings with single garages, enabling smaller more affordable lots; and
- Smaller lot sizes of 12x20m².

The demographic profile of FHBs is relevant when considering the housing typology and provision of both social and physical infrastructure needed for the precinct.

Across Australia 79.8% of FHBs are contained within the 25-44 age cohorts, with 56.2% in the 25-34 and 23.6% in the 35-44 age groups. This indicates that the major market segments for housing products and areas seeking to attract FHBs need to provide facilities to this age cohort. It is also highly likely that this age group will either come as a couple (32.7%) or with dependent children (31.3%).

4.2.1 Demographic Analysis

Given the above analysis of the likely split in housing typology and the expected FHB market, it is predicted that the demographic mix for MPP will have a younger age profile.

Similar age profiles have been observed in the 'newer' nearby suburbs of Stanhope Park, Glenwood, Kellyville Ridge and Kellyville as compared to 'older' nearby suburbs.

Table 6. Percentage of population by age cohort for nearby suburbs, 2006

Age Cohort	Stanhope Park	Glenwood	Kellyville Ridge	Kellyville	Mount Druitt	Kings Langley
0-19	29	34	35	35	32	27
20-34	29	24	30	20	25	20
35-49	22	25	24	26	21	22
50-64	13	13	8	14	14	23
65+	7	4	3	5	8	8

The below table provides an indicative age profile of MPP once it becomes a fully formed precinct, based on an averaging of profiles from nearby established suburbs. An indicative demographic profile for MPP is included below. It indicates that the precinct's residents will be mainly younger families with children.

Table 7.	Estimated Population Breakdown by Age Cohort for MPP
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Market Segment	2015	2020	2025	2030
0-19	210	3,359	7,559	10,078
20-34	122	1,944	4,374	5,833
35-49	157	2,516	5,662	7,549
50-64	87	1,389	3,125	4,167
65+	29	458	1,030	1,373
Total	604	9,667	21,750	29,000

The almost equal breakdown between 20-34 and 35-49 age groups reflects the time horizon used to estimate population and the staging of dwelling construction within the precinct.

Construction is assumed to occur at a steady pace over time until 2028, with the main purchasers of dwellings in the 20-34 'first homebuyers' cohort. Over time as dwelling construction continues the early purchasers will age, so that by 2028 which is when construction is estimated to conclude, there will be a split between more recent purchasers who will represent the forecast 23% of 25-34 age bracket and the initial purchasers of dwellings now in the 35-49 age bracket, and a larger representation of 50-64 year olds.

The initial market group for the precinct however is expected to be a younger profile, with the following features:

- Young families, with young children or couples yet to start a family;
- Adults in the 25-49 age bracket; and
- Increasing family sizes over time, as couples have children.

Detailed analysis of the Blacktown LGA's demographic characteristics is provided at *Appendix A* to this report. The analysis confirms our expectation of a preference for detached housing product but also a market capacity for innovative higher density product particularly if it is able to be provided at a relatively affordable level. The analysis also considers various factors and conditions affecting dwelling demand.

5 Community Facilities

5.1 Planning for Social Infrastructure

Social infrastructure delivery is usually facilitated on a hierarchical basis with different design and size requirements depending on the type of facilities to be provided.

Standard benchmarks for the provision of services and facilities differ marginally. Whilst the Growth Centre Commission (GCC) Standards provide an initial guide for estimating the provision of recreation and open space, differing approaches are taken by specific state agencies and Blacktown Council. Alternate standards may, for instance, exist for:

- The Department of Education and Communities (DEC) school thresholds
- Sydney Area Health Services requirements for district and local level medical services

MPP is estimated to generate a population of 29,000 people and represents the largest of three precincts located to the west of Richmond Road (i.e. Marsden Park, Marsden Park Industrial and Shanes Park). It will comprise the bulk of the population expected to be accommodated in this south-western wedge of the NWGC.

The nature of precinct planning is incremental, and as such must have regard for previous precinct plans to ensure consistency and that facilities are not duplicated. There is also a degree of demand overlap that arises from the process of designing for precinct-specific need, as district or regional level facilities are located in certain precincts whilst demand for them is generated by others.

Given the location and size of the MPP in the context of its surrounding precincts it could be expected that both local and district level community facilities could be located within this precinct or have the potential to be co-located adjacent to planned commercial and retail offerings.

Whilst the assessment of demand and need undertaken for this report is focused on that generated by the MPP alone, a broader assessment of need generated by the adjacent MPIP has also been considered and is included in Section 7 of this report. We note that Blacktown Council has requested an even broader regional consideration be given to community facilities and open space needs. Such work falls outside the scope of the current brief.

5.2 Standards of Provision

The GCC Development Code (October 2006) provides a start point for the threshold provision of community infrastructure.

 Table 8.
 GCC Community Infrastructure Standards

TYPE OF FACILITY	BENCHMARK	SIZE	
EDUCATION			
Public Primary School	1:1,500 dwellings	3 ha/2.3 ha (if joint use)	
Public High School	1:4,500 dwellings	6-10 ha	
Tertiary	1 for whole NW centre		
HEALTH AND SOCIAL WELFARE			
Community Health Centre	1:20,000 people	2,000m ² (for 80,000 people)	
Hospital	2 beds:1,000 people		
Aged Care:			
Aged Care Housing	1:10,000 centre		
High Care (nursing home)	40 beds: 1,000 70+ people		
Low Care (hostel)	48 places: 1,000 people 70+		
Youth Centres	1:20,000 people		
Community Service Centre	1:60,000 people		
Childcare Facility	1 place: 5 children 0-4 yrs		
After School Care Facility	1 place: 25 children 5-12yrs		
CULTURE			
Branch Library	1:33,000 people	2,400m ²	
District Library	1:40,000 people	2,400m ²	
Performing Arts/Cultural Centre	1:30,000 people	0.24-8 ha	
EMERGENCY SERVICES			
Ambulance		To accommodate 12 ambulances	
Fire Station		2,000m ² min	
Police Station		4,000m ² (for first 10 yrs)	
COMMUNITY CENTRES			
Local	1:6,000	1,500m ² - 2,400m ²	
District	1:20,000	2,000-2,500 m ²	

Source: Growth Centres Commission (2006) Structure Plan

In addition to the GCC Code requirements, different thresholds provided by DEC for school provision have been taken into consideration in our estimation of need. These standards have a benchmark that is triggered at a higher dwelling yield level than the GCC Code thresholds and are nominated below.

Table 9. DEC Standards for School Provision

EDUCATION	BENCHMARK	SIZE
Public Primary School	1:2,000-2,500 dwellings	3 hectares
Public High School	1:6,000-7,500 dwellings	6 hectares

We note Blacktown Council's standards for the provision of community facilities in its release areas accord with those included in the GCC Code.

5.3 Community Needs

5.3.1 Social Infrastructure Needs Estimate

Application of the GCC thresholds to the population and dwelling yields provide the following social infrastructure requirements for the precinct:

 Table 10.
 Provision of Community Facilities for MPP

TYPE OF FACILITY	BENCHMARK	SIZE	SOCIAL INFRASTRUCTURE REQUIRED
POPULATION			29,000
DWELLINGS			10,000
EDUCATION			
Public Primary School	1:1,500 dwellings	3 ha/2.3 ha (if joint use)	6.67
Public High School	1:4,500 dwellings	6-10 ha	2.22
Tertiary	1 for whole NW centre		
HEALTH AND SOCIAL WELFARE			
Community Health Centre	1:20,000 people	2,000m ² (for 80,000 people)	1.45
Hospital	2 beds:1,000 people		58.12
Aged Care:			
Aged Care Housing	1:10,000 centre		2.91
High Care (nursing home)	40 beds: 1,000 70+ people		31.77
Low Care (hostel)	48 places: 1,000 people 70+		38.12
Youth Centres*	1:20,000 people		1.45
Community Service Centre*	1:60,000 people		0.48
Childcare Facility*	1 place: 5 children 0-4 yrs		566.88
After School Care Facility*	1 place: 25 children 5- 12yrs		107.80
CULTURE			
Branch Library*	1:33,000 people	2,400m ²	0.88
District Library*	1:40,000 people	2,400m ²	0.73
Performing Arts/Cultural Centre*	1:30,000 people	0.24-8 ha	0.97
EMERGENCY SERVICES			
Ambulance		To accommodate 12 ambulances	
Fire Station		2,000m ² min	
Police Station		4,000m ² (for first 10 yrs)	
COMMUNITY CENTRES			
Local*	1:6,000	1,500 - 2,400m ²	4.84
District*	1:20,000	2,000-2,500m ²	1.45

^{*} denotes Council (or possible Council) provision; Source: GCC, Department of Education, Blacktown CC

As suggested by the application of the above thresholds, the forecast population of MPP triggers the need for the provision of district community facilities such as a community health centre, a youth centre and a performing arts centre.

5.3.2 Council Community Facilities

Community Resource (& Recreation) Hub (CRRH) Model

Blacktown Council has adopted a CRRH Model for the provision of its local community facilities. The CRRH model is a multi-purpose facility that makes provision for otherwise stand-alone facilities, including:

- Neighbourhood/community centres;
- Child care centres;
- Youth centres; and
- Libraries.

