



Submission to Sydney Olympic Park Master Plan 2030 (2016 Review)

On behalf of The GPT Group

15 November 2016

Table of Contents



Executive Summary	5
1.0 Overview	8
1.1 Background	8
1.2 MP Review	9
1.3 Key limitations with MP Review	10
2.0 MP Review – Discussion	13
2.1 Urban structure	13
2.1.1 Connections	13
2.1.2 Open space	20
2.2 Land use framework	27
2.2.1 Mixed use precinct	27
2.2.2 Land use categorisation	31
2.3 Building height and built form	31
2.4 Floor space ratio	35
2.5 Car parking	35
2.6 Infrastructure	36
Transport	36
Open space	36
3.0 Conclusion	37

List of Figures

Figure 1: GPT's Site within the Central Precinct

Figure 2: MP Review - Proposed Urban Structure

Figure 3: MP Review – Proposed Urban Structure Road Connections - Fragmented, small lots within GPT's site

Figure 5: Spatial Requirements for Typical Retail Layouts – Anchor with speciality to edge

Figure 6 Spatial Requirement for Typical Retail Layouts – Rouse Hills Town Centre

Figure 7: Recommended Urban Structure –Through site links

Figure 8: Existing and proposed Public Spaces - Recommended Urban Structure –Through site links

Figure 9: Extract of Figure 5.6 Central Precinct Site Floor Spce Ratio Plan (Source MP Review)

Figure 10: Extract of Figure 5.6 Massing analysis illustrating impact of park on FSR

Figure 8: MP Review – Proposed Urban Park – GPT's site Central Precinct

Table of Contents

Figure 12: Alternative indicative distribution of open spaces across the site
Figure 3: Existing open space and proposed open space in MP Review
Figure 4: Central Precinct Land Uses Plan
Figure 15: Depth of Proposed mixed use precinct and commercial precinct
Figure 16: Constrained tower placement within the existing mixed use precinct
Figure 17: More flexible tower placement within an extended mixed use precinct
Figure 8: Recommended Expanded Mixed Use Area
Figure 19: Provide a greater variation in tower heights across the precinct (east-west)
Figure20: Amendment to Central Precinct building height plan
Figure21: Proposed increased heights on the SEPP Building Heights Map

Executive Summary

This submission has been prepared on behalf of The GPT Group ('GPT') in response to the exhibition of the Sydney Olympic Park Master Plan 2030 (2016 Review) (the 'MP Review').

The MP Review provides a considered response to the changing local, regional and metropolitan context and promotes initiatives to facilitate the ongoing evolution of the town centre into a vibrant and active hub.

GPT supports the MP Review as a key instrument in the ongoing transformation of Sydney Olympic Park and believes it provides significant advances towards realising the vision for a 'thriving economic town centre and growing residential community in the heart of metropolitan Sydney'.

In order to ensure the planning framework facilitates the ability to achieve this vision, there are several observations and recommendations outlined below, which would provide the requisite flexibility to allow for the master plan to be realised.

(1) Urban structure:

The MP Review prescribes mandated vehicle connections and the provision of a large, contiguous area of open space at grade. This fragments the Central Precinct into lot sizes which limit the ability to accommodate key anchor and destination retailers.

Recommendations

Vehicle connections

- Adopt a flexible urban structure for additional north-south and east-west connections through GPT's site. Connections should be identified as 'indicative', comprising a range of pedestrian linkages and shared streets. The character of the links will be a street network hierarchy defined by a future retail concept, as part of an overall, integrated design solution.

Open space

- Include an open space principles diagram for the Central Precinct identifying a series of meaningful open spaces. There should be a primary open space located at the north of the site. Update the design guidelines and character statements for 11 Urban Park – Central (11) in Appendix B of the Review to reflect this.
- Remove reference to open space on Land Uses Plan for the Central Precinct.
- Apply a height to both the SEPP building height maps and MP Review height maps at 33m and 8 storeys, as the open space shown in the open space principles diagram is indicative and could be provided in a variety of ways.

(2) Land use

The MP Review seeks to facilitate a mix of uses within the Central Precinct, including retail, commercial, education and student accommodation, civic and community uses, cultural, entertainment and leisure uses, along with hotels and residential. However, the delivery of a mix of uses is impacted by the designation of land uses within the precinct.

Recommendations

Mixed use precinct

- Expand the mixed use area to Figtree Drive and to the north.
- Allow residential uses within the expanded mixed use zone on Figtree Drive the and new north-south street.

Land use categorisation

- Clarify and update the Land Uses in the table of allowable land uses, Land Use Plan and Active Frontages Plan so as to not conflict with the wide range of uses permitted within the B4 Mixed Use Zone applying under the SEPP State Significant Precincts.

(3) Building heights

While the MP Review provides for an increase in the heights of the buildings, variation in heights from the 20 storey buildings provided within the Central Precinct is desirable to create architectural diversity.

An extension of the variable 4-8 storey street wall/block edge to the new main street is recommended, in lieu of the proposed 6-8 storey street wall height, to achieve a consistent approach to the street wall heights within the Central Precinct and a corresponding architectural relationship to the taller buildings.

Recommendations

Tower heights

- Amend the building heights maps for the Central Precinct to indicate 25 and 35 storey buildings.
- Amend the SEPP Building Height Map to increase the buildings heights from 74m to 90m and 102m to allow for the 25 storey and 35 storey height variation in the centre of the Central Precinct.

Street wall heights

- Extend the 4-8 storey variable street wall height to the new main street.

(4) Floor space ratio

Further massing testing is required to ensure the FSRs can achieve the proposed building heights. There may need to be limited increases in the FSRs within the central sites to provide for architectural diversity and variation in building heights. Preliminary massing indicates an FSR in the order of 4:1 may be required to facilitate the height variation, where an FSR of 3.6:1 currently applies. More detailed modelling and analysis will be required to determine the required FSR.

The allocation of FSR in the MP 2016 is unnecessary. The FSR should be determined by the SEPP.

Recommendations

- Delete FSR allocation map applying to the Central Precinct map from the MP Review.
- Review FSRs in the SEPP to ensure they align with the height controls, including the suggestion for greater variation in heights.

(5) Built form controls

Certain built form controls require reconsideration to ensure they do not impact on the ability to realise the development yields and targets anticipated under the MP Review.

Recommendations

- Increase the floor plate control for residential floor plates above 15 storeys from 800m² gross building area (GBA) to 900m² gross floor area (GFA).
- Remove the requirement for a 40m separation between towers and require separation distances which are consistent with SEPP 65 Apartment Design Guide.

(6) Infrastructure

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 the amount of the SIC levy, the extent of regional infrastructure that it will fund and the administrative arrangements are not yet known.

Recommendations

Open Space

GPT is seeking to retain ownership of the future open spaces to be delivered within their site. This structure will allow for the management and maintenance of this open space in partnership and consultation with the Sydney Olympic Park Authority.

(7) Car parking

The Sydney Olympic Park Master Plan 2030 (2016 Review) - Assessment of Traffic and Transport Outcomes prepared by GTA Consultants indicates that the parking ratios identified for retail uses are not adequate for a significant retail centre.

The controls in the MP Review specify car parking is to be located underground and identifies limited opportunities for above ground/podium car parking. Podium car parking is a way to ensure flexibility of buildings beyond the life of the master plan, by allowing retrofitting to other uses at a later date where car parking becomes redundant or as a result of improvements to public transport and changes in technology and approaches to car ownership. It is significantly more difficult to retrofit basement structures where they become obsolete for the reasons outlined above.

Recommendations

Car parking

- Adopt a single maximum rate for retail parking of 4.5 spaces per 100m² (GLA).
- Expand the provisions relating to above ground/podium car parking to allow for well-designed podium car parking. This could include controls on the appropriate sleeving of podium car parking with active uses, residential uses or architectural screens.

1.0 Overview

1.1 Background

This submission has been prepared on behalf of The GPT Group ('GPT') in response to the exhibition of the Sydney Olympic Park Master Plan 2030 (2016 Review) (the 'MP Review').

GPT has a long term lease over a large landholding within the Central Precinct, which is located within the Sydney Olympic Park Town Centre. GPT's land (the 'site') is shown in Figure 1 below.



Figure 1: GPT's Site within the Central Precinct

Over the last number of years, GPT and their consultant team have engaged with the Sydney Olympic Park Authority (SOPA) and the Department of Planning and Environment (DP&E) to articulate their vision and thinking for GPT's site and the broader Central Precinct, which aligns with the strategic importance of Sydney Olympic Park (SOP). This vision was articulated through a series of meetings, presentation and submissions provided to SOPA and DP&E over that period.

1.2 MP Review

The MP Review provides a considered response to the changing local, regional and metropolitan context. As articulated by SOPA and DP&E, the review has been informed by a number of key drivers which include:

- The location of the Olympic Peninsula within the Greater Parramatta to Olympic Peninsula (GPOP) Priority Growth Area, which is identified as a major development area in *NSW A Plan for Growing Sydney*.
- The ongoing development and changing character of the adjacent Wentworth Point and Carter Street Priority Precincts.
- Improvements in transport infrastructure, including the Parramatta Light Rail, Sydney Metro West, WestConnex and associated road works.
- Recognition of the need to support the growing SOP community – including workers, residents and visitors – with an active and vibrant town centre that provides a diverse range of services, facilities and experiences.
- Ongoing development within SOP and the take-up of current planned capacity under the Master Plan 2030.
- The importance of the continuing role of SOP as a major events precinct within Sydney and NSW.

The MP Review promotes the following initiatives to facilitate the ongoing evolution of the town centre into a vibrant and active hub:

- Creating an active, 18-24/7 town centre with a strong day and night economy by maximising opportunities for mixed use development which integrates retail, residential, commercial, entertainment and educational uses. The greater opportunities for mixed use development will be focused within the core of the Town Centre within the Central Precinct.
- Facilitating meaningful residential, retail and educational uses. The targets for residential, retail and education uses, both in terms of dwellings, jobs and floor space, have been increased significantly from the current master plan. This has been reflected in increased floor space ratios (FSRs) and building heights.
- Increased tower developments to reinforce the urban structure of the Town Centre at its core.
- Providing opportunities for a diversity of built forms through varying building heights, street walls and setbacks.
- Maximising connectivity throughout the Town Centre with a diversity of linkages that promote pedestrian activity and active frontages.

