

Client

Department of Planning and Infrastructure

Project

Peer Review of Social Infrastructure and  
Demographic Assessment for Catherine  
Fields (Part) Precinct

Date

September 2013

Contact

Chris Manning  
9387 2600  
Chris@elton.com.au



**Sydney**  
t (02) 9387 2600

PO Box 1488  
Level 6, 332-342 Oxford St  
Bondi Junction NSW 1355  
f (02) 9387 2557  
consulting@elton.com.au  
www.elton.com.au  
ABN 56 003 853 101

---

Prepared by	Chris Manning
Reviewed by	
	Chris Manning
Date	July 2013
Job number	133/3234
Document name	Social infrastructure peer review final report
Version	2

---

This document is  
printed on paper produced  
using sustainable forestry  
practices and chlorine  
free pulp

# Contents

---

<b>Executive Summary</b>	<b>2</b>
<b>1 Introduction</b>	<b>4</b>
1.1 Background and context	4
1.2 Scope of this report	4
<hr/>	
<b>2 Policy framework</b>	<b>5</b>
2.1 Comment on MacroPlan Report	5
<hr/>	
<b>3 Existing social infrastructure</b>	<b>6</b>
3.1 Comment on MacroPlan Report	6
3.2 Additional information	6
<hr/>	
<b>4 Population and Demographic Forecasts</b>	<b>8</b>
4.1 Comment on MacroPlan Report	8
4.2 Average household size	8
4.3 Population numbers	9
4.4 Population characteristics	9
<hr/>	
<b>5 Community Facility Requirements</b>	<b>11</b>
5.1 Comment on MacroPlan Report	11
5.2 Issues raised in submissions	11
5.3 Revised community facility requirements	11
5.4 Conclusion	16
<hr/>	
<b>6 Open Space and Recreational Requirements</b>	<b>18</b>
6.1 Comment on MacroPlan Report	18
6.2 Issues raised in submissions	18
6.3 Likely recreation needs	18
6.4 Planning and design principles	19
6.5 Site opportunities and constraints	20
6.6 The overall quantum of open space	20
6.7 District sport and recreation facilities	21
6.8 Requirements for sporting open space	22
6.9 Requirements for passive open space	23
<hr/>	
<b>7 Conclusion</b>	<b>25</b>
7.1 Comments on MacroPlan Report	25
7.2 Population forecasts	25
7.3 Community facility requirements	25
7.4 Open space requirements	26
<hr/>	
<b>8 References</b>	<b>27</b>

# Executive Summary

This report provides a peer review of the *Social Infrastructure and Demographic Assessment for the Catherine Fields (Part) Precinct* prepared by MacroPlan Australia in 2012. It has been prepared for the Department of Planning and Infrastructure (DP&I) to provide advice on issues raised in response to the public exhibition of the draft Precinct Plan and to support and inform the final Precinct Plan.

The report is not intended to provide a full and comprehensive assessment of demographic issues and social infrastructure requirements, as this was the intended purpose of the initial MacroPlan study. Instead, each chapter provides commentary on the adequacy of the MacroPlan report and updates or supplements information provided to ensure a comprehensive assessment has been undertaken in keeping with best practice social planning approaches.

This Report contains seven chapters.

**Chapter 1** outlines the purpose of the report and provides background and context.

**Chapter 2** provides a brief comment on the policy context provided in the MacroPlan report and considers the summary to be adequate.

**Chapter 3** notes the absence of information in the initial assessment relating to the capacity of existing community facilities to meet future demand generated by the Precinct, particularly those provided or proposed within the adjacent Oran Park / Turner Road Precincts and the Leppington Major Centre. This chapter provides additional information to address these gaps.

**Chapter 4** sets out population forecasts for the Precinct. The occupancy rates proposed in the MacroPlan report to be applied to different types of dwellings have been revised, in keeping with recent experience of the types of households moving to nearby release areas. These revised rates have then been applied to the dwelling yields associated with the final ILP for the precinct.

Based upon a yield of about 3,229 dwellings, comprising a mix of low density, small lot and medium density dwellings, the future population of the Precinct is likely to be around 10,210 people.

It is assumed that families with children will be the predominant household type in the Precinct. These families will span a mix of age and life cycle stages. The provision of a proportion of smaller lot dwellings

will also ensure that the development appeals to households without children, including both young couples as first home owners and empty nester households downsizing. The proportion of older people and lone person households is expected to be low, based upon experience in surrounding areas.

**Chapter 5** examines the requirements for community facilities to be located within the Precinct. A population of the size anticipated will generate demand for the following local facilities:

- A multi-purpose community centre of around 429sqm will be required to provide indoor space for community activities and programs and meet Camden Council's standards for provision. This facility will be owned and managed by Camden Council and will require a site of around 1,000 sqm. The final ILP appropriately locates the community centre within the proposed neighbourhood centre, to reinforce the role of the centre as the main community focal point for the Precinct.
- A public primary school. A site of 2 hectares has been identified in the final ILP and agreed in principle with the DEC, on the basis that the school will share access to the adjoining public open space, which will be owned and managed by Camden Council as a local park. This will be subject to negotiation of detailed arrangements for shared use between DEC and Camden Council. To ensure shared use outcomes can be negotiated, DPI may need to set up a framework for negotiations and facilitate the negotiation process.
- A variety of facilities and services to be provided by non-government or commercial providers, including:
  - A Catholic primary and high school
  - Childcare centres
  - Medical centres

In addition, the forecast population will contribute to demand for district level facilities to be provided within or close to the Oran Park town centre. Based upon Camden Council's standards of provision, this will include:

- Contributions equivalent to 133 sqm for a district community centre
- Contributions equivalent to 429 sqm of library floorspace in Oran Park

The precinct will also fall within the catchment area for the public high school proposed for Oran Park.

District and regional level services, including a performing arts and cultural centre, specialist health

and medical facilities, TAFE, university, courthouse, police and emergency services, will be provided at the Leppington Major Centre and other centres across south western Sydney.

**Chapter 6** considers requirements for open space, sporting and recreation facilities to be located within the Precinct. It has identified a need for:

- A minimum of 28.89 ha of open space to meet Council's minimum requirements based on a standard of 2.83 ha / 1000 people
- Local neighbourhood parks distributed equitably through the Precinct
- About 8 playgrounds to be provided across the precinct according to the hierarchy proposed within the *Camden Play Space Strategy 2010-2020*
- Two double playing fields of approximately 4.6 ha each, located so as to provide equitable access
- Linear open space to provide a network of walking and cycling trails
- Four outdoor sports courts to be provided off-site as part of the precinct's contributions to a larger district / regional sports complex. For consistency with the planning of district / regional sports complex proposed in the *Oran Park Section 94 Contributions Plan*, this contribution all up should be equivalent to about 3.84 ha of land.

The final ILP has incorporated these requirements appropriately. It has provided 29.71 ha of open space, which allows 6.7 ha for neighbourhood parks, 9.2 ha for two double playing fields, 3.81 ha for off-site contributions to district sporting facilities and around 10 ha of land adjoining or within the buffer to the riparian corridor for informal recreation, walking and cycling trails.

**Chapter 7** provides a conclusion, summing up the findings and recommendations of the study.

# 1 Introduction

This report has been prepared for the NSW Department of Planning and Infrastructure (DP&I) to provide advice in relation to social infrastructure requirements for the Catherine Fields (Part) Precinct.

The report addresses three objectives:

1. It provides a Peer Review of the Social Infrastructure and Demographic Assessment prepared by MacroPlan Australia in 2012 to inform the preparation of the draft Precinct Plan for the Catherine Fields (Part) Precinct
2. It provides advice to the Department on the issues relating to social infrastructure raised in submissions received in response to the public exhibition of the draft Precinct Plan
3. It provides additional advice to support and inform the final Precinct Plan with regard to social infrastructure requirements.

## 1.1 Background and context

The Catherine Fields (Part) Precinct (the Precinct) is located wholly within Camden local government area and occupies the southern portion of the larger Catherine Fields Precinct, within the South West Growth Centre. The precinct adjoins the Oran Park Precinct to the west, the Turner Road Precinct to the east, and the developing residential area of Harrington Grove to the south. The precinct covers approximately 322 hectares of rural land and borders two major roads, Oran Park Drive and Camden Valley Way. Key features of the Precinct include the historically significant Oran Park House and the South Creek Corridor, which bisects the precinct.

This precinct was released by the Minister for Planning in August 2011 under the Precinct Acceleration Protocol.

A draft Precinct Plan and associated technical studies have been prepared for the precinct and were exhibited in late 2012.

The draft Indicative Layout Plan (ILP) for the precinct provided for a minimum of 3,100 dwellings, and a population of about 9,500 people. It proposed a range of housing types at varying densities across the Precinct. The majority of the Precinct has been identified for low density residential development, predominantly single dwellings typical of urban growth areas in other parts of Sydney.

Since the exhibition period finished in December 2012, the Department of Planning and Infrastructure has reviewed the public submissions received and worked to resolve outstanding matters. A final Indicative Layout Plan has now been prepared, with an overall site yield of 3,229 dwellings.

The technical studies informing the draft Precinct Plan included a *Social Infrastructure and Demographic Assessment*, prepared by MacroPlan Australia. The DP&I has sought a peer review of this study, to provide a second opinion as to its findings. Further work has also been required to address submission issues and to provide further advice on social infrastructure requirements as the planning of the Precinct is finalised.

## 1.2 Scope of this report

This report is not intended to provide a full and comprehensive assessment of demographic issues and social infrastructure requirements for the Precinct. It recognises that this was the intended purpose of the initial MacroPlan technical study.

