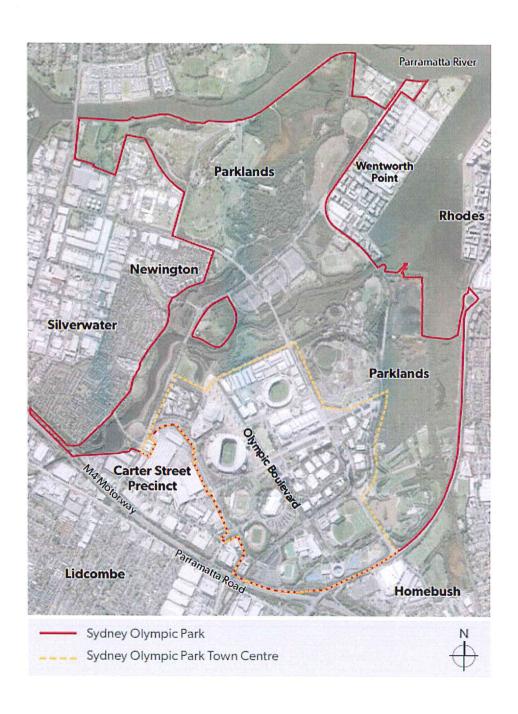
Submission - Sydney Olympic Park Master Plan 2030 (Review 2016) and State Significant Precincts SEPP.

City of Parramatta



Contents

1. Discussion

- 1.1 Land Use
- 1.2 Built Form, Height, Floor Space Ratio
- 1.3 Overshadowing
- 1.4 Public Domain and Landscaping
- 1.5 Access, Traffic and Transport
- **1.6** Parking
- 1.7 Active Travel
 - 1.7.1 Cycle Routes
 - 1.7.2 Bicycle Parking
 - 1.7.3 Walking
- 1.8 Demographic Assumptions
- 1.9 Affordable Housing
- 1.10 Community Facilities
- 1.11 Childcare
- 1.12 Education
- 1.13 Social Inclusion
- 1.14 Land Assets and Facilities
- 1.15 Recreation Facilities and Open Space
- 1.16 Healthy High Density living
- 1.17 Smart City
- 1.18 Sustainability
- 1.19 Contributions Framework
- 1.20 Housing

1.1 Land Use

The current Master Plan 2030 has a gross floor area capacity of 1,500,000m2 of which 490,000m2 of GFA is completed or committed for development. Key market findings indicate a growing demand for residential development and a corresponding decline in commercial office space development. Retail expenditure modelling also indicates a significant growth in demand for retail floor space within the Town Centre with potential for a regional shopping centre.

The Masterplan 2030 (Review 2016) review (The Review) identifies a commercial core in the Town Centre that is exclusively for commercial uses. An expanded shopping /entertainment centre is likely to improve the prospect of attracting more office space as the Town Centre becomes more activated during the day. The revised master plan provides increased capacity for residential and retail and recognises a likely reduction in the take up of commercial floor space. The commercial capacity remains well above current demand.

Recommendation

Care should be taken to ensure that changes in expected floor spaces for retail, commercial and retail uses complement existing centres such as Parramatta CBD, which is identified in the Metro Strategy as the key CBD for Western Sydney.

Council seeks to engage in ongoing dialogue with SOPA regarding particularly the take-up of commercial space over time to ensure land use objectives for Parramatta CBD and SOPA are maintained.

The Royal Agricultural Society Lands should be incorporated within the Sydney Olympic Park Masterplan 2030 (Review 2016) to reflect any plans for redevelopment of the Showground precinct

1.2 Built form, Height and FSR

It is proposed to increase the maximum height of buildings along Olympic Boulevard, Edwin Flack Avenue (45 storeys) and Australia Avenue (30 storeys), promote the use of smaller floor plates and to create more slender tower forms. The revised master plan includes a control to limit the maximum floor plate of all towers to 800m2 (GBA). The remainder of the Town Centre will be subject to built form and height controls that protect views, define streets, maximise solar access to open space and enhance connectivity throughout the Town Centre and adjoining areas.

Generally, an increase in floor space ratio (FSR) is proposed on all underdeveloped sites within the Town Centre. It is proposed to retain the existing Master Plan provision which enables a bonus floor space allocation of up to 10% if the consent authority is satisfied that the proposed development exhibits design excellence.

Recommendation

The Review does not acknowledge the existing hierarchy of centres and building heights/urban form surrounding SOP. Building heights in the order of 35-45 storeys are typically located within a City Centre context. It is questioned the appropriateness of 45 storeys at SOP and how it will affect the skyline and urban form of Metropolitan Sydney.

More specifically, the proposed heights (45 storeys) and densities (4:1) within the Stadia Precinct is queried. This site should relate to the heights and densities proposed at the Carter Street urban renewal precinct.

The Review should ensure that the maximum building height in storeys is calibrated with maximum

FSR's. Height limits should consider design excellence bonuses and plant room/rooftop articulation requirements for tall buildings.

The provision of colonnades providing continuous shelter for pedestrians in primary streets in the master plan is supported in principle. However, the extent of colonnades shown is questioned. Rationalisation of the extent of colonnades is recommended to address a few key, appropriately scaled, retail streets only, the remainder being furnished with awnings. Both colonnade and awning treatments should be continuous for full street or legible block lengths.

The proposed tower street wall/ podium relationship is queried for mixed use/ residential towers. It is unclear if the 8+ storey street wall is as a result of accommodation above ground car parking or if it is primarily residential. Some of the lower levels seem to demonstrate issues with ADG and generally appear very large. Building controls should be included that limit above ground parking to no more than 4 levels above ground. In addition, the 3D flythrough on exhibition clearly illustrates that the podium sizes along Olympic Boulevard are significantly larger than the tower floorplates. It is unlikely that residential could be accommodated within this podium and still comply with the Apartment Design Guidelines.

The additional 9,500 (total 23,500) residents must be considered in conjunction with the projected densities at nearby Wentworth Point and Carter Street urban renewal precincts. The cumulative impacts of significant densities without the provision of social + transport infrastructure could result in significant long term social and economic issues for the Greater Parramatta region.

It is recognised by the Masterplan that this focus on an increase on residential uses will create increased local infrastructure needs across the Park and surrounding areas. As noted below, the Council seeks to engage with SOPA to ensure the most effective and efficient delivery of local infrastructure across the wider area. Council cautions that current programmes, infrastructure identification and prioritisation mechanisms and processes for the funding and delivery of essential State infrastructure require coordinated attention from state agencies. This is particularly the case in respect of the M4 access ramp (Hill Rd- Carter St) where the Housing Acceleration Fund allocation in the 2016/17 budget is yet to be confirmed for expenditure by RMS.

Density should relate to walking catchments of existing heavy and proposed light rail stops as well as transport capacity and frequency of transport. The density correlation to this aspect is not clear in the Review.

1.3 Overshadowing

The Review retains a number of planning controls that aim to minimise the impact of taller building forms on the level of solar access to other development and public open space within the Town Centre and surrounding properties.

Recommendation

The cumulative impact of the proposed building form/heights pose a risk of overshadowing open spaces and impact on the ability of adjacent developments of achieving ADG solar access compliance.

A 3d model of the Review area should be made accessible to CoP so that it can be incorporated into the LGA wide digital model and the extent of overlooking can be better tested.

1.4 Public Domain + Landscape

Recommendation

Principles should include:

- o mandatory contiguous deep soil zones (ie natural ground) requirements on selected boundaries for development lots,
- o minimum 4.5-5m footpath width in the active streets where there are zero setbacks to allow reasonable tree root and crown spread,
- o minimum soil volumes for trees according to best horticultural practice,
- o structural soils or suspended pavement slabs over tree pits to minimise compaction of tree roots in the town centre (parking lanes or footpaths),
- o no basement car parking under public streets or dedicated pedestrian links.

Public seating is required in primary streets as an alternative option to commercial outdoor seating (where payment to sit is required). Public seating should include minimum 30% with arm and back rests.

1.5 Access, Traffic and Transport

Traffic generation is one of the key constraints to development at Sydney Olympic Park. As part of the review, a high level traffic and transport assessment was undertaken by WSP Parsons Brinckerhoff. The assessment considered the impact of an additional GFA above that contemplated in the existing master plan in terms of traffic generation, performance of roads and intersections, parking, public transport usage and travel demand management within and outside of the Town Centre. Traffic generation First-principles modelling was undertaken to quantify the anticipated change to traffic generation as a result of the proposed changes to land use.