The MP Review has sought to implement these initiatives through the following:

- **A revised land use strategy that provides for:**
 - The introduction of a mixed land use strategy to facilitate a town centre within the Central Precinct, which integrates residential, commercial, retail, education, community and other uses to service the needs of workers, residents and visitors.
 - An expansion of residential uses within the Central Precinct.
 - An expansion of retail uses within the Central Precinct.
 - A mixed use 'zone' that provides a transition to the residential areas.
- **Increased floor space ratios (FSRs)** across the majority of the Central Precinct to reflect the revised land use strategy and associated uplift in residential and retail targets.
- **Increased building heights** across the Central Precinct including:
 - 45 storeys along Olympic Boulevard, from the previous 20-32 storey height limit.

- 20 storeys to the south of the new east-west main street, from the previous 8-10 storeys height limit.
- Introduction of variable street wall heights of 4-8 storeys.

1.3 Key limitations with MP Review

The MP Review provides significant advances towards realising the vision for a vibrant, mixed use town centre. However, there are a number of key limitations within the framework, which we believe will impact on the ability to achieve this vision.

The key limitations of the MP Review form the basis of this submission. These are outlined below and detailed further in Section 2, along with supporting analysis.

(1) Urban structure

The MP Review seeks to establish an urban structure that comprises of a hierarchy of linkages and public spaces within the Town Centre. While the principles of providing linkages and open space is supported by GPT, the hierarchy of vehicle connections and open space that is proposed within the Central Precinct, principally within GPT's site, is not conducive to the creation of an active and vibrant retail, commercial and mixed use town centre.

The key components of the proposed urban structure which are not supported by GPT include:

- The location and characterisation of through site links as vehicle connections.
- The provision of a large, contiguous area of open space located on the northern side of the main street at grade.

The proposed vehicle connections create, smaller fragmented lot sizes that cannot support the character or quantum of retail that is envisaged for the centre and do not align with the fundamental principles for a retail town centre. This will effectively preclude the realisation of the expanded retail opportunities that are envisaged for residents, workers and visitors to SOP in the MP Review. GPT supports the provision of a high level of permeability, however there is a need for more flexibility in the categorisation and location of connections to support the creation of a retail town centre.

The provision of additional open spaces is supported by GPT, however a large, contiguous open space, wholly at grade, which is surrounded by roads on all sides, further fragments the site and opportunities for retail uses. An expansive, vast open space of this scale is not well suited to the retail town centre and will not promote activity or vitality. The size, distribution and quantum of open space to be provided within GPT's site requires careful and detailed consideration of how these spaces will extend and complement the existing spaces at SOP. A more flexible approach is sought that would allow for the open space to be distributed over a series of smaller spaces, at different levels and with different characters, accommodating a range of uses. Smaller spaces that are activated by adjoining land uses are considered more desirable and conducive to a town centre environment.

(2) Land use

The MP Review seeks to facilitate a mix of uses within the Central Precinct, including retail, commercial, education and student accommodation, civic and community uses, cultural, entertainment and leisure uses, along with hotels and residential. However, the delivery of a mix of uses is impacted by the designation of land uses within the precinct.

The designated mixed use spine running east-west through the centre, flanked by a commercial zone to the north and road to the south, presents a narrow and problematic land use designation. It constrains opportunities for the placement of residential towers and maximising tower separation for solar access consistent with the SEPP 65 Apartment Design Guide.

Accordingly, a larger mixed use zone that maintains the requirement for active frontages along the main street and other key retail/commercial streets, while allowing for ground floor residential uses on Figtree Avenue and single north-south street, is recommended.

(3) Building heights

While the MP Review provides for an increase in the heights of the buildings, greater variation in heights from the 20 storey buildings provided within the core of the Central Precinct is desirable. This will provide a better transition between the 30 storey building heights on Australia Avenue and 45 storey building heights on Olympic Boulevard.

An extension of the variable 4-8 storey street wall/block edge to the new main street is also recommended in lieu of the proposed 6-8 storey street wall height. This will provide a consistent approach to the street wall heights within the core of the precinct and will ensure a better architectural relationship to the taller buildings.

(4) Floor space ratio

Preliminary massing studies undertaken by SJB indicate that the proposed 45 storey height limit (149m) cannot be achieved with the proposed floor space ratio. This will result in potentially lower building heights along Olympic Boulevard, which will compromise the hierarchy of building heights that is envisaged to reinforce the urban structure.

There may need to be an increase in the FSR within the central sites that is commensurate with the variation in building heights being recommended. Preliminary massing indicates an FSR in the order of 4:1 may be required to facilitate the height variation, where an FSR of 3.6:1 is currently proposed. More detailed modelling and analysis will be required to determine the FSR.

Furthermore, the allocation of FSR, as shown in Central Precinct Site FSR Plan is unnecessary. The map includes the same FSR as contained in the SEPP, but allocates the FSR over irregular parcels. The maps should be deleted as they do not provide any clarity regarding the FSRs that could be achieved on the development lots.

(5) Built form controls

There are a number of built form controls that require reconsideration, as they will impact on the ability to realise the development yields and targets that are anticipated under the MP Review. Furthermore, these controls are not consistent with other policy frameworks, including the SEPP 65 Apartment Design Guide (ADG).

The requirement for 40m tower separation between neighbouring buildings is inconsistent with the maximum tower separation distance of 24m that is mandated under the ADG and will severely impact the number of towers that can be accommodated within the Central Precinct.

The desire for slender towers is supported by GPT, however restricting residential floor plates above 15 storeys to a maximum gross building area (GBA) of 800m² will not deliver viable residential buildings. A maximum residential floor plate of 900m² gross floor area (GFA) is more appropriate, provides consistency with the floor plate controls in the adjacent Carter Street Precinct and will still achieve slender tower forms.

(6) Infrastructure

There is need for greater clarity in relation to infrastructure delivery and the associated funding framework. The Infrastructure Contributions Framework (ICF) specifies the levy and works schedule for local infrastructure and identifies that regional infrastructure, including the proposed Parramatta Light Rail, are proposed to be

delivered through a Special Infrastructure Contribution (SIC). However, the actual the amount of the SIC levy, the extent of regional infrastructure that it will fund and the administrative arrangement are not yet known.

While DP&E is expected to provide details of the SIC by the end of this year, this could have implications for infrastructure identified in the MP Review, as well as the viability of future development that is permitted under the MP Review.

(7) Car parking

The Sydney Olympic Park Master Plan 2030 (2016 Review) - Assessment of Traffic and Transport Outcomes prepared by GTA Consultants and included at Attachment 2, recommends an increase in car parking ratios for retail uses commensurate with the parking demands for a retail centre of this scale and nature.

In terms of the location of car parking, the controls in the MP Review specify that all car parking is to be located underground, while acknowledging that there will be circumstances in which above ground car parking cannot be avoided, such as sloping sites. While this provides some flexibility in terms of locating car parking above ground, there is a lack of certainty as to the circumstances in which podium car parking would be considered. Podium car parking is a way to ensure flexibility of buildings beyond the life of the master plan, by allowing retrofitting to other uses at a later date where the car parking becomes redundant or as a result of improvements to public transport and changes in technology and approaches to car ownership. It is significantly more difficult to retrofit basement structures where they become obsolete for the reasons outlined above.

It is important innovative ways are encouraged to address this, allowing well designed podium car parking with appropriate floor to floor heights. Podium parking is being considered within the precincts adjacent to SOP, namely Wentworth Point and Carter Street.

Strategic Policy Framework

The preparation of the MP Review has involved both SOPA and DP&E, and undoubtedly consultation and collaboration with key stakeholders and government agencies, including the Greater Sydney Commission (GSC) and Transport for NSW (TfNSW). Notwithstanding, there are a number of strategic policy documents applying to SOP and the broader region, which are yet to be completed, which may have implications for the MP Review and development within SOP. These policies include:

- The District Plans being prepared by the GSC;
- The Land Use and Infrastructure Strategy for the Greater Parramatta Priority Growth Area being prepared by DP&E in collaboration the GSC, TfNSW and Parramatta Council; and
- The Olympic Peninsula Special Infrastructure Contribution Plan (OPSIC), being prepared by DP&E.

It is important that there is a future opportunity to revisit any aspects of the MP Review which are affected as a consequence of outcomes from these as yet undetermined strategic policies.

2.0 MP Review – Discussion

Details of those elements of the MP Review which we believe need to be revisited, along with our recommendations for amendments, are provided below.

2.1 Urban structure

The MP Review seeks to establish an urban structure that comprises a hierarchy of linkages and public spaces within the Town Centre. While this principle is supported by GPT, the hierarchy of vehicle connections and open space that is proposed within the Central Precinct, principally within GPT's site, is not conducive to the creation of an active and vibrant retail, commercial and mixed use town centre as envisaged under the MP Review.

The key components of the proposed urban structure that are not supported by GPT include:

- The location and characterisation of the through site links as vehicle connections.
- The provision of a large, contiguous area of open space located on the northern side of the new main street, at grade.

2.1.1 Connections

The MP Review introduces additional east-west and north-south connections, creating a hierarchy of vehicle connections through the Central Precinct and GPT's site. The character of these new vehicle connections are represented in the diagram at Figure 2.



Figure 2: MP Review - Proposed Urban Structure

They are all vehicle connections of different widths and functions ranging from a 9m road around a large park, a 12m east-west service road, 18m north-south connections and the 20m east-west main street.

The main street connection is supported by GPT as an important part of the urban structure and creation of a town centre. However, many of the other vehicle connections are highly prescriptive and create fragmented lots, which will effectively preclude the realisation of the expanded retail opportunities that are envisaged for residents, workers and visitors to SOP in the MP Review.

Figure 3 illustrates the indicative lot sizes that will result from the proposed vehicle connections. The lots are all under 5,000m², with the exception of the lot fronting Olympic Boulevard, which is 5,300m². Some of the lots are particularly small at around 2,000m²-2,500m².