The purpose of this current report is to provide comment on the findings of the original MacroPlan report, to address any gaps in its assessment and to provide supplementary advice in relation to the Precinct Plan as it is finalised. This report does not repeat all the information provided in the MacroPlan report, and so should be read in conjunction with that report as a background document. This report does, however, supercede the MacroPlan report as the social infrastructure technical study supporting the final Precinct Plan for the Catherine Fields (Part) Precinct.

In keeping with its purpose as a peer review, this report is structured similarly to the MacroPlan report.

## 2 Policy framework

### 2.1 Comment on MacroPlan Report

The description of the policy context for social infrastructure planning for the precinct provided in the MacroPlan report is considered to be adequate. It provides an outline of key NSW Government and Camden Council policies that have a bearing on social infrastructure provision in the precinct. No further information is required to supplement this review.

## 3 Existing social infrastructure

### 3.1 Comment on MacroPlan Report

The MacroPlan assessment identifies some types of social infrastructure in the area surrounding the precinct but is quite incomplete. In particular, core types of facilities such as community centres, childcare centres, government high schools, youth facilities, community health services, welfare and support services, aged care, cultural facilities and tertiary education facilities have not been included in the assessment.

While many existing facilities in the surrounding area have been listed or mapped in the MacroPlan report, there is no assessment of their capacity to meet any demand generated by the Precinct and no conclusion as to what the pattern of existing social infrastructure means for the planning of social infrastructure for the Precinct. Accordingly there is no identification of how / where the district and regional level needs of the future population can be met in the wider area.

Importantly, the report does not describe what facilities are being provided / proposed within the adjacent Oran Park and Turner Road Precincts, or the regional facilities proposed within Leppington Major Centre to serve the SWGC as a whole. The district level facilities being provided within Oran Park are of particular relevance and need to be factored into the assessment.

### 3.2 Additional information

It is beyond the scope of this report to complete the assessment of existing social infrastructure just for the sake of comprehensiveness. However, the most relevant facilities for the Precinct will be those to be provided within the adjoining Oran Park and Turner Road Precincts, and the regional facilities proposed for the Leppington Major Centre. These are outlined below.

#### 3.2.1 Proposed regional and sub-regional facilities

The *Demographic and Social Infrastructure Assessment for the Austral and Leppington North Precincts* (Elton Consulting 2011) considered requirements for regional social infrastructure to serve the South West Growth Centre as a whole, given that the Leppington Major Centre will be located in the North Leppington Precinct. It found

that most of the existing regional facilities and services, including those in Camden and Narellan, would not have capacity to meet the future needs of the Growth Centre, given the very substantial population growth envisaged.

The *Demographic and Social Infrastructure Assessment for the Austral and Leppington North Precincts* recommended that a number of new regional level facilities to serve the Growth Centre as a whole be located in or near to the Leppington Major Centre. These included:

- A major performing arts cultural centre
- A Regional Integrated Primary and Community Care health facility
- A TAFE campus
- Possibly a courthouse, police station and emergency services facilities
- Major competition level aquatic and indoor sporting facilities
- Major sporting stadium.

The *Demographic and Social Infrastructure Assessment for the Austral and Leppington North Precincts* also recommended that the South West Growth Centre be divided into three sub-catchments for the purposes of providing sub-regional social facilities and services. The Catherine Fields Precinct was included in the sub-catchment for the Oran Park town centre. However, the recommendation to include the Catherine Fields Precinct within this catchment for sub-regional facilities came after the social planning for the Oran Park town centre had been undertaken and the Section 94 Contributions Plan for the Oran Park Precinct had been prepared.

Thus although the needs of the Precinct population for sub-regional and district level social infrastructure have been proposed to be met by facilities in and around the Oran Park town centre, population forecasts for the Precinct have not been factored into the planning or costing of these facilities.

In the report *Oran Park Community Facilities and Open Space Assessment* prepared by Elton Consulting in 2007, it was recommended that Oran Park town centre provide a branch library, district community centre and youth centre initially for a forecast population of 35,500 people (being the combined populations of the Oran Park and Turner Road Precincts), but capable of expansion in a second stage to accommodate future demand from Marylands and Catherine Fields Precincts. It was also recommended that Oran Park town centre contain a district cultural centre and a leisure centre with indoor sports and aquatic facilities to serve the wider



catchment that would include Marylands and Catherine Fields Precincts. Subsequently these recommendations were amended in the Section 94 Contributions Plan for Oran Park, to recognise changes to Section 94 contributions arrangements which only allowed contributions to be levied for local, as opposed to district, level facilities. However, scope remains to add to the Oran Park facilities as planning for the remaining precincts within this proposed catchment occurs.

Within the current *Oran Park and Turner Road Precincts Section 94 Contributions Plan* (Camden Council 2008), proposed facilities with potential to serve as sub-regional or district level facilities for the whole Oran Park catchment (as defined in the *Demographic and Social Infrastructure Assessment for the Austral and Leppington North Precincts*) include:

- A district multi-purpose community resource centre incorporating some space for cultural activities and a branch library
- A recreation and youth centre
- A leisure centre with land area of 10 hectares with indoor courts and aquatic facility, sports oval with grandstand and a number of sports fields and courts, designed to service a population catchment of 75,000 people
- A sports park comprising 12 hectares, to contain two sports grounds (each containing two double playing fields) for a population catchment of 50,000 people

It should be noted that the only facilities that have been built in capacity for populations beyond the Oran Park and Turner Road Precincts are the sports park and leisure centre. It is also noted that the proposed sporting facilities at Mick Doohan Reserve form part of the proposed district level sports park (subject to agreement on the proposed VPA).

Non-Council district level social infrastructure proposed for the Oran Park catchment includes:

- Sub-regional Integrated Primary and Community Care health centre and private sector medical services
- Aged care facility – the Chesalon Retirement Village
- Oran Park Anglican College
- Places of worship
- Commercial leisure and entertainment facilities
- Fire brigade.

### 3.2.2 Local level facilities

When fully developed, the adjoining residential communities of Oran Park, Harrington Grove, Gledswood Hills and Gregory Hills will contain a variety of local facilities and open space areas. These will include local community centres, childcare facilities, primary schools, parks, playgrounds and sporting fields.

However, these facilities have all been planned for specific local population catchments that do not include the Precinct, and accordingly they will not have capacity to service the Precinct population in addition to their planned catchment. The Precinct will need to make its own provision for local social infrastructure.

#### Schools

Identifying sites of existing and proposed schools in and around the Precinct is a key component of social infrastructure planning for the Precinct. Issues that have not been identified in the MacroPlan report include the following:

The Precinct already contains two new schools:

- St Justins Primary School, a Catholic primary school on Oran Park Drive
- St Benedicts College, a Catholic high school also on Oran Park Drive.

Planning for Oran Park Precinct has made provision for:

- One government high school, co-located with a primary school as a K-12 school. The site for this school is located to the north east of the Oran Park town centre
- Two to three additional government primary schools
- The Oran Park Anglican College, a K-12 school.

It is understood that Gregory Hills will also include a government primary school.

## 4 Population and Demographic Forecasts

### 4.1 Comment on MacroPlan Report

The MacroPlan report contains several iterations of population forecasts that are revised as dwelling forecasts and occupancy rates are revised. These are unnecessarily misleading as the initial projections have been based on an average household size derived largely from Prestons, a new release area in Liverpool LGA. Liverpool suburbs have a much bigger average household size than Camden suburbs, by virtue of their different cultural mix, and this accounts for the adopted household size of 3.4 persons for low density dwellings. This is larger than the average Camden new release area and inappropriate to use in the Camden context.

This error seems to have been realised by the time the final population forecasts are presented (Table 9), which have adopted lower occupancy rates derived from Currans Hill and Mount Annan.

The MacroPlan report anticipated that the precinct would contain 2,972 dwellings, with a population of 8,800 people, based on the development scenario outlined in the draft ILP. These figures now need to be revised in relation to the final ILP.

In terms of demographic characteristics, the MacroPlan report focuses just on the characteristics of first home buyers, assuming that the bulk of the population of the precinct will be first home buyers although not making explicit what this proportion will be. While there is likely to be a reasonable proportion of first home buyers, we do not support the assessment that this group will make up the bulk of the population, based on recent trends in the surrounding area. As most of the dwellings will be separate houses there is likely to be a reasonable proportion of second and subsequent home buyers, as these types of dwellings are less affordable for first home buyers. Also the report does not consider recent trends for older people downsizing to new, smaller dwellings.

We agree with the overall conclusion that the bulk of households will be families with children, but given recent trends and the mix of dwelling types proposed, it is likely that the population will be more diverse than new release areas of the past. There is likely to be a greater mix of both younger and more

established families, as is occurring in adjoining release areas, and this will influence the age profile.

The MacroPlan report has modelled the forecast age profile on that of first home buyers at a national level, and the Liverpool suburbs of Cecil Hills, Prestons and Horningsea Park. These suburbs are not necessarily representative of the different Camden market. These issues are discussed further in the following sections.

### 4.2 Average household size

As population forecasts are based upon assumptions of average household size, determination of this variable is important.

The MacroPlan report has proposed using the following assumptions of average household size, based upon experience in Currans Hill and Mount Annan (source of data unknown):

- Low density, large lot residential and environmental living: 3.2 persons per dwelling
- Medium density: 2 persons per dwelling.

The Precinct Plans for the adjoining precincts of Oran Park and Turner Road were based on the following assumptions about average household size:

- Detached (low density) dwellings: 3.3 persons per dwelling
- Attached / semi-detached (medium density) dwellings: 2.4 persons per dwelling
- Apartment (high density) dwelling: 1.8 persons per dwelling.

These assumptions were based upon average household size in nearby release areas derived from the 2001 ABS Census, which was the most recent census data available at that time. Over the past decade, average household size in south-west Sydney has changed only slightly.

Data on average household size for different dwelling types in new release areas in Camden, and for the LGA as a whole, from the 2011 ABS Census is presented in the following table.

