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1 Summary of Submissions
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FOREWARD

Sydney Olympic Park is a large and unique area located 14 kilometres west of Sydney’s central business district. The site offers the opportunity to establish world’s best practice of sustainable urban development while remaining a premier sporting and entertainment precinct. Recognised by the Greater Sydney Commission as the Greater Parramatta to Olympic Peninsula Lifestyle Precinct, the revised Master Plan 2030 (the 2016 Review) aims to ensure the Park continues to evolve into an active and vibrant Town Centre within Metropolitan Sydney.

The 2016 Review focused on three key areas, the Central, Parkview and Stadia Precincts. After extensive stakeholder consultation and public exhibition, the 2016 Review provides for significant densification, diversification and activation of Sydney Olympic Park to create a place where people can work, live, learn and play and where the customer experience extends well beyond major events. The 2016 Review protects and enhances the Parks capacity to host major events and continue to be recognised internationally as a major events destination.

The key changes to Master Plan 2030 as a result of the 2016 Review include significant uplift and increased densities across the Central and Parkview Precincts, an improved road network to provide for efficient traffic and pedestrian movement, greater diversification and preservation of commercial land use through the establishment of a strong commercial core and a substantial increase in retail development to support precinct activation and provide jobs.
EXECUTIVE SUMMARY

Sydney Olympic Park Master Plan 2030 provides a comprehensive approach to long-term development and contains planning principles and controls to encourage development at Sydney Olympic Park (the Park).

The Master Plan is required to be reviewed every five years to ensure that the document remains current and relevant to the changing urban landscape in the Park, Greater Western Sydney and the wider metropolitan area.

The 2016 Review documentation was placed on public exhibition by the Department of Planning and Environment (DPE) between 10 October and 15 November 2016. The documentation was available to view on the DPE website, at DPE offices in the City and Parramatta and at the Authority’s offices at Sydney Olympic Park. A total of sixty (60) submissions were received in response to the exhibited 2016 Review.

In general, there was broad support for the proposed changes provided for in the 2016 Review including densification and activation of the Park and the continued management of Sydney Olympic Park for major events and recreation. However a range of issues were raised and commentary provided around various elements of the 2016 review. The main issues raised in submissions related to:

- traffic and transport;
- parking;
- affordable housing;
- open space and community facilities;
- education facilities;
- built form controls (primarily site-specific);
- sustainability;
- events; and
- economic impacts.

Since the conclusion of the public exhibition, the Authority has examined the issues raised and has undertaken additional targeted investigations in relation to traffic, transport and parking, urban design, community facilities, affordable housing and economic analysis.

As a result of its consideration of the issues and the outcomes of the additional investigations, the Authority has identified a number of further amendments to the Master Plan, as detailed in Section 9 of this report.
1. Introduction

This document has been prepared by the Sydney Olympic Park Authority (the Authority) and constitutes the Response to Submissions (RtS) Report, incorporating proposed amendments to the Master Plan.

This report documents and considers the issues raised in the community, stakeholder and agency submissions received in response to the public exhibition of Sydney Olympic Park Master Plan 2030 (2016 Review). In particular, this report provides:

- An overview of the Master Plan, as exhibited;
- Details of the consultation activities undertaken prior to, and during the public exhibition, as well as after the conclusion of the exhibition period;
- Responses to issues raised in community, stakeholder and agency submissions; and
- Details of additional investigations that have been undertaken since the public exhibition; and
- Summary of the proposed amendments to the Master Plan and State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP)

1.1 Background

Sydney Olympic Park Master Plan 2030 came into effect on 10 March 2010. The Master Plan provides a comprehensive approach to long-term development, ensuring that Sydney Olympic Park (the Park) continues to evolve into an active, vibrant suburb within metropolitan Sydney. It contains planning principles and controls to encourage development of Sydney Olympic Park (the Park) that responds to the context and which contributes to the quality of the built environment, future character and cultural significance of the Park Central to this is the establishment of a Town Centre, new urban activities and residential uses that will activate the precinct on a 18-24 hour / 7 day basis.

Both the Master Plan and State Environmental Planning Policy (State Significant Precincts) 2005 require the Authority to review the Master Plan every five years. This ensures that the document remains current and relevant to the changing urban landscape in the Park, Greater Western Sydney and the wider metropolitan area.

The five-year review provides the opportunity to revisit the targets and strategies set out in Master Plan 2030 in the context of these considerations and in conjunction with development occurring on the wider Olympic Peninsula and in Greater Western Sydney.

The 2016 Review was prepared having regard to the following:

- A Plan for Growing Sydney which identifies the Olympic Peninsula (including Sydney Olympic Park) as a major new development area within the Greater Parramatta and Olympic Peninsula (GPOP) Priority Growth Area;
- A desire to broaden the types of activity within Sydney Olympic Park, and respond to market interest for residential development in the precinct;
- Event operations and the need to protect the role of Sydney Olympic Park as a premier destination for cultural, entertainment, recreation and sporting events;
- Increased visitor numbers to Sydney Olympic Park;
- New re-zonings within the priority precincts at Wentworth Point and Carter Street;
- The potential for improved access from Hill Road off ramp, the proposed Light Rail service from Parramatta to Strathfield; and
- Consultation with local councils, State agencies, key stakeholders and the local community.

The five-year review provides the opportunity to revisit the targets and strategies set out in Master Plan 2030 in the context of these considerations and in conjunction with development occurring on the wider Olympic Peninsula and in Greater Western Sydney.

The 2016 Review also includes updates to the Infrastructure Contributions Framework (ICF).
Proposed amendments to the SSP SEPP have also been included for the consideration of the Department of Planning and Environment (DPE) to align the SEPP with the Master Plan provisions.

The 2016 Review documentation was placed on public exhibition between 10 October and 15 November 2016. During this time, the community, key stakeholders and interest groups were invited to make a submission using either the online submission tool on the DPE website or by providing a written submission.

The exhibited documents included:

- Sydney Olympic Park Master Plan 2030 and State Significant Precinct Planning Report;
- Summary of Proposed Planning Changes;
- Sydney Olympic Park Master Plan 2030 (2016 Review);
- Draft SEPP Maps – FSR, Heritage, Height of Buildings, Land Use Zones and Reduced Level Map; and
- Technical Studies including:
  - Community Facilities Strategy
  - Feasibility and Market Testing
  - Local Infrastructure Contributions Framework
  - Noise Management Guidelines
  - Traffic and Transport Strategy

An electronic copy of the 2016 Review documentation is available on the DPE website:


1.2 Overview of the Master Plan (2016 Review) – as exhibited

The Master Plan divides the Park into nine Precincts. The 2016 Review primarily focuses on the Central, Parkview and the Stadia Precincts. As outlined above, the 2016 Review aim to encourage development of the Park in a manner that responds to future context and positively contributes to the quality of the built environment, future character and cultural significance of the Park through the establishment of a Town Centre, new urban activities and residential uses that will activate the precinct on a 18-24 hour / 7 day basis. The proposed increases in height and density in the 2016 Review will contain the development footprint while achieving a high level of activation in the Town Centre. Minor changes are also proposed for the Boundary Creek and Tennis, Haslam’s and Sydney Showground Precincts. No changes to the controls are proposed in the Central Sports and Southern Sports Precincts.

The 2016 Review recognises the impact of densification in surrounding areas, including the development of the Carter Street Priority Precinct and reflects extensive testing used to determine the type and quantum of each land use that can be delivered based on the capacity of existing infrastructure and modelled take-up rates.

An important part of the 2016 Review was recognition of how Master Plan 2030 worked in achieving the vision for the broader Park and how it facilitated the Town Centre’s evolution into a vibrant mixed use centre and urban parkland. Development targets have been established based on market data liveability indicators and operational requirements associated with major event attributes to deliver a high quality place.

The future vision for the Town Centre includes revisions to land use and development controls to achieve a compatible and diverse range of land uses to accommodate future growth.

The key changes proposed in the 2016 Review include:
• additional gross floor area (GFA) for most land uses, which equates to an extra 460,000m$^2$ GFA;
• an increase in quantum of residential floor space (additional 280,000m$^2$) in line with NSW government policy to focus residential development around transport hubs;
• a small reduction in commercial GFA (-67,000m$^2$), however this is balanced by an equivalent increase in retail floor space (+67,000m$^2$) which supports activation of the Town Centre and ensure employment targets are preserved;
• modifications to certain built form controls to allow increases in height and FSR;
• an expansion of the street network to improve permeability and connectivity and to provide a dedicated service street to support the mixed use commercial centre within the Town Centre;
• an increase in the proportion of non-car trips made by people working in the Park to 40%, the achievement of which relies on major public transport improvements;
• an increase the quantum of open space within the Town Centre;
• inclusion of a new community hub that includes a library and multi-purpose community centre and identification of potential sites for development of a secondary school, and
• consideration for Parramatta Light Rail stops and Sydney Metro West station.

Future Master Plan reviews will consider the remaining six Precincts to allow for appropriate staging of development in line with market demand and anticipated regional infrastructure upgrades.

1.3 Structure of the Report
The report is structured as follows:

Section 1 – Introduction – provides an introduction to the report, an overview of the Master Plan and the structure of the RtS report. This section also introduces the need for amendments to the Master Plan.

Section 2 – Consultation – provides an overview of the consultation activities undertaken prior to and during the public exhibition of the Master Plan Review, together with a summary of post-exhibition consultation activities.

Section 3 – Overview of Submissions - provides an overview of the process that was used to analyse the issues raised in submissions (including details of additional technical investigations), as well as an overview of the key issues raised by the community, government agencies and key stakeholders.

Section 4 – Key Issues – identifies the key issues raised during the exhibition period and outlines the Authority’s consideration and response in the context of the Master Plan.

Section 5 – Government Agency and Non-government Organisation Submissions – Summarises the key issues raised by government agencies and the Authority’s response.

Section 6 – Lessees Submissions – summarises the issues raised by leaseholders and other key stakeholders and the Authority’s response.

Section 7 – Community Submissions – identifies the range of issues raised by the community.

Section 8 – ICF and State Infrastructure Contributions – summarises the issues pertaining to local and State infrastructure contributions.

Section 9 – Amendments to MP 2030 – provides an outline of the amendments that have been made to the Master Plan and ICF since the public exhibition. It also identifies the additional required changes to State Environmental Planning Policy (State Significant Precincts) 2005.

Section 10 – Conclusion – provides key conclusions for this report.
2. Consultation

2.1 Consultation during Preparation of 2016 Review

As part of the 2016 Review, the Authority developed a Consultation Strategy to guide engagement with key stakeholders, including relevant government agencies and landowners/leaseholders to seek input into the review of Master Plan 2030.

Stakeholder engagement included relevant government agencies, community representatives, industry partners and Sydney Olympic Park landowners and leaseholders, each of which have a major role in supporting and implementing the Authority’s vision.

Consultation during the preparation of the 2016 Review included:

- Presentations and regular updates to the Sydney Olympic Park Authority Board;
- Introductory workshop and targeted meetings with Department of Planning and Environment, Transport for NSW, Roads and Maritime Services, the Department of Premier and Cabinet, the Department of Education, the Office of Sport, the Department of Health, the Environment Protection Agency and the Office of Environment and Heritage to consider matters such as traffic and transport, school requirements, noise, odour and contaminated lands management;
- Briefings for staff of the City of Parramatta Council;
- Liaison with the Greater Sydney Commission in the development of a strategic vision for the Greater Parramatta to Olympic Peninsula;
- Ongoing engagement with key community stakeholders that represent the Park community including local councils, business groups, education institutions, sports and events representatives; and
- Introductory workshop and one-on-one meetings to discuss issues and aspirations with the major venues, landholders and leaseholders.

The emergent issues/key messages from the consultation served to inform the 2016 Review.

2.2 Consultation during the Public Exhibition

The Consultation Strategy was reviewed and adjusted for the public exhibition period to ensure that relevant stakeholders and the Park community had the opportunity to understand the proposed changes to Master Plan 2030 that resulted from the 2016 Review and to provide feedback to the Authority for consideration in its finalisation of the updated Master Plan. It is important to note that the Sydney Olympic Park community comprises residents, workers and students of the Park and surrounding suburbs (such as Newington, Wentworth Point and Rhodes), in addition to the wide variety of visitors to the Park coming for sport, recreation, events, business events, commerce, cycling, conservation, education and many other activities.

The updated Consultation Strategy used a range of channels to promote awareness of the 2016 Review and invite the stakeholders and the community to ‘have their say’. The channels included media events, public relations, advertisements, websites, blogs, social media, email newsletters, flyers, posters and hard copies provided at the offices of the City of Parramatta Council, City of Canada Bay Council and Cumberland Council.

Major leaseholders were sent the package of information and given the opportunity to have one-on-one briefings sessions with the Authority and DPE. Park stakeholders representing NSW government agencies, local government, industry partners and community groups were able to attend a range of briefing sessions.
The Park community was invited to participate in a range of activities coordinated by the Authority, including briefing sessions and pop-up information sessions within the Town Centre, Wentworth Point and Newington. Guided walking tours were provided during the week and on weekends through Parkview, Central and Stadia Precincts where architectural perspectives were used to illustrate the proposed future development and land uses identified in the 2016 Review.

Stakeholders and the community were able to have their say through online formal submissions, in person at any of the abovementioned events / activities and through social media. This feedback was used to inform the final stages of the 2016 Review.

2.3 Consultation After the Public Exhibition

A number of the lessees sought the opportunity to meet with the Authority to discuss the detail contained in their respective submissions. The Authority has engaged in one-on-one meetings with each of the following stakeholders in this regard:

- Austino
- Dexus
- Ecove Group
- Fitzpatrick Investments
- Venues Live
- Mirvac Group
- Royal Agricultural Society of NSW
- Soka Gakkai International
- Dunnet Group
- GPT Group
- Bonim 3 Pty Limited
- Sydney Business Chamber
- Cambooya Properties

2.4 Ongoing / Further Consultation

The Authority adopts a consultative approach to its operation and management of the Park and engages with individual stakeholders as required.

A comprehensive consultation strategy will be integral into future reviews of the Master Plan.
3. **Overview of Submissions**

Formal submissions were received by DPE and were allocated a unique reference number. A total of 60 submissions were received, comprising:

- 24 government / agency submissions, including 16 non-government organisations
- 21 submissions from stakeholders (lessees / developers)
- 15 submissions from the community

The Authority, in consultation with DPE, has tabulated the submissions (**Appendix 1**). The format includes details of each submission, a summary of main issues raised in each submission (summarised into key points) and responses to same, together with details of further changes (if any) to the Master Plan.

A number of clear issues emerged in the submissions, some of which were specific to individual development sites, while others related to the Park as a whole. The main issues raised in submissions related to:

- traffic and transport;
- building design elements including colonnades and podia;
- building heights;
- tower form and footprint;
- the need for additional schools; and
- the need for adequate open space.

It is noted that members of the local community tended to raise precinct-wide issues (that is, issues that related to the whole of Sydney Olympic Park). Details of the response to key issues that are relevant to the wider Park are provided in Section 4 of this report.

Section 5 addresses the issues raised by government agencies and non-government organisations.

Section 6 identifies and provides discussion on the issues raised by lessees / developers which tended to be site-specific, rather than related to the Park as a whole.
4. **Key Issues**

The following sections of this RtS Report provides a detailed assessment and response to each of the key issues relevant to the Park, particularly in relation to traffic and transport matters, as well as the wider Olympic Peninsular region.

4.1 **Traffic & Transport**

A large proportion of submissions (27 in total) raised various aspects of traffic and transport as being critical to the realisation of the development objectives of the Master Plan. The majority of these submissions (41%) were from members of the local community / private citizens and approximately 30% from a range of non-government organisations. Submissions were also received from local councils and a combined submission was received from Transport for NSW (TfNSW) and Roads and Maritime Services (RMS).

The broad concerns related to:

- Regional transport infrastructure / planning, funding and timing; and
- The ability of the road network to manage simultaneous residential, retail and entertainment trips (i.e. peak traffic management).

It should be noted that the matters raised by TfNSW and RMS are addressed in more detail in Section 5 of this report.

4.1.1 **Traffic & Transport Infrastructure**

In order to determine the potential impact of the increased traffic forecasts that could result from the proposed land use changes outlined in the 2016 Review, the Authority commissioned a strategic traffic analysis underpinned by traffic forecasting and SIDRA intersection modelling. The findings of this analysis were detailed in the Traffic and Transport Strategy (2016 Review) which was exhibited with the Master Plan. The traffic analysis showed that the changes in land use proposed as part of the 2016 Review would initially require short term upgrades to a number of identified local and regional gateway intersections, as well the construction of new local roads in the Central Precinct. Longer term upgrades to regional intersections and road widening on various arterial roads would also be required to improve road network capacity and efficiency.

Short-term upgrades for local infrastructure will be funded from the Local Infrastructure Contributions Framework. Upgrades were recommended for:

i) local intersection upgrades at eight locations within the Park including signalisation, additional turning lanes and intersection widening;

ii) delivery of seven new intersection within the Park including signalisation, additional turning lanes, roundabouts and intersection widening; and

iii) delivery of a network of new streets within the Town Centre (Central Precinct) to improve access and traffic circulation for all road users.

The delivery of short-term upgrades to local infrastructure will occur in response to developments within the Park as priorities are identified. The proposed infrastructure is illustrated in Figure 3.14 of the 2016 Review document and detailed in the Sydney Olympic Park Local Infrastructure Contributions Fund, exhibited with the 2016 Review and updated and provided as Appendix 2 to this RtS Report.

Short term upgrades for regional intersections, including the four key gateway intersections which
provide access to the Park and adjacent priority precincts are being investigated as part of the Special Infrastructure Contribution (SIC) fund for greater Parramatta being developed by the DPE. Longer term upgrades to the regional network are also expected to be funded through the SIC.

The WestConnex project is already delivering a number of significant regional road upgrades which will directly support development at the Park and the broader Olympic Peninsula, including:

- Widening of the M4;
- New G-ramp at Homebush Bay Drive and the modified westbound on-ramp from Hill Road to the M4;
- New eastbound on-ramp from Hill Road to the M4;
- Proposed westbound off-ramp from the M4 to Hill Road and proposed future Hill Road widening; and
- New commuter cycleway

These upgrades will also significantly improve the regional network capacity and access to/from the Olympic Peninsula. Longer term upgrades to arterial roads and regional intersections will be required to facilitate development within the wider GPOP corridor.

Improvement in public transport options through the introduction of increased rail and bus frequencies and delivery of the Parramatta Light Rail (PLR) (which is likely to commence operation in around 2025) will further assist in meeting transport demands of future development.

The 2016 Review is not reliant on, and does not capitalise on any transport network capacity improvements that may be realised from delivery of the proposed Sydney Metro-West. Further upgrades to key regional intersections and the regional road network as well as delivery of key public transport initiatives such as a Metro service will be required to enhance access to the Park and allow for consideration of additional value capture as part of future revisions of the Master Plan. To this end, provision of a metro station within the Park has been considered.

Key regional road infrastructure for the GPOP corridor is currently being scoped and prioritised by TfNSW and RMS. Whilst the scoping and funding of improvements to regional infrastructure and connections is outside of the scope of the 2016 Review, the Authority recognises the importance of delivery of this key infrastructure and will actively work with the relevant government agencies to support its delivery for the benefit of future residents, workers, businesses and visitors to the Park.

**Australia Avenue Roundabout**

Four submissions raised the Australia Avenue roundabout as an issue – primarily that the intersection may be operating at capacity and cannot accommodate additional traffic to/from the Park. Two of the submissions also sought further information about the design/upgrade of the roundabout.

The Australia Avenue roundabout at the intersection with Homebush Bay Drive is defined as regional infrastructure and is recognised as a key gateway to the Park and surrounding precincts, including Wentworth Point, Homebush and Strathfield. The intersection is heavily influenced by all development areas in the subregion.

Improvements at this intersection have been identified as part of the Olympic Peninsula Regional Transport Infrastructure Investigations being undertaken by RMS/TfNSW. The specific upgrade design and works will be significantly influenced by the final approved route of the PLR project. Irrespective of the PLR decision, improvements at the intersection are essential to meet the future traffic demand within both the Park and the broader Olympic Peninsula. The Authority supports immediate improvement to this intersection and will continue to work collaboratively with TfNSW and RMS to assist in the delivery of this critical regional infrastructure upgrade.
Hill Road Ramp and Road Widening

The primary concerns raised in relation to the ramps at Hill Road related to the land-take and associated impacts on the development potential of sites in the Haslam’s Precinct and whether the off-ramp in particular, has been factored into the Transport Strategy.

The new on and off ramps at Hill Road to / from the M4 are referenced heavily in the Transport Strategy (exhibited as part of the 2016 Review) and are acknowledged as an important measure to increase regional road capacity and providing better access to the Park, the Carter Street Priority Precinct and Wentworth Point.

The east bound Hill Road on and off ramps have already been delivered and the Government has committed funding for construction of the Hill Road west off ramp and potential Hill Road widening. The westbound off ramp from the M4 to Hill Rd is considered critical to improving access to Wentworth Point, Carter St and the Park, as well as having the additional benefit of alleviating pressure at the Australia Ave roundabout.

Once operational these ramps will not only provide an attractive alternative access to the Homebush Bay Drive / Australia Avenue gateway but will help separate event traffic from the day-to-day residential and business movements in and around the Town Centre and Central Precinct at the Park.

Land that may be subject to future road works has been identified in Section 5 of the 2016 Review, however this is indicative only. The Authority understands that at the time of writing this report, the extent and nature of any road works that may be required was yet to be determined, however once finalised, DPE will make the necessary amendments to the SSP SEPP to reflect the change in land use. Once the SSP SEPP is amended, the Authority will be in a position to consider any necessary amendments to the Master Plan to allow for development of any residual land that remains in its ownership.

Parramatta Light Rail

A number of submissions raised the Parramatta Light Rail (PLR) project in the context of need for improved public transport facilities and the advantages of improved accessibility to jobs and services for development / residents of the Park.

The PLR, linking the Parramatta CBD through to Sydney Olympic Park, is an essential public transport infrastructure project that will contribute significantly to the achievement of the 40% non-car modal share target. Preliminary investigations by the PLR project team have identified capacity for route options along both Australia Avenue and Olympic Boulevard.

The Authority will continue to work closely with the PLR project team regarding the planning for Stage 2 of the project (Camellia to Sydney Olympic Park), including the Light Rail route and location of stations. The PLR will play a significant role for workers, residents and visitors to the Park, providing connections to employment and homes within the GPOP area, as well as stronger connections to other modes within the public transport network.

Heavy Rail / Buses

A common theme in the submissions in relation to transport is the need for improvements to existing heavy rail and bus services.

The Park is currently connected to the Sydney Trains network by the Lidcombe Sprint (a 10-minute shuttle train service between Olympic Park and Lidcombe rail stations) via the T7 Olympic Line. There are capacity opportunities on the existing T7 service Lidcombe Sprint itself e.g. increasing from 4 to 8 carriage sets, however there is limited capacity to introduce a greater number of existing T1
Western Line train services stopping at Lidcombe station. This potential increase in capacity has been outlined in the Transport Strategy commissioned for the 2016 Review and the Authority will continue to work closely with TfNSW and Sydney Trains to ensure increased heavy rail demand to/from the Park is accommodated.

Similarly, capacity opportunities exist with current and future bus services. The frequency of existing bus services could be increased to improve transport in the short-term between the Park and areas such as Parramatta and Strathfield. In relation to future bus services, the NSW Government’s long term plan to redesign Sydney City’s bus network Sydney Bus Future plan (Transport for NSW, 2013) includes a key suburban bus route between Sydney Olympic Park and Parramatta via Ryde and states that:

- suburban routes will become rapid routes in future; and
- over sixty new services will connect Parramatta to Sydney Olympic Park.

**Sydney Metro West**

As with the PLR, submissions that referred to the Sydney Metro West were generally made in the context of the need for improved public transport facilities and the advantages for development / residents at the Park.

The recently announced (after the 2016 Review public exhibition) Sydney Metro West would clearly transform transport access to the Park; providing a fast efficient mode of public transport for residents and visitors. However, it is important to note that the 40% non-car mode share that is required to support the quantum of development associated with the 2016 Review is not dependent on a Metro service, however, a Metro service would assist in reaching this target sooner and provide significant benefits to the surrounding road network.

Nevertheless, the introduction of Metro services to the Park from the Sydney and Parramatta CBDs would create numerous metropolitan-wide transport connections not currently viable in terms of travel time to the Park and would allow for a higher non-car stretch mode share target of 60%. Whilst this means a further increase to development yield for the Park could be contemplated, the current status of the project and the anticipated lead time to reach approval suggests that it would be appropriate to address land use and potential increases in development yields as part of the next Master Plan review.

The Authority has anticipated that a Sydney Metro West would form part of the future transport infrastructure servicing the Park. As such, the Transport Strategy identified a site for a station box, based on a prior metro feasibility analysis in 2009. The more recent announcement of a Sydney West Metro has provided the opportunity to examine further options for locating a Metro station within the Park and the Authority has engaged with TfNSW in this regard.

The delivery of Sydney Metro-West is considered a key public transport initiative that will deliver significant improvement for accessing the Park and allow for consideration (in future revisions of the Master Plan) of additional value capture beyond the provisions provided for as part of the 2016 Review.

**Bennelong Bridge – investigation of usage restrictions**

The primary concern regarding the Bennelong Bridge was that it remains solely for the use of public transport services and active transport modes.

Bennelong Bridge, which connects the communities of Rhodes and Wentworth Point, is managed by RMS and is currently limited to pedestrians, cyclists, buses and taxis.

The Transport Strategy does not suggest that the Bennelong Bridge needs to be used by general traffic to accommodate any additional traffic generated by the development that may occur under the
2016 Review. However, the Authority will continue to work with RMS to ensure its use is managed effectively for traffic management including the option of utilising this connection for major event bus movements.

4.1.2 Peak Traffic Management

The primary concern in relation to management of traffic levels is the ability of existing infrastructure to accommodate additional traffic volumes generated by the quantum of proposed development, particularly having regard to cumulative impacts during major events.

Discussion

The highest impact on traffic is anticipated to occur when peak hour traffic coincides with major events. Quantification of the impact of simultaneous peak time traffic and event traffic (taking into account the increase in development provided for in the 2016 Review) has been considered as part of the Transport Strategy, as summarised in the following points:

- The impacts of event road closures have been assessed in terms of access to the growing Central Precinct. The coverage and duration of event road closures are proposed to be modified (reduced) to facilitate greater levels of business-as-usual activity in the Precinct whilst maintaining access for high volume pedestrian movements, event bus priority and event off-street car parking.

- The location of the increase in retail yields (mostly within the Central Precinct) has been carefully planned to ensure it does not interfere with event operations (traffic and public transport) at the Park. The Authority intends to relocate the Aquatic bus terminal (consolidating it into the major northern bus terminal located within the Stadia Precinct) and reduce the coverage and duration of event road closures in the Central Precinct which will limit the impact on local businesses and residents and allow public transport services to operate to regular routes without the need for diversions.

- The increase in retail offering, particularly food and beverage, is also expected to assist in dissipating crowd movements more evenly through travel demand management before and after major events within the Park. The increased retail offering will also provide event patrons a greater incentive to arrive earlier for events and stay longer following the conclusion of events which will facilitate a more efficient spread of travel patterns.

- The establishment of a strong commercial core will be beneficial to the Park in terms of the traffic it generates as a land use. The alternative land uses of residential, retail, education will add vibrancy and activity in the Park throughout the day and night (and flatten commuter peak movements) and will contribute to the justification for investment in infrastructure (i.e. not solely reliant on commuter movements).

- The greater use by event patrons of the M4 Motorway and Hill Road ramps to access event car parks will serve to separate event traffic from the growing residential and business activity in the Central Precinct. This will be supported through improved wayfinding and road guidance signage whether permanent, temporary or electronic.

Outcome

No further changes to the Master Plan were required as a result of the issues raised in relation to traffic and transport. The Authority will continue to progressively deliver upgrades of local infrastructure and work with TfNSW and RMS to facilitate delivery of regional infrastructure upgrades to provide further improvements for development in the Park and within the greater GPOP corridor.
4.2 Parking

A total of 8 submissions raised parking as an issue.

4.2.1 Residential Parking Ratios

A small number of submissions suggested that the 2016 Review provided an opportune time to review on-site parking requirements, some of which suggested that residential parking should be limited to a maximum of 1 space per dwelling or that consideration be given to allowing the development of apartments without parking.

One submission was also made in relation to encouraging and providing space for car sharing opportunities within the Park.

Discussion

The Authority notes the opportunity to review residential parking ratios. However, any further reduction in the residential parking ratios could not occur without significant improvements in public transport servicing the Park.

Furthermore, a review of residential parking ratios compared to standards applied by Canada Bay and Parramatta Councils (including the former Auburn Council) showed that council parking ratios are generally higher and/or are expressed as a minimum rather than maximum requirement (as provided for in Master Plan 2030).

Consistent parking ratios for Carter Street and Wentworth Point would also be required or the benefits of this policy adjustment to the Park alone would be lost, and could have potential market implications in terms of competitiveness with adjacent developments.

The Authority further notes that a future review of parking ratios may be required, which could also include consideration for the provision of car share spaces both on-street and within developments.

Outcome

Section 4.7.1 of the Master Plan has been amended to reflect the Authority’s view that car sharing is to be encouraged. The Authority will work with proponents and local councils to identify opportunities to provide car sharing spaces for new developments where possible.

4.2.2 Retail Parking Ratios

One submission suggested that the recommended retail parking ratio in the 2016 Review is too low and suggested that a rate of 4.5 spaces per 100m² should be adopted.

Discussion

The Authority undertook a further review of parking rates across comparable areas. It is considered that whilst a higher number of spaces may have been provided in other developments, the examples provided as part of the submission are located closer to the edge of the city rather than the more central, inner west location such as Sydney Olympic Park.

At the current proposed rate of 1 space / 50m² the anticipated 100,000m² of retail floor space contemplated in the 2016 Review would require the provision of 2,000 car parking spaces. The Authority considers this to be adequate for the quantum of development proposed.

Furthermore, a review of retail parking ratios compared to standards applied by Canada Bay and
Parramatta Councils (and the former Auburn Council) revealed that once again the ratios applied in those local government areas are generally higher and/or are expressed as a minimum rather than a maximum rate (as provided for in Master Plan 2030).

**Outcome**

No change to the Master Plan has been made as the retail parking ratios are considered appropriate and comparable to the retail parking rate of similar Local Government Areas.

### 4.2.3 Basement Parking

Three submissions requested that the requirement for basement parking be reviewed. One submission made by the Ecove Group indicated that the Master Plan fails to recognise the inability of certain sites (e.g. Site 9) to provide basement parking.

**Discussion**

Underground car parking is a base minimum design requirement for contemporary development across Sydney. The Authority seeks to achieve a better outcome at Sydney Olympic Park than other areas in order to ensure value is retained and increased for the Park as a whole.

The 2016 Review paves the way for a complex, high density and compact urban place with significantly more residential development, which can only be achieved where all building frontages present active uses / facades at street level regardless of site constraints.

However, development sites located on remediated lands pose a unique set of risks. The Park’s industrial history has resulted in some heavily contaminated sites that today are carefully managed as part of the Sydney Olympic Park Remediated Lands to ensure these areas do not present a risk to human health or the environment.

The Authority has consulted with experts for advice in this regard. Contaminants generally migrate from a site via a combination of factors including rainwater infiltration, groundwater migration and surface water runoff and gas migration. It is recognised that any disturbance associated with excavation (as required for basement level parking), presents an increased risk for sites on remediated lands. The Authority has therefore amended the Master Plan to require development on site located on it’s Remediated Lands to exclude underground car parking.

As underground parking is considered a minimum design requirement for delivering high quality development, this requirement has not been amended for sites other than remediated lands.

**Outcome**

The Master Plan has been amended to remove the requirement to provide basement parking on sites where above ground parking cannot be avoided due to site conditions, such as sites located on the Sydney Olympic Park Remediated Lands, including Site 9. However it should be noted that such sites are still required to include activation along all street frontages, particularly in the Central Precinct. This may involve “sleeved” development, where active or habitable uses are provided at ground and first floor, wrapping around street corners for a minimum of 15 metres.

### 4.2.4 Accessible Parking

The Access Advisory Committee, an independent advisory group that provides input and advice to the Authority’s Chief Executive Officer for consideration on matters of accessibility, made a submission which includes a suggestion that the required rate for the provision of accessible parking should be increased to 3-5%, dependant on building use.
**Discussion**

The Authority’s Access Guidelines specifies 2% of required parking spaces be accessible spaces. The Building Code of Australia (BCA) sets requirements for provision of car parking for people with a disability, depending on building classification.

It is noted that the Authority’s current requirement for the provision of accessible parking spaces is comparable to, and in certain classifications of building, greater that BCA requirements.

**Outcome**

Noted. Whilst no change to the rate of accessible parking is proposed, the Master Plan has been amended to reference the Authority’s Access Guidelines.

### 4.3 Affordable Housing

A total of 8 submissions raised concern that the 3% affordable housing target was insufficient and should be increased.

**Discussion**

The Authority acknowledges the need to provide a proportion of housing at the Park that is appropriate for the needs of very low to moderate income households. Further advice was sought from Hill PDA on the affordable housing targets being delivered in other areas, and on the targets being set in key strategies and policy documents, with a view to determining the most appropriate affordable housing target.

Based on the advice received and, having regard to the Metropolitan Strategy and other contemporary planning documents (District Plans), it was determined that the affordable housing target could be increased from 3% to a minimum of 5%.

**Outcome**

Section 4.6.17 of the Master Plan has been amended to increase the required proportion of dwellings in a development to be allocated to affordable rental housing to a minimum of 5%.

### 4.4 Education Facilities

Concern regarding adequate provision being made for education facilities was raised in 6 submissions, including a petition comprising 110 signatures calling for additional primary and secondary schools to cater for both the current and likely future student population in this community.

A submission was also received from the Department of Education (DoE) which recognised the population growth in the Sydney Olympic Park Precinct and surrounding areas and indicated the Department would be working towards increasing the provision of additional secondary education infrastructure in the area. The submission indicated that consistent with the Departments vertical model for secondary education currently being implemented in other areas, maximising flexibility would be desirable for delivery of a school.

**Discussion**

Site 109 located in the Boundary Creek and Tennis Precinct is identified in the 2016 Review for education purposes only and may be a suitable location for a new school. However, both the Master
Plan and SSP SEPP make provision for education land uses throughout the B4 Mixed Use Zone providing the opportunity to deliver education uses across a wide range of sites in the Park.

Nevertheless, having regard to the submissions received, the Authority has consulted with the DoE to better understand the site characteristics that would facilitate the delivery of a school at the Park. The building height provisions in the Master Plan have been increased for Site 109 from four to eight storeys to provide better flexibility and opportunity for delivery of a school at this site. The DoE is further exploring height requirements of the site to help maximise opportunities for future development.

Whilst the government’s broader education program is outside the scope of the Master Plan, the Authority will work with DoE and other education providers to identify feasible locations/sites for new schools and other educational infrastructure within Sydney Olympic Park.

**Outcome**

The building height control for Site 109 has been amended from 4 to 8 storeys to provide greater flexibility and opportunity for delivery of a school on the site.

### 4.5 Open Space and Community Facilities

#### 4.5.1 Open Space

Four submissions raised concern about a lack of open space to service the increased resident population in the Park.

**Discussion**

The 2016 Review proposes new local parks in the Town Centre that will provide the community with space for play and informal sports (including informal ball games).

To determine the open space requirements for the 2016 Review, the Authority commissioned a detailed study on community infrastructure needs. The study, prepared by Elton Consulting, was exhibited as part of the 2016 Review.

The Community Facilities Strategy (Elton 2015) examines future community needs for active open space, based on the projected population. The Strategy examines how community needs could be met through facilitating community access to existing Park facilities, upgrades to existing facilities to increase capacity and the provision of new facilities. The Strategy also examines options for meeting active open space requirements not only within the Town Centre but more widely across Sydney Olympic Park. Areas outside the Town Centre are beyond the scope of the Master Plan and are therefore are not illustrated in the Master Plan. The Master Plan is however underpinned by the Strategy, which will be used to identify priority community infrastructure and open space projects as development occurs.

In line with the recommendations of the Community Facilities Strategy, the 2016 Review provides for new parks including a large (5,780m²) urban park located in Central Precinct, a major upgrade of the Central Linear Park to include new landscaped areas and new activity spaces; and a new local park in Parkview Precinct of approximately 2,400m².

Provision has also been made for active recreation areas including upgrades to the Tom Wills Oval to provide new community facilities, as shown in Figure 4.9 of the Master Plan, and a new sporting field at the Archery Centre which is located within the Parkland but outside the area shown in Master Plan 2030 (2016 Review).
Finally, it should be recognised that the Authority manages a unique extensive network of open spaces including wetlands and the Newington Nature Reserve. While these areas are located outside the development core, they are valuable assets that provide open space and access to walking, cycling, picnicking and other recreational activities to meet the needs of residents, workers and visitors to the Park.

The Local Infrastructure Contributions Framework (ICF), exhibited as part of the 2016 Review provides funding for upgrades to existing open space and delivery of new parks, recreation and public domain spaces as development occurs.

**Outcome**

Section 3.10 of the Master Plan has been amended to reference the Community Facilities Strategy as a key document which underpins 2016 Review.

### 4.5.2 Community Facilities

The issue of the adequacy of community facilities for the projected population / quantum of development proposed under the Master Plan was raised in seven submissions, including those made by the Canada Bay and Parramatta councils.

**Discussion**

The Community Facilities Strategy informed the 2016 Review and includes a number of proposals for community facilities and open space within the Town Centre.

The Strategy considers a future population at the Park of approximately 24,000 residents and 34,000 workers. Development of the Strategy involved the application of standards for community infrastructure to this population to determine future needs for facilities (including determining the types, quantities and scale of facilities required).

Detailed analysis revealed that the manner in which these needs could be met was through facilitating community access to existing facilities at the Park, upgrades to existing Park facilities (to increase capacity) and the provision of new Park facilities. Recommendations for community facilities and open space to address future needs are outlined in the Community Facilities Strategy.

Many of the recommendations in the Strategy relate to infrastructure in the Park areas outside the Town Centre (and are therefore not documented in the Master Plan). The Community Facilities Strategy will however continue to underpin the Master Plan and to inform the delivery of priority projects as development occurs.

Some submissions suggested that the Community Facilities Strategy does not make allowance for a standalone community centre and assumes that existing meeting rooms in various sporting facilities across the Park will be adequate. This is not the case. The Strategy proposes the provision of a new multi-purpose community centre of 1,200m² which will include spaces for community meetings and other activities as well as a library of 2,400m². If delivered as community hub, incorporating the multi-purpose community centre and library, a combined area of between 2500 – 3000m² would be required. The Master Plan identifies a number of potential sites for the proposed community centre/library which are shown in Figure 3.14.

The Local ICF was exhibited as part of the 2016 Review and provides for funding for community facilities such as a library, community Hub and multi-purpose community centre.

**Outcome**

Section 3.10 of the Master Plan has been amended to reference the Community Facilities Strategy as a key document which underpins Master Plan 2030 (2016 Review).
4.6 Events

4.6.1 Sydney Olympic Park as an Event Precinct

Three submissions raised concern about the preservation of Sydney Olympic Park for events. In particular there was concern that increased residential development will over time dilute and restrict the Park’s ability to cater to the major event market.

Discussion

Section 1.3 of the 2016 Review includes a clear requirement to protect the role of the Park as a premier destination for cultural, entertainment, recreation and sporting events. This purpose is also specified in the functions of the Authority under the Sydney Olympic Park Authority Act 2001 and Regulation and special provisions, including provisions for the emission of noise from major events at the Park, are embodied in the legislation to preserve the Park’s capacity to continue to deliver events into the future regardless of any increase in development.

It is also important to recognise that activation of the Precinct is intended to allow event patrons to further enhance their experience by including activities before and after events. Key public spaces that facilitate major events and the movement of people, such as Olympic Boulevard, have been protected not only to preserve the settings for the iconic Stadium and Arena structures, but to also allow its continued use as a key transport node for major events and event management space.

Other initiatives incorporated in the Master Plan which support and maintain the event function of the Park include:

- An increase in the number of sites available for a wide range of accommodation products that will support the increasing number of events;
- Building heights and uses have been strategically chosen to mitigate noise from venues with commercial land uses being located closer to venues and residential sites further away. Additional information in relation to noise assessment and management is provided in Section 5.7.4 below; and
- Extensive modelling and stakeholder consultation undertaken as part of the 2016 Review has determined the appropriate mix of land used to sustain and generate a 24/7 economy that supports significant densification and protects the Park as a premier event destination.

Outcome

No change to the Master Plan has been made arising from issues raised in relation to the continued provision of events. Facilitation and preservation of event capacity is integral to the Authority’s day to day management of the Park, is a key consideration in the assessment of all development applications within the Park and is an underlying principle for the 2016 Review.

4.6.2 Traffic and Events

The City of Parramatta and TfNSW raised the issue that no assessment of simultaneous peak hour travel demand and events has been undertaken.

Discussion

Modelling undertaken as part of the 2016 Review focused on local roads and intersections in SOPA’s ‘control’ or directly influenced by Master Plan, and was based on the commuter AM and PM peaks. Simultaneous cumulative peak hour and event impacts were not able to be modelled because the wider road network, its capacity and performance are all subject to significant change as a result of upgrades currently being delivered to regional infrastructure as part of the M4 WestConnex. The
impact of these regional upgrades was to be modelled by RMS as part of the precinct (mesoscopic) model. At the time of writing this report a mesoscopic model for the regional road network which incorporated the new M4 Ramps at Hill Road and Homebush Bay Drive was not available. However, given these works are still being delivered, it is unlikely that a mesoscopic model would have accurately reflected the new capacity that will be provided.

It is anticipated that the M4 Motorway and Hill Road on/off ramps will be used by event patrons for access to the precinct’s major event car parks and will serve to separate event traffic from the growing residential and business activity in the Central Precinct. The use of this alternative access into the Park will be supported by improved wayfinding, variable message signage and the implementation of demand management messaging both before and after events.

It is important to recognise that estimating event travel demand is challenging. The variety of event types and size, their operational timing (time of day; day of week) and their associated travel management plans make wider road network event modelling problematic in accurately replicating the event management measures and the subsequent expected reduction of cumulative impacts. Modelling of simultaneous peak hour and event traffic would require not only a mesoscopic model incorporating regional infrastructure upgrades, but extensive data collection across numerous events over time to validate the model. Even if this modelling was undertaken the results would likely only replicate the existing transport usage behaviours and not necessarily reflect the changes associated with the new regional road and public transport infrastructure measures. The use of public transport by event patrons and changes in commuting behaviour by residents/workers varies widely between events as do the size and time at which events are staged. It was considered that any attempt to identify specific commuter demands for the purposes of quantitative ‘modelling’ would have provided unreliable results.