Overall, the results of the high level analysis indicate that the proposed changes to land use within the Town Centre would increase AM peak hour traffic generation by around 17%, with the majority of the increase travelling in the opposite direction to the dominant traffic flow. Based on this analysis, the Department of Planning consider the additional peak hour traffic impacts of the changes to land uses proposed to be relatively minor.

The analysis identifies a number of upgrades to roads and intersections within the short and longer term to manage the impact of development anticipated under the existing master plan and additional traffic generation as a result of this review. Many of the upgrades were identified in 2010 to support anticipated development as part of the existing master plan and as part of the current review are required to be brought forward and / or are now under investigation as part of the Olympic Peninsula Regional Transport Infrastructure Investigations being undertaken by Roads and Maritime Services (RMS).

The funding of these road and intersection upgrades will be managed through one of a number of mechanisms:

- Sydney Olympic Park Authority's Local Infrastructure Contributions Framework;
- Special Infrastructure Contribution (SIC) for State and regional roads/Light Rail. As the SIC has not yet been finalised, a clause will be inserted into the State Significant Precincts SEPP that requires satisfactory arrangements to be made for State and regional infrastructure prior to development consent being given for proposed development.

Public and Active Transport Existing heavy rail and bus services have increased significantly since the existing master plan came into effect. Building upon this, in the future it is proposed that:

• the potential for a rapid transit line through Sydney Olympic Park should be incorporated into the current joint federal and state government scoping study into the rail needs of Western Sydney.

- the potential for a future rapid transit station within Sydney Olympic Park should be preserved.
- train capacities and services should be progressively increased in response to increased patronage
- light rail is included and provided for as part of the Master Plan Review.
- the adoption of future bus infrastructure

A non-car mode share of 28% for Sydney Olympic Park has been achieved, which exceeds the 25% target nominated by the 2010 (baseline) transport study. The traffic analysis recommends that a non-car mode share of 40% be targeted. The transport study also recommends that a higher stretch target of around 60% should be adopted

The revised non-car mode share targets have been incorporated into the master plan with controls which require all non-residential development in the Town Centre to prepare and implement a Work Place Travel Plan outlining how the development will comply with Master Plan 2030 transport strategies and the relevant mode share target for utilisation of public transport and minimisation of car travel during peak commuter periods (refer to section 4.8.1 of the master plan).

Recommendation

The cumulative impact of the proposed additional development in conjunction with the Carter Street Precinct and the Wentworth Point development and the total impact that that level of development will have on the road network has not been modelled at this stage. (See Traffic Study - section 5.8 Table 5.15 3rd dot point).

It appears that the *Olympic Peninsula Regional Transport Infrastructure Investigations* (RMS) are expected to be a 'fix all' for the impacts. Without the benefit of that document, which appears to be a work in progress, it is difficult to make a comment of any worth on the proposed traffic facilities and whether the impact of the proposed changes can be mitigated. Once this document is available then further consideration can be given to the acceptability of the proposal.

No assessment of the impact of the simultaneous combination of peak travel demand and an event appears to have been undertaken. There is recognition of there being an interaction but no quantification.

Council supports the push to a higher mode shift to other means of transport from car with encouragement for the development of travel plans.

It appears that the westbound offload ramp from the M4 to Hill Road northbound has not been factored into the assessment. This is a critical piece of infrastructure to provide satisfactory access to the whole Olympic Penisula. In addition there are works proposed at the intersection of Hill Road and Carter Street which cannot be achieved if the off ramp is constructed. In addition, the plan seems to show a series of vehicular connections that are not provided for in the Carter Street DCP requiring consistency of documented planning.

Generally, there seems to be an approach throughout the report that when traffic begins to be impacted by the development then the need to investigate solutions will need to occur. The infrastructure required to maintain satisfactory transport needs to be identified at the outset to allow the levying of appropriate contributions from the developers and to ensure current development does not limit the opportunity for future transport improvements that may be required.

Until a final alignment is announced, the Review should be revised to indicate both Australia Ave +

Uhrig Ave Light Rail alignments. The density proposed warrants significant transport capacity increases such as a Metro line linking SOPA with Parramatta.

1.6 Parking

The proposed changes generate a net increase in parking supply of 6,560 additional car parking spaces which includes 1,340 and 4,730 additional spaces for retail and residential uses, respectively. The supply for private car parking generated by commercial development would however be less by approximately 840 spaces.

Recommendation

CoP wish to clarify whether above ground car parking is proposed and how podium built forms containing car parking will be managed to deliver positive and active public street interface.

The parking rates remain fairly generous and it is proposed that they will be reconsidered in the future. It is appropriate that these rates should be reconsidered now with lower restrictive numbers to discourage car ownership. Rates such as those in the RMS Guide to Traffic Generating Developments would provide lower rates reducing the number of car parking spaces provided in the area.

Parking rates should be limited to maximums and the provision of car share schemes should be encouraged by the Master Plan.

1.7 Active Travel

In response to the significant uplift and the resultant higher demand on the traffic and transport network, there should be consideration of strategic provision of active travel within, to and through the site. Improving active travel is limited to breaking up large blocks with a new street network and a series of pedestrian bridges, some of which exist already, some that are questionable in purpose, though there are a couple that are supported.

With the "gateways" to the site already experiencing significant congestion, as outlined in the Traffic and Transport report, there should be improved connections to Public Transport and amongst other Travel Demand Management solutions.

If walking and cycling are highlighted, there needs to be directed investment to make them the mode of choice for those shorter trips - walking up to 2km and cycling up to 10km. SOP is currently an active travel island with very poor permeability to the surrounding areas.

Recommendation

Increased investment in provision for active travel and connections beyond the borders of the site boundary should be undertaken.

A demonstrated plan should be prepared that identifies how users access the northern end of the bridge from the Central Sports Precinct, connections to the regional M4 Cycleway and Parramatta Road footpath and connections through to destinations such as Lidcombe or Homebush.

Maps should represent the pedestrian railway underpass from the Town Centre to Bicentennial Park and Concord West Station

1.7.1 Cycling Routes

As identified on the RMS cycleways finder within the report, there are very few "low difficulty" cycle lanes, off road paths within SOP or connections to the surrounding area (p57). This excludes a large proportion of the population who are "interested but concerned" and highlight safety as a key barrier to cycling.

Recommendation

Key regional routes to and through SOP should be separated from general traffic and pedestrians (including a physically separated cycleway to follow the LR route alignment). Links to Lidcombe, Rhodes, North Strathfield, Concord West, Wentworth Point and Newington/Silverwater should be proposed and clearly identified. SOP should also to connect to the M4 Cycleway.

1.7.2 Bicycle Parking

The current rates proposed are not in line with current expectations for residential, commercial and other development. They do not adequately address the difference between Long Term and Short Term parking, nor provision for end of trip facilities (showers, lockers etc). The current provision of 140 bike racks across SOP is inadequate.

Recommendation

Parking Rates for long term (workers and residents) and short term (visitors) should be **as per Table 1 below.**

Short term parking (hoops) to be close to the entrance and preferably under cover. Long term parking to be a secure bike cage that can be safely and easily accessed from the surrounding network.

End of trip facilities (individual lockers of equal number to Long Term bicycle spaces, sufficient showers and change facilities for both sexes, generally at a rate of 1 per 5-10 spaces).

Table 1

Land Use	Туре	SOPA	SOPA	CoP Suggest	Cop Suggest Short Term
		Long	Short	Long Term	
		Term	Term		
Education	School & Tertiary	0	1 per 100	1 per 20 staff	1 per 5 students in Yr 4 and above (secure bike cage)
Child Care		0	0	1 per 20 staff	1 per 10 staff
Dwellings		1 per 3	1 per 12	1 per dwelling	1 per 10 dwellings
Aged		0	0	1 per 20 staff	1 per 10 staff

Housing					
Commerc		1/200m2 GFA	1/750m2 GFA	1/100m2 GFA	1/500m2 GFA
Retail	Superm arket	0	0	1/600m2 GFA	1/300m2 GFA
Retail	Local Retail	0	0	1/200m2 GFA	1/100m2 GFA
Rec & Leisure		0	0	1 per 20 staff	1 in 10 users

1.7.3 Walking

There should be network analysis that will serve to identify the gaps in the current network and clearly identify the disconnection of SOP to the surrounding areas, especially Newington and Concord West. The pedestrian bridge over Sarah Durack Avenue and the Railway line is supported as it links high density residential development to potential community/school facilities.