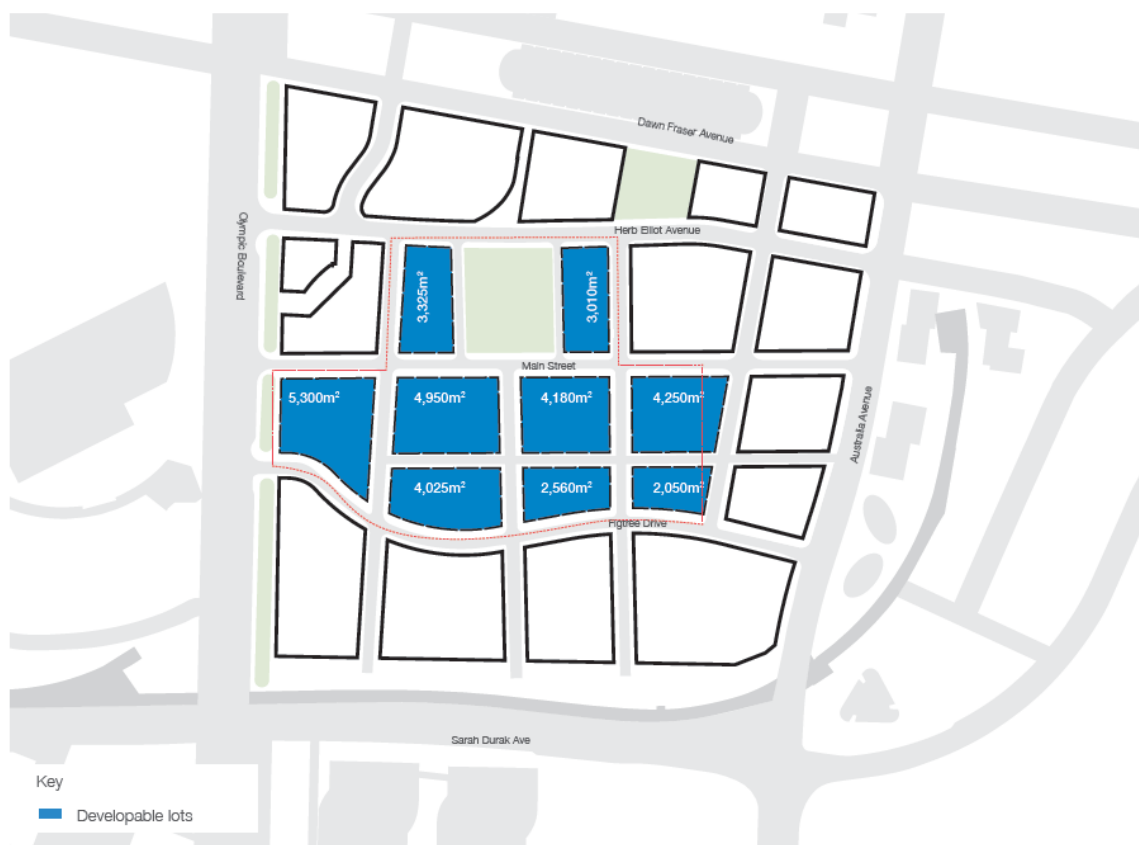


Figure 3: MP Review – Proposed Urban Structure Road Connections - Fragmented, small lots within GPT's site

The MP Review identifies a target retail gross floor area of around 60,000m². This quantum of retail within the Central Precinct is supported by the Feasibility & Market Testing prepared by Hill PDA as part of the MP Review, which identifies the following:

- The retail expenditure modelling indicates 'significant growth in demand for retail floor space in SOP with potential for a regional shopping centre'.
- The retail capacity recommendation provides for a concentration of retail uses in the Central Precinct and a spread of retail uses across other precincts.
- The floor space take up is likely to occur in a major block of 50,000-60,000m². The balance of retail take up will be proportional to development in other precincts at SOP.

This indicates that the Central Precinct should be the primary focus for retail development. For a successful centre, retail uses need to occur in a concentrated area to promote vibrancy.

There are many examples of poorly performing centres where retail uses “bleed” along long stretches of road.

Based on Hill PDA’s analysis and given GPT’s site occupies the majority of the Central Precinct that is identified for retail/commercial uses in the MP Review Land Use Plan, it is reasonable to expect that most of the target retail GFA will need to be accommodated on GPT’s site. However, this will not be possible under the proposed urban structure due to the location and number of vehicle connections and configuration of open space.

Just as residential uses have ideal footprints for achieving desired built form, amenity and sustainability, so do retail uses. Retail uses typically underpin the high levels of activation sought in a vibrant town centre. For this reason, retail is a fundamental building block in town centre models. Typically, to deliver the quantum of retail that is envisaged under the MP Review, the building blocks required would consist of at least four (4) major space users, known as anchors, ranging from 4,200m² to 12,000m². Anchors are the greatest generators of pedestrian traffic. They also generate footfall, which allows the smaller retailers - specialities and mini majors (ranging from 400m² to 1500m²) – to trade successfully, which results in a vibrant, activated social spine of activity.

A scaled comparison of the spatial requirements of these necessary retail anchors to GPT’s site is illustrated in Figure 4. The average size of a full line supermarket (excluding loading and ancillary specialities) is around 4,200m², a discount department store is 6,000m², a cinema is 7,000m² and a department store is around 8,000m² to 2,000m². Figure 4 clearly demonstrates that the lot sizes resulting from the proposed vehicle connections are too small to accommodate these anchors.

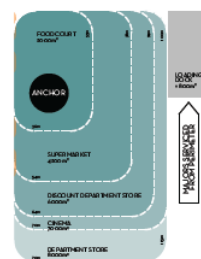
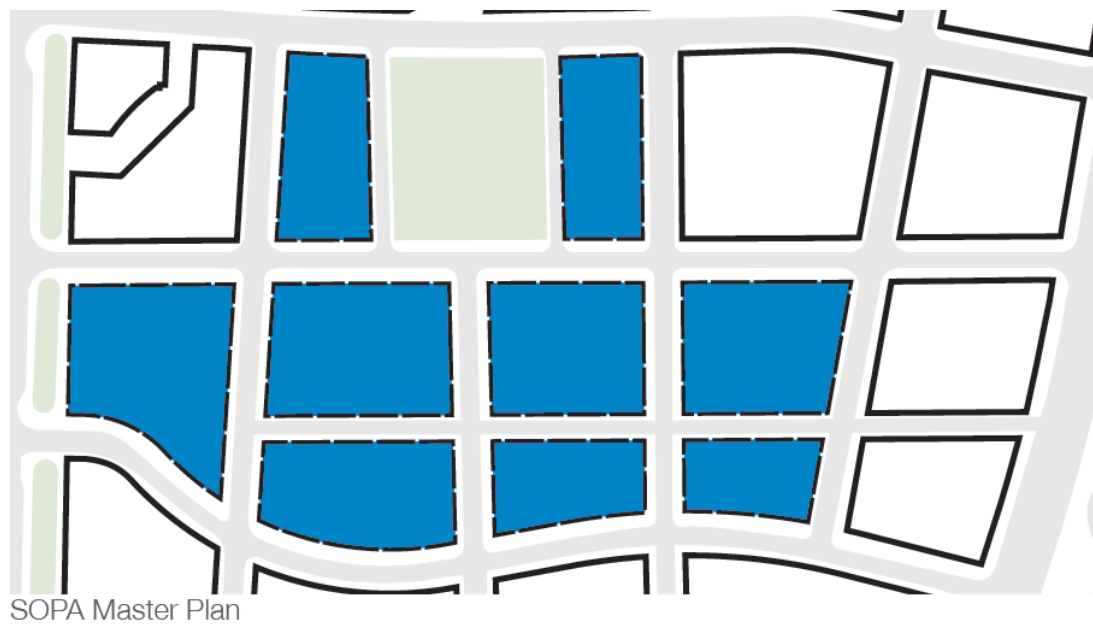


Figure 4 Spatial Requirements for Typical Retail Layouts

This is reinforced further in Figure 5, which shows spatial requirements of supermarket (including servicing) with ancillary activation along the streets in the form of speciality shops, cannot be achieved on the largest lots currently proposed.

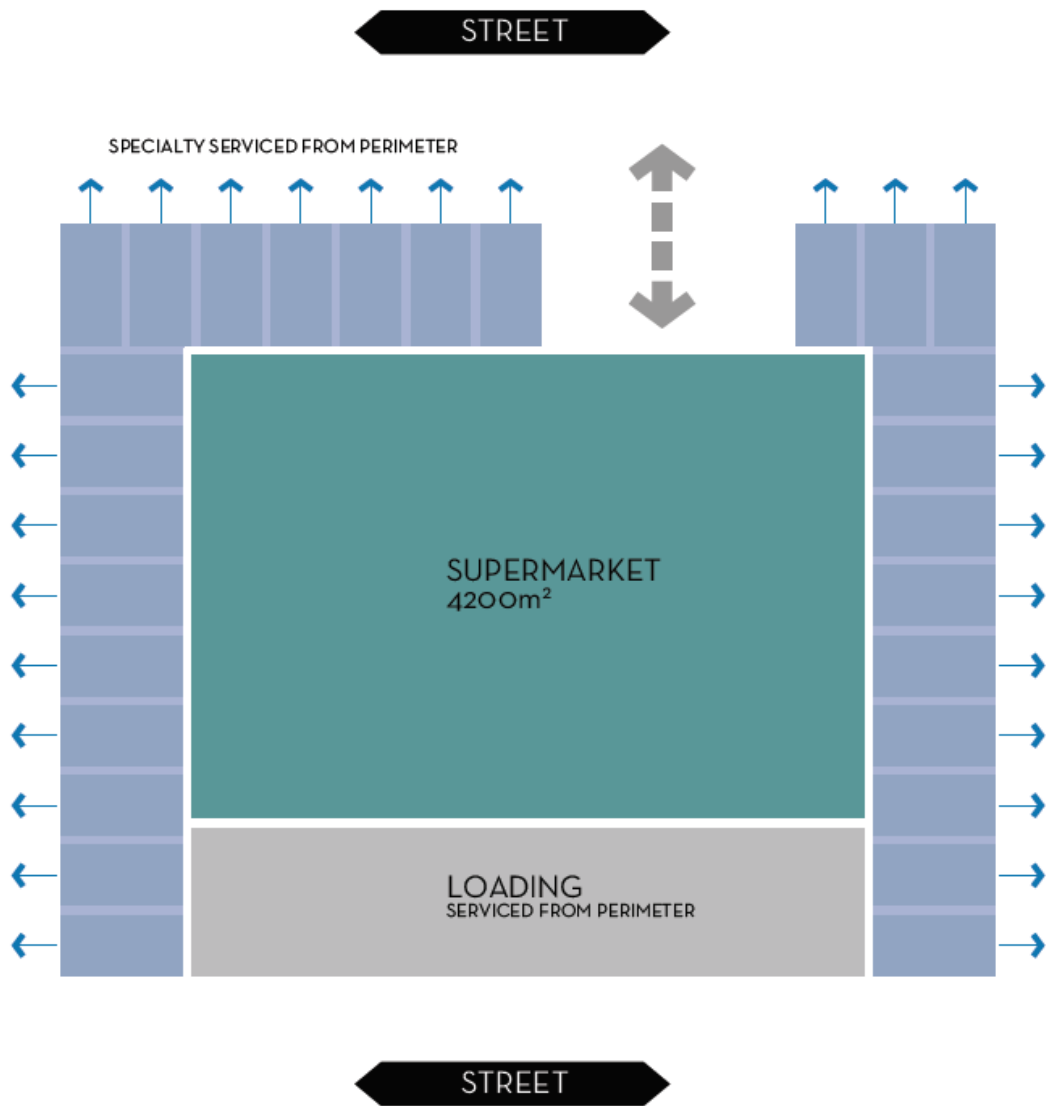


Figure 5: Spatial Requirements for Typical Retail Layouts – Anchor with speciality to edge