Nevertheless, Sydney Olympic Park has a proven track record in managing the demands of event generated travel and the trip movements of its local businesses, residents and visitors. The transport planning for Master Plan Review has maintained and improves upon the management of simultaneous peak hour travel demand and events through:

- High capacity public transport services (rail and event bus) which operate for major events and currently achieve a non-car mode share of approximately 65%. The Authority is working to further improve this through a consistent approach to integrated ticketing for major events to further encourage use of public transport. Future public transport services such as Sydney Metro West and Parramatta Light Rail are likely to increase this mode share significantly as they provide more efficient and reliable ways to travel to and from the Park.
- Priority buses to service events. The use of priority buses provides the flexibility for additional services to be provided in direct response to the number and size of events.
- Establishing high capacity local road connections from/to the regional road network (creating an event ring road) which are free of on-street parking and driveways preserving traffic movement during events.
- Implementing event road management plans to facilitate access to the major car parks and the use of Travel Demand Management messaging around events to encourage non-car mode share.

As part of the operational management of events, the Authority implements specific Traffic Management Plans for each event to ensure minimal disruption for businesses within the Park, whilst maintaining access for high volume pedestrian movements, event bus priority and event off-street car parking. Further, it is important to understand that most major events occur in the evening, and predominantly on the weekends. For those mid-week major events, the additional PM trips generated by the development associated with the Master Plan Review will generally be travelling outbound from the precinct, in the reverse direction to the inbound event traffic. The frequency of this scenario is less than six (6) occasions per year.
The Authority has also carefully planned the location of the increased retail floor space (mostly within the Central Precinct) to ensure event operations are not compromised (refer to Section 4.1) and the increase in retail offering, particularly food and beverage, will help to further dissipate crowd movements within the Park before, during and after major events.

In addition, first principles transport planning together with SOPA event management experience has been used to identify improvements that can be delivered within the Park to further facilitate travel and event traffic demand. This includes the proposed relocation of the Aquatic Bus Terminal which will open up road access via Olympic Boulevard to Herb Elliott Avenue and the Central Precinct and provide a significant increase in local access to the Park.

Event public transport (dedicated event rail and bus services) and traffic management will continue and will increase in capacity over time with the introduction of PLR (Stage 2) and possible Sydney Metro West. In the shorter-term, the Authority understands that the heavy rail timetable is to be reviewed in 2018. The Authority will work closely with relevant agency to identify opportunities to improve heavy rail connections to provide further improvements to simultaneous peak travel demand and event traffic.

Finally, a range of local infrastructure improvement including new roads and intersections has been provided for in the 2016 Review (Figure 3.14). These will deliver further improvements for management of peak hour travel demand over time as development occurs.

**Outcome**

No change to the Master Plan is required. The Authority employs a range of mechanisms for management of simultaneous peak hour travel demand and events traffic and further improvements to local infrastructure will be funded through the ICF. Additional improvements will be provided by the delivery of regional infrastructure upgrades including the M4 upgrade works, and the proposed PLR (Stage 2) and Sydney Metro West.

### 4.7 Sustainability

The Green Building Council recommended the use of the Green Star – Communities rating tool to influence design and delivery for development in the Park.

**Discussion**

As part of the Olympic Legacy, the Authority is committed to achieving environmental sustainability in built environments and environmental best practice. Master Plan 2030 (2016 Review) encourages this through the requirement for minimum six star Green Star rating for Design Excellence. The Authority will continue to work with developers to deliver the highest practical ratings for NABERS and BASIX and move towards establishing the Park as a Green Star community.

**Outcome**

Section 4.2 – Sustainability has been amended to refer to Green Star Communities. Appendix A - has been amended to include provision of Green Star registration as part of any Development Application being considered with a minimum six star Green Star rating being required for Design Excellence.
4.8  Changes to Built Form Controls

4.8.1  Height and FSR

A high proportion (almost 60%) of submissions from lessees in the Precinct sought a variation, in most cases an increase, in the permissible FSR and heights applicable to their respective sites.

Discussion

The Authority undertook extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support an active and successful development within the Park. The testing and ultimate allocation of both FSR and building heights was based on a precinct-wide evaluation rather than a site specific basis, having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of the Park as a high quality public space.

General Principles

The following general approach was adopted in setting the FSR for development sites. The Authority is of the view that this approach underpins the urban design principles in the 2016 Review and provides the necessary consistency across precincts required to deliver good urban design outcomes.

FSR’s were standardised where possible across tower zones, reflecting the Master Plan height principles. For example, in the Central Precinct:

- 6.5:1 generally applied for 45 storey tower zone (except for site 4B with 8:1 FSR due to minimal impact of the street easement on this site). This reflects the status of Olympic Boulevard as the primary civic space, and allows for building heights proportional to the scale of the Boulevard.
- 4.5:1 was generally applied for the 30 storey tower zone along Australia Avenue, this was the maximum height suitable for this narrower street corridor.
- 3.6:1 for sites within the 20 storey zone between Olympic Boulevard and Australia Avenue and 3.2:1 for sites within the 8 storey zone

Similarly, FSRs for other precincts were also standardised across zones where possible to reflect Master Plan height principles. However, given the area that can be built on is confined to the building envelope, and different sites have different building envelopes, the resulting FSRs in a particular tower zone can vary from site to site.

FSR boundaries were, to the extent possible, aligned with existing lease boundaries, with minor adjustments to regularise development areas and match new street alignments. The FSR for a site was based on the full FSR area including setbacks, easements for future parks, through site links, and streets etc. This approach was adopted to ensure that landholders were not unfairly penalised as a result of subdivision of their sites and to enable the Authority to secure land required for new streets and open space without the need to resume or purchase land.

It is important to note that the FSRs and resulting total GFA across the Park were set not only to provide the appropriate mix of land uses, but to match predicted market uptake rates and the capacity of infrastructure. The Authority considers that the 2016 Review sets an appropriate level of FSR and height based on current market conditions and infrastructure. It should be recognised that significant uplift in both FSR and building heights has been provided in the 2016 Review for sites in the Central, Parkview and Stadia Precincts.

Further, an important consideration in setting site FSRs and heights was to promote liveability and a high level of amenity. The 2016 Review seeks to not only deliver an appropriate level of densification but provide guidelines and controls that promote liveability. To this end, building heights and FSR have also been carefully considered and established to avoid impacts from overshadowing and light spill on sensitive environments including the Badu Wetlands and Brick Pit which are not only an
important part of the Park’s natural areas, but support threatened flora and fauna species and provide valuable amenity. The Authority is of the view that these considerations are critical to the development of the Park as a place to live, work and play and to this end, the 2016 Review establishes FSRs and building heights that provide a balance between significant uplift and densification and maintaining liveability while protecting sensitive natural areas and amenity.

In addition to the significant uplift already provided for in the 2016 Review, a further maximum bonus of 10% for design excellence sites was included in total GFA calculation (refer to Attachment 2 to this report - Infrastructure Contribution Framework (ICF) Attachment B).

**Testing**

The proposed FSR’s were tested by SOPA’s experts based on the proposed building envelopes, and adjusted where required to ensure the allocated FSR, GFA and heights were reasonable and achievable. A wide range of site specific factors were also taken into consideration including:

- Podium heights. Podiums require more gross floor area (GFA) than the towers above and therefore a range of podium heights were tested for different sites based on the urban design principles set out in the Master Plan. Testing concluded that flexibility in podium heights was required to achieve solar access for some sites and, for these areas, a range of podium heights has been provided for in the Master Plan.
- Tower floor plate size. FSR and building heights took into account the maximum floor plate size of 900m$^2$ set out in the Master Plan to deliver slender towers to maximise view sharing and solar access.
- Requirement for the site to provide a single or double height colonnade or awning. Envelope testing factored in reductions in GFA where colonnades are required.
- The quantum of different land uses on mixed use sites with building heights being calculated to allow for the different ceiling height requirements for commercial and residential land uses.
- FSR, total GFA and building heights were adjusted to allow for any part of the site already developed and/or for design excellence where relevant.
- Areas within a development site identified for roads, green space and/or preservation of significant trees were included as part of the total site area for calculating total GFA and the FSR was adjusted to allow for the this GFA to be delivered within the smaller development site footprint. The FSR, and heights were tested to ensure the allocated GFA was achievable within the building envelope.
- An efficiency of 85% was generally assumed for all sites to allow for lift wells and service areas. However, testing was undertaken based on 75% efficiency for residential and 80% efficiency for commercial uses to provide greater confidence that the proposed FSRs and building heights could be achieved.

It should be noted that the ability to realise all of the GFA and building heights allocated for a site will also be influenced by the specific development model or design proposed for that site. The allocated GFA and building heights are maximum values. The Authority will work closely with proponents on individual development proposals to maximise opportunities to realise the allocated GFA and building heights consistent with the general controls and planning principles set out in 2016 Master Plan.

The Authority is of the view that given significant uplift that has been provided in the 2016 Review and that extensive testing and consideration has been undertaken to ensure the allocated FSRs, GFA and building heights set are reasonable and achievable, no further increase can be provided.

However, the Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

**Outcome**

There has been no further variation in permissible FSR and building heights in the Master Plan.
4.8.2 Podia

Six submissions raised issues related to the requirements for podia. These related to either the need for greater flexibility in podium heights or questioned why podia were required, particularly for residential buildings.

Discussion

Height and FSR controls in the 2016 Review were modelled on the basis of a podium and tower arrangement. Eliminating the podium element would mean the prescribed FSRs could not be achieved.

A podium and tower model has been adopted as the appropriate form for the Central and Parkview Precincts as it provides an efficient mechanism for achieving high densities, variety in dwelling types, quality streets, a compact yet well-coordinated urban area and represents an efficient use of land.

The underlying design principles for the employment of podia as an architectural design element at Sydney Olympic Park includes:

- The scale of buildings proposed (towers of between 20 – 45 storeys) need to be broken down in scale in order to:
  - Provide a lower but larger building component to increase densities in a form that has less impact than a tower form;
  - Create a more human scale along streets;
  - Reduce overshadowing along streets; and
  - Facilitate view and sun light sharing between sites.

- Podia assist in defining the street as the primary space within an urban area, by providing a level of uniformity or consistency across all buildings on a street. They provide street frontages at a more human scale and a transition from the tower form to the ground.

Notwithstanding the above, the Authority undertook additional testing of podia heights to determine whether additional flexibility could be provided while still achieving the key principles underlying design principles for the use of podia. It is recognised that some variation is desirable in both height as well as the façade articulation to break up the scale of large and long buildings. This has been reflected in the proposed amendments to the Master Plan, except along Olympic Boulevard where the primary objective for the 2016 Review was to improve built form and the frontage along the Boulevard within the Central Precinct. Key to this is ensuring block edge buildings that match the grandeur and scale of the Boulevard. Block edge heights are also required to have a high level of consistency to produce a street wall to frame the western side of the Boulevard with a strong built edge.

Outcome

The Authority has reviewed the requirements for podia and has amended the Master Plan to provide increased flexibility with:

- 5 and 8 storeys podia with a setback above 6 storeys in commercial streets;
- 4-8 storey podia with a setback above 6 storeys in residential streets; and
- 8 storey podia along Olympic Boulevard.
4.8.3 Colonnades and Awnings
Three submissions suggested that the requirement to provide colonnades should either be removed or the extent of colonnades should be rationalised and be appropriately scaled. Specific comments were raised in relation to whether colonnades are appropriate on sites south of the Town Centre.

Discussion

Colonnades have been used at Sydney Olympic Park to:

- Allow additional capacity along streets for large crowds in event mode;
- Increase the width of the footpath to allow generous space for a range of street-based activities including outdoor dining and café seating, whilst maintaining the free flow of pedestrian traffic;
- Provide a grand scale to main streets, and
- Allow generous space for street tree canopies and sun and weather protection.

The footpath capacity created by colonnades serves to encourage street life and activation of the public domain along the major streets in the Town Centre. This is particularly important at the Park as one of the key drivers in the 2016 Review was to expand before and after event activation and street-based retail. Sydney Olympic Park is an entertainment / events precinct that accommodates very large crowds. Awnings and colonnades can provide weather protection that potentially encourages event patrons to extend their stay at the Park.

Double height colonnades can often provide a better proportion to match tall buildings, however in certain circumstances they can be too narrow and open and as a consequence do not provide sufficient weather protection, nor do they achieve an intimate scale to shopfronts. A potential design solution to address this would be to partially enclose the upper level of the colonnade.

The Authority undertook a further assessment of awning and colonnades to determine whether additional flexibility could be provided whilst achieving the underlying design principles for the use of awnings and colonnades. As a result, Figure 4.2 of the Master Plan has been amended, expanding the range of options available to building designers and proponents.

Outcome

It was considered that some streets within the Park already have a colonnade style and, where practical, this should be continued along the remainder of these streets, except for Olympic Boulevard where the current colonnade is not successful in realising the potential of this street. It was also considered that, given a double height colonnade is a grand feature, this should be used on the key streets, including the streets within the Town Centre. The requirement for a double height colonnade could however be reduced to a single storey colonnade on secondary streets to provide greater architectural variety.

Having regard to the above, the Authority has determined that the requirement for double height colonnades should be retained on key streets as follows:

- Eastern side of Olympic Boulevard (excluding the area to south of Sarah Durack Avenue);
- Dawn Fraser Avenue;
- Streets around the new Park in the Central Precinct; and
- New East West street.

Single height colonnades are required to be provided on new secondary streets or streets with existing single storey colonnades, as follows:

- Herb Elliott Avenue;
- Edwin Flack Avenue; and
• Showground Road.

The Authority considered that the requirement for colonnades did not need to be maintained on Australia Avenue given existing developments do not currently provide consistency in urban form along the street. However, given this street provides active frontages, to the extent practical, continuous shelter should be provided. Therefore awnings should be provided as a minimum for buildings along Australia Avenue.

No awnings or colonnades are required on the western side of Olympic Boulevard as existing buildings do not reflect these features and a requirement for awnings and colonnades would not provide for a continuous street tree canopy or shelter along this section of Olympic Boulevard.

4.8.4 Residential Tower Floor Plates

One submission sought flexibility in the size of floor plates for residential towers above 15 storeys to provide additional flexibility and optimise design outcomes.

Discussion

A key underlying principle of the 2016 Review is the use of slender towers to maximise view sharing and solar access and provide a point of difference that allows for high end quality development to be delivered at the Park.

The Authority therefore considers it important that the Master Plan maintains this high standard of design particularly having regard to the Park’s status as a publicly owned State Significant Precinct. Land use and density has been substantially uplifted beyond that contemplated in the current Master Plan with the expectation that this will facilitate high quality design and design excellence on all development sites.

The Authority has undertaken further investigations which suggest that contemporary residential high rise development in Parramatta, Chatswood and Sydney CBDs are achieving narrow floor plates ranging between 750 - 900m². However, it is noted that the City of Sydney and Parramatta City Council development controls set a tower floor plate of around 1,000m², which suggests that some more recent developments are significantly over performing in comparison with the controls.

With this in mind, the Authority undertook additional testing to determine the appropriate floor plate size that could be provided while delivering high quality developments. It was determined that a maximum residential floor plate of 900m² Gross Building Area (GBA) could be accommodated for developments above 15 storeys while still providing slender towers that maximise view sharing and solar access.

Outcome

The Master Plan has been amended to vary the floor plate control for residential towers above 15 storeys from 800m² GBA to a maximum of 900m² GBA.

4.9 Economic Impacts

4.9.1 Impact on Other Retail Centres

One submission raised concern about the potential economic impacts of the retail offering at Sydney Olympic Park, particularly in relation to the Rhodes Shopping Centre. Supplementary information in support of the submission was received in early May 2017 including a report prepared by a consultant in response to the Authority’s Market Testing Report (Hill PDA) exhibited as part of the 2016 Review. The following discussion has been prepared in response to the submission as a whole.
Discussion

The Authority commissioned Hill PDA to complete a further Retail Demand and Impact Assessment to determine the viability of the proposed 100,000m² retail floor space as part of the 2016 Review and consider the economic impacts that this would have on the surrounding retail centres hierarchy, including the facility at Rhodes, DFO Homebush and other local areas.

Hill PDA found that retail centres such as Rhodes currently trade at well above the National Average in terms of dollars per square metre. Similarly, DFO Homebush is trading at a much higher level than homemaker and brand outlet centres located in out of centre locations.

Based on a bespoke gravity impact model, some predicted loss of trade could be expected for the Rhodes centre (based on the first year of trading in 2026) as a result of the proposed retail offering at Sydney Olympic Park. It was concluded that overall, the predicted immediate impacts on Rhodes, DFO and several other centres was moderate. However, given the current level of over trading, it was considered that this immediate loss in trade could be sustained and could be expected to lessen over time as a result of population and expenditure growth in the locality. Further, based on the high trading levels and expected growth in resident and worker populations in the wider trade area over the next 10 years, these centres are expected to continue trading above industry benchmark levels.

The demand modelling further indicated that by 2031, between 125,000m² and 150,000m² of retail floor space could be supported at the Park. This is more than the 100,000m² retail floor space proposed as part of the 2016 Review. A copy of the Retail Demand and Impact Assessment is at Appendix 3.

It should also be noted that the Park hosts over 5,000 events each year and attracts over 10 million visitors. These figures are expected to continue to grow providing a substantial additional population for retail trade within the Park. Event patrons will be encouraged to arrive early and stay beyond the event, providing retail trade that does not compete with surrounding retail centres.

Further, the offering around ANZ Stadium and Qudos Arena is identified as entertainment type uses which could include a wide range of uses such as sporting clubs, amusement centres, pubs, and retail uses. These areas are not expected to include the type of department and speciality stores that would be found in a subregional shopping centres such as Rhodes.

The Authority notes that the submission espoused the importance of assessing impacts under different scenarios. Whilst the further impact assessment undertaken by Hill PDA only considered one scenario, it adopted the low growth scenario combined with 80,000m² of retail space by 2026. This is a high impact scenario and it is therefore considered that other scenarios would only demonstrate lesser impacts. For this reason testing of additional scenarios was not necessary.

Having regard to the above, the quantum of retail floor space proposed in the 2016 Review is considered to be sustainable and without significant impact on the viability of existing or planned centres in the region.

Outcomes

No changes to the Master Plan are required. The Retail Demand and Impact Assessment prepared by Hill PDA on behalf of the Authority is provided as Appendix 3 to this RtS report.
4.9.2 Reduction in Commercial Floor Space

Three submissions identified the proposed reduction in commercial floor space as a matter for concern, suggesting that it would devalue the role of commercial land use at Sydney Olympic Park and would be contrary to objectives to provide employment land uses in proximity to where people live.

Discussion

While concerns relating to the reduction in commercial floor space are noted, it should recognised that this small reduction in commercial GFA (- 67,000m²), is balanced by an equivalent increase in retail floor space (+67,000m²) which supports activation of the Town Centre and creates additional jobs to ensure employment targets are not compromised.

The Authority recognises that a strong commercial centre is critical to a successful Town Centre and has undertaken extensive testing to develop a land use mix which ensures an adequate quantum of commercial floor space to achieve a viable commercial centre both numerically and spatially.

It is acknowledged that development sites that have been identified for “mixed use” may be taken up by residential development despite the option for commercial use. In order to preserve opportunities for commercial development over the long-term, the Master Plan identifies areas / development sites for “commercial only” use.

It is considered that the statutory requirement to review the Master Plan every five years ensures that it remains current, responsive to changes in market demand and captures any additional uplift that may result from the delivery of regional infrastructure improvements.

Outcomes

No change to the Master Plan has been made as a result of submissions regarding commercial floor space as the small reduction in commercial GFA is balanced by an equivalent increase in retail space which is expected to support activation and deliver on the employment targets for the Park.
5. Government Agencies and NGOs Submissions

This section of the report sets out the key issues raised by the government agencies and non-government organisations together with the Authority’s response. Where relevant, reference is made to additional testing that has been undertaken to address the specific matters raised.

5.1 Transport for NSW / Roads and Maritime Services

Key issues raised by TfNSW / RMS and the Authority’s responses are as follows:

- The development yield for all land uses has increased by 460,000m² since Sydney Olympic Park Master Plan 2010. The retail yield in particular has significantly increased from 33,000m² to 100,000m². The requirements for transport infrastructure able to cater for retail trips, residential, entertainment and other trips at the same time will be significant.

The balance and combination of land uses at the Park has been subject to detailed land use planning and market testing. The increase in retail yield reflects the growth in population (local retail) and the Precinct’s character as an entertainment and sporting precinct (destination retail).

The increase in retail yield locally has the potential to contain retail trips within the Park, reducing the need for locals to travel externally for daily retail needs to locations such as Newington, Rhodes, Strathfield or Burwood. The 2016 Review has sought to maximise densities in and around the Central Precinct and train station, reducing the need to travel outside of the Park and therefore minimising the subsequent impact on local and regional road networks.

The location of the increase in retail floor space (primarily within the Central Precinct) has also been carefully planned to minimise conflict with event operations (traffic and public transport). The proposed relocation of the Aquatic bus terminal and reduction in coverage and duration of event road closures in the Central Precinct will limit the impact on local businesses and residents and allow public transport services to operate to regular routes without the need for diversions.

The increase in retail offering within the Town Centre, particularly food and beverage, will also help to dissipate crowd movements through travel demand management before and after major events. The greater use by event patrons of the M4 Motorway and Hill Road ramps to access event car parks will further assist in the separation of event traffic from the growing residential and business activity in the Central Precinct.

In consideration of the additional gross floor area associated with the 2016 Review, the Traffic & Transport Strategy (TTS 2016) adopted a 40% non-car share mode, which is dependent on a number of identified upgrades to transport infrastructure such as the PLR project, WestConnex and associated on/off ramps, internal containment trips and a number of regional and local intersection upgrades. As had been agreed with TfNSW/RMS/DPE, the Authority's Infrastructure Contributions Framework (ICF) would fund the required new local streets and local intersection upgrades, whilst the regional traffic and transport infrastructure projects would be funded through a new Special Infrastructure Contribution (SIC) administered by DPE.

- The Traffic and Transport Strategy (TTS 2016) could have addressed broader longer term cumulative impacts of the proposed uplift in land development in the subregion. It is likely that more significant impacts than those nominated in SOP MP 2030 and TTS 2016 will be required. Detailed investigation and transport analysis needs to be undertaken to understand the infrastructure requirements along with the development of a SIC and enhanced Local Contributions Framework.
The Authority has worked proactively with TfNSW and RMS in the development of the transport strategy. At the commencement of the 2016 Review the Authority was advised that RMS was investigating the regional road impacts of the Park and adjacent development areas and scoping the regional mitigation measures. This regional scale of assessment required the use of mesoscopic modelling (lead by RMS). This model would ultimately capture and assess the transport demands from adjacent precincts whilst also assessing the influence of WestConnex (Stage 1). Other projects of significance which would also impact the regional road capacity include the PLR project for which TfNSW was also undertaking regional traffic modelling.

The 2016 Review has outlined the local impacts and measures required to address the increase in development yield. The sub-regional context and adjacent development has been acknowledged in the Transport Strategy but falls outside the jurisdiction of the Authority’s planning remit and forms part of the Greater Sydney Commission’s function for district level planning.

The Transport Strategy has outlined a number of transport infrastructure improvements to both the local and regional road networks which are to be funded from both the ICF and the SIC. This will provide the Park an additional uplift in transport capacity to accommodate current and future growth ahead of the planned major improvements to public transport such as PLR (Stage 2) and Sydney Metro West.

As indicated previously in this report, DPE is preparing a SIC for the Greater Parramatta Priority Growth Area in consultation with TfNSW and RMS and other relevant agencies to ensure that infrastructure contributions are based on a rigorous analysis of infrastructure requirements.

- **TfNSW does not support the approach of ‘satisfactory arrangements’ under the SEPP (State Significant Precincts) 2005 for transport infrastructure funding. The preferred approach is that the Special Infrastructure Contribution is finalised including identification and costing of transport infrastructure (including land and capital) before the SOPMP 2030 is finalised.**

The Authority notes TfNSW’s comment, however this review has focused on the Master Plan. Any requirement to amend SSP SEPP will be considered by DPE.

The “satisfactory arrangements” clause will ensure that consent is not granted for development at the Park unless the Secretary of DPE has certified in writing, that satisfactory arrangements have been made to contribute to the provisions of designated State and regional public infrastructure in relation to that land.

Furthermore, the satisfactory arrangements clause provides the legal basis for the Authority’s Local ICF. Its removal is therefore not supported.

- **There is an opportunity to reflect on the recent (post publication) announcement of planning for a future Sydney Metro West Project by allocating land for a future Metro Station and bus interchange/layover as part of SOPMP 2030 and acknowledging a new rail corridor and potential for integrated over-station development.**

The planning for a Sydney Metro West has been part of the Park’s transport strategies for many years. The stretch non-car mode share target (60%) has been assumed with a Metro system in place. This was increased from 40% from the base line Master Plan 2030.

The Transport Strategy identified a site for a station box for the Sydney Metro West based on planning for the previous Sydney Metro in 2008. This site represents the previously preferred alignment from the adjacent proposed metro stations at Strathfield and Silverwater. The station location was also based on a previous options analysis based on previous versions of the Master Plan. The station location best serves the Central Precinct, ANZ Stadium and Carter Street.
The Authority is working closely with TfNSW’s Metro team regarding a number of other potential metro station box locations. The Authority is confident that a further options analysis will identify the most suitable area for a metro station, including the possibility for an integrated over-station development.

The Authority is strongly supportive of the metro transport initiative, which along with the PLR will be the greatest tool for reducing car dependency in the precinct due to its metropolitan wide connections and travel time benefits.

- **There is an opportunity to reconsider the proposed SOPMP land use changes, including development scale and use, with the increased transit amenity provided with a Sydney Metro West station.**

Noted. However the Sydney Metro West had not been announced at the time of preparing the 2016 Review. As indicated above, provision has been made for a station box for the Sydney Metro West at Sydney Olympic Park.

As the Master Plan is required to be reviewed every 5 years, it is considered that there is adequate opportunity to capture any uplift that may result from the delivery of a Sydney Metro West line in future reviews.

- **There is a need for land for road widening purposes along the eastern side of Hill Road from John Ian Wing Parade intersection north to Pondage Link Road. This road is the key to unlocking much of the development potential of at the Park and this fact is referenced multiple times in the TTS 2016. The corridor needs to be identified and protected in the Master Plan. In the absence of a Special Infrastructure Contributions (SIC) this particular issue could in the short term be incorporated into a regional contributions framework and included in the SOP Master Plan and planning agreement for the site.**

The detailed proposals for the Hill Road ramps on the M4 Motorway and associated Hill Road widening were provided after publication of the initial draft of the 2016 Review in July 2016.

At the time of preparing this RtS report, details of the Hill Road off Ramp and / or Hill Road widening had not been released. However in recognition of the potential for future works in Hill Road, the Master Plan has been amended to illustrate the areas that may be possibly affected, based on the indicative information provided by RMS as part of its submission.

- **There are a number of important issues to consider if the Parramatta Light Rail is to be successfully integrated into the existing street network at Sydney Olympic Park.**

PLR is crucial to the success of the development contemplated under the Master Plan and will significantly contribute to achieving the 40% non-car mode share target and encouraging development prior to the operation of Sydney Metro West in the later part of the Master Plan 2030 development timeframe.

The Authority notes the current status of the PLR project and has also noted the need to consider appropriate setbacks and access controls on the roads outlined within the Park.

Specific issues identified include changes to traffic signals, potential loss of street parking, realignment of roads and footpaths and change in driveway access to left-in/left-out only.

Early indication from the PLR team indicates that a potential Stage 2 (Camellia to Sydney Olympic Park) route is likely to traverse either Australia Avenue or Dawn Fraser Avenue and this has been considered in the 2016 Review. The Authority has liaised closely with the PLR project team from TfNSW and is currently examining alignment and station location options for Stage 2 of the project. At the time of the public exhibition of the 2016 Review documentation the level of information available
was limited, however appropriate corridor space has been allowed within the urban structure for future PLR provision where detail is known.

5.2 City of Parramatta

Council provided a comprehensive analysis of the 2016 Review documentation and has raised a range of issues, many of which have been raised by others and addressed elsewhere in this report. These include:

- Colonnades and podia;
- Building form and height;
- Cumulative traffic impact;
- M4 Off-ramp;
- Reconsideration of parking rates;
- Impact of increased density on transport and Community infrastructure;
- Affordable Housing;
- More detailed schedule of works in the ICF; and
- Does not support the inclusion of a satisfactory arrangements clause and recommends that State / regional contributions only be sought when the SIC is in place.

However, certain other key issues raised in the submission are addressed in the following paragraphs.

5.2.1 Metropolitan Skyline

Council considers 45 storey towers to be more appropriately located within the Parramatta City Centre. Development of this height at Sydney Olympic Park may affect the metropolitan skyline and urban form.

Discussion

The Authority believes that the Town Centre should be readily visible and identifiable within the urban environment and has undertaken significant testing to determine suitable heights and FSRs for the growth of the Park. The location of the Park, its proximity to Parramatta CBD and the relatively flat terrain between the Park and Parramatta’s CBD would make it unlikely that the metropolitan skyline will be impacted from any viewing areas.

It is also important to recognise that the existing development at the Park already creates a unique skyline and urban form. Taller buildings of 30 to 45 storeys along Australia Avenue and Olympic Boulevard are a key urban design principle for the 2016 Review that allow these streets to be readily identified as the main axis roads into the Park and allow the required densification to be achieved while freeing up the ground plane for delivery of open space, streets and other public domain that create a liveable place.

In setting the maximum building heights the Authority has also given consideration to existing views that assist in orientation and connect the Town Centre with both the surrounding local and metropolitan environment, enhance the existing topography and preserve important view corridors as shown in Figure 3.2 of Master Plan.

Finally, the development footprint at Sydney Olympic Park is deliberately compact with a high level of activity concentrated at the Town Centre and contained on all sides by major public sport / recreational buildings or parkland. As such it is considered that the building heights provided in the 2016 Review not only match expected take-up rates but will allow a vibrant Town Centre to be achieved within a public recreation and parkland setting.
The Authority is of the view that the primacy of the Parramatta City Centre will not be compromised by the building heights provided for under the 2016 Review.

**Outcome**

No change to the Master Plan as the 45 storey towers will be consistent with the unique skyline and urban form at Sydney Olympic Park.

### 5.2.2 Interface with Carter Street Precinct

Parramatta Council has indicated that heights and densities within the Stadia Precinct should relate to those for Carter Street Precinct.

**Discussion**

The Authority notes the development controls for the Carter Street Precinct are currently being reviewed in response to the NSW Government commitment of funding for a new westbound off-ramp from the M4 Motorway at Hill Road. The draft development control plan that has been prepared includes higher density urban community with potentially over 5,500 dwellings, including a range of housing options from townhouses to apartments in buildings of up to 20 storeys.

The Authority acknowledges that consideration could be given to the proposed built form along Edwin Flack Avenue more closely aligning with that within the Carter Street Precinct. However it should also be noted that development on these sites will also serve to mitigate noise from event venues to residents in the Carter Street Precinct and as such are likely to be higher than the adjoining development in that Precinct. To this end, the land use for the tower zone as exhibited was for mixed commercial, hotel and serviced apartments with a building height of up to 45 storeys. The land use has remained unchanged, however, the Authority has reviewed the proposed height of development along Edwin Flack Avenue and amended it to be more consistent with those proposed in the Carter Street Precinct.

**Outcome**

The Master Plan has been amended to reduce the bulk and scale of the building on the Coach Parking Site on Edwin Flack Avenue from 45 storeys to 30 storeys which more closely aligns with the proposed maximum building heights of 20 Storeys for the Carter Street Precinct. The additional GFA from this change has been redistributed around Qudos bank arena (refer to 6.3.1).

### 5.2.3 Residential Occupancy Rates

Parramatta Council contends that it is likely that the proposed average occupancy rate of 2.2 persons per dwelling does not reflect existing occupancy patterns in the Parramatta LGA and should be amended to 2.47 persons per dwelling. Council is also concerned that the rate identified in the Community Facilities Strategy prepared by Elton Consulting on behalf of the Authority may lead to a greater population based on a significant proportion of families being attracted to live in this area.

**Discussion**

The Authority has undertaken a review of occupancy rates for comparable high density developments areas and notes the following:
Having regard to the above, and the advice provided in the Community Facilities Strategy, the Authority is of the view that the nominated occupancy rate of 2.2 persons / dwelling is appropriate for the proposed development within Sydney Olympic Park. The assumption that a significant proportion of families will be attracted to the Park is not supported by the information available to the Authority and is not reflected in the demand or types of developments being delivered at Sydney Olympic Park.

Nevertheless, given the statutory requirement to review the Master Plan every 5 years, if the occupancy rate does under-estimate the population, then this would be able to be adjusted in future reviews of the Master Plan, ensuring the information (including occupancy rates and future population size) always reflects the latest population and demographic data from the Australian Bureau of Statistics.

**Outcome**

No changes were made to the Master Plan. The occupancy rate of 2.2 persons per dwelling is consistent with expert advice provided to the Authority and the occupancy rates applied in comparable areas.

### 5.2.4 Cycle Routes – Active Travel

Parramatta Council has suggested that there should be an increase in investment in active travel and a plan should be prepared.

**Discussion**

The Authority is working with RMS in relation to connections to the M4 Cycleway. It is noted that there is an existing connection to the M4 near Haslam’s Creek adjacent to Newington. Existing regional cycling connections provide links to Rhodes and beyond.

Cycle routes were specifically designed to complete, complement and add to the TfNSW plans. Plans for a cycleway through the "mouse hole" to a new eastbound on-motorway cycle route are currently being developed.

It should also be noted that the Master Plan only applies only to the Urban Core and cycle routes through the parklands are included in the Authority’s Parklands Plan of Management.

**Outcome**

No changes were made to the Master Plan.

### 5.3 Canada Bay Council

Canada Bay City Council made two separate submissions, which have been identified in the Table at Appendix 1; however the issues have been consolidated for the purposes of the following discussion.
Canada Bay raised similar concerns to Parramatta City Council in terms of the impost of additional growth at the Park on existing social and transport infrastructure and open space in the locality. It also identified issues with:

- the proposed 8 storey podia and suggested that a maximum of 6 storeys would result in a more human scale at the street edge;
- cumulative traffic impacts arising from growth at the Park and surrounding areas;
- parking rates;
- affordable housing; and
- demand for community facilities.

These matters have been addressed elsewhere in this RtS report. Another key issue raised by the City of Canada Bay relates to the timing and delivery of infrastructure, as discussed below.

### 5.3.1 Timing and Delivery of Infrastructure

Council suggested that development at the Park should only be permitted to proceed where appropriate infrastructure is in place to support it.

**Discussion**

The provision of local and regional infrastructure for a growing population is facilitated through local and regional infrastructure contributions which provide funding to help deliver infrastructure progressively as development occurs.

The Authority’s ICF requires contributions of money or land from developers to provide local infrastructure to support development under Master Plan 2030.

DPE is also preparing a SIC for the Greater Parramatta Priority Growth Area. The SIC will be a financial contribution paid during the development process to help fund State and regional infrastructure.

While the SIC is being prepared, a clause will be included in the SSP SEPP that requires the consent authority to be satisfied that satisfactory arrangements have been made for State and regional infrastructure prior to giving development consent.

State infrastructure already committed to by the NSW Government to be delivered in the region includes the Hill Road off ramp and the PLR. Additional State and regional infrastructure is expected to include regional road and intersection upgrades, upgrades to local and regional bus networks and existing rail services and Sydney West Metro.

Since 2010, new infrastructure has been funded through the Sydney Olympic Park Authority local ICF. This includes new roads such as Murray Rose Avenue and Parkview Drive extensions, road and intersection upgrades including Australia Avenue, Bennelong Parkway, and Olympic Boulevard and utility upgrades such as expansion of the recycled water scheme and new parks such as Brick Pit Park.

The ICF exhibited with as part of the 2106 Review provides for delivery of further local infrastructure upgrades as development occurs (refer to Figure 3.14 of the Master Plan).

The Authority can seek both land and monetary contributions from developers to which the ICF applies to facilitate the timely delivery of infrastructure as development occurs.

Section 3 of the ICF 2030 (2016 Review) document addresses infrastructure sequencing and states
that “infrastructure delivery will as far as possible … be synchronised with the rollout of new development”. It is anticipated that this will take place in phases in the Parkview, Central and Stadium Precincts subject to need.

Other factors affecting the delivery of infrastructure identified in the ICF include:

- Where practical and appropriate infrastructure will be provided as part of, or in conjunction with new development;
- Construction of streets and public spaces associated with adjoining development … are to be coordinated to enable the public domain to be built simultaneously; and
- New and upgraded infrastructure constructed within each development phase is to be largely completed prior to the commencement of subsequent phases.

**Outcome**

Timing and delivery of infrastructure has been carefully considered by the Authority, no changes to the Master Plan are required.

### 5.4 City of Sydney

The City of Sydney submission to the SOPA Master Plan 2030 (2016 Review):

- was broadly supportive of the SOPA Master Plan;
- considered the proposed uplift appropriate based on the precinct’s existing transport network and indicated that the existing infrastructure supports the vision to deliver a liveable, sustainable and vibrant place and
- supported the provision of additional housing to contribute to Sydney’s housing needs.

The submission focused on the environmental performance of new buildings and recommended:

- consideration of climate change impacts beyond sea level change be included in Section 4 – General Controls and Guidelines;
- BASIX targets to be established for residential development in line with those used by Urban Growth in the Parramatta Road Corridor Urban Transformation Strategy;
- the requirements for office development to be increased from 5 star to 5.5 star Green Star and
- submission of a BASIX Certificate to be required to be provided for all new residential developments.

**Discussion**

The Authority notes and supports the Council’s comments that consideration of climate change impacts beyond sea level change should be included in Section 4 – General Controls and Guidelines. Consideration of Climate Change impacts and the preparation of a Climate Change Adaptation Plan is included as part of Green Building Council Green Star rating system. Nevertheless, Master Plan (2016 Review) has been amended to state that all future developments and project applications should consider the impacts as a result of climate change and include elements in building design and construction that specifically address climate change impacts consistent with the guidance provided in the Green Building Council of Australia Green Star Design & As Built Guidelines. The Authority is currently working with Sustainability Advantage on its risk assessment before an overarching precinct Climate Adaptation Plan is developed consistent with the requirements for achieving Green Star Communities. Reference to SOPA’s Climate Change Adaptations Plan has also been included in the Master Plan.

The Authority is committed to achieving environmental sustainability in built environments and environmental best practice and a submission was received from the Green Building Council of Australia which was supportive of the sustainability measures included in Master Plan 2030 (2016 Review). Master Plan 2030 (2016 Review) encourages sustainability through the requirement for all development to achieve a minimum Green Star rating with higher ratings for design excellence. To further drive sustainability, the Authority has increased its requirements for all design competition
sites from 5 to a 6 Star Green Star rating. This has been reflected in Appendix A - *Requirements for Design Competition Process*.

It is important to recognise that the number of Design Completion Sites, as shown in Figure 4.6 of the Master Plan (2016 Review), have also substantially increased from the current Master Plan to include all development sites (with the exception of sites already developed) within Central and Stadia Precincts and all commercial and mixed use development sites, and some residential sites, in Parkview Precinct. This will drive delivery of a substantial number of 6 Star Green Star buildings and help the Authority establish the Park as a Green Star Community. Section 4.2 of the Master Plan (2016 Review) has been amended to state that SOPA will be working towards certification of **Green Star Communities** and the Green Star ratings required under the Master Plan 2030 (2016 Review) will assist in achieving this outcome.

The Authority will work with developers to deliver the highest practical ratings for NABERS and BASIX for all developments. The Authority notes Councils comments in relation to establishing BASIX targets for residential development in line with those used by Urban Growth in the Parramatta Road Corridor Urban Transformation Strategy. However, reference in the Master Plan to multiple rating systems may confuse proponents and it is considered that delivery of Green Star residential buildings will achieve an equivalent or higher sustainability rating than BASIX or NABERS systems. Further, a BASIX Certificate is a legislative requirement for all new residential developments under the BASIX SEPP and must be submitted as part of the development application. Therefore it is not considered necessary to also require submission of a BASIX Certificate under the Master Plan.

**Outcome**

Section 4.2 – Sustainability has been amended to refer to requirement for all developments to consider the impacts as a result of climate change and include elements in building design and construction that specifically address climate change impacts consistent with the guidance provided in the Green Building Council of Australia *Green Star Design & As Built Guidelines*. Reference has also been included to SOPA preparing a precinct Climate Change Adaptation Plan consistent with the requirements of **Green Star Communities**.

Appendix A - has been amended to include provision of Green Star registration as part of any Development Application being considered with a minimum six star Green Star rating being required for Design Excellence.

### 5.5 Sydney Water

Sydney Water generally supported the further growth provided for in the 2016 Review. Sydney Water advised that its investigations indicate that the existing potable water and wastewater systems do not have sufficient capacity to accommodate all future growth in the urban renewal corridor including Sydney Olympic Park and that further investigations will be required to identify the extent and timing for the provision of amplifications.

**Outcome**

The Authority has already begun working with Sydney Water in relation to the planning for possible future amplification of water supply, wastewater and stormwater services to accommodate projected growth.

The Authority’s Water Reclamation and Management Scheme (WRAMS) system provides a recycled water option for developments within the Park and its surrounding areas, offsetting potable water demand by delivering recycled water from stormwater harvesting and wastewater processing. WRAMS saves more than 850 million litres of potable water annually by avoiding its use for non-drinking purposes.
Less than 5% of all water used at the Park is potable water. Potable water is typically only used where recycled water or harvested stormwater cannot be used, such as for drinking water, showers and hand basins. Developments within the WRAMS catchment are required to connect to recycled water for non-potable water uses where practical to manage water demand.

5.6 Department of Education and Training

A submission was received from the Department of Education (DoE) which recognised the population growth in the Sydney Olympic Park Precinct and surrounding areas and indicated the Department would be working towards increasing the provision of additional secondary education infrastructure in the area. The submission indicated that consistent with the Department's vertical model for secondary education currently being implemented in other areas, maximising flexibility would be desirable for delivery of a school.

Discussion

Site 109 located in the Boundary Creek and Tennis Precinct is identified for education purposes only. However, both the Master Plan and the SSP SEPP make provision for education land uses throughout the B4 Mixed Use Zone offering the opportunity to deliver education uses across a wide range of sites in the Park.

Nevertheless, having regard to the submissions received, the Authority has consulted with the DoE to better understand the site characteristics that would facilitate the delivery of a school at Sydney Olympic Park. The building height provisions in the Master Plan have been adjusted from four to eight storeys to provide better flexibility and opportunity for delivery of a school on Site 109. The DoE is further exploring height requirements of the site to help maximise opportunities.

Whilst the government’s broader education program is outside the scope of the Master Plan, the Authority will continue to work with DoE and other education providers to identify feasible locations/sites for new schools and other educational infrastructure within Sydney Olympic Park.

Outcome

The building height control for Site 109 has been amended from 4 to 8 storeys to provide greater flexibility and opportunity for delivery of a school on the site. This is reflected in Figure 5.49 of the Master Plan.

5.7 Environment Protection Authority

The EPA submission provides a commentary regarding the Authority’s statutory obligations in relation to air and water quality, noise, contaminated land management and waste management.

5.7.1 Air Quality

- Odour issues associated with the Homebush Bay Liquid Waste Treatment Plan (LWTP) and the Auburn Resource Recovery Centre and relationship to the Haslam’s Precinct.
- Master Plan provides the opportunity to raise awareness of air quality issues and incorporate air quality information in planning process and delivery actions to maintain or improve air quality for future growth.