Recommendation

A network analysis of the pedestrian network 2km from the town centre to identify missing links and connections is required. This process should include a review of the proposed pedestrian bridges with thoughtful analysis on how they will be used, by whom and why.

1.8 Demographic assumptions

Council officers have reviewed the methodology used by Elton Consulting in their *Community Facilities Strategy for Sydney Olympic Park Master Plan 2030* to forecast likely demand for community and recreation facilities at Sydney Olympic Park.

Estimated future population

Average occupancy rate

It is likely that the proposed 2.2 persons per household occupancy rate proposed by Elton for the Sydney Olympic Park development does not accurately reflect existing occupancy patterns in the Parramatta LGA and surrounding suburbs in similar developments.

In the *Community Facilities Strategy for Sydney Olympic Park Master Plan 2030* report Elton Consulting assumes the occupancy rate for the site to be 2.2 persons per household by following the key assumptions:

"80 square metres has been used as the average dwelling or unit size. This reflects recent (2015) guidelines introduced by the NSW Government for minimum sizes for apartments as follows:

Studios: 35 sqm

One bedroom apartments: 50 sqm

Two bedroom apartments: 70 sqm

Three bedroom apartments: 90 sqm.

At this stage, an average household size of 2.2 persons has been applied. .. An average household size of 2.2 persons may lead to an over-estimation of the population, unless there is a higher than average proportion of larger dwellings" (page 18).

Approximate residential floor space (sqm) 855,000...Number of residential units of 10,700 there would be 23,500 residents for the 2030."

However, this assumption by Elton Consulting is not consistent with the average household occupancy rate for the City of Parramatta and surrounding suburbs of Sydney Olympic Park.

The average occupancy rate for all types of dwellings in Parramatta LGA, Newington and Wentworth Point combined in 2011 is **2.47 persons per household**. (ABS Census 2006 and 2011, data compiled by .id demographic consultants).

The average occupancy rate for Parramatta LGA is 2.68, for Newington is 2.72 and for Wentworth Point is 2.03.

TABLE: Average household size in high density dwellings

	2006	2006	2011	2011
	Average household size	% of high density dwellings	Average household size	% of high density dwellings
City of Parramatta	2.63	24%	2.68	26.6%
Newington	2.68	40.5%	2.72	45.8%
Wentworth Point	1.93	99.6%	2.03	98.5%
Average	2.41	54.7%	2.47	50.3%

Source: ABS Census, 2011.

Trend data shows that for City of Parramatta overall and for Wentworth Point and Newington, the average occupancy rate is increasing overtime.

Using an occupancy rate of 2.47 persons applied to 10,700 dwellings leads to an **estimated resident population of 26,429** for Sydney Olympic Park.

The report by Elton Consulting assumes that there will be a relatively lower proportion of family households residing in the proposed development area in Sydney Olympic Park. This may be due to the assumption that high density housing does not tend to attract families with children, or larger households. The report also suggests that people tend to stay in apartments while their children are young or until the second child is born and then move to larger dwelling types. The report cites evidence from a survey undertaken by the Urban Taskforce Australia, which found that families with young children make up around 10-15% of apartment households, but mature families with other children comprise a very small proportion of apartment households.

Council officers argue that this assumption should be revised, for the following reasons:

- The recognition that apartment living is becoming an increasingly accepted option for families with children in Sydney, particularly for those born overseas.
- The high levels of existing and planned facilities, social infrastructure and transport connections are likely to attract families with children, despite the dwelling structure available in the proposed development. The proposed infrastructure that will become available near the site includes retail facilities, parks and open space areas, schools, childcare facilities, community spaces, libraries and other essential services. These facilities will attract and support families.
- There is also anecdotal evidence of multi-generational families and large families living in small, overcrowded apartments in other high density areas in the City of Parramatta, including Westmead and Harris Park.
- City of Parramatta trend data shows that whilst our built form is getting smaller, our household size is getting larger.

Therefore the assumption that only a small proportion of families will reside in this development should be revised.

Recommendations

The incoming population profile and proposed development target market identified within the Review should be revised to recognise a higher occupancy rate (resulting in greater population) and significant proportion of families that will be attracted to live in this area.

SOPA should consider promoting social diversity through affordable housing and a mix of dwellings of difference sizes/bedroom numbers, and the provision of housing suitable for older people (including high and low care options and independent/assisted living units.

Projected incoming population profile

In the Elton Consulting *Community Facilities Strategy for Sydney Olympic Park Master Plan 2030* report dated June 2016, the characteristics of the incoming population of the proposed Sydney Olympic Park development are identified as:

- A high proportion of young adults 25-34 years
- Low proportion of older people, over 65+ are not downsizing to apartments as anticipated due part possible economic factors.
- A lower proportion of single person households.
- Higher proportion of couple households without children.
- A small but growing proportion of young people sharing in group households.
- Lower proportion of families with children.

This is consistent with forecasts undertaken determined by .id for City of Parramatta for the Sydney Olympic Park, Newington and Wentworth Point area.

As per the table below, the biggest change in Sydney Olympic Park population between 2011 and 2036 is in the Tertiary education and independence age group (+4,184), Young Workforce age groups (+11,040), Parent and Homebuilder age group (+4,627), and the age cohorts that are 50 years old and over.

TABLE: Sydney Olympic Park forecast age structure by service age groups, 2011 - 2036

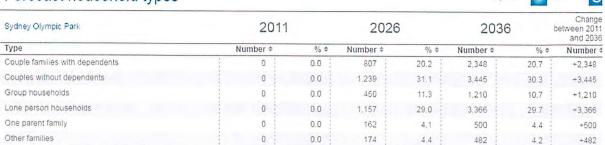
Sydney Olympic Park - Total persons	20	2011 2016		16	2036 between		Change between 2011 and 2036
Age group (years) #	Number ≎	% ≎	Number ≎	% ≎	Number \$	% *	Number
Babies and pre-schoolers (5 to 4)	5	7.6	85	5.0	1,876	7.4	+1,871
Primary schoolers (5 to 11)	3	4.5	27	16	869	3.4	+866
Secondary schoolers (12 to 17)	6	9.1	44	2.6	502	2.0	+496
Tertiary education and independence (18 to 24)	9	13.6	406	23.9	4,193	16.6	+4,184
Young workforce (25 to 34)	13	19.7	833	49.1	11,053	43.8	+11,040
Parents and homebuilders (35 to 49)	10	15.2	210	12.3	4,637	18.4	+4,627
Older workers and pre-retirees (50 to 59)	17	25.8	64	3.7	1,176	4.7	+1,159
Empty nesters and retirees (60 to 69)	2	3.0	20	1.2	623	2.5	+621
Seniors (70 to 84)	1	1,5	5	0.3	213	0.8	+212
Elderly aged (85 and over)	0	0.0	5	0.3	65	0.3	+65
Total persons	66	100.0	1,698	100.0	25,207	100.0	+25,141

Source: Population forecasts, prepared by .id

As per the tables below, the biggest change in Sydney Olympic Park households between 2011 and 2036 is in lone person households (+3,3,36), couples without dependents (+3,445) and couples families with dependents (+2,348).

TABLE: Sydney Olympic Park forecast households for 2011 - 2036

Forecast household types



Source: Population forecasts, prepared by .id

As per the tables below, the biggest change in Newington population between 2011 and 2036 is in the seniors age group (+231), young workforce age groups (-208) and parent and homebuilder age group (-143).