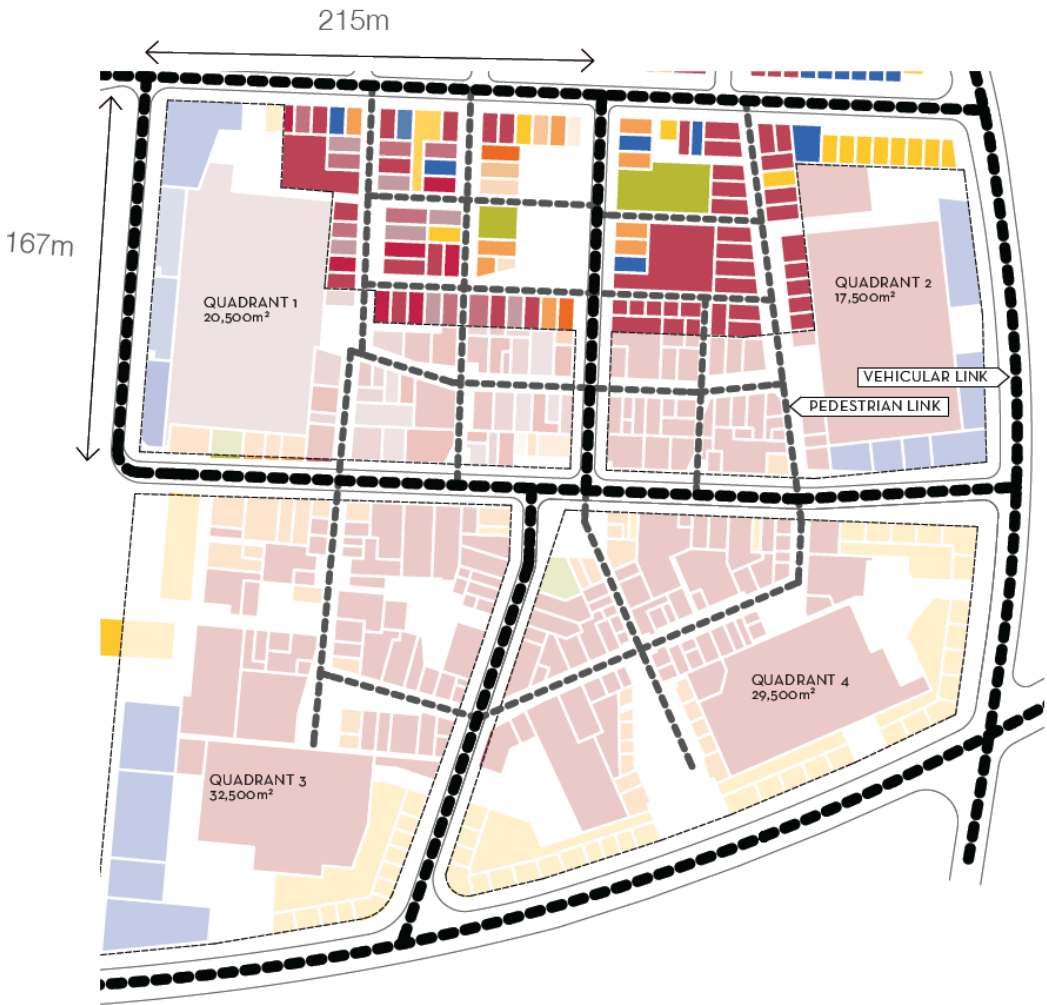
To further demonstrate the spatial requirements for anchors, Figure 6 includes a layout of the Rouse Hill Town Centre for comparison. The areas of each of the four (4) lots that accommodate anchors and an appropriate amount of supporting retail are around 3 hectares and 160m to 200m in length. Pedestrian connections are provided throughout to maximise permeability through the centre and promote pedestrian activity. Vehicle connections reinforce the urban structure and role of the town centre, instead of fragmenting the site.

The proposed vehicle connections and resultant lot sizes have other detrimental implications for retail development. Ensuring appropriate servicing arrangements for retail uses is critical, particularly within a town centre that will incorporate mixed uses, including residential. While the provision of consolidated service arrangements has merit, the proposed east-west service lane (Figure 2) dissects the site and creates potential interface issues for the development to the south, which is identified as residential. A centralised service arrangement located within the basement is more desirable, as it ensures that the activation along the

main street and other key retail frontage is not interrupted by vehicle entries and service arrangements. This also minimises potential amenity impacts on surrounding development. Access to the basement would be provided from access points at the perimeter of GPT's site and the core.

Further to the matters highlighted above, the proposed vehicle connections will also create inefficiencies in basement parking and servicing requirements of future development, as it results in reduced basement footprints and necessitates increased basement parking provision due to the inefficient circulation and layouts. While these inefficiencies may be relieved to some extent by allowing basements under roads, which will be required and SOPA advised has been done elsewhere within SOP, it is unworkable within the context of the retail town centre at the scale envisaged under the MP Review.

Retail Anchor



Rouse Hill Town Centre Master Plan

Figure 6 Spatial Requirement for Typical Retail Layouts – Rouse Hills Town Centre

Recommendation

Having regard to the above, GPT is seeking greater flexibility in the categorisation and location of these connections to support the creation of a retail and commercial mixed use town centre. Based on the MP Review and supporting documentation, it is understood that the key drivers for the inclusion of vehicle connections are:

- Improved connectivity.
- Provision of a finer grain network.
- Promoting pedestrian activity.
- Creating active frontages.
- Providing separate service areas.

GPT recognises the importance of these principles for creating a successful town centre. However, the achievement of these principles does not necessitate the requirement for prescriptive vehicle connections as proposed in the Master Plan.

These principles may be achieved more effectively by replacing the vehicle connections with a greater number of pedestrian links and shared connections. In the previous analysis submitted to SOPA and DP&E, GPT presented mixed use/retail concepts for the Central Precinct that delivered a finer grain with the provision of extensive through site links, which were predominantly envisaged as pedestrian links and not streets.

The proposed east-west main street and north-south streets connecting Herb Elliot Drive to the main street are supported by GPT as vehicle connections. However, for additional north-south and east-west connections through their site, GPT is seeking a more flexible urban structure which is illustrated in Figure 7. All connections are identified as 'indicative' and would potentially comprise a range of pedestrian linkages, as well as shared ways, which maximise connectivity and pedestrian activity throughout the precinct, and create a finer grain network without compromising the ability to deliver a retail mixed use centre. The character of the links will be defined by a future retail concept as part of an overall, integrated design solution.



Figure 7: Recommended Urban Structure –Through site links

2.1.2 Open space

The MP Review identifies the provision of a large, contiguous area of open space – Urban Park – at grade, within the northern part of the commercial core on GPT’s site, which is surrounded by roads. The park is denoted as No. 11 on Figure 8.

Based on the design guidelines and character statements for future new public spaces contained at Appendix B of the MP Review, the park is proposed to have an area of approximately 5,700m². The size of the park, further fragments GPT’s site and for the same reasons outlined in 2.1.2, restricts opportunities for the envisaged retail and commercial development on the lots adjoining the park and creates issues achieving the retail GFA targets generally.

The principle of providing additional public spaces within the Central Precinct is supported by GPT. The current Master Plan 2030 identifies a new 4,000m² park in the Central Precinct. To date, GPT has previously conveyed to SOPA and DP&E their support for the provision of new open space within the Central Precinct. However, they have consistently sought to move away from the provision of a single, large space, and introduce a variety of smaller spaces to ensure a greater range of open space typologies are accommodated, that is more appropriate for a town centre and is integrated with the hierarchy and network of spaces already existing within SOP.

As outlined below, GPT is seeking to distribute the quantum of open space over a series of smaller spaces with different characters, functions, design and facilities, and at different levels.

Figure B1 Public Spaces Key



Figure 8: Existing and proposed Public Spaces - Recommended Urban Structure –Through site links

Open space and fragmentation of retail and commercial opportunities

As illustrated in Figure 3 in 2.1.1 above, the provision of a large, contiguous area of open space of around 5,700m² at grade, which is surrounded by roads, creates two lots of between 3,000 m² and 3,300m². As previously discussed in Section 2.1.1, these lots do not support the provision of retail anchors and subsequent retail activation.

The fragmentation of these lots by the proposed park also impacts on the ability to realise the eight (8) storey commercial/retail buildings that are envisaged for these sites under the MP Review. Each these sites have an FSR of 3.6:1, which utilises the FSR from the park (refer to Figure 9).