Discussion

The existing Homebush Bay Liquid Waste Treatment Plan (LWTP) and the Auburn Resource Recovery Centre are located in the Haslam’s Precinct. The EPA currently regulates the LWTP under
an Environmental Protection Licence and has been working with Transpacific Industries Pty Ltd, the operator of the facility to deliver substantial improvements in relation to odour controls at the plant over the last 12 years. The Haslam’s Precinct has seen minimal development since Master Plan 2030 came into effect and no change to the Haslam’s Precinct is proposed as part of the 2016 Review.

The Authority considers air quality issues as part of its assessment of all development proposals and provides advice on this matter in relation to any development applications referred by Parramatta City Council for comment. A significant proportion of development within the Park is State Significant Development and is assessed by DPE and determined by the Minister for Planning or his delegate. Air quality is a key consideration required to be addressed in any application for State Significant Development.

The Authority recognises the NSW Government Clean Air for NSW consultation paper and Parramatta Road Corridor Urban Transformation Strategy which will assist in setting guiding principles and priorities for development within the Park. The Authority is already delivering projects that contribute to the management of particulates through initiatives such as the cogeneration plant at the Aquatic Centre which has been in operation since 2014.

**Outcome**
The NSW EPA’s comments are noted. No changes are required to the Master Plan.

### 5.7.2 Water Quality

The EPA recommends consideration be given to updating current water management strategies for the Park with contemporary information;

- Delivery of key water principles to protect and restore existing waterways.
- Promote integrated water cycle management and encourage investment into water cycle management.
- Promote development that fosters relationship between water landscapes and urban living to enhance human and social wellbeing and promote community co-design.

**Discussion**

In late 2016, developed in consultation with leading industry experts, the Authority published its revised Stormwater and Water Sensitive Urban Design Policy to promote integrated water cycle management and provide proponents with clear guidance on the requirements for all development within the Park.

The Authority considers water cycle management in its assessment of all development applications submitted in respect of land at the Park. The Stormwater and Water Sensitive Urban Design Policy requires proponents to maximise on-site capture and reuse of stormwater, connect to the Recycled Water Plant for non-potable water uses and provide for adequate deep soils planting and surfaces that reduce flows to the receiving waters. Detailed modelling and supporting information is required to be provided as part of any development application and this information is independently peer reviewed if required to ensure good environmental outcomes are achieved.

The Authority also provides advice on water quality in relation to any development applications referred by Parramatta City Council and works closely with council on a wide range on initiatives including “Our Living River”.

**Outcome**
The NSW EPA comments are noted. No changes are required to the Master Plan.

### 5.7.3 Contaminated Land and Waste Management

Contaminated lands are managed strictly in accordance with Contaminated Lands Management Act 1997 Notice No 28040 issued to the Authority and administered by the NSW EPA.
Discussion

The Authority implements rigorous monitoring and management procedures to ensure compliance with all its statutory obligations under the Contaminated Lands Management Act (the Notice).

Beyond the requirements of the Notice, the Authority has developed a risk management framework and undertakes additional monitoring of remediated lands infrastructure to ensure these areas are managed with due diligence.

The Authority provides relevant information on contaminated lands and waste management requirements to tenderers and proponents in relation to development sites. The Authority’s experts in contaminated sites assist proponents in understanding the remediation history of Sydney Olympic Park and appropriately addressing risks to future development.

In relation to waste management, the EPA’s *Multi-Unit Development Guidelines* are noted and reference to these guidelines will be made in the Authority’s submission in relation to development proposals within the Park.

Outcome

The NSW EPA comments are noted. No changes are required to the Master Plan.

5.7.4 Noise

Noise is regulated by the Authority under the provisions in the *Sydney Olympic Park Act 2001*. Development within the Park is subject to specific noise mitigation measures and conditions that are imposed on title.

Discussion

Parts of the Park are subject to high levels of noise, primarily from sporting and entertainment activities undertaken in the Stadia, Sydney Showground, Central Sports, Boundary Creek, Tennis and Southern Sports precincts. Sydney Olympic Park Authority continues to use ‘public positive covenants’ to ensure landowners and lessees acknowledge the environmental and operational conditions that arise from events.

As part of the 2016 Review, Wilkinson Murray was commissioned to review and update existing acoustic provisions for the proposed changes, which relevantly include proposed increases in building heights within the Town Centre to accommodate additional residential uses. The primary focus was to minimise potential acoustic impacts of sporting and entertainment venues on other land uses within and around the Park. The review considered noise for all major event venues.

The 2016 Review aims to create a more liveable place, including outside of event times and during the day and night. To this end, the introduction of taller building forms along Olympic Boulevard, Edwin Flack Avenue and Australia Avenue act to both reinforce the urban structure of the precinct and to screen residential uses from event noise.

The Authority also considers noise issues as part of its assessment of all development proposals. It also provides advice on this matter in relation to any development applications referred by Parramatta City Council for comment. In relation to developments with the Park, the Authority will continue to use ‘Public Positive Covenants’ to ensure landowners and lessees acknowledge the environmental and operational conditions that arise from the sporting events and entertainment events that are a prominent feature of life at the Park.

A significant proportion of development within the Park is State Significant Development and is assessed by DPE and determined by the Minister for Planning or his delegate. Noise is a key consideration required to be addressed in any application for State Significant Development. Where
appropriate, validation of compliance with noise guidelines can be required as a condition off
development consent.

**Outcome**

The NSW EPA comments are noted. No changes are required to the Master Plan.

5.8 Non-Government Organisations

A total of 16 submissions were received from non-government organisations, most of which raised
precinct-wide issues, which have been addressed elsewhere in this report. The following points
identify the issues raised in each submission and cross reference the relevant section of the
Response to Submissions Report. As with all submissions, a response to the issues raised is
included at Appendix 1.

- **Australian Institute of Landscape Architects** – open space requirements (Section 4.5.1)
- **Newington Public School P & C Association** – petition; need for more schools (Section 4.4)
- **National Rugby League** – active greenspaces for local sporting teams and the community
  (Section 4.5.1). The NRL submission also suggested that change to existing timetables for T1
  and T7 lines are required to allow for increased number of trains directly accessing the Park. In
  this regard, direct rail services outside of events require significant disruption to the busy T1
  Western Line which operates at capacity during commuter peaks. It is understood that this has
  previously been investigated by TfNSW. Significant investment in infrastructure would be
  required to achieve direct rail services and in the light of the recent announcement of Sydney
  Metro West this is unlikely to be considered a priority at this time.
- **Green Building Council** – recommend Green Star Communities rating tool (Section 4.7)
- **Action for Public Transport (NSW) Inc** – Metro (Section 4.1.1); review parking rate for
  residential (Section 4.2.1); infrastructure contributions (Section 8); and community facilities
  Section 4.5.2)
- **Save North Strathfield Residents Action Group** – how infrastructure needs generated by
  proposed density and population growth will be met (Section 4.5.2)
- **Sydney Olympic Park Access Committee** – accessible parking (Section 4.2.4). The
  submission also requested that Master Plan be amended to reinforce the principle of
  accessibility. In this regard, additional information has been included in Section 3.3 of the Master
  Plan in relation to social sustainability, particularly for those with disability.
- **Shelter NSW and Sydney Alliance** – affordable housing (Section 4.3).
- **NSW Nurses and Midwives Association** – affordable housing (Section 4.3).
- **Urban Taskforce Australia** – infrastructure contributions (Section 8); affordable housing
  (Section 4.3).
- **Tourism Accommodation Australia** - balance between the Park’s legacy as an events precinct
  and an emergent Town Centre (Section 4.6); traffic and transport (Section 4.1).
- **Sydney Business Chamber** – traffic and transport (Section 4.1); preservation of the Park for
  major events (Section 4.6).
• **GoGet Car Share** – recommends a network of car share vehicles within the Park both on-street and off-street (Section 4.2.1).

• **Basketball NSW** – shortage of indoor multi-use sports venues across NSW, relocation of Sports Hall. In this regard, the Community Facilities Strategy includes an assessment of the future needs for a range of community infrastructure types (including indoor sports facilities). The Master Plan includes the proposal to relocate the Sports Hall. It is intended this new facility will assist to address community needs for multi-use sports courts.

• **NSW Federation of Housing Associations** – affordable housing (Section 4.3).

• **Nomoreodours Group** – against the Cleanaway Plant. It is noted that this site is not located within Sydney Olympic Park and is regulated by the EPA under licence.
6. Lessees Submissions

The issues raised by the lessees / developers in the Town Centre are, in the majority, site specific and relate directly to the development potential of their respective sites. Appendix 1 provides a direct response to the particular issues for each site, however the following sections of this report summarise the key issues in each of the three Precincts that are the focus of the 2016 Review.

6.1 Central Precinct

Nine submissions were received from lessees in the Central Precinct, the majority of which related to site-specific issues, including:

- Opportunities for increases in height and density;
- Split land uses – the submissions did not support the proposed split between commercial and mixed use as the boundary between the land uses does not necessarily align with land ownership and will not provide adequate flexibility to deliver a vibrant, integrated mixed use development on the entirety of the sites;
- Building height splits on sites along the southern side of Figtree Drive restrict ability to achieve design excellence;
- Fragmentation associated with mandatory vehicle connections compromises the ability to accommodate key anchor and destination retail – more flexible urban structure is required;
- Tower floor plate control should be increased;
- Deletion of the 40m separation requirement between towers; and
- The delivery of the proposed central open space – it should instead be able to be a series of spaces rather than a single space. Private ownership would facilitate management/maintenance.

Some precinct-wide issues were also raised, including the requirement for mandatory podia, infrastructure delivery, parking rates (particularly as they relate to retail floor space) and lack of detail in relation to the SIC, each of which are discussed elsewhere in this Response to Submissions report.

Discussion

Height and Density

Significant uplift has been provided for all sites in the Central Precinct in the 2016 Review and it is further noted that achieving design excellence provides the potential for a 10% bonus GFA.

The Authority has set the heights and densities in response to market take-up rates and to provide for viable building forms. It should also be noted that total GFA for development sites has been calculated on total site area including land-take associated with new roads or green space. Further information is provided in Section 4.8.1 of this RtS report.

The Authority has undertaken rigorous testing to allocate FSR, heights and land use across all precincts which takes into consideration the capacity of existing infrastructure and the vision for the Park. This included consideration of site specific factors and testing to ensure the FSRs GFA and building heights set in the 2016 Review were reasonable and achievable. More detailed information is provided in Section 4.8.1 of this report.

The ability to realise the maximum allocated GFA and building height on a development sites will be influenced by the specific development model or design proposed and therefore should be considered maximum values. The Authority will work closely with proponents on individual development proposals to maximise opportunities to realise the allocated GFA and building heights consistent with the general controls and planning principles set out in 2016 Master Plan.
The allocated building heights and densities were set to not only provide the appropriate mix of land uses, but to match predicted market uptake rates and the capacity of infrastructure and promote liveability and high levels of amenity. Therefore building heights and FSR have also been carefully considered with a view to preventing impacts from overshadowing of Linear and Central Park. These parks provide important recreation, amenity and operational capacity for management of major events and are therefore critical to the development of the Park as a liveable place.

The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or density that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Split Land Uses

The intent of the land use split was to ensure:

- a quantum of commercial floor space was secured on sites within the core commercial areas; and
- that there was a uniformity of use along important streets, such as Figtree Drive the future character of which is as a residential neighbourhood only; or the commercial streets, the character of which is to be as a business district.

Figtree Drive is designed to be activated with residential entries and residential gardens, an outcome which is incompatible with commercial and "big box" retail development. However, the Authority considers that a variation to the land use split line may be acceptable where the design intent is achieved.

The Authority has amended the Land Use Controls for the Central Precinct to allow a variation to the land use split line on the Land Uses Plan to be considered in the following circumstances:

- The amount of commercial floor space delivered is in accordance with the Land Uses and Building Heights Plan; and
- Along streets with commercial land uses the frontage is predominantly commercial; and
- Along Figtree Drive the frontage is 100% residential.

Building Height Splits

The building height split plays is critical in delivering high quality amenity outcomes by ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on adjacent developments or the Linear Park. It is envisaged that developments with building heights splits would be stepped down from twenty storey towers fronting Figtree Drive to eight storeys along Linear Park.

The location of taller buildings cannot generally be accommodated fronting onto Linear Park as this would result is significant overshadowing of the park. The Master Plan however does not preclude proponents from seeking a variation to the development controls consistent with the meeting the stated purpose and objectives set out in Section 1.3 of the Master Plan.

Fragmentation

The fundamental character of a town centre is based on an interconnected public street system as the primary commercial, civic and communal space. As such, the Central Precinct is required to deliver a network of streets to achieve a strong core town centre. These streets perform an important civic and commercial function as well as facilitating solar access and view sharing into the Town Centre.
The Authority has undertaken further testing in relation to the street network for Town Centre and determined that the east-west streets are critical for efficient traffic flow. The new north-south streets are also critical however the central North South Street could be delivered as a shared way or pedestrian only street without significantly impacting on traffic movements. This option could also deliver a better amenity outcome linking the Abattoir and Central Park areas through to the new Linear Park. The Authority has also given consideration to the new Service Lane being delivered underground to provide amenity and improved function.

As a result, the following amendments are proposed:

- Central Park Edge Streets amended to allow the option for these streets to be a shared way or "pedestrian only streets;"
- The Service Street has been amended to require this street to be delivered underground. Entry and exit to the underground street and/or car parks must be provided from the two new North South Streets and/or directly onto Australia Avenue;
- No entries or exits to underground parking is permitted from either Herb Elliott Avenue or Figtree Drive;
- North South Streets have been amended to allow retail uses, access and parking to be located under the street where there are adjoining commercial uses; and
- The section of North South Street running from Central Park through to Linear Park has been amended to allow this to be provided as a shared way or pedestrian only street.

**Tower Floor Plates**

As discussed in Section 4.8.4 of this RtS Report, the Authority has tested the floor plate control for residential towers above 15 storeys and has amended the Master Plan to allow a maximum of 900m$^2$ GBA.

**40m Tower Separation**

A key underlying principle of the current Master Plan and 2016 Review is the requirement for slender towers with good separation to maximise view sharing and solar access and provide a point of difference that allows for high end quality development to be delivered at Sydney Olympic Park that sets the Park apart from other development precincts. The requirement for 40m tower separation is an existing provision and not a new requirement of the 2016 Review.

The separation between towers is critical for solar access and view sharing and in achieving the high quality urban design outcomes. The Authority does not support amending the requirement for 40m tower separation and therefore no amendment to the Master Plan has been made.

**Central Open Space**

The Central Park will be a much needed ‘concentrated’ area of open space within the Town Centre.

The Authority acknowledges that it will be important for the Town Centre to include a range of open spaces of various sizes and offerings however, this range must include open spaces larger than pocket park size. The proposed Central Park will be an important community asset within the Town Centre. One of the other key open green spaces in the Town Centre (Cathy Freeman Park) is heavily utilised including for informal sports and during events.

A new consolidated open space is capable of providing a larger open grass area, suitable for informal recreation and local community events that cannot be accommodated in smaller pocket parks.

The new park as indicated under the Master Plan has a more central location, provides a better configuration and is strategically located to maximise solar access, view sharing and to create a sense of place. This is achieved through: a sun access plane deep into Central Precinct by
strategically locating the new park so as to combine the new park with Abattoir Gardens, the train station plaza and Cathy Freeman Park, and providing a wide view corridor towards the stadium and Showground buildings across Abattoir Gardens, the train station plaza and Cathy Freeman Park up the Boulevard towards the marker.

The Authority has reviewed the Master Plan requirements and considers that there could be some flexibility on the size and location of the new Central Park; however a large continuous park in the existing location would still need to be delivered to provide a central meeting place and allow for a wide range of flexible uses including event management. As a consequence:

- The north-south dimension of the park is not changed. That is, the alignment of the new Central Park must be between the frontages to Herb Elliott Avenue and the new East-West street; Central Shopping Street;
- The east-west dimension of the Park shall not be varied by more than one third. A smaller park must still be bounded by the Park Edge Streets; and
- The same quantum of open space is to be provided; being $5780m^2$. Therefore where a narrower park is proposed, the balance of the space is to be provided elsewhere.

The Authority considers that all open space must be delivered on ground level and as public open space. Ownership will be retained by the Authority.

**Outcome**

No change has been made to broader height, density or land use controls. However amendments, as described in the above, have been made to:

- land use split line on the Land Uses Plan for Central Precinct
- the street network;
- the requirements for Central Park and
- the tower floor plates.

### 6.2 Parkview Precinct

Five submissions were received from lessees within this Precinct. A limited number of precinct wide matters were raised (all of which have been discussed elsewhere in this RtS report), However, the primary focus of these submissions were site-specific including:

- Increases in height and density;
- Objection to modifications to land uses, in particular the removal of residential as a land use in favour of commercial-only; and
- Deletion of the requirement for a split maximum building height for sites along Bennelong Parkway and replacement with a single height standard applied to the whole site.

**Discussion**

**Height and Density**

Significant uplift has been provided for all sites in the Parkview Precinct to provide for increased densification and diversification to encourage greater activation of Sydney Olympic Park. It should be further noted that achieving design excellence provides the potential for a maximum of up to 10% bonus GFA.

The Authority has undertaken rigorous testing to allocate FSR, heights and land use across the Parkview taking into consideration the capacity of existing infrastructure and the vision for the precinct. A wide range of site specific factors were considered in setting heights and densities and
testing was undertaken to ensure the FSRs GFA and building heights set in the 2016 Review were reasonable and achievable. More detailed information on how densities and heights were allocated is provided in Section 4.8.1 of this report.

The ability to realise the maximum allocated GFA and building height on a development sites will be influenced by the specific development model or design proposed and therefore should be considered maximum values. The Authority will work closely with proponents on individual development proposals to maximise opportunities to realise the allocated GFA and building heights consistent with the general controls and planning principles set out in 2016 Master Plan.

It is important to note that the allocated building heights and densities were set to not only provide the appropriate mix of land uses, but to match predicted market uptake rates and the capacity of infrastructure and promote liveability and high levels of amenity. Therefore building heights and FSR have also been carefully considered with a view to preventing impacts from overshadowing and light spill on sensitive environments including the Badu Wetlands and Brick Pit. These areas are an important part of the Park’s natural areas, support threatened flora and fauna species and provide valuable amenity that is critical to the development of the Park as a unique place.

The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or density that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Further information can be found in Appendix 1 to this report which provides comments on individual submissions.

**Land Uses**

Firstly, it is important to note that the allocation of land use has been undertaken on a Town Centre (the development centre of Sydney Olympic Park including the Central, Parkview and Stadia Precincts) wide basis and not on individual sites. It was undertaken with a view to delivering a greater mix of uses and increased density to creation of an attractive place to work and visit. A strong commercial centre was considered a key requirement to a successful Town Centre.

The Authority commissioned Hill PDA to undertake development feasibility testing and land use demand forecasting for the 2016 Review. The key findings were that there is a growing demand for residential development and a decline in demand for commercial office space.

The market research suggested that market up-take rates per annum for the Park could be revised. However a key concern identified through the Hill PDA testing was the market potential for “crowding-out” of existing and potential commercial office uses. Office uses were important in creating a viable place where people could live and work. The Master Plan addresses this concern by nominating commercial cores within the Central Precinct and Parkview Precincts that preserves this land use. It was considered that increasing the retail offering would attract commercial office uses as development occurs. Further, the delivery of the PLR and expanding demand for education and retail uses would also support increased demand for commercial uses over time.

Areas / development sites identified for strictly commercial use not only create the commercial core but serve to preserve this type of land use which is considered critical for the creation of jobs and the success for the Park as a whole. Accordingly, any variation in the quantum of commercial-only sites is not supported.

**Split Height Controls**

The height split in the Parkview Precinct (sites fronting Bennelong Parkway and fronting the Brickpit) were designed to ensure that taller building elements were set along the new streets, to optimise the separation to the Badu Mangroves, thereby minimising any impacts from overshadowing and
minimise impacts on the Brickpit. The height split controls in Parkview Precinct are an existing control under the current Master Plan.

Badu Mangroves is an ecologically significant and diverse estuarine wetland system that is listed on the Commonwealth Government’s ‘Directory of Important Wetlands in Australia’ due to its high ecological values. It is zoned E2 ‘environmental conservation’ under NSW planning legislation, and is managed to protect and enhance its ecological values for the long-term benefit of the community. It provides extensive habitat for a wide variety of species including endangered species such as Zannichellia (a listed endangered aquatic plant) and the Green and Golden Bell Frog (listed as a threatened species).

The Brickpit is also zoned E2 ‘environmental conservation’ under NSW planning legislation, and is managed to protect and enhance its ecological values. It supports a high abundance and diversity of native fauna including native frogs, over 50 species of native birds, insectivorous bats, reptiles and invertebrates and provides primary habitat for the endangered Green and Golden Bell Frog.

Development adjacent to the Brickpit must be cognizant of, and avoid, potential indirect impacts of development including: artificial shadowing, artificial lighting, light spill, wind tunnel effects and physical barriers to bird and bat flight paths.

Given the sensitivity of the surrounding natural areas, any further increase is building heights and density cannot be supported and the location of tall buildings must be away from the Brickpit edge and not fronting onto Bennelong Parkway. The Master Plan however does not preclude proponents from seeking a variation to the development controls consistent with meeting the stated purpose and objectives set out in Section 1.3 of the Master Plan.

The Authority would require any proposal to vary the split site control to clearly demonstrate, to the Authority’s satisfaction, that it will not result in any additional overshadowing, light spill or otherwise impact the Badu Wetlands or Brick Pit conservation areas or their ecological values.

Outcomes

Given the proximity to sensitive natural areas of the development site fronting Bennelong Parkway no change has been made to the broad height, density controls or land use controls beyond the provisions of the 2016 Review. It should however be noted that the provision of the 2016 Review do provide for a significant uplift from the previous Master Plan.

6.3 Stadia Precinct

One submission was received from a Lessee in the Stadia Precinct. The submission raised some Park-wide issues including:

- Opportunity for much more development at the Park (Section 1.2);
- Lack of activation to Olympic Boulevard (Sections 4.6.1 and 4.8.2);
- Inclusion of RAS Master Plan for Showground Precinct (Section 6.4.1); and
- Capacity / constraints of existing road infrastructure, particularly during events (Section 4.6).

As indicated above, these issues are addressed elsewhere in this RtS report.

6.3.1 Area around Qudos Bank Arena

The submission suggests that area around Qudos Bank Arena should be consistent with the approach adopted for the area around the base of the ANZ Stadium.
Discussion

The Authority acknowledges the merit of this suggestion. The total quantum of GFA contemplated in the 2016 Review has not been increased. However, a proportion of the floor space originally allocated to the Coach Parking site on Edwin Flack Avenue (opposite ANZ Stadium) has been redistributed around the front of Qudos Bank Arena to provide for the same land uses as ANZ Stadium.

Outcomes

Master Plan has been amended to provide 13,000m² of mixed commercial and entertainment land use around Qudos Bank Arena, consistent with the land use around ANZ Stadium.

6.4 Other

6.4.1 Royal Agricultural Society (RAS)

The RAS has been developing a Master Plan for the Sydney Showground site in consultation with the Authority, in response to a number of key challenges and opportunities faced by the organisation. The RAS believes that the Showground can play an integral role in supporting the growth of Sydney Olympic Park and as such, suggests that the RAS master plan, once prepared, should be integrated with Master Plan 2030 to optimise development and precinct activation outcomes, to the overall benefit of NSW.

Discussion

The 2016 Review focuses on three key areas - the Central, Parkview and Stadia Precincts. However the importance of seamlessly integrating the Royal Agricultural Society Showground into the Master Plan 2030 is acknowledged and accordingly, a high level strategic vision for the site has been incorporated into Master Plan 2030 to provide some further information. The Authority will continue to work in close collaboration with the RAS in the preparation of its Master Plan with a view to incorporating the RAS Master Plan as part of the future review of the Showground Precinct.

In the interim, the strategic vision for the Showground site has been included in the Master Plan.

Outcome

The RAS vision aims to sustain and expand its function as a ‘not-for-profit’ organisation charter, whilst fulfilling its responsibilities as a custodian of NSW Government owned lands. It includes the following key elements:

- A multi-function entertainment facility for up to 3,000;
- The Sydney Royal Centre which will be the centralised home for the RAS;
- An Urban Farm for promoting NSW agricultural produce, farming excellence and innovation;
- A market canopy area to accommodate a range of community events such as food markets and
- A range of upgrades and improvements to the Sydney Showground Stadium (Spotless Stadium) and a number of other buildings to extend the useable life of these assets.

The RAS strategic vision has been included in Section 5.5 of the Master Plan.

6.4.2 Site 79, Haslam’s Precinct

The leaseholder of Sites 79A and 79B requested an increase in FSR and height to provide built form in keeping with the evolving urban context of the adjacent Carter Street Precinct and to assist in the
delivery of planned infrastructure which directly impacts the site, specifically the widening of Hill Road to facilitate the new M4 Hill Road off-ramp and the proposed new local road extending through the centre of the site, providing a connection from Hill Road to / from the Carter Street Precinct.

**Discussion**

The 2016 Review primarily focuses on the Central, Parkview and the Stadia Precincts, and the proposed increases in height and density in these areas will contain the development footprint and achieve a high level of activation in the Town Centre.

Site 79 is located in Haslam’s Precinct and was not included in the 2016 Review. Notwithstanding this, the Authority recognises that the site may be subject to future road works for a Hill Road on-ramp and / or widening of Hill Road. Land that may be subject to future roads works has been shown in Section 5 of the Master Plan, however this is indicative only. The Authority understands that the extent and nature of any road works that may be required is yet to be determined, however once finalised, the DPE will make the necessary amendments to the SSP SEPP to reflect the change in land use.

Once the SEPP is amended, the Authority will be in a position to consider any necessary amendments to the Master Plan to allow for development of any residual land that remains in its ownership. It is anticipated that any review of FSR and building heights for the site will be undertaken at this time or as part of subsequent Master Plan reviews.

**Outcome**

The Master Plan has been amended to indicate the areas that may possibly be affected by RMS works. This should be considered **indicative only** and does not in any way reflect the exact extent of any works that may be undertaken by RMS.
7. Community Submissions

As indicated previously in this report, a range of issues emerged during the public exhibition of Master Plan 2030 (2016 Review), some of which were site specific, while others were issue-based and related to the Park as a whole.

Details of the response to key issues that are relevant to the wider Sydney Olympic Park are provided in Section 4 of this report.

A response to each submission is included at Appendix 1. However these responses should be read in conjunction with this RtS Report which provides further detail in relation to key issues.
8. ICF and State Infrastructure Contributions

8.1 Summary of Submissions in relation to the ICF

A total of 10 submissions (including 2 submissions from the community and 8 agency submissions) were received during the public exhibition period which raised issues in relation to the proposed Local Infrastructure Contributions (ICF) under the Master Plan. The range of issues included:

- The amount, type and timing of proposed infrastructure;
- The rationale for the proposed contributions;
- The merits of different funding mechanism such as value capture;
- The responsibility for delivering proposed infrastructure, the basis for site specific contributions; and
- Requests for additional information regarding the proposed Local Infrastructure Contributions.

Discussion

The issues are noted with additional explanation being provided for clarification purposes within the Infrastructure Contributions Framework 2030 provided as an appendix to Master Plan 2030. Delivery of priority projects as development occurs will be informed by the Authority's Community Facilities Strategy to ensure demand for infrastructure is met.

Outcome

The Authority has amended the Infrastructure Contributions Framework 2030 document in relation to the type of proposed Local infrastructure. To this end, a new sub-clause (i.e. 3.3.2) and Table has been added to the ICF 2030 document which provides more detail as to the extent of the ICF.

The ICF Table has been amended to reduce the GFA on the Coach Parking site and apportion that GFA to the area around the front of the Qudos Bank Arena in accordance with the amendments to the Master Plan outline in Section 5.2.2 and Section 6.3.1 of this RtS report.

8.2 Summary of Submissions in relation to the SIC

Five (5) submissions raised the SIC and / or the funding arrangements for regional infrastructure.

Discussion

DPE is preparing a SIC for the Greater Parramatta Priority Growth Area. A SIC is a financial contribution paid during the development process to help fund State and regional infrastructure. The Department is investigating and modelling the capacity of future development to pay the contribution.

Until such time as the SIC is finalised, a clause will be included in Schedule 3, Part 23 of State Environmental Planning Policy (State Significant Precincts) 2005 that requires a consent authority to be satisfied that satisfactory arrangements have been made for State and regional infrastructure prior to development consent be granted.

Outcome

No change to Master Plan or ICF required. The SIC is a matter for DPE and will be determined by the Minister for Planning and Environment at a later date.
9. Proposed Amendments to MP 2030 & ICF

9.1 Summary of Master Plan Amendments

The following amendments are now proposed to the Master Plan (as exhibited) to address the issues raised in the submissions:

9.1.1 Section 3 Planning Principles

- Section 3.3 Sustainability - amended to refer to Green Star Communities. Also reflected in amendments to Appendix A Development Application requirements.
- Section 3.7 Access and Transport - amended to include reference to driverless shuttle bus services.
- Section 3.10 New Facilities and Infrastructure - amended to reference Community Facilities Strategy and ICF.

9.1.2 Section 4 General Controls and Guidelines

- Section 4.2 Sustainability - amended to refer to Green Star Communities. This has also been included in Appendix A to include mandatory provision of Green Star registration as part of all Development Applications.
- Section 4.4 Figure 4.4 Land Uses Plan has been amended to ‘reflect Mixed Commercial and Entertainment Uses around Qudos Bank Arena consistent with the area around ANZ stadium.
- Section 4.3 Public Domain - Figure 4.2 Awnings and Colonnades Plan has been amended to remove the requirement for colonnades but requires awnings along Australia Avenue. Double height colonnades have been generally maintained along Olympic Boulevard except on the western side where the requirement for a colonnade has been deleted. Sites 9 and 12 have been amended to single storey colonnades as per the current Master Plan.
- Section 4.6.8 Tower Building Controls - amended to allow floor plates of 900m² GBA for towers above 15 storeys.
- Section 4.6.9 Accessibility Controls – amended to require provision of accessible parking consistent with the Authority’s Access Guidelines.
- Section 4.6.10 Design Excellence Controls – amended to include the area around Qudos Bank Arena and Site 109 as Design Excellence sites.
- Section 4.6.17 Residential Building Controls - Affordable Housing has been amended to increase the proportion of residential units required to be allocated to affordable rental housing to a minimum of 5% of development yield.
- Section 4.7.1 Access and Parking Controls - amended to:
  - remove the requirement for basement parking on constrained sites including sites located on remediated lands such as Sites 9 and 12;
  - require provision of accessible parking consistent with the Authority’s Access Guidelines; and
  - include consideration for car sharing.
• Section 4.9 Landscape and Site - amended to refer to the Authority’s Stormwater and Water Sensitive Urban Design Policy.

9.1.3 Section 5

• Section 5.2 Central Precinct - Figure 5.7 Central Precinct Land Uses Plan - amended to require the Service Road to be delivered underground and provide the option for the North South Street on the axis with Central Park to be delivered as a shared way or pedestrian only street.

• Section 5.2 Central Precinct - Figure 5.8 Central Precinct Building Heights Plan - amended to reflect increased flexibility with regard to podia. Podia of between 5 and 8 storeys with a setback above 6 storeys are permitted in commercial streets and 4-8 storey podia in residential streets except along Olympic Boulevard which maintains a requirement for an 8 storey podium.

• Section 5.2 Central Precinct - Figure 5.9 Central Precinct Land Uses Plan amended to require the Service Road to be delivered underground and provide the option for the North South Street on the axis with Central Park to be delivered as a shared way or pedestrian only street.

• Section 5.4 Stadia Precinct - (including Figures 5.21 to 5.26) has been amended to provide mixed commercial and entertainment land use around Qudos Bank Arena, consistent with the land use around ANZ Stadium. Figure 5.25 has been amended to reduce the bulk and scale of the building from 45 storeys to 30 storey mixed use commercial, hostel and serviced apartments.

• Section 5.5 Sydney Showground Precinct - references the RAS strategic vision for the Sydney Showground Precinct.

• Section 5.7 Boundary Creek and Tennis Precincts - Figure 5.49 has been amended to increase the maximum building height to 8 storeys to allow for more flexibility for a vertical school / education facility.

• Section 5.9 Haslam’s Precinct - Figures 5.62 - 5.66 have been amended to acknowledge that certain sites on Hill Road may be possibly affected by future road works.

9.1.4 Appendices and Additional Information

Appendix A - Development Applications has been amended to:
• Reference requirement to comply with the Authority’s Parkland Plan of Management for any proposal within the Parklands; and
• Include provision of Green Star registration as part of any Development Application being considered with a minimum six star Green Star rating being required for Design Excellence.

Appendix B - New Public Spaces - Central Park has been amended to allow for more flexibility in relation to the size and location of the park; provided certain criteria are satisfied.

Appendix C – Street Plans and Sections has been amended in relation to:
• Street 3 Dawn Fraser Avenue East
• Street 6 Murray Rose Avenue East
• Street 8 Australia Avenue
• Street 14 Herb Elliott Avenue
• Street 19 Central Shopping Street
• Street 23 North South Street
• Street 24 Verge Street (the section of Street 24 from Central Park through to Linear Park)
• Street 27 - Service Street
• Street 34 Rod Laver Drive
• Street 35 - Central Park Edge Streets
9.2 Amendments to Infrastructure Contributions Framework

Appendix to Master Plan 2030 - Local Infrastructure Contributions Framework has been amended to include a new subclause 3.3.2 and Table to provide a more detailed list of local infrastructure items.

9.3 SEPP Amendments

A number of the abovementioned amendments to the Master Plan will necessitate amendments to State Environmental Planning Policy (State Significant Precincts) 2005. DPE will draft the proposed amendments to the instrument and associated maps, which will be presented to the Minister for Planning as part of the recommendations in relation to the Master Plan review.

The anticipated amendments to the SEPP that arise from the proposed Master Plan amendments are summarised in the table below.

<table>
<thead>
<tr>
<th>Master Plan Amendment</th>
<th>Corresponding SEPP Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 5.25 has been amended to reduce the bulk and scale of the building on the Coach Parking Site on Edwin Flack Avenue from 45 storeys to 30 storeys.</td>
<td>Height of Buildings Map Sheet HOB 001 – amended to reflect the reduction in height on the Coach Parking Site.</td>
</tr>
<tr>
<td>Section 5.7 Boundary Creek and Tennis Precincts - Figure 5.49 has been amended to increase the maximum building height to 8 storeys to allow for more flexibility for a vertical school / education facility.</td>
<td>Height of Buildings Map Sheet HOB 001 – amended to reflect the additional height on Site 109.</td>
</tr>
<tr>
<td>Section 5.4 Stadia Precinct - (including Figures 5.21 to 5.26) has been amended to provide mixed commercial and entertainment land use around Qudos Bank Arena, consistent with the land use around ANZ Stadium.</td>
<td>Reduced Level Map Sheet RDL 001 – apply Category W (42m AHD) to the area around Qudos Bank Arena consistent with the area around the stadium.</td>
</tr>
</tbody>
</table>
10. Conclusions

This RtS Report has been prepared by Sydney Olympic Park Authority to address the issues raised as a result of the public exhibition of the 2016 Review, the Infrastructure Contributions Framework 2030 and proposed amendments to State Environmental Planning Policy (State Significant Precincts) 2005.

The Authority has tested certain issues / aspects of the submissions and where appropriate, has made amendments to the Master Plan and ICF. It is noted that any amendments to State Environmental Planning Policy (State Significant Precincts) 2005 will be prepared by DPE.

Submissions were discussed in Sections 4, 5, 6 and 7 of this report and where aspects of the submission were supported by the Authority, the appropriate amendments to the Master Plan have been identified. These amendments are catalogued in Section 9.

10.1 Next Steps

DPE will now consider the submissions made in relation to this submissions report prior to formalising a recommendation to be made to the Minister for Planning with regard to the adoption of the Revised Master Plan 2030 (2016 Review), Infrastructure Contributions Framework 2030 and amendments to SEPP (State Significant Precincts) 2005. If the information contained in the submissions report is reasonable, a recommendation will be made by the Secretary to the Minister for Planning.

After considering this advice, the Minister for Planning may adopt the proposal as amended, refuse the proposal, or adopt the proposal subject to directions / conditions the Minister may feel is appropriate.

Should the Minister adopt the proposal, the Master Plan 2030 (2016 Review) and Infrastructure Contributions Framework 2030 would be formally implemented. However the proposed amendments to State Environmental Planning Policy (State Significant Precincts) 2005 will require gazettal.
<table>
<thead>
<tr>
<th>Submission No.#</th>
<th>Organisation name</th>
<th>Response / Nature of Amendments to Master Plan (2016 Review) &amp; Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>170549 #1</td>
<td>Australian Institute of Landscape Architects</td>
<td>Need a balance between development and open space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Better accessibility to open space in the locality (rather than within the development footprint).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Further analysis required in relation to future open space requirements at Sydney Olympic Park to make it a desirable place to live in future and support high density development / increased population</td>
</tr>
<tr>
<td>165612 #2</td>
<td>Andrew Hill STAR Park</td>
<td>Advertising details for an educational theme park STARS (education theme park complementing education syllabus) STARS currently associated with Sydney, Ryde &amp; Parramatta Councils. Request to increase events at Sydney Olympic Park. No issues raised.</td>
</tr>
<tr>
<td>171040 #3</td>
<td>Antonella Shannahan Newington Public School P &amp; C Association (Secretary)</td>
<td>Need for more schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concern regarding no commitment from State Government (Department of Education).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Petition of 110 signatures for primary and secondary schools to cater for the current and proposed student population of this community.</td>
</tr>
<tr>
<td></td>
<td>Austino Sydney Olympic Park Pty Ltd Leaseholder 1-5 Murray Rose Ave (c/o Urbis Pty Ltd)</td>
<td>Requests that tower zone within Parkview Precinct be extended to Lot 60A ands 60B (1 and 2 Murray Rose Avenue) to provide opportunity for 15 storeys including a six storey podium on sites which have high levels of amenity. Amendment to Figure 5.41 of the draft Master plan requested to extend tower zone.</td>
</tr>
</tbody>
</table>

**Organisations**

The Community Facilities Strategy (Elton Consulting, 23 October 2015), developed to inform the Master Plan review, recognises the importance of access to public open space (and other community infrastructure) to the future community at Sydney Olympic Park.

The Strategy identifies community needs (based on the projected population) for active and passive open space; outlines proposals for how these needs could be met and includes recommendations for the upgrade of existing open spaces and proposes new open spaces within the Town Centre and other areas within Sydney Olympic Park.

The Master Plan only illustrates those recommendations relating to the Town Centre development area. The Master Plan however will be underpinned by the Community Facilities Strategy, which will be used to identify priority projects as Sydney Olympic Park development occurs.

**Amendment:** Section 3.10 amended to reference the Community Facilities Strategy and ICF. Refer to Section 4.5 of this Response to Submissions Report for further information.

The Master Plan provides for a number of additional sites for education land uses across the Park. The Authority is working with the Department of Education and other education providers to identify feasible options for new schools and other educational infrastructure within Sydney Olympic Park.

**Amendment:** No change. Refer to Section 4.4 of this Response to Submissions Report for further information.

Extending the tower zone for sites 60A and 60B is not supported as these sites are located adjacent to the environmentally sensitive Badu Mangroves and Brick pit habitats. Tower zones have been carefully considered and established with a view to preventing impacts from overshadowing and light spill on these sensitive environments. These areas are an important part of the Park’s natural areas, support threatened flora and fauna species and provide valuable amenity that is critical to the development of the Park as a unique place. The Master Plan does not preclude a variation to any guideline or control provided it can demonstrate that it is still consistent with the principles and guidelines for the precinct and does not resulting in any additional overshadowing or otherwise impact the ecological values of the Badu Mangroves and Brick Pit habitats.

The Authority has undertaken extensive testing to set appropriate building heights for sites and significant uplift in has already been provided in the 2016 Review for 60A and 60B with building heights increased from 4-8 storeys up to 6-15 storeys. A further increase in building heights is not supported.