This model provides hubs that act as a focal point for the delivery of community services, increasing the scale and scope of what single centres can deliver to the community. CRRH's combine the provision of services identified through the GCC standard.

A key design consideration for CRRH's is its accessibility to the community via town centres and co-location with other service facilities including active recreation facilities. Using this criterion, it would be expected, for instance to 'marry' proposed CRRH's with proposed local and town centres that are expected to be provided throughout MPP and areas of public open space or recreational provision.

A larger CRRH facility that would be expected to be associated with a town centre could provide the following facilities – a youth centre, performing arts/cultural centre, a district level community centre and a library.

If there were to be provision for a smaller CRRH format, to be co-located with a local centre, such could provide for a local community facility and possibly a smaller-sized youth centre.

Further discussion on the appropriate location of a CRRH is provided in Section 6 of this report which deals with local open space and recreational requirements.

Childcare Services

The threshold application suggests that a need for 567 child care places is generated by MPP.

We note that whilst local government has historically been involved in the provision of child care services current Federal Government funding programs encourage the provision of child care services by private enterprise. Increasingly local government plays a diminishing role in this sector or, where it does play a role, the service is heavily subsidised by existing ratepayers.

Analysis of other release areas suggests that a typical local government provision in this area is 1 local government childcare centre for every 1,190 children. MacroPlan understands that Blacktown Council's current child care services are underutilised when compared to private offerings and expects that the demand for child care services from the precinct will be met by the private sector as the precinct develops. We also note that Blacktown Council operates a Family Day Care Scheme which provides support to a network of over 90 childcare providers who operate from their individual homes.

Given current trends in the sector and Council's current support for family day care services it is recommended that no additional council-funded child care centres be provided at MPP.

5.3.3 State Agency Community Facilities

Schools

The NSW Department of Education and Communities (DEC) has developed the following benchmarks for the provision of state-funded schools in new residential areas. DEC's benchmarks for school provision are set at a higher dwelling yield than the GCC Code thresholds. They are nominated below.

Table 11. DEC School Thresholds

EDUCATION	BENCHMARK	SIZE	PROVISION FOR MPP
Public Primary School	1:2,000-2,500 dwellings	3 hectares	4
Public High School	1:6,000-7,500 dwellings	6 hectares	1

In addition to these thresholds, the following factors are also taken into consideration by DEC in determining actual levels of provision in new areas:

- Possible diversion of some students in new areas to existing schools (e.g. Marsden Park Primary School);
- Impact of existing or proposed non-government schools;
- The type and speed of residential development;
- The possible need for additional sites in large developments to cater for temporary enrolment peaks; and
- The characteristics of the expected population.

The provision of primary and secondary public schools will ultimately depend on the DEC's final planning report for the area. Whilst initially there may exist some potential to utilise existing school services it is recommended that the provision for 4 primary schools and 1 secondary school be made given the expected eventual population of the precinct and its location west of Richmond Road. It is understood however that the required secondary school could be a K-12 offering therefore absorbing the provision of 1 of the required 4 primary schools.

NSW Police

NSW Police considers the current provision of police stations to adequately service the expected growth. MacroPlan notes that the Marsden Park – St Mary's police station at King Street St. Marys is relatively new and that planning approval has been given for a new Riverstone station, with building works due to commence in 2012. NSW Police is likely to be a 'trailing' agency, with the need for new facilities driven more by crime and other social need statistics rather than raw population data.

NSW Fire Brigade

NSW Fire Brigade has not yet finalised a site finalised to locate a new Fire Station to service the Marsden Park Precinct. The Brigade has indicated that it is flexible with regards to the site's eventual location, with the main requirement being access to a main road, with the preferable site being close to the Garfield and Richmond Road intersection, and comprising a land area of at least 2,000m².

Health Services

There are no specific benchmarks for service provision used by Area Health but there a number of relevant ratios that can be used to provide an indication of demand. We note that:

- The 2006-2007 national average for the provision of beds per 1,000 people was 3.5;
- The equivalent OECD average was 3.6; and

While there is no consensus on the provision of General Practitioners, the General Practice Divisions identify 1:1000, while the Australian Department of Health and Ageing identify 1:1,500.

Although no specific benchmark criteria has been provided for the purposes of this report by the Western Area Health Service (WAHS) MacroPlan is aware of thresholds recommended by the Sydney South West Area Health Service (SSWAHS) in catering for demand generated by population growth. These thresholds vary marginally from the above GCC standards:

- 2.3 hospital beds people per 1,000 people;
- 1 mental health bed/placement per 2,773 people; and
- 1 integrated primary health GPs to 1,300 people.

Whilst no new hospitals are currently proposed for the NWGC, WAHS has advised that both Blacktown and Mount Druitt Hospitals are planned to expand in line with expected population projections. These hospital expansions are expected to service demand generated by the Marsden Park Precinct.

Blacktown Hospital's expansion will include:

- additional acute beds (including Intensive Care approximately 128)
- the establishment of an acute inpatient dialysis unit
- additional sub-acute rehab/stroke beds (10) and new sub-acute mental health unit (20 beds)
- emergency department expansion
- establishment of a comprehensive (ambulatory) cancer care centre
- additional antenatal care capacity
- enhancement of operating theatre capacity

The Mount Druitt Hospital expansion will include:

- emergency department expansion
- additional dental chairs (adult and paediatric)
- additional (10) sub-acute rehab beds

WAHS has also advised that an Integrated Health Care Centre planned for Rouse Hill will service the Marsden Park area, providing a range of district level facilities covering:

- GP primary care clinics;
- Specialist multidisciplinary/procedural clinics; and
- Community health services (e.g. mental health, drug health and child and family clinics, satellite pharmacy).

HealthOne Rouse Hill, opened in May 2010. This service currently provides integrated general practice and community health services two days per week, with a focus on chronic and complex care. It is understood that further integration of primary and community health services for the Rouse Hill area is also planned, and will involve an increase in the hours and days that services are offered from HealthOne, with a specific focus on priority target groups including people who do not have a general practitioner and local Aboriginal families.

The demand for other 'local' health services are expected to be met privately by local doctors or doctors attracted to the area by its growth. It is not anticipated that this local provision would be supplied by WAHS.

Justice

While no feedback has been received from the Attorney Generals Office it is noted that many of its services are likely to be provided at a regional level and draw on policies that apply to the wider NWGC.

State Emergency Services

Feedback and advice has been sought from NSW State Emergency Services Logistics team. They have been requested to consider the impact of the development in relation evacuation routes and procedures. No response had been received at the stage when this assessment report was finalised. It is anticipated the location and scale of community facilities will assist in disaster planning including evacuation routes, refuge centres and population concentrations including educational establishments, health services facilities.

5.3.4 Private Community Facilities

Aged Care Services

According to the GCC thresholds the population of MPP will generate the need for 3 aged care centres (housing), with up to 36 high care beds and 44 low care beds. It is however noted that:

- Aged care accommodation is predominately provided by the private and not-for-profit sectors; and
- That there is a tendency for the market to seek co-location of these facilities or at least near location with larger district level health services.

It is expected that aged care facilities are more than likely to be privately provided in the precinct, as is the industry norm. The uptake of that provision is a matter for market consideration but is not expected to be pressing given the younger age profile of the precinct, particularly in its formative years.

Child Care Services

Blacktown Council has recently adopted a child care service policy that requires that it monitors the provision of services by the private sector. Council will further consider the potential need to scale back its service provision should the market shift to private centres continue.

5.4 Summary – Community Facilities

This section has outlined requirements for local community facilities and services in MPP and the principles for their design and location. Section 7 provides further detail regarding the apportionment of community facilities that might also be considered in relation to the adjoining Marsden Park Industrial Precinct, accounting for its estimated additional 3,205 people and 1,121 dwellings.

The future resident population of MPP will require a mix of community facilities, at both a local neighbourhood level and at a district level. Local (Council-provided) facilities and services to meet the needs of the projected MPP population of 29,000 persons include:

- 1 youth centre;
- 1 performing arts centre; and
- 1 district level community centre and 1 local centre.

We note also that the threshold for a branch library (at 33,000 people) is approached and would be all-but met if the MPIP population was taken into consideration (see Chapter 7).

It is recommended, where possible, that these required facilities be co-located with other forms of social infrastructure and open space, creating focal points within the precinct. Specifically the community centre and performing arts centre could be expected to co-locate. Blacktown Council's CRRH model encourages such co-location, including the combined location of community and recreational services and facilities.

MacroPlan understands that Council has identified the need for 2 CRRHs, one in or adjacent to the MPP town centre, and a second facility adjacent to a local neighbourhood centre.

The provision of 3 public primary schools and a combined K-12 school is proposed by DEC to service the MPP catchment. We understand that DEC will consider the continued use of the existing Marsden Park Primary School on Garfield Road West during the 'start-up' years of the release area.

Consideration has also been given to the provision of different social infrastructure services via the non-government sector, either by for-profit or not-for-profit organisations. These services include:

- Childcare services;
- Aged care services; and
- Neighborhood/District level medical services (e.g. general practitioners or larger integrated medical centres).

It is expected that some of the private provided services will be located outside the MPP; however it is likely that local childcare services and medical services may choose to locate within MPP. This will be a function of the perceived demand for these services and alternate supply in surrounding precincts by private service providers.