Table 1: Persons per dwelling, Camden release areas, 2011 ABS Census

Location	Detached (low density) dwelling	Medium density dwelling	High density dwelling
Harrington Park	3.4	0	0
Mount Annan	3.3	3.2	0
Currans Hill	3.1	2.5	0
Elderslie	2.9	1.7	1.3
Camden LGA	3.1	2.1	1.5

This table suggests that an average household size of 3.2 persons per dwelling for low density dwellings is a realistic assumption, based upon averaging across the four release areas included in the sample.

For the small lot (20 dwellings/ha) homes, it is understood that most of these areas will probably comprise detached 3-4 bedroom dwellings on a 300-400 sqm lot, consistent with the Department's recently released Housing Diversity Package. Accordingly, they are likely to contain a similar mix of households as dwellings of the same size on larger blocks. An occupancy rate of 3.2 persons/dwelling is also proposed for the small lot dwellings.

Deriving average household size for medium density (attached) dwellings from the release area examples is less reliable, as numbers of such dwellings in the different release areas are relatively small. Averaging across the three release areas that contain medium density dwellings results in an average household size of 2.5 persons. This is consistent with more recent anecdotal information as to the types of households moving into the smaller dwellings in nearby release areas such as Oran Park and Gregory Hills, where a significant proportion of these dwellings are being occupied by young couples yet to have children or young families with 1-2 children, as these dwellings are more affordable than larger lot homes. It is clear that in the short term, these households are likely to be larger than two people.

Accordingly, we support the MacroPlan recommendation to adopt an average household size of 3.2 persons for detached dwellings. This rate should apply across the R2 low density residential areas, including both the 15 dwellings /ha and 20 dwellings/ha areas. However, the data suggests that the MacroPlan recommendation of 2 persons per dwelling for medium density homes is too low, and we recommend instead adopting 2.5 persons per dwelling for medium density types of housing (zoned R3 areas).

### 4.3 Population numbers

Dwelling forecasts for the final ILP have been revised since the draft ILP was prepared. The final ILP assumes a yield of around 3,229 dwellings.

The dwelling forecasts contained within the final ILP, and associated population forecasts based upon assumptions of average household size outlined above, are provided in the following table.

Table 2: Forecast population size

Dwelling type	No. of dwellings	Av household size (persons)	No. of people
Medium density (25 dw/ha)	173	2.5	432
Small lot (20 dw/ha)	208	3.2	665
Low density (15 dw/ha)	2,722	3.2	8,710
Large lot	118	3.2	378
Environmental living	7	3.2	22
Oran Park House	1	3.2	3
<b>Total</b>	<b>3,229</b>		<b>10,210</b>

This table indicates that the future population of the Precinct, based upon the development scenario outlined in the final ILP and Precinct Plan, will be **about 10,210 people**.

It should be noted that the planning controls provide for minimum dwelling densities and it will be permissible to develop at higher densities. Therefore the final dwelling yields and population numbers could be significantly higher than these forecasts suggest.

### 4.4 Population characteristics

The proposed dwelling mix is reasonably similar to that currently being constructed within the Gregory Hills development (ie the Turner Road Precinct), and it can be assumed that the Precinct will appeal to a population with similar characteristics to that moving to Gregory Hills. Characteristics of the population moving to Gregory Hills (based on the initial 600 or so dwellings) are understood to include:

- About 20% are first homebuyers, being predominantly young couples yet to start a family or with one or two young children
- About 60% are second home buyers / upgraders. The majority of these are families with children across a span of age groups (pre-school, primary and high school). However there is also a small

but significant proportion of empty nester couples seeking to downsize to smaller dwellings

- The remaining 20% are investors, with dwellings likely to be made available to tenant households. These will comprise a mix of household types
- The majority of new residents are drawn from other parts of south west Sydney – primarily upgrading from Campbelltown, Liverpool and Fairfield and other parts of Camden.

Based upon this profile, it is assumed that families with children will be the predominant household type in the Precinct. These families will span a mix of life cycle stages with children of different ages. The provision of smaller lot dwellings will also ensure that the development appeals to households without children, including both young couples and empty nester households. There will also be some older people (70+), particularly grandparents moving to be close to their children, but generally the proportion of older people and lone person households is expected to be low, based upon experience in surrounding areas.

Our assumption is that first home buyers will make up a lower proportion of households than assumed in the MacroPlan report and that the age profile will be older as a result. This will not change the age profile presented in Table 12 of the MacroPlan report significantly, as its age cohorts are very broad. Moreover, a more mature and mixed age profile will not impact on requirements for social infrastructure. Flexible and multi-purpose facilities capable of meeting a variety of needs across the population spectrum will be required if a socially sustainable community is to be developed within the Precinct.

# 5 Community Facility Requirements

## 5.1 Comment on MacroPlan Report

The MacroPlan assessment has been overly reliant on the application of numerical standards for determining community facility requirements and has struggled to make sense of the standards without really understanding how these types of facilities are delivered and operate. The focus on numerical standards has meant that the assessment lacks consideration of other factors such as the needs of the population, opportunities and constraints of the site, its contextual location, and leading practice in the provision of social infrastructure. As a result, it is unable to confidently make recommendations as to what is required.

The heavy reliance on the Growth Centre standards to assess requirements is misplaced, as the Growth Centre standards are intended as a guide only.

The MacroPlan assessment does not provide sufficient guidance to the draft ILP with regard to principles for the design, location and distribution of social infrastructure.

The assessment does not take sufficient account of proposed facilities in Oran Park town centre, only 3 kms away, and the extent to which they should be expanded to address some of the demand from the Precinct.

It notes that the population will not be large enough to trigger provision of district or regional facilities within the Precinct, but does not identify how these needs should be met by facilities in the wider area. The report needs to identify how the Precinct will contribute to cumulative demand for district level facilities so that costs can be apportioned accordingly.

Issues specific to the various types of community facilities are discussed further in the following sections.

## 5.2 Issues raised in submissions

Several of the submissions received during the public exhibition of the draft ILP have raised issues relating to the planning of community facilities for the precinct. These are outlined below. The proposed responses to these issues are included in the following sections.

Table 3: Community facility issues raised in submissions

Raised by	Issue
Camden Council	Proposed co-location of primary school and open space should not be relied upon until arrangements are negotiated
Hixson Pty Ltd	Proposes re-location of community centre from neighbourhood centre to sporting fields
Hixson Pty Ltd and Catholic Education Office	Seeks re-configuration of road network around Catholic schools to improve accessibility
Greenfields Development Company No. 2	Proposes re-location of the primary school to flatter land and to be closer to Oran Park
YMCA NSW	Expresses desire for proposed community centre to provide facilities for young people and adopt YMCA service model
NSW Family and Community Services	Concern at apparent lack of provision for childcare, pre-schools and out of school care

## 5.3 Revised community facility requirements

### 5.3.1 Community centre

The MacroPlan report recommended that a local youth / community centre of between 370 sqm and 800 sqm be provided to meet the needs of a forecast population of 8,800 people. The report recommended that this facility be located within the proposed neighbourhood centre, but noted that it might also be co-located with a sporting field.

In the planning of local community facilities for the other Growth Centre precincts, Camden Council has required the application of its standards:

- 42 sqm per 1,000 people for a local community centre
- An additional 13 sqm/1,000 for district level facilities, to be provided as additional floorspace to a local facility.

For the revised forecast population of 10,210, this generates a requirement for:

- A local community centre of 429 sqm
- Contributions equivalent to 133 sqm for a district community centre.

The ways in which these requirements should be met are discussed below.

## Local community centre

A community centre of about 429 sqm is relatively small. It will allow for a simple facility (such as a hall, a meeting room and an office, with associated storage and amenity areas) that is unstaffed and available for hire by community groups. The facility will provide space for community activities and classes (eg playgroups, dance classes, fitness activities), for organisations and community groups to meet, and for private functions such as birthday parties.

Leading practice location and design criteria for community centres include:

- Being accessible by public transport, with good walking and cycling connections
- Located on a main street with street frontage for optimum visibility and accessibility.
- Design for safety, security and capacity for casual surveillance
- Located in places where people already have cause to congregate and that have an existing level of human activity, such as shops or schools, so as to provide a place for social interaction and gathering
- Clustered with other facilities, to promote convenient access and help create a focal point for community activity
- Sensible relationships with surrounding uses to reduce incompatibilities with neighbours, including traffic and noise impacts on neighbours
- Ensuring sites have room to grow, expand and adapt, to provide flexibility as community needs change
- Locations adjacent to open space, to allow for related outdoor community events, such as festivals and markets. This opens up the potential for greater multiple usage of a community centre.
- Adjacent to sporting, recreation and leisure facilities to create a health and activity focus.

Following submissions and discussions with Camden Council, two sites for the community centre have been considered: within the neighbourhood centre, as proposed in the draft ILP, and co-located with one of the sporting fields, as suggested in the submissions.

These sites have been reviewed in terms of the principles outlined above. Both sites have advantages and disadvantages.

The advantages of the neighbourhood centre site include:

- Its capacity to support and reinforce the role of this centre as a community focal point, as a place for social interaction and the main gathering place for the Precinct
- Synergies with the heritage Coach House located within the proposed centre, and potential for adaptive re-use of this building
- The accessibility and visibility of the site
- Adjacent open space for associated children's activities and community events.

Disadvantages include:

- The neighbourhood centre will be quite small (only 1000 sqm retail), and so will not provide a routine destination or focal point that draws together residents as a larger shopping centre might. This may leave the community centre without the level of surrounding activity to support its activation.
- The Coach House may not be suitable for adaptive re-use as a community centre
- Proximity to neighbouring dwellings may limit the usability of the centre for private functions that generate noise impacts.