**Amendment:** No change. Refer to Sections of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th><strong>Supports increased residential density on sites overlooking the Parklands. Recommend 1&amp;2 Murray Rose Ave only two sites in Parkview Precinct that can be developed for residential.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Authority has undertaken extensive testing to allocate FSR, building heights and land use across all precincts to ensure they are reasonable and achievable and take into consideration the capacity of existing infrastructure and the vision for Sydney Olympic Park. Sites 60A and 60B are not located over looking recreational parklands but adjacent to the sensitive natural environments of the Brick Pit and Badu Wetlands. The building heights and densities have been set to maximise view sharing and minimise impacts on sensitive ecological environments.</strong></td>
</tr>
<tr>
<td><strong>Figure 5.39 Parkview Site FSR Plan boundary as documented in the existing Master Plan should not be amended, as it relates to the area for 1-5 Murray Rose Avenue (Lot 88 DP870992) thus maintaining the existing site area of 24,515 sqm for the purposes of FSR.</strong></td>
</tr>
<tr>
<td><strong>MP 2030 reflected the Lot boundaries at the time of it’s initial approval in 2010. The portion of land depicted to the north of the subject Lot is no longer part of the leased area and is therefore not shown as part of the development site. It has however already been included in the calculation for FSR and total GFA for the site. The site floor space ratio plan has been left unchanged from the current Master Plan to show that the entire area has been used in the calculation of FSR for the site.</strong></td>
</tr>
<tr>
<td><strong>Amendment: Figure 5.39 has not been amended from current Master Plan to show the entire area used for calculation of total GFA for the site. No amendment to density. Refer to Section 6.2 of this Response to Submissions Report for further information.</strong></td>
</tr>
<tr>
<td><strong>Update the notation of the through site links on Sites 60A and 60B to be 18m to reflect the existing situation (Figure 5.42). This avoids ambiguity in the future development of the residential portion of these sites.</strong></td>
</tr>
<tr>
<td><strong>Through site links are nominated as a standard 20 metres in width for all sites on which they are required. That said however there may be practical or design reasons why the width of the through site link may need to be varied. Consideration of these reasons and any precedents will be as part of the assessment of any specific development application(s). For consistency, no all-encompassing amendment to the Master Plan is proposed.</strong></td>
</tr>
<tr>
<td><strong>Amendment: No change.</strong></td>
</tr>
</tbody>
</table>
| **Amended Submission:**

* Lot boundary for FSR purposes increasing to 3.2:1
* Building Heights: 15 storey residential tower to be developed on part of No. 2 Murray Rose Avenue, with a 6 storey block edge on Bennelong Parkway
* 11 and 13 storey towers can be developed on No. 1 Murray Rose Avenue, also with a 6 storey block edge.
| **Refer to comments above. The Authority has undertaken extensive testing and considered a wide range of site specific issues in setting appropriate FSR, GFA and building heights that are reasonable and achievable. The Authority is of the view that significant uplift has been provided for in the 2016 Review and no further increase can be provided without significantly impacting on the adjacent sensitive ecological environments.** |
| **Amendment: No change to FSR and building heights. Refer to Section 4.8.1 on setting of FSR and Building Heights and Section 6.2 of this Response to Submissions Report for further information.** |
| **DEXUS (4 Dawn Fraser Ave)**  
<table>
<thead>
<tr>
<th>(Colin Rockliff, Advisor Strategic Planning)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concern raised to reduction in commercial GFA from 32% to 21%. Reduction in the quantum of commercial floor space significantly devalues the role of commercial land use at Sydney Olympic Park and is contrary to objectives to provide employment land uses close to where people live.</strong></td>
</tr>
<tr>
<td><strong>Retail hub should be located opposite station on Dawn Fraser Ave, retained and reinforced as the single focus of Sydney Olympic Park. Any fragmentation should be resisted.</strong></td>
</tr>
<tr>
<td><strong>Master Plan 2030 review does not address current issue of underdevelopment.</strong></td>
</tr>
<tr>
<td><strong>Concern regarding road system to cope with increase density.</strong></td>
</tr>
<tr>
<td><strong>Concern regarding no cost estimate being provided for transport infrastructure, how &amp; when this will be provided. Accessibility needs to be addressed to cater for proposed changes in density and growth.</strong></td>
</tr>
<tr>
<td><strong>Future development options for Sydney Olympic Park will reflect the need to ensure timely and efficient movement of passenger transport modes through the Australia Avenue intersection.</strong></td>
</tr>
<tr>
<td><strong>Traffic generation rates were used as per RMS guidelines for traffic modelling.</strong></td>
</tr>
<tr>
<td><strong>Planning for key regional infrastructure is being identified and prioritised by Transport for NSW and Roads and Maritime Services. Future transport infrastructure and connections beyond the precinct is outside of the scope of this Master Plan and could be considered in the development of regional transport solutions led by the Greater Sydney Commission. Whilst outside the remit of this Master Plan, the Authority will continue to work closely with all relevant agencies to support the delivery of infrastructure projects.</strong></td>
</tr>
<tr>
<td><strong>Amendment: No change. Refer to Sections 4.8.1 and 4.9.2 of this Response to Submissions Report for further information.</strong></td>
</tr>
<tr>
<td><strong>The fabric of the streets, building separations should be reduced to present a finer grain network, where possible, to introduce an urban texture which is currently missing in Sydney Olympic Park e.g. Boulevard does not need to be maintained at its current width.</strong></td>
</tr>
<tr>
<td><strong>The Authority has undertaken extensive testing to set the land use mix to ensure an adequate quantum of commercial space (office space) is provided for to create a commercial centre both numerically and spatially. The Authority recognises that a strong commercial centre is key to a successful town centre at Sydney Olympic Park. The small reduction in commercial space discussed has been offset by an equivalent increase in retail which will generate employment and help to meet the jobs target.</strong></td>
</tr>
<tr>
<td><strong>Mixed use sites may be expected to be taken up by residential despite the option for commercial use. The Authority has identified areas for commercial use only which serves to preserve opportunities for this type of land use. Residential, retail and commercial targets were modelled to match take-up rates and provision was made for a potentially slow or patchy take-up. The Master Plan review focused on three key precincts only. The Master Plan is reviewed every five years to ensure it remains current, respond to changes in market demand and capture any additional uplift that may result for delivery of regional infrastructure improvements. The Authority is of the view that the densities set in the 2016 Review are reflective of the current market and capacity of existing infrastructure.</strong></td>
</tr>
<tr>
<td><strong>Amendment: No change. Refer to Sections 4.8.1 and 4.9.2 of this Response to Submissions Report for further information.</strong></td>
</tr>
<tr>
<td><strong>The width of the Boulevard is also required to be maintained for event management and to allow it to continue to be used as a key transport node north of the Qudos Bank Arena and as a bus turning area.</strong></td>
</tr>
<tr>
<td><strong>Amendment: No change. Refer to Section 4.8 of this Response to Submissions Report for further information.</strong></td>
</tr>
<tr>
<td>Ecove Group (Site 9) C/- JBA Urban Planning (Daniel West, Principal Planner)</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Transitional density along Olympic Boulevard from north to south and transitional scale of towers along Boulevard from north to south</td>
</tr>
<tr>
<td>A primary objective for the Master Plan review was to improve built form and the frontage along the Boulevard within the Central Precinct. Key to this is to ensure block edge buildings that are commensurate with the grandeur and scale of the Boulevard. Block edge heights are also required to have a high level of consistency to produce a street wall to frame the western side of the Boulevard with a strong built edge. The Pullman Hotel and other buildings along the Boulevard were not used as the precedent for future developments as they do not strongly enough define and address the Boulevard.</td>
</tr>
<tr>
<td>FSR for site 9 should be increased to 6:1 consistent with Site 12</td>
</tr>
<tr>
<td>FSRs and resulting total GFA and building heights across the Park have been set to provide the appropriate mix of land uses and match predicted market uptake rates and the capacity of infrastructure. The proposed FSR's, GFA and building heights were tested modelled against the proposed building envelopes, and adjusted to ensure they allocated they were reasonable and achievable. A wide range of site specific factors were also taken into consideration in setting FSRs and building heights including the requirements within the Master Plan for podiums, setbacks, site through links, streets etc.</td>
</tr>
<tr>
<td>Consider height of 129m (or 40 storeys)</td>
</tr>
<tr>
<td>It should be recognised that significant uplift in both FSR has been provided in the 2016 Review for sites in the Central, Parkview and Stadia Precincts, including Site 9 which has increased from an FSR of 4.5 to 5.5 in the 2016 Review.</td>
</tr>
<tr>
<td>Site 9 has received significant uplift from 6 storeys in the current Master Plan to 32 storeys under the 2016 Review. Extensive testing and consideration has been given to the setting of FSRs and building heights in the 2016 Review and ensure they are reasonable and achievable, therefore the Authority is of the view that no further increase can be provided at this time without impacting on the quality of development that would be delivered for the Park. The Authority will however work closely with proponents on individual development proposals to maximise opportunities to realise the allocated GFA and building heights consistent with the general controls and planning principles set out in 2016 Master Plan.</td>
</tr>
<tr>
<td>The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.</td>
</tr>
<tr>
<td>Amendment: No change. Refer to Section 4.8.1 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>
Underground car parking presents a risk for sites on remediated lands. Accordingly, the Master Plan has been amended to remove the requirement for basement parking for all remediated landfill sites.

Colonnades are seen to be a positive and memorable feature in Sydney Olympic Park which can work to moderate extreme temperature and wind conditions. This allows for a generous footpath creating functional and useable public areas and allowing mature street trees to be provided without requiring building setbacks. The Authority has reviewed the extent of colonnades in the draft Master Plan and amended the plan to require double height colonnades on key streets, single height colonnades on secondary streets or streets wherever a single colonnade already exist and identifying additional streets where an awning is required with a view to delivering greater consistency along individual streets and continuous shelter within town centre and along axis roads.

Amendment: Section 4.7.1 of the Master Plan amended to remove the requirement for basement parking on contaminated sites including Site 9.

![Figure 4.2 Awning and Colonnades Plan has been amended to remove the requirement for colonnades but requires awnings along Australia Avenue. Double height colonnades have generally been maintained along Olympic Boulevard except on the western side where the requirement for colonnades has been deleted. Sites 9 and 12 have been amended to single storey colonnades as per the current Master Plan. Refer to Sections 4.2.3 and 4.2.8 of this Response to Submissions Report for further information.]

<table>
<thead>
<tr>
<th>Fitzpatrick Investments  (Site 4B)  C/- JBA Urban Planning  (Daniel West, Principal Planner)</th>
<th>Mixed use commercial and residential zone size and dimensions are too small to develop a mixed use tower development - increase to 50m x 24m</th>
</tr>
</thead>
</table>

FSR of 8:1 (with assumed 10% floor space bonus) does not match the 45 storey building height limit. FSR 9:1 required.

The Authority has undertaken extensive testing and is of the view that the proposed heights and densities are reasonable and achievable when modelled on the building envelope. Nevertheless, to provide flexibility and optimise built outcomes, the Authority has reviewed the land use controls and varied Section 5.2.4 to allow the land use split line for mixed commercial and residential sites to be varied provided the quantum of different uses is preserved and streets with predominantly commercial frontages remain predominantly commercial.

The Authority has reviewed the FSR for Site 4B and notes that ther site is partially developed. The FSR of 8:1 has been determined based on the residual area available for development given the impact of future streets and open space and the requirement to minimise overshadowing and deliver good urban design outcomes. The higher FSR for Site 4B (compared to other 45 storey towers) was also set with consideration of the minimal impact of street easement on the site compared to other sites.

The ability to achieve the maximum GFA and/or building heights will however be influenced by the development model proposed for the site and the Authority will work closely with proponents on individual development proposals to maximise opportunities to realise the allocated GFA and building heights consistent with the general controls and planning principles set out in 2016 Master Plan. However, it is important to recognise that the building heights provided in the Master Plan are not mandatory, these are expressed as a maximum and development may not achieve the maximum heights on all sites. Given part of the site has already been developed at a lower height, it is reasonable to assume that site 48 may not achieve 45 storeys.

Amendment: Section 5.2.4 has been amended to allow a variation to the land use split line. No change in FSR or building height. Refer to Section 4.8 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>VenuesLive (Daryl Kerry, Managing Director)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunity for much more development.</strong></td>
</tr>
<tr>
<td><strong>Concern raised about reduction in commercial office space - potential workforce for the precinct is reduced compared to original Master Plan.</strong></td>
</tr>
</tbody>
</table>

The Boulevard is a key public space within Sydney Olympic Park. Its expansive width is not/will not be contained by buildings to the western side. As such, it is appropriate that buildings achieve an edge that defines the Boulevard and is commensurate with its scale. Ensuring a high level of consistency between sites along the length of the Boulevard will result in a distinctive, grand space as was envisaged at the inception of Sydney Olympic Park. Furthermore, the physical extent of the Boulevard is required for event management and to allow it to continue to be used as a key transport node north of Qudos Bank Arena and bus turning area.

The Authority has reviewed the requirements for podia and has amended the Master Plan to provide increased flexibility with podia of between 5 and 8 storeys with a setback above 6 storeys in commercial streets and 4-8 storey podia in residential streets except along Olympic Boulevard which maintains a requirement for an 8 storey podium. As indicated, 8 storey podiums along the length of the Boulevard are required to provide a defined block edge that match the grandeur and scale of the Boulevard.

The Pullman Hotel is not of a suitable scale for Olympic Boulevard and the Authority is of the view that transitional built forms from the Pullman would not deliver the unified grand streetscape required to deliver a good design outcome.

**Amendment:** Refer to Section 4.8.2 of this Response to Submissions Report for further information.

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<table>
<thead>
<tr>
<th>VenuesLive</th>
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</thead>
<tbody>
<tr>
<td><strong>Opportunity for much more development.</strong></td>
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<td><strong>Concern raised about reduction in commercial office space - potential workforce for the precinct is reduced compared to original Master Plan.</strong></td>
</tr>
</tbody>
</table>

The Authority has undertaken extensive testing to set the land use mix to ensure an adequate quantum of commercial space (office space) to create a commercial centre both numerically and spatially. The Authority recognises that a commercial centre is key to a successful town centre. Significant uplift has already be provided in the draft Master Plan.

Mixed use sites can be expected to be taken up by residential although options for commercial development are available. Areas have been identified for commercial uses only to preserve opportunities for this type of land use. Residential, retail and commercial targets were modelled to match take-up rates. Provision was also made for slow or patchy take-up. The small reduction in commercial GFA is balanced by an equivalent increase in retail floor space, which supports activation of the Town Centre and ensures that employment targets are preserved.

The Master Plan is reviewed every five years to ensure it remains current and can respond to prevailing / evolving market conditions.

**Amendment:** No change. Refer to Sections 1.2 and 4.9.2 of this Response to Submissions Report for further information.

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<thead>
<tr>
<th>VenuesLive</th>
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<tbody>
<tr>
<td><strong>Lack of activation to Olympic Boulevard (except where the Stadium Precinct interfaces with the Boulevard).</strong></td>
</tr>
<tr>
<td><strong>Connection to Olympic Boulevard needs to be considered.</strong></td>
</tr>
</tbody>
</table>

The Review aims to improve built form and the frontage along Olympic Boulevard within the Central Precinct while maintaining its function as a key public and event space. A street wall to frame the western side of the Boulevard will provide areas for high level of retail and entertainment activation. The physical extent of the Boulevard has been preserved as it is required for event management, serves as important open public space for the movement of pedestrians and allows the Boulevard to continue to be used as a key transport node north of Qudos Bank Arena and bus turning area.

**Amendment:** No change. Refer to Sections 4.6.1 and 4.8.2 of this Response to Submissions Report for further information.

---

<table>
<thead>
<tr>
<th>VenuesLive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lack of activation to Olympic Boulevard (except where the Stadium Precinct interfaces with the Boulevard).</strong></td>
</tr>
<tr>
<td><strong>Connection to Olympic Boulevard needs to be considered.</strong></td>
</tr>
</tbody>
</table>

The Boulevard is a key public space within Sydney Olympic Park. Its expansive width is not/will not be contained by buildings to the western side. As such, it is appropriate that buildings achieve an edge that defines the Boulevard and is commensurate with its scale. Ensuring a high level of consistency between sites along the length of the Boulevard will result in a distinctive, grand space as was envisaged at the inception of Sydney Olympic Park. Furthermore, the physical extent of the Boulevard is required for event management and to allow it to continue to be used as a key transport node north of Qudos Bank Arena and bus turning area.

The Authority has reviewed the requirements for podia and has amended the Master Plan to provide increased flexibility with podia of between 5 and 8 storeys with a setback above 6 storeys in commercial streets and 4-8 storey podia in residential streets except along Olympic Boulevard which maintains a requirement for an 8 storey podium. As indicated, 8 storey podiums along the length of the Boulevard are required to provide a defined block edge that match the grandeur and scale of the Boulevard.

The Pullman Hotel is not of a suitable scale for Olympic Boulevard and the Authority is of the view that transitional built forms from the Pullman would not deliver the unified grand streetscape required to deliver a good design outcome.

**Amendment:** Refer to Section 4.8.2 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>No information about plans for the Showground - should be integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Plan 2030 (2016 Review) focuses on three key areas - Central, Parkview and Stadia Precincts. The Authority is working in close collaboration with the Royal Agricultural Society in relation to its Strategic Vision for the Showground with a view to incorporating the Royal Agricultural Society Master Plan as part of the future review of the Showground Precinct.</td>
</tr>
<tr>
<td>Amendment: The RAS strategic vision has been included in Section 5.5 of the Master Plan. Refer to Section 6.4.1 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Area around Qudos Bank Arena is not consistent with the approach adopted for the area around ANZ Stadium. Should be integrated.</td>
</tr>
<tr>
<td>A 45 storey tower was identified in Edwin Flack Avenue (west of ANZ Stadium). This has been reviewed to 30 storeys, with the GFA being re-distributed within the Stadia Precinct.</td>
</tr>
<tr>
<td>Amendment: Section 5.4 of the Master Plan has been amended (including Figures 5.21 to 5.26) to provide mixed commercial and entertainment land use around Qudos bank Arena, consistent with the land use around ANZ Stadium. Refer to Section 6.3.1 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Australia Avenue roundabout. Access to the site on non-event days. Constraints on current road access to the site. Proposed land yields and future uses and cost of implementing infrastructure.</td>
</tr>
<tr>
<td>The Australia Avenue roundabout is regional infrastructure and as such, is beyond The Authority's direct control. Nevertheless, The Authority is working closely with Department of Planning and Environment, Transport for NSW and Roads and Maritime Services to assist in the delivery of this critical regional infrastructure upgrade.</td>
</tr>
<tr>
<td>The introduction of metro services to Sydney Olympic Park from the Sydney and Parramatta CBDs will transform transport access to ANZ Stadium creating numerous metropolitan wide transport connections not currently viable in terms of travel time to the precinct. It is envisaged that event buses and Sydney Trains services would remain or be modified based upon the planning for the metro.</td>
</tr>
<tr>
<td>Upgrades to M4 ramps at Hill Road and associated road widening will significantly improve road access to ANZ Stadium and P1 car park providing and attractive alternative access to Homebush Bay Drive / Australia Avenue gateway.</td>
</tr>
<tr>
<td>The reduction in commercial development will be beneficial to the site in terms of the traffic it generates as a land use. The alternative land uses of residential, retail, education will add vibrancy and activity in the precinct throughout the day and night (and flatten commuter peak movements) and help better justify investments for infrastructure (i.e. not rely on just commuter movements alone).</td>
</tr>
<tr>
<td>Cost for transport improvements will be established as part of future consideration.</td>
</tr>
<tr>
<td>Amendment: No change. Refer to Section 4.6 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>
| Figtree OD Pty Ltd  
| (c/- Urbis Pty Ltd) | The building height split plays a critical role in delivering high-quality amenity outcomes. By ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on adjacent developments or the Linear Park, Linear Park will provide important recreation and amenity to support the proposed densities and is critical to the development of the Park as a liveable place. It was envisaged that developments with building heights splits facing Linear Park would be stepped down to minimise overshadowing of the park. Taller buildings cannot be accommodated facing onto the Linear Park without significantly impacting on amenity; however, the Master Plan does not preclude a variation to any provision of the Master Plan from being considered as part of a proposal provided the proposal achieves the overall vision, planning principles and key elements for the precinct, and does not result in additional overshadowing of Linear Park. The Authority has undertaken extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support an active and successful development within the Park. Testing was based on a precinct-wide evaluation rather than a site-specific basis, having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of the Park as a high-quality public space. Both FSR and building heights were tested and set for sites based on the building envelope to ensure they were reasonable and achievable. Therefore, an increase in FSR based on the view that an optimum design outcome cannot be achieved is not supported, and the Authority is of the view that no further increase can be provided. It should be noted that both sites S1 and S2 have been provided with significant uplift in the revised Master Plan (from 2.5:1 to 3.2:1) and up to an additional 10% bonus FSR may be achieved through design excellence. The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Amendment: No change. Refer to Sections 4.8 and 6.1 of this Response to Submissions Report for information.

| FSR and split building height controls for Sites S1 and S2 restrict flexibility in achieving design excellence and would result in poor amenity.  
| A height limit of 74m should extend over whole of Sites S1 and S2 to allow flexibility in design and provide better outcomes for massing, shadowing and architectural outcomes.  
| FSR of 3.6:1 should apply to Site S1 consistent with Site S2 | The building height split plays a critical role in delivering high-quality amenity outcomes. By ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on adjacent developments or the Linear Park, Linear Park will provide important recreation and amenity to support the proposed densities and is critical to the development of the Park as a liveable place. It was envisaged that developments with building heights splits facing Linear Park would be stepped down to minimise overshadowing of the park. Taller buildings cannot be accommodated facing onto the Linear Park without significantly impacting on amenity; however, the Master Plan does not preclude a variation to any provision of the Master Plan from being considered as part of a proposal provided the proposal achieves the overall vision, planning principles and key elements for the precinct, and does not result in additional overshadowing of Linear Park. The Authority has undertaken extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support an active and successful development within the Park. Testing was based on a precinct-wide evaluation rather than a site-specific basis, having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of the Park as a high-quality public space. Both FSR and building heights were tested and set for sites based on the building envelope to ensure they were reasonable and achievable. Therefore, an increase in FSR based on the view that an optimum design outcome cannot be achieved is not supported, and the Authority is of the view that no further increase can be provided. It should be noted that both sites S1 and S2 have been provided with significant uplift in the revised Master Plan (from 2.5:1 to 3.2:1) and up to an additional 10% bonus FSR may be achieved through design excellence. The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Amendment: No change. Refer to Sections 4.8 and 6.1 of this Response to Submissions Report for information.

| Heights should be expressed in metres not number of storeys. | The building height split plays a critical role in delivering high-quality amenity outcomes. By ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on adjacent developments or the Linear Park, Linear Park will provide important recreation and amenity to support the proposed densities and is critical to the development of the Park as a liveable place. It was envisaged that developments with building heights splits facing Linear Park would be stepped down to minimise overshadowing of the park. Taller buildings cannot be accommodated facing onto the Linear Park without significantly impacting on amenity; however, the Master Plan does not preclude a variation to any provision of the Master Plan from being considered as part of a proposal provided the proposal achieves the overall vision, planning principles and key elements for the precinct, and does not result in additional overshadowing of Linear Park. The Authority has undertaken extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support an active and successful development within the Park. Testing was based on a precinct-wide evaluation rather than a site-specific basis, having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of the Park as a high-quality public space. Both FSR and building heights were tested and set for sites based on the building envelope to ensure they were reasonable and achievable. Therefore, an increase in FSR based on the view that an optimum design outcome cannot be achieved is not supported, and the Authority is of the view that no further increase can be provided. It should be noted that both sites S1 and S2 have been provided with significant uplift in the revised Master Plan (from 2.5:1 to 3.2:1) and up to an additional 10% bonus FSR may be achieved through design excellence. The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Amendment: No change. Refer to Sections 4.8 and 6.1 of this Response to Submissions Report for information.

| Options for delivery of footbridge linking Boundary Creek Precinct to Central Precinct - in exchange for additional FSR at Site S1. | The building height split plays a critical role in delivering high-quality amenity outcomes. By ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on adjacent developments or the Linear Park, Linear Park will provide important recreation and amenity to support the proposed densities and is critical to the development of the Park as a liveable place. It was envisaged that developments with building heights splits facing Linear Park would be stepped down to minimise overshadowing of the park. Taller buildings cannot be accommodated facing onto the Linear Park without significantly impacting on amenity; however, the Master Plan does not preclude a variation to any provision of the Master Plan from being considered as part of a proposal provided the proposal achieves the overall vision, planning principles and key elements for the precinct, and does not result in additional overshadowing of Linear Park. The Authority has undertaken extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support an active and successful development within the Park. Testing was based on a precinct-wide evaluation rather than a site-specific basis, having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of the Park as a high-quality public space. Both FSR and building heights were tested and set for sites based on the building envelope to ensure they were reasonable and achievable. Therefore, an increase in FSR based on the view that an optimum design outcome cannot be achieved is not supported, and the Authority is of the view that no further increase can be provided. It should be noted that both sites S1 and S2 have been provided with significant uplift in the revised Master Plan (from 2.5:1 to 3.2:1) and up to an additional 10% bonus FSR may be achieved through design excellence. The Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations may be considered as part of future reviews of the Master Plan.

Amendment: No change. Refer to Sections 4.8 and 6.1 of this Response to Submissions Report for information. |
<table>
<thead>
<tr>
<th>City of Canada Bay (Gary Sawyer, General Manager)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master Plan makes assumptions that residents will use community facilities in adjoining local government areas - CCBC are already at capacity.</strong></td>
</tr>
</tbody>
</table>

| **Bicentennial Park is already at 95% capacity and cannot accept the level of growth proposed.** |

| **Master Plan understates recreational needs of a residential population of 23,500 and workforce of 34,000 (particularly given context of Sydney Olympic Park, surrounded by areas of growth).** |
| Many of the current venues in Sydney Olympic Park have meeting rooms, but they are not accessible to the public, due to their location within venues and many being at capacity. 
| Need to provide additional, publicly accessible, affordable community facilities which are benchmarked with local government fees and charges. 
| Community Facilities Strategy does not make allowance for a stand alone community centre and assumes existing meeting rooms in various sporting facilities will be adequate. |

| **The Master Plan 2030 (2016 Review) recognises the impact of surrounding densification. The Authority has undertaken extensive testing to determine the type and quantum of each land use that can be delivered taking into account the capacity of exiting infrastructure and modelled take up rates. The targets within the revised Master Plan are based on external expertise engaged to determine the opportunity for and key components of a 24/7 economy for Sydney Olympic Park and identify the necessary thresholds and conditions to achieving such an economy. This included consideration of traffic and transport issues, an analysis of ‘developable’ land, with a particular understanding of the adjacent developments including Wentworth Point, Carter Street and Rhodes and logistical consideration around the ongoing delivery of events.** |

| **Targets have been set based on market data liveability indicators and major event attributes. Master Plan is reviewed every five years in accordance with legislative requirements and to allow it to remain current and allow it to respond to change surrounding land uses and regional infrastructure upgrades.** |
| **Amendment: No change. Refer to Section 5.3 of this Response to Submissions Report for further information.** |

| **The Community Facilities Strategy considers a future population of approximately 24,000 residents and 34,000 workers. Development of the Strategy involved the application of standards for community infrastructure to this population to determine future needs for facilities (including determining the types, quantities and scale of facilities required). The process then involved examining how these needs could be met, through facilitating community access to existing facilities at Sydney Olympic Park, upgrades to existing Sydney Olympic Park facilities (to increase capacity) and the provision of new Sydney Olympic Park facilities. Recommendations for community facilities and open space to address future needs are outlined in the Community Facilities Strategy – summary p.8-10).** |

| **The Strategy informed the review of the Master Plan, which includes a number of proposals for community facilities and open space within the Town Centre development area. Many Community Facility Strategy recommendations relate to infrastructure in Sydney Olympic Park areas outside the Town Centre (and are therefore not documented in the Master Plan). The Community Facilities Strategy will however continue to underpin the Master Plan and to inform the delivery of priority projects as development occurs.** |

<p>| <strong>The Community Facilities Strategy does not propose reliance on existing Sydney Olympic Park meeting spaces alone and proposes the provision of a new multipurpose community centre of 1,400sqm. The community centre will include spaces for community meetings and activities (in addition to other uses – refer Appendix A, Section A-4 for additional detail). The Master Plan identifies a number of potential sites for the proposed community centre/library.</strong> |
| <strong>Amendment: No change. Refer to Section 4.5.2 of this Response to Submissions Report for further information.</strong> |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Plan</td>
<td>The Authority has reviewed the affordable housing target and amended the requirement from 3% to a minimum of 5%.</td>
<td>Amendment: Section 4.6.17 Affordable Housing has been amended. Refer to Section 4.3 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Urban design</td>
<td>Podia are intended to provide street frontages at a more human scale. The Authority has reviewed the podiums and amended to Master Plan to provide greater variety in podium Heights across all sites except Olympic Boulevard where a more grand scale has been maintained.</td>
<td>Amendment: Podium heights amended from 6-8 storeys to 5-8 storeys across all commercial and mixed use site except those with frontage to Olympic Boulevard. Refer to Section 4.8.2 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Timing and delivery of infrastructure</td>
<td>Noted – Draft ICF 2030 (2016) document section 3 Infrastructure Sequencing states that “infrastructure delivery will as far as possible ... be synchronised with the rollout of new development”. It is anticipated that this will take place in phases in the Parkview, Central and Stadium precincts subject to need.</td>
<td>Other factors affecting the delivery of infrastructure identified in the ICF include: o Where practical and appropriate infrastructure will be provided as part of, or in conjunction with new development; o Construction of streets and public spaces associated with adjoining development ...are to be coordinated to enable the public domain to be built simultaneously; o New and upgraded infrastructure constructed within each development phase is to be largely completed prior to the commencement of subsequent phases.</td>
</tr>
<tr>
<td>Parking</td>
<td>The opportunity to review parking rates is noted however, this would need to be supported by improvements in public transport throughout the area.</td>
<td>Consistent parking rates for Carter Street and Wentworth Point would also be required or the benefits of this policy adjustment to Sydney Olympic Park alone would be lost and have potential market implications in terms of competitiveness with adjacent developments.</td>
</tr>
<tr>
<td>Traffic and Transport</td>
<td>The opportunity for improvements at key intersections such as Homebush Bay Drive / Australia Avenue is noted. This gateway intersection is the responsibility of RMS and is influenced heavily as noted by all development areas in the sub-region. The Authority supports immediate improvement to this intersection.</td>
<td>Amendment: No change. Refer to Section 4.1 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>
| City of Canada Bay  
| (John Osland, Director, Technical Services & Operations) | **Address the many positive or negative indirect impacts of Sydney Olympic Park on the City of Canada Bay (CCBC).** E.g. cumulative impact of the development within the region is not clearly addressed. | The Master Plan 2030 (2016 Review) recognises the impact of surrounding densification. The Authority has undertaken extensive testing to determine the type and quantum of each land use that can be delivered taking into account the capacity of existing infrastructure and modelled take up rates. The targets within the revised Master Plan are based on external expertise engaged to determine the opportunity for and key components of a 24/7 economy for Sydney Olympic Park and identify the necessary thresholds and conditions to achieving such an economy. This included consideration of traffic and transport issues, an analysis of ‘developable’ land, with a particular understanding of the adjacent developments including Wentworth Point, Carter Street and Rhodes and logistical consideration around the ongoing delivery of events. |
| | **Lack of recognition of impact of surrounding densification** | Targets have been set based on market data liveability indicators and major event attributes. Master Plan is reviewed every five years in accordance with legislative requirements and to allow it to remain current and allow it to respond to change surrounding land uses and regional infrastructure upgrades. **Amendment:** No change. Refer to Sections 2.1 and 4.8.1 of this Response to Submissions Report for further information. |
| | **Urban design:** Solar access to open spaces; Podia should be used to ensure human scale to street frontages. | FSRs on sites have been modelled to provide slender footprint towers to ensure solar access for both park and residential developments. Slender towers deliver significant environmental performance, residential amenity and reduced overshadowing. The Authority has reviewed the requirements in relation to podia to provide increased flexibility. **Amendment:** Commercial podium heights amended from 6-8 storeys to 5-8 storeys across all commercial and mixed use sites, except those with frontage to Olympic Boulevard. Refer to Sections 4.8.2 and 4.8.4 of this Response to Submissions Report for further information. |
| | **Affordable housing** | The Authority has reviewed the affordable housing target and amended the requirement from 3% to a minimum of 5%. **Amendment:** Section 4.6.17 Affordable Housing has been amended to a minimum of 5%. Refer to Section 4.3 of this Response to Submissions Report for further information. |
### 172397 #11

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Apartment dwellers utilise public space more frequently than in lower density areas and require a higher level of amenities (inc. dog parks, cycleway connections, local scale parks, play equipment etc)</strong></td>
<td>The Authority’s Community Facility Strategy, provided as a supporting document to the Master Plan placed on exhibition, takes into consideration the unique needs of people living in high density areas and, as a result, proposes that emphasis be placed on the provision of flexible, multi-purpose and high quality locally accessible facilities and on a high level of embellishment of open space. The Strategy maps existing surrounding infrastructure (including City of Canada Bay facilities) for information only. The strategy does not reference City of Canada Bay facilities in proposals relating to addressing future needs for open space. The Strategy addresses needs for sports fields within Sydney Olympic Park and provides a summary of the proposed new playing fields and a range of upgrades to existing fields. (Refer Strategy p.9 for a summary of the proposal for playing fields (including a new field as well as upgrades to existing fields). The Strategy will be used to identify opportunities for additional recreational space beyond the areas of the Master Plan as the population of Sydney Olympic Park grows. <strong>Amendment:</strong> Section 3.10 has been amended to reference the Community Facilities Strategy and ICF. Refer to Section 4.5.2 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td><strong>Community Facilities Strategy:</strong></td>
<td>-</td>
</tr>
<tr>
<td>- identifies open spaces to address future needs that are at capacity (including Bicentennial Park and City of Canada Bay sports fields and courts inc. Powells Creek and Ron Routley Oval)</td>
<td></td>
</tr>
<tr>
<td>- assumes existing sports courts in the existing sports facilities will be adequate however these are not publicly accessible or affordable for community use</td>
<td></td>
</tr>
<tr>
<td>- makes assumptions that residents will be able to access facilities in surrounding LGAs however, these are at capacity</td>
<td></td>
</tr>
<tr>
<td><strong>City of Canada Bay cannot provide for the needs of other adjoining areas with current expansion of services</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Additional local sports fields and recreational facilities should be included in the Master Plan to accommodate growth in Sydney Olympic Park</strong></td>
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</table>

### Traffic - inadequate information about options and long term network operation; request improved bus interchange facilities; connections with proposed light rail or improvements to southern line services.

The Sydney Metro West has been part of Sydney Olympic Park transport strategies for many years. The stretch mode share target (60%) has been assumed with a metro system in place. The transport strategy identified a site for a station box. This transport initiative will be the greatest tool for reducing car dependency in the precinct over time due to its metropolitan wide connections and travel time benefits. Whilst the traffic network is constrained there are still capacity opportunities on both the heavy rail network (additional seats) and bus services. The introduction of both Light Rail and Metro rail will make step changes in public transport provision to support the planned development levels. **Amendment:** No change. Refer to Section 4.1 of this Response to Submissions Report for further information.

### Council reiterates its opposition to any change in usage of Bennelong Bridge from public transport services.

Bennelong Bridge is managed by RMS. No proposal has been suggested in the strategy to alter the traffic priority restrictions on the Bennelong Bridge. The Authority will continue to work with RMS to ensure its use is managed effectively for public transport including the possible use for major event buses. **Amendment:** No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information.

### Nomoreodours group

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100 that joined the group. Against the Cleanaway plant</strong></td>
<td>This site does not form part of Sydney Olympic Park. The site is regulated by the NSW Environment Protection Authority under licence. <strong>Amendment:</strong> No change.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>170078 #12</th>
<th>Nomoreodours group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100 that joined the group. Against the Cleanaway plant</strong></td>
<td><strong>Amendment:</strong> No change.</td>
</tr>
<tr>
<td>#13</td>
<td>NSW Federation of Housing Associations (Helen Karathomas, Policy &amp; Service Delivery Officer)</td>
</tr>
<tr>
<td>#14</td>
<td>National Rugby League James Eastes</td>
</tr>
</tbody>
</table>
| #15 | JBA Urban Planning On behalf of 12-14 BIRNIE AVENUE, LIDCOMBE. | Re-examine the development standards for the lot at the corner of Bernie and Edwin Flack Avenue to ensure they can deliver the intended density without adversely or unfairly impacting upon the subject site. | Identified the need for further improvements in the road and Public Transport networks above those already under construction. Issues raised include changes to the existing timetable for T1 and T7 line services to allow for more trains to access the Park directly, provision of underground access to train and future Metro services and proposed removal of parking. Direct rail services outside of events require significant disruption to the busy T1 Western Line which operates at capacity during commuter peaks and has been previously investigated by TfNSW. Significant investment in infrastructure would be required to achieve direct rail services and in the light of the recent announcement of Sydney Metro West this is unlikely to be considered a priority at this time. The ability to achieve undercover pedestrian access to train and bus stations would require significant investment and urban design consideration based on the scale of these movements. The existing conditions at Sydney Olympic Park are no different to that of other major sports precincts in Sydney or Australia. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information. | SEPP 65 applies to residential apartment buildings, not tourist or visitor accommodation. Amendment: No change.
<p>| 172207 #16 | Green Building Council of Australia (Jema Samonte, Advocacy Assistant) | The Authority is committed to driving good sustainability outcomes and has amended the Master Plan to include reference to Green Star Communities. A minimum six star Green Star rating has been included as a requirement for achieving Design Excellence. Amendment: Section 4.2 - Sustainability has been amended to refer to Green Star Communities. Appendix A has been amended to include provision of Green Star registration as part of any Development Application being considered with a minimum six star Green Star rating being required for Design Excellence (refer to Appendix A). Refer to Section 4.7 of this Response to Submissions Report for further information. |
| 172329 #17 | Mirvac Real Estate Pty Ltd (Jennifer Cooper, Consultant Town Planner, Urbis) | The Authority has completed a demand and impact assessment study of the proposed 100,000sqm of retail floor space contemplated in the Master Plan 2030 (2016 Review) on the surrounding retail hierarchy, including the Rhodes Waterside shopping centre. The predicted immediate impacts on Rhodes shopping centre, DFO and several other centres were found to be moderate. However due to current high trading levels and expected growth in resident and worker populations in the wider trade area over the next 10 years, these centres are expected to continue trading above industry benchmark levels. Furthermore, demand modelling indicated that by 2031, between 125,000 and 150,000sqm of retail floor space could be supported at Sydney Olympic Park. The Authority has received a submission considering it important to assess impacts under different scenarios. Whilst the Authority’s further impact assessment considers only one scenario it adopts the low growth scenario combined with 80,000sqm of retail space by 2026. This is a high impact scenario and it is considered that other scenarios would demonstrate lesser impacts. Amendment: No change. Refer to Section 4.9.1 of this Response to Submissions Report for further information. |
|  | Action for Public Transport (NSW) Inc (Jim Donovan, Secretary) | Providing a connection to the T1 Northern Line from the T7 line is noted. It is considered that this presents significant engineering, construction and operational challenges for the existing Sydney Trains network. The strategy identifies a similar scheme for a future north-south Metro connection between Hurstville and Macquarie Park. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information. |</p>
<table>
<thead>
<tr>
<th>Metro connections should be provided within Sydney Olympic Park and be integrated with heavy rail and other transport modes.</th>
<th>Rail improvements are identified by providing Sydney Metro West services between the city and western suburbs. The flow-on benefits to the T1 Western Line to be considered as part of wider rail network planning in response to Sydney Metro West. Provision of a Metro station within the Park is noted and is proposed as part of the initial phase announced by the NSW Government. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station improvements include provision of lifts at Lidcombe Station and linking entry and exit near bus facilities.</td>
<td>Improvements to Lidcombe station are noted and supported but fall outside the jurisdiction of The Authority. Amendment: No change.</td>
</tr>
<tr>
<td>Sydney Olympic Park special event buses to be made permanent metro-style bus route</td>
<td>Increased bus provision within and outside of events noted. The introduction of services via the Bennelong Bridge have improved the reliability of bus services from the north and connections with Rhodes station. It is beyond the scope of the Master Plan and supporting Transport Strategy to investigate and develop a metropolitan wide cross-regional bus strategy and assess its viability. Amendment: No change.</td>
</tr>
<tr>
<td>Consideration of building apartments without parking</td>
<td>Note the opportunity to review parking rates for residential development. Venues at Sydney Olympic Park have a planning agreement to maintain the number of event car parking spaces. The introduction of Sydney Metro West could be the next point in time when the existing quantity of event parking is reviewed. Amendment: No change. Refer to Section 4.2.1 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Value capture has proven to be a success story overseas in providing finance for transit-oriented development. This is covered in our submission to recent Federal Parliamentary Committee Inquiry (<a href="http://aptnsw.org.au/documents/connectivity.html">http://aptnsw.org.au/documents/connectivity.html</a>). Consideration should be given to a levy for public transport improvements for every $1,000 increase in land value.</td>
<td>The Local ICF under MP 2030 has been developed using value capture principles. DPE is preparing a Special Infrastructure Contribution (SIC) for the Greater Parramatta Priority Growth Area. A SIC is a financial contribution paid during the development process to help fund State and regional infrastructure. 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 Precincts 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. As the SIC has not yet been finalised a clause will be inserted into State Environmental Planning Policy (State Significant Precincts) 2005 that requires satisfactory arrangements to be made for State and regional infrastructure prior to consent being granted to proposed development. Amendment: No change. Refer to Sections 4.1.1 and 8.1 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>
| Royal Agricultural Society of NSW  
Jonathan Seward | Sydney Olympic Park is of sufficient scale to provide a range of education, health and other community services. Demand for community facilities in medium and high density areas should not be underestimated. The mistake of not providing adequate facilities made in other areas (e.g. Wentworth Point) should not be repeated. Master Plan Review is light on detail regarding planned schools, health care facilities and community facilities. Providing local facilities would reduce need for car journeys outside Sydney Olympic Park to access facilities elsewhere. | The Community Facilities Strategy takes into consideration the unique needs of people living in high density areas (p.36) and, as a result, proposes emphasis on the provision of flexible, multipurpose, high quality, locally accessible facilities. The Strategy examines how community needs could be met, through facilitating community access to existing Sydney Olympic Park facilities, upgrades to existing facilities (to increase capacity) and the provision of new facilities including a library/community centre, childcare and local open space. Schools: The Master Plan makes provision for education land uses. The Authority will work with the Department of Education and other education providers to identify feasible options of the delivery of schools and other educational facilities. Health facilities: Health facility planning is undertaken by the Department of Health at the Metropolitan-wide, regional and district level – which involves considering population growth across a wider area (not on a site-by-site basis). The future Sydney Olympic Park population should however be factored into Western Sydney Local Health District (WSLHD) overall area planning. Amendment: Section 3.10 has been amended to reference the Community Facilities Strategy and ICF. Refer to Section 4.4 of this Response to Submissions Report for further information. |
| Royal Agricultural Society of NSW  
Jonathan Seward | RAS Master Plan to be integrated to the Authority Master Plan in full. Master Plan review does not recognise the Showground, future plans for its redevelopment or recognition of the importance of the site. Hotels / short-terms accommodation is considered vital to success. | The Master Plan 2030 (2016 Review) focuses on three key areas - the Central, Parkview and Stadia Precincts. The Authority will continue to work in close collaboration with the RAS in the preparation of its Master Plan with a view to incorporating the RAS Master Plan as part of the future review of the Showground Precinct. Amendment: The RAS strategic vision for the Showground Precinct has been included in Section 5.5 of the Master Plan. Refer to Section 6.4.1 of this Response to Submissions Report for further information. |
| Royal Agricultural Society of NSW  
Jonathan Seward | Increase density in areas that best support densification including those close to transport, retail, community facilities and open space. | The Master Plan 2030 (2016 Review) recognises the impact of surrounding densification. The Authority has undertaken extensive testing to determine the type and quantum of each land use that can be delivered taking into account the capacity of exiting infrastructure and modelled take up rates. The targets within the revised Master Plan are based on external expertise engaged to determine the opportunity for and key components of a 24/7 economy for Sydney Olympic Park and identify the necessary thresholds and conditions to achieving such an economy. This included consideration of traffic and transport issues, an analysis of ‘developable’ land, with a particular understanding of the adjacent developments including Wentworth Point, Carter Street and Rhodes and logistical consideration around the ongoing delivery of events. Targets have been set based on market data liveability indicators and major event attributes. Amendment: No change. Refer to Section 1.2 of this Response to Submissions Report for further information. |
| Royal Agricultural Society of NSW  
Jonathan Seward | Government to provide certainty around the delivery of light rail and western Metro | Provision and delivery of the Light Rail and Western Metro is outside the remit of the Master Plan. The Authority will continue to work closely with TfNSW in relation to both projects and their respective routes through Sydney Olympic Park. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information. |
<table>
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<tr>
<th>Suggestion</th>
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<tr>
<td>Allow further review of Master Plan if delivery of major infrastructure is changed</td>
<td>Master Plan is reviewed every five years in accordance with legislative requirements. This allows it to remain current and to ensure it responds to changes in surrounding land uses and captures regional infrastructure upgrades. Amendment: No change.</td>
</tr>
<tr>
<td>Impact of light rail route on operation of events, P6 use for Carnival. Relocation of Carnival may allow development of P6 to maximise use of site beyond on-grade parking.</td>
<td>The route of the Parramatta Light Rail is outside the remit of the Master Plan. Comments will be forwarded to the PLR Project Team for consideration and the Authority will continue to work with TfNSW in relation to an appropriate route through Sydney Olympic Park. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information.</td>
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<td>Provision for primary and secondary schools required</td>
<td>Master Plan provides for education land uses. The Authority will work with the Department of Education and other education providers to explore feasibility for new schools and other education infrastructure. Amendment: No change. Refer to Section 4.4 of this Response to Submissions Report for further information.</td>
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<td>Scale of Olympic Boulevard is not appropriate for activation</td>
<td>The Boulevard is a key public space. It has significant width that is not proposed to be contained by buildings on the Western side. As such it is appropriate that buildings along the Boulevard achieve an edge that defines the public street and is commensurate in scale with the width of the Boulevard. Ensuring a high level of consistency between sites and along the length of the Boulevard will result in a distinctive, grand space. Amendment: No change.</td>
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<td>No clear provisions for playing fields, pitches etc</td>
<td>The Community Facilities Strategy examines future community needs for open space (including sports fields) and addresses how community needs could be met, through facilitating community access to existing Sydney Olympic Park sports fields, upgrades to existing fields (to increase capacity) and the provision of a new sports fields. The proposals for sports fields primarily relate to areas outside the Town Centre development area (and therefore are not illustrated in the Master Plan). The Master Plan however will be underpinned by the Community Facilities Strategy, which will be used to identify priority community infrastructure and open space projects, as development occurs. Amendment: Section 3.10 has been amended to reference the Community Facilities Strategy. Refer to Section 4.5.1 of this Response to Submissions Report for further information.</td>
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<td>Propose that the area of the Sports Halls becomes a new Carnival location and utilised for sports fields community uses when not required for Carnival</td>
<td>The RAS strategic vision for the Showground Precinct has been included in the Master Plan. Amendment: The RAS strategic vision for the Showground Precinct has been included at Section 5.5 of the Master Plan. Refer to Section 6.4.1 of this Response to Submissions Report for further information.</td>
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<tr>
<td>Unsustainable development in terms of living and cycling, transport, infrastructure, height and density</td>
<td>Stakeholder engagement during the Master Plan review process identified a need for a greater mix of land uses and densities to create an attractive and vibrant place to work and visit. Stakeholders expressed a desire for Sydney Olympic Park to become a diversified Town Centre. The Authority has undertaken extensive testing to determine the appropriate scale and density of development to match market take-up rates whilst providing viable building forms in cognisance of the capacity of existing infrastructure and maintaining / evolving the unique character of Sydney Olympic Park as a high quality public place. The Master Plan is reviewed every five years in accordance with legislative requirements which ensures it remains current and responsive to market changes, whilst reflecting changes in surrounding land use and regional infrastructure including transport networks. <strong>Amendment:</strong> No change. Refer to Sections 1.1 and 1.2 of this Response to Submissions Report for further information.</td>
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<td>Concern regarding proposed density and population growth and how infrastructure needs will be met (including for libraries, schools, hospitals and universities) How will future infrastructure be funded? Concern regarding value capture (regarded as a tool that only works in the developer’s favour)</td>
<td>The Authority has undertaken extensive testing to determine appropriate heights and densities to match market take-up rates and facilitate viable building forms having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of Sydney Olympic Park. The Community Facilities Strategy includes recommendations for new facilities (including a library/community centre, childcare facilities, parks and open spaces) as well as upgrades to existing facilities to address these needs. The Master Plan identifies new open spaces as well as potential sites for a library/community centre and childcare facilities. Provision has been made for education sites. The Authority will work with the Department of Education and other education providers to identify feasible options of the delivery of schools and other education facilities. In terms of access to universities, there a number of existing tertiary education institutions in Sydney Olympic Park (ACPE and Western Sydney University) and surrounding areas (WSU Parramatta Campus, Macquarie University). It is also projected that residents will access tertiary institutions further afield (with tertiary institutions typically having large, Metropolitan-wide catchments). Health facility planning is undertaken by the Department of Health at the Metropolitan-wide, regional and district level – that involves considering population growth across a wider area (not on a site-by-site basis). The future population at Sydney Olympic Park should however be factored into Western Sydney Local Health District (WSLHD) overall area planning. Open space upgrades, delivery of new parks and community facilities (such as libraries and community centres) will be funded through the Local Infrastructure Contributions Framework 2030 (as outlined in section 1.10 of the Master Plan). <strong>Amendment:</strong> Section 3.10 has been amended to reference the Community Facilities Strategy and ICF. Refer to Sections 4.5.2, 5.3.1 and 8 of this Response to Submissions Report for further information.</td>
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<td>The Authority Access Committee</td>
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<td>Master Plan does not recognise the Olympic Legacy that all aspects of the built environment are to be fully accessible (buildings and the public domain). Provision of accessible parking - current rate should be increased to 3-5% pending building use. Accessible buses should operate within the park. Pre-booking of accessible car parking spaces. Increased training for Stadium personnel to understand needs and the introduction of ticketless car park entry.</td>
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<td>The current Authority Access Guidelines require a 2% accessible parking rate. Increase in parking provision for people with disability is noted. The opportunity to review this against accessible parking rates across the park is key. The introduction of permanent accessible shuttle service, hail and ride and P&amp;R shuttle buses across the park would need to be assessed against demand and operational cost. The emergence of new mobility services such as point to point services may be able to meet this need more responsively and cost effectively. The improvement to parking technology and event operations are noted for consideration. The Authority will continue to work with partners in ensuring the best experience possible for patrons with disability.</td>
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<td>Amendment: Provision for accessible parking consistent with The Authority Access Guidelines has been reflected in Sections 4.6.9 and 4.7.1 of the Master Plan. Refer to Sections 4.1.1 and 4.2.4 of this Response to Submissions Report for further information.</td>
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<td>Planning principles and other sections should be amended to reinforce the principle of accessibility</td>
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<td>Additional information has been included in relation to social sustainability particularly for those with disability. - Delivering socially sustainable and liveable communities that provide opportunities for all members of the community including people with disabilities to exercise their rights, to live, learn, work and play, to feel safe, to belong, to raise a family and to grow old. Creating liveable communities that not only increase physical accessibility but creating opportunities for social engagement, improve the quality of personal, social and business interactions and the way in which information is provided.</td>
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<td>Amendment: Section 3.3 of the Master Plan has been amended.</td>
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<td>Concept of access enabled transport and mobility is important and should be addressed in the Master Plan and in operations at Sydney Olympic Park</td>
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<td>The Authority provides access enabled transport for events as part of its normal operations including accessible shuttle buses during major events.</td>
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<td>Amendment: No change.</td>
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<td>Master Plan Review represents a dilution of accessibility standards for residential development which is not supported by the Access Committee.</td>
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<td>The Community Facilities Strategy includes planning principles for community facilities and open space – including principles guiding the provision of inclusive and accessible places and spaces. Refer Chapter 7 – Planning Approach, sections 7.1.3 and 7.2.1.</td>
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<td>Amendment: Section 3.10 of the Master Plan has been amended to reference the Community Facilities Strategy.</td>
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| #22 | Homebush Partnership  
Mark Skipper, Director  
Submitted by PlanningLab Pty Ltd |
|---|---|
| **Not consistent with Metropolitan Strategy 2015 and Master Plan 2010.**  
Disagree with removal of residential as a permissible use on Site 62B whereas permitted in current Master Plan.  
Controls to be revised to identify site as being suitable for 30 storey tower forms and 5.5:1 FSR and reinstate residential as a permissible use. |
| The Authority has undertaken extensive testing to set the land use mix to ensure an adequate quantum of commercial floor space (office space) to create a commercial centre both numerically and spatially.  
Stakeholder engagement during the Master Plan review process identified the need for a greater mix of uses and density to create an attractive place to work and visit. Stakeholders expressed a desire for Sydney Olympic Park to become more diversified and to preserve commercial land uses to encourage activation and generate jobs. The establishment of distinct commercial cores was undertaken based on a Sydney Olympic Park-wide approach (rather than on a site-by-site basis), and some sites, such as 62B are more strategically located than others. Sites 62B is located within the area identified as the commercial core for Parkview precinct and the FSR and building heights provided for under the 2016 Review are consistent with this land use and adjoining commercial sites which are also 8 storeys.  
The establishment of commercial only land uses is considered critical to preserving the quantum of commercial space over the long-term.  
The change in land use for site 62B has been offset by an uplift in FSR for the site, which increases from 2.5:1 under the current Master Plan to 4.5:1 in the 2016 Review. The establishment of commercial only land uses will ensure the creation of jobs and the success for Sydney Olympic Park as a whole. The Authority therefore does not support any reduction in the quantum of commercial only sites.  
Amendment: No change. Refer to Sections 4.8 and 6.2 of this Response to Submissions Report for further information. |