TABLE: Newington forecast age structure by service age groups, 2011 - 2036

Forecast age structure - Se	1130	ago grou	~~			export		eset S
Newington - Total persons		2011		2026	3	2036		Change between 2011 and 2036
Age group (years)	‡	Number *	% \$	Number \$	% \$	Number =	% \$	Number \$
Babies and pre-schoolers (0 to 4)	- 1	544	9.8	496	8.9	491	8.8	-53
Primary schoolers (5 to 11)		534	9.6	539	9.6	530	9.5	-4
Secondary schoolers (12 to 17)	- 1	275	4.9	351	6.3	345	6.2	+70
Tertiary education and independence (18 to 24)	1	401	7.2	408	7.3	408	7.3	+7
Young workforce (25 to 34)		1,163	20.8	964	17.2	955	17.1	-208
Parents and homebuilders (35 to 49)		1,570	28.1	1,451	25.9	1,427	25.6	-143
Older workers and pre-retirees (50 to 59)		610	10.9	631	11.3	613	11.0	+3
Empty nesters and retirees (60 to 69)		335	6.0	407	7.3	409	7.3	+74
Seniors (70 to 84)		130	2.3	318	5.7	361	6.5	+231
Elderly aged (85 and over)	1	17	0.3	28	0.5	43	0.8	+26
Total persons		5,579	100.0	5.593	100.0	5.582	100.0	+3

Source: Population forecasts, prepared by .id

As per the tables below, the biggest change in Newington households between 2011 and 2036 is in the couples without dependents (-64), couples without dependents (+51) and parent and lone parent households (+30).

TABLE: Newington forecast households 2011 - 2036

Forecast household types

Couple families with dependents

Couples without dependents

One parent family

Other families

Newington

Туре



17.8

7.1

3.6

+30

+4

+4

363

145

73

Source: Population forecasts, prepared by .id

As per the tables below, the biggest change in Wentworth Point population between 2011 and 2036 is in the parents and homebuilders (+4,078), young workforce age groups (+2,920) and older workers and pre-retirees (-143).

2011

% ≑

43.5

26.9

2.8

16.4

7.0

3.4

Number \$

830

583

52

353

145

73

17.3

7.1

3.6

Number \$

544

57

333

69

TABLE: Wentworth Point forecast age structure by service age groups, 2011 - 2036

Wentworth Point - Total persons		2011		2026	6	2036		Change petween 2011 and 2036
Age group (years)	\$	Number +	% ≎	Number \$	% ≑	Number ≎	% \$	Number \$
Babies and pre-schoolers (0 to 4)	-	170	5.9	1,502	8.4	1,302	7.1	+1,132
Primary schoolers (5 to 11)	1	106	3.7	1,005	5.6	1,140	6.2	+1,034
Secondary schoolers (12 to 17)	1	81	2.8	483	2.7	665	3.6	+584
Tertiary education and independence (18 to 24)		246	8.5	1,480	8.3	1,294	7.1	+1,048
Young workforce (25 to 34)	1	1,109	38.3	5,299	29.6	4,029	22.0	+2,920
Parents and homebuilders (35 to 49)		677	23.4	4,495	25.1	4,755	26.0	+4,078
Older workers and pre-retirees (50 to 59)	1	271	9.4	1,855	10.4	2,380	13.0	+2,109
Empty nesters and retirees (60 to 69)		169	5.8	1,139	6.4	1,643	9.0	+1,474
Seniors (70 to 84)		57	2.0	587	3.3	976	5.3	+919
Elderly aged (85 and over)		11	0.4	79	0.4	103	0.6	+92
Total persons	1	2.897	100.0	17.926	100.0	18.286	100.0	+15,389

Source: Population forecasts, prepared by .id

As per the tables below, the biggest change in Wentworth Point households between 2011 and 2036 is in lone households (+2,468), couples without dependents (+2,431) and couples families with dependents (+1,205).

TABLE: Wentworth Point forecast households types for 2011 - 2036

Population and household forecasts, 2011 to 2036, prepared by .id , the population experts, September 2016.

Forecast household types







Wentworth Point	2011		20	26	20	36	Change between 2011 and 2036
Туре	Number \$	% \$	Number *	% \$	Number \$	% ¢	Number *
Couple families with dependents	230	16.2	1.398	16.6	1,435	16.6	+1,205
Couples without dependents	532	37,5	3,009	35.8	2,963	34.2	+2,431
Group households	91	5.4	492	5.9	459	5.3	+368
Lone person households	440	31.0	2,701	32.1	2,908	33.6	+2,468
One parent family	91	6.4	601	7.2	686	7.9	+595
Other families () is a second of the second	1913) (gd 35 (girl)	2.5	203	2.4	208	2.4	+173

Source: Population forecasts, prepared by .id

Workforce population

In the Elton Consulting *Community Facilities Strategy for Sydney Olympic Park Master Plan 2030* report dated June 2016, the workforce assumptions of the proposed Sydney Olympic Park development are identified in the table below.

TABLE: Preliminary workforce estimates 2015-2030

Employment category	Jobs to 2030
Office Jobs	26,300
Retail and entertainment jobs	2,430
Education jobs	1,900
Hotel / temporary accommodation jobs	1,900
Community and venue jobs	1,470
Total workforce	34,000

Some of these workers will rely and utilise the social infrastructure within in and close by to the SOP site and therefore when calculating social infrastructure provision the workforce should be considered when determining capacity.

Neighbouring Developments and Suburb Growth

Significant growth and high density development and change is expected in the suburbs bordering Sydney Olympic Park. Considering SOP in isolation is unhelpful and the master plan should be reviewed and finalised in context of the growth occurring in Wentworth Point, Carter Street and Newington particularly. Decision makers should also be cognisant of the way in which the community of Rhodes will seek to utilise social infrastructure on the Wentworth Point/ SOP sites.

1.9 Affordable housing

There is no specific commitment to the provision of affordable housing outlined in the Review.

Council's current policy context supports increasing the supply of affordable housing in the City of Parramatta, as outlined in the:

- Affordable Housing Policy adopted in 2009 (currently under review), and
- Community Strategic Plan adopted in June 2013 which identifies affordable housing as an area of focus.

Maintaining and attracting key workers to the City of Parramatta is vital to the success of Parramatta's developing CBD and surrounding centres of research, education, health and industry. It will also be important for the success of Sydney Olympic Park's commercial zones. Targeting key workers for affordable housing allows workers providing the essential services in these industries to live close to their place of employment, and provides an incentive for them to continue serving the local Parramatta community.

Housing affordability in the City of Parramatta is rapidly declining, resulting in a significant level of housing stress¹ in the City of Parramatta. In 2011, 14.7% of households in the Parramatta LGA were experiencing housing stress (8,793 households). Parramatta's cost average fell from 8% to 2% between 2010 and 2014. This decline in housing affordability is expected to continue as renewal and intense development of the City of Parramatta occurs.

Sydney Olympic Park is an ideal location for Affordable Housing. Sydney Olympic Park Authority Local Infrastructure Contributions Framework (May 2016) states;

"Contributions for affordable housing not addressed in the ICF Infrastructure contributions sought under the ICF do not include contributions for any affordable housing that the consent authority may seek, through a consent condition, from developers of land to which the ICF applies. SOPA may, at its discretion and by agreement with a developer, however choose to address contributions for affordable housing at the same time as contributions identified under the ICF through a single planning agreement." (page 9).

The rate of provision of affordable housing in the Sydney Olympic Park development can be determined by considering the affordable housing contributions of other local government areas and development sites as listed below:

- In Willoughby LGA, a contribution of 4% of the floor space of the development is required to be allocated to affordable housing
- In City of Sydney's Green Square precinct, onsite contributions for affordable housing equal to 3% of the total residential floor area
- In the North Parramatta precinct, UrbanGrowth NSW proposes to allocate 3% of total development yield for affordable housing. In the Cumberland sub-precinct this amounts to 13,000m² of gross floor area, which at an average floor space of 60m², would account for approximately 216 dwellings. If calculated on a per unit basis rather than floor space, 3% of 2,700 proposed dwellings would account for 81 affordable housing dwellings.

The City of Parramatta notes the affordable housing contributions rates secured by other councils. However, the CoP considers that a higher rate is more appropriate given the demand for affordable

¹ Housing stress is defined as per the NATSEM (National Centre for Social and Economic Modelling) model as households in the lowest 40% of incomes who are paying more than 30% of their usual gross weekly income in housing costs.

housing across the Western Sydney Region and the position of Sydney Olympic Park as a best practice development opportunity. To this end, the level of affordable housing provided should be at least 5%-10%. This level should be consistent with the affordable housing approach in the forthcoming District Plans.

Recommendation

SOPA should make provision for affordable housing in the Review documentation and Infrastructure Contributions Framework, with a minimum of 5-10% of total yield applied with the affordable housing units dedicated in perpetuity.

Affordable housing units should be indistinguishable from all private market dwelling in the development.

The dwelling mix of affordable housing units should mirror the overall dwelling mix of the development, to meet the varying needs of prospective affordable housing tenants.