6 Open Space and Recreational Requirements

Open space is comprised of both active and passive space and may be provided on a local, district or regional basis. It is generally accepted that greenfield estates cannot be asked to provide for regional facilities as these serve much broader populations.

In New South Wales the overall spatial requirements for active and passive space are typically accounted for through the application of the long held 2.83 ha per 1,000 persons standard, however the split between the amount of active space and passive space is determined through a local assessment of need and potential site constraints.

Assuming a precinct population of 29,000 persons determines a base level requirement of 82.07 hectares of open space for MPP. In this chapter we consider the specific make-up of this provision.

6.1 Open Space Standards

When evaluating the open space needs of a community, it is necessary to do so within a catchment hierarchy that reflects different types of open space and recreational facilities. The initial estimates provided are based on the Growth Centres Development Code which outlines the following hierarchy:

- Neighbourhood level facilities are triggered by populations of 2,000;
- Local level facilities are triggered by populations of 10,000;
- District level facilities are triggered by populations of 30,000; and
- Regional level facilities triggered by populations between 200,000 and 300,000.

 Table 12.
 GCC Community Open Space Standards

OPEN SPACE	BENCHMARK	SIZE	MARSDEN PARK
Overall Open Space	2.83 ha:1,000 people		82.07
Neighbourhood Open Space	1:2,000	1ha	14.50
Local Open Space	1:10,000	2ha	2.90
District Open Space	1:100,000	5ha	0.29
Local Sports Ground	1:10,000	1ha	2.90
District Sports Ground	1:30,000	2ha	0.97
Regional Sports Ground	1:200,000	5ha	0.15
Local Tennis Centre	1:10,000	1ha	2.90
District Tennis	1:30,000	2ha	0.97
Equestrian	1:30,000	1ha	0.97
Lawn Bowls	1:30,000	1ha	0.97
Netball/Basketball Local	1:10,000	1ha	2.90
Netball/Basketball District	1:30,000	2ha	0.97
District Aquatic Centre	1:100,000	1ha	0.29
Regional Aquatic/Indoor Sports Centre	1:300,000	2ha	0.10

Source: Growth Centres Commission (2006) Structure Plan

We note that the standards incorporated within the Growth Centres guidelines are indicative only and are based on different thresholds for district and regional facilities than used by Blacktown Council. Under Council's open space hierarchy, district level facilities are required for a population catchment of 40,000-100,000 people and regional facilities for populations of above 100,000 persons.

Also, whilst it is a long-held planning standard, the provision of open space at a rate of 2.83ha per 1,000 population is a quantitative standard only. Application of the standard must have regard for the quality of the open space offering and its accessibility to the dwellings it is intended to serve.

Other benchmarks are utilised in determining accessibility and in ensuring a high quality provision of open space. Qualitative principles used by Council include:

- 400 metre walking distance from residences to local passive open space;
- A provision of playgrounds for a mix of age groups;
- BMX and skate parks designed for older children and teens;
- Provision of walkways and cycleways to link and connect facilities;
- Provision of aquatic facilities within Council's existing aquatic hierarchy;
- The judicious location of sports grounds to minimise impact on residents;
- The integration of sports grounds and recreational spaces; and
- The need to ensure accessibility of sports facilities to the general community and a variety of sporting groups.

Utilising a combination of the GCC standards, the above qualitative measures and having regard for Council practices in adjoining and nearby release areas and in its S94 planning, the following indicative requirements for MPP are derived. We note in particular that planning for open space in the NWGC has generally applied the 2.83ha/1,000 population standard (used in Riverstone/Alex Avenue and as the basis of provision for the Parklea Release Area). Such provision is also consistent with release area planning for the SWGC (e.g. 2.81ha/1,000 is applied for Oran Park and Turner Road, 2.4ha for Edmondson Park and 2.9ha recommended for Austral-Leppington).

The derived open space requirements for MPP are depicted below. It is noted that these requirements incorporate a higher provision for some sporting facilities than the GCC standards, as per Council's practice for its release areas.

Table 13. Open space requirements for MPP

APPLIED OPEN SPACE REQUIREMENTS FOR MARSDEN PARK PRECINCT											
(29,000 people and 10,000 dwellings)											
	Benchmark Number Area										
Open Space	2.83 per 1,000	-	82.07 ha								
Parks	1.32 per 1,000	-	38.22 ha								
Sub-Total Passive			38.22 ha								
Sports Fields (double fields)	1: 1,850 7.8		31.35 ha								
Hard Courts		15	7.5 ha								
Basketball/Netball	1: 3,500	8	4 ha								
Tennis courts	1: 4,000	7	3.5 ha								
Local Aquatic Facility	1: 10,000	3	3 ha								
District Aquatic Facility	1: 40,000	0.725	- ha								
Indoor Sports Courts	1: 25,500	1.14	2 ha								
Sub-Total Active			43.85 ha								

6.2 Provision of Active Open Space

Active open space is defined as an area used for organized sporting and recreational activity. This usually includes sporting fields, hard court sports such as basketball, netball and tennis and leisure centres.

There are a number of factors to consider when determining actual need for active open space at MPP:

- The rate of provision of open space in adjacent precincts;
- District level provision of active open space planned or provided in nearby precincts;
- Physical constraints within the catchment that may restrict the amount of developable land that is available; and
- The forecast demographic characteristics of the precinct and the locational characteristics of the catchment.

Given the location of MPP at the south-western edge of the NWGC, the high number of young families expected to populate MPP and the youth profile of the precinct MacroPlan considers that the standards utilised by Blacktown Council are appropriate for the provision of active open space. These are incorporated in the above table.

Sportsgrounds

Council's preference for the design of sports fields is to provide 'double sports fields' that colocate 2 fields together, reducing the duplication of space and parking areas and allowing the shared use of the same facility by different sports. Single fields are not considered suitable for competition or multiple teams, reducing the availability of training and playing times required to support multiple sporting codes.

The recommended provision for sportsgrounds therefore is 7.8 double sports fields, totalling 31.35 hectares at 4 hectares for each field. Council has separately advised of its preference for double sporting fields of 4.5 hectares in size. Whilst we have not calculated this provision it could be accommodated at MPP but would impact the amount of remaining passive open space provided within the precinct. Council's requirement at 4.5 hectares for each double sports field would increase the sports park land take to 35.2 ha and reduce the overall passive open space land take by 3.9 hectares to 34.3 hectares.

At a catchment population of 29,000 persons the provision of district level sporting services is warranted at MPP.

MacroPlan understands that the waste services depot at Grange Avenue is intended to be utilised for district level provision of sporting and community services for MPP. This site is also identified in Council's draft S94 plan for the adjacent Marsden Park Industrial Precinct as one of two potential Community Resources and Recreation Hubs (CRRHs).

It is also understood, however, that an independent investigation regarding the appropriateness of the waste disposal site for future recreational or other uses is being undertaken for Council and that any acceptance of this site is dependent on that report's findings. Obviously alternate sites would need to be identified should the waste disposal site be found to be unsuitable for open space or community facility purposes. It may also be the case that the waste service site cannot be made immediately available, in which case some alternate provision (possible temporary) may be incorporated in earlier residential releases within MPP.

Outdoor Courts

The application of the above standards generates a requirement for 8 netball courts and 7 tennis courts. It would be expected that these would be co-located with the district sports park as part of a primary CRRH.

Indoor Sports Court

The provision of an indoor sports facility is required to service the Marsden Park population. This facility could also be co-located as part of a primary CRRH.

Aquatic Facilities

Utilising Blacktown Council's standards for active open space the need for 3 local community aquatic facilities is generated on a population basis (1 per 10,000 persons). As with the identified hard court and indoor recreation facilities it is expected that the required aquatic facilities would be located in conjunction with planned CRRHs.

As Council has preliminary plans for the provision of two CRRHs only there would seem to be an apparent economy opportunity to combine the third aquatic centre into one of two provisions within the CRRHs, effectively creating a district level provision.

Further economies could be gained if the district facility was to absorb other local demand so that one large (district) facility was provided in lieu of 3 smaller centres. This is consistent with the findings of the Blacktown Draft Section 94 Contributions Plan No.21 for the Marsden Park Industrial Precinct.

6.3 Provision of Passive Open Space

Passive open space provides recreational uses that do not involve a specific organised activity. It includes open space in the form of neighborhood parks and playgrounds, cycleway or walkway networks which often connect various active and passive areas and larger passive areas that may also provide a combined conservation and recreation (picnic) purpose.

Neighbourhood Parks and Playgrounds

Table 14. Provision of Neighbourhood Open Space

PARK	SIZE	PROVISION
Local	Minimum 0.3 ha, 400-500 from residences	38.22 ha

Neighbourhood Parks and playgrounds could potentially be co-located with sporting fields, making use of hard-court recreational facilities, and include:

- BMX and skate facilities;
- Children play equipment;
- Picnic and BBQ facilities;
- Unleashed dog exercise areas;
- Share bikeways and bike tracks; and
- Green spaces.

The following demographic breakdown provides a guide to the ultimate provision of facilities within neighbourhood parks, providing an indication of the likely demand for specialised equipment for different age groups.