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<th>#24</th>
<th>NSWNMA Company</th>
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<td>Reconsider and increase the current affordable housing target of 3% and include key workers, including nurses, midwives and aged care workers in eligibility criteria for affordable housing.</td>
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</table>
| The Authority has reviewed the affordable housing target and amended the requirement from 3% to a minimum of 5%.  
Amendment: Section 4.6.17 Affordable Housing has been amended to a minimum of 5%. Refer to Section 4.3 of this Response to Submissions Report for further information. |

| #25 | Soka Gakkai International  
(BBF Town Planners) |
|---|---|
| 3 Parkview Drive. Concerns about insufficient building height, not consistent with B4 mixed use zoning under the SEPP, insufficient incentive for redevelopment.  
Support increase in FSR from 2.5:1 to 4.5:1 but provides insufficient incentive for redevelopment and does not promote the best development outcome for the site.  
Objects to 8 storey height limit on site where surrounding sites include heights from 15 - 32 storeys. |
| The Authority has undertaken extensive testing to allocate FSR, heights and land use across all precincts taking into consideration the capacity of existing infrastructure and the vision for Sydney Olympic Park and to ensure the FSR and building heights set were achievable and reasonable. It is important to acknowledge that an increase in FSR from 2.5:1 to 4.5:1 for 3 Parkview Drive represents a significant uplift from the current Master Plan.  
The Authority has set the heights and densities to match market take up rates and provide for viable building forms. A greater mix of uses and densities will create an attractive place to work and visit and allow Sydney Olympic Park to become a fully diversified and high quality place. The site is located in the area identified as part of the Parkview Precinct commercial core and the FSR and building heights provided for under the 2016 Review are consistent with this land use and adjoining commercial sites which are also 8 storeys.  
Total GFA for development sites is calculated on total site area including land take associated with new roads or green space.  
Amendment: No change. Refer to Sections 4.8 and 6.2 of this Response to Submissions Report for further information. |
| 172205  
#26 | Stephen White, Urbis  
On behalf of Site 50  
(8 Figtree Drive) | Supports the revision to the future targets for the precincts to increase residential development floor space and promote new communities and increased heights limits. | Noted.  
**Amendment: No change.** |
| 171505  
#27 | Sydney Water Corporation | Works with The Authority to support future growth by proposing effective water servicing options and consider all the water supplies reuse, wastewater and stormwater services. Specific recommendations regarding drinking water and wastewater | Noted. The Authority has already begun working with Sydney Water in relation to the planning for possible future amplification of water supply, wastewater and stormwater services to accommodate projected growth.  
The Authority’s Water Reclamation and Management Scheme (WRAMS) system provides a recycled water option for developments within the Park and its surrounding areas, offsetting potable water demand by delivering recycled water from stormwater harvesting and wastewater processing. WRAMS saves more than 850 million litres of potable water annually by avoiding its use for non-drinking purposes.  
The Authority will work with Sydney Water in relation to water supply, waste water and stormwater services.  
**Amendment: No change.  Refer to Section 5.4 of this Response to Submissions Report for further information.** |
| | | Seeks clarification about whether land use and area designations in the ICF are just a guide or form a quasi-land use control read in conjunction with the SEPP - seeking optimum flexibility for land use and the final proportion of non-residential floor space would be determined through a combination of design excellence process and market testing. | In terms of site 50, MP 2030 provides for a potential mix of residential and commercial land uses while the ICF makes an assumption (as a guide only) that the site will be developed for residential, education and retail activities to determine the total GFA amounts by land use. It is noted however that the subsequent Development Application lodged for the site may well include a different set of land uses.  
**Amendment: No change.** |
| | | Greater degree of flexibility should be employed in relation to the 8 storey podium form along Olympic Boulevard to allow for lower and more diverse scale of podium heights. | The Authority has reviewed the requirements for podia and amended the Master Plan to provide increased flexibility with podiums for both commercial and residential streets except along the Boulevard. The Authority is of the view that 8 storey podiums are required for buildings along the Boulevard in order to achieve an edge that defines this public street and ensures a high level of consistency to create a grand scale commensurate with the scale and grandeur of the Boulevard and the Olympic venues.  
**Amendment: No change to podiums along Olympic Boulevard. Refer to Section 4.8.2 of this Response to Submissions Report for further information.** |
Mandatory vehicle connections and the provision of a large contiguous area of open space at grade fragments the Central Precinct into lot sizes and limits the ability to accommodate key anchor and destinational retailers. More flexible urban structure is needed.

Expand mixed use area to Figtree Drive and to north. Also permit residential within the expanded mixed use zone and along the new north south street.

Building heights should be amended to indicate 25 and 35 storey building within Central Precinct, with 4-8 storey variable street wall height.

FSR of 4:1 required to accommodate architectural diversity, allocation of FSR in MP unnecessary. Review FSR in SEPP to ensure they align with heights. Increase floor plate control for residential plates above 15 storeys from 800sqm to 900sqm.

Remove requirement for 40m separation between towers and require distances consistent with SEPP 65 Apartment Design Guide.

The Authority has undertaken rigorous testing to allocate FSR, heights and land use across precincts which takes into consideration the capacity of existing infrastructure and the vision for the Park. This included consideration of site specific factors and testing to ensure the FSRs GFA and building heights set in the 2016 Review were reasonable and achievable.

It is important to recognise that the allocated building heights and densities were set to not only provide the appropriate mix of land uses, but to match predicted market uptake rates and the capacity of infrastructure and promote liveability and high levels of amenity. Building heights and FSR have also been carefully considered with a view to preventing impacts from overshadowing of Central Park. This park provides important recreation, amenity and operational capacity for management of major events and are therefore critical to the development of the Park as a liveable place.

The Authority considers that no further uplift should be provided as part of the 2016 Review. However, the Master Plan is reviewed every five years to ensure that it reflects contemporary standards, changes to infrastructure capacity and market expectations and allow for any additional height and/or density that may be realised as a result of future regional infrastructure improvements to be considered.

The fundamental nature of a town centre is based on an interconnected public street system as the primary commercial, civic and communal space. This required the Central Precinct to deliver a network of streets to achieve a core town centre. These streets provide an important civic and commercial function as well as facilitating sun access and view sharing into the core central area.

Town Centre street network reviewed and Central Park Edge Streets amended to allow for these streets to be a shared way or pedestrian only streets. Service Street amended to require this street to be delivered underground. Entry and exit to the underground street and/or car parks must be provided from the two new North South Streets and/or directly onto Australia Avenue. No entries or exits to underground parking permitted from Herb Elliott Avenue or Figtree Drive. North South Streets amended to allow retail uses, access and parking under street where there is adjoining commercial use. Section of North South Street running from Central Park to Linear Park has been amended to allow this to be provided as a shared way or pedestrian only street.

Floor plate control for towers above 15 storeys has been tested and amended to 900sqm GBA. The separation between towers is critical for solar access and view sharing and therefore has not been amended.

Amendment: No change to FSR and building heights. Section 4.6.8 - Tower Building Controls amended to allow tower floor plates above 15 storeys of 900sqm GBA. Appendix C has been amended in relation to Street 27 - Service Street; Street 35 - Central Park Edge Streets; and the section of Street 24 from Central Park through to the Linear Park. Refer to Sections 6.1 of this Response to Submissions Report for further information.
There is a need for greater clarity in relation to infrastructure delivery and the associated funding framework. Regional infrastructure is to be delivered through a Special Infrastructure Contribution (SIC). However, the actual amount of the SIC levy, the extent of regional infrastructure that it will fund and the administrative arrangements are not yet known.

Draft MP 2030 and Draft ICF 2030 set out a summary of the Local infrastructure to be provided and an Indicative implementation of phased development (Refer to Draft MP 2030 Figure 3.15) to ensure that new infrastructure is programmed to coincide with each development phase.

The Department is preparing a Special Infrastructure Contribution (SIC) for the Greater Parramatta Priority Growth Area. A SIC is a financial contribution paid during the development process to help fund State and regional infrastructure. The Department is investigating and modelling the capacity of future development to pay the contribution.

As the SIC has not yet been finalised a clause will be inserted into State Environmental Planning Policy (State Significant Precincts) 2005 that requires satisfactory arrangements to be made for State and regional infrastructure prior to consent being granted to proposed development.

Amendment: No change. Refer to Section 8.2 of this Response to Submissions Report for further information.

Open space should be delivered as a series of spaces, open space may be able to be delivered in a variety of ways.

Remove reference to open space on Land Uses Plans.

GPT seeks to retain ownership of open space it delivers as it will allow for the management and maintenance of this open space in partnership and consultation with The Authority.

The Central Park will be a much-needed ‘concentrated’ area of open space within the Town Centre. A park of around 0.57ha is considered to be modest, not large or expansive.

It is acknowledged that it will be important for the Town Centre to include a range of open spaces of various sizes and offerings – however, this range must include open spaces larger than pocket park size. The proposed Central Park will be an important community asset within the Town Centre – particularly given the other key open green space (Cathy Freeman Park) is already heavily utilised (including for informal sports and during events). An open space (of a reasonable size) is capable of providing a larger open grass area, suitable for informal recreation and local community events (that cannot be accommodated in smaller pocket parks).

The new park as indicated under the Master Plan has a more central location, provides a better configuration and is strategically locating to maximise sun access, view sharing and to create a sense of place through: a sun access plane deep into Central Precinct by strategically locating the new park so as to combine the new park with Abattoir Gardens, the train station plaza and Cathy Freeman Park; and providing a wide view corridor towards the stadium and Showground buildings across Abattoir Gardens, the train station plaza and Cathy Freeman Park up the Boulevard towards the marker. The Authority has reviewed the Master Plan requirements and considers that there could be some flexibility on the size and location of the Central Park provided:

i. The north-south dimension of park is not changed. That is the park’s alignment must be between the frontages to Herb Elliott Avenue and the new East-West street; Central Shopping Street.

ii. The east-west dimension of the park does not vary by more than one third. A smaller park must still be bounded by the Park Edge Streets.

iii. The same quantum of park space is provided; being 5780sqm. Therefore where a narrower park is preferred, the remainder of the space is to be provided else where, preferably in one contiguous area on ground level.

Open space must be delivered as public open space. Ownership will be retained by The Authority.

Amendment: Appendix B - New Public Spaces - Central Park has been amended. Refer to Section 6.1 of this Response to Submissions Report for further information.

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As the SIC has not yet been finalised a clause will be inserted into State Environmental Planning Policy (State Significant Precincts) 2005 that requires satisfactory arrangements to be made for State and regional infrastructure prior to consent being granted to proposed development.

Amendment: No change. Refer to Section 8.2 of this Response to Submissions Report for further information.
| Bonim 3 Pty Limited (Tony Royal)  
| C/- SJB Planning (Director)  
|  
| Endorses mixed use development and increase residential to provide lively and active neighbourhood.  
| Increase building heights to 60 storeys in areas close proximity to railway station.  
|  
| Request to apply FSR of 3:1 and building height of 72m and 42m to Site 79 in the Haslams Precinct to provide built form in keeping with evolving urban context of surrounding precinct.  
| Also raised concern regarding the land-take associated with the Hill Road on-ramp and the impact on the development potential of the site.  
|  
| The Authority has undertaken extensive testing to allocate heights and land use across the precincts taking into consideration the capacity of existing infrastructure and the vision for Sydney Olympic Park. Significant uplift has been provided in draft MP2030 which have been set to match market take up rates. Extensive testing has been undertaken in determining the appropriate building heights. Further information can be found in Section 4.8 of the Response to Submissions report. The Master Plan is reviewed every five years to ensure it remains current and takes into account any additional uplift as a result of regional infrastructure upgrades such as improved rail services. Any further uplift that may be able to be realised may be considered as part of future reviews of the Master Plan.  
| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.  

| Urban Taskforce Australia  
| Chris Johnson  
|  
| Endorses mixed use development and increase residential to provide lively and active neighbourhood.  
| Increase building heights to 60 storeys in areas close proximity to railway station.  
|  
| It is considered that whilst higher number of spaces has been proposed in other developments, as outlined in the submission, these sites are located closer to the edge of the city rather than the more central location of Sydney Olympic Park. At the current proposed rate of 1 space per 50msqm with 100,000sqm of retail space development stated in the Master Plan, this would equate to 2,000 car parking spaces. This is considered adequate for the development proposed.  
| Underground car parking is a minimum design requirement for developments throughout Sydney. Sydney Olympic Park is a State Significant Precinct which aspires to achieve superior outcomes and ensure value is retained and increased for the Town Centre as a whole.  
| The Master Plan Review paves the way for a complex, high density and compact urban place with a lot more residential development, which can only be achieved where building frontages have active frontages regardless of site constraints. Except on heavily contaminated sites, above ground car parking/basement areas are considered to deliver poor outcome for Sydney Olympic Park and are not supported.  
| Amendment: No change. Refer to Sections 4.2.2 and 4.2.3 of this Response to Submissions Report for further information.  

| 172319 #29  
|  
| Parking ratio allocated for retail not adequate. 4.5 spaces per 100m2 should be adopted. Above ground podium parking should be permitted sleeved with active uses, residential uses or architectural screens.  
| It is considered that whilst higher number of spaces has been proposed in other developments, as outlined in the submission, these sites are located closer to the edge of the city rather than the more central location of Sydney Olympic Park. At the current proposed rate of 1 space per 50msqm with 100,000sqm of retail space development stated in the Master Plan, this would equate to 2,000 car parking spaces. This is considered adequate for the development proposed.  
| Underground car parking is a minimum design requirement for developments throughout Sydney. Sydney Olympic Park is a State Significant Precinct which aspires to achieve superior outcomes and ensure value is retained and increased for the Town Centre as a whole.  
| The Master Plan Review paves the way for a complex, high density and compact urban place with a lot more residential development, which can only be achieved where building frontages have active frontages regardless of site constraints. Except on heavily contaminated sites, above ground car parking/basement areas are considered to deliver poor outcome for Sydney Olympic Park and are not supported.  
| Amendment: No change. Refer to Sections 4.2.2 and 4.2.3 of this Response to Submissions Report for further information.  

| Review 2016 primarily focuses on the Central, Parkview and the Stadia Precincts, and the proposed increases in height and density in these areas will contain the development footprint and achieve a high level of activation in the Town Centre.  
| Site 79 is located in Haslam’s Precinct and was not included in this review of the Master Plan. Nevertheless The Authority recognised that the site may be subject to future road works for a Hill Road on-ramp and widening of Hill Road. The area of the development site that may be affected by the RMS works is at this time unknown . Any review of FSR and building heights for the site would be undertaken as part of subsequent Master Plan reviews.  
| The Authority has however amended the Master Plan to indicate the areas that may possibly be affected by RMS works.  
| Amendment: Figures 5.62 - 5.66 have been amended. Refer to Section 6.4.2 of this Response to Submissions Report for further information.  

| Endorses mixed use development and increase residential to provide lively and active neighbourhood.  
| Increase building heights to 60 storeys in areas close proximity to railway station.  
|  
| The Authority has undertaken extensive testing to allocate heights and land use across the precincts taking into consideration the capacity of existing infrastructure and the vision for Sydney Olympic Park. Significant uplift has been provided in draft MP2030 which have been set to match market take up rates. Extensive testing has been undertaken in determining the appropriate building heights. Further information can be found in Section 4.8 of the Response to Submissions report. The Master Plan is reviewed every five years to ensure it remains current and takes into account any additional uplift as a result of regional infrastructure upgrades such as improved rail services. Any further uplift that may be able to be realised may be considered as part of future reviews of the Master Plan.  
| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.  

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| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.  

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| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.  

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| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.  

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| Amendment: No change. Refer to Sections 1.2 and 4.8 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>Tourism Accommodation Australia  Carol Giuseppi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns that the Draft Review 2016 has not struck an appropriate balance between the Park’s legacy and capacity as a major entertainment and events precinct and the creation of an “active and energised” town centre. TAA’s concern is that increased residential development will over time dilute and restrict the precinct’s ability to cater to the event market.</td>
</tr>
<tr>
<td>The purpose of the Master Plan Review includes a clear requirement to protect the role of Sydney Olympic Park as a premier destination for cultural, entertainment, recreation and sporting events. Activation of the Precinct will allow event patrons to expand their experience to include activities before and after event. Key public spaces that facilitate major event and the movement of people, such as Olympic Boulevard, have been protected not only to preserve the iconic Stadium and Arena structures but to allow the continued use of the Boulevard as a key transport node for major events and event management space.</td>
</tr>
<tr>
<td>Amendment: No change. Refer to Sections 4.6.1 and 4.6.2 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>

<p>| Concern regarding reduced commercial and education land uses in favour of supporting increased residential development. A strong leisure segment more likely to support the visitor economy over weekend and commercial and educational segments vital to support mid-week economy |
| The concerns relating to the reduction in commercial activity are noted. This will provide a relief to road network capacity as the increased residential activity will be occurring in the reverse direction. It will also introduce more activity through greater residential “all day” population and create floor space opportunities for other land uses such as education which also create all day activity for retail. |
| Amendment: No change. Refer to Section 1.2 of this Response to Submissions Report for further information. |</p>
<table>
<thead>
<tr>
<th>Concern</th>
<th>Action/Master Plan 2030</th>
<th>Amendment: No change. Refer to Section 4.6 of this Response to Submissions Report for further information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in hotel, motel and serviced apartment accommodation unlikely to be matched with mid-week demand</td>
<td>Master Plan 2030 will deliver development over time. The delivery of hotels and similar accommodation will be a response to market demand. The Authority has undertaken extensive testing to determine the quantum of different land uses that could be delivered base on existing infrastructure, giving consideration to modelled uptake rates and recognising that The Authority continues to deliver an increasing number of entertainment and sporting events including mid-week events.</td>
<td></td>
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<tr>
<td>MP has not made any changes to increase capacity to host events or corporate and education businesses. Potential negative impacts on future value contribution of major events to state economy. A major events precinct without investment in regulated, transparent accommodation product will fail to continue to attract world class events.</td>
<td>The revised Master Plan provides for an increase in the number of sites available for a wide range of accommodation products that will support the increasing number of events.</td>
<td></td>
</tr>
<tr>
<td>Concern regarding poor transport connectivity, noise impacts, traffic issues during major events, limited activation in non-event days, importance of visitor economy.</td>
<td>The Authority has and will continue to work with other agencies to provide efficient transport services for major events. Building heights and uses have been strategically chosen to assist mitigation of noise for venues with commercial land uses being located closer to venues and residential sites further away. The Authority have undertaken extensive modelling and stakeholder consultation to determine the appropriate mix of land used to sustain and generate a 24/7 economy that supports significant densification and protects Olympic Park as a premier event destination.</td>
<td></td>
</tr>
<tr>
<td>Sufficient space to be retained for access to and from Stadium and Olympic Park Station.</td>
<td>Concerns relating to sufficient space for pedestrian access between the stadium and station is noted. The Master Plan does not propose changes to the existing urban design and requirement for this movement. With the introduction of the Metro this movement may be further dispersed over time.</td>
<td></td>
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<tr>
<td>Future routing of increased number of cars from new development via perimeter streets, the need for improved rail connections to reach the 40% stretch target for modal share and the reduction in proposed commercial activity.</td>
<td>Public transport improvements such as Parramatta Light Rail and Sydney Metro West provide the capacity and frequency to achieve the target mode shares outlined in the strategy. The Metro also has the potential to expand beyond Parramatta to Western Sydney Airport. Concerns relating to use of existing perimeter streets is noted. It is anticipated that improvements across all transport modes will work collaboratively to accommodate this growth pressure.</td>
<td></td>
</tr>
</tbody>
</table>
### NSW Education

**Joyner, Director Schools Planning**

A submission was also received from the Department of Education (DoE) which recognised the population growth in the Sydney Olympic Park Precinct and surrounding areas and indicated the Department would be working towards increasing the provision of additional secondary education infrastructure in the area. The submission indicated that consistent with the Department’s high rise model for secondary education currently being implemented in other areas, maximising flexibility would be desirable for delivery of a school.

- Site 109 located in the Boundary Creek and Tennis Precinct is identified for education purposes only.
- However, both the Master Plan and State Environmental Planning Policy (State Significant Precincts) 2005 make provision for education land uses throughout the B4 Mixed Use Zone offering the opportunity to deliver education uses across a wide range of sites in Sydney Olympic Park.
- Nevertheless, having regard to the submissions received, the Authority has increased the height for site 109 from four to eight storeys to provide better flexibility and opportunity for delivery of a school at this site.

**Amendment:** Figure 5.49 has been amended. Refer to Section 4.4 of this Response to Submissions Report for further information.

### Conybeare Morrison International

**(Brent Alexander, Associate Director)**

on behalf of Billbergia

Submission prepared in respect of P6 Car Park and Sites 2A and 2B within the Parkview Precinct.

Proposes FSR 10:1 and up to 95 storeys for P6 Car Park and FSR 8:1 and up to 45 storeys for Sites 2A and 2B and allow for mixed use development integrated with new rail infrastructure.

Review all current transport infrastructure proposals that may need to be incorporated into the Master Plan 2030

Re-consider uses of sites that may be incorporated into future transport infrastructure developments

Consult with stakeholders, including Govt and private sector investors in relation to these transport infrastructure projects

Re-consider the proposed uses and controls designated to specific sites that may be incorporated into transport infrastructure developments

Grant stakeholders additional time to develop site specific proposals, in relation to proposed transport infrastructure projects

The vision for Sydney Olympic Park is noted. However, at this time, the P6 car park is not identified as a development site and is subject to an existing use / lease by RAS.

Decisions pertaining to Metro and Light Rail routes through Sydney Olympic Park are yet to be determined. The Authority continues to work with TfNSW and other stakeholders in this regard.

Having regard to the likely timing for the Metro and Light Rail, it would be appropriate to revisit the development potential of the P6 Car Park in a future revision of Master Plan 2030.

**Amendment:** No change. Refer to Sections 4.1.1 and 6.2 of this Response to Submissions Report for further information.

### Urbis

**(Murray Donaldson, CEO)**

On behalf of Kador Group Holdings 1 Figtree Drive

Key issues: east-west service road and road layout surrounding Site 45A-D. Recommend removal of service road and consider alternative options to improve access.

Inconsistent land use zoning / fragmentation.

Clarify dedication of public domain areas.

Fragmentation of site. Recommends review of FSR to accommodate the amount of land required for streets.

Notes that details of the SIC have not been made available. Requests that SIC framework outline rationale and feasibility behind the contribution and consideration be given to economic impacts of the additional contribution (development potential of land).

The Master Plan review sought to, as far as possible, achieve equity across sites. However some sites are more strategically located than others in achieving a coordinated street and laneway system to support the significant density increases. The new north-south street is an important visual and access connector and is critical for event and traffic management, as such this has not been changed from the current MP. However, the Authority has considered the impact of the new service street and amended the 2016 Review to require it to be delivered as an underground service street. This will provide greater amenity outcomes for the Central precinct as a whole and provide greater flexibility/opportunity for development of Sites 45A and 45C which can be developed as one larger area.

Site affected by proposed new streets, lanes or public open space have been compensated for in the total GFA for affected development sites.

Public domain areas are delivered as public space. Accessible 24/7 and managed by The Authority.

**Amendment:** Figure 5.7 Land Uses Plan has been amended to require the service lane to be delivered underground allowing for greater opportunity and flexibility for development of sites 45A-D.

The SIC is outside the scope of the Master Plan.

**Amendment:** No change.
<table>
<thead>
<tr>
<th>Sydney Business Chamber / Sydney Olympic ParkBA / NRMA Joan Dharamdas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity and connectivity constraints of the existing rail service to access Sydney Central - potential station upgrades at Lidcombe to support this in the short term, provision of driverless shuttle buses and the need to provide Metro and Light Rail services in the future.</td>
</tr>
<tr>
<td>Road issues are also noted including congestion on key access route and Australia Avenue/Homebush Bay Drive intersection, construction of a duplication of the Holker Street bridge for all vehicles and improved access from all directions into and out of Sydney Olympic Park.</td>
</tr>
</tbody>
</table>

| Key road infrastructure has been identified and prioritised by RMS for delivery. Future road infrastructure and connections beyond the precinct is outside of the scope of this Master Plan and could be considered in the development of regional transport solutions led by the Greater Sydney Commission. Whilst outside the remit of this Master Plan, The Authority will continue to work closely with RMS to support the delivery of infrastructure projects. |
| Wider rail connections and capacity is outside the remit of the Master Plan however comments have been passed to TNSW for consideration. The Authority will continue to work closely with Sydney Trains to maximise the capacity of the existing T1 and T7 lines as well as the rolling stock used to provide an additional level of comfort for users. |
| Sydney Metro West has been part of Sydney Olympic Park transport strategies for many years. The stretch mode share target (60%) has been assumed with a metro system in place. The transport strategy identified a site for a station box. This transport initiative will be the greatest tool for reducing car dependency in the precinct over time due to its metropolitan wide connections and travel time benefits. |
| Provision of driverless shuttle buses is noted for consideration. |
| Whilst it is considered that the Ferry wharf is too far from the Town Centre to provide viable option for resident or employment directly, possible options to better link with bus services may be considered. |

**Amendment:** Section 3.7 has been amended to include reference to driverless shuttle bus services. Refer to Section 4.1.1 of this Response to Submissions Report for further information.

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<table>
<thead>
<tr>
<th>Sydney Business Chamber / Sydney Olympic ParkBA / NRMA Joan Dharamdas</th>
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<tbody>
<tr>
<td>Recommend inclusion of a development control to allow for shared and integrated basements below public domain areas including roads.</td>
</tr>
<tr>
<td>In principle, the concept of integrated basements between sites is supported however it must be moderated against the intent for Central Precinct as a commercial centre with a public domain system of streets, parks and laneways.</td>
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<tr>
<td>Amendment: No change.</td>
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</table>

| Attachment B of the Sydney Olympic Park Local Infrastructure Contribution Framework (ICF) outlines the development potential of sites affected by the ICF. The schedule shows each site’s current (2016) level of development and maximum development potential. |
| Site 45 is identified to provide a maximum of 61,588m2 of total GFA, of which 59,588m2 is identified for residential use and 2,000m2 for retail use. This breakdown of land uses is inconsistent with the Central Precinct Land Use Plan that identifies the site for Mixed Commercial/Residential/Hotel and Serviced Apartments, Commercial and Residential. |
| The submission recommends that the inconsistency between the planning controls and the Attachment B of the ICF be rectified. |
| The allocation of residential use identified in the Attachment B of the ICF is supported by Kador Group. |

<p>| While the Draft MP 2030 Central Precinct Land Uses Plan (Figure 5.7) sets out a range of possible mixed (ie commercial, residential, hotels, services apartments) and residential uses on Site 45 this Land Use Plan should also be read in conjunction with Table 4.2 - Allowable Land Uses which provides a list of allowable land use activities under each broad land use category) . Attachment B in the Draft ICF 2030 provides a guide only as to the most likely development of the site ie residential and ground floor retail. This has been done to identify the overall development potential under MP 2030 but also to establish the expected total Gross Floor Area to be levied under the ICF. |
| There is no inconsistency between the MP 2030 and ICF Attachment B. The development potential and total GFA of a site may vary over time as sites develop. The MP is reviewed every five years to ensure that it remains relevant. |
| Amendment: No change. |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Text</th>
<th>Note</th>
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<tbody>
<tr>
<td>Upgrade of major road intersections into Olympic Park. Holker Street bridge should be duplicated with consideration for car access.</td>
<td>Noted. The Authority will continue to work with RMS on the delivery of regional transport upgrades. Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information.</td>
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</tr>
<tr>
<td>Olympic Boulevard too wide to connect with street network and parks.</td>
<td>The Master Plan review aims to improve built form and the frontage along the Boulevard within the Central Precinct. Key to this is to ensure block edge buildings that match the grandeur and scale of the Boulevard. Block edge heights have a high level of consistency to produce a street wall to frame the western side of the Boulevard with a strong built edge. The Boulevard is a key public space. It has significant width that is not proposed to be contained by buildings to the Western side. As such it is appropriate that building along the boulevard achieve an edge that defines the public street and is commensurate in scale with the width of the Boulevard. Ensuring a high level of consistency between sites and along the whole of the boulevard will result in a distinctive, grand space, as it was envisaged from its inception. The width of the Boulevard is also critical for event management and allows for operation of a key transport node north of the Qudos Bank Arena and bus turning area. Amendment: No change. Refer to Section 4.8.2 of this Response to Submissions Report for further information.</td>
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<tr>
<td>Preservation of Sydney Olympic Park for events is important.</td>
<td>The preservation of Olympic Park as a premier event destination is integral to a successful Master Plan and is reflected in the purpose of the Master Plan 2030 (2016 Review) - Refer to Section 1.6. Amendment: No change. Refer to Sections 1.2 and 4.6 of this Response to Submissions Report for further information.</td>
<td></td>
</tr>
<tr>
<td>Fully support retail increase but possible opportunity for more to east of train station. More commercial uses. Residential should not be at the expense of commercial uses. Jobs target should be revised upward, more land dedicated to job centre.</td>
<td>The Authority supports the provision of jobs and establishment of a job centre within Sydney Olympic Park and has undertaken extensive testing to set the land use mix to ensure an adequate quantum of commercial space (office space) to create a commercial centre both numerically and spatially. A commercial centre is considered key to a successful town centre in Sydney Olympic Park. To this end, significant uplift has already been provided in draft MP2030 and commercial use only sites have been maintained to preserve this type of land use. The quantum of land dedicated to commercial uses and the creation of jobs will be reviewed every five years (as part of future Master Plan reviews) to ensure it remains relevant and to allow for further uplift if appropriate in response to regional transport upgrades. Amendment: No change. Refer to Sections 1.2 and 4.9.2 of this Response to Submissions Report for further information.</td>
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<td>#</td>
<td>Name</td>
<td>Comments</td>
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<tr>
<td>172374</td>
<td>GoGet Carshare (Joshua Brydges, Locations and Transportation Planner)</td>
<td>Widely supportive of the intentions outlined within the Draft Master Plan, particularly the shift towards encouraging a modal shift towards public and active transport. Encourage the Department to look towards including reference for the need to develop a network of carshare vehicles within Sydney Olympic Park both on-street and off-street. Investigate requirements for the provision of carshare vehicles in residential and commercial development at Sydney Olympic Park. Car sharing provision and availability of dedicated parking spaces is noted for further consideration alongside the review of parking rates. Amendment: Section 4.7.1 has been amended to include consideration for car sharing. Refer to Section 4.2 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>172370</td>
<td>Architectus (Greg Burgon, Senior Associate)</td>
<td>Undertake an assessment of the potential impacts resulting from the Hill Road widening and access ramps on the planned future residential development along the Hill Road corridor. Change the proposed zoning of land at the new intersection of John Ian Wing Parade and Hill Road, from residential to open space to integrate with open space in the Carter Street Precinct, accommodate the Hill Road widening and to provide sufficient landscape buffer to reinforce the Perimeter Avenue character. Remove the proposed on-street car parking identified in Figure 3.10 ‘Parking Plan’ at the intersection of the Hill Road and John Ian Wing Parade intersection. Update Figure 3.6 ‘Street Hierarchy’ in the Sydney Olympic Park Master Plan 2030 to reflect the function of Hill Road as a ‘Perimeter Avenue and Connecting Street’. Extend a cycleway connection servicing Carter Street to John Ian Wing Parade, connecting to the Louise Sauvage Pathway and broader Olympic Parklands. The Master Plan (2016 Review) focused on three key areas; the Central, Parkview and the Stadia Precincts. The areas referred to in the submission are located in Haslam’s Precinct which was not included in this review of the Master Plan. Nevertheless The Authority recognises that some sites may be subject to future road works by RMS for the Hill Road widening and Hill Road on-ramp. The Authority has amended the Master Plan to show the sites that may be affected by future road works. Other issues relevant to the Haslam’s Creek Precinct will be addressed in future revisions of the Master Plan. Amendment: Figures 5.62-5.66 have been amended. Refer to Sections 4.1.1 and 6.4.2 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>174477</td>
<td>Basketball NSW Kim Murphy</td>
<td>Basketball NSW seeks a permanent home in Sydney Olympic Park. Proposed redevelopment in the Southern Sports Precinct (including relocation of the Sports Hall) could potentially house this facility. NSW Basketball Facilities Strategy identifies a shortage of indoor multi-use sports venues across NSW. The Authority actively seeks opportunities to provide a place for professional and semi professional sports. The Community Facilities Strategy includes an assessment of the future needs of the Sydney Olympic Park community for a range of community infrastructure types (including indoor sports facilities). The Master Plan includes the proposal to relocate the Sports Hall. It is intended this new facility will assist to address community needs for multi-use sports courts. Amendment: No change.</td>
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<tr>
<td>Request</td>
<td>Response</td>
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<tr>
<td>Increase FSR. Delete requirement for a split maximum building height and replace with a single height standard of 74 m across the site. Allow flexible application of building setback controls.</td>
<td>The Authority has undertaken rigorous testing to allocate FSRs across precincts with consideration given to the capacity of existing infrastructure and the vision for the Park and site specific factors to ensure the FSRs provided were reasonable and achievable. The FSR and resulting GFA and building heights were not only set to provide the appropriate mix of land uses, but to match predicted market uptake rates and the capacity of infrastructure and promote liveability. FSRs and building heights have been carefully considered with a view to preventing impacts from overshadowing on recreational areas including Linear Park. The building height split plays and setbacks are critical in delivering high quality amenity outcomes and ensuring the tower component of the developments south of Figtree Drive do not result in additional overshadowing impacts on Linear Park. It was envisaged that developments with building heights splits fronting Linear Park will be stepped down to minimise overshadowing of the park. Taller buildings cannot be accommodated fronting onto the park without significantly impacting on amenity however, the Master Plan does not preclude a variation to any provision of the Master Plan from being considered as part of a proposal provided the proposal achieves the overall vision, planning principles and key elements for the precinct, and does not result in additional overshadowing of Linear Park. Given the Authority has undertaken extensive testing as part of the 2016 Review to set the land use mix, densities and heights to ensure adequate densification and diversification to support successful development within the Park, a further increase in FSR is not supported. Both sites 51 and 52 have already been provided with significant uplift in the 2016 Review (from 2.5:1 to 3:2:1) and an additional 10% bonus FSR may be achieved through design excellence. The Master Plan is reviewed every five years. Any potential for additional height and/or FSR that may be able to be realised as a result of regional infrastructure improvements or changes in market expectations without impacts in the recreational values of Linear Park may be considered as part of future reviews of the Master Plan. Amendment: No change. Refer to Sections 4.8 &amp; 6.1 of this Response to Submissions Report for information.</td>
<td></td>
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<tr>
<td>Clarification around the responsibility for construction of the pedestrian / cyclist footbridge over the rail line and road. If the developer is required to fund and construct the bridge it would be considered onerous and an inequitable impost on any one developer. If this is the expectation any cost must be offset from the local development contributions they are obligated to pay under the ICF associated with the site’s redevelopment. Provide a transparent formula for the conversion cost of leasehold to freehold.</td>
<td>The proposed pedestrian / cycle bridge is an item of public infrastructure funded by all developments under the Local Infrastructure Framework contributions. The responsibility for procurement &amp; delivery of the bridge rests with The Authority and not the landowner. The Authority may however negotiate with developers to construct various items of local infrastructure on its behalf where practical. Discussions relating to conversion costs and conversion of leasehold to freehold is a commercial matter not a Master Plan matter. These matters are dealt with on a case by case basis between The Authority and the lessee. A lessee may formally request The Authority enters into a Direct Negotiation process however this is at The Authority’ sole discretion and requires The Authority Board approval. Appendix to Master Plan 2030 - Local Infrastructure Contributions Framework has been amended to provide further information. Amendment: Appendix to Master Plan 2030 - Local Infrastructure Contributions Framework has been amended.</td>
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</tbody>
</table>
Clarification in relation to the list of infrastructure works that the development contributions under the ICF are to be directed.