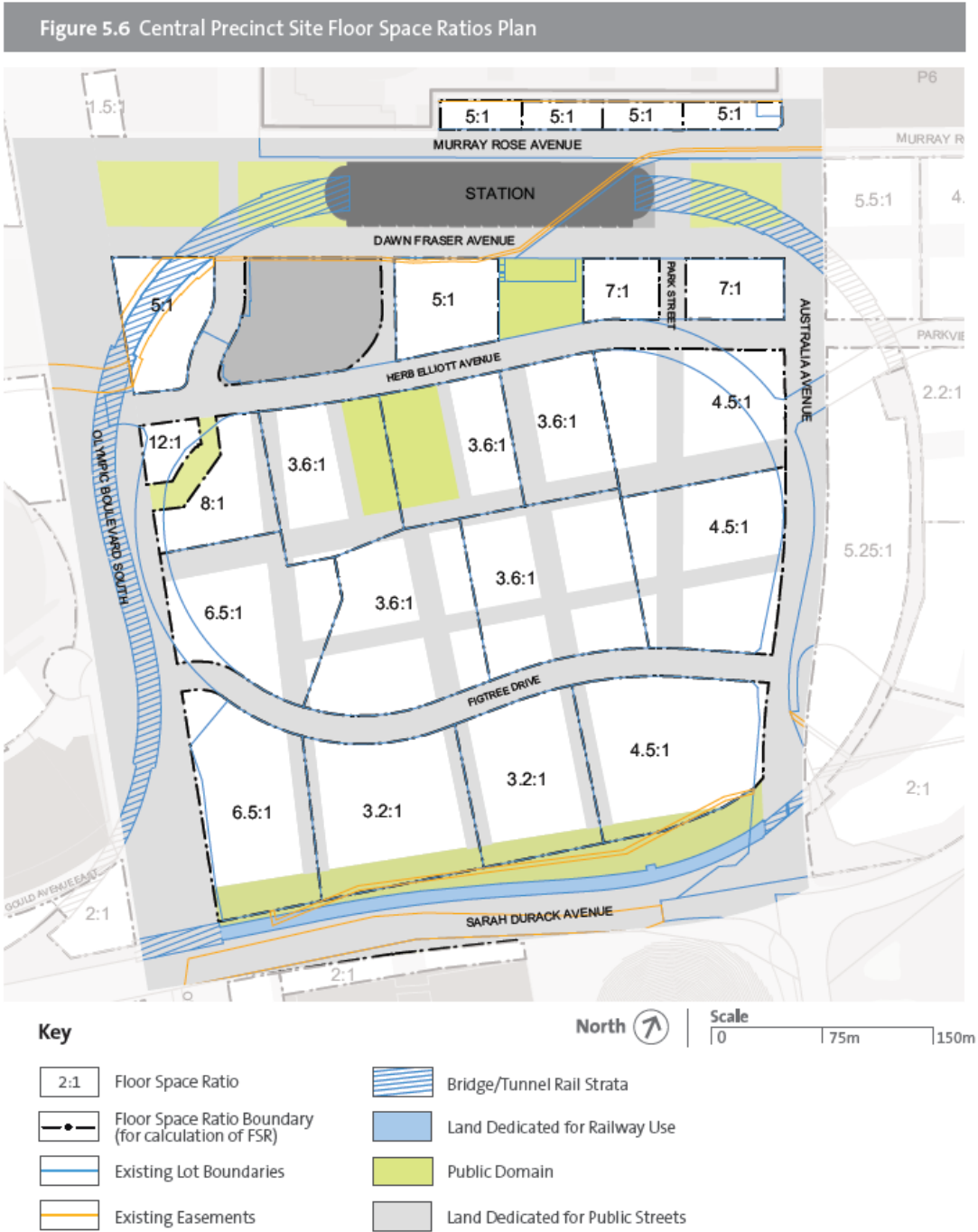


Figure 9: Extract of Figure 5.6 Central Precinct Site Floor Spoe Ratio Plan (Source MP Review)

As illustrated in the massing analysis at Figure 10, this potential FSR cannot be realised on sites of around 3,000m². Instead the FSR will be limited to around 2.4:1, which coupled with the limitation on retail typologies, has a significant impact on the delivery of the envisaged retail and commercial targets and viability of the development generally.

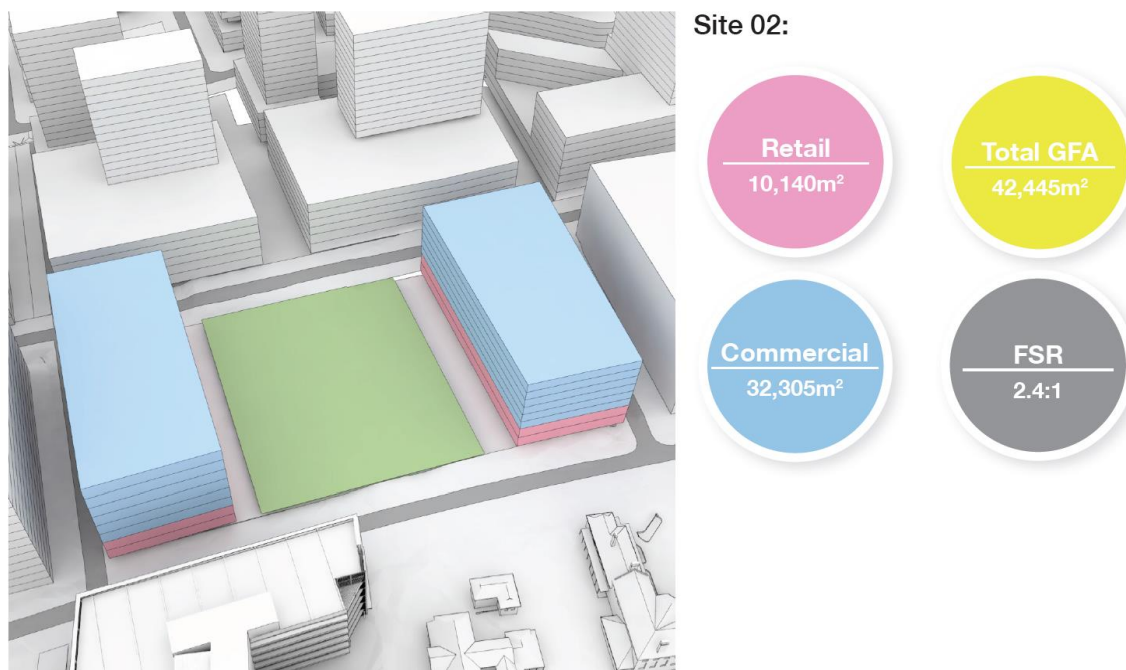


Figure 10: Extract of Figure 5.6 Massing analysis illustrating impact of park on FSR

Town centres and public spaces

As illustrated in Figure 11, at 70m wide and 80m long, and with an area of around 5,700m², the proposed park is a large, expansive space that will be difficult to activate with surrounding land uses. The fact that the space is surround by roads exacerbates the fragmentation and opportunities for activation.

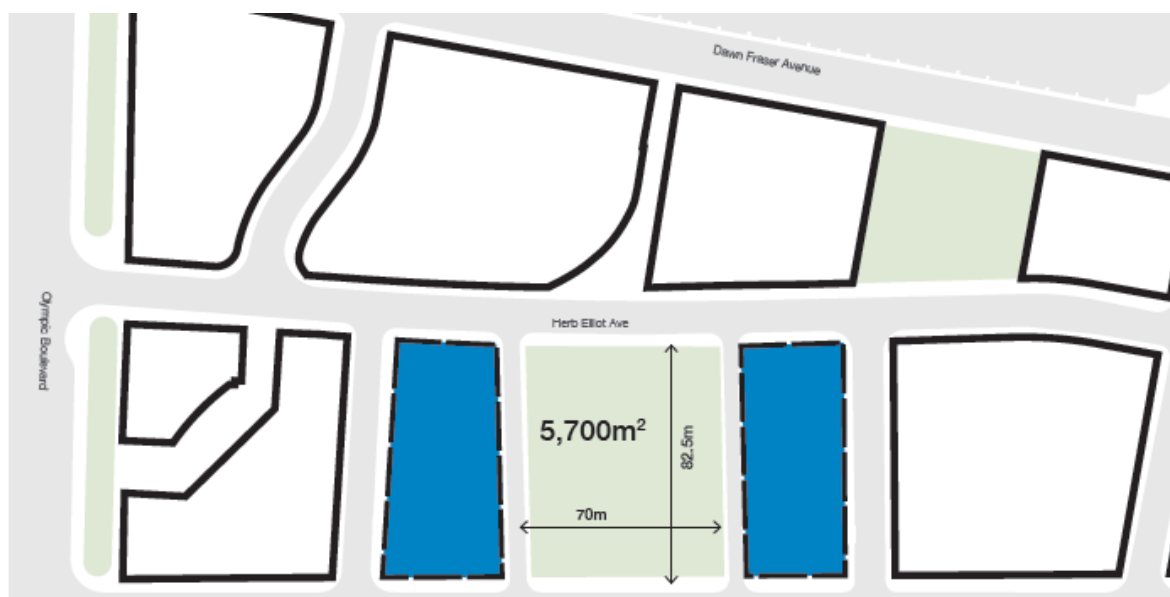


Figure 6: MP Review – Proposed Urban Park – GPT's site Central Precinct

Successful town centres are structured around a variety and hierarchy of spaces. The retail and commercial core that is envisaged for the Central Precinct requires a range of spaces with anchors critical to the vibrancy and success of the Town Centre. Size of spaces and retail activation are intimately tied together, with the further apart retail frontages are from each other, the less they are able to activate. In many ways, this is no different to a traditional street, with the 'invitation' or perception of being able to cross to the other side closely linked to its width – the wider it is, the less inviting it is. Most spaces that people perceive as active have a high level of 'friction' and in retail terms, this translates to spaces which typically have overlapping spheres of activity.

For this reason, a series of smaller spaces that are activated by adjoining land uses are considered more desirable and conducive a town centre environment. Figure 12 provides an indicative distribution of three (3) potential urban spaces, including a primary space located to the north of the site, to maximise opportunities for solar access. Smaller spaces are dispersed throughout the site. This model would facilitate a variety of urban spaces with different characters and facilities including civic spaces, squares, laneways, play areas and the like, similar to those represented in the open space typologies also included at Figure 12. These types of spaces should also be provided in the residential areas south of Figtree Drive.



Figure 12: Alternative indicative distribution of open spaces across the site

SOP open space network

The size, distribution and quantum of open space to be provided within GPT's site requires careful and detailed consideration of how these spaces will extend and complement the existing spaces at SOP and should be addressed as part of an integrated design solution. This will include consideration of the existing and desired character of nearby open spaces within the Central Precinct and adjacent precincts to ensure that a range of well-utilised spaces are provided that meet the needs of the vast range of users that visit, work and live at SOP.

The MP Review includes the following description of the proposed 'Urban Park':

The intention for this park is to provide a pleasant, grassed open space surrounded with trees, seating and artworks as a focus for the precinct and a respite within the Town Centre. The park is to provide sunny and shady places, and opportunities for a range of activities, such as casual social interaction and casual seating for individuals and social groups. Paths are to be limited to main desire lines.