Table 15. Parks for Younger Age Profiles

AGE COHORT	POPULATION	PROVISION	DESCRIPTION
0–4	3,122	1:500, 6 playgrounds	 Possible co-located with schools, sportsgrounds, hard-courts, community centres Specialised play equipment Children's bikeways
5-12	2,983	1:500, 6 playgrounds	 Possible co-located with schools, sportsgrounds, hard-courts, community centres More challenging equipment BMX/skate park

Cycleway and Walkway Network

While the GCC Code and the Office of Environment and Heritage do not allow for cycleways or walkways to be located in core riparian areas, they are permitted to be placed adjacent to this land. A cycleway-walkway network creates non-auto transit connectivity between different areas and access to key focal points within the MPP.

This is especially important given the proposed passive open space may include children skate and BMX facilities. Networked connections will ensure safe access to such facilities for younger residents.

Other Passive Open Space

Whilst the presence of riparian land and water ways represents a challenge in designing new settlements in terms of producing sufficient housing yields, such spaces can provide important vegetated links between recreation spaces and other community facilities and thereby enhance the liveability of urban spaces.

It is recommended that a level of open space provision for MPP include walkways and bikeways adjacent to riparian areas and between neighbourhood parks and proposed sports field, and that these connections be used for:

- Passive open space walking and biking;
- Urban conservation and picnic areas; and
- Unleashed dog exercise areas.

The area required for this type of passive open space usage is incorporated in the 38.22ha noted above for neighbourhood parks.

We note also that the draft S94 Plan for the MPIP incorporates a proposed conservation zone located in the Riverstone Precinct as a 'combined precinct facility' to which the future residents of MPP are expected to financially contribute. It is not clear whether this contribution is to be considered as part of MPP's overall open space provisions or whether it is regarded as an extra 'regional' requirement. We note that in other cases, proportionate contributions to district facilities have been factored into precinct requirements.

6.4 Summary

The total recommended provision of open space for MPP is 82.07 ha comprised of:

43.85 ha of local active open space; and

 38.22 ha neighbourhood parks, including other passive land that connects recreational and community facilities or provides a stand-alone urban conservation/picnic purpose.

We note that the provision of district level facilities are required to service a population of 29,000 persons and that these are planned to be provided as part of a primary Community Resources and Recreation Hub (CRRH) located on the waste services depot site at Grange Avenue (subject to appropriate site clearances). This could be expected to include the colocation of the following facilities:

- 4 double sport fields;
- 1 large (district) aquatics centre;
- An indoor sports centre; and
- 8 hard courts, including 4 tennis courts and 4 basketball courts.

The remaining provision of open space is expected to be distributed throughout the precinct so as to provide access to residents and including:

- 4 double sporting fields, with a size of 4 ha each (noting that Council stipulates a higher minimum of 4.5ha for such a facility)
- A district level aquatic centre
- 7 hard courts, including 3 tennis and 4 basketball/netball courts
- 38.22 ha of passive open space, with a recommended minimum size of 0.3 hectares to ensure useability, and including connecting bikeways and walkways to linking different forms of open space and other services.

We note however, as discussed above, that a greater land take for double sports fields could be accommodated at MPP. Such an allocation (based on Council's preferred option of 4.5 ha per double field) would impact the amount of remaining passive open space provided within the precinct. Council's requirement at 4.5 ha for each double sports field would increase the sports park land take to 35.2 ha and reduce the overall passive open space land take to 34.3 ha.

We note also that an independent investigation regarding the appropriateness of the waste disposal site for future recreational or other uses is being undertaken for Council and that any acceptance of this site is dependent on that report's findings.

Obviously alternate sites would need to be identified should the waste disposal site be found to be unsuitable for open space or community facility purposes.

It may also be the case that the waste service site cannot be made immediately available, in which case an alternate provision (possibly for a temporary period) may need to be incorporated in earlier residential releases within MPP.

To assist this consideration, the following breakdown of open space requirements has been prepared as a guide to the level of open space and the type of facilities that may be required as the population of the precinct grows. We use 5-yearly intervals to portray requirements.

 Table 16.
 Open Space Requirements Over Time - MPP

Market Segment	2015	2020	2025	2030
0-19	210	3,359	7,559	10,078
20-34	122	1,944	4,374	5,833
35-49	157	2,516	5,662	7,549
50-64	87	1,389	3,125	4,167
65+	29	458	1,030	1,373
Total	604	9,667	21,750	29,000
Active Open Space (ha)	0.91	14.62	32.89	43.85
Passive Open Space (ha)	0.80	12.74	28.67	38.22
Total Open Space (ha)	1.71	27.36	61.55	82.07

Table 17. Open Space Facilities Required Over Time - MPP

Active Open Space Facilities	2015		2020		2025		2030	
		Cumulative Number of Facilities & Area						
	No.	ha's	No.	ha's	No.	ha's	No.	ha's
Sports Fields (double fields)	0	0	3	12	6	24	8	32
Hard Courts	0	0	5	3	11	6	15	8
Basketball/Netball	0	0	3	1.4	6	3.1	8	4.1
Tennis courts	0	0	2	1.2	5	2.7	7	3.6
District Aquatic Facility	0	TBA	0	TBA	0	TBA	1	TBA
Indoor Sports Courts	0	0	0	0	1	2	0	0
Total Active	0	0	8	15	18	32	24	39

We note that the primary provision of open space in the 'early years' of the precinct's development is centred around passive open space. A requirement for sports fields and hard courts is not reached until after 2015, with 3 double sports fields and 5 hard courts being required by 2020. Approximately $8,000\text{m}^2$ of passive open space, however, is required by 2015. Passive open space, which includes neighbourhood parks, is typically required on a commensurate basis as the precinct's population grows. Obviously, the full complement of active and passive open space facilities is not required until the precinct's full population is reached.

7 Consideration of Adjacent MPIP

A consideration that will impact the overall provision of open space and community facilities is the inclusion of the future Marsden Park Industrial Precinct (MPIP) population in the estimation of demand. MPIP immediately adjoins MPP to the south and will accommodate 3,205 residents once fully developed.

According to the Draft Section 94 Contribution Plan for MPIP it is expected that much of the open space and community facilities generated by this precinct will be located in the Marsden Park Precinct, due to the small size of the MPIP population not triggering demand for standalone facilities. The only direct provision proposed for MPIP is for a 0.684 hectare local park at Reserve 934, located on the eastern side of Richmond Road.

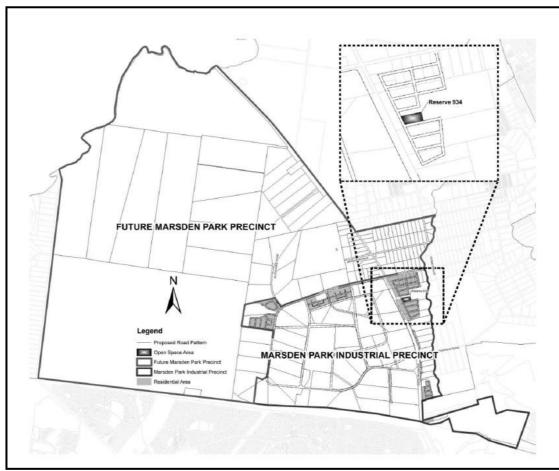


Figure 9. Marsden Park Industrial Precinct (MPIP), Reserve 934

Source: Draft Section 94 Contribution Plan – Marsden Park Industrial Precinct

Community Facilities

Potential sites for community facilities identified in MPP include the waste services site at Grange Avenue and another site in the northern part of the precinct.

Blacktown Council's Draft Section 94 Plan for MPIP suggests that no community facilities are to be located in the MPIP and that contributions from MPIP be sought for the 'land only' costs of two community facility sites in MPP (estimated total land area 1.605ha required for community facilities).

It is understood that there is a current lease agreement over the waste disposal site at Grange Avenue and that this lease may preclude immediate access to the site. As discussed earlier,

MacroPlan is aware also that further investigation is being undertaken to determine the suitability of the site for future open space/recreational uses. As the site is owned by Council the 'actual cost' to Council to date of this land, indexed to current values, would apply in any Section 94 costings.

Applying the GCC/BCC thresholds (and the DEC educational standards) to the combined MPP and MPIP expected populations provides the following service estimates.