For the playing fields site, advantages include:

- The community centre can be co-located with the amenities building and this can provide economies in dual use of toilets etc, thereby maximising use of the available floorspace for community uses
- Synergies with sporting and recreation facilities to create a health and activity focus
- Associated with this, the community centre can support activities that require a more extensive outdoor play area, such as afterschool and vacation care.
- However, on this site, the community centre would need to have a prominent and visible location with street frontage and be accessible by public transport
- A further consideration is the extent to which the community centre would be able to contribute to community identity and vibrancy and levels of community interaction if it were to be located with playing fields, which will not be used extensively throughout the week.

Weighing up the advantages and disadvantages outlined above, the final ILP has proposed that the community centre be located within the proposed neighbourhood centre, in order to strengthen its role as the main community focal point for the Precinct.

The size of site required for the community centre will depend upon capacity for shared parking and for adaptive re-use of the Coach House. Generally Council standards require a site area which is 2.5 times the built area. For a facility of around 429 sqm, a site area of around 1,000 sqm will be required. A site of this size has been included in the yield calculations for the final ILP.

### **District community centre**

As discussed previously, a district community resource centre will be provided in Oran Park town centre, about 3 kms from the Precinct.

The community centre proposed for the Precinct will be a local centre, given the scale of the Precinct and its proposed neighbourhood centre, and it is not appropriate that it also incorporate the floorspace allocation for district level facilities.

It is recommended that the additional floorspace requirements for a district community centre should be added to the district community centre in Oran Park.

### **5.3.2 Youth centre**

The proposed local community centre will be a multi-purpose facility that will meet the needs of all age groups, including young people. A youth centre is a specialist district level facility and is not usually provided for a small local population. It is therefore inappropriate to add the Council requirement for youth facility floorspace to requirements for a local community centre, as the MacroPlan report has proposed.

The MacroPlan report has not considered the fact that a youth recreation facility is proposed within the Oran Park town centre, and that a Police and Community Youth Centre (PCYC) is proposed to be located within Gregory Hills. Both these facilities will be district level facilities that will be able to serve young people within the Precinct.

It will also be important that the multi-purpose community centre, civic spaces, sporting fields and other areas of open space within the Precinct recognise and accommodate the needs of young people through their amenities, programs and management policies.

It is noted that the type of facility and range of services suggested for the Precinct in the submission from the YMCA constitutes a district resource to serve a much larger population, and would greatly

exceed the capacity of the small community centre proposed for the Precinct.

### **5.3.3 Library services**

The MacroPlan report assumes that the proposed library at Oran Park will meet the needs of the Precinct. However, as outlined in Section 2, it is understood that the Precinct population forecasts have not been factored in to the floorspace requirements for the Oran Park library.

A calculation needs to be made of the additional floorspace requirements generated by the Precinct population and the library expanded accordingly, or alternatively contributions be made towards its embellishment (within the current Section 94 contribution guidelines).

Based on current Council library standards (approx. 42 sqm/1000 people), a forecast population of 10,210 would generate a need for about 429 sqm of library floorspace.

The needs of the forecast population for access to other cultural facilities will be addressed in part through access to the cultural space component of the proposed Oran Park Community Resource Centre and proposed Council facilities in Leppington Major Centre, as outlined in Section 2 of this report.

### **5.3.4 Schools**

The MacroPlan report has advised that the population of the Precinct will warrant the provision of one government primary school, based upon the Department of Education and Communities (DEC) guideline of one primary school per 2,000-2,500 dwellings. The report has not identified how the high school needs of the precinct will be addressed.

The DEC has confirmed that one primary school will be required in the precinct. This Precinct will provide a full catchment for a primary school (although it may take children from adjoining areas, as a holding school, until other new schools in the district are built). In the longer term, it is not intended that this school also meet demand from Oran Park or Gregory Hills, which will have their own primary schools.

The DEC has also advised that the high school needs of the Precinct will be met by the proposed high school to be located to the north east of the Oran Park town centre.

Primary schools require access to a site area of approximately 3 ha. The school itself requires a site of 2 ha, and the additional 1 ha for play space may be provided as shared open space, where the school can be co-located with open space. This is subject to negotiated arrangements between the DEC and local council.

Locational guidelines for DEC schools outlined in the DEC's *Advisory Notes for Master Planning New Education Facility Sites* include:

- Schools should be located relatively central to their residential catchment (within approximately 1.6kms by road) and on distributor or collector roads to alleviate noise and traffic problems.
- Urban design features should include:
  - Has a number of frontage (three frontages required)
  - Main street frontage should not be located opposite a T-intersection
  - Desirable to be adjacent to a community playing field
  - Allows for security and privacy through visibility and appropriate surrounding development
  - Is not overly overshadowed by surrounding development
  - Considers future form and structure of centres, towns and future development.
- Land should not be located within or immediately adjacent to:
  - Land zonings for: Industrial (IN1 – IN4), Conservation (E1-E4), Waterways (W1-W3)
  - Special uses such as: airports, correction centre, electricity substations, mobile phone towers, sewage treatment plants, sewage systems, transmission lines, waste disposal facility, waste or resource management facility, waste or resource transfer station, water recycling facility, water supply system, wind farms and the like
  - Inappropriate retail and commercial development such as bottle shops, brothels, home occupation (sex services), methadone clinics, pubs, registered clubs, restricted premises, sex service premises or the like
  - Development with potential undesirable impacts or risks such as: airport flight paths, bulky goods premises, crematorium, depots, freight transport facility, hazardous or offensive development, hostel, hotel or motel accommodation, intensive agriculture, mining and extraction industries, tourist and visitor accommodation, vehicle repair workshops or the like.

Other design requirements for new school sites included in the *Advisory Notes* include:

- Sites should have a slope no greater than 1:10
- Sites must not be located within or immediately adjacent to land mapped as within the 1 in 100 year flood level
- Sites should have a substantially regular shape

- Schools should not be within or adjacent to land mapped as Bush Fire Prone or on a site that requires an Asset Protection Zone
- Site will not give rise to significant issues associated with dust, smoke, odours or the like
- Sites must not be contaminated, waste filled, have high soil erosion, stability or acid sulphate concerns
- Sites should be free of ecological and heritage concerns or restrictions
- Site should allow for other socially inclusive uses such as election days, community markets, emergency meeting points etc.

The draft ILP proposed a 2 ha site for a primary school, co-located with a 1 ha park, to provide access to a 3 ha site for a primary school, consistent with the DEC guidelines.

In revising the draft ILP and considering the submissions made during the exhibition process, alternative sites for the primary school have been considered and discussed with DEC representatives. Key considerations have included:

- The need for the site to be centrally located within its catchment, which is limited to this precinct, and to be readily accessible from all parts of the precinct
- The need for the site to be relatively flat and to meet the other DEC site requirements (eg away from transmission lines and riparian corridors, to have three street frontages, including a collector road etc)
- The potential for co-location with open space, in order to reduce the site requirement from 3ha to 2 ha.

Where shared use of open space between a school and the general community is proposed, the school will generally require exclusive use of the open space during school hours, to ensure student safety and for programming of outdoor activities. This usually works well where the open space comprises playing fields, as these tend to be used by the general community at times outside of school hours.

However where the shared open space is a park, providing exclusive use to the school during school hours is potentially more problematic, as it can preclude other sections of the community, such as parents with pre-school aged children or older people, from using the park during school hours.

DEC and the DP&I are seeking to maximise shared use of open space arrangements within the Growth



Centre precincts, in order to enhance land use efficiency and reduce the costs of urban development. However these arrangements are still at the pioneering stage, especially with regard to primary schools having shared use of adjoining parks. There are many issues of detail to negotiate between the parties before effective shared use arrangements can be realised.

Camden Council has expressed some reluctance about the school having shared use of the adjoining park, as proposed in the draft ILP. There is concern that exclusive use of the park during school hours would not allow equitable access for other sections of the community, who have paid for the park through Section 94 contributions. However, Council has been more favourably disposed towards shared use of the sporting fields.

Re-location of the school site to co-locate with the sporting fields, rather than a park, has been explored during revisions to the ILP. The playing field sites have been determined by the gradient of the land and use of potentially flood affected land that is not suitable for residential use, and are not easily moved. However these locations do not work well from a schools point of view, as they are not sufficiently central and accessible for the school catchment area. It has therefore been determined that co-location of the primary school with sporting fields is not likely to be feasible in this precinct.

In the final ILP, the site for the primary school has remained roughly in the same position as in the draft ILP, consistent with advice from DEC representatives. The size of the adjoining park has been increased to 1.2 ha. This larger area would enable public access to some part (at least 0.2ha) of the park to be maintained, even if the school required exclusive use of up to 1 ha during school hours.

The concerns of Camden Council staff in relation to shared use arrangements for parks with schools are acknowledged. At the same time, locating the school beside an area of open space, and creating a park of sufficient size, retains the potential for shared use arrangements to be negotiated in the future. This recognises that work at an inter-departmental policy level is currently occurring to remove obstacles to shared use arrangements, and that the climate for negotiating effective shared use arrangements may be more conducive to success in the future.

Securing an effective shared use arrangement for the proposed park beside the primary school is a matter that should not just be left to DEC and Camden Council to sort out, as experience has shown the challenges in reaching such agreements. Given the pioneering nature of the proposal, it is recommended that DP&I play a lead role in establishing and facilitating a negotiation process, consistent with the

approach proposed in the report to the DP&I *Shared Use of Open Space by Schools and the General Community* (Elton Consulting 2012).

The needs of the Precinct population for easy access to schools will also be met by the new Catholic primary and high schools in the south of the precinct. The suggestion in the submissions to realign the road to the north of this school site is supported, in order to enhance the accessibility of the school and to help manage the traffic impacts which schools generate. This issue has been addressed in the final ILP.

### 5.3.5 Childcare services

A number of different forms of childcare and activities for young children are generally provided in a community, including long daycare, family daycare, pre-school, occasional care and playgroups. Planning for childcare should also address the need for out of hours school care for primary school aged children.