SOPA should select a community housing provider (CHP) to manage the affordable housing units, and work with City of Parramatta Council and the CHP to determine an effective framework, particularly for matters such as tenant eligibility and length of overall tenancy to ensure a coordinated approach to affordable housing in the City of Parramatta areas.

1.10 Community facilities

The future Sydney Olympic Park is a precinct that will have a neighbourhood, district and regional role as a result of the infrastructure and housing it will provide.

Surrounding Context

Other community facilities are proposed in the surrounding Wentworth Park and Carter Street precincts. Wentworth Park 3,200sqm community facility is about to come on line and the proposed Carter Street facilities of 2,000sqm will impact on the community facilities space in Sydney Olympic Park. These Sydney Olympic Park surrounding facilities will provide the forecast population and provide the future residents with range of services and recreational programs.

The proposed community facilities of Sydney Olympic Park need to work in collaboration with surrounding community facilities to provide best practice services and programs to meet the needs of the population.

Proposed community facility

Elton's Community Facilities Strategy for Sydney Olympic Park Master Plan 2030 report dated June 2016 states:

A gap in the provision of local community facilities that facilitate people meeting, forming relationships and the development of social network (e.g. libraries and community centres) has been previously identified (page 28).

The Elton Consulting report states that a lack of multipurpose community centre space, space for community service delivery and library space, contribute to key community infrastructure shortfalls in the area. The report notes that the proposed Sydney Olympic Park development is in a higher density area with high relative land values. In similar areas, there is a common trend in community

infrastructure provision to focus on the delivery of quality over quantity, with an emphasis on flexible, multipurpose, high quality spaces. The proposed model for the key Sydney Olympic Park facility is a community hub including a library and multipurpose community centre. Also to be considered within this development is the co-location of a childcare facility.

Elton proposes sizes for these facilities, as listed in the table below:

Facility	Proposed	Proposed new	Enhancement of	Comments
	standard	provision	existing	
Multipurpose community centre	50sqm:1000 people and minimum floor area of 1000 sqm (Auburn Council)	2030 residential population (23,500) and 10% usage by worker – 1,200 sqm community centre space	Use of existing SOPA facilities for functions/space for hire functions	For services, activities, programs, groups, talks, formal and informal meetings. Area could be decreased if developed as a community hub with library
Library	39sqm:1000 (NSW Public Library)	2030 residential population (23,500) and approximately 34,000 workers – 2,400 sqm library space	NA	Includes worker demand. Floor space could be decreased if developed as a community hub with community centre.
Childcare Centre	1 place for every 2 children 0-4 years 1 place for every 75 workers.	12-13 new centres (based on 80 places per centre)	NA	Childcare care is likely to be provided by the private sector and or nongovernment organisations. Childcare is generally a permitted use within commercial and residential areas.
Public Schools	Primary school- 1:2,000-2,500 dwellings. Secondary school – 1:6,000-7,500 dwellings.	Discussions are ongoing with DEC regarding School provision in SOP town centre. A 2,000 student high school is being investigated for SOP, as well as provision for a	NA	Projections suggest approximately 2,000 school aged children will live within SOP town centre.

	future primary	
	school.	

The Elton Consulting Report calculates that by 2030, with a combined residential and working population that the Sydney Olympic Park area will require approximately 2,400sqm of library space. The report also considers that a Multipurpose Community Centre operating in 2030, due to residential use and a 10% usage by the Sydney Olympic Park working population, will require a space of approximately 1,200sqm. The proposed facility will be an integrated community hub facility and the report has assumed that by efficiencies gained through co-location, floor area of this facility could be reduced to 2,500-3,000sqm. Within the report, there are no details on who will manage the proposed Community Hub containing a library and community meeting space.

As a result of amalgamations, CoP will acquire a new library, currently under construction, and forming part of the community hub at Wentworth Point. This hub integrates a library service within 3200 sq. m. of useable space. There are also a number of Library facilities in the surrounding LGA's, with those in closest proximity to the site including Auburn Library, Lidcombe Library and Newington Library.

The Elton Consulting report states that a lack of multipurpose community centre space, space for community service delivery and library space, contribute to key community infrastructure shortfalls in the area. The report notes that the proposed Sydney Olympic Park development is in a higher density area with high relative land values. In similar areas, there is a common trend in community infrastructure provision to focus on the delivery of quality over quantity, with an emphasis on flexible, multipurpose, high quality spaces. The proposed model for the key Sydney Olympic Park facility is a community hub including a library and multipurpose community centre. Also to be considered within this development is the co-location of a childcare facility.

As previously stated, the proposed occupancy rate of 2.2 (leading to 23,500 residents is likely to be too low. Using an occupancy rate of 2.47 (Demographics Appendix) and applying this to the expected number of dwellings of 10,700 leads to an estimated resident population of 26,429.

Considering this potential increased residential population within the SOP master plan areas as well as the growing resident population nearby in Newington and Wentworth Point and Carter Street, the size of a multipurpose hub potentially housing a library (and other community services) should be no less than 3000 sq m.

Size and scale

Council favours the development of an integrated community hub of adequately size which could include a branch library. Flexible community meeting space and exhibition space should be incorporated into any community hub to service the residents, visitors and workers of Sydney Olympic Park as well as those in surrounding suburbs.

The potential growth and high density dwelling form at SOP is comparable to the development currently taking place in Wentworth Point, where a 3,200sqm multi-purpose community hub, that includes a branch library, has been included.

The standard for Library space recommended by NSW Public Libraries is 39sqm per 1000 people. Additionally, the recommended standard for multipurpose community centre space by Auburn Council is 50sqm per 1000 people and a minimum floor area of 1000sqm. Elton's 2016 'Community Facility Needs Study' prepared for the City of Parramatta recommends that Community Facility provision should be between 70 to 80sqm per 1000 people.

Location

Leading practice favours the clustering of social infrastructure in central, accessible locations to enhance accessibility and connectivity with related uses. Permeability for surrounding residents is considered to be important. The proposed community facilities are centrally located, close to the commercial core and the local primary school. Connectivity to existing residents of the district would be reliant on the additional transport services proposed within the report, as existing connections would not provide adequate access for those residents accessing community infrastructure.

It appears that both the core Sydney Olympic Park precinct and the Carter Street growth area would benefit from community hub facilities. Such hubs may include library services, community meeting spaces, function area, exhibition space and technology facilities (aligned with library e resources). The hub at the core SOP precinct, based on population estimates out to 2030 could be a larger set of spaces, possibly up to 3000 sq. metres. (The Wentworth Point Library and Community Centre is approx. 3200 sq. metres to be spread over two floors). The Carter Street hub could be at a 2000 sq. metre size

Recommendation

A district level community hub, with potential to incorporate a library branch, should be included in the development at a scale of minimum 3,000sqm.

Any new library in Sydney Olympic Park should satisfy the following requirements:

- Adequate size of the facility
- Adequate provision of car parking, including accessible parking spots
- Implementation of universal design principles to ensure access for all community members
- Provision of flexible spaces for community programs to accommodate change in need of the community
- Alignment of services with any other community based tenants of the proposed community spaces to provide a broad offer to local communities
- Develop strong links with various early years services in this part of the LGA, including making programming space available for their use
- Carefully consider the need for a community technology hub as part of the facility development and service provision

Sydney Olympic Park should work with Council to identify the strategic purpose of the community facilities and formulate an appropriate governance structure for them, especially given similar community facilities either in planning stage or in final stages of construction at Wentworth Point and Carter Street. These discussions should include, but not be limited to, the engagement of an existing not-for-profit agency as anchor tenant, managing the multi-function and multi-tenanted aspects of the facility.

Sydney Olympic Park Authority should collaborate with Council in respect of surrounding community facilities to encourage best practice for services and programs. This is particularly important in respect of those facilities proposed for Carter St and should be discussed with Council in more detail. SOPA should consider the dedication of space to social enterprises within the community hub.

Sydney Olympic Park should set targets for local employment, particularly the employment of local disadvantaged communities – social housing tenants, young people, Aboriginal and Torres Strait Islanders, cultural and linguistically diverse communities, and people with a disability – in the construction phase of development. This should be done in partnership with vocational training and

education centres.

SOPA and DPE should clarify the long term financial arrangements for providing these facilities, including how it is proposed for the facilities to be funded and future operational arrangements for any new facility, particularly those that may become the responsibility of Council in the future.