Table 18. Community Facilities – MPP & MPIP Combined

COMMUNITY		PROVISION FOR MPIP	PROVISION FOR MPP	PROVISION FOR MPP AND MPIP
FACILITIES	BENCHMARK	(3,205 people and 1,121 dwellings)	(29,000 people and 10,000 dwellings)	(32,205 people and 11,121 dwellings)
EDUCATION				
Public Primary School	1:2,000-2,500 dwellings (DEC)	0.45	4	4.45
Public High School	1:6,000-7,500 dwellings (DEC)	0.15	1.33	1.48
Tertiary	1 for whole NW centre			
HEALTH AND SOCIAL W	ELFARE			
Community Health Centre	1: 20,000 people	0.16	1.45	1.61
Hospital	2 beds:1,000 people	6.4	58.12	64.5
Aged Care Housing	1:10,000 centre	0.32	2.9	3.2
High Care (nursing home)	40 beds: 1,000 70+ people	5.07	31.77	
Low Care (hostel)	48 places: 1,000 people 70+	6.08	38.12	
Youth Centres*	1: 20,000 people	0.16	1.45	1.61
Community Service Centre*	1: 60,000 people	0.05	0.48	0.53
Childcare Facilities*	1 place: 5 children 0-4 yrs	57	567	624
After School Care Facility*	1 place: 25 children 5-12yrs	11	108	119
CULTURE				
Branch Library*	1: 33,000 people	0.10	0.88	0.98
District Library*	1: 40,000	0.08	0.73	0.81
Performing Arts/Cultural Centre*	1: 30,000 people	0.11	0.97	1.08
EMERGENCY SERVICES				
Ambulance	To accommodate 12 ambulances			
Fire Station	2,000m ² min			
Police Station	4,000m ² (for first 10 yrs)			
COMMUNITY CENTRES				
Local Community Facility*	1: 6,000	0.54	4.84	5.38
District Community Facility*	1: 20,000	0.16	1.45	1.61

^{*} denotes Council (or possible Council) provision; Source: GCC, DEC, Blacktown Council

The inclusion of MPIP in the consideration of demand for community facilities increases the provision required for some facilities, including:

- Local community centres increase from 4 to 5 centres with the combined population (although, as 1.61 district centres are required a more logical provision would be for 1 district centre and 2 smaller local facilities to be provided); and
- Library services the threshold requirement for a district library is neared, although we note that overall need is still slightly below the threshold for a branch library (at 33,000) people. A branch library therefore ought to be provided.

Council's draft S94 Plan identifies two community service sites, on the basis of two CRRH's being provided within MPP. Whilst there are some economies of scale advantages with this combined offering, the practicality of this proposal hinges on the suitability of the primary CRRH site, being the Grange Avenue Waste Service Depot, for building purposes or for recreational use.

An alternate approach could see the identification of another or several CRRH sites, providing for a range of differently scaled services.

It is considered that, should the identified CRRH (waste service depot) site be available for use, it would be an appropriate site for a district level community centre that could service both MPP and MPIP.

With regards to the provision of library facilities, given that the benchmark for a branch level service is all-but met, such provision will service both MPP and MPIP residents.

With regard to primary and secondary school provisions, it has been indicated by DEC that a K-12 school and 3 primary schools will be sufficient to service the combined precinct populations, with the existing Marsden Park Public School (Primary) potentially being upgraded in place of the provision of a further primary schools.

Open Space and Recreation

Sub-Total Active

Similarly, as for the provision of community facilities, an expectation of the Draft s94 Plan for MPIP is that much of the open space required for MPIP can or should be provided within MPP.

The following estimate of the combined requirement for open space and recreational facilities for MPIP and MPP applies:

OPEN SPACE	BENCHMARK	PROVISION FOR MPIP (3,205 people and 1,121 dwellings)		PROVISION FOR MPP (29,000 people and 10,000 dwellings)		MPP AND MPIP e and (32,205 people and				
		Number	Area	Number	Area	Number	Area			
Open Space	2.83 per 1,000	-	9.07	-	82.07ha	-	90.17ha			
Parks		-	4.23	-	38.22	-	40.83ha			
Sub-Total Passive			4.23		38.22		40.83ha			
Sports Fields (double fields)	1: 1,850	0.87	3.45	7.83	31.35	8.7	34.82ha			
Hard Courts		1.72	0.86	15	7.5	17	8.5			
Basketball/Netball	1: 3,500	0.92	0.46	8.2	4	9.22	4.5			
Tennis courts	1: 4,000	0.8	0.4	7.2	3.5	8	4			
Local Aquatic Facility	1: 10,000	0.32	0.3205	2.9	3 ha	3.22	3ha			
District Aquatic Facility	1: 40,000	0.08	0.08	0.72	- ha	0.8	1ha			
Indoor sports courts	1: 25,500	0.12	0.26	1.14	2 ha	1.26	2ha			

Table 19. MPP and MPIP, Open Space requirement

Specifically, the inclusion of MPIP's population increases the need for passive open space as well as playing fields and hard courts and brings the total catchment demand closer to the district level aquatic facility threshold.

4.97

43.85

There are two ways to approach the inclusion of MPIP in the estimation of demand for open space within MPP:

- To identify the additional land and facilities required (as per the above table) and seek to place these in MPP – the disadvantage of this approach is that MPP would need to provide a greater share of open space than is normally expected, with a corresponding decrease in residential yields; or
- To increase the level of service only, without increasing the 'land take' within MPP.

Similar to the recommendation for an increased level of service for shared community facilities it would seem reasonable and appropriate to seek an increased level of provision for aquatic recreational services rather than to seek additional land.

Upgrading the useability of proposed facilities will adequately provide for additional demand from the industrial precinct, e.g. it would be possible to incorporate provision of a district level aquatic facility in lieu of smaller neighbourhood facilities.

We also note the proximity of MPIP to the proposed CRRH site near to the town centre, strengthening the connection between the precincts and the nexus in demand and facility location.

For the purposes of identifying the contributions made by the MPIP, the following percentage share of overall requirements is attributable to MPIP residents.

It is likely that the open space attributed to MPIP will be taken up by the district level facility located near the Marsden Park town centre. It is recommended the following is considered MPIPs proportion of use:

49.32

Community Facilities and Open Space Assessment - Marsden Park Prepared for NSW Department of Planning & Infrastructure

 Table 20.
 Share of Open Space used by MPIP

Open Space	Total Provision	MPIP share of cost
Overall Open Space	82.07	8.2 ha
Neighbourhood Parks	48	4.8 ha
Local Sports Field	34	3.4 ha
Netball/basketball courts	9	91% of a single facility
Tennis courts	8	80% of a single facility
Indoor sports courts	1	12.5% of the indoor sports facility
Aquatic Facilities	3	9% of the aquatic facility

8 Conclusion

This report has considered the need for community facilities and open space provisions to service an expected population of 29,000 persons in the Marsden Park Precinct (MPP) of the North West Growth Centre.

Our assessment of need has considered the underlying focus of greenfield release to contribute to housing supplies and has taken into consideration the likely demographic characteristics of the MPP, provisions in adjoining precincts and methodologies used to derive rates of provision, and current Blacktown Council policy.

Based on these factors we estimate a need for:

- 82.07 hectares, of high quality and useable open space incorporating :
- 38.22ha of passive neighbourhood open space, that will take the form of local parks with a minimum size of 0.3 hectares, bikeway and walkway linkages and larger stand-alone urban parks;
- 43.85ha of active open space and facilities, including 34 hectares for sports fields, 17 hard courts, an indoor facility and aquatic/leisure centre facilities.
- 1 youth centre;
- 1 performing arts centre
- A district level community centre;
- A neighbourhood level community centre; and
- 3 public primary schools and a K-12 school.

Our estimate of need does not include those community facilities that would otherwise be expected to be provided by the private sector. These services include:

- Childcare services, with the support of Blacktown Family Day Care programme;
- Aged care services; and
- Medical services, provided through local neighbourhood GPs as determined by market need.

MacroPlan has provided a high level cost estimate of the required facilities. This is included in *Appendix B* of this report.

We have also considered the possible implications of combining overall demand from the adjacent Marsden Park Industrial Precinct with provision within the Marsden Park Precinct and identified additional service levels that would result (e.g. the threshold for a branch library would be reached).

Appendix A - Demographics & Dwelling Demand

Key Demographic Indicators

In 2006, the Blacktown LGA had a population of 271,703, whilst the suburb of Marsden Park had a population of only 806 persons. Given the small population of Marsden Park (due to it being relatively undeveloped), our analysis has focused on Blacktown – South West SLA to provide a more comprehensive socio-economic snapshot of the locality.

We have used the Blacktown - South West SLA for historical assessment despite the fact that the subject site is actually located in the Blacktown North SLA. The subject site is located at the western extent of the Blacktown - North SLA and is closer to the main population centres in Blacktown - South West. The Blacktown South-West SLA provides a more accurate indicator of the important trends and potential target market for the subject site.

For all forward looking data sets, however (e.g. population forecasts) we have considered activity levels and population trends for the Blacktown – North SLA.

At the time of the 2006 Census, when compared to the Sydney Metropolitan average, Blacktown – South West SLA was characterised by:

- A relatively high average household size (3.12 compared with 2.71); this is due to the higher proportion of couple families with children in the SLA (43% to 36%).
- A high proportion (46%) of unskilled blue collar workers compared to Sydney's 27%.
- A below average proportion of persons aged 55 and over (17% compared with 22%); this is a likely contributing factor to the significantly lower proportion of owners (25% compared to 33%).
- Above average proportion of couples with children (43% compared with 36% for the Sydney Metropolitan average); reflected in the significantly higher proportion of separate houses (84% compared to 64%), which is a preferred dwelling type for this market segment.

More detail, incorporating relevant statistics for both the Blacktown North and South-West SLAs is provided in the figure overleaf.