Camden Council has advised, in accordance with its current directions, that it will not be providing Council operated long day or pre-school childcare centres in the Growth Centre precincts. As such, and as is common with the provision of childcare in most new developments, childcare in the Precinct will be left to market forces (through private sector providers) and to responses from the not for profit, community based non-government child care sector, as demand develops. Council will, however, provide family day care and seek to ensure that spaces are available for playgroups and out of school hours care in its community centres.

Childcare centres are generally a permitted use within residential areas and do not necessarily require land to be designated at the master planning stage. However, there can be benefits in identifying sites for childcare centres within neighbourhood and district centre hubs, even if these are ultimately developed by private operators, for the following reasons:

- To ensure some childcare is provided in central and conveniently accessible locations, and to reinforce the role of the hub as the focal point for the community
- To locate childcare adjacent to complementary land uses such as schools and community centres
- To help avoid childcare centres locating inappropriately in residential areas with amenity impacts on adjoining residents (particularly in terms of traffic congestion).

Within the Precinct, it is intended that a childcare centre will be located within the proposed neighbourhood centre. The community centre should

also allow for a variety of children's activities (playgroup, after school care) through its co-location with open space.

### 5.3.6 Other types of services

The MacroPlan report has documented the ways in which demand for medical services, emergency services and aged care service will be met in the Precinct. We support these findings.

### 5.3.7 District and regional level services

The new population will require access to a variety of district, sub-regional and regional level services, generally provided for larger population catchments. These types of facilities and services are generally best located in larger activity centres that are well served by public transport, to maximise access for the whole catchment.

As discussed in Chapter 3, planning for the Leppington Major Centre has made provision for some major new facilities to serve the SWGC as a whole. These include:

- A major performing arts and cultural centre
- A regional Integrated Primary and Community Care health facility with specialist medical services
- A TAFE campus
- Possibly a courthouse, police station and emergency services facility.

A variety of government and non-government human services supporting individual and family well-being (such as welfare, family support, youth, aged care) is also expected to locate in the Leppington Major Centre. This centre is also likely to include private sector regional services such as specialist and allied health services and entertainment and leisure services such as cinemas, clubs and pubs.

At the regional level, the Precinct population will also use:

- University of Western Sydney Campbelltown Campus (which has sufficient spare capacity to accommodate increased demand)
- Liverpool, Campbelltown and Camden Hospitals. Projected population growth across the South West Growth Centre has been factored into planning for hospital inpatient and ambulatory care services across the region. The strategy to address increased health demand includes increasing the capacity of Liverpool, Camden and Campbelltown Hospitals.

As discussed in Chapter 3, the Precinct population will also enjoy ready access to the district and sub-

regional facilities to be developed in Oran Park town centre. These include:

- Community resource centre and library
- Integrated Primary and Community Care Centre and associated private medical services
- Entertainment and leisure facilities
- Aged care services.

## 5.4 Conclusion

Our review supports the broad MacroPlan assessment that a community centre, a primary school and some private sector childcare and medical facilities will be required in the Precinct to meet local-level needs. The provision of a youth centre is not supported.

A local multi-purpose community centre of around 429 sqm will be required to provide indoor space for community activities and programs and meet Camden Council's standards for provision. A site of around 1,000 sqm will be required to accommodate this facility. The final ILP appropriately locates the community centre within the proposed neighbourhood centre, to reinforce the role of the centre as the main community focal point for the Precinct.

A site of 2 hectares for a public primary school has been identified in the final ILP and agreed in principle with the DEC, on the basis that the school will share access to the adjoining public open space, which will be owned and managed by Camden Council as a local park. This will be subject to negotiation of detailed arrangements for shared use between DEC and Camden Council. To ensure shared use outcomes can be negotiated, DPI may need to set up a framework for negotiations and facilitate the negotiation process.

A variety of facilities and services will be provided by non-government or commercial providers, including:

- A Catholic primary and high school
- Childcare centres
- Medical centres.

In addition, the forecast population will contribute to demand for district level facilities to be provided within or close to the Oran Park town centre. Based upon Camden Council's standards of provision, this will include:

- Contributions equivalent to 133 sqm for a district community centre
- Contributions equivalent to 429 sqm of library floorspace in Oran Park.

The precinct will also fall within the catchment area for the public high school proposed for Oran Park. District and regional level services, including a performing arts and cultural centre, specialist health and medical facilities, TAFE, university, courthouse, police and emergency services, will be provided at the Leppington Major Centre and other centres across south western Sydney.

# 6 Open Space and Recreational Requirements

## 6.1 Comment on MacroPlan Report

The assessment of open space and recreational requirements contained within the MacroPlan report is incomplete. Again, the report has focused predominantly on considering and then applying numerical standards to ascertain the quantum of open space and recreational facilities required. There has been little or no consideration of other issues that would typically be included in an assessment of open space and recreational requirements, including:

- Recreation trends and participation in different types of outdoor activity
- The range of open space and recreation needs of the future population
- Principles and objectives for open space provision
- Analysis of the opportunities and constraints of the site
- Design and location criteria to guide the distribution of open space
- Potential for use of parts of the riparian corridor.

There is no clear identification of the district and regional sporting and recreation facilities proposed for the Oran Park and Maryland Precincts and extent to which the Precinct has been / will be factored into the catchments for these facilities so that costs can be apportioned accordingly. Similarly there is no assessment of how/ where the aquatic and indoor sporting needs of the future population will be met.

It is beyond the scope of this report to address all of the shortcomings identified above just for the sake of providing a comprehensive assessment. Instead, this chapter provides advice on the key matters necessary to support and inform revisions to the ILP. These include:

- The overall quantum of open space required
- The use of facilities in Oran Park
- The nature and location of required sporting facilities

- The nature and distribution of proposed passive open space.

## 6.2 Issues raised in submissions

Several of the submissions received during the public exhibition of the draft ILP have raised issues relating to the planning of open space for the precinct. These are outlined below. The proposed responses to these issues are included in the following sections.

Table 4: Open space issues raised in submissions

Raised by	Issue
Camden Council	The proposed quantum of open space, and particularly the need to provide more open space Arrangements to make open space public
South Western Sydney Local Health District	Proposed quantum and distribution of open space will not provide equitable access to encourage physical activity Suggested re-location of one of the sporting fields
Hixson Pty Ltd	Suggested re-configuration of open space associated with Oran Park House
Greenfields Development Company No. 2	Suggested reduction in number of sporting fields to take account of sporting fields in Oran Park Proposed re-location and re-configuration of some areas of passive open space, and overall quantum of open space

## 6.3 Likely recreation needs

Over the past decade or so, a number of studies have been undertaken to determine demand for open space and recreational facilities in the region. These include:

- *Western Sydney Regional Recreation Demand and Opportunities Study*, (Suter and Associates, 2003)
- *South West Subregion Draft Subregional Strategy*, (Department of Planning, 2007)
- *Liverpool City-Wide Recreation Strategy 2020*, (Heather Nesbitt Planning et. al., 2003)
- *Camden Recreation Demand Survey*, (UTS, 2003).

These studies have found that trends in use of open space and participation in recreation activities are being driven by a number of wider trends in Australian society, including the ageing population, changes in workplace practices, changing sport and recreation preferences among men and women, health and fitness concerns and changing housing types.

While precise needs cannot be identified at this stage, based on the findings of these studies it is likely that the broad needs of the Precinct population will include the following:

- A variety of accessible local parks for informal play and passive recreation that support family and community activities and that provide a diversity of recreation settings and opportunities for all age groups and all abilities
- High quality parks with well maintained facilities such as paths, play equipment, fencing, landscaping and shelter from sun, wind and rain, that offer a range of play experiences
- Outdoor areas for larger gatherings and cultural events e.g. extended family and group picnics, amphitheatre, markets
- Multi-purpose playing fields suitable for a variety of field sports, and able to accommodate both junior and adult sporting activities for males and females, recognising that levels of participation in sport in the region are high
- Access to both outdoor and indoor courts for court sports
- Indoor spaces for activities such as dance, martial arts, yoga, fitness, gym
- Access to free or low cost recreation, entertainment and leisure opportunities and meeting places that target young people, including public spaces that are safe and welcoming and allow for social interaction and informal games
- Access to aquatic facilities that include a variety of leisure and fitness activities and programs consistent with local needs and preferences
- A network of walking and cycling tracks linked to key destinations and recreation nodes
- Options to enhance individual fitness in parks and trails
- Off leash exercise areas for dogs
- Opportunities for adventure based activities, such as mountain biking, trail bikes, horse riding, rock climbing. This should include opportunities for adventure play for primary school aged children as well as young people – for instance informal tracks and mounds for BMX and active games, observation places and structures, flying fox.
- Opportunities to enjoy bushland, water and other natural settings, for picnics, bushwalking and as spaces for reflection, rest and relaxation

- Opportunities that increase incidental physical activity, through design of footpaths, road networks and accessible, safe and well lit walking and cycling tracks.

Some of these needs will be satisfied by local open space and facilities to be provided within the Precinct, while others will be addressed by accessing facilities in the wider district and more broadly in the region.

## 6.4 Planning and design principles

While there are many open space and recreation planning documents available that outline best practice principles, it is suggested that the Landcom *Open Space Design Guidelines* provide a succinct summary of the core principles that should inform open space and recreation provision for a new community such as at the Precinct.