1.11 Childcare

The Elton Consulting Community Facilities Strategy report (2016) notes that there are a number of childcare centres close to the development, including centres in Olympic Park, Strathfield, Homebush, Concord, Lidcombe and Auburn. The report states that these childcare centres provide long day care services and are also complemented by a significant number of family day care, after school and vacation care services in and around the site.

However, the Elton's report states that Auburn Council has advised of a significant shortage of quality, affordable childcare places across the LGA, and in particular, a critical shortage and high demand for places for children 0-2 years. Whilst the Elton Consulting report did not contact each childcare centre to determine vacancy rates, it can be expected that limited vacancies most likely exist at these centres and that there would be undersupply of places for 0 -2 year olds. The report also states that many centres do not cater for the 0-2 year old age group as these places are not profitable due to the high costs associated with child-to-carer ratios.

Future demand for childcare generated by the development

The report acknowledges that the future residential and working community at the proposed development at Sydney Olympic Park will generate additional demand for childcare and that additional childcare facilities will be required to meet these needs.

Elton Consulting states:

"Although the provision of on-site childcare was considered not important (only 6%), when this is considered across a larger future workforce, the number of childcare places required will be significant'

The proposed standard for the provision of childcare centres as part of the City of Sydney's 2016 master plan review stated that there should be one (1) place made available for every two (2) children aged 0-4 years and that there should be one (1) place per 75 workers in the development area.

Elton Consulting have made the assumption that 6% of the new population of the development will be aged 0-4 years old (based on research undertaken by the Department of Education), and that one childcare place should be provided for every two children aged 0-4 years. This suggests that there will be approximately 1,410 children aged 0-4 years at the development, and that the new development will generate demand for **705** childcare places. In addition to this, the report states that a working population of approximately 34, 000 people would generate demand for **453** childcare places; which when combined with the residential population, requires a collective demand for **1,158** childcare places.

Elton Consulting therefore states:

"Benchmarks indicate the need for 12-13 new childcare centres. This need should be reassessed as the town centre is developed and demand patterns established. Additional places may also be required to cater to the future SOP childcare students"

However, it is possible that demand for childcare facilities may be higher than projected by Elton, as:

- There may be a larger population living at Sydney Olympic Park than projected (Council
 officers estimate potential for more than 26, 429 residents)
- There may be a higher proportion of families with children and babies living at the site than projected by Elton. The Forecast population for Sydney Olympic Park in 2036 as prepared by .id indicated that the expected proportion of the population between 0-4 years will be approximately 7.4% (1,876). (note this forecast was completed using the current master plan so dwelling figures are deflated and therefore this 0 4 year estimate is likely to be a minimum figure).

This will contribute to higher demand for childcare at the development or close by.

Further, a *Needs Analysis* completed by Families at Work (2015) for City of Parramatta indicates a potential undersupply of long day care places by 2036 across the LGA. These calculations did not take into account need generated by the proposed development (not available at the time of this report). An update provided by Families at Work has been provided to assess the impact of the SOP master plan proposal of childcare. They assess the demand raised by the master plan for long day care places to be 770 places (full time) and 55 family day care places (full time).

The allocation of childcare centres should be reassessed against the revised forecasted population to ensure that demand can be met.

Out of school hours care

Whilst acknowledging that there are a 'significant number' of family day care, after school and vacation care centres in and around the site, the report prepared by Elton Consulting does not appear to include the consideration of OOSH services within the proposed community facilities, which will lead to a further undersupply of out of school hours places close to the development.

A *Needs Analysis* completed by Families at Work (2015) for City of Parramatta indicates a potential undersupply of Out of School Hours Care (OOSH) spaces by 2036 across the LGA. These calculations did not take into account need generated by the proposed development (not available at the time of this report). An update provided by Families at Work has been provided to assess the impact of the SOP master plan proposal on childcare including OOSH. They assess the demand raised by the master plan for OOSH services to be 122 places.

Proposed new childcare facilities

Elton Consulting notes that the additional demand for childcare facilities, generated by the development, should be accommodated for both onsite and in the surrounding area.

Elton Consulting have proposed 12-13 new childcare centres to meet the needs of the future Sydney Olympic Park community. The report also states that this need for childcare should be reassessed as the town centre is developed and demand patterns established.

In terms of location, Council officers note that childcare should not be isolated from the surrounding community facilities.

The childcare centres provided should meet the following requirements:

- Compliance with relevant legislation (Education and Care Services National Regulations, 1 June 2014)
- Parramatta DCP 2011, including requirements for outdoor play spaces at grade
- Emphasis on attracting providers that deliver quality, affordable long day care (potentially through not-for-profit providers)
- Sufficient places for 0-2 year olds to meet demand from the development.
- Preferably no larger than 65 children per centre.

Management of childcare facilities

The report prepared by Elton Consulting predicts that for Sydney Olympic Park, childcare is likely to be provided by private sector or community based non-government providers.

Not-for-profit community based childcare services are preferred to manage childcare facilities, to ensure that a range of community needs are met. Not for profit childcare providers are generally better equipped and more likely to support children and families with complex needs, compared with private, profit-driven providers. A mix of private and not-for-profit childcare providers in the Sydney Olympic Park area would also enable competition and quality standards to be met, as well as encouraging affordability and access for vulnerable families and children.

Recommendation

The requirements for long day care spaces for children under five be should revised up to at least 1,220 places (full time) to ensure that provision remains appropriate to meet potential demand.

Consideration should be given to having a mix of private and community based long day care child care provided on the site.

OOSH facilities should be included in the master plan, with provision for at least 122 places. There is already projected undersupply, which will be exacerbated by this development.

Sydney Olympic Park Authority should work with Department of Education and Communities to consider the location of a long day care centre and OOSH service within or in close proximity of the proposed school.

1.12 Education

The *Community Facilities Strategy* report completed by Elton Consulting (2016) has been reviewed. The report covers secondary and primary education. It identifies that the population of the proposed development is likely to be 23, 500 people, with an under-representation of children under 15. According to the report, there are projected to be approximately 2,000 school aged children in SOP in the future.

Analysis undertaken by Council officers using a higher average household occupancy rate of 2.47 indicates that the population of the development could be up to 26,429 people (2,929 additional residents than proposed by Elton). (Refer to the Section titled 'Demographics' for more discussion)

There are currently six (6) Government schools located within close proximity of the site and two Government primary schools planned for the Wentworth Point and Carter Street Priority Precincts. There are currently eight (8) Catholic or and Independent schools located in the surrounding areas. The report recognises that there are Technical and Further Education (TAFE) opportunities located in the area surrounding the development at Sydney Olympic Park, with facilities located at Strathfield, Granville, Lidcombe and Meadowbank.

Taking into account population growth from the proposed development and the surrounding suburbs, by 2036 local schools will need to accommodate a significant number of primary and high school students at a neighbourhood and district level.

Tertiary education facilities service a wide metropolitan and regional catchment and are not planned on a local level. As such the growth in tertiary aged students from this development is likely to be accommodated by existing facilities. Elton's report indicates that through consultation with Department of Education and Communities, accommodating this growth could include either:

"Confirming the capacity of existing schools in surrounding areas and planned schools at Wentworth Point and Carter Street to accommodate additional students. The need for an additional primary and/or high school in SOP"

Elton's report recognises that it is possible the future numbers of school-aged children in SOP will be higher if a greater proportion of three bedroom units are included. The report has also indicated that there is ongoing consultation with the Department of Education and Communities (DEC) "...to determine capacity, issues and gaps in relation to existing schools... to explore opportunities for the identification of public school sites in the SOPA Town Centre"

The Elton's report has identified that the key public education need to date is a public secondary school, and presents an option for a public school in the town centre to reuse or occupy some of the existing office and commercial space closer to the town centre.

Council recognises that there is an opportunity for the joint use of assets, as well as the co-location of assets to fulfil the needs and demands of the increasing school-aged population, increase efficiencies, make good use of limited land and provide useful infrastructure to the broader community.

Furthermore, current development at Wentworth Point incorporates the construction of a new primary school (under construction). With the expected growth in primary and high school aged students at a local, neighbourhood and district level in and around the SOP area, the capacity of this school at Wentworth Point should be revisited.