Key Indicators – Marsden Park and Blacktown

	Marsden Park (State Suburb)	Blacktown - North (SLA)	Blacktown - South West (SLA)	Blacktown (LGA)	Sydney Metropolitan Area
Headline Indicators (2006)					
Population and Households					
Persons	804	87,425	93,663	271,709	4,119,190
Households	336	28,061	29,286	89,031	1,521,465
Average Household Size	2.39	3.12	3.20	3.05	2.71
Socio-Economic Snapshot					
Income and Wealth					
Median Household Income	\$36,920	\$72,592	\$51,116	\$57,460	\$72,038
variation from Sydney metropolitan median	-48.7%	0.8%	-29.0%	-20.2%	
Median Income Per Capita	\$20,904	\$30,108	\$21,424	\$24,596	\$37,910
variation from Sydney metropolitan median	-44.9%	-20.6%	-43.5%	-35.1%	
Occupation					
Clerical and Administrative Workers	14%	20%	19%	19%	17%
Community and Personal Service Workers	6%	8%	9%	8%	8%
Labourers	20%	9%	16%	12%	8%
Machinery Operators And Drivers	16%	8%	16%	12%	6%
Managers	17%	12%	6%	9%	13%
Professionals	4%	19%	11%	15%	24%
Sales Workers	9%	10%	10%	10%	10%
Technicians and Trades Workers	15%	14%	14%	15%	13%
Demographic Snapshot					
Age Distribution					
0-4 years	5%	9%	9%	8%	7%
5-14 years	15%	16%	19%	16%	13%
15-24 years	15%	14%	15%	15%	14%
25-54 years	40%	46%	41%	43%	44%
55-64 years	15%	9%	9%	9%	10%
65 years and over	12%	6%	7%	8%	12%
Family Types					
Couple family with children	27%	49%	43%	44%	36%
Couple family without children	22%	23%	18%	21%	24%
One parent family	11%	12%	21%	16%	11%
Other Family	2%	1%	1%	1%	1%
Lone Households	36%	13%	15%	16%	23%
Group Households	3%	2%	2%	2%	4%
Tenure Type					
Owner	53%	24%	20%	25%	33%
Purchaser	11%	52%	41%	43%	34%
Renter	36%	24%	38%	32%	32%
Other	1%	0%	0%	0%	1%
Dwelling Type					
Separate House	100%	91%	84%	85%	62%
Semi-detached	0%	8%	10%	11%	12%
Flat, Unit, Apartment	0%	1%	6%	5%	26%
Birthplace					
Australia	80%	68%	66%	66%	60%
Overseas	20%	32%	34%	34%	40%

Source: ABS Census (2006), MacroPlan Australia (2009)

Socio Economic Index - SEIFA

MacroPlan has assessed the relative level of economic advantage and disadvantage of residents in the Blacktown LGA for 2006 using the ABS Socio-Economic Index for Areas (SEIFA).

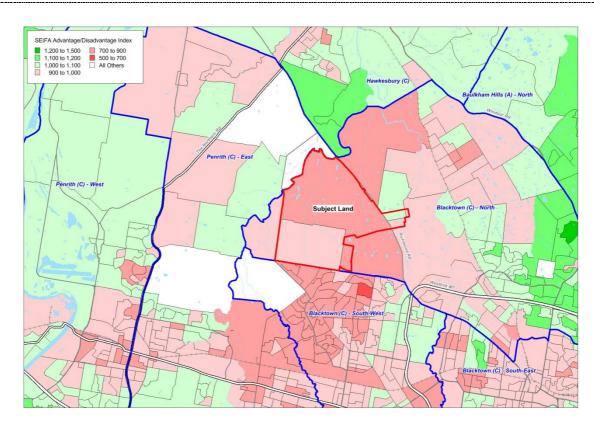
The Index of Economic Advantage/Disadvantage provides an indication of the relative economic advantage for a Census Collection District (CCD), representing approximately 250 households each. The index has a mean of 1,000, with a score above 1,000 indicating the area has a relatively high proportion of residents with high incomes or a skilled labour force, whereas a score below 1,000 indicates an area has a relatively high proportion of low incomes or unskilled labour.

The index is based on 21 indicators including low or high income, internet connection, occupation and education. It should be noted that this index does not include Indigenous status.

The SEIFA map indicates a wide range of scores across the LGA. The area immediately surrounding the subject site, however, registers at the lower end of the SEIFA scale.

It is important to note the high wealth areas in Blacktown – North SLA. This reflects the availability of new land releases in this area which has attracted residents of higher wealth (a trade-up market in addition to wealthier first home buyers). It also reflects the relative lack of new land and housing in the adjacent Baulkham Hills Shire, with Blacktown's offerings attracting a spill-over market from its wealthier neighbouring LGA.

SEIFA Map - Blacktown Area



Source: ABS (2006) and MacroPlan Australia (2009)

Historical Population Growth

MacroPlan has analysed the historical population growth of Blacktown – South West to understand current trends in population growth and age distribution. Between 1996 and 2006 the population increased from 86,047 to 93,541, an increase of 7,494 or 8.7%. In the same period, the growth rates of the older cohorts were significantly higher than the younger cohorts (persons aged between 55-74 years increased by 57.1% while the number of persons aged between 20-34 years declined by 11.3%).

Time series – Blacktown –South West SLA 1996-2006 – Population by Age

Age Cohorts	19	96	20	2001		2006		Change 1996 - 2006	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Growth	
0 - 19	32,115	37%	33,258	37%	33,677	36%	1,562	4.9%	
20 - 34	22,001	26%	20,468	22%	19,516	21%	-2,485	-11.3%	
35 - 54	22,650	26%	25,009	27%	25,387	27%	2,737	12.1%	
55 - 74	7,917	9%	10,317	11%	12,436	13%	4,519	57.1%	
75+	1,364	2%	1,976	2%	2,525	3%	1,161	85.1%	
Total	86,047		91,028		93,541		7,494	8.7%	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

Blacktown's ageing population and its strong representation of mid-cycle households will impact on housing demand. The population ageing, in particular, will result in an increased demand for smaller dwellings.

Labour Force

The unemployment rate in Blacktown – South West SLA has been in steady decline between 1996 and 2006 (11.7% to 9.4%). During this period the number the people unemployed has decreased, the labour force has increased in size and the number of people employed has also increased.

Time series – Blacktown –South West SLA 1996-2006 – Labour Force

Year	Employed	Unemployed	Participation Rate	Unemployment Rate	Not in Labour Force
1996	32,261	4,280	62.1%	11.7%	22,330
2001	33,350	3,885	60.8%	10.4%	24,041
2006	34,738	3,620	61.1%	9.4%	24,376
Change	2,477	-660	-0.9%	-2.3%	2,046

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

Blacktown's improving employment record is a positive market indicator, particularly given that a significant proportion of sales from any new land development are likely to be generated locally.

Occupation

Blacktown – South West SLA has a high proportion of unskilled blue collar workers and a low proportion of white collar workers. However this trend is decreasing - between 1996 and 2006 white collar jobs accounted for over 40% of job growth, and now account for 17% of jobs for workers in the SLA.

Time series – Blacktown –South West SLA 1996-2006 – Collar Status

	19	96 20		001 20		06	Change	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
White Collar	4,577	15%	5,085	16%	5,664	17%	1,087	42%
Blue Collar	15,172	49%	15,513	48%	15,733	47%	561	21%
Other	11,431	37%	11,887	37%	12,398	37%	967	37%
Total	31,180		32,485		33,795		2,615	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

This again is generally a positive indicator for new residential development, although occupation type is not a sole indicator of household wealth.

Household Type

Between 1996 and 2006 there was significant growth in the number of one parent families (1,336 households) and lone person households (1,046 households).

Time series – Blacktown –South West SLA 1996-2006

	19	996	2	001	2	006	Change	
	Number	Proportion	Number	Number Proportion N		Proportion	Number	Proportion
Couple family with no children	4,384	17%	4,373	17%	4,648	17%	264	11%
Couple family with children	12,609	50%	12,585	48%	12,230	44%	-379	-16%
One parent family	4,692	19%	5,173	20%	5,738	21%	1,046	45%
Lone person household	3,058	12%	3,572	14%	4,394	16%	1,336	58%
Group household	486	2%	583	2%	540	2%	54	2%
Total	25,229		26,286		27,550		2,321	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

While the proportion and number of couple families with children decreased (by 379 from 50% of households to 44% of households). While this decrease is relatively minor, should the trend continue there may be decreased demand for large family homes in the area.

Tenure Type

Between 2001 and 2006 the proportion of dwellings being purchased increased from 36% to 41% (1,625 dwellings).

Time series – Blacktown –South West SLA 1996-2006 – Tenure Type

	1996		2	001	2	006	Change	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
Fully Owned	5,773	23%	6,851	26%	5,502	20%	-271	-13%
Being Purchsed	10,134	40%	9,421	36%	11,046	41%	912	45%
Rented	8,986	36%	9,594	37%	10,426	38%	1,440	70%
Other	152	1%	331	1%	118	0%	-34	-2%
Total	25,045		26,197		27,092		2,047	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

There could be several causes for the growth in dwellings being purchased between 2001 and 2006. When analysed in tandem with the migration data (see Section 4.4) the most likely cause of the increase is internal churn as people sell their homes to trade up within the same SLA.

Dwelling Type

Due to data availability MacroPlan has analysed the change in dwelling mix and occupancy rates for the Blacktown LGA rather than Blacktown – South West SLA. MacroPlan has also included the 2006 dwelling mix and Blacktown – South West SLA for comparison.