The Seven Principles described in those guidelines propose that all open spaces:

1. Are meaningful and appealing to the community. They should integrate the geographic and heritage features of the precinct, reflect and complement the natural and visual character of the local topography, vegetation and riparian corridors, and capitalise on features unique to the area, such as views from elevated areas
2. Are multi-functional and adaptable to changing needs to allow a range of users to enjoy them. Open spaces should maximise joint use and co-location with other uses to minimise duplication, (including co-location with infrastructure easements where feasible) and maximise use of sporting facilities outside of training and competition periods
3. Provide diverse recreational opportunities to meet a wide range of needs. They should cater for all age groups, both genders, different cultural backgrounds, physical abilities and levels of socio-economic status. This means incorporating universal access principles and incorporating features such as shade and shelter, BBQs, seating, lighting and pathways
4. Encourage social interaction, recognising that the public domain provides a focal point for meeting and gathering and design features should encourage both incidental and planned social interaction and cultural activity
5. Promote health and wellbeing, through encouraging physical activity, providing spaces for rest and relaxation and enhancing a sense of safety and personal security through the application of Crime Prevention through Environmental Design (CPTED) principles. Chief among these is the principle of promoting natural surveillance of open

space areas, with parks having a frontage to a road where possible.

6. Provide equity and accessibility. Open space should be largely publicly provided to ensure public access, and it should provide recreation opportunities that are inclusive of all members of the community. It is important to ensure that all public spaces are visibly and evidently public in nature to encourage use by all members of the community. To provide convenient and equitable access, international best practice suggests that a maximum walking distance of 400-500 metres (or a 10 minute walk) from any residential property to a park as optimum in urban or semi urban areas. To make access to public open space convenient, easy and safe, open space areas should also be linked and connected physically to provide an open space network. Links should include a network of off-road paths, shared paths, cycle ways and bush paths that connects major activities and open spaces to encourage walking and cycling.

7. Embody sustainability (environmental, social, cultural and financial). This includes to protect and conserve watercourses, water bodies and wetlands and incorporate natural areas and riparian corridors into the open space corridors where possible. It also includes to integrate the network of open space with stormwater management and water-sensitive urban design.

## 6.5 Site opportunities and constraints

Opportunities and constraints of the site can impact significantly on the open space plan. In the Precinct, these include the following:

### Opportunities

- The extensive system of creeks and riparian corridors, and in particular the South Creek corridor, allows for significant pedestrian and cycle linkages and some areas of informal open space
- The extensive curtilage proposed around the heritage item, Oran Park House, provides opportunities for public open space encompassing interpretive features
- The area's natural vegetation and topography can provide a distinctive character to the development
- Topography - Elevated sites are favoured for informal open space because of views and interest. Flat land is preferred for sporting fields and facilities to minimise earthworks required.

### Constraints

- Utilities - The electricity transmission lines are not ideal locations for high use recreation and public open space. It is understood that Camden Council

is willing to accept electricity easements for passive open space, but not for sporting fields.

- The South Creek corridor may act as a barrier to easy access throughout the precinct, effectively cutting it in half. It will be important to provide walking and cycling, as well as road links, at numerous points across the corridor to enhance access throughout the precinct
- Creeks and drainage lines – Flood liable land can impact on the location, quality and usability of recreation infrastructure and sporting facilities.

## 6.6 The overall quantum of open space

As demonstrated in the MacroPlan report, there is a myriad of different numerical standards that can be applied to determine the quantum of open space that a given population will require. There is also a new policy in NSW (not mentioned in the MacroPlan report), the NSW Government *Recreation and Open Space Planning Guidelines for Local Government* (Department of Planning, 2010), which propose a default standard for local and district open space provision of 9% of the developable area.

For the Precinct, two standards are most relevant:

- The Camden Council standard which provides that in (urban) residential areas, local and district public open space should be provided at the rate of 0.4ha and 3.24ha per 1000 population respectively, totalling 3.64 ha per 1000 people
- The Growth Centres standard which relies on the traditional provision of 2.83 ha per 1000 people. This has traditionally been applied as 1.62/1000 for active open space and 1.21/1000 for passive open space.

Camden Council has expressed a desire for its standard of 3.64 ha/1000 to be applied in the Precinct. However, it has recognised that in the other SWGC precincts the lower rate of 2.83 ha/1000 has been adopted for planning purposes. Council staff have indicated a preparedness to accept this lower standard in the Precinct as a minimum rate of provision, for consistency with the other precincts.

In considering the quantum of open space to be provided, Camden Council's requirements should be noted as follows:

- The emphasis needs to be on providing quality, usable open space that can meet the varied recreation and sporting needs of the future community
- Land which falls into the following categories may, in some instances, be able to be included as part of a public or drainage reserve, but will not be

accepted as local open space if it meets any of the following criteria:

- Is less than 30 metres in width
  - Is less than 30 metres in width from the defined edge of a water body to the open space boundary
  - Provides for the regional needs of the community
  - Provides for tourist areas or tourist recreation facilities
  - Is provided as private open space or for private recreation facilities
  - Is provided as noise attenuation buffers, estate entrances or amenity areas
  - Provides for the protection of the character and bio-diversity of creek floodplains, wetlands, or water quality features
- Land under transmission lines cannot be used for active open space, but may be used for passive recreation if it is in public ownership
  - Areas provided for drainage purposes should not be counted as public open space
  - Land that is flood prone may not be counted at the full rate towards meeting Camden Council’s requirements. While it is sensible in terms of land use efficiency to use flood-prone land for some recreation purposes, there are concerns that this limits the usability and quality of the open space provided, as well as significantly increasing its maintenance costs. The proposed strategy for open space is based on the principle that flood-prone land may not be used for active sporting facilities, but may be considered for passive recreation uses
  - Riparian land and other conservation land such as bushland, should not be counted towards the overall quantum of open space where it is not publicly owned and where its access and usefulness for recreation purposes is restricted. However, recent changes to guidelines concerning riparian corridors indicate that some parts of the buffer areas (but not the core) can be used for recreation purposes (eg pathways, trails) and accordingly a proportion of the riparian corridors may be counted as open space. This is reflected in the quantum of open space proposed in the final ILP (see below for further details).

Using the Growth Centre standard of 2.83 ha/1000 persons and based upon a forecast population of 10,210 people, the Precinct will need to provide a **minimum of 28.89 ha** of public open space to satisfy this benchmark.

The final ILP makes the following provision (refer Map 1 on following page):

Table 5: Proposed quantum of open space

Type of open space	Quantum (hectares)
Local neighbourhood parks	6.7
Sporting fields	9.2
Contribution to off-site sporting facilities*	3.81
27% of riparian corridor (37ha)	10.00
<b>Total</b>	<b>29.71</b>

\*Note: see comments and calculations in Section 6.7 below

The proposed provision of 29.71 ha therefore adequately satisfies the minimum level of provision required to meet the DP&I benchmarks. The proposed split of active: passive open space is 44: 56.

### 6.7 District sport and recreation facilities

As outlined in Chapter 3, planning for the Oran Park and Turner Road precincts made provision for two sets of sporting and recreation facilities that would serve a broader district population than forecast just for those two precincts. As described in the *Oran Park and Turner Road Section 94 Contributions Plan* (pages 48, 51), the planning provides for:

- A leisure centre with land area of 10 hectares with indoor courts and aquatic facility, sports oval with grandstand and a number of sports fields and courts, designed to service a population catchment of 75,000 people
- A sports park comprising 12 hectares, to contain two sports grounds (each containing two double playing fields) for a population catchment of 50,000 people.

As the combined population of the Oran Park and Turner Road precincts was forecast in the Contributions Plan at 33,700 people, it was envisaged that both of these facilities would also serve part of the future Catherine Fields and Maryland precincts. This arrangement was to ensure that some district level higher order, quality facilities were provided, rather than just providing all local level facilities for each precinct individually.

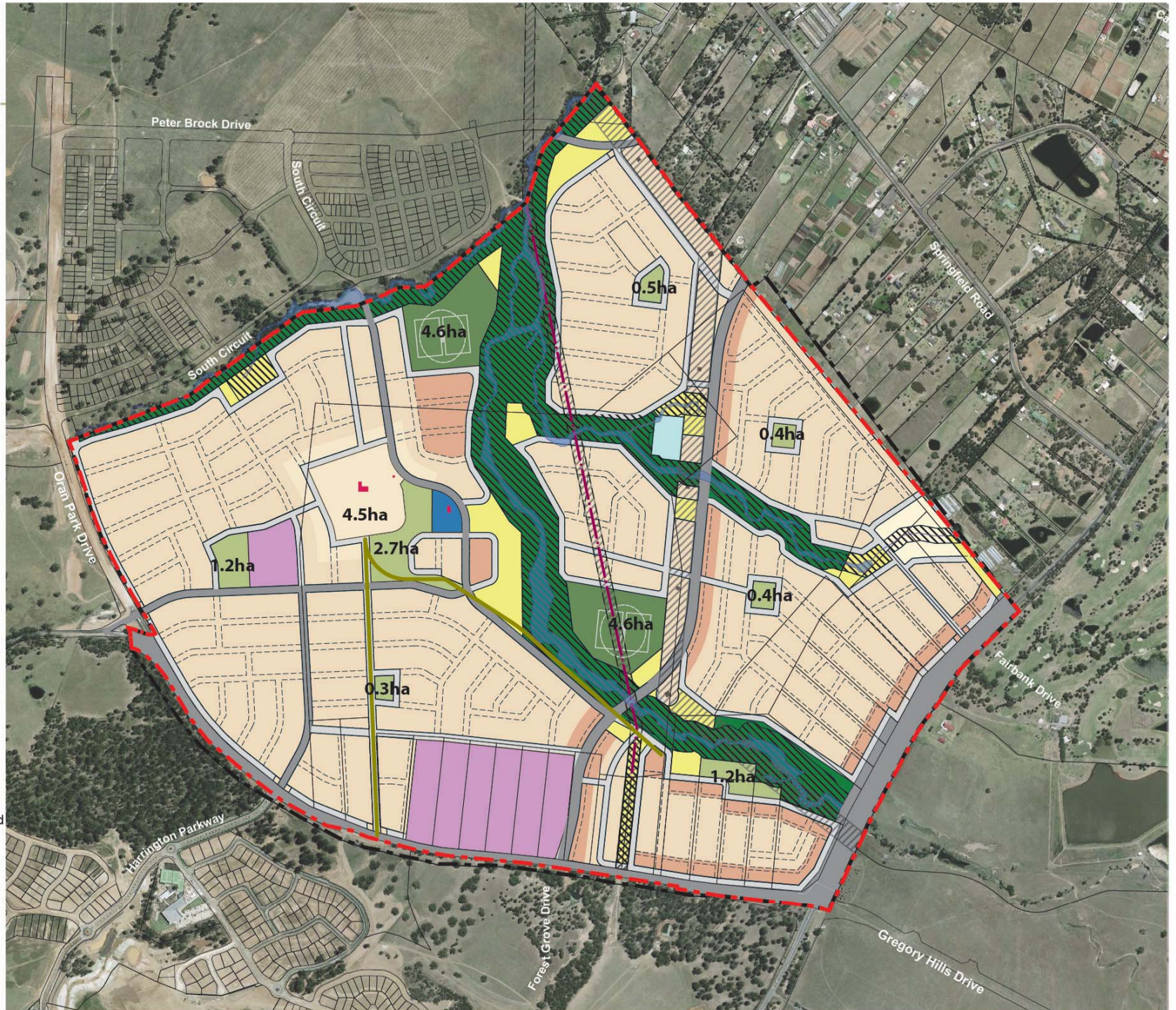
With a forecast population of 10,210, the proportional share of these facilities for the Precinct would be:

- 1.36 ha (13.6% of 10 ha) for the leisure centre plus embellishment costs
- 2.45 ha (20.4% of 12 ha) for the sports ground, plus embellishment costs.

**CATHERINE FIELDS (PART)  
PRECINCT**  
INDICATIVE LAYOUT PLAN

19 July 2013

-  Part Precinct Boundary
-  Land to which Precinct Plan applies
-  Low to Medium Density Residential
-  Low Density Residential
-  Very Low Density Residential
-  Environmental Living
-  Indicative School Location
-  Neighbourhood Centre
-  Parks
-  Sporting Fields
-  Environmental Conservation
-  Electricity Substation
-  Drainage
-  Riparian Corridor
-  Major Road
-  Key Local Road
-  Potential Local Road Network
-  Historic Driveway
-  Transmission Easement
-  Transmission Line to be Undergrounded
-  Oran Park House, Silo & Coach House
-  Creek (Existing Top of Bank)



1:10,000 @ A3  
0 100m 250m 500m





This quantum of land has been factored into the table of land requirements outlined in Table 5 above. This is consistent with the planning for the Oran Park and Turner Road precincts, which included the land for these facilities within the overall provision rate of 2.81ha/1,000 people. This component is counted in the quantum of active open space.

It is noted that the MacroPlan report assessed the proportional contribution of the Precinct to the district level sports park and leisure centre as 2.3 ha (p.40), but that report does not make clear how this calculation was derived.

## 6.8 Requirements for sporting open space

### 6.8.1 The MacroPlan Report

The MacroPlan report identified a need for two double playing fields, based primarily upon Camden Council's standard of 1 (single) field per 1,850 residents. The double playing fields were recommended to be 5.4 ha each and to include within that area four outdoor courts.

We support the assessment that two double playing fields will be required for the Precinct, based upon the Camden Council standard and the broader standard adopted for the Austral / Leppington North Precincts (and more generally in other new release areas) of 1 double playing field per 5,000 people. It is noted that the lower rate of provision recommended for the Oran Park precinct was on the basis of its proximity to the proposed district level Sportsground and Leisure Centre facilities, which would provide major competition and training facilities.

The MacroPlan report has determined that 4 outdoor courts for court sports (eg netball, basketball, tennis) will be required, based upon levels of provision proposed in the Turner Road precinct. The report also notes the Camden Council standard of 1 court per 1,075 people, which suggests a need for 10 courts for the Precinct population. The Camden Council standard is very low, relative to other councils in western Sydney (eg Blacktown, Baulkham Hills) and the benchmarks used by Parks and Leisure Australia, which suggest provision of around 1 court for about 2-3,000 people. On this basis, we support the MacroPlan assessment that the Precinct population will generate demand for four courts.

### 6.8.2 Additional advice

Further issues to note include:

- The recommended provision of sportsgrounds is based on providing for larger sporting complexes with a minimum of two playing fields, rather than single fields dotted around the development, which would result in duplication of smaller

facilities and provide limited recreational and social benefit. Double fields provide economies of scale for infrastructure. Single fields are not suitable for sporting competitions and multiple teams. This leads to a lack of opportunity for training, an inability to accommodate emerging sports, and a reduction in the ability to put into practice Federal and State government campaigns to improve general community health and well-being.

- In the final ILP, the size of the sportsgrounds has been reduced from 5.4 ha to around 4.6 ha, recognising that, subject to detailed design, the adjoining riparian buffer areas may be able to provide associated setbacks and passive open space, including playground and barbecue facilities.
- Furthermore, Camden Council has advised that it would like the outdoor courts to be provided off-site, as part of a major competition complex for netball, rather than within the local sportsgrounds. This recognises that small numbers of courts distributed throughout residential areas do not meet the competition needs of various sporting codes, and instead courts need to be clustered in larger complexes. The contribution towards district level facilities in Oran Park / Maryland Precinct provides sufficient land for the four courts required to meet Precinct needs.
- At this early stage of planning, sportsgrounds are proposed as multi-use facilities, rather than being allocated for specific sporting codes. Many sports can share space. In the detailed design stage, consideration should be given to including features that will help to maximise use of the sporting fields, including lighting for training and evening games. Consideration may also be given to synthetic turf pitches for training which require less maintenance and water and have a high capacity for use especially in winter months.
- Council requirements for sporting fields also include parking (50 spaces per single field) and amenities buildings (toilets, change rooms, canteen).
- It was suggested in the submissions that the eastern playing fields shown in the draft ILP should be re-located to a site further to the south of the precinct. This suggestion has been accepted in the final ILP, to make more efficient use of land and to link the sporting facilities with open space that can be used for passive recreation in the adjoining riparian corridor and underground transmission easement.

### 6.8.3 In summary

- We support the findings of the MacroPlan report that two double playing fields and four outdoor sports courts will be needed to meet the active recreation needs of the Precinct population.
- The four outdoor courts should be provided off-site as part of a larger district / regional sports complex in Oran Park/Maryland Precinct.
- In the final ILP, the two double playing field parks are appropriately sized and located to meet the local sporting needs of the future population.
- The needs of the Precinct population for access to district level playing fields, indoor sports courts and aquatic facilities will be met by proposed facilities within the Oran Park and Maryland Precincts. These facilities have already been identified and costed in the Oran Park Section 94 Contributions Plan. The Precinct will need to contribute towards the provision of these facilities on a proportional population basis.

## 6.9 Requirements for passive open space

### 6.9.1 The MacroPlan Report

The MacroPlan report proposes that 3.5 to 4.4 ha of open space should be sufficient for local neighbourhood parks, based upon the slightly differing Growth Centre and Camden Council standards. The report also provides advice as to Camden Council's requirements for minimum size of parks, and provides a general indication of what these parks should include. There is no identification of need for district level parks, or discussion of the distribution or design features of the parks proposed in the draft ILP.

### 6.9.2 Design requirements

The requirements of Camden Council with regard to open space provision in new release areas, as noted in the *Camden Contributions Plan 2011*, include the following:

- Open space is to be provided in two components, district and local
- District open space, wherever practicable, is to have a minimum area of 5 hectares, be no further than 2 kilometres from all dwellings, be located near public transport routes and provide a link to significant natural systems
- Local open space is to have a minimum area of 2,000 square metres, and be located within 500-700 metres walking distance of all dwellings

- Children's playgrounds should be provided on the basis of 1 per 1,200 people. The *Camden Play Space Strategy 20010-2020* outlines levels of play hierarchy and the design requirements for play spaces.

As discussed in the MacroPlan report, although Council has a minimum provision of 2,000 sqm for local parks, there is a preference for larger areas, which can provide for a variety of recreational activity.

In addition to the design requirements of Camden Council, parks within the Precinct should reflect the range of needs and principles outlined previously in this chapter. This includes providing for a variety of age and ability groups, providing equitable and safe access and linking areas of open space through a network of walking and cycling tracks.

### 6.9.3 Comments in relation to the ILP

The final ILP provides 16.7 ha of open space for informal recreation, comprising 6.7 ha for neighbourhood parks (distributed among 7 parks) and a further approximate 10 ha of land adjacent to or within the riparian corridors as linear open space.

**Size of parks:** All of the proposed areas of recreational open space meet Council's minimum requirement of being greater than 2,000 sqm. The smallest is 0.3 ha and the largest, the park adjoining Oran Park House, is 2.7 ha.

While there is no single park proposed which would qualify as a "district level" park in the Camden hierarchy, (ie with a minimum size of 5 ha), the extensive areas of open space associated with the riparian corridors and water management areas will provide some large areas that will allow a range of recreational activity, including picnics and barbecues, children's play and active games, fitness activities, relaxation in a natural setting and walking and cycling.

**Distribution of parks:** The final ILP has changed the distribution of open space to include a park in the south-western part of the precinct. The proposed distribution of parks will ensure that Camden Council's design requirement that all dwellings be within 500-700 metres walking distance of some open space is met.

The final ILP also ensures that open space areas are within easy reach of the higher density housing areas, recognising that these residents will not have access to as much private open space.