Predominant uses

A mix of active, social and passive recreational uses, including walking, sitting, worker lunch/coffee breaks, children's playground, unstructured ball games and play.

As illustrated in Figure 13, many of these characteristics and features are already available in many of the nearby parks. Furthermore, it is considered that some of the existing parks are not as well utilised as they could be.

For this reason, it is important to ensure that, in determining the character of any new open spaces, potential upgrades or changes to the character of existing parks is contemplated to maximise their utilisation.

Recommendation

It is recommended that the provisions for the Central Precinct be amended to include an open space principles diagram which identifies the open spaces as a series of small open spaces, with a primary open space located at the north of the site as illustrated in Figure 12 above.

This will be supported by a revised design guidelines and character statements Urban Park – Central (11) in Appendix B of the MP Review. The revised design guidelines and character statements will:

- Indicate that new open space is to be distributed into a series of smaller spaces throughout the site, with a primary space to the north.
- Identify opportunities for each of the spaces to have variable character based on the surrounding land uses and the different needs of visitors, workers and residents.
- Identify a range of amenities and facilities – tables, chairs, playground, water features, and opportunities for public art, landscaping – to allow for a range of users and based on the desired character of the spaces.
- Remove reference to open space on the Land Uses Plans.
- Apply a height in both the SEPP maps and DCP at 33m and 8 storeys.



	Open Space	Area	Facilities
1	Yulang Square	-	Seating
2	Fig Grove	10,411m ²	Seating, Water Feature
3	Cathy Freeman Park	25,955m ²	Play Equipment, Seating, Toilets
4	Station Square	-	Seating
5	Jacaranda Square	2,961m ²	Table Tennis
6	Stockroute Park	1,818m ²	Seating
7	Abattoir Garden	629m ²	Seating
8	Brickpit Park	15,328m ²	Brickpit Ring Walk

Figure 3: Existing open space and proposed open space in MP Review

2.2 Land use framework

2.2.1 Mixed use precinct

The MP Review proposes an east-west mixed use precinct extending through the centre of the site that is flanked by a commercial precinct to the north and a service road and residential zone to the south (refer to Figure 14).

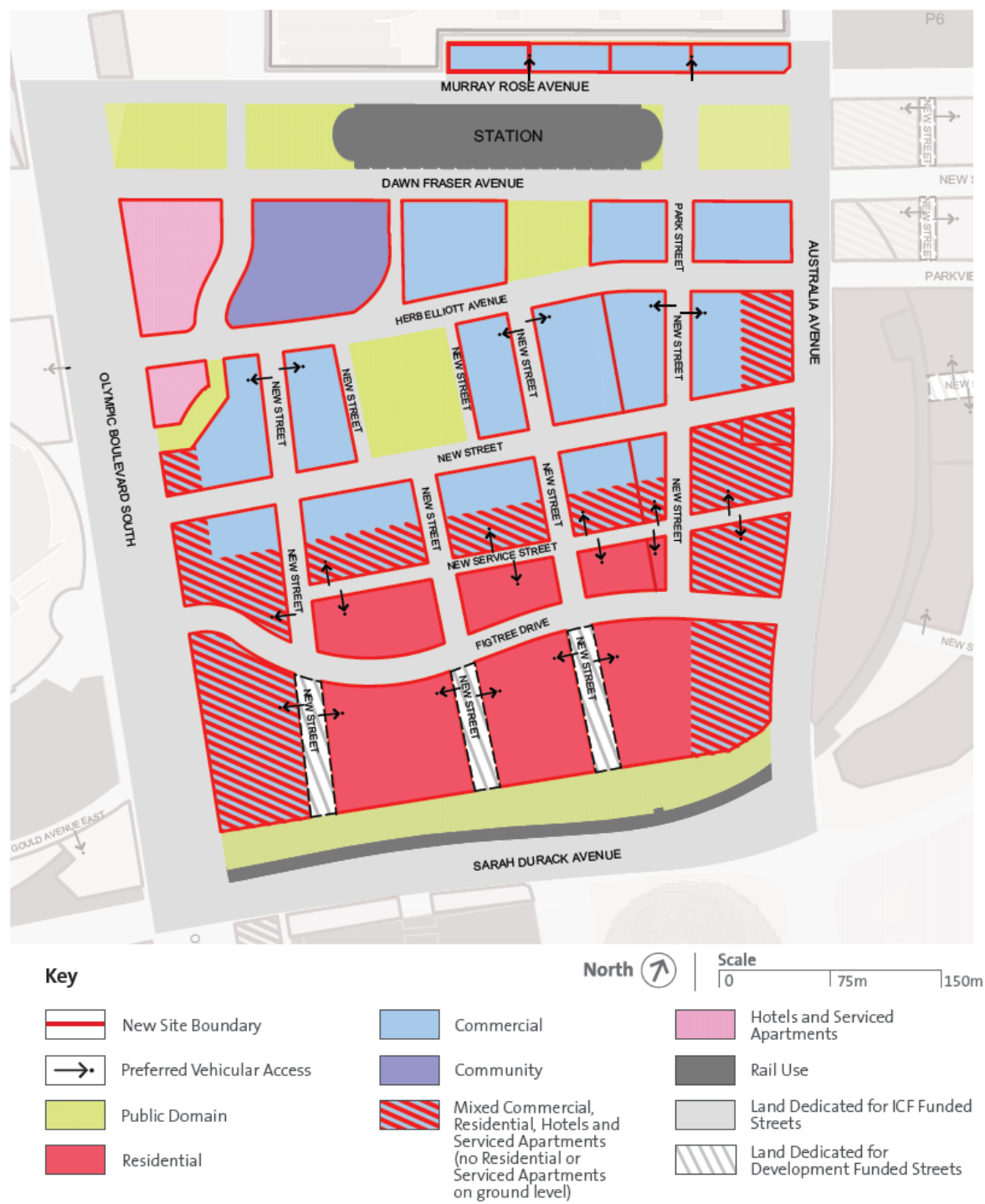


Figure 4: Central Precinct Land Uses Plan

As illustrated in Figure 15, the mixed use precinct and adjoining commercial precinct are both around 30m deep.



Figure 15: Depth of Proposed mixed use precinct and commercial precinct

As a result of the abutting commercial precinct, the placement of the residential towers is restricted to the 30m mixed use precinct, as residential uses are not permitted in the commercial zone. This pushes the towers further south. In addition, the narrow depth of the mixed uses precinct forces the orientation of the towers to be east-west. As illustrated in Figure 16, these two factors create overshadowing to the buildings in the adjacent residential zone and impacts on the ability to satisfy the SEPP 65 ADG solar design criteria.

A larger mixed use precinct provides more flexibility in relation to the placement and orientation of towers north-south, which reduces the extent of overshadowing of buildings as shown in Figure 17.