Recommendation

SOPA should seek a formal response from the Department of Education and Communities Assets Division to the education needs of the potential future population, giving specific consideration to the:

- estimated number of additional school aged children;
- capacity of current local primary and high schools to meet this demand;
- development required (if any) to accommodate the expected student numbers as well as cost estimates and preferred funding mechanisms; and
- preferred operational arrangements to enable and support the boarder community and residents of Sydney Olympic Park to effectively and efficiently make use of the development's community facilities (community halls, multipurpose meeting rooms, library etc.) and open space.
- Co-location of infrastructure including long day care and OOSH on site or close by. The City of Parramatta would request it be provided with a copy of the response from the

Department.

SOPA should liaise with Department of Education and Communities Assets Division regarding the potential to increase the capacity of Wentworth Point Primary School through expansion of the facility.

1.13 Social inclusion

Social Inclusion is more than an aspiration and research proves that people that are engaged in their community are happier, healthier and better able to live in their place of choice, for longer. The following chapter discusses some of the ways that the proposed development could promote social inclusion for *all* members of the community.

Universal design and ageing in place

Design and access for older people or people with a disability is important in promoting social connectedness and a sense of place for the whole community. Universal design guidelines should be applied not only in individual dwellings and buildings, but in the community as a whole.

The Centre for Universal Design (1997) defines universal design as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design. Universal design is an inclusive design philosophy which spans age, gender and ability."

Universal design can apply to: environments and housing, services, products and technology. By making all aspects of life more accessible, safe, usable and convenient, universal design encourages greater social inclusion by ensuring all people, no matter age or abilities, can easily move around their community and meet each other i.e. in the street or in the local environment. This can then lead to incidental social interaction and relationship building. In the long term, these social connections ensure natural supports for people in the community.

Recommendation

Dwellings and spaces throughout Sydney Olympic Park should reflect universal design principles.

1.14 Land, assets and facilities

There are a number of spaces and assets within the development which are proposed to be accessible to the surrounding community as public land. It is essential that the community facilities are designed to encourage use by the public, particularly the surrounding community (not juts immediate residents of SOP).

The programing of community spaces within the development is important in supporting activation, creating opportunities for incidental meet-ups, and encouraging belonging and community cohesion.

An appropriate governance structure will assist the effective programming of community spaces, ensuring a well-coordinated, sustainable approach that meets the needs of the residents of the development and the broader community.

The inclusion of play elements in the site should be considered as part of this development. These play elements could be incorporated in the design of the built form and public domain to encourage people to interact with each other and the site in a positive way, building trust and belonging.

Recommendation

Consideration should also be given to ease of access to facilities through appropriate way finding and signage, and inclusion of public toilets in close proximity to public facilities.

The inclusion of play elements and interactive public art should be included in the design of the built form and public design.

1.15 Recreation Facilities and Open Space

Public Open Space

The proposed changes to open space within The Review are as follows:

New Park in Central Precinct

- A park is proposed to be relocated within the commercial core. The total size of the park is proposed to be increased to 5,780m2.
- New linear Park in Central. The current review proposes an increase in size to 10,510m2 and a major upgrade including new activities, play court and new paving to the Olympic Boulevard end.
- A pedestrian overpass will also provide access across the railway corridor and Sarah Durack Avenue, to the southern precincts of the Town Centre.
- Parkview Precinct A small local park that was identified in the existing master plan will be enlarged to 2,400m2 and reconfigured to better service the residents and workers within the Parkview precinct. This park will be soft landscaped including planting, paving, furniture and lighting. In addition, and existing areas of open space are proposed to be upgraded:

A key principle of the Review is to 'enhance the network of publicly accessible open spaces', which is to be achieved through a combination of both new open spaces and the expansion and embellishment of existing open spaces based upon the recommendations of the Community Facilities Strategy (Strategy) prepared by Elton Consulting. This Strategy considered the likely needs and demands for community infrastructure based on the revised population forecasts and demographic characteristics of residential and worker populations.

The strategy states that 'community infrastructure provision needs to also consider the regional needs and demand created by surrounding development, including Wentworth Point and Carter Street' and that consideration is needed for regional level community infrastructure such as district and regional open space. The Strategy also states that 'although the town centre contains a number of high quality sport and recreation facilities, community access to these is limited as their focus is on elite sport and/or the provision of a regional level service'.

It also acknowledges that whilst nearby Bicentennial Park, Wentworth Common and Blaxland Riverside Park provide district and regional open space for the 'town centre', these open spaces already experience a high level of existing usage by the wider metropolitan population.

The Strategy recognises 'the importance of high quality, flexible and multipurpose spaces that 'foster community connections and engagement' in higher density residential environments'. However, in consideration of relatively high local land values, this is to be achieved primarily through improved access to and increased capacity of existing open spaces and recreational facilities.

Recommendation

The Review does not address anticipated local active open space requirements of the proposed significant incoming population. When it is viewed in the context of surrounding existing and proposed high density development at Wentworth Point, Rhodes, Carter Street and Melrose Park, it

is clear that significant new active recreation assets will be required to service the incoming community. Existing sporting facilities at Homebush are targeted for national and performance level sporting pursuits and are not generally available for local active sporting use.

Council is generally supportive of this approach to passive open space provision; however the Review needs to better consider active open space provision. Details about the range of other prescribed open space facilities should also be addressed.

Proposed Archery Centre Sporting Field

It is proposed to create a new sporting field on under-utilised land at the Archery centre. This is an important opportunity to increase the number of playing fields and should incorporate a standard multipurpose layout of 2 x football fields / 1 x Cricket Oval with a synthetic surface to maximise capacity.

Wilson Park (2 Fields)

Wilson Park is currently at capacity and could not accommodate increased demand without a significant upgrade. The Master Plan should provide for a significant upgrade to Wilson Park incorporating synthetic fields to facilitate increased capacity.

Newington Armoury Field

This site also provides an important opportunity for increased playing field provision (however is currently subject to access restrictions). The Master Plan should prioritise improved community access to this field and provide for an upgrade to this field to facilitate increased capacity.

1.16 Healthy High Density Living

Sydney Olympic Park has well developed appropriately designed regional passive and active recreational areas and space. The proposed Review includes:

- Improving transport and pedestrian access throughout the park
- Changing land use controls to encourage mix use developments for after-hours activities
- Creation of open spaces to create a large Urban Park
- Creation of a key hub for the community
- Identification of sites for a community facility
- Identification of sites for a new school with sporting facilities

High density residential development, if located in well developed areas of the site that are encouraging of recreation, can have a number of health benefits for residents and the surrounding community. For example, the Heart Foundation (2014) argues that "higher density in the right location, with appropriate height, land use mix, good design and accompanying amenity can contribute to creating walkable neighbourhoods and encourage more walking" (p.7).

The most significant health benefits of the proposed development relate to the promotion of active lifestyles. There are a number of features of the proposed development that are likely to encourage healthy lifestyles:

- There are a large number of facilities and services within Sydney Olympic Park which can encourage walking
- There are a large number of public transport connections linking the site with employment, education and other activities

• Both passive and active recreation facilities will be provided on site. High quality public open space is more important to people living in higher density housing compared with others because it substitutes for the private space available to residents of low density housing.

Potential negative impacts of the development

Potential negative health impacts of the development could include:

- Increased exposure to noise and pollution from the M4 motor way, potentially resulting in respiratory issues
- Potential for overcrowding, if there is a high proportion of small (1 and 2 bedroom)
 apartments in the development and a mismatch with the existing population characteristics
- Impact of high density housing on mental health, including exposure to environmental stressors such as noise, crowding, poor indoor air quality, restricted light, reduced feelings of safety, limited access to green space

NB: Some potential negative health and wellbeing impacts may apply to particular demographics only.

Recommendation

Best practice design guidelines should be implemented throughout the development to encourage healthy active living, social interaction and other health-promoting behaviour.

1.17 Smart City

Smart City Masterplan

City of Parramatta's *Smart City Masterplan* outlines PCC's commitment to making sure Parramatta is "a city based upon the foundations of good urban planning, economic competitiveness, environmental engineering and sustainable practices that use information and communication technologies to enhance liveability, sustainability and workability" (2015, p.8).

Applying a smart city approach to development at Sydney Olympic Park will enable a number of benefits, which will allow the residents and community of Sydney Olympic Park to live well and reach their full potential.