Time series – Blacktown LGA - 1996-2006 – Dwelling Type and Occupation

	1996		2	2001		.006	Ch	ange
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
Separate House	66,045	87%	74,120	87%	77,963	83%	11,918	67%
Semi-detached	5,738	8%	7,343	9%	10,063	11%	4,325	24%
Flat, Unit, Apartment	2,990	4%	3,559	4%	4,596	5%	1,606	9%
Other	867	1%	499	1%	761	1%	-106	-1%
Total	75,640		85,521		93,383		17,743	
	1	996	2	001	2006		Change	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
Occupied	72,392	96%	82,089	96%	89,003	95%	16,611	94%
Unoccupied	3,248	4%	3,432	4%	4,380	5%	1,132	6%
Total	75,640		85,521		93,383		17,743	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

Blacktown has had significant growth in dwellings between 1996 and 2006, with 17,743 dwellings built during this period. A majority of these dwellings were separate houses (11,918 or 67%) followed by semi-detached (4,325 or 24%) and flats and units (1,606 or 9%). While a majority of dwellings constructed in that period were separate houses; as a proportion of total dwellings they declined from 87% to 83%. While the proportion of semi-detached dwellings (8% to 11%) and flats units and apartments (4% to 5%) increased.

Blacktown - South West SLA

Comparison of Blacktown LGA to Blacktown – South West SLA shows very similar dwelling type proportions and levels of occupation.

Blacktown - South West SLA 2006 - Dwellings

	2	000
	2	.006
	Number	Proportion
Separate House	25,610	84%
Semi-detached	3,135	10%
Flat, Unit, Apartment	1,842	6%
Other	32	0%
Total	30,619	
	2	.006
	Number	Proportion
Occupied	29,287	96%
Unoccupied	1,340	4%
Total	30,627	

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

The occupancy rate is slightly higher (96% to 95%) and the proportion of separate houses is also slightly higher (84% to 83%) but these differences are minor.

Migration Analysis

MacroPlan has analysed migration data for the Blacktown – South West SLA between 2001 and 2006. During that period the Blacktown – South West SLA experienced a net loss of 6,314 people to other locations in Australia.

Between 2001 and 2006; 28,582 people moved into a home in the Blacktown – South West SLA. These people came from three main sources - other SLA's in Australia (12,424), internal churn (people who moved from within the same SLA 11,791) and overseas (4,037). Therefore 41.25% of people moving into Blacktown – South West SLA come from within the SLA itself.

It is significant that there has been a net loss of people to the Penrith – East SLA. A likely cause of this is the presence of new residential developments in the area (Glenmore Park, Waterford, Ropes Crossings etc) or the general view of Penrith as a trade-up destination.

Blacktown –South West SLA Migration: 2001-2006

	Mig	ration - E	Blacktow	n South-	West SI	_A			
IN	5-14	15-24	25-34	35-44	45-54	55 - 64	65 - 74	75+	Total
Blacktown (C) - South-East	397	299	509	304	192	79	40	66	1,886
Penrith (C) - East	274	276	403	221	149	71	44	25	1,463
Blacktown (C) - North	250	216	333	197	117	60	15	29	1,217
Holroyd (C)	139	101	188	154	75	31	14	18	720
Parramatta (C) - Inner	94	37	109	115	49	7	10	5	426
Auburn (A)	106	55	63	106	42	18	13	5	408
Rest of Metropolitan Sydney	824	639	1,165	838	460	201	131	196	4,454
Regional NSW	273	251	231	168	93	57	30	42	1,145
Interstate	133	175	144	111	68	47	12	15	705
Total	2,490	2,049	3,145	2,214	1,245	571	309	401	12,424
NET	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
Blacktown (C) - South-East	80	48	178	34	21	10	15	46	432
Penrith (C) - East	-296	-244	-227	-202	-88	-38	-9	-4	-1,108
Blacktown (C) - North	-175	-122	-45	-223	-130	-50	-31	-5	-781
Holroyd (C)	55	30	72	84	28	17	-5	9	290
Parramatta (C) - Inner	77	-7	28	67	28	-8	6	2	193
Auburn (A)	93	25	24	87	27	9	10	5	280
Rest of Metropolitan Sydney	-509	-422	-421	-466	-254	-211	-28	68	-2,243
Regional NSW	-281	-66	-157	-312	-161	-327	-106	-4	-1,414
Interstate	-537	-249	-326	-378	-205	-192	-64	-12	-1,963
Total	-1,493	-1,007	-874	-1,309	-734	-790	-212	105	-6,314
	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
Overseas	837	804	1,124	725	289	141	92	25	4,037
	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
Internal	2,945	2,400	2,382	1,977	1,172	507	221	187	11,791

Source: ABS Census (1996-2006) and MacroPlan Australia (2009)

The high level of internal migration in the SLA combined with a high proportion of in migration from the other SLA's in the Blacktown LGA indicate that a majority of future residents at a new housing development at Marsden Park could be expected to originate from within the Blacktown LGA.

Population Forecasts

Sydney's population has grown at very high levels for the past two years – by 63,000 during 2006/07 and by over 55,000 people for 2007/08.

MacroPlan has used the ABS Department of Health forecasts to estimate the future population of the Blacktown – North SLA. This SLA is being used as it is the SLA that the subject site is located in and as such is the best indicator of local population growth going forward.

The local population is expected to grow significantly with an annual growth rate of 3.0% over the next 18 years. This is significantly above the expected growth rate of Sydney. The population is expected to increase by 70.1% during this period.

While the older cohorts will increase the most in percentage terms, a majority of growth will occur in the younger demographics with people aged between 20-54 accounting for a majority of growth (51.1%).

Blacktown - North SLA - Population Forecasts 2009-2027

Age Cohort	2009	2012	2017	2022	2027	2009 - 2027 Growth	2009 - 2027 Growth (%)
0-19	29,584	31,792	36,048	40,953	46,231	16,647	56.3%
20-34	24,653	27,694	32,424	36,160	39,480	14,827	60.1%
35-54	28,729	31,339	36,530	42,771	49,289	20,560	71.6%
55-74	13,097	15,211	18,742	22,025	25,476	12,379	94.5%
75+	2,630	2,980	3,848	5,375	7,420	4,790	182.1%
Total	98,693	109,016	127,592	147,284	167,896	69,203	70.1%
Average Annual Growth		3.37%	3.20%	2.91%	2.65%	3.00%	

Source: ABS Dept of Health Forecasts (2009) and MacroPlan Australia (2009)

In order for this population forecast to be achieved there will need to be a significant increase in dwelling supply.

Dwelling Demand Forecast

MacroPlan has calculated a high level estimate of dwelling demand in the Blacktown – North SLA. The forecast has been calculated using the population forecasts from the ABS (Forecasts made for the Department of Health, see below) using Census data to calculate current trends in average household size and the current number of occupied dwellings. The assumptions made in this forecast are conservative and are likely to underestimate demand.

Considering the low proportion of unoccupied dwellings, which MacroPlan expects to continue into the future, these have been removed as part of our forecasts. However if they were included the dwelling demand would increase only slightly.

As the Blacktown – North SLA is a part of the North-West Growth Centre it is expected to have significant dwelling demand over the next twenty years. MacroPlan estimates that there will an annual average dwelling demand of 1,244 dwellings between 2009 and 2012. This annual average dwelling demand is expected to increase to 1,639 dwellings per annum between 2022 and 2027.

Blacktown –North SLA - Population Forecasts 2009-2027

	2009	2012	2017	2022	2027	2009 - 2027	2009 - 2027 (%)
Population	98,693	109,016	127,592	147,284	167,896	69,203	70.1%
Population Change		10,323	18,576	19,692	20,612		
Average Household Size	3.12	3.09	3.02	2.96	2.90	-0.23	
Occupied Dwellings	31,602	35,333	42,213	49,761	57,953	26,351	83.4%
New Dwelling demand		3,731	6,879	7,548	8,193		
Dwelling Demand Per Annum		1,244	1,376	1,510	1,639		

Source: ABS Dept of Health Forecasts (2009), ABS Census (2006) and MacroPlan Australia (2009)

These dwelling forecasts indicate a significant demand for residential dwellings in the Blacktown - North SLA.

Factors and Conditions Affecting Dwelling Demand

Recent land sales in Sydney's north-west growth centre have been concentrated in the Kellyville Ridge and The Ponds subdivisions. Both areas have enjoyed strong growth in value per m².

We expect that there will be demand for about 1,300 new dwellings per annum in the northwest growth centre over the next five years, and then increasing over time. This outlook is conditional on sufficient progress on new subdivisions to the west of Kellyville – in particular, the Riverstone and Alex Avenue precincts. The competitive tension across the north-west (and subsequent impact on the cost of achieving an englobo land area) will be dependent on these precincts proceeding in the near future.

Highly fragmented land ownership presents difficulties for the timely and orderly release and servicing of Growth Centre land. In 2003 the (former) Department of Infrastructure Planning and Natural Resources (DIPNR) commissioned Edge Consulting to undertake a review of land ownership in the North-West and South-West sectors of Sydney. Edge Consulting showed that both Growth Centres are held in highly fragmented ownership.