The ICF contains document contains a summary of the proposed local infrastructure and the associated costs (section 1.4). This table should be read in conjunction with Section 3.10 of the Draft MP 2030 which further details along with Map 3.14 which shows the location of the main local infrastructure items within the Sydney Olympic Park Town Centre. The detailed list of local infrastructure items are derived from the prioritised recommendations of various background studies which support Draft MP 2030 including:
- Sydney Olympic Park MP 2030 Traffic & Transport Strategy (2016)
- Community Facilities Strategy For MP 2030 (2016)
- WSUD Strategy for Southern Catchments, Sydney Olympic Park

Amendment: ICF 2030 has been amended to include further details in relation to local infrastructure items.

| Key surrounding development includes: 9 Australia Ave, ground level retail and a 24 storey residential tower. 11 Australia Ave, development comprises 2 separate buildings, a 24 storey tower and a 30 storey tower. A 2 level podium link the towers providing for additional retail and commercial space, a gymnasium and communal facilities. The site is located directly south of a 8 storey commercial building. The site is within 100m of Olympic Park station. |

Heights have been modelled to reinforce the urban structure. Increasing heights on this site would require lifting heights above 30 storeys along all of Australia Avenue, which was not supported in the review process given the proximity to existing tall buildings. This site forms part of the commercial core area within the Central Precinct and is key to achieving the required critical mass of protected commercial land in order to secure a viable town centre. |

Amendment: No change. Refer to Sections 1.2, 4.8 and 6.1 of this Response to Submissions Report for further information.

<table>
<thead>
<tr>
<th>Air Quality</th>
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<tbody>
<tr>
<td>• Odour issues surrounding existing Homebush Bay Liquid Waste Treatment Plan (LWTP) and the Auburn Resource Recovery Centre and relationship to the Haslams Precinct</td>
</tr>
<tr>
<td>• MetroPlan’s vision, and commitment to air quality. Impact urban layout has on air quality in residential areas to improve health and well-being.</td>
</tr>
<tr>
<td>• Master Plan has opportunity to raise awareness of air quality issues and incorporate air quality info in planning process and delivery actions to maintain or improve air quality for future growth.</td>
</tr>
<tr>
<td>• Submission mentions NSW Govt Clean Air for NSW consultation paper opportunity to incorporate this into master plan or ensure it is considered in DA’s DCPs? Eg. Principles include: New potential sources of air emissions to use best practice controls and prevent land use conflict</td>
</tr>
<tr>
<td>• Consideration for future residential growth and education facilities to be planned next to major roadways or future major roads or rail corridors that avoid or reduce population exposure to emissions from transport. Best practice guidelines have been provided to incorporate and/or achieve this.</td>
</tr>
</tbody>
</table>

Water Quality

- Consideration should be given to updating current water management strategies for the Park with contemporary information. Delivery of key water principles to protect and restore existing waterways. Promote integrated water cycle management and encourage investment into water cycle management. Promote development that fosters relationship between water landscapes and urban living to enhance human and social wellbeing and promote community co-design

Noise and Contaminated Land Management - refer to submission

The Authority considers air quality issues as part of all proposed development it assesses and provided advice on this matter to Parramatta City Council in relation to all referrals. It should be noted that both the Homebush Bay Liquid Waste Treatment Plant and Auburn Resource Recovery Centre are within the Parramatta LGA.

The majority of development within Sydney Olympic Park is State Significant Development and is assessed and determined by the Department of Planning & Environment. For these developments air quality is a key consideration included in the Secretary's Environmental Assessment Requirements (SEARS).

In late 2016, developed in consultation with leading industry experts, The Authority published a revised Stormwater and Water Sensitive Urban Design Policy to promote integrated water cycle management and provide proponents with clear guidance to on the requirements for all development within Sydney Olympic Park.

Contaminated lands are managed strictly in accordance with Contaminated Lands Management Act Notice No 28040 issued to The Authority and administered by the NSW EPA.

Noise is regulated by the Authority under the provisions in the Authority Act. Development within Sydney Olympic Park is subject to specific noise mitigation measures and conditions that are imposed on title.

Amendment: No change. Refer to Section 5.6 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>City of Parramatta</th>
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</table>

45 storey towers more appropriate for the Parramatta city centre - may affect metropolitan skyline and urban form. Heights and densities within Stadia Precinct should relate to those for Carter Street Precinct. Height limits should consider design excellence bonuses and plant rooms / roof articulation requirements.

It is intended that Sydney Olympic Park become a Town Centre that is readily visible and identifiable within the urban environment. It will be compact with a high level of activity as the centre’s footprint area is contained on all sides by either major public sport/recreational buildings and parkland. As such it is considered appropriate to increase heights in order to meet take-up rates and achieve a vibrant town centre within a public recreational and parkland setting. The metropolitan skyline is not a requirement of any state legislation and has therefore not been considered as a dominant design driver.

It is acknowledged that building form modelling along Edwin Flack Avenue could more closely align with the Carter Street Precinct. The Authority has given consideration to heights of development along Edwin Flack to more closely match Carter Street and the Master Plan has been amended.

FSR has been calibrated to account for the 10% design excellence bonus, which is an FSR not a height bonus. It is expected that issues of articulation and roof forms will be addressed at development assessment and design excellence stages as these matters are too detailed to be dealt with in the Master Plan.

Amendment: Figure 5.25 has been amended to reduce the bulk and scale of the building on the Coach Parking Site on Edwin Flack Ave (adjacent to the Carter Street Precinct) from 45 storeys to 30 storey mixed used commercial, hostel and serviced apartments. Refer to Section 5.2 of this Response to Submissions Report for further information.

Extent of colonnades should be rationalised and be appropriately scaled. Colonnade and awning treatments should be continuous for full street or block. Need for podiums on residential towers is questioned.

Colonnades are seen to be a positive and memorable feature in Sydney Olympic Park which can work to moderate extreme temperature and wind conditions. This allows for a generous footpath creating functional and useable public areas and allowing mature street trees to be provided without requiring a building setbacks. The Authority has reviewed the extent of colonnades in the draft Master Plan and amended the plan to require double height colonnades on key streets, single height colonnades on secondary streets or streets wherever a single colonnade already exist and identifying additional streets where an awning is required with a view to delivering greater consistency along individual streets and continuous shelter within town centre and along axis roads.

In relation to the requirement for podiums on residential sites, podiums allow a transition in scale from tall building forms to the ground which is particularly important where building abut public open spaces, the street, ground level apartment gardens and public parks. The podium provides the opportunity for communal spaces, green roofs and adds green space to high density urban areas. No amendment has been made to the Master Plan.

Amendment: Figure 4.3 Awning and Colonnades Plan has been amended. Podium requirements for residential buildings are unchanged. Refer to Section 4.8.3 of this Response to Submissions Report for further information.

Cumulative impact of building form/heights pose a risk of overshadowing open spaces. Public domain should include mandatory deep soil zones, minimum 4.5-Sm footpaths width for active streets, minimum soil volume for trees & no basement parking beneath public streets or pedestrian links.

A separation distance of a minimum of 40m between towers has been set as well as a requirement to ensure sun access to north facing frontages affected by sun access ensure minimum of 2hrs solar access. Floor plates above 15 storeys are to have a floor plate of no greater than 900sqm GBA. The design excellence and pre-development assessment further refine impact on adjoining sites. Bands of taller and lower buildings have been designed rather than on height across the whole precinct.

The gross envelopes were tested for ADG compliance by the Department of Planning and deemed to be acceptable. Slender towers will also preserve the view across the Olympic Precinct and venues, and set Sydney Olympic Park apart from other development by creating a point of difference.

Amendment: No change.
Transport cumulative impact study not modelled. No assessment of simultaneous combination of peak travel demand and events undertaken, higher mode shift required.

Quantification of the impact of simultaneous Peak time traffic and event have been considered. The impacts of event road closures were considered in terms of access to the growing Central precinct. The coverage and duration of event road closures have been proposed to be modified (reduced) to facilitate greater levels of business as usual activity in the precinct whilst maintaining access for high volume pedestrian movements, event bus priority and event off-street car parking.

Council's higher mode for non-car modes is noted.

Amendment: No change. Refer to Sections 4.1.2 and 4.6.2 of this Response to Submissions Report for further information.

Westbound off-ramp from M4 to Hill Road not factored into assessment, densities warrant Metro link between Sydney Olympic Park and Parramatta.

The new ramps at Hill Road are referenced heavily in the Transport Strategy and are acknowledged as a short term measure to increase regional road capacity and influence the approach routes to the major car park at P1. Regional (and local) road upgrades have been a part of every Sydney Olympic Park Master Plan through coordination with RMS.

The review seeks to undertake an analysis of existing and proposed transport solutions to determine their effectiveness in supporting the future development within Sydney Olympic Park. The development and investigation of additional or refined solutions will be ongoing as the plan is delivered and developed.

The Authority acknowledges the need to provide additional transport capacity including Metro and Light Rail and that any provision is done as to not negatively impact upon other modes including road traffic. It is noted that no alignment through Sydney Olympic Park for the PLR has been confirmed by TfNSW.

Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information.
Parking - is above ground parking proposed?
Parking rates should be reconsidered.

Above ground car parking is not generally permissible in Sydney Olympic Park (refer 4.7.1, 1.). On major streets in the Town Centre, where it is desirable to have a well-defined street edge, a flexible podium encourages a commercial building up to 8 storeys (as per market requirements) with a residential component above, in other mixed use and residential only areas, a flexible 4-8 storey street wall is permissible. This allows for flexibility in design outcomes whilst meeting commercially viable building forms (refer 4.6.8).

However in certain circumstances above ground car parking is permissible (where underground parking is not practical, such as on remediated lands). The Master Plan has been amended to remove the requirement for underground parking for Sites 9 and 12 located on remediated lands.

The Authority acknowledges the need to achieve appropriate parking rates within the site. The key is to balance the need of residents and those attending events with a desire to provide residents, employers and visitors with appropriate and convenient Passenger Transport alternatives.

The review of parking rates would need to be supported by improvements in public transport provision throughout site. Additionally this is likely to be contrary to current (based upon Auburn, Canada Bay and Parramatta LGA) parking standard requirements. Consistent parking rates for Carter Street and Wentworth Point would also be required or the benefits of this policy adjustment to Sydney Olympic Park alone would be lost and have potential market implications in terms of competitiveness with adjacent developments.

Car sharing is seen as a key component of the transport plan for Sydney Olympic Park. Opportunities to provide appropriate parking locations within the site will be considered both on street and as part of private developments (i.e. basement car parks). The Authority will work with private organisations and car sharing services to provide modal choice for residents and employers alike.

Amendment: No change. Refer to Section 4.2 of this Response to Submissions Report for further information.

Increase investment in active travel, a plan should be prepared for how users from northern end of bridge connect to M4 cycleway and Parramatta road footbridge and thru to Lidcombe or Homebush.
Maps should represent pedestrian railway underpass from town centre to Bicentennial Park and Concord West station.
Key regional cycling routes through Sydney Olympic Park should be identified. Bicycle parking rates proposed.

Network analysis for walking required.

The Authority coordinating with RMS re: connections to the M4 Cycleway. It is noted that the network already connects to the M4 near Haslams Creek adjacent to Newington. Regional cycling connections also exist to Rhodes and beyond. Connections associated with the PLR are not in the scope of this Master Plan. Cycle routes were specifically designed to complete, complement and add to the TFNSW plans. Plans for a cycle line through the "mouse hole" to a new on motorway cycle route heading east are being developed. The Master Plan only applies only to the Town Centre area. Surrounding areas are included in The Authority's Parklands Plan of Management (refer Fig 1.3)

The Authority notes the opportunity to review bicycle parking rates as per supplied table which will be considered.

Sydney Olympic Park has one of the most developed walking paths in Sydney and a number of new connections are currently under construction. These connections are clearly articulated in the Master Plan maps.

The Authority is keen to build upon the excellent active travel choices available to residents and visitors alike and will consider increasing this connectivity with neighbouring sites not just for recreational usage but to provide a viable alternative for commuters.

Increased wayfinding and linkages to other transport hubs will also play a role in future active transport network provision.

Amendment: No change. Refer to Section 5.2 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in density</td>
<td>Increase in density without transport or social infrastructure may have long term social and economic impacts on the area. A district level hub including library should be included. Long day care places, both private and community based. OOSH facilities should be included. Schools needed. Access and wayfinding for public toilets and other facilities. Does not address open active space requirements for increased population.</td>
</tr>
<tr>
<td>Community Facilities Strategy</td>
<td>The Community Facilities Strategy proposes a community hub (library and community centre) of 2,500-3,000sqm for Sydney Olympic Park. Council’s request for a facility at the upper end of this size range is noted. Schools and OOSH facilities. The Master Plan makes provision for education land use sites. The Authority will work with the Department of Education and other education providers to identify feasible options of the delivery of schools (including support services) and other educational facilities. Recreation facilities and open space. The Community Facilities Strategy examines future community needs for active open space. The Strategy examines how community needs could be met through facilitating community access to existing Sydney Olympic Park facilities, upgrades to existing facilities (to increase capacity) and the provision of a new facilities. The proposals for active open space primarily relate to areas outside the Town Centre development area (and therefore are not illustrated in the Master Plan). The Master Plan however will be underpinned by the Strategy, which will be used to identify priority community infrastructure and open space projects as development occurs.</td>
</tr>
<tr>
<td>Occupancy rates</td>
<td>Occupancy rates - the proposed average occupancy rate of 2.2 persons/dwelling does not reflect existing occupancy patterns in the Parramatta LGA and should be amended to 2.47 persons/dwelling.</td>
</tr>
<tr>
<td>Amendment</td>
<td>Amendment: No change. Refer to Section 5.2.3 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Allocation of childcare centres</td>
<td>The allocation of childcare centres should be reassessed against the revised forecasted population (proposed by Council) to ensure demand can be met. Consideration should be given to having a mix of private and community based long day care centres.</td>
</tr>
<tr>
<td>Feedback on proposed childcare needs</td>
<td>Feedback on proposed childcare needs and required places is noted. Master Plan nominates key potential sites for childcare facilities. There will be the opportunity to provide a mix of facility types on these sites (including centres operated by not-for-profit providers). There will also be opportunities to provide additional childcare facilities in commercial, community and mixed use zonings in the Town Centre. The Authority is committed to reviewing childcare needs and demands as development occurs (as part of the five yearly Master Plan review process) and identifying opportunities for the provision of a range of facility types to meet these needs.</td>
</tr>
<tr>
<td>Amendment</td>
<td>Amendment: No change. Refer to Section 4.5.2 of this Response to Submissions Report for further information.</td>
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<tr>
<td>Smart cities, sustainability and NABERS Energy savings ratings</td>
<td>Smart cities, sustainability and NABERS Energy savings ratings - environmental guidelines may conflict or may not be addressed through Green Star.</td>
</tr>
<tr>
<td>Amendment</td>
<td>Amendment: Section 4.2 Sustainability has been amended to refer to Green Star Communities. Appendix A has been amended to include provision for Green Star registration as part of any Development Application being considered with a minimum six star Green Star rating being required for Design Excellence. Refer to Section 4.7 of this Response to Submissions Report for further information.</td>
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<tr>
<td>Recommendation</td>
<td>Action</td>
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<tr>
<td>Sydney Olympic Park should promote social diversity through affordable housing (minimum 5-10% indistinguishable from other private dwellings), mix of dwelling types (including a reasonable percentage of 3 bedroom dwellings) and provision for older people.</td>
<td>The Authority has amended the Master Plan to require a minimum of 5% Affordable Housing. The Authority acknowledges that diversity is key to the creation of a socially sustainable community and will seek opportunities to provide a mix of dwelling types suitable for families and older people where possible. Amendment: Section 4.6.17 Affordable Housing has been amended to a minimum of 5%. Refer to Section 4.3 of this Response to Submissions Report for further information.</td>
</tr>
<tr>
<td>Revise ICF to include affordable housing as part of the infrastructure being sought to support a liveable community. The Authority should seek to capture 5-10% of total yield for affordable housing.</td>
<td>As set out in the Draft ICF 2030 - section 2.11 does not include contributions for affordable housing. The Master Plan has been amended to require 5% of a development’s total dwellings to be dedicated as Affordable Housing. Amendment: Section 4.6.17 Affordable Housing has been amended to a minimum of 5%.</td>
</tr>
<tr>
<td>Council encourages a more detailed works list to increase transparency and further justify costing’s and seeks to engage with The Authority in respect of a number of assumptions and methodologies noted in the formal submission. These include: • Basis for defining infrastructure need • Definition of appropriate levels of provision (p6) and an understanding of how this benchmarking informed the works schedule • Attributing a distinction between broad &amp; localises beneficiaries • Definition of regional vs local infrastructure • Prioritisation methodology</td>
<td>The ICF contains document contains a summary of the proposed local infrastructure and the associated costs (section1.4). This table should be read in conjunction with Section 3.10 of the Draft MP 2030 which further details along with Map 3.14 which shows the location of the main local infrastructure items within the Sydney Olympic Park Town Centre. The detailed list of local infrastructure items are derived from the prioritised recommendations of various background studies which support Draft MP 2030 including: - Sydney Olympic Park MP 2030 Traffic &amp; Transport Strategy (2016) - Community Facilities Strategy For MP 2030 (2016) - WSUD Strategy for Southern Catchments, Sydney Olympic Park Each item of local infrastructure has been costed by a quantity surveyor and includes an attribution (%) for broad / local impact. It also includes an allowance for preliminaries &amp; margins, project management, design &amp; consulting fees, statutory charges, staging of works and construction contingency (as set out in section 3.3.2). Amendment: Master Plan Appendix - Local Infrastructure Contributions Framework document has been amended.</td>
</tr>
<tr>
<td>Recommends that the SEPP not include a satisfactory arrangements clause and that State / Regional contributions only be sought when the SIC is in place.</td>
<td>The satisfactory arrangements clause provides the legal basis for The Authority’s Local ICF. Its removal is therefore not supported. Amendment: No change.</td>
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<tr>
<td>Landowners</td>
<td></td>
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<tr>
<td>Name Withheld</td>
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Areas for development should not be released until Central Precinct and Carter Street have been fully developed.

Staged release of development precinct to avoid disruption, environmental impacts, noise and traffic. Release of all areas proposed may create a hopscotch effect, resulting in less cohesive development that may not encourage retail investment as foot traffic is not sufficiently concentrated.

Under the Authority Master Plan Sydney Olympic Park is divided into 9 Precincts. The Master Plan (2016 Review) focused on only Central, Parkview and the Stadia Precincts. It recognises the impact of surrounding densification, including the development of the Carter Street Priority Precinct and has undertaken extensive testing to determine the type and quantum of each land use that can be delivered based on the capacity of existing infrastructure and modelled take up rates. Other areas within Sydney Olympic Park will be the subject of future reviews to allow for appropriate staging of development in line with market demand and future upgrades to regional infrastructure.

Targets have been set based on market data liveability indicators and major event attributes to deliver a high quality place. Master Plan is reviewed every five years in accordance with legislative requirements and to allow it to remain current and allow it to respond to change surrounding land uses and regional infrastructure upgrades.

The main increases in residential and commercial floor space were by-and-large confined to Central, Stadium and Parkview Precincts in order to contain development and achieve a high level of activation.

Amendment: No change. Refer to Section 1.2 of this Response to Submissions Report for further information.

Residential development proposed for site next to current bus parking area close to waste transfer station, odour and noise impacts.

Development within the Carter Street Precinct is within the Parramatta Local Government Area. The Authority has however provided input to Council in relation noise, odour and traffic management.

Amendment: No change.

Comments in relation to this site are noted. However, a State Significant Development (SSD) application for development of this site has been submitted to the Department of Planning and Environment and is being assessed based on its merits under the provisions of State Environmental Planning Policy (State Significant Precincts) 2005.

Amendment: No change.

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Staged release of development precinct to avoid disruption, environmental impacts, noise and traffic. Release of all areas proposed may create a hopscotch effect, resulting in less cohesive development that may not encourage retail investment as foot traffic is not sufficiently concentrated.

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Amendment: No change. Refer to Section 1.2 of this Response to Submissions Report for further information.

Residential development proposed for site next to current bus parking area close to waste transfer station, odour and noise impacts.

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Amendment: No change.
<table>
<thead>
<tr>
<th>#45</th>
<th>Antonella Shannahan</th>
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<tbody>
<tr>
<td><strong>Concern that skyscrapers will create wind tunnels throughout Central Precinct.</strong></td>
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<td>Individual development proposals for towers will be required to address potential wind impacts as part of the development application process.</td>
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<td>Amendment: No change.</td>
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<tr>
<th>#44</th>
<th>Landowner</th>
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<tbody>
<tr>
<td><strong>Concern regarding educational infrastructure, clearer timeframe as to when and where the school will be located.</strong> A local high school needed</td>
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<tr>
<td>The Master Plan provides sites for educational uses. The Authority is working closely with the Department of Education and other education providers on the delivery of education infrastructure.</td>
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<tr>
<td>Amendment: No change. Refer to Section 4.4 of this Response to Submissions Report for further information.</td>
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<thead>
<tr>
<th>#46</th>
<th>Chris Wong</th>
</tr>
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<tbody>
<tr>
<td><strong>Existing space around ANZ Stadium to be kept as it is.</strong></td>
<td></td>
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<tr>
<td>The Master Plan review aims to improve built form and the frontage along Olympic Boulevard and activate the areas around ANZ Stadium and Qudos Bank Arena outside event mode, while maintaining capacity to operate major events. The Boulevard is recognised as a key public space. It also has significant width that will be maintained for event management and operation and to allow its continued use as a key transport node and bus turning area. The height of any infill development will be restricted to preserve the iconic status of these Olympic Venues.</td>
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<td>Amendment: No change.</td>
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<tr>
<th>#47</th>
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<tr>
<td>The Authority has undertaken extensive testing to determine appropriate heights and densities to match market take-up rates and facilitate viable building forms having regard to the capacity of existing infrastructure while maintaining and evolving the unique character of Sydney Olympic Park.</td>
<td></td>
</tr>
<tr>
<td>Community Infrastructure Community Facilities Strategy includes recommendations for new facilities (including library/community centre, childcare facilities, parks and open spaces) as well as upgrades to existing facilities to address these needs. Master Plan identifies new</td>
<td></td>
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</tbody>
</table>
| Name Withheld | Educational infrastructure not detailed and no solid commitment from Department of Education.  
Sydney Olympic Park area is not adequately coping with primary and secondary school provisions with the existing population base, let alone when the additional 5000 students are added to this growing demographic.  
Need for both primary and secondary schools. |
|---|---|
| Name Withheld | Maximising business as usual, no respect for indigenous people.  
Impact of increase in densities and maximising retail space. |
| Name Withheld | Concerns regarding minimal green space providing access to nature and habitat for wildlife. |
| Name Withheld | Master Plan review offers no real community benefit. |

**Provision has been made for education sites. The Authority is working with the Department of Education and other education providers to identify feasible options of the delivery of schools and other education facilities. In terms of access to universities, there a number of tertiary education institutions in Sydney Olympic Park (ACPE and Western Sydney University) and surrounding areas (WSU Parramatta Campus, Macquarie University). It is also projected that residents will access tertiary institutions further afield (with tertiary institutions typically having large, Metropolitan-wide catchments).**

Health facility planning is undertaken by the Department of Health at the Metropolitan-wide, regional and district level – that involves considering population growth across a wider area (not on a site-by-site basis). The future population at Sydney Olympic Park should however be factored into Western Sydney Local Health District (WSLHD) overall area planning.

**Infrastructure Funding**  
Open space upgrades, delivery of new parks and community facilities (such as libraries and community centres) will be funded through the Local Infrastructure Contributions Framework 2030 (as outlined in section 1.10 of the Master Plan).

**Amendment:** Section 3.10 amended to reference Community Facilities Strategy. Refer to Sections 1.2, 4.5.2 and 8 of this Response to Submissions Report for further information.
<table>
<thead>
<tr>
<th>#</th>
<th>Agreement Type</th>
<th>Name</th>
<th>Comments</th>
</tr>
</thead>
</table>
| **50** | SJB Planning  
(Joanne McGuiness, ASSOCIATE) | Includes a submission from GTA addressed to GPT Group; and a submission from SJB on behalf of GPT Group. Recommendations to review connections, open space, land use, heights, built form, car parking etc | Refer to response to GPT issues above (at # 28)  
Amendment: refer discussion at #28 above. Refer to Section 6.1 of this Response to Submissions Report for further information. |
| **51** | GPT Group  
Antony McNulty | recommendations for greater flexibility for the Master Plan | Refer to response to GPT issues above (at # 28)  
Amendment: refer discussion at #28 above. Refer to Section 6.1 of this Response to Submissions Report for further information. |
| **62** | Landowner  
Matthew Doherty | Progress on light rail but not Metro.  
Route currently shown along Holker St not supported - would not capture Newington residents.  
Route should be through Newington shopping centre or further south along Fariola Street.  
Route should follow Boulevard rather than Australia Ave as it would capture large venues (and avoid open spaces at Brickpit); could connect to Australia Ave somewhere south of the railway station. | Comments on Parramatta Light Rail (PLR) are noted. Route is outside the remit of the Master Plan. Comments to be forwarded to PLR Project Team for consideration and The Authority will continue to work closely with TNSW in relation to PLR provision through the park.  
Whilst outside of the remit of the Master Plan, the environmental impact of the proposed Metro is considered to be light due to services being underground through the park area.  
Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information. |
| **63** | Landowner  
Nirman Kumar Mahato | Suggests to develop a primary school at Wentworth point and a high school in Sydney Olympic Park to accommodate residents from Sydney Olympic Park, Newington, WP as current Concord High School at capacity | The Master Plan provides sites for education land use. The Authority is working closely with the Department of Education and other education providers on delivery of education infrastructure  
Amendment: No change. Refer to Section 4.4 of this Response to Submissions Report for further information. |
| **64** | Landowner  
Yanis Garrett | Overall very supportive. Concern raised on built form or proposed residential buildings, acoustic privacy, balcony design requirements.  
Request for no height limit and proposals to be based upon merit assessment. | The Master Plan is a very broad framework document, it is not overly prescriptive but rather seeks to provide guidance on those aspects of the place that require coordination across sites, streets, precincts and the whole of Sydney Olympic Park. It seeks to protect/create a quality public domain whilst supporting significant increases in density. A variety of design responses on individual sites can be explored during pre-development and development application stages. A high degree of flexibility has been built into the Master Plan. The Authority's Design Review Panel and design excellence processes ensure each proposal is assessed on its merits and delivers not only good urban design but good outcomes for the community as well as public amenity.  
Amendment: No change. |
| **65** | Landowner  
Yanis Garrett | Concern raised in relation to transport network - rail connections on the existing network and proposes a Metro connection from Hurstville to Macquarie Park via Sydney Olympic Park to accommodate increase in residents. | Wider rail connections and timetabling is outside the remit of the Master Plan however comments have been passed to TNSW for consideration. The Authority will continue to work closely with Sydney Trains on this issue.  
Whilst not proposed at this time, long term future north-south linkages for Metro services may be considered.  
Amendment: No change. Refer to Section 4.1.2 of this Response to Submissions Report for further information. |
| **66** | Landowner  
Yanis Garrett | Schools need to be built to accommodate future population needs.  
There should be no net loss of green spaces. If anything there should be a net gain | The Master Plan provides sites for education land use. The Authority is working closely with the Department of Education and other education providers on delivery of education infrastructure.  
The Master Plan identifies a number of new local parks to be located within the Town Centre.  
Amendment: No change. Refer to Sections 4.4 and 4.5.1 of this Response to Submissions Report for further information. |
| Name Withheld | Recommendation and concern if Light rail route does not include Wentworth Point or Olympic Park Wharf. Benefits of light rail providing improved accessibility and convenience to major events and stadia precinct. | Light Rail to Wentworth Point and Olympic Park Wharf has not formed part of provisional design at this stage but may be considered in the future. Comments will be passed on to the PLR team for consideration.  
Amendment: No change. |
|---|---|---|
| Name Withheld | Concern that the focus of the Master Plan is on residential and not the education and public facilities, transport infrastructure to support this growth, public transportation and education facilities. | The Master Plan is underpinned by the Community Facilities Strategy and Traffic and Transport Study which were exhibited as part of the Master Plan 2030 (2016 Review). These documents examine and identify future needs for community facilities (including schools, community halls, library, green space and other facilities) and traffic and transport infrastructure and will be used to inform decision making and investment of Infrastructure contributions funding as development occurs.  
Amendment: Section 3.10 - New Facilities and Local Infrastructure has been amended. Refer to Sections 4.1.1, 4.4 and 4.5.2 of this Response to Submissions Report for further information. |
| Matthew Gee Kwun Chan | Public transport options and connectivity, decontamination of air and water and noise barriers.  
Evacuation procedures for buildings exceeding 20 storeys. | The Master Plan is underpinned by the Traffic and Transport Study exhibited as part of Master Plan 2030 (2016 Review). The Study examines and identifies future needs for traffic and transport infrastructure and will be used to inform decision making as development occurs. The Authority is also working closely with TfNSW and RMS to identify priority areas for improve traffic and transport services to support densification.  
Air and water quality issues are considered as part of any development application. All development proposals are required to demonstrate that they meet all the relevant legislative requirements in relation to air and water quality.  
The Master Plan has carefully considered the potential impact of event noise and located residential developments as far away as possible from major event venues.  
Amendment: No change. Refer to Sections 4.1.1, 4.6.2 and 5.6 of this Response to Submissions Report for further information. |
| Max Diamond | Railway connection from the T7 line at Sydney Olympic Park to T1 Northern Line should be provided. | Providing a connection to the T1 Northern Line from the T7 line is noted. It is considered that this presents significant engineering, construction and operational challenges for the existing Sydney Trains network. The Transport Strategy identifies a similar scheme for a future north-south Metro connection between Hurstville and Macquarie Park.  
Amendment: No change. Refer to Section 4.1.1 of this Response to Submissions Report for further information. |
<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>166890 #59</td>
<td>Name Withheld</td>
<td>Recommendation for lower podiums to allow increased solar access and transition to surrounding Parklands.</td>
</tr>
<tr>
<td></td>
<td>The Authority has reviewed the requirements for podia and has amended the Master Plan to provide increased flexibility with podia of between 5 and 8 storeys with a setback above 6 storeys in commercial streets and 4-8 storey podia in residential streets except along Olympic Boulevard which maintains a requirement for an 8 storey podium. FSRs on sites have been modelled to provide slender footprint towers to ensure solar access for both open spaces / the public domain and residential developments. Slender towers deliver significant environmental performance, residential amenity and reduced overshadowing. Amendment: No change. Refer to Sections 4.8.2 and 4.8.4 of this Response to Submissions Report for further information.</td>
<td></td>
</tr>
<tr>
<td>176389 &amp; additional email 3.12.2016 #60</td>
<td>Ms Elaine Tan and Dr Min-Hsuan Hung</td>
<td>Strong opinion against the height increase of the residential apartments from 4 storeys to 6 storeys along Bennelong Parkway. Resident purchased off the plan apartment at Site 67 (Meriton) in September 2015 with advice that height of neighbouring property would rise to 4 storeys. Amendment: No change.</td>
</tr>
<tr>
<td></td>
<td>The Authority’s Master Plan takes a precinct wide approach to setting building heights and land uses. The Authority is required to review the Master Plan every five years in accordance with statutory requirements and it is subject to change. Developers, residents and leasees must undertake their due diligence and seek information from the relevant agencies and the Authority. Having said that, an key consideration in Master Plan 2030 (2016 Review) was maximising solar access and view sharing across developments. The Master Plan provides for setback to minimise overshadowing of wetlands and adjoining sites. Increased heights were based on extensive modelling and testing to identify the optimum mix for development within the Precinct and development proposals are required to optimise urban amenity including view sharing to the extent practical by considering placement and orientation of buildings. Amendment: No change.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transport for NSW / RMS</td>
<td>Simultaneous management of residential, retail and entertainment trips. The location of the increase in retail yields (mostly within the Central Precinct) have been carefully planned to not interfere with event operations (traffic and public transport). The proposed relocation of the Aquatic bus terminal and reduction in coverage and duration of event road closures in the Central Precinct will limit the impact on local businesses and residents and allow public transport services to operate to regular routes without the need for diversions. The increase in retail offering, particularly food and beverage, also will help to dissipate crowd movements through travel demand management before and after major events within the precinct. The greater use by event patrons of the M4 Motorway and Hill Road ramps to access event car parks will help to separate event traffic from the growing residential and business activity in the Central Precinct. The Authority will liaise with TNSW to explain the basis of planning for the Central Precinct and its operation during events and carefully review, in consultation with TNSW, the appropriateness of the proposed retail car parking rates. The development of other precincts in the absence of a regional transport plan is noted including Parramatta CBD, Carter St and Wentworth Point. The Authority has, and will continue to work closely with TNSW on regional transport solutions. The Master Plan provides for upgrades to the bus network. The heavy rail timetable is proposed to be reviewed in 2018. The Authority will work closely with relevant agency to identify opportunities to improve heavy rail connections. Amendment: No change. Refer to Sections 4.1 and 4.6 of this Response to Submissions Report for further information.</td>
</tr>
</tbody>
</table>
Regional transport issues / planning:
- upgrade Australia Avenue
- Hill Road off-ramp and Hill Road Widening
- Regional Transport Plan required
- Light Rail
- Metro not reflected in the Master Plan
- funding needs - SIC
- poor transport connections, heavy rail, buses, timetables

Regional Transport Plan is being developed by TNSW / RMS. The absence of a RTP should not prevent the approval of the MP review as the MP has been based on the capacity of existing and/committed infrastructure.

Review of MP every five years allows The Authority to capture any increased capacity resulting from transport infrastructure upgrades and / or implementation of a Regional Transport Plan.

To date, urban growth and approval of other priority precinct plans have not been reliant on the preparation of a Regional Transport Plan.

DPE is preparing a Special Infrastructure Contribution (SIC) for the Greater Parramatta Priority Growth Area. A SIC is a financial contribution paid during the development process to help fund State and regional infrastructure. 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. The funding of public transport improvements is currently being considered by DPE as part of the separate SIC.

Hill Road on-ramp has already been delivered as part of WestConnex. It is understood that off-ramp funding has been committed. This provides for improved access into and out of the Olympic Peninsula. Widening of Hill Road will significantly impact on numerous development sites and the proposed Wave Park. The Authority will work with Transport for NSW and RMS to ensure options are considered and the implications well understood.

The Authority will continue to work with GSC, GPOP and the NSW government to ensure the opportunities in both delivery and modal choice services are realised. Any additional value capture to be reflected in next revisions of the MP in 3-4 years.

Amendment: An indication of the area that may be affected by road works is shown in Figures 5.62-5.66
Sydney Olympic Park
Local Infrastructure Contributions Framework (ICF)

Sydney Olympic Park Authority

Last Updated October 2017
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Attachments
Attachment A Land to which the ICF applies
Attachment B Development potential of sites affected by the ICF
Attachment C Development contribution calculation
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Attachment E Master Plan (2017 Review) Figure C of Appendix C Street Type Key
Attachment F Master Plan (2017 Review) Section 3 Figure 3.14 Proposed New Infrastructure
Attachment G Master Plan Figure (2017 Review) B1 of Appendix B Public Spaces Key
1. Introduction and summary schedules

1.1 Overview of Framework

Under Section 13 of the SOPA Act 2001, Sydney Olympic Park Authority (SOPA) is, amongst other matters, charged with responsibility for the functions of:

(a) promoting, coordinating and managing the orderly and economic development and use of Sydney Olympic Park, including the provision and management of public infrastructure and other public purposes;

(b) promoting, co-coordinating, organising, managing, undertaking, securing, providing and conducting cultural, sporting, educational, commercial, tourist, recreational, entertainment and transport activities and facilities; and

(c) providing, operating and maintaining public transport facilities within Sydney Olympic Park.

SOPA has prepared the Sydney Olympic Park Master Plan 2030 (2017 Review) (Master Plan 2030) to control the future development of Sydney Olympic Park. This Local Infrastructure Contribution Framework (ICF) describes the administrative arrangements for local infrastructure contributions; the expected future development in Sydney Olympic Park; the local infrastructure that will be required to meet that development and its capital cost; the method used to equitably share the cost of infrastructure among developers of land in Sydney Olympic Park; and the contributions that SOPA will seek to include in planning agreements to be negotiated with developers of land in Sydney Olympic Park and which will be applied towards the provision of that infrastructure.

In the future, substantial new development of land in Sydney Olympic Park is expected to occur as a result of the implementation of Master Plan 2030. This new development will generate and support increasing resident, worker and visitor populations, along with an associated demand for infrastructure located both within and adjacent to Sydney Olympic Park. The infrastructure requirements will include modified, upgraded, and new: streets and walkways; open space, recreation, and public domain; community facilities; public transport; traffic management; and utility services.

Developers of land in Sydney Olympic Park will be responsible for the provision, extension or augmentation of local public infrastructure within Sydney Olympic Park that is required to support new development. The ICF is designed with the flexibility that (by agreement) direct or indirect infrastructure contributions, including works-in-kind, may be made to satisfy a developer’s obligation to make infrastructure contributions.
The ICF is facilitated by the following:

(a) A planning agreement under Division 6 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EPA Act) entered into between SOPA and a developer will generally be taken to be evidence that satisfactory arrangements exist for the provision of infrastructure and services. Matters addressed by such planning agreement will include infrastructure contributions identified under the ICF.

(b) Under *State Environmental Planning Policy* (State Significant Precincts) 2005 Schedule 3, Part 23 Sydney Olympic Park is defined as a state significant site. Development consent for residential development in Sydney Olympic Park cannot be granted unless the Secretary of the Department of Planning has first certified in writing, to the consent authority, that satisfactory arrangements have been made for the provision of designated State public infrastructure in relation to the land on which the development is to be carried out.

SOPA is satisfied that the developments allowed under Master Plan 2030, if carried out, will or are likely to require the modification or provision of, expand the capacity of, or increase the demand for the infrastructure identified in the ICF.

In establishing the ICF SOPA has, with regards to development contributions, set out, given consideration to and is satisfied that the:

(a) infrastructure that is proposed to be funded by a development contribution can be provided within a reasonable time;

(b) impact of the proposed development contribution on the affordability of the proposed development is reasonable;

(c) proposed development contribution is based on a reasonable estimate of the cost of proposed infrastructure; and

(d) estimates of demand for each item of public infrastructure to which the proposed development contributions relate are reasonable.
1.2 Overview of infrastructure contribution rates

SOPA will seek both land and monetary contributions from developers of land to which the ICF applies. The total contribution that SOPA will seek from a developer under the ICF will depend on the following:

- the area of the site the subject of the proposed development;
- the development potential (measured in gross floor area) available for the site under Master Plan 2030; and
- the total amount of gross floor area proposed in the development.

The ICF is designed to take into account infrastructure contributions (including any land, money or other material public benefit that the applicant has elsewhere dedicated or provided free of cost within the area or previously paid to the consent authority in respect of development) on a notional basis. In this context, and for the purposes of determining monetary contributions under the ICF a contributions floor space ‘credit’ will apply to each site.

SOPA does not accept the dedication of land in part or in full satisfaction of a requirement for a monetary contribution under the ICF, as any requirement to dedicate land (whether under free-hold or lease-hold) includes the transfer of applicable development potential to the balance of the development site.

<table>
<thead>
<tr>
<th>Monetary contribution (as at Base Date (2) March 2015)</th>
<th>$205 per m² of GFA above 1:1 FSR* [Refer to Attachment C for indices adjustment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land contribution</td>
<td>Refer to Attachment D</td>
</tr>
</tbody>
</table>

* excludes any GFA attributable to the types of development listed in clause 2.5 of the ICF

The monetary contribution ‘Base Date (1)’ of March 2010 represents the date the Minister of Planning approved the ICF and the ICF came into effect (adopted). The monetary contribution ‘Base Date (2)’ of March 2015 represents the date the ICF was updated to reflect the Master Plan 2030 (2017 Review).

1.3 Provision for Regional Infrastructure contribution

Monetary contributions will be sought from developers of land for regional infrastructure. Details of the monetary contributions for regional infrastructure and method of collection will be outlined in a Special Infrastructure Contribution Plan, which will apply to all new development in the Olympic Peninsula Special Infrastructure Contribution Area, and will be managed and coordinated by the NSW Department of Planning & Environment.
### 1.4 Summary of local infrastructure and costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roads and Road-like Places</td>
<td>$75,000,000</td>
</tr>
<tr>
<td></td>
<td>Streets and Laneways</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedestrian Bridges and Footpaths</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Parks, Recreation, &amp; Public Domain</td>
<td>$54,000,000</td>
</tr>
<tr>
<td></td>
<td>Town Centre Public Domain.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parklands Spaces and Facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Play Courts and Playing Fields.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Community Facilities</td>
<td>$18,000,000</td>
</tr>
<tr>
<td></td>
<td>Branch Library; Cultural Hub;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multi-purpose Community Centre</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Public Transport</td>
<td>$20,000,000</td>
</tr>
<tr>
<td></td>
<td>Travel Demand Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Precinct Shuttle Bus Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rail Station Access Infrastructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Bus Stops and Laybys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional Bus Terminals</td>
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</tr>
<tr>
<td>5</td>
<td>Traffic Management</td>
<td>$25,000,000</td>
</tr>
<tr>
<td></td>
<td>Road Intersections; Road Closures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedestrian Crossings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crowd Management</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Environmental Infrastructure</td>
<td>$26,000,000</td>
</tr>
<tr>
<td></td>
<td>Recycled Water Head-works</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stormwater Control; Drainage</td>
<td></td>
</tr>
</tbody>
</table>

**$218,000,000**
2 Framework Administration

2.1 Name

This framework is called the Sydney Olympic Park Local Infrastructure Contributions Framework 2030 (ICF).

2.2 Status

The ICF is a policy of the Sydney Olympic Park Authority. The ICF is NOT made under the provisions of the EP&A Act and has no legal force or effect under the EPA Act. It is however intended by SOPA that it will be a key reference point indicating the land and monetary contributions that SOPA will seek from developers through planning agreements negotiated under section 93F of the EPA Act - to demonstrate satisfactory arrangements for the provision of local infrastructure for developments at Sydney Olympic Park.

2.3 Purposes of the ICF

The purposes of the ICF are as follows:

- To facilitate the future development of Sydney Olympic Park being adequately supported by local infrastructure; and
- To define an infrastructure contributions framework that:
  - is equitable and transparent;
  - is based on a convenient infrastructure demand measure for the purpose of calculating the contributions amounts (that is, gross floor area);
  - enables the provision of the local infrastructure to appropriate levels that reflect and balance environmental standards, community expectations and funding priorities;
  - provides financial certainty to both SOPA and to developers of land in Sydney Olympic Park; and
  - includes contributions that are set at a level that encourages the orderly and efficient development of land in Sydney Olympic Park.

2.4 Commencement

The ICF applies to developments associated with Master Plan 2030 and may be amended from time to time to reflect significant changes to the Master Plan or the development potential of Sydney Olympic Park.

Applications involving development and land the subject of this ICF that are determined on or after this date will be subject to the provisions of the ICF.
2.5 Land to which the ICF applies
The ICF applies to the numbered or lettered sites located within the area that Master Plan 2030 applies, as shown on the map included in Attachment A to the ICF.