**Design of parks:** One of the submissions proposed a reconfiguration of the heritage park, which provides the curtilage to Oran Park House. From an open space planning perspective, key considerations include:

- Ensuring that this park provides quality open space that is usable for recreation purposes, as well as meeting heritage objectives, if it is to be counted as public open space
- Ensuring that this park meets Principle #6, to be visibly and evidently public in nature to encourage use by all members of the community
- Ensuring that this park meets Principle #5, to enhance a sense of safety and security through application of CPTED principles to promote natural surveillance, with parks having a frontage to a road.

These considerations have been addressed in the final ILP, which consolidates the two components of the Oran Park House park in the draft IP and gives the park a road frontage for most of its perimeter.

**Embellishment of parks:** As a general principle, the parks together should aim to meet the likely needs of the future population identified in Section 6.3 above.

Proposed embellishments for the open space areas have been outlined in the *Catherine Fields Public Domain and Landscape Strategy* prepared for DPI by AECOM.

Based upon Council's standard of 1 playground per 1,200 residents, the Precinct is likely to require about 8 playgrounds. These should be provided across the precinct according to the hierarchy proposed within the *Camden Play Space Strategy 20010-2020*, to include:

- Larger playgrounds catering to both young and older children within the larger parks, along with picnic and barbecue facilities to meet the need for "something for everyone" family activities
- Local playgrounds with more limited facilities in local parks

Together the playgrounds should ensure that there is a range of play equipment and play opportunities for children of different ages across the precinct. Each play area should offer a different experience, and provide fencing if adjacent to water, road, or steep slope, seating, shade, and drinking water.

#### **Use of riparian corridors:**

The NSW Government has previously advised that conservation areas, including core riparian zones, vegetated buffers, biological linkages and remnant patches of native vegetation, may not be embellished for recreation uses. This in effect has quarantined these areas from being used for passive recreation purposes. However, it is understood that these requirements have recently changed, and that a proportion of land in riparian corridors may now be

counted as open space in the Growth Centre precincts.

As outlined above, in the final ILP it has been assumed that about 10 of the 37 ha that comprise the riparian corridors may be available for recreation purposes. This land will need to be acquired by Camden Council if it is to be counted as public open space.

The extent to which this land will permit quality recreation uses suitable for district level open space is not clear at this stage. Before any conservation areas, riparian corridors, buffers and detention basins can be accepted as areas of open space, it will need to be confirmed that they are usable and capable of providing quality recreation settings, and that it will be appropriate for them to contain embellishments such as barbecue and picnic facilities, seating, playgrounds, pathways etc. Accordingly, the precise quantum of these lands that will be counted as open space (as opposed to environmental conservation areas) will need to be adjusted once a process of "ground-truthing" has occurred to identify the areas suitable for recreation.

When 10 ha of riparian corridors and open space alongside the riparian corridors are added to the land proposed in the ILP for parks, it is clear that overall, an adequate quantum of land will be provided to meet requirements for informal/passive recreation.

While parts of riparian zones may be counted as open space, it is understood that the Precinct Plan will still need to locate all embellishments including play and fitness equipment, cycleways and associated activity nodes to demonstrate that they are not proposed within the conservation areas. However, they may be located adjacent to these areas.

The extensive network of linear open space associated with the riparian corridors provides excellent opportunities to create walking and cycling paths, for both recreation and active transport. The critical success factor for these pathways is ensuring that they are safe by having passive surveillance and regular activity nodes and points of interest which may, for example, offer play areas for children, fitness equipment, seating, community gardens, public art or picnic facilities.

A network of 'on road' and 'off road' walking and cycling tracks should link with key destinations, including the neighbourhood centre, community centre, sporting fields and primary school. It will also be important that trails and walking paths in the Precinct link into the Oran Park town centre, local schools and the regional trail network to enhance connectivity.

# 7 Conclusion

## 7.1 Comments on MacroPlan Report

This report has provided a peer review of the *Social Infrastructure and Demographic Assessment for the Catherine Field (Part) Precinct* prepared by MacroPlan in 2012. It has found that the MacroPlan report provided only some of the information necessary to inform the preparation of a Precinct Plan for the Precinct.

Shortcomings of the MacroPlan assessment have included:

- An incomplete assessment of existing social infrastructure in the surrounding area
- Lack of recognition of the facilities being provided / proposed within the adjacent Oran Park and Turner Road precincts, and regional facilities proposed within the Leppington major Centre
- Lack of recognition of recent population trends in other new release areas in Camden and an under-estimation of population numbers and likely levels of household diversity
- An over-reliance on the use of numerical standards for determining community facility and open space requirements, and no clear advice as to what is needed when the standards are not definitive
- Lack of consideration of other factors such as the likely needs of the population, opportunities and constraints of the site, its contextual location and principles for the design, location and distribution of social infrastructure
- Ways in which needs for district and regional level facilities will be addressed, and associated issues of apportionment of costs for off-site facilities.

It is beyond the scope of this report to address all the shortcomings identified. Instead, our report has focused on addressing major information gaps and providing supplementary advice to support and inform the final ILP and Precinct Plan.

## 7.2 Population forecasts

This report has reviewed the occupancy rates to be applied to different types of dwellings as the basis of population forecasts. It has then applied these revised rates to the dwelling yields associated with the final ILP for the precinct.

Based upon a yield of about 3,229 dwellings, comprising a mix of low density, small lot and medium density dwellings, the future population of the Precinct is likely to be around 10,210 people.

It is assumed that families with children will be the predominant household type in the Precinct. These families will span a mix of age and life cycle stages. The provision of a proportion of smaller lot dwellings will also ensure that the development appeals to households without children, including both young couples as first home owners and empty nester households downsizing. The proportion of older people and lone person households is expected to be low, based upon experience in surrounding areas.

## 7.3 Community facility requirements

A population of the size anticipated will generate demand for the following local facilities within the precinct:

- A multi-purpose community centre of around 429sqm will be required to provide indoor space for community activities and programs and meet Camden Council's standards for provision. This facility will be owned and managed by Camden Council and will require a site of around 1,000 sqm. The final ILP appropriately locates the community centre within the proposed neighbourhood centre, to reinforce the role of the centre as the main community focal point for the Precinct.
- A public primary school. A site of 2 hectares has been identified in the final ILP and agreed in principle with the DEC, on the basis that the school will share access to the adjoining public open space, which will be owned and managed by Camden Council as a local park. This will be subject to negotiation of detailed arrangements for shared use between DEC and Camden Council. To ensure shared use outcomes can be negotiated, DPI may need to set up a framework for negotiations and facilitate the negotiation process.
- A variety of facilities and services to be provided by non-government or commercial providers, including:
  - A Catholic primary and high school
  - Childcare centres
  - Medical centres

In addition, the forecast population will contribute to demand for district level facilities to be provided within or close to the Oran Park town centre. Based upon Camden Council's standards of provision, this will include:

- Contributions equivalent to 133 sqm for a district community centre
- Contributions equivalent to 429 sqm of library floorspace in Oran Park

The precinct will also fall within the catchment area for the public high school proposed for Oran Park.

District and regional level services, including a performing arts and cultural centre, specialist health and medical facilities, TAFE, university, courthouse, police and emergency services, will be provided at the Leppington Major Centre and other centres across south western Sydney.

## 7.4 Open space requirements

In terms of open space, sporting and recreation facilities, the study has identified a need for:

- A minimum of 28.89 ha of open space to meet Council's minimum requirements based on a standard of 2.83 ha / 1000 people
- Local neighbourhood parks distributed equitably through the Precinct
- About 8 playgrounds to be provided across the precinct according to the hierarchy proposed within the *Camden Play Space Strategy 2010-2020*
- Two double playing fields of approximately 4.6 ha each, located so as to provide equitable access
- Linear open space to provide a network of walking and cycling trails
- Four outdoor sports courts to be provided off-site as part of the precinct's contributions to a larger district / regional sports complex. For consistency with the planning of district / regional sports complex proposed in the *Oran Park Section 94 Contributions Plan*, this contribution all up should be equivalent to about 3.84 ha of land.

The final ILP has incorporated these requirements appropriately. It has provided 29.71 ha of open space, which allows 6.7 ha for neighbourhood parks, 9.2 ha for two double playing fields, 3.81 ha for off-site contributions to district sporting facilities and around 10 ha of land adjoining or within the buffer to the riparian corridor for informal recreation, walking and cycling trails.

## 8 References

- AECOM (2013) *Catherine Fields Public Domain and Landscape Strategy* prepared for DPI
- Camden Council (2010) *Camden Play Space Strategy 20010-2020* .
- Camden Council (2005) *Camden Recreation and Leisure Strategy 2005*.
- Camden Council (2011) *Camden Contributions Plan*.
- Camden Council (2010) *Camden 2040*.
- Camden Council (2008) *Oran Park and Turner Road Precincts Section 94 Contributions Plan*.
- Department of Planning and Infrastructure (2012) *Draft Precinct Plan for Catherine Fields Part Precinct*.
- Department of Education and Communities *Advisory Notes for Master Planning New Education Facility Sites*.
- Elton Consulting (2012) *Shared Use of open Space by Schools and the general Community* . Prepared for Department of Planning and Infrastructure
- Elton Consulting and Parkland Environmental Planners (2011) *Demographic and Social infrastructure Assessment Report, Austral and Leppington North Precincts*. Prepared for Department of Planning
- Elton Consulting (2007) *Oran Park Community Facilities and Open Space Assessment: Final Report*. Prepared for Growth Centres Commission, March.
- Growth Centres Commission (2006) *Growth Centres Development Code*.
- MacroPlan Australia (2012) *Social Infrastructure and Demographic Assessment for Catherine Fields Part Precinct*.
- NSW Government, Department of Planning, December 2010. *Recreation and Open Space Planning Guidelines for Local Government*, prepared by SGS and HM Leisure Planning.
- South Western Sydney Local Health District (2012) *Integrated Primary and Community Care Development Plans for the South West Growth Centre*.