For example the following issues arise:

- Different land owners with different attitudes to their land and homes for example, preparedness to move on, financial expectations, lifestyle considerations, and the way land is used as a source of family income.
- Difficulties in achieving practical and equitable outcomes for all owners in the
 preparation of precinct and contributions plans, in respect of road layouts, stormwater
 management systems, housing densities and the location of retail centres, parklands
 and the like.

The Edge Consulting Report 2003 found that approximately 92 percent of lots in the North-West Growth Centre are 3 hectares or less in size. However, this does not mean that 92 percent of all land holdings are below 3 hectares as some holdings comprise multiple lots. Relatively large land holdings are found at Box Hill and Schofields, in addition to the subject lands at Marsden Park.

It appears that the prospects for Marsden Park will be defined by its subdivision development cost base relative to those in Riverstone and Alex Avenue.

If development of Riverstone and Alex Avenue does proceed, but in a limited degree (due to fragmented ownership of lots and/or cost factors), then it is possible that the residential

development frontier will push more quickly across the south through Schofields and Schofields West, and west into Marsden Park.

This outcome would be supportive of the Richmond Road upgrading process, as Schofields West borders the Marsden Park and Marsden Park North precincts, so this would lead to more demands being placed on Richmond Road.

Importantly, Marsden Park is situated midway between north Blacktown – Baulkham Hills, Penrith and other development fronts and is, in MacroPlan's opinion ideally situated to trade to the cross market segments, both locally and further afar. A three-pronged marketing approach should be possible, incorporating affordable product, mid-ranged trade-up product and a premium offer.

Housing Typologies

Whilst our expectations for Marsden Park are that our there will be a strong preference for detached housing product we also expect that there is market capacity for innovative higher density product particularly if it is able to be provided at a relatively affordable level.

For the purpose of this report our housing yield estimates have been based on an assumption of likely dwelling formats and on the application of assumed dwelling occupancy rates. The outcomes are summarised in the following table:

Final	Population	ጲ	Housing	Tyne	Forecast	for	MPP
HIIIAI	ropulation	X	Housing	1 ypc	i Ui ecast	101	IVILL

Dwelling Type	Proportion	Number of dwelling	People p/dwelling	Population
High density	10%	600	2.0	2,000
Medium density	30%	2,900	2.8	8,400
Low density	60%	6,500	3.1	18,600
Total		10,000	2.9	29,000

We note however that there is a tract of land to the west of the precinct, which is identified as flood prone land. It is possible that this land might be acquired by Council for the purposes of open space or recreational objectives. Alternatively, there is potential for this land to be used for a limited scale of residential development. The magnitude of residential development in this specific area would be limited to approximately 100 lots with sizes ranging from, say, 600-800m².

Relative to the lots planned for the majority of the site, these western-most lots would allow for relatively large lot housing, with scope for an adjoining band of community title land (for the purposes of animal husbandry, equine recreation or the like). This community title land would be for the private use only for landowners of the affected lots.

It is likely that this product will eventually gain access from Stoney Creek Road, linking this part of the estate to an established rural-residential area, and providing an attraction for households commuting to Penrith.

An offer of larger sized allotments would be attractive for households downsizing from larger rural-residential parcels from the adjacent suburbs of Windsor, Richmond and Berkshire Park and/or form those that seek a larger residential allotment than would typically be provided within the rest of the estate.

Community Facilities and Open Space Assessment - Marsden Park Prepared for NSW Department of Planning & Infrastructure

It is also expected that demand for these lots would be solid, given that comparable lots will be difficult to achieve in the Riverstone and Schofields areas, as these precincts largely comprise small, fragmented holdings.

The provision of such housing choice is consistent with our view that Marsden Park is well placed to trade to cross market segments and will add to the choice of housing available within the estate.

Appendix B – Cost of Works Estimate

		\$/sqm	TOTAL Cost Comment
	Preliminaries	\$ 224.25	\$ 538,200.00
	Substructure	\$ 102.75	\$ 246,600.00
	Superstructure	\$ 752.00	\$ 1,804,800.00
	Finishes	\$ 223.00	
			Single storey, standard
Library (2,400 sqm)	Fittings	\$ 123.50	excluding loose fittings
	Services	\$ 705.00	3 1,032,000.00
	External Services	\$ 4.75	\$ 11,400.00
	Contingency	\$ 54.75	\$ 131,400.00
	Total Cost	\$ 2,190.00	\$ 5,256,000.00
	Size		1,500 sqm 2,500 sqm
	Preliminaries	\$ 186.00	\$ 279,000,00 \$ 465,000,00
			300-500 capacity, nall suitable
	Substructure		
Civic Centre (300-500	Superstructure	\$ 716.25	standard finishes. no air-
capacity)	Finishes	\$ 254.00	\$ 381,000.00 \$ 635,000.00 conditioning; costs can be
	Fittings	\$ 58.00	, , , , , , , , , , , , , , , , , , , ,
	Services	\$ 397.25	
	External Services	\$ 4.75	
	Contingency Total Cost	\$ 44.50 \$ 1,774.75	
	Size	3 1,774.73	2,000 sqm 2,500 sqm
	Preliminaries	\$ 298.00	
	Substructure	\$ 128.00	\$ 256,000.00 \$ 320,000.00 ante room high standard
0: : 0 : /	Superstructure	\$ 892.25	\$ 1,784,500.00 \$ 2,230,625.00 finishes, kitchen and bar
Civic Centre (500-700 capacity)	Finishes	\$ 360.50 \$ 122.50	\$ 721,000.00 \$ 901,250.00 facilities, air-conditioning:
capacity)	Fittings Services	\$ 898.75	\$ 1.797.500.00 \\$ 2.246.875.00 costs can be used to estimate
	External Services	\$ 4.75	\$ 9,500,00 \$ 11,875,00 cost for performing arts and
	Contingency	\$ 69.50	\$ 139,000.00 \$ 173,750.00 youth centre.
	Total Cost	\$ 2,775.00	
	Preliminaries	\$ 144.75	-
	Substructure Superstructure	\$ 87.00 \$ 561.15	-
	Finishes	\$ 146.50	-
Public Primary School (3ha)	Fittings	\$ 142.00	-
(Sila)	Services	\$ 250.75	-
	External Services	\$ 3.25	-
	Contingency Total Cost	\$ 1,370.00 \$ 2,705.40	■
	Preliminaries	\$ 258.25	
	Substructure	\$ 4.20	-
	Superstructure	\$ 569.00	→ I
Publice Secondary	Finishes	\$ 198.00	
School (6ha)	Fittings	\$ 262.50	=
	Services External Services	\$ 495.50 \$ 2.75	-
	Contingency	\$ 52.00	- ∤
	Total Cost	\$ 2,075.00	
	Grass		\$ 20,600.00 \$ 22,200.00
	Bituminous concrete		\$ 28,300.00 \$ 30,400.00 Including minimal cut or fill,
Tennish Courts	Plexipave or Rebound Synpave		\$ 39,400.00 \$ 44,500.00 preparation, drainage, 3.6m chain-wire fence, nets and
	Supergrasse or Sport Grass		\$ 53,800.00 \$ 57,700.00 posts, surface finish
	Total (per court)		\$ 142,100.00 \$ 154,800.00
Basketball/Netaball	Total (per court)		\$ 40,000.00 \$ 48,000.00 Mid grade, twin courts, 6 poles, 2 lights

	Playing Area	\$ 6.25	\$			250,000.00	Excludes top soil
	Amenities (toliet and changerooms)	\$ 2,390.00	\$			239,000.00	100m2
Sports Fields (total is	Play Ground		\$			80,000.00	Equipment
for 1 sports field)	Passive recreation	\$ 6.25	\$			31,250.00	Excludes top soil (0.5 ha)
	Lights	\$ 13.75	\$			550,000.00	
	Parking	\$ 81.00	ı	Exact quantum o	f pa	rking to be	
	Play ground	\$ 80,000.00		Exact number of	of p	arks to be	Equipment, \$80,000 each
	Passive Receration	\$ 0.85		determined, h	ow	ever it is	Seeded
Parks	Landscaping	\$ 6.50	recommended that 43.5 hectares of passive open space be provided for				Assumes 20% of site will be landscaped
	Lights (per park)	\$ 20,450.00	the purpose of neighbourhood parks.		3 lights per park		
	Size (Sqm)	\$/Sqm		1145		1234	
	Preliminaries	\$ 124.75	\$	142,839	\$	153,941.50	
	Substructure	\$ 88.50	\$	101,333	\$	109,209.00	
	Superstructure	\$ 522.75	\$	598,549	\$	645,073.50	Standard construction, brick
Basketball Centre	Finishes	\$ 221.75	\$	253,904	\$	273,639.50	walls, metal roof, timber
(Indoor courts centre)	Fittings	\$ 11.25	\$	12,881	\$	13,882.50	floor to playing area, change
	Services	\$ 185.75	\$	212,684	\$	229,215.50	rooms.
	External Services	\$ 5.50	\$	6,298	\$	6,787.00	rooms.
	Contingency	\$ 29.78	\$	34,098	\$	36,748.52	
	Total Cost	\$ 1,190.00	\$	1,362,584.35	\$	1,468,497.02	
Aquatic Centre	Total		\$	1,348,000.00	\$	1,453,000.00	Open in ground pool of fully formed concrete, including all plant and filtration equipment; 50 m in length,
							21 m wide 1/2.4 m deep

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