The ICF DOES NOT apply to the following categories of sites where they are specifically listed in the table included as Attachment B to the ICF:

- Any site the subject of a development consent (or the subject of a development proposal received and likely to be determined prior to the approval of Master Plan 2030) that utilises the maximum development potential under Master Plan 2030 and which is subject to infrastructure contributions arrangements other than those referred to in the ICF;
- Any site that has been identified in Master Plan 2030 for a level of commercial, retail, education, entertainment, residential or temporary accommodation gross floor area (GFA) that is less than the ‘credit’ GFA that applies to a particular site. Clause 4.4.1 of the ICF provides more detail on ‘credit’ GFA;
- Any site that has been identified in Master Plan 2030 exclusively for community, transport or venue GFA; and
- Any site that has not been ascribed any additional potential GFA under Master Plan 2030.

2.6 Development to which the ICF applies
The ICF applies to any development the subject of a project application, development application or application for a complying development certificate, except the following types of development:

- Recreation and community facilities provided by or on behalf of SOPA.
- Venue additions – confined to uses that support the prime purpose and activities of the venue.
- Transport (including public car parking and coach parking).
- Public utility undertakings.
- Adaptive reuse of an item of environmental heritage.
- Exempt development, as defined in Subdivision 3 of Division 3 of Part 14 of Schedule 3 of the SEPP (State Significant Precincts).

2.7 Relationship to other plans and strategies
The ICF repeals Development Contributions Strategy Briefing Note for Developers V11 November 2002 (the pre-existing Contributions Strategy). Uncommitted funds collected under the pre-existing Contributions Strategy will be directed towards the provision of infrastructure in Sydney Olympic
2.8 Indexing of monetary contributions

Monetary contribution rates identified in the ICF will be indexed quarterly to reflect movements in the Producer Price Index.

The contribution rates will be indexed as follows:

\[
\text{Indexed contribution rate} = \frac{\text{Current Index}}{\text{Base Date (x) Index}} \times \$CA
\]

Where:

- \$CA\ is the contribution rate for works schedule items (other than land yet to be acquired) at the time of adoption of the ICF expressed in dollars.
- Current Index\ is the Producer Price Index - Roads and Bridges PPI (3101) NSW - as published by the Australian Statistician at the time of the review of the contribution rate.
- Base Date (1) Index\ is the Producer Price Index - Roads and Bridges PPI (3101) NSW - as published by the Australian Statistician at the Base Date of March 2010.
- Base Date (2) Index\ is the Producer Price Index - Roads and Bridges PPI (3101) NSW - as published by the Australian Statistician at the Base Date of June 2015.

Note: The contribution rates will not be less than the contribution rates specified at the date of the adoption of the ICF.

Refer to Attachment C for the monetary contribution calculation including further guidance on the method of calculation and locating the indices figures.

2.9 Modifications to the infrastructure requirements

The design of the infrastructure included in the ICF may be modified over time in response to:

- new legislation or standards which apply to the planning, specification and delivery of a particular item;
- better meet the evolving facility and service demands of residents, workers and visitors in Sydney Olympic Park; or
- respond to site and budgetary constraints revealed as components of the development move from concept to detailed design phase.
Any major modification to or adjustment of infrastructure requirements and their costs will be reflected in SOPA amending the ICF.

### 2.10 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.

### 2.11 Utility infrastructure addressed by the ICF

The ICF provides only for reticulation of the following utility infrastructure from existing service supply to the property boundary:

- Potable water
- Stormwater
- Electricity supply
- Gas supply
- Communications

The ICF provides for reticulation and head works for recycled water utilities.

Notwithstanding, the developer will need to make satisfactory arrangements for the provision of utility infrastructure as part of the development approval process (refer to clause 4.1).

SOPA may, at its discretion and by agreement with a developer, choose to address contributions for additional utility infrastructure at the same time as contributions identified under the ICF through a single planning agreement.

### 2.12 Definitions

In the ICF:

**EPA Act** means the Environmental Planning and Assessment Act 1979.

**Floor space** ratio means the ratio of the gross floor area of all buildings within the site to the site area.

**FSR** means floor space ratio.

**GFA** means gross floor area.
**Gross floor area** has the same meaning as that contained in the Standard Instrument (Local Environmental Plans) Order 2006, that is:

"**gross floor area** means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

(a) the area of a mezzanine, and
(b) habitable rooms in a basement or an attic, and
(c) any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

(d) any area for common vertical circulation, such as lifts and stairs, and
(e) any basement:
   (i) storage, and
   (ii) vehicular access, loading areas, garbage and services, and
(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
(g) car parking to meet any requirements of the consent authority (including access to that car parking), and
(h) any space used for the loading or unloading of goods (including access to it), and
(i) terraces and balconies with outer walls less than 1.4 metres high, and
(j) voids above a floor at the level of a storey or storey above."

**Local Infrastructure** means local streets and traffic management devices, parklands and urban spaces, recreation facilities, major event infrastructure, multi-purpose community centres, utility reticulation, and transport services to required to be built or modified to serve the local community while preserving major event precinct capability.

**SEPP (State Significant Precincts)** means State Environmental Planning Policy (State Significant Precincts) 2005.

**Master Plan 2030** means Sydney Olympic Park Master Plan 2030 (2017 Review), which is a master plan prepared under section 18 of the Sydney Olympic Park Authority Act 2001, and which is deposited in the office of the Sydney Olympic Park Authority.

**Regional Infrastructure** means regional road networks (including arterial corridors), public transport networks, and regional open space serving broad subregional communities.

**SOPA** means the Sydney Olympic Park Authority.
Utility infrastructure means water, sewerage, gas, electricity and communications or similar infrastructure, services and facilities, including infrastructure, services and facilities located outside the Sydney Olympic Park site that relate to development within the Sydney Olympic Park site.
3. Infrastructure demands and proposed works

3.1 Development, infrastructure and contributions context

In 2002 the Sydney Olympic Park Authority prepared the Sydney Olympic Park Master Plan 2002 as the initial means by which to progress the NSW Government's commitment to Sydney Olympic Park in its multiple roles as:

- the premier major venue events precinct in NSW;
- one of the world’s great urban regional parks; and
- a modern, sustainable new town in metropolitan Sydney.

It was recognised at the time that further investment in infrastructure was required to support the additional residents and daily workers envisaged under Sydney Olympic Park Master Plan 2002, and that developers should make a reasonable contribution to that infrastructure.

The pre-existing contributions strategy, adopted in 2002, catered for the following development in Sydney Olympic Park:

- 1,300 residential dwellings housing up to 3,000 people;
- 110,000 square metres of commercial GFA accommodating up to 6,110 workers;
- 104,000 square metres of other employment GFA accommodating up to 1,100 workers; and
- 25,000 square metres additional GFA in the Australia Centre accommodating up to 1,250 workers.

The pre-existing contributions strategy:

- acknowledged that there was existing infrastructure (particularly open space and recreation facilities) that had some spare capacity that could be absorbed by the demands of Sydney Olympic Park development. Consequently, no contribution was sought for these facilities; and
- included the following additional infrastructure that would be needed to serve, and for which contributions would be imposed on, new development:
  - child care centre, community centre and a contribution to other community services and facilities to be provided by Auburn Council;
  - an additional railway station entry;
  - a transit-way station;
Sydney Olympic Park
Local Infrastructure Contributions Framework

- intersection upgrades and other traffic management works;
- travel demand management initiatives; and
- streetscape embellishment works.

At the time that the ICF came into effect, only some of the infrastructure from the pre-existing contributions strategy have been provided.

3.2 What future development is expected to occur in Sydney Olympic Park?

Sydney Olympic Park Master Plan 2002 and the pre-existing Contributions Strategy had a life of up to 10 years.

In 2005, the State Government’s Metropolitan Strategy, City of Cities, identified Sydney Olympic Park as a ‘specialist centre’. In 2009 Sydney Olympic Park was identified in State Environmental Planning Policy (State Significant Precincts (2005) as a ‘State Significant Site’.

A longer term plan guiding the development of land beyond the Sydney Olympic Park town centre was required if a more sustainable and vibrant urban place was to be created and the Government’s planning objectives for the area were to be achieved.

The initial Master Plan 2030 was approved by the Minister for Planning on the 8th October 2009. This 2017 Review builds on the directions established under previous plans and provides a broader and longer term development vision. Significantly, this master plan proposes a greater scale and intensity of development than previous plans.

The updated Master Plan 2030 provides for:

- maximum development potential of 1.96 million square metres GFA;
- a mix of land uses comprising commercial, retail, residential, hotel/accommodation, education, venue and entertainment; and
- a projected daily population of over 34,600 workers, 23,500 residents, 15,000 visitors, and 5,000 students.

Master Plan 2030 apportions the total maximum development potential on a site by site basis.

A map showing the location of these sites is shown as Attachment A to the ICF.

A schedule showing each site’s current (2016) level of development and maximum development potential is shown as Attachment B to the ICF.
3.3 What infrastructure is required to meet expected development?

3.3.1 Future infrastructure requirements

Much of the infrastructure existing in and around Sydney Olympic Park at the time the ICF commenced was provided prior to 2000 to meet the demands of the Olympic and Paralympic Games and to support the existing commercial, residential, accommodation and venue developments.

Infrastructure in Sydney Olympic Park has been designed to meet the current needs, reflecting its overriding role as a nationally significant event node and its current, more limited role as a residential area and commercial or employment node.

This infrastructure includes both key items that serve a broad user catchment (for example, the rail loop line, access roads and recycled water systems) and public domain and smaller parks that serve a more localised catchment.

While acknowledging that some of the existing Sydney Olympic Park infrastructure has capacity to meet some of the infrastructure needs generated by future development, it will not meet all of those needs.

The future development of Sydney Olympic Park as a growing community of residents, workers and students using the area will necessitate the modification of existing and/or provision of additional local infrastructure to:

- ensure satisfactory access and movement to and through the area during and outside of events;
- provide a safe, attractive and usable public domain that promotes the enhancement of a distinctive sense of place;
- provide access to recycled water to minimise use of potable water;
- create opportunities for social interaction and community well being; and
- meet the local sports and recreation needs of the growing community.

3.3.2 Local Infrastructure schedule

The following categories and sub-categories of new and augmented infrastructure are required to meet future local development demands and are included in this ICF. It should be noted however that this list of local infrastructure components is subject to change over time dependent upon the type of development and the resulting community needs at Sydney Olympic Park.
<table>
<thead>
<tr>
<th>Category</th>
<th>Local Infrastructure Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads &amp; Road Like Places</td>
<td>Upgrade Existing Streets – as shown in Attachment E - Master Plan 2030 (2017 Review) Street Type Key</td>
</tr>
<tr>
<td>Parks, Recreation, &amp; Public Domain</td>
<td>Upgrade Sydney Olympic Parkland Spaces and Facilities – including Bicentennial Park, Woo-la-ra Park &amp; other Infrastructure Upgrades.</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>Provide a branch library &amp; multipurpose community centre in the Town Centre – as shown in Attachment F - Master Plan 2030 (2017 Review) Proposed New Infrastructure.</td>
</tr>
<tr>
<td>Public Transport</td>
<td>Enhance the sustainability of travel mode demand.</td>
</tr>
<tr>
<td>Public Transport</td>
<td>Upgrade bus services and facilities within the Town Centre - including new Precinct Shuttle Bus Services, Regional Bus Terminals and Bus Shelters.</td>
</tr>
<tr>
<td>Public Transport</td>
<td>Support rail services access and information within the public domain – including Olympic Park and Lidcombe Station.</td>
</tr>
<tr>
<td>Traffic Management</td>
<td>Upgrade Local Road Intersections and vehicle / crowd control messaging systems – as shown in Attachment F - Master Plan 2030 (2017 Review) Proposed New Infrastructure.</td>
</tr>
<tr>
<td>Environmental Infrastructure</td>
<td>Expand Recycled Water reticulation network infrastructure and connections to meet SOP user demand</td>
</tr>
<tr>
<td>Environmental Infrastructure</td>
<td>Upgrade stormwater drainage and water sensitive urban design infrastructure to manage impacts from new MP development and public domain – including Brickpit, Bennelong Pond, Lake Belvedere &amp; Boundary Creek</td>
</tr>
</tbody>
</table>

### 3.3.3 Infrastructure sequencing

Development will be ideally sequenced in successive phases. This sequence of phasing will arise by facilitating development in the town centre in the Central, Parkview and Stadia precincts initially, then progressively developing towards the outer edges. Figure 3.15 in Master Plan 2030 shows, indicatively, the location of short, medium and long term development phases.
Infrastructure delivery will as far as possible, and responding to fluctuations in the cash balance of the infrastructure contributions fund, be synchronised with the roll-out of the development phases for the various Sydney Olympic Park precincts described in Master Plan 2030.

Other factors affecting the program for delivery of infrastructure identified in the ICF include the following:

3.3.3.1 Wherever practicable and appropriate, infrastructure will be provided as part of, or in conjunction with, new development.

3.3.3.2 Construction of streets and public spaces associated with adjoining development within a development phase and precinct are to be coordinated to enable the public domain to be built simultaneously.

3.3.3.3 New and upgraded infrastructure constructed within each development phase is to be largely completed prior to the commencement of subsequent phases.

The full program of infrastructure work identified in the ICF will only be adequately funded when and if the maximum allowable and levy able gross floor area set out in Master Plan 2030 is fully developed. To the extent that development is less than the maximum allowable floor space, and hence the corresponding infrastructure funding not collected, lower priority infrastructure projects will either be delayed or not delivered. A projected implementation plan is provided below based on October 2015 dollars and assumed stages of delivery of development.

<table>
<thead>
<tr>
<th>LOCAL INFRASTRUCTURE CONTRIBUTIONS PLAN</th>
<th>PROJECTED IMPLEMENTATION PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage 1 (2015-2020)</td>
</tr>
<tr>
<td>ROADS AND ROAD-LIKE PLACES</td>
<td></td>
</tr>
<tr>
<td>Upgrades to Existing Streets</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>Delivery of New Streets</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>PARKS, RECREATION, &amp; PUBLIC DOMAIN</td>
<td></td>
</tr>
<tr>
<td>New Open Space</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Upgrades to Existing Open Space</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>New Playing Fields</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>COMMUNITY FACILITIES</td>
<td></td>
</tr>
<tr>
<td>New Community Hub including Library and Community Centre</td>
<td>$9,000,000</td>
</tr>
<tr>
<td>PUBLIC TRANSPORT</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>TRAFFIC MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>Local Infrastructure Upgrades</td>
<td>$5,700,000</td>
</tr>
<tr>
<td>ENVIRONMENTAL INFRASTRUCTURE</td>
<td></td>
</tr>
<tr>
<td>Recycled Water Scheme Upgrades</td>
<td>$5,800,000</td>
</tr>
<tr>
<td>Stormwater and WSUD Upgrades</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>TOTALS</td>
<td>$66,000,000</td>
</tr>
</tbody>
</table>
4. Infrastructure contributions calculations

4.1 Satisfactory arrangements to be made for the provision of infrastructure

SOPA is the lead agency responsible for promoting and co-ordinating the orderly and economic use and development of land within Sydney Olympic Park.

This responsibility extends to ensuring that supporting infrastructure is planned, designed and constructed in an integrated and coordinated way. The cost of providing future infrastructure represents a major funding commitment.

Developers of land for the purposes of residential accommodation in Sydney Olympic Park will be required to fund the provision of State public infrastructure that is attributable to the extra demands brought about by future residential accommodation through infrastructure contributions. The arrangements for designated State public infrastructure are to satisfy the needs that arise from development on the land, if the land is developed intensively for urban purposes.

Development consent for development for the purposes of residential accommodation in an intensive urban area in Sydney Olympic Park (as identified in the State Environmental Planning Policy (State Significant Precincts) 2005 Sydney Olympic Park Intensive Urban Development Map) cannot be granted unless the Secretary of the Department of Planning and Environment has certified in writing, to the consent authority, that satisfactory arrangements have been made to contribute towards the provision of State public infrastructure in relation to the land on which the development is to be carried out.

A planning agreement under Division 6 of Part 4 of the EP&A Act entered into between SOPA and a developer will generally be taken to be evidence that satisfactory arrangements exist for the provision of State public infrastructure.

4.2 What are the Local Infrastructure contributions that SOPA will seek from developers?

SOPA will seek both land and monetary contributions from developers of land to which the ICF applies.

4.3 What land is required under the ICF?

SOPA will require land to be dedicated free of cost for the provision of the following infrastructure as part of any development proposal:
- Public school
- Civic streets
- Local streets
- Park edge streets
- Local Parks (Town Centre Local Park 1 and Parkview Local Park 2)

The location of lands to be dedicated is shown in Attachment D.

No value will be ascribed to these land dedications in the calculation of any monetary contribution sought under the ICF. This is because the maximum development potential under Master Plan 2030 (in terms of gross floor area) ascribed to the land to be dedicated can be transferred to the residual of the development site.

4.4 What are the monetary contributions that are required under this Framework and how are they determined?

Formula
Monetary contributions identified in the ICF are calculated in accordance with the following formula:

\[
\text{Contribution per m}^2 \text{ of GFA Above 1:1 FSR ($)} = \frac{\text{Infrastructure cost}}{\text{Total GFA above floor space credit}}
\]

\[
= \frac{\$218,000,000}{1,064,654 \text{ m}^2 \text{ of GFA}}
\]

\[
= \$205 \text{ per m}^2 \text{ (rounded)}
\]

Where:

- **GFA** is gross floor area, expressed in square metres
- **FSR** is floor space ratio
- **Infrastructure cost** is the total projected procurement cost of local infrastructure included in the ICF expressed in dollars and as shown in the table included in section 1.4 thereof.

**Total GFA above floor space credit** is the planned total gross floor area that could be constructed under Master Plan 2030 on all of the land to which the ICF applies less:
the total gross floor area that could be constructed assuming all of the land to which the ICF applies was developed up to a floor space ratio of 1:1, expressed in square metres; and

- the planned gross floor area to be developed for community, transport or venue purposes, expressed in square metres.

Total and site-specific calculations of GFA are shown in the table in Attachment B to the ICF.

Note: formula calculations of GFA do not include any floor area proposed to be used for the purposes of affordable housing.

4.4 Example of Local Infrastructure Contributions

In this hypothetical example, the Sydney Olympic Park Site No. X in the Central precinct has an area of 3,250 square metres.

Under Master Plan 2030 the site has a maximum development potential of 16,600 square metres. This is made up of 4,500 square metres of commercial GFA, 10,100 square metres of residential GFA, 1,000 square metres of community GFA and 1,000 square metres of retail GFA.

Local Infrastructure (Monetary) contribution

The contributions floor space credit is 3,250 square metres, so the total monetary contribution calculation applicable to this site is based on the residual GFA less any community, transport or venue GFA, i.e.

$$16,600 - 3,250 - 1,000 = 12,350 \text{ square metres}$$

The total monetary contribution assuming the site is developed to its maximum development potential is therefore:

$$12,350 \times \$205^* \text{ per square metre} = \$2,531,750$$

*The monetary contribution rate of $205 per m² used in this example is the rate as at the date of this document. However, this rate will be adjusted in accordance with Producer Price Index (PPI).

4.5 Application of FSR credits for existing development rights.

The maximum credit applicable to each development site will be equivalent to the full site being developed at a floor space ratio of 1:1. That is, the maximum credit available (where applicable*) is equal to the area of the site (in square metres) multiplied by the contribution rate.

The floor space credit is applied in the calculation of contributions under the ICF for the following reasons:

- Recognition of the historic investment in existing infrastructure made by development in Sydney Olympic Park through development
contributions previously made by development on land to which the ICF applies under the pre-existing Contributions Strategy (many of these developments were subject to a maximum floor space ratio of 1:1 under Sydney Olympic Park Master Plan 2002).

- Encouragement of the timely development and redevelopment of land in accordance with Master Plan 2030.

(*NOTE: FSR Credits are not applicable to sites that have not been previously developed. These sites are the Coach Parking Site, and Sites 70 to 78 inclusive)
5. Implementation strategy for infrastructure contributions

SOPA will track new development and associated transport demand generation within the precinct and endeavour to match this to the capacity within the existing and planned transport networks.

This implementation strategy will involve developers of land to which the ICF applies demonstrating satisfactory arrangements for the provision of infrastructure.

- Planning agreements under section 93F of the EP&A Act will be the principal mechanism used to implement the ICF and that will be supported by SOPA policy and procedures setting out:
- SOPA’s strategic objectives and fundamental principles with respect to the use of planning agreements;
- circumstances in which a planning agreement is required;
- the process by which developers may negotiate, prepare, exhibit and enter into planning agreements.
- arrangements for the provision of security and the settlement of contributions included in planning agreements;
- arrangements for the pooling of contributions;
- requirements in relation to the provision of works-in-kind or other material public benefits in lieu of monetary contributions;
- credits and offsets policy;
- circumstances in which an implementation agreement may be required to be entered into between the developer and SOPA;
- the procedure for monitoring and review of developer obligations, and discharge of those obligations, under planning agreements;
- the procedure for modifying planning agreements;
- dispute resolution procedures;
- the standard-form planning agreement that SOPA will use as a basis for drafting the agreement; and
- other policy and operational matters with respect to the use of planning agreements relating to development on land within Sydney Olympic Park.
## DEVELOPMENT POTENTIAL OF SITES AFFECTED BY THE INFRASTRUCTURE CONTRIBUTIONS FRAMEWORK

### 2015-2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Project</th>
<th>Total GFA</th>
<th>Commercial GFA</th>
<th>Community GFA</th>
<th>Education GFA</th>
<th>Entertainment GFA</th>
<th>Transport GFA</th>
<th>Recreational GFA</th>
<th>Temp Accomodation</th>
<th>Vacant Exp</th>
<th>Net GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Sydney Showground</td>
<td>30,040</td>
<td>18,580</td>
<td>11,580</td>
<td>2,900</td>
<td>3,240</td>
<td>1,500</td>
<td>1,100</td>
<td>1,900</td>
<td>6,090</td>
<td>23,950</td>
</tr>
<tr>
<td>2016</td>
<td>Sydney Showground</td>
<td>30,040</td>
<td>18,580</td>
<td>11,580</td>
<td>2,900</td>
<td>3,240</td>
<td>1,500</td>
<td>1,100</td>
<td>1,900</td>
<td>6,090</td>
<td>23,950</td>
</tr>
<tr>
<td>2017</td>
<td>Sydney Showground</td>
<td>30,040</td>
<td>18,580</td>
<td>11,580</td>
<td>2,900</td>
<td>3,240</td>
<td>1,500</td>
<td>1,100</td>
<td>1,900</td>
<td>6,090</td>
<td>23,950</td>
</tr>
</tbody>
</table>

### Land Excluded from this Plan

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Sydney Showground</td>
<td>23,950</td>
</tr>
</tbody>
</table>

### Key

- Development area for ICP purposes
- Remaining GFA to be levied
- Used for temporary accommodation
- Vacant
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SYDNEY OLYMPIC PARK LOCAL INFRASTRUCTURE CONTRIBUTION FRAMEWORK (ICF)
DEVELOPERS CONTRIBUTION CALCULATION

Guidance Notes:
The ICF Developers Contribution Calculation is based on the Australian Bureau of Statistics (ABS) Produce Price Index (PPI) 3101 Roads and Bridges, NSW Index.

The ICF Base Date (1) is March 2010 where the ABS PPI 3101 Roads and Bridges, NSW index is 92.2. The ICF Base Date (2) is June 2015 where the ABS PPI 3101 Roads and Bridges, NSW index is 108.7. The Base Date (1) represents the Minister of Planning’s approval of the final version of the ICF and the date at which the ICF was adopted. Base Date (2)’ of June 2015 represents the date the ICF was updated to reflect the 2015 five –year Master Plan 2030 review.

The Calculating Date is the quarter immediately before the Committed Development Agreement date between the Developer and SOPA Contracts.

Developers Contribution Calculation:

<table>
<thead>
<tr>
<th>Base Date Index</th>
<th>Calculating Date Index</th>
<th>$250/m²</th>
<th>Developers Contribution $/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Date (1)</td>
<td>Mar-10</td>
<td>92.2</td>
<td>$250/m²</td>
</tr>
<tr>
<td>Calculating date</td>
<td>Mar-15</td>
<td>108.7</td>
<td>$295/m²</td>
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<tr>
<td>Base Date (2)</td>
<td>Jun-15</td>
<td>108.7</td>
<td>$205/m²</td>
</tr>
<tr>
<td>Calculating date</td>
<td>Jun-15</td>
<td>108.7</td>
<td>$205/m²</td>
</tr>
</tbody>
</table>

Notes:
1. This table is an example of the Developers Contribution based on calculating date.
2. The last updated calculating date index in June 2015
3. Developers Contribution figure is rounded to the nearest dollar.
4. Base Date (2) Developer Contribution Rate allows for uplift from MP2030 review.

Australian Bureau of Statistics (ABS) Index

The ABS PPI 3101 Roads and Bridges, NSW Index can be found on the ABS Website.

Click on the link and follow the website tabs below:
- Statistics
- Inflation Produce Price Index
- Downloads
- Table 17
- Select indices "3101 Road and Bridge Construction NSW".


The ABS PPI Indices are updated quaterly, with data released one month after each quarter.
Land required to be dedicated for public purpose

ATTACHMENT D
Figure C Street Type Key

Civic Streets
1 Olympic Boulevard (North)
2 Olympic Boulevard (South)
3 Dawn Fraser Avenue (East)
4 Dawn Fraser Avenue (Central)
5 Dawn Fraser Avenue (West)
6 Murray Rose Avenue (East)
7 Murray Rose Avenue (Central)

Perimeter Avenues
8 Australia Avenue
9 Kevin Coombs Avenue
10 Edwin Flack Avenue
11 Sarah Durack Avenue
12 Pondage Link
13 Old Hill Road

Town Streets
14 Herb Elliott Avenue
15 Shane Gould Avenue (East)
16 Shane Gould Avenue (West)
17 Showground Road
18 Grand Parade

Local Streets
19 Central Shopping Street
20 Median Street
21 Figtree Drive
22 Parkview Drive
23 North South Street
24 Verge Street
25 Pedestrian Street
26 Shared Way
27 Service Street
28 Coach Parking Street

Park Edge Streets
29 Bennelong Parkway
30 Marjorie Jackson Parkway
31 Shirley Strickland Avenue
32 Park Edge Street Haslam
33 Park Edge Street Boundary Creek
34 Rod Laver Drive
35 Central Park Edge Street

Source: Master Plan 2030 (2017 Review)
QUALITY ASSURANCE

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Quality Control

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

Reviewed by:

[Signature]

Dated 20 April 2017

Report Details

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1 INTRODUCTION

HillPDA was commissioned by Sydney Olympic Park Authority (SOPA) to undertake a retail demand and impact study (hereafter referred to as the Study) to test the viability of increased retail floor space as part of the Sydney Olympic Park (SOP) Master Plan 2030 (2016 Review) [hereafter referred to as the 2016 Review].

The analysis takes into consideration the changes in the Master Plan 2030 and recent surrounding developments, population projections and expenditure data.

Background

SOP Master Plan 2030 (the Master Plan 2030) was first approved in 2010. The Master Plan 2030 provides a comprehensive approach to the long-term development of Sydney Olympic Park, ensuring that it continues to evolve into an active, vibrant suburb within metropolitan Sydney.

As part of NSW Planning and Environment’s requirements and to ensure the Master Plan 2030 remains current and relevant a 5 year review has since been undertaken by SOPA, namely the Master Plan 2030 (2016 Review).

Master Plan 2030 (2016 Review)

The Master Plan 2030 (2016 Review) commenced in 2014 and involved a series of research projects, community and stakeholder consultations, technical studies and workshops.

The review builds on Sydney Olympic Park’s Vision 2025 and Sydney Olympic Park Master Plan 2002, and also complements the NSW Government’s A Plan for Growing Sydney, which was released in 2014. The review also considered a number of influences which have developed since the Master Plan 2030 was approved in 2010. These include:

- A Plan for Growing Sydney which identifies the Olympic Peninsula as part of the Greater Parramatta Priority Growth Area. Sydney Olympic Park has a role in providing: new office space to support growth in the ‘knowledge economy; enabling infrastructure to support growth and urban renewal; and jobs close to home.
- WestConnex project and the proposed light rail corridor from Parramatta to Strathfield / Burwood via Sydney Olympic Park.
The Wentworth Point and Carter Street Priority Precincts and the New Parramatta Road Urban Transformation Strategy which are contributing to the changing use and character of development in and around SOP.

The need to facilitate activation and create a town centre that is vibrant and active 24/7, to support the growing communities in and around the Park and to enhance the event experience for visitors.

The outcomes of the 2016 review promote a considerable uplift in the density of residential, commercial and retail land uses, including:

- 10,700 homes for 23,500 residents;
- 34,000 job opportunities;
- retail space increased to 100,000sqm;
- more local parks; and
- possibilities for new primary and secondary schools.

The figures below shows the SOP Vision in the SOP MP 2030 and subject area of Master Plan 2030 (2016 Review).

Figure 1: SOP Vision in 2030 Master Plan

Source: Sydney Olympic Park Master Plan 2030 (2016 Review)
**SOP Town Centre – Precincts**

SOP has been divided into nine precincts (as shown in the figure below):

- Central Precinct;
- Sports and Education Precinct;
- Stadia Precinct;
- Sydney Showground Precinct;
- Parkview Precinct;
- Boundary Creek Precinct;
- Tennis Precinct;
- Southern Sports Precinct; and
- Haslams Precinct.
The Central Precinct is planned as a key mixed used, high density hub within the Town Centre, combining a range of commercial, retail and residential uses. The proposed retail floor space of up to 100,000sqm will be largely located in this Precinct.

**Greater Parramatta to the Olympic Peninsula (GPOP)**

The Greater Sydney Commission released its vision for GPOP, namely, the area of Greater Parramatta to the Olympic Peninsula in October 2016. The vision sets out the area’s evolution over the next 20 years. This area is envisaged as a successful inner-urban hub, with Olympic Park identified as a Lifestyle Super Precinct. Moreover, Olympic Park is earmarked as GPOP’s eastern economic anchor offering inner-city style living in the Olympic Park Town Centre, Carter Street and Homebush Precincts. Of particular relevance to this Study, is the vision’s assertion that the provision of an abundance of retail, entertainment, government/business/medical services and sporting facilities within a walkable area is one of the key factors in ensuring that Olympic Park prospers as economic anchor.
**Purpose of this Study**

This document will form part of the 2016 review process, with particular focus on retail floor space provision. More specifically this Study will assess the viability of the proposed 100,000sqm of retail floor space as part of the Master Plan 2030 (2016 Review) and consider the economic impacts that this development would have on the surrounding retail hierarchy.
2 SURROUNDING RETAIL DEVELOPMENT

The following provides an assessment of surrounding retail centres that would compete with the proposed development in terms of retail expenditure capture. The Chapter also provides analysis on the retail development pipeline within the immediate area.

Surrounding Competing Centres

Rhodes Waterside Shopping Centre

The Rhodes Waterside Shopping Centre is located approximately 3.3km northeast of the Subject Site and provides approximately 23,922sqm of leasable retail floor space. The shopping centre contains three anchors being Target (3,795sqm), Coles (3,497sqm) and Reading Cinemas (2,841sqm). The remaining 13,789sqm of leasable retail floor space comprises 97 speciality shops. IKEA DIY store (around 20,000sqm) adjoins the shopping centre. IKEA has a very wide but thin trade area.

The Mirvac retail web site states that as of June 2016 the shopping centre had:

- a trade area population of approximately 173,500 persons;
- 11.3 million annual customer visits; and
- An annual performance (MAT) of $207.0 million (excluding the IKEA).

Total retail sales for Rhodes Waterside in the year ending September 2016 was $210.3million (excluding the turnover of IKEA).

In terms of turnover per square metre the centre was ranked 12 out of 95 “little gun” centres across Australia. It achieved $9,618 for the year to September 2016 which was 34% above the median of $7,187/sqm for “little guns” centres. It is therefore a very strong performing centre. It is highly likely that some of its success comes from “piggy backing” the IKEA store.

DFO Homebush

DFO Homebush is Sydney’s leading retail factory or brand outlet centre, located 1.1km southeast of the Subject Site. DFO Homebush,
has recently completed its $100m redevelopment to accommodate an expansion of its Australian, international and luxury retail offering. The centre provides some 29,600sqm of retail floor space\(^4\) and is anchored by Freedom Furniture (2,755sqm), JB Hi-Fi (1,787sqm), Provincial Home Living (1,129sqm) and Just Sport (1,004sqm). It has numerous factory outlet apparel stores. The centre reported a sales turnover of $293m in 2015/16\(^5\) - almost $10,000 per square metre. For arguably an “out-of-centre” destination its performance is extraordinarily strong – around double the level you would expect for this format of retailing.

**Ryde Town Centre**

Ryde Town Centre, also known as ‘Top Ryde’, is located approximately 6.4km northeast of the Subject Site and is accessible via Concord Road/ Church Street. Retailing in the town centre is focused upon the recently developed Top Ryde Shopping Centre which provides some 74,793sqm of retail and leisure floor space and is anchored by Woolworths (4,240sqm), a recently opened Coles and Kmart, Big W (8,207sqm), JB Hi-Fi (1,030sqm), Aldi (1,470sqm) and Best & Less in addition to speciality and leisure related floor space. The centre reported a sales turnover of $382m in 2015/16\(^6\) which is a satisfactory level at $6,750 per square metre.

**Meadowbank Small Village Centre**

The Meadowbank Small Village Centre is located adjacent to the rail station, some 7.2km north of the Subject Site. The Village Plaza is anchored by a 1,400sqm ALDI supermarket and a 1,000sqm Supa IGA supermarket. Based on previous HillPDA floorspace surveys, outside of the Village Plaza is a further 800sqm of strip shops adjacent to the railway station. The trade area for this centre is local, north of Parramatta within a distance of half a kilometre.

**Auburn Precinct**

South of The M4, the largest concentration of retail facilities is found in Auburn Town Centre, some 5.8km south of the Subject Site. The Town Centre contains three supermarkets together with extensive strip shopping. Leyshon Consulting estimated that the Town Centre comprises around 35,000sqm of retail floorspace. The Auburn

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\(^5\) Shopping Centre Directory 2015/16

\(^6\) Shopping Centre Directory 2015/16
Employment Lands Strategy estimates 52,800sqm of space but this includes non-retail commercial shop front space.

The largest component of retailing in the Town Centre is the enclosed Auburn Central shopping mall, a sub-regional shopping centre (PCA definition) of approximately 17,900sqm, located adjacent to the Auburn railway station. The centre is anchored by Big W (7,159sqm) and Woolworths (3,650sqm)\(^7\).

Immediately to the southeast of Auburn Central additional retail floorspace is provide at:

- Auburn Shopping Village at the corner of Auburn Road and Queen Street comprising 22 speciality shops over one level totalling 1,650sqm; and
- Auburn Shopping Arcade at 75 Auburn Road. The centre reported a sales turnover of $400,000 in 2015/16 from 2,024sqm of retail floorspace\(^8\).
- Outside these centres is around 15,000sqm of strip retail space.

Along Parramatta Road in Auburn the Homemaker Megamall Auburn and Red Yard centre provide over 34,000sqm retail floorspace combined, along with a Costco wholesale outlet of approximately 16,450sqm\(^9\).

**The Piazza – Wentworth Point**

The Piazza is small retail precinct serving localised retail demand emerging out of recent residential development in the area and includes restaurants and cafe floorspace, a dentist, estate agent, dry cleaners, hairdressers, community library and a small convenience store of 177sqm\(^10\). The precinct is located 2.7km north of the Subject Site.

**Newington Marketplace**

Newington Marketplace is small retail precinct located along The Avenue of Europe in Newington, some 3.4km west of the Subject Site. The centre is anchored by a Woolworths supermarket (2,218sqm) and comprises a further 15 specialty shops. The centre

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\(^7\) Shopping Centre Directory 2015/16  
\(^8\) Shopping Centre Directory 2015/16  
\(^9\) Shopping Centre Directory 2015/16  
reported a sales turnover of $24.5m in 2015/16\(^{11}\) which is a respectable $6,750/sqm.

**North Strathfield**

Bakehouse Quarter, a small neighbourhood centre is situated some 2.5km southeast of the Subject Site. Retail uses are focused along George Street and comprise a mixture of retail goods and services and leisure facilities catering for a local catchment. Retail and entertainment uses include an ALDI foodstore, restaurants, take-aways, pharmacy, ten-pin bowling, laser tag, convenience stores, medical centre and gym\(^{12}\).

To the east of Bakehouse Quarter, a Woolworths supermarket of some 1,400sqm is provided along Concord Road, with a small provision of specialty retail and take away outlets also provided immediately to the north the supermarket\(^{13}\).

**Sydney Olympic Park**

The existing provision of retail at SOP is interspersed and generally located on the ground floor of mixed use development. There is currently approximately 8,500sqm of retail floorspace provided within SOP which largely serves local residents and visitors to the parklands.

**Proposed Developments**

Additional retail floorspace has been proposed within Precinct D in Rhodes, some 4km east of the Subject Site. The centre will largely service local residents and commuters of Rhodes Train Station. The proposed retail mix includes a national full line supermarket of around 3,500sqm, an Asian food and grocery mini-major and specialty retail, totalling some 10,000sqm of retail floorspace. For the purpose of this Study we have assumed the centre is operational by 2026.

**Wentworth Point Peninsula**

A new commercial centre at Footbridge Blvd is currently under construction some 3.5km north of the Subject Site. The development includes approximately 15,500sqm of retail floorspace and is

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\(^{11}\) Shopping Centre Directory 2015/16
\(^{12}\) Shopping Centre Directory 2015/16
\(^{13}\) Google Maps
designed to cater for the regular shopping and commercial needs of the residents at Wentworth Point. The centre will include:

- A full line supermarket of 4,200sqm (gross lettable area or GLA);
- Asian grocer of 400sqm (GLA); and
- Approximately 5,000sqm (GLA) of specialty shopfront retail floorspace.

Further developments that are currently under construction within the Wentworth Point area and incorporate retail floorspace are provided within the table below:

<table>
<thead>
<tr>
<th>Development name</th>
<th>Retail type</th>
<th>Status</th>
<th>Completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wentworth Point Marinas - Block G – REGATTA</td>
<td>315.14</td>
<td>202.4 construction</td>
<td>2016</td>
</tr>
<tr>
<td>Wentworth Point Apartments – TAIGA</td>
<td>108</td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Wentworth Point Marinas - Block B – ZEN</td>
<td>291</td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Total</td>
<td>606</td>
<td>310</td>
<td></td>
</tr>
</tbody>
</table>

Source: CordellsConnect

Rhodes East

Rhodes East is a Priority Investigation Area east of Blaxland Rd and west of Concord Rd. The investigation area could accommodate up to 4,000 dwellings.

The increased population would demand additional retail services within this area which is part of the Priority Precinct investigation, but it remains too early to be definitive about the amount of space, the retail mix and location(s). A full line supermarket based centre is highly improbable given the estimated population and the presence of competing facilities in Rhodes West, but it is likely that some convenience food and grocery retailing will be part of the mix.

There are a number of development proposals either with development consent or awaiting approval in the locality. Developments that include retail floorspace have been summarised in the table below.
Table 2 - Mixed use developments pipeline

<table>
<thead>
<tr>
<th>Development name</th>
<th>Supermarket</th>
<th>Speciality retail</th>
<th>Status</th>
<th>Completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hills Road Residential Development</td>
<td></td>
<td>200</td>
<td>Development Application</td>
<td>2022</td>
</tr>
<tr>
<td>Wentworth Point – JEWEL</td>
<td>1941</td>
<td>400</td>
<td>Development approval</td>
<td>2017</td>
</tr>
<tr>
<td>Rhodes West Station Precinct Stage 1</td>
<td></td>
<td>305</td>
<td>Development Application</td>
<td>2020</td>
</tr>
</tbody>
</table>

Source: CordellsConnect

These developments will service the immediate area and new residents and will not directly compete with SOP and thus have not been considered in our impact analysis.
3 SOURCES OF RETAIL EXPENDITURE

The purpose of this Chapter is to define the trade area of retail provision in SOP and identify the sources from which any retail provision on the site could expect to capture some retail spend.

Sources of Retail Expenditure

Sources of expenditure to support the centre would be derived from the following:

- Local residents;
- Workers; and
- Visitors/Tourists.

Each of these sources is considered immediately below.

Trade Area Identification of Residential Market

The residential trade area is determined by a combination of factors including:

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

The Trade Area has been defined to include one Primary Trade Area and three Secondary Trade Areas as follows:

- **Primary Trade Area** – encompasses the suburb of Sydney Olympic Park and bounded to the south by M4. A strong retail offer in Sydney Olympic Park would capture the majority of retail expenditure generated from residents in this area;
- **Secondary East Trade Area** – includes the Rhodes peninsula, Liberty Grove, North Strathfield and parts of Concord. The Subject Site will generate a small proportion of business from the
Secondary East and a minimal proportion of food and grocery related expenditure;

- **Secondary South Trade Area** – extends south of the M4 to Auburn and Lidcombe and incorporates parts of Homebush West. Its boundary is limited further to the south by competing retail centres in Auburn, Homebush and Strathfield;

- **Secondary West Trade Area** – includes the suburbs of Silverwater, Newington and Wentworth Point.

The extent of the trade area is shown in the figure below.

**Figure 4: Proposed Developments Main Trade Area**
We refer hereafter to the combination of the Primary Trade Area and Secondary Trade Areas as the residential Main Trade Area (MTA) of SOP.

**Residential Population Projections**

Population projections for the MTA from 2016 to 2031, with the exception of the Primary Trade Area and Secondary West Trade Area, have been based on the NSW Bureau of Transport Statistics (BTS) projections (released September 2014).

HillPDA has adopted BTS projections for the Primary Trade Area’s base year (2016). Projected forecasts, however, have been broadened to include the residents residing in the proposed development at the Subject Site.

We have considered two scenarios:

- **Moderate Growth Scenario (Scenario 1):** HillPDA has applied a rate of ~660 new residents every year from 2016 to 2031 within the Primary Trade Area (i.e. ~300 new dwellings at an occupancy rate of 2.2 persons per dwelling). This scenario assumes a more conservative growth rate, with partial completion of the residential developments at SOP by 2031.

- **Strong Growth Scenario (Scenario 2):** HillPDA has applied a rate of ~1,500 new residents every year from 2016 to 2031 within the Primary Trade Area (i.e. ~700 new dwellings at an occupancy rate of 2.2 persons per dwelling). This scenario assumes most residential components proposed in the Master Plan are completed and largely occupied by 2031.

In 2014 NSW BTS forecasted 8,843 people living in Wentworth Point (which forms part of the Secondary West Trade Area) by 2016 - a significant increase from 2,963 people in 2011. However the rate of growth was expected to decline considerably with a further ~3,500 people moving in to 2021 and only a further 1,000 people by 2031. Since these BTS forecasts the revised capacity for Wentworth Point has increased to 13,725 dwellings (and around 27,500 people). As such Wentworth Point is likely to experience a much stronger growth rate than proposed by BTS. Rhodes has achieved an average of 456 new dwellings per annum over a 10 year period ending 2014. Its

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14 Population Projections are based on levels proposed in the SOP Master Plan 2030 (2016 Review). HillPDA have considered two scenarios, namely a moderate growth scenario and a strong growth scenario, as detailed above.