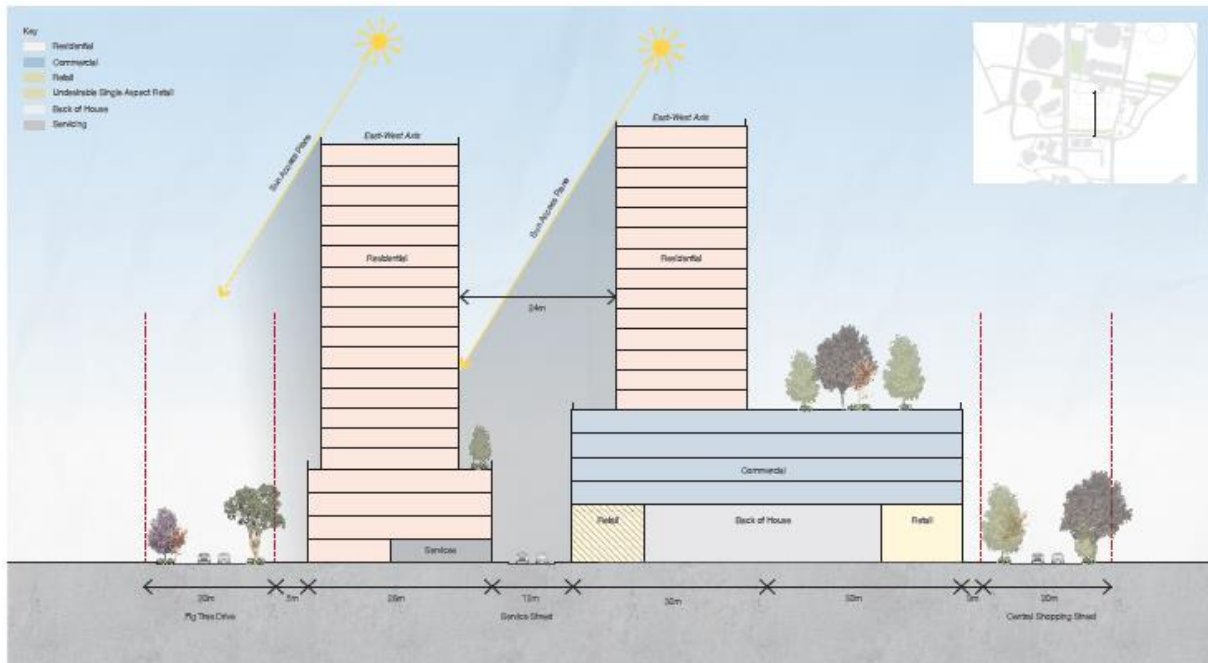


Figure 16: Constrained tower placement within the existing mixed use precinct

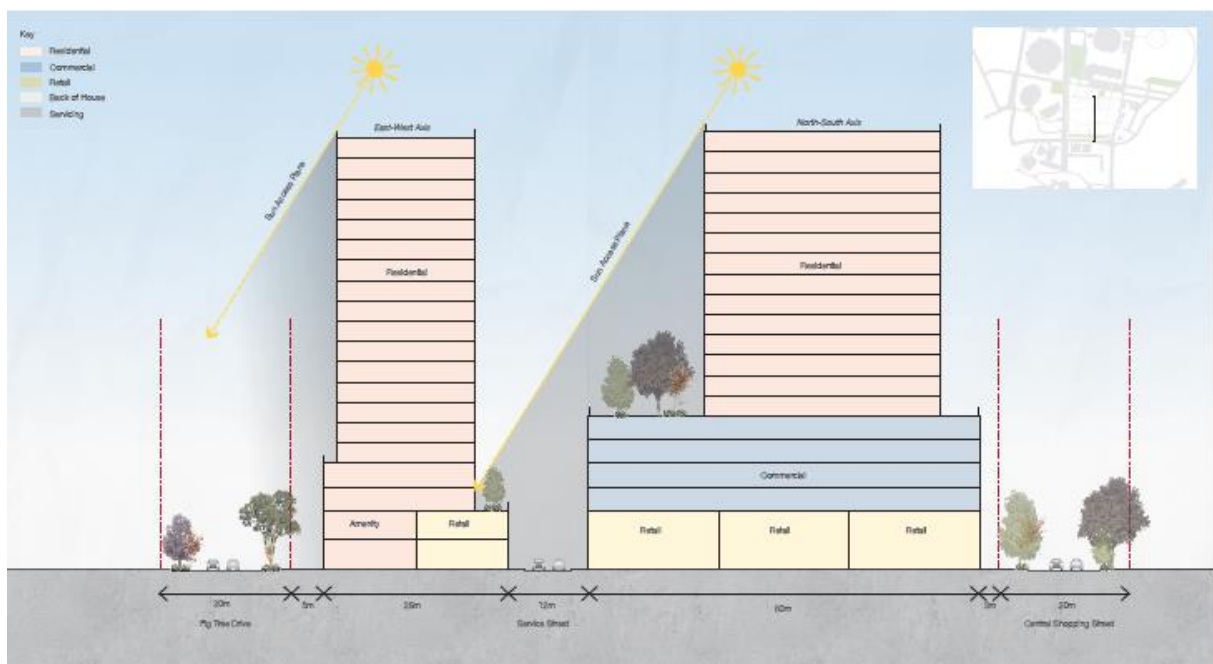


Figure 17: More flexible tower placement within an extended mixed use precinct

The provision of the service lane between the mixed precinct and residential precinct is also problematic, as retail uses will not be appropriate along the laneway and it will purely function as a service lane. This creates an interface issue for the north facing ground level residential apartments on the southern side of the laneway due to the operation impacts associated with service areas including noise, heavy vehicle movements and waste collection.

Recommendation

Base on the above, it is recommended that the mixed use area be expanded as illustrated in Figure 18. This will assist in ensuring ADG separation and solar access requirements are achieved and minimise overshadowing impacts on residential buildings to the south. The expanded mixed use zone would also eliminate interface and amenity impacts associated with the service lane and split land use allocation.

To ensure an appropriate interface to the residential precinct to the south and east, it is recommended that residential uses be permitted at the ground level along the Figtree Drive frontage and new north-south street of the extended mixed use precinct zone. This is also appropriate given that extending an active frontage (retail or commercial) to Figtree Drive will not be viable. This assists in concentrating retail function in the central core.



Figure 8: Recommended Expanded Mixed Use Area

2.2.2 Land use categorisation

Section 4.5 .1 Land Use Controls of the MP Review identifies a table of allowable land uses, which is to be read in conjunction with the Land Use Plan and Active Frontages Plan.

We note that a broad range of land uses are permitted within the B4 Mixed Use zone applying to the site under the SEPP, which has precedence over the MP Review. While the MP seeks to provide further guidance as to location in which land uses that are desired based on the character of each of the SOP precincts, it is important that is not inconsistent with the SEPP. Additional wording may need to be included in the MP Review to this effect, so as not to unreasonably restrict land uses that are permitted under the SEPP.

There are also a number of obvious omissions from the retail land use category contained in the MP Review, including discount department stores and department stores. This should be addressed in the table to promote the broadest range of retail offering as is appropriate for a centre of this scale and nature.

2.3 Building height and built form

Tower heights

While the building heights have been increased across the Central Precinct, the heights are uniform, particularly the 20 storey tower heights within the centre, which are located between the 45 storey heights on Olympic Boulevard and 30 storey heights on Australia Avenue.

A greater variety in the tower heights located between the two perimeter towers heights would provide a better urban design outcome by reinforcing the concept of the 'urban bowl'. As illustrated in Figure 19, 20 storey heights should be increased to 25 storeys and 35 storeys, with 20 storey heights maintained in the centre.

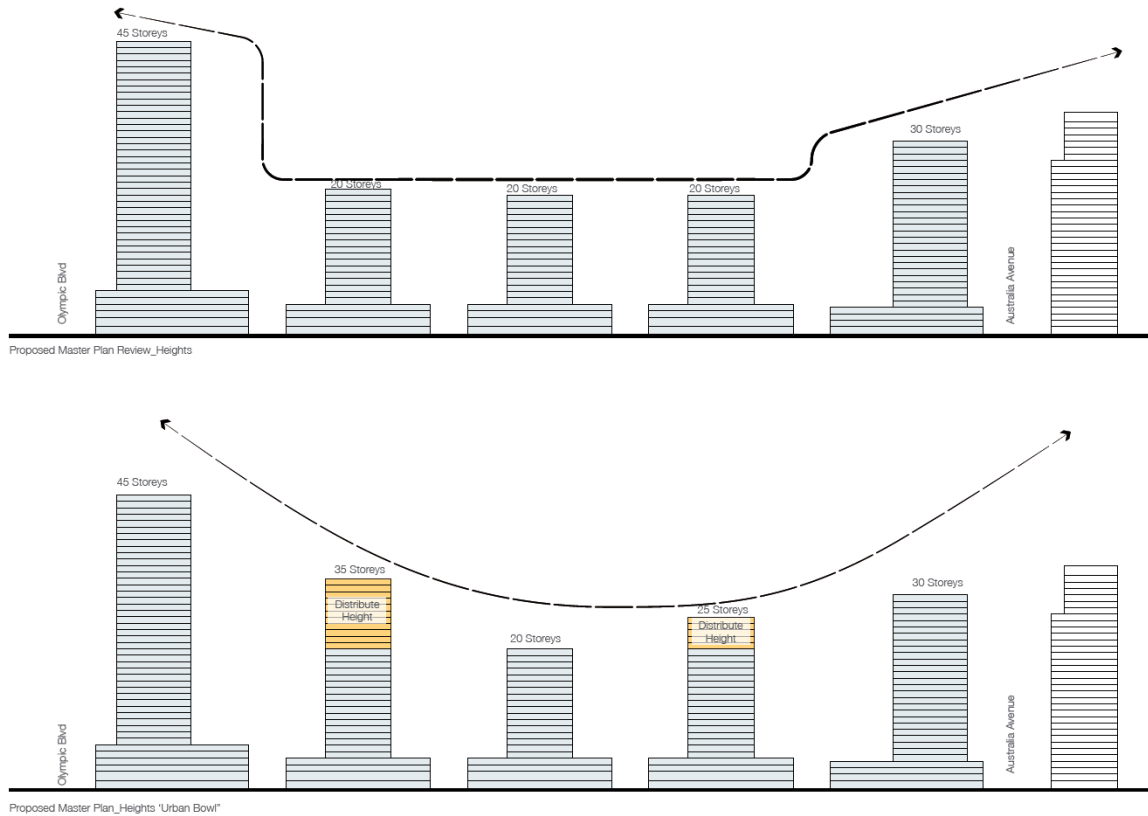


Figure 19: Provide a greater variation in tower heights across the precinct (east-west)

Recommendation

- Amend the building heights maps in section 5.2 of the Master Plan to indicate 25 and 35 storey buildings as illustrated in Figure 20.
- Amend the SEPP Building Height Map as illustrated in Figure 21 to increase the buildings heights from 74m to 90m and 102m to allow for the 25 storey and 35 storey height variation in the centre of the precinct.

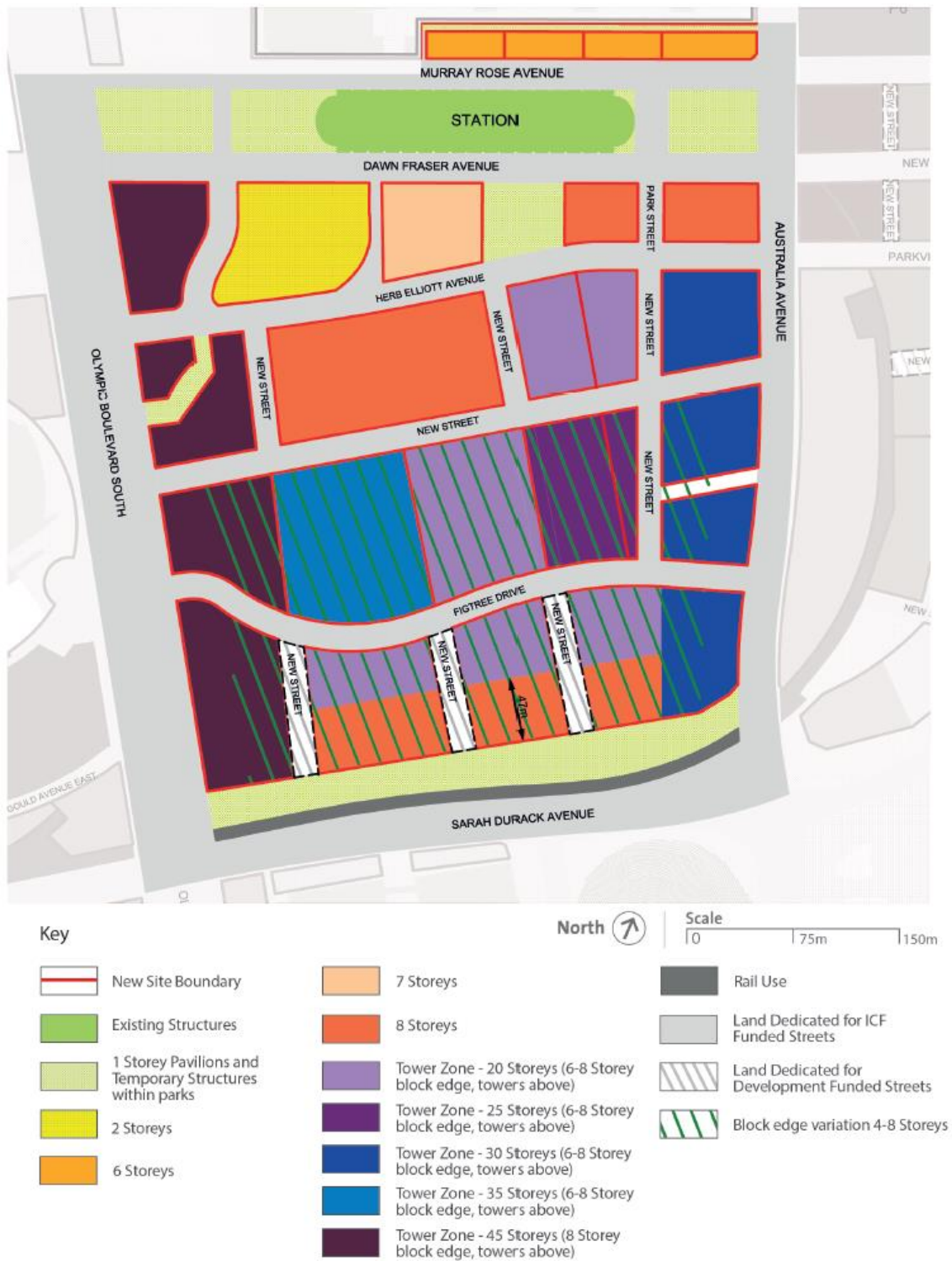


Figure20: Amendment to Central Precinct building height plan



Figure 21: Proposed increased heights on the SEPP Building Heights Map

Street wall heights

While the variable 4 – 8 storey street wall height provides a level of flexibility for podium heights, an eight (8) storey podium has been mandated in certain locations including Olympic Boulevard and 6 – 8 storey street wall along the new main street (east-west). An eight (8) storey podium may not deliver a desired character, urban form or development outcome for the main street. The scale of the podium is not proportionate to the 20 storey building height. While some increase in the tower heights may alleviate this, the 6-8 storey podium requires reconsideration in terms of the desired urban form.