Additionally, embedding smart city principles in the built and social fabric of Sydney Olympic Park will help to "future proof" the community, and allow it to leverage its close links to planned knowledge precincts at Rydalmere (including WSU's Rydalmere campus) and the Parramatta CBD.

Recommendation

The Review should reflect the guiding principles and standards and approaches outlined in the City of Parramatta's Smart City Masterplan. The standards and approaches outlined in the Review include:

- Open data
- System connectivity
- Open standards
- Information governance
- Data management
- Data analytics
- Smart buildings and places
- Sensors and control
- Holistic approach

Trans-sector collaboration

1.18 Sustainability

Council strongly supports the continued focus on environmental sustainability as a priority, as identified as a key issue in consultation with stakeholders².

Council notes that the Sydney Olympic Park Authority Act 2001 requires The Minister for Planning must not approve any amendment of the master plan, unless that Minister has considered whether the amendment is consistent with the Environmental Guidelines. This provision protects the legacy of the 'green games' as integral to character of Sydney Olympic Park.

Council's review finds that the Assessment of the Proposal against the Environmental Guidelines 2008 included in the Planning Report³, which supports the review, does not adequately address the proposed amendments and believe that the Minister will be unable to confirm consistency without a more detailed review of the material changes to environmental requirements and energy efficiency that are presented in the amendments.

Council's detailed review also highlighted a number of concerns that have not been identified in the Review Report and Council cannot see evidence that environmental sustainability has been a priority.

Energy Conservation Objectives of the Environmental Guidelines require a commitment to applying best available environmental design principles, technology and procurement practices to significantly reduce greenhouse gas emissions. Council believes the proposed amendments fall considerable short of this commitment in the following areas:

- Removal of a requirement for NABERS Energy targets and associated commitment agreements for offices and office interiors
- Requiring no better than minimum legislated standards energy and water performance for residential buildings in NSW.
- Reliance on the lowest ratings obtainable under Green Star Design & As Built for all building types except Offices.
- Inconsistency with Objectives of the Environmental Guidelines and the nominated rating tool.

Recommendation

The review should require NABERS Energy ratings of 5 star for Shopping Centres and Hotels, 5.5 star for Offices, a minimum BASIX40 for energy, BASIX60 for water for residential developments and that other rating targets are above the lowest available and deliver contemporary best practice.

That the Review should ensure that objectives of the Environmental Guidelines that may conflict or not addressed through adoption of Green Star are explicitly required with appropriate controls.

² Sydney Olympic Park Summary of Proposed Planning Changes, NSW Planning and Environment August 2016

³ Review of Master Plan 2030 and State Significant Precinct Planning Report NSW Planning and Environment August 2016

1.19 Contributions Framework

The current Infrastructure Contributions Framework (ICF) requires contributions of money or land from developers to provide infrastructure to support development under Master Plan 2030. The review proposes managing State and local contributions separately depending on the type of infrastructure.

The Department is preparing a Special Infrastructure Contribution (SIC) for the Greater Parramatta Priority Growth Area. The Department is investigating and modelling the capacity of future development to pay the contribution. While the SIC is being prepared, a clause will be included in the State Significant Precinct listing that requires a consent authority to be satisfied that satisfactory arrangements have been made for State and regional infrastructure prior to giving development consent.

A draft SIC framework is due for public exhibition at the end of 2016. State infrastructure the NSW Government has already committed to build in the region includes the Hill Road off ramp (\$140m) and the Light rail (\$1bn). Additional State and regional infrastructure could include:

- further regional road and intersection upgrades
- upgrades to local and regional bus networks
- upgrades to existing rail service, and
- upgrade to Woo-la-ra Park

Local contributions

Since 2010, new infrastructure has been funded through Sydney Olympic Park Authority's Infrastructure Contributions Framework (ICF). This includes new roads, road and intersection upgrades and utility upgrades (expansion of the recycled water scheme) and new parks. Sydney Olympic Park Authority has updated the existing ICF to account for the local infrastructure required for the proposed changes.

The ICF also describes the:

- administrative arrangements for local infrastructure contributions
- expected future development in the Park
- infrastructure required to meet that development and its capital cost
- how to equitably share the cost of infrastructure among land developers
- contributions that will be included in planning agreements that are negotiated with developers and that are used to fund infrastructure.

The SOPA will seek both land and monetary contributions from developers to which the ICF applies. The total contribution will depend on:

- the area of the site the subject of the proposed development
- development potential (measured in gross floor area) available for the site
- total proposed GFA in the development.

As regional infrastructure will now be funded through the SIC for Sydney Olympic Park, the monetary contribution base rate in the ICF has been reduced from \$298/m2 to \$205/m2 of GFA. It is

important to note that both payments combined are likely to result in a net increase in infrastructure levies.

However, exact rates for the regional contribution will not be finalised until a final SIC Plan has been exhibited and finalised.

Commentary

The approach undertaken in the ICF is straightforward and simple. It identifies total infrastructure costs (including breakdown by theme), total development capacity under the Review, and divides the former by the latter to yield a cost per square metre to be implemented via VPA.

It is noted that $$205 \times 100$ sqm for a typical apartment roughly equals the \$20,000 s94 cap for a dwelling.

The framework applies a 1:1 "credit" to contributions, essentially exempting the previous development controls from contributions. Effectively, this means contributions are made on the FSR uplift amounting to a value capture scheme.

Recommendation

Council encourages a more detailed works list to increase transparency and further justify costing and seeks to engage with SOPA in respect of a number of assumptions and methodologies noted in the formal submission. These include:

- The basis for defining infrastructure 'need'
- The definition of "appropriate levels" of provision (p. 6) and an understanding of how this benchmarking informed the works schedule
- Attributing a distinction between broad and localised beneficiaries
- Definition of regional vs local infrastructure as in, what was removed under what definition to be potentially included in the SIC
- Prioritisation methodology

The contributions framework also outlines a process for securing contributions in manner not dissimilar to Council's contributions mechanism proposed for Parramatta CBD by applying a 1:1 "credit" to contributions thus exempting the previous development controls from contributions. Effectively, contributions are made on the FSR uplift amounting to a value capture scheme.

It is also recommended that SOPA revise the Local Infrastructure Contributions Framework to include affordable housing as part of the infrastructure being sought to support a liveable community. SOPA should seek to capture 5-10% of total yield for affordable housing.

Satisfactory Arrangements

A 'satisfactory arrangements' clause is proposed until a Special Infrastructure Contributions (SIC) levy is in place.

The continued adoption of these types of clauses in EPIs is not an adequate replacement mechanism for a well thought out strategic infrastructure planning costing and apportionment process to inform a more effective contribution mechanism such as the SIC. There is no timeframe for the adoption of the SIC across this area and it is feasible that a satisfactory arrangements function could be in place for some time.

A satisfactory arrangements clause as a mechanism places undue pressure on State agencies to identify infrastructure on a DA by DA basis and places unreasonable pressure on consent authorities as they cannot issue of development consents until such time as the Secretary of the Department of Planning and Environment is satisfied that arrangements have been made to contribute to state and regional infrastructure.

It is recommended that the SEPP not include a satisfactory arrangements clause and State/Regional contributions only be sought when SIC is in place to ensure robust strategic infrastructure planning and funding streams.

1.20 Housing

The Sydney Olympic Park Master Plan 2030 documents do not identify any dwelling mix for the development of the 10,700 new homes.

Dwelling mix

A high percentage of two bedrooms and three bedroom dwellings were available in the City of Parramatta, Newington and Wentworth Point in 2011 as shown below.

TABLE: Percentage of Bedrooms

		2006	2011		
	2 bedrooms	3 bedrooms	2 bedrooms	3 bedrooms	
City of Parramatta	27.9%	37.9%	29.5%	36.5%	
Newington	28.8%	41%%	30.7%	42%	
Wentworth Point	44.0%	19.9%	50.9%	13.3%	

Source: Population forecasts, prepared by .id

It will be important to provide an adequate amount of three bedroom dwellings to accommodate the demand from those in larger household sizes (shared group homes and families). There is a risk that people may be displaced from the area, or be forced to live in one and two bedroom dwellings which are too small for their needs if there is inadequate numbers of larger dwellings. This can have numerous health and wellbeing impacts, as discussed in Chapter 10.

Recommendation

Further consideration should be given to providing a dwelling mix that will be suitable for the population, which includes a reasonable percentage of three bedroom dwellings in the housing mix