15 This includes 11,074 dwellings on Mariners, TNT, Waterfront and Palermo sites, 11,776 dwellings on Lots 8, 9, 10 & 18 and 4,600 dwellings on the UAP site. Source: Billberger
annual average rate was over the last 5 years of that period\textsuperscript{16}. For the purpose of this Study Secondary West Trade Area forecast we have assumed the following:

- Applied a rate of 900 new residents every year from 2016 to 2031 when the population is expected to reach \( \sim 22,300 \) people in Wentworth Point; and
- Adopted BTS forecasts for the remaining area of the Secondary West Trade Area.

From the above sources, the population forecasts for the trade areas were estimated as follows.

**Table 3: Forecast Population by Trade Areas**

<table>
<thead>
<tr>
<th>TRADE AREA</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary: Scenario 1</td>
<td>1,879</td>
<td>5,173</td>
<td>8,468</td>
<td>11,762</td>
</tr>
<tr>
<td>Primary: Scenario 2</td>
<td>1,879</td>
<td>9,712</td>
<td>17,546</td>
<td>25,379</td>
</tr>
<tr>
<td>Secondary East</td>
<td>33,357</td>
<td>38,160</td>
<td>41,755</td>
<td>44,817</td>
</tr>
<tr>
<td>Secondary South</td>
<td>28,480</td>
<td>33,863</td>
<td>37,867</td>
<td>41,833</td>
</tr>
<tr>
<td>Secondary West</td>
<td>18,236</td>
<td>23,887</td>
<td>29,850</td>
<td>35,971</td>
</tr>
<tr>
<td>MTA: Scenario 1</td>
<td>81,952</td>
<td>101,083</td>
<td>117,940</td>
<td>134,383</td>
</tr>
<tr>
<td>MTA: Scenario 2</td>
<td>81,952</td>
<td>105,622</td>
<td>127,018</td>
<td>148,000</td>
</tr>
</tbody>
</table>

Source: HillPDA, BTS

The population forecasts indicate that the MTA will increase from almost 82,000 persons in 2016 to over 134,000 persons in 2031 under Scenario 1 and 148,000 persons under Scenario 2, an increase of \( \sim 52,500 \) persons (or 64\%) and \( \sim 66,000 \) (or 80\%) over the period, respectively.

**Local Demographics of Residents**

Demand for retail floorspace is dependant not only on the number of households in the trade area but also the socio-demographic characteristics of those households. This next Section examines the key demographic characteristics of and trends in the residential trade area and benchmarks these to Greater Sydney.

A summary of key demographic data sourced from the 2011 Census is provided in the table below.

\textsuperscript{16} ABS Dwelling Completions by Suburb
As shown in the above table there are a few significant differences between the MTA and Greater Sydney in terms of their demographic profile, including:

<table>
<thead>
<tr>
<th>Table 4 - Demographic Characteristics</th>
<th>MTA</th>
<th>Greater Sydney</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-14 years</td>
<td>16.4%</td>
<td>19.2%</td>
</tr>
<tr>
<td>15-29 years</td>
<td>28.8%</td>
<td>21.0%</td>
</tr>
<tr>
<td>30-44 years</td>
<td>28.1%</td>
<td>22.5%</td>
</tr>
<tr>
<td>45-59 years</td>
<td>16.4%</td>
<td>19.2%</td>
</tr>
<tr>
<td>60-74 years</td>
<td>7.4%</td>
<td>11.9%</td>
</tr>
<tr>
<td>75+ years</td>
<td>3.0%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Median age of persons</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td><strong>Place of Birth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia &amp; Oceania</td>
<td>41.9%</td>
<td>71.3%</td>
</tr>
<tr>
<td>Europe</td>
<td>5.1%</td>
<td>9.5%</td>
</tr>
<tr>
<td>North Africa and Middle East</td>
<td>1.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Asia</td>
<td>35.4%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Americas</td>
<td>0.6%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>0.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Average household size</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Home Ownership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owned or Being Purchased</td>
<td>55.7%</td>
<td>65.2%</td>
</tr>
<tr>
<td>Rented</td>
<td>41.9%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Other/Not Stated</td>
<td>2.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Household Structure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Households</td>
<td>73.3%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Lone Person Households</td>
<td>20.0%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Group Households</td>
<td>6.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Family Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple family w. children</td>
<td>46.6%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Couple family w/o children</td>
<td>38.4%</td>
<td>33.5%</td>
</tr>
<tr>
<td>One parent family</td>
<td>12.2%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Other family</td>
<td>2.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Dwelling Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separate house</td>
<td>32.5%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Townhouse</td>
<td>6.9%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Flat-Unit-Apartment</td>
<td>60.2%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Other dwelling</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Not stated</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Collar</td>
<td>17.9%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Community Services</td>
<td>30.4%</td>
<td>32.0%</td>
</tr>
<tr>
<td>White Collar</td>
<td>44.0%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Selected Medians</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median total personal income ($/weekly)</td>
<td>$730.18</td>
<td>$619</td>
</tr>
<tr>
<td>Median household income ($/weekly)</td>
<td>$1673.33</td>
<td>$1,447</td>
</tr>
<tr>
<td>Median rent ($/weekly)</td>
<td>$458.07</td>
<td>$351</td>
</tr>
</tbody>
</table>

Source: ABS 2011 Census Community Profiles
The average household size in the MTA is smaller than Greater Sydney;
The population is generally younger, with the median age of the MTA being 31, while the Greater Sydney recorded a median age of 36. The younger population was reflected in the higher proportion of residents under 30 years of age (45%) compared to Greater Sydney (40%);
The MTA has a very high representation of Asian born residents (almost 35%) compared to the Greater Sydney (15%);
Residents in the MTA had a higher earning potential compared to the wider Greater Sydney region;
Families are the dominant household type, however, a higher proportion of group households (7%) resided within the MTA compared to 4% for the Greater Sydney;
A high proportion of residents rented their place of residence (42%) when compared to Greater Sydney (32%);
The MTA contained a higher proportion of family types classified as couple families without children (38%) when compared to Greater Sydney (34%);
A significant proportion of the MTA’s dwelling typology was unit style dwellings (60%), this is compared to 26% for the Greater Sydney;
The unemployment rate was slightly higher within the MTA (5.8%) compared to that of the Greater Sydney (5.7%);
The majority of the MTA’s workforce worked within “white collar” professions (44%) and above Greater Sydney (37%);
The earning potential was higher in the MTA ($730/week) compared to the Greater Sydney ($619/week); and
The average rent paid per week was higher ($458/week) than that recorded in the Greater Sydney ($351/week).

Potential Future Demographics

Having regard to the above analysis, the likely future demographic characteristics of any additional population within the MTA would be reflective of a young professional population.

Residents would be attracted to the area as a result of its proximity to employment precincts, access to transit nodes, strong amenities and apartment living.
Other likely characteristics would be:

- Lower car ownership levels;
- Higher income earners (compared to Greater Sydney);
- More likely to be within the young workforce age cohort;
- A highly skilled labour force;
- Higher rates of couples without children; and
- Lower occupancy rates (compared to Greater Sydney).

**Trade Area Identification of Worker Market**

The retail provision at SOP is assumed to capture a significant proportion of trade from workers within a walkable catchment. As such, SOP’s Worker Trade Area has been defined to include the aforementioned Primary Trade Area (referred to as the Worker Trade Area hereafter).

**Worker Market Projections**

The projected number of jobs located within the Worker Trade Area from 2016 to 2031 is largely based on the NSW Bureau of Transport Statistics (BTS) projections (released September 2014). The projections have made allowances for the additional workers resulting from the proposed development at the Subject Site.

The forecasts indicate that the number of jobs within the Worker Trade Area will increase from over 14,500 persons in 2016 to approximately 34,000 persons in 2031.

**Visitor/Tourist Market**

SOP attracts a significant number of visitors to the parklands and from sporting events and ticketed entertainment and as such will attract business from this market. On average, the total number of visitors to SOP in 2014/15 was 10.6 million\(^\text{17}\). For the purposes of this analysis we have taken a conservative approach and assumed visitation numbers remain constant to 2031.

In addition to the above visitors, SOP will also attract additional expenditure from domestic and international overnight tourists occupying rooms at local hotel establishments. It is estimated that hotels in and around SOPA generated approximately 200,000 visitor nights\(^\text{18}\) in

\(^{17}\) SOPA; Sydney Olympic Park Precinct Activation Research, MacroPlan 2015

\(^{18}\) Visitor nights refers the total number of nights that a visitor stays at a hotel
2015\textsuperscript{19}. The Masterplan proposes to substantially increase the hotel floorspace. This coupled with the improved amenity post development would substantially increase the overnight tourists into the area. For the purposes of this study we have assumed hotels in and around SOPA would generate 400,000 visitor nights.

\textsuperscript{19} Hotels within Homebush Bay- Silverwater SA2; Source: ABS Tourist Accommodation 2015-16
4 RETAIL DEMAND AND SUPPLY ASSESSMENT

This Chapter quantifies the total expenditure generated within the SOP trade area from the various sources (i.e. residents, workers and visitors/tourists) and subsequently forecasts demand for retail floorspace within SOP, making allowances for the existing supply of retail floorspace within the trade area.

Residential Expenditure

Residential expenditure was sourced from AnySite Data (2016) which provides household expenditure by broad commodity type.

AnySite retail expenditure per capita data was not available for the Primary Trade Area due to the locality’s limited population. Thus for the purposes of this analysis we have used retail expenditure per capita levels from the Secondary West TA as a proxy, since the future demographic and expenditure per capita levels are likely to be similar.

Based on the above, and assuming population growth forecasts as discussed above, HillPDA has forecast household retail expenditure in the MTA as provided in the following table. Note the forecasts assume growth in real retail spend per capita of 0.8% per annum which is slightly lower than the long term trend in historic spend since 1986.20

Table 5: Total Retail Spend by Trade Area Residents ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Trade Area: Scenario 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>8.8</td>
<td>25.1</td>
<td>42.8</td>
<td>61.8</td>
</tr>
<tr>
<td>Take-away Liquor Stores</td>
<td>0.9</td>
<td>2.6</td>
<td>4.4</td>
<td>6.3</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>1.0</td>
<td>2.9</td>
<td>5.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>1.6</td>
<td>4.5</td>
<td>7.7</td>
<td>11.2</td>
</tr>
<tr>
<td>Restaurants, Hotels and Clubs*</td>
<td>3.1</td>
<td>9.0</td>
<td>15.3</td>
<td>22.2</td>
</tr>
<tr>
<td>Department Stores</td>
<td>2.1</td>
<td>6.0</td>
<td>10.1</td>
<td>14.7</td>
</tr>
<tr>
<td>Apparel Stores</td>
<td>2.7</td>
<td>7.7</td>
<td>13.2</td>
<td>19.1</td>
</tr>
<tr>
<td>Bulky Goods Stores</td>
<td>4.1</td>
<td>11.8</td>
<td>20.0</td>
<td>29.0</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods</td>
<td>4.2</td>
<td>12.0</td>
<td>20.4</td>
<td>29.5</td>
</tr>
<tr>
<td>Selected Personal Services**</td>
<td>1.1</td>
<td>3.2</td>
<td>5.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Total</td>
<td>29.6</td>
<td>84.8</td>
<td>144.4</td>
<td>208.7</td>
</tr>
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<td>Primary Trade Area: Scenario 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>8.8</td>
<td>47.1</td>
<td>88.6</td>
<td>133.4</td>
</tr>
<tr>
<td>Take-away Liquor Stores</td>
<td>0.9</td>
<td>4.8</td>
<td>9.1</td>
<td>13.7</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>1.0</td>
<td>5.5</td>
<td>10.3</td>
<td>15.6</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>1.6</td>
<td>8.5</td>
<td>16.0</td>
<td>24.1</td>
</tr>
</tbody>
</table>

20 The long term trend line has shown just over 1% per annum growth in real retail spend per capita from 1986 to 2014 based on ABS data which includes total population and total retail sales indexed to CPI.
### Sydney Olympic Park Retail Demand and Impact Assessment

#### Restaurants, Hotels and Clubs*
<table>
<thead>
<tr>
<th></th>
<th>2041</th>
<th>2042</th>
<th>2043</th>
<th>2044</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>3.1</td>
<td>16.9</td>
<td>31.8</td>
<td>47.8</td>
</tr>
</tbody>
</table>

#### Department Stores
<table>
<thead>
<tr>
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<th>2042</th>
<th>2043</th>
<th>2044</th>
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<tr>
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<td>11.2</td>
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#### Apparel Stores
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<td>41.2</td>
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#### Bulky Goods Stores
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<td></td>
<td>4.1</td>
<td>22.1</td>
<td>41.5</td>
<td>62.5</td>
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#### Other Personal & Household Goods
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<td>4.2</td>
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#### Selected Personal Services**
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<th>2044</th>
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<tr>
<td></td>
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<td>5.9</td>
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<td>16.8</td>
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#### Total
<table>
<thead>
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<th>2043</th>
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<tr>
<td></td>
<td>29.6</td>
<td>159.1</td>
<td>299.1</td>
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#### Secondary East Trade Area

<table>
<thead>
<tr>
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<th>2053</th>
<th>2054</th>
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</thead>
<tbody>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>131.3</td>
<td>156.3</td>
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<td>Take-away Liquor Stores</td>
<td>14.3</td>
<td>17.1</td>
<td>19.4</td>
<td>21.7</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>15.2</td>
<td>18.1</td>
<td>20.6</td>
<td>23.0</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>23.8</td>
<td>28.3</td>
<td>32.2</td>
<td>36.0</td>
</tr>
<tr>
<td>Restaurants, Hotels and Clubs*</td>
<td>47.9</td>
<td>57.1</td>
<td>65.0</td>
<td>72.6</td>
</tr>
<tr>
<td>Department Stores</td>
<td>31.4</td>
<td>37.4</td>
<td>42.6</td>
<td>47.6</td>
</tr>
<tr>
<td>Apparel Stores</td>
<td>40.7</td>
<td>48.5</td>
<td>55.2</td>
<td>61.6</td>
</tr>
<tr>
<td>Bulky Goods Stores</td>
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<td>74.5</td>
<td>84.8</td>
<td>94.7</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods</td>
<td>63.2</td>
<td>75.2</td>
<td>85.7</td>
<td>95.7</td>
</tr>
<tr>
<td>Selected Personal Services**</td>
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<td>20.0</td>
<td>22.7</td>
<td>25.4</td>
</tr>
</tbody>
</table>

#### Total
<table>
<thead>
<tr>
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<th>2052</th>
<th>2053</th>
<th>2054</th>
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<td></td>
<td>447.2</td>
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#### Secondary South Trade Area

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<tr>
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<th>2063</th>
<th>2064</th>
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<tbody>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>97.7</td>
<td>120.9</td>
<td>140.7</td>
<td>161.7</td>
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<td>Take-away Liquor Stores</td>
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<td>14.4</td>
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<tr>
<td>Specialty Food Stores</td>
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<td>16.4</td>
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<tr>
<td>Fast-Food Stores</td>
<td>18.2</td>
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<tr>
<td>Restaurants, Hotels and Clubs*</td>
<td>35.9</td>
<td>44.5</td>
<td>51.7</td>
<td>59.5</td>
</tr>
<tr>
<td>Department Stores</td>
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<td>29.0</td>
<td>33.7</td>
<td>38.8</td>
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<td>Apparel Stores</td>
<td>30.4</td>
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<td>Bulky Goods Stores</td>
<td>46.6</td>
<td>57.6</td>
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<td>77.1</td>
</tr>
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<td>Other Personal &amp; Household Goods</td>
<td>47.0</td>
<td>58.1</td>
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<td>Selected Personal Services**</td>
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#### Total
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<th>2063</th>
<th>2064</th>
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<tr>
<td></td>
<td>333.2</td>
<td>412.2</td>
<td>479.7</td>
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#### Secondary West Trade Area

<table>
<thead>
<tr>
<th>Category</th>
<th>2071</th>
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<th>2073</th>
<th>2074</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>85.1</td>
<td>115.9</td>
<td>150.8</td>
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</tr>
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<td>Take-away Liquor Stores</td>
<td>8.7</td>
<td>11.9</td>
<td>15.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>9.9</td>
<td>13.5</td>
<td>17.6</td>
<td>22.1</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>15.4</td>
<td>21.0</td>
<td>27.3</td>
<td>34.2</td>
</tr>
<tr>
<td>Restaurants, Hotels and Clubs*</td>
<td>30.5</td>
<td>41.6</td>
<td>54.1</td>
<td>67.8</td>
</tr>
<tr>
<td>Department Stores</td>
<td>20.2</td>
<td>27.5</td>
<td>35.7</td>
<td>44.8</td>
</tr>
<tr>
<td>Apparel Stores</td>
<td>26.2</td>
<td>35.8</td>
<td>46.5</td>
<td>58.3</td>
</tr>
<tr>
<td>Bulky Goods Stores</td>
<td>39.8</td>
<td>54.3</td>
<td>70.6</td>
<td>88.6</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods</td>
<td>40.5</td>
<td>55.3</td>
<td>71.9</td>
<td>90.1</td>
</tr>
<tr>
<td>Selected Personal Services**</td>
<td>10.7</td>
<td>14.6</td>
<td>19.0</td>
<td>23.8</td>
</tr>
</tbody>
</table>

#### Total
<table>
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<th>2072</th>
<th>2073</th>
<th>2074</th>
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<td>287.1</td>
<td>391.3</td>
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</table>

#### MTA Total: Scenario 1
<table>
<thead>
<tr>
<th></th>
<th>2081</th>
<th>2082</th>
<th>2083</th>
<th>2084</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,097.0</td>
<td>1,420.7</td>
<td>1,739.1</td>
<td>2,075.4</td>
</tr>
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</table>

#### MTA Total: Scenario 2
<table>
<thead>
<tr>
<th></th>
<th>2081</th>
<th>2082</th>
<th>2083</th>
<th>2084</th>
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<tr>
<td></td>
<td>1,097.0</td>
<td>1,495.0</td>
<td>1,893.9</td>
<td>2,317.0</td>
</tr>
</tbody>
</table>

Source: HillPDA

*Turnover relating only to consumption of food and liquor (excludes all other types of revenue such as accommodation, gaming and gambling).

** Selected Personal Services includes hair and beauty, laundry, clothing hire and alterations, shoe repair, optical dispensing, photo processing and hire of videos.
The residential MTA generated almost $1.1b of retail expenditure in 2016. Over the period to 2031 total retail expenditure generated is forecast to increase to $2.1b under Scenario 1 and $2.3b under Scenario 2 as a result of population and expenditure growth.

However, of total retail expenditure generated by residents of the trade areas, only a proportion would be captured by retail facilities proposed at SOP.

The type of retail demand from residents would be for high value retail facilities with an emphasis on convenience, quality and eating out. They are likely to spend a reasonable proportion on dining out and thus demand a higher than average level of cafe and restaurant floorspace. Convenience will be important for households in the Primary Trade Area that are likely to be cash-rich but time-poor.

HillPDA has estimated a range of capture rates for different retail stores types as shown in the following table. It should be noted that we have adopted aspirational target capture rates for SOP which reflect the size of the MTA and household expenditure available as well as the competitive landscape.

Table 6: Potential Capture Rates of Household Expenditure

<table>
<thead>
<tr>
<th>Retail Store Type</th>
<th>Primary</th>
<th>Secondary East</th>
<th>Secondary South</th>
<th>Secondary West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>85%</td>
<td>7%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Take-away Liquor Stores</td>
<td>85%</td>
<td>7%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>85%</td>
<td>8%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>80%</td>
<td>8%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Restaurants, Hotels and Clubs</td>
<td>75%</td>
<td>8%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Department Stores</td>
<td>40%</td>
<td>5%</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>Apparel Stores</td>
<td>40%</td>
<td>5%</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>Bulky Goods Stores</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods Retailing</td>
<td>55%</td>
<td>5%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Selected Personal Services</td>
<td>75%</td>
<td>5%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>61%</td>
<td>6%</td>
<td>22%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: HillPDA

Based on the above assumed capture rates and assuming SOP attracts a further 2.5% of household expenditure from beyond the MTA, the following table shows SOP could capture up to $184.3m of retail expenditure in 2016 from residents, increasing to $438.3m in
2031 under Scenario 1 and $586.9m under Scenario 2 once the new development in SOP is completed.

Table 7: Assumed Capture of Residential Expenditure by Retail Facilities in PTA 2016 to 2031 ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
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<tbody>
<tr>
<td><strong>Primary Trade Area: Scenario 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>7.6</td>
<td>21.9</td>
<td>37.3</td>
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</tr>
<tr>
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<td>3.8</td>
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</tr>
<tr>
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<td>4.3</td>
<td>6.3</td>
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<tr>
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<td>3.7</td>
<td>6.3</td>
<td>9.2</td>
</tr>
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<td>Restaurants, Hotels and Clubs*</td>
<td>2.4</td>
<td>6.9</td>
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</tr>
<tr>
<td>Department Stores</td>
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<td>4.2</td>
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</tr>
<tr>
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<td>7.8</td>
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<tr>
<td>Bulky Goods Stores</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods</td>
<td>2.4</td>
<td>6.7</td>
<td>11.5</td>
<td>16.6</td>
</tr>
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<td>0.8</td>
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<td>6.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>52.1</strong></td>
<td><strong>88.8</strong></td>
<td><strong>128.3</strong></td>
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<td><strong>Primary Trade Area: Scenario 2</strong></td>
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<td>Supermarkets &amp; Grocery Stores</td>
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<td>9.0</td>
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<td>7.0</td>
<td>13.1</td>
<td>19.8</td>
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<td>13.0</td>
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<td>16.9</td>
</tr>
<tr>
<td>Bulky Goods Stores</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods</td>
<td>2.4</td>
<td>12.7</td>
<td>23.8</td>
<td>35.8</td>
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<td>12.9</td>
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<td></td>
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<td>9.4</td>
<td>11.2</td>
<td>12.8</td>
<td>14.3</td>
</tr>
<tr>
<td>Take-away Liquor Stores</td>
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<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
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<tr>
<td>Specialty Food Stores</td>
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<td>1.5</td>
<td>1.7</td>
<td>1.9</td>
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<tr>
<td>Fast-Food Stores</td>
<td>1.9</td>
<td>2.3</td>
<td>2.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Restaurants, Hotels and Clubs*</td>
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<td>4.7</td>
<td>5.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Department Stores</td>
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<td>1.9</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Apparel Stores</td>
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<td>2.8</td>
<td>3.2</td>
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<tr>
<td>Bulky Goods Stores</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Other Personal &amp; Household Goods</td>
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<td>3.9</td>
<td>4.4</td>
<td>4.9</td>
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<td>1.3</td>
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<td><strong>Total</strong></td>
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<td><strong>30.2</strong></td>
<td><strong>34.4</strong></td>
<td><strong>38.4</strong></td>
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<td><strong>Secondary South Trade Area</strong></td>
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<td></td>
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<td>Supermarkets &amp; Grocery Stores</td>
<td>35.1</td>
<td>43.4</td>
<td>50.5</td>
<td>58.0</td>
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<td>Take-away Liquor Stores</td>
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<td>4.4</td>
<td>5.2</td>
<td>5.9</td>
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<tr>
<td>Specialty Food Stores</td>
<td>2.9</td>
<td>3.6</td>
<td>4.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>4.7</td>
<td>5.8</td>
<td>6.7</td>
<td>7.7</td>
</tr>
</tbody>
</table>
### Sydney Olympic Park Retail Demand and Impact Assessment

| Restaurants, Hotels and Clubs* | 9.2 | 11.4 | 13.3 | 15.2 |
| Department Stores | 3.6 | 4.5 | 5.2 | 6.0 |
| Apparel Stores | 4.7 | 5.8 | 6.7 | 7.7 |
| Bulky Goods Stores | - | - | - | - |
| Other Personal & Household Goods | 7.2 | 8.9 | 10.4 | 12.0 |
| Selected Personal Services** | 1.9 | 2.4 | 2.8 | 3.2 |
| **Total** | **72.9** | **90.2** | **104.9** | **120.6** |

### Secondary West Trade Area

| Supermarkets & Grocery Stores | 26.2 | 35.7 | 46.4 | 58.1 |
| Take-away Liquor Stores | 2.7 | 3.7 | 4.8 | 6.0 |
| Specialty Food Stores | 2.5 | 3.5 | 4.5 | 5.7 |
| Fast-Food Stores | 3.9 | 5.4 | 7.0 | 8.8 |
| Restaurants, Hotels and Clubs* | 7.8 | 10.7 | 13.9 | 17.4 |
| Department Stores | 6.2 | 8.5 | 11.0 | 13.8 |
| Apparel Stores | 8.1 | 11.0 | 14.3 | 17.9 |
| Bulky Goods Stores | - | - | - | - |
| Other Personal & Household Goods | 8.3 | 11.3 | 14.7 | 18.5 |
| Selected Personal Services** | 2.2 | 3.0 | 3.9 | 4.9 |
| **Total** | **67.9** | **92.6** | **120.4** | **151.0** |

**MTA Total: Scenario 1**

| 184.3 | 265.0 | 348.5 | 438.3 |

**MTA Total: Scenario 2**

| 184.3 | 310.8 | 443.6 | 586.9 |

Source: HillPDA

*Turnover relating only to consumption of food and liquor (excludes all other types of revenue such as accommodation, gaming and gambling).

**Selected Personal Services includes hair and beauty, laundry, clothing hire and alterations, shoe repair, optical dispensing, photo processing and hire of videos

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### Worker Expenditure

The Urbis 2013 National Office Worker Survey found that in 2013 workers in the CBDs of Australian capital cities on average spend $230 per week on retail goods and services in the CBD which equates to an average spend of $11,000 annually. Of course this level is high in the CBDs where the retail offer is very strong and wide. The level of spend will diminish with the size and strength of the retail offer. For the purpose of this assessment we have adopted a more conservative rate of $4,200 on retail goods and services annually which will increase at 0.8% per annum to reflect real growth.

On this basis we estimated a further $61.0m per annum spend coming from workers in 2016 increasing to $161.1m in 2031 as a result of worker population and expenditure growth.

---

21 Urbis 2013 National Office Workers Survey
Visitor/Tourist Expenditure

Visitor/Tourist expenditure was sourced from:

- Sydney Visitor Profile September 2016\(^{22}\) which provides the total visitor spend (including airfares, fuel and accommodation) for international, domestic overnight and domestic day trippers in 2016;
- Regional Tourism Profiles 2009/10\(^{23}\) for the Greater Sydney which provides the breakdown of visitor expenditure by category. The proportion of spend on food, drink and shopping was applied to the total per capita expenditure by visitor reported in the 2016 Regional Tourism Profile for Sydney to derive the average spend on food, drink and shopping in 2016.

HillPDA has made the following assumptions to calculate the total expenditure of visitors/tourists at SOP:

- Visitors attending parklands, events and ticketed entertainment spend on average $58 on food, drinks and shopping per day;
- Overnight tourists spend on average $99 on food, drinks and shopping per day;
- SOP would capture 50% of total expenditure from visitors attending parklands, events and ticketed entertainment (conservative estimate);
- SOP would capture 30% of total expenditure from overnight tourists (conservative estimate); and
- 0.8% growth on retail expenditure per annum which reflects historical trends.

On this basis we estimated a further $318.1m per annum spend coming from visitors and tourists in 2016 increasing to $358.5m in 2031.

Total Potential Retail Sales

The table below combines retail expenditure generated by residents, workers and visitors/tourists which could be captured by retailers in Sydney Olympic Park.

\(^{22}\) Sydney Visitor Profile, Destination NSW; TRA
\(^{23}\) Regional Tourism Profiles 2012/13, Tourism Australia
### Table 8: Total Forecast Potential Retail Sales ($m) 2016 – 2026

<table>
<thead>
<tr>
<th>Retail Store Type</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario 1 (Low Growth in SOP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>108.5</td>
<td>147.2</td>
<td>187.3</td>
<td>230.3</td>
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<tr>
<td>Take-away Liquor Stores</td>
<td>16.3</td>
<td>20.9</td>
<td>25.8</td>
<td>31.0</td>
</tr>
<tr>
<td>Specialty Food Stores</td>
<td>20.2</td>
<td>25.6</td>
<td>31.3</td>
<td>37.5</td>
</tr>
<tr>
<td>Fast-Food Stores</td>
<td>87.7</td>
<td>101.8</td>
<td>116.6</td>
<td>132.5</td>
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<tr>
<td>Restaurants, Hotels and Clubs*</td>
<td>99.2</td>
<td>118.2</td>
<td>138.2</td>
<td>159.5</td>
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<td>Department Stores</td>
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<td>79.7</td>
<td>92.2</td>
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<td>Bulky Goods Stores</td>
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<td>0.0</td>
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<tr>
<td>Other Personal &amp; Household Goods Retailing</td>
<td>90.7</td>
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<td><strong>Total Trade Areas</strong></td>
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<td>957.9</td>
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<td><strong>Scenario 2 (High Growth in SOP)</strong></td>
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</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
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<td>166.4</td>
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<td>292.7</td>
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<td>179.2</td>
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<td>63.3</td>
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<td>85.5</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<td>Other Personal &amp; Household Goods Retailing</td>
<td>90.7</td>
<td>113.5</td>
<td>137.6</td>
<td>163.4</td>
</tr>
<tr>
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<td>50.5</td>
<td>59.6</td>
<td>69.4</td>
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<tr>
<td><strong>Total Trade Areas</strong></td>
<td>563.5</td>
<td>733.7</td>
<td>913.3</td>
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</tbody>
</table>

Source: HillPDA Estimate

*Turnover relating only to consumption of food and liquor (excludes all other types of revenue such as accommodation, gaming and gambling).

**Selected Personal Services includes hair and beauty, laundry, clothing hire and alterations, shoe repair, optical dispensing, photo processing and hire of videos.

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**Demand for Retail Floor Space (sqm)**

Demand for retail floor space is forecast by applying target turnover rates (or industry benchmarks\(^26\)) to captured spend. HillPDA’s target turnover rates have been sourced from various sources and include

\(^{26}\)Note: Derived from various sources including Urbis Retail Averages, ABS Retail Survey 1998-99 escalated at CPI to $2013, Shopping Centre News, HillPDA and various consultancy studies.
growth at 0.5% per annum to allow for real turnover increases in line with historic trend\textsuperscript{25}.

Table 9 – Forecast Demand for Retail Floorspace (sqm)

<table>
<thead>
<tr>
<th>Retail Store Type</th>
<th>Target Rate*</th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
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<tr>
<td><strong>Scenario 1</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>$11,000</td>
<td>9,860</td>
<td>13,055</td>
<td>16,195</td>
<td>19,429</td>
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<td>Specialty Food Stores</td>
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<td>2,524</td>
<td>3,126</td>
<td>3,727</td>
<td>4,345</td>
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<tr>
<td>Fast-Food Stores</td>
<td>$8,000</td>
<td>10,962</td>
<td>12,411</td>
<td>13,872</td>
<td>15,373</td>
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<td>Restaurants, Hotels and Clubs</td>
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<td>18,036</td>
<td>20,969</td>
<td>23,900</td>
<td>26,913</td>
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<td>11,049</td>
<td>12,881</td>
<td>14,732</td>
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<tr>
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<td>11,666</td>
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<td>0</td>
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<tr>
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<td>19,073</td>
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<td>11,795</td>
<td>13,126</td>
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<tr>
<td><strong>Total Retail Floorspace</strong></td>
<td>$6,293</td>
<td>89,536</td>
<td>105,225</td>
<td>120,925</td>
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<td></td>
</tr>
<tr>
<td>Supermarkets &amp; Grocery Stores</td>
<td>$11,000</td>
<td>9,860</td>
<td>14,757</td>
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<td>24,690</td>
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<td>Take-away Liquor Stores</td>
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<td>2,890</td>
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<td>12,809</td>
<td>14,680</td>
<td>16,604</td>
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<td>Restaurants, Hotels and Clubs</td>
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<td>18,036</td>
<td>22,045</td>
<td>26,086</td>
<td>30,241</td>
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<tr>
<td>Department Stores</td>
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<td>15,847</td>
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<td>Clothing Stores</td>
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<td>10,631</td>
<td>12,515</td>
<td>14,457</td>
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<td>Bulky Goods Stores</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Personal &amp; Household Goods Retailing</td>
<td>$5,500</td>
<td>16,495</td>
<td>20,123</td>
<td>23,795</td>
<td>27,576</td>
</tr>
<tr>
<td>Selected Personal Services</td>
<td>$4,000</td>
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<td>12,315</td>
<td>14,182</td>
<td>16,103</td>
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<td><strong>Total Retail Floorspace</strong></td>
<td>$6,267</td>
<td>89,536</td>
<td>111,373</td>
<td>133,406</td>
<td>156,090</td>
</tr>
</tbody>
</table>

Source: * Various including ABS Retail Surveys, Shopping Centre News, Urbis Retail Averages, various annual reports and consultancy reports

By applying the target RTDs to achievable retail sales, HillPDA has forecast demand for around 137,000sqm of retail floor space by 2031 under Scenario 1 and 156,000sqm under Scenario 2 as indicated in the table above.

\textsuperscript{25}Note: Expenditure per capita has increased at around 0.9% to 1.3% above CPI every year since 1986 although HillPDA is currently using an assumption of 0.8% growth per annum from 2016 onwards. Around half of this increase has translated into an increase in retail floorspace per capita (from 1.8sqm in the 1980s to around 2.1-2.2sqm today). The balance of the increase in expenditure has translated into a real increase in turnover per square metre rates.
Retail Floorspace Supply versus Demand

As discussed in Chapter 3, the Primary Trade Area (which includes SOP) currently provides approximately 8,500sqm of retail floor space. With this factored into the supply side, there is clear undersupply of retail shopfront floor space of ~81,000sqm within the Primary Trade Area. Over time this undersupply of retail floor space in the PTA will increase to almost 128,600sqm by 2031 under Scenario 1 and more than 147,500sqm under Scenario 2.

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1: Retail Demand</td>
<td>89,536</td>
<td>105,225</td>
<td>120,925</td>
<td>137,088</td>
</tr>
<tr>
<td>Scenario 2: Retail Demand</td>
<td>89,536</td>
<td>111,373</td>
<td>133,406</td>
<td>156,090</td>
</tr>
<tr>
<td>Retail Shopfront Supply</td>
<td>8,500</td>
<td>8,500</td>
<td>8,500</td>
<td>8,500</td>
</tr>
<tr>
<td>Scenario 1: Undersupply*</td>
<td>81,036</td>
<td>96,725</td>
<td>112,425</td>
<td>128,588</td>
</tr>
<tr>
<td>Scenario 2: Undersupply*</td>
<td>81,036</td>
<td>102,873</td>
<td>124,906</td>
<td>147,590</td>
</tr>
</tbody>
</table>

Source: HillPDA; *Red Text indicates oversupply, Blue Text indicates undersupply
5 ECONOMIC IMPACT ASSESSMENT

This section assesses the impacts of any proposed retail on existing and planned retail centres in the locality.

 Estimated Turnover of Proposal

For the purpose of the impact assessment we have assumed that SOP will have 80,000sqm of occupied retail space trading at close to industry benchmark levels (for metropolitan areas and above financially sustainable levels) by 2026 and that population and worker growth will be conservative (as per the BTS forecast).

For the purpose of the assessment we have assumed the following retail mix:

- Food and groceries: 15%
- Restaurants and fast foods: 20%
- Apparel and department stores: 40%
- Other: 25%

Based on assumed target turnover rates, HillPDA has estimated that retailers in SOP would achieve retail sales of around $540m in 2026 ($6,750/sqm). It is assumed that 40% of the estimated turnover is expected to be generated from the residential market which will redirect expenditure from surrounding centres. The remaining 60% of trade will come from workers in SOP and from day visitors, event attendees and tourists (refer to the preceding section).

Please note that this is considered to be a high impact scenario – 80,000sqm of occupied retail space combined with a low growth forecast for SOP. In all likelihood impacts would be a little lower than shown below.

Redirection of Turnover from Existing Centres

In order to quantify the redirection of trade from competing centres HillPDA prepared a bespoke gravity impact model. For the purpose

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26 This based on the proportion of residential expenditure SOP could capture in the MTA relative to the total potential retail sales for SOP (i.e residents expenditure + worker expenditure + visitor/tourist expenditure)
of the assessment it has been assumed that the first year of trading will be in 2026.

The gravity model was designed on the premise that the level of redirected expenditure from a competing centre is directly proportional to the turnover of that centre and indirectly proportional to the distance from SOP. The results are presented in the following table.

### Table 11: Impact on Surrounding Centres ($m)

<table>
<thead>
<tr>
<th>Retail Centre</th>
<th>Distance from Subject Site (km)</th>
<th>Approx. Retail Floor Space</th>
<th>Turnover in 2016</th>
<th>Turnover in 2026 without Proposal</th>
<th>Turnover in 2026 with Proposal</th>
<th>Immediate Shift in Turnover</th>
<th>% Shift in Turnover in 2026</th>
<th>Shift in turnover from 2016 to 2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney Olympic Park</td>
<td>8,500</td>
<td>60.0</td>
<td>81.3</td>
<td>539.0</td>
<td>457.7</td>
<td>-51.2</td>
<td>-11.3%</td>
<td>-0.4</td>
</tr>
<tr>
<td>North Strathfield</td>
<td>2.5</td>
<td>4,000</td>
<td>35.8</td>
<td>39.9</td>
<td>35.4</td>
<td>-4.5</td>
<td>-11.3%</td>
<td>-0.4</td>
</tr>
<tr>
<td>DFO Homebush</td>
<td>1.1</td>
<td>29,650</td>
<td>300.0</td>
<td>357.9</td>
<td>299.9</td>
<td>-58.0</td>
<td>-16.2%</td>
<td>-0.1</td>
</tr>
<tr>
<td>The Piazza Wentworth Point</td>
<td>2.7</td>
<td>1,000</td>
<td>10.0</td>
<td>11.2</td>
<td>9.7</td>
<td>-1.5</td>
<td>-13.6%</td>
<td>-0.3</td>
</tr>
<tr>
<td>Rhodes shopping centre</td>
<td>4.0</td>
<td>23,900</td>
<td>210.0</td>
<td>219.2</td>
<td>198.5</td>
<td>-20.7</td>
<td>-9.4%</td>
<td>-11.5</td>
</tr>
<tr>
<td>Newington Marketplace</td>
<td>3.4</td>
<td>3,650</td>
<td>27.0</td>
<td>28.0</td>
<td>25.5</td>
<td>-2.5</td>
<td>-9.0%</td>
<td>-1.5</td>
</tr>
<tr>
<td>Wentworth Point</td>
<td>3.4</td>
<td>9,600</td>
<td>104.4</td>
<td>95.0</td>
<td>95.0</td>
<td>-9.3</td>
<td>-9.0%</td>
<td>95.0</td>
</tr>
<tr>
<td>Costco Auburn</td>
<td>3.4</td>
<td>13,000</td>
<td>85.0</td>
<td>95.8</td>
<td>86.9</td>
<td>-8.9</td>
<td>-9.3%</td>
<td>1.9</td>
</tr>
<tr>
<td>Rhodes Station</td>
<td>4.0</td>
<td>10,000</td>
<td>95.1</td>
<td>87.7</td>
<td>7.4</td>
<td>-7.8</td>
<td>7.8%</td>
<td>87.7</td>
</tr>
<tr>
<td>Auburn Town Centre</td>
<td>5.8</td>
<td>34,900</td>
<td>245.0</td>
<td>300.8</td>
<td>283.1</td>
<td>-17.7</td>
<td>-5.9%</td>
<td>38.1</td>
</tr>
<tr>
<td>Auburn Homemaker / Red Yard</td>
<td>5.8</td>
<td>34,650</td>
<td>140.0</td>
<td>170.7</td>
<td>163.9</td>
<td>-6.8</td>
<td>-4.0%</td>
<td>23.9</td>
</tr>
<tr>
<td>Ryde</td>
<td>6.4</td>
<td>56,600</td>
<td>390.0</td>
<td>434.1</td>
<td>409.3</td>
<td>-24.8</td>
<td>-5.7%</td>
<td>19.3</td>
</tr>
<tr>
<td>Meadowbank Village</td>
<td>7.2</td>
<td>5,400</td>
<td>50.0</td>
<td>54.4</td>
<td>51.9</td>
<td>-2.6</td>
<td>-4.7%</td>
<td>1.9</td>
</tr>
<tr>
<td>Other Sources and Localities</td>
<td>-292.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>234,850</td>
<td>1552.8</td>
<td>1992.7</td>
<td>2285.7</td>
<td>0.0</td>
<td>14.7%</td>
<td>732.9</td>
<td>47.2%</td>
</tr>
</tbody>
</table>

Source: Hill PDA  
Column 1: The main competing retail centres in the main trade area or just beyond.  
Column 2: Shortest Distance from SOP (Central) by road  
Column 3: Various sources including Shopping Centre News (SCN), PCA Shopping Centres Directory and HillPDA surveys  
Column 4: Estimated turnover ($) in 2016. Various sources including SCN, PCA and HillPDA estimate  
Column 5: HillPDA estimate having allowed for population growth and new centres (Wentworth Point and Rhodes Station)  
Column 6: Turnover following expansion of retail space in SOP. HillPDA estimate using gravity theorem  
Column 7: The difference between Column 6 and 5  
Column 8: Calculated as Column 7 divided by Column 5  
Column 9: Calculated as Column 6 minus Column 4  
Column 10: Calculated as Column 9 divided by column 4 (allows for growth over time)

The above table shows that in absolute dollar terms the largest impacts will be on DFO Homebush ($58m), Ryde Shopping Centre ($25m) and Rhodes Shopping Centre ($21m). Around $293m of trade at SOP is expected to come from workers in SOP and from day visitors, tourists, events and the like. This proportion of trade is not expected to be redirected from the above centres. Some proportion
of this is likely to be redirected from larger centres beyond the main trade area such as Burwood and Parramatta.

There are no universal measures of significance of economic impact. There are references in various consultancy reports and statements in the Land and Environment Court which suggest that a loss of trade below 5% is considered insignificant, 5% to 10% is low to moderate, 10% to 15% is moderate to high and above 15% is a strong or significant impact.

On this basis only DFO Homebush will experience an impact that is considered significant. A number of other centres are likely to experience moderate impacts including Rhodes, Wentworth Point and North Strathfield.

However as stated above some of these centres are overtrading when benchmarked to industry averages. Rhodes is trading 34% above the National average of “little gun” centres (as defined by Shopping Centre News) in terms of dollars per square metre. It can therefore sustain an immediate impact of 9% loss in trade. DFO Homebush is trading at more than twice the level expected of homemaker and brand outlet centres normally located in industrial or “out-of-centre” locations.

Furthermore, these are immediate impacts in 2026. Over time these impacts will lessen as a result of population and expenditure growth in the locality. As shown in the final column in the above table Rhodes and Newington are expected to experience a 5% to 6% loss in trade from 2016 to 2026. This is considered minor or insignificant. Some centres are expected to enjoy some growth over this period.

Moreover, the turnover of SOP should be seen within the context of the amount of expenditure generated in the trade area. Table 5 indicates that residents in the Main Trade Area generated $1.1b of retail expenditure in 2016 which is forecast to increase to $1.6b by 2026 under the low growth scenario (46% increase). Under the high growth scenario main trade area expenditure is expected to reach $1.8b by 2026 (64% increase).

Furthermore the demand modelling indicated that by 2031 125,000sqm-150,000sqm of retail floorspace could be supported in SOP (Table 9). The development of say 80,000sqm of retail space by 2026 or say 100,000sqm by 2031 is therefore achievable without resulting in social detriment to existing or planned centres.
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