Recommendation

Having regard to the above it is recommended that the 4-8 storey variable street wall height be extended to the new main street as illustrated in Figure 20.

Miscellaneous built form considerations

The Master Plan Review contains quite prescriptive built form controls relating to active frontages, setbacks (ground, podium and tower), building footprints, colonnades, location of car parking at basement and various others. These controls are listed at Attachment 1 and require further consideration given they have implications for the form, design, character and viability of development.

Of particular note is the control requiring a 40m separation between tower buildings on neighbouring sites. This is more restrictive than the maximum 24m separation distances applying under ADG. It significantly impacts on the number of towers that can be located within the Central Precinct and the achievement of the residential dwelling targets that are envisaged under the MP Review.

Restricting the residential floor plates to 800m² (GFA) above 15 storeys is particularly onerous, particular when compared to tower floor plates controls that apply elsewhere in Sydney. For example, a 900m² (GFA) floor plate control applies to buildings above 12 storeys in the Carter Street Precinct and 750m² (GFA) floor plate applies to towers in Wentworth Point.

Recommendation

- The floor plate control for residential floor plates above 15 storeys should be amended to 900m² (GFA).
- The requirement for a 40m separation between towers be removed and require separation distances consistent with ADG.

2.4 Floor space ratio

Preliminary massing studies undertaken by SJB indicate that the proposed 45 storey height limit (149m) cannot be achieved with the proposed floor space ratio. This will result in potentially lower building heights along Olympic Boulevard, which will compromise the hierarchy of building heights that is envisaged to reinforce the urban structure.

There may also need to be a potential increase in the FSR within the central sites that is commensurate with the variation in building height that is being suggested. Preliminary massing indicates an FSR in the order of 4:1 may be required to facilitate the height variation, where an FSR of 3.6:1 is currently proposed. More detailed modelling and analysis will be required to determine the FSR.

Furthermore, the allocation of FSR as shown in Central Precinct Site FSR Plan is unnecessary. The map includes the same FSR as contained in the SEPP, but allocates the FSR over irregular parcels. The maps should be deleted as it does not provide any clarity as to the FSRs that could be achieved on the development lots.

Recommendation

- Delete Figure 5.6 Central Precinct Site Floor Space Ratio plan from the Master Plan.
- Review FSR's in the SEPP.

2.5 Car parking

Car parking rates

The Sydney Olympic Park Master Plan 2030 (2016 Review) - Assessment of Traffic and Transport Outcomes prepared by GTA Consultants (GTA) and included at Attachment 2, recommends an increase in parking ratios for retail uses commensurate with the parking demands for a retail centre of this scale and nature. GTA also recommends a single rate for retail uses instead of providing different rates for supermarkets and local and themed retail.

GTA recommends the adoption of single maximum retail rate of 4.5 spaces per 100m² (GLA).

Location of car parking

In terms of the location of car parking, the controls in the MP Review specify that all car parking is to be located underground, while acknowledging that there will be circumstances in which above ground car parking cannot be avoided, such as sloping sites. While this provides some flexibility in terms of locating car parking above ground, there is a lack of certainty as to the circumstances in which podium car parking would be considered. Podium car parking is a way to ensure flexibility beyond the life of the master plan, by allowing retrofitting to other uses where the car parking becomes redundant or as a result of improvements to public transport and changes in technology and approaches to car ownership. It is significantly more difficult to

retrofit basement structures where they become obsolete for the reasons outlined above. It is important that innovative ways are encouraged to address this, allowing well designed podium car parking with appropriate floor to floor heights. Podium parking is being considered within the areas adjacent to SOP, namely Wentworth Point and Carter Street.

Recommendation

The MP Review should expand the provisions relating to above ground/podium car parking to allow well designed podium parking. This could include controls on appropriate sleeving of podium parking with active uses, residential uses or architectural screens.

2.6 Infrastructure

The MP Review identifies two infrastructure funding frameworks:

- **Local Infrastructure Contribution's Framework (ICF):** This funds the delivery of local infrastructure within the SOP Town Centre. The current contribution rate is \$205/m².
- **Special Infrastructure Contribution (SIC):** This will fund the delivery of regional infrastructure, including the proposed Parramatta Light Rail, which will extend through SOP. The framework for the SIC funding is currently being developed by DP&E and is currently scheduled for release at the end of this year. It is unclear whether SIC funding will be applied to the recently announced Sydney Metro West.

Transport

The Assessment of Traffic and Transport Outcomes prepared by GTA Consultants (Attachment 2) identifies the following potential limitations in relation to the funding and delivery of transport infrastructure:

- The Traffic and Transport Study identifies short term upgrades (surrounding road network and SOP precinct local road network) as well as long term upgrades (surrounding road network only), with a basic scope of works in the Traffic and Transport Study, however no costing information is available in order to understand the adequacy of funding allocated leading to potential gaps in transport infrastructure funding and delivery.
- Details of the SIC plan are not yet available to identify specific upgrades covered, with a potential lack of funding for external works required. Without a more detailed understanding of the proposed SIC, the extent to which the plan might seek to address Parramatta Light Rail value capture is not clear.
- There is currently no understanding of what road infrastructure is included in the SIC, other than the "regional infrastructure" as vaguely identified in the report. This is key to understanding the extent to which the proposed contributions can fund the required works.
- Achieve a level of clarity and certainty with respect to future transport infrastructure provisions and contributions (both internal and external), with a clear nexus between works and future development within SOP.
- The actual amount of the SIC that will be levied is not known. This has potential risks and implications for the viability of development. This, in turn, may have implications for the development yields that will need to be achieved to ensure the viability of development, compared to what it envisaged under the master plan.

Open space

The MP Review and ICF identify that the proposed new public open space within the Central Precinct is to be dedicated to SOPA. GPT is seeking to retain ownership of the future open spaces to be delivered within its site. This structure will allow for the management and maintenance of this open space in partnership and consultation with SOPA.

3.0 Conclusion

The MP Review is an important step towards realising the vision to create an active and vibrant 18-24/7 Town Centre within SOP, with a mix of retail, commercial, residential and other uses that are focussed around the Central Precinct. While the MP Review seeks to foster this vision, there are elements of the Plan which may act to limit the realisation of the vision.

It is considered these limitations can be overcome subject with the implementation of the recommendations outlined in this submission and summarised below:

Urban structure – connections

The proposed east-west main street and north south roads connecting Herb Elliot Drive to the main street are supported as vehicle connections. However, for additional north-south and east-west connections through their site, GPT is seeking a more flexible urban structure which is illustrated in Figure 6. All connections are identified as 'indicative' and would potentially comprise a range of pedestrian linkages, as well as shared ways, which maximise connectivity and pedestrian activity throughout the precinct and create a finer grain network, without compromising the ability to deliver a retail mixed use centre. The character of the links will be defined with a future retail concept, as part of an overall, integrated design solution.

Urban structure - open space

It is recommended that the provisions for the Central Precinct be amended to include an open space principles diagram which identifies the open spaces as a series of smaller open spaces, with a primary open space located at the north of the site.

This will be supported by a revised design guidelines and character statements for 11 Urban Park – Central (11) in Appendix B of the Review. The revised design guidelines and character statements will:

- Indicate that new open space is to be distributed into a series of small spaces throughout the site, with a primary space to the north.
- Identify opportunities for each of the spaces to have variable character based on the surrounding land uses and the different needs of visitors, workers and residents.
- Identify a range of amenities and facilities – tables, chairs, playground, water features, and opportunities for public art, landscaping – to allow for a range of users and based on the desired character of the spaces.
- Remove reference to open space on Land Uses Plan.
- Apply a height in both the SEPP maps and MP Review maps at 33m and 8 storeys.

Land use framework - mixed use precinct

Expand the mixed use area to Figtree Drive. This will assist in ensuring ADG separation and solar access requirements are achieved and minimise overshadowing impacts on residential building to the south. The expanded mixed use zone would also eliminate interface and amenity impacts associated with the service lane and split land use allocation.

To ensure an appropriate interface to the residential precinct to the south and east, it is recommended that residential uses be permitted along the Figtree Drive frontage and new north-south street of the extended

mixed use precinct zone. This is also appropriate given that extending an active frontage (retail or commercial) to Figtree Drive will not be viable. This assists in concentrating the retail function in the central core.

Land use framework – land use categorisation

Clarify and update the Land Use in the table of allowable land uses, Land Use Plan and Active Frontages Plan to indicate that it does not preclude the wide range for uses that are permitted within the B4 Mixed Use Zone applying under the SEPP. Identify additional retail uses in MP Review land use tables, including discount department stores and department stores, as outlined in Attachment 1.

Building height and built form - tower heights

- Amend the building heights maps in section 5.2 of the Master Plan to indicate 35 and 25 storey buildings as illustrated in Figure 18.
- Amend the SEPP Building Height Map as illustrated in Figure 20 to increase the buildings heights from 74m to 90m and 102m to allow for the 25 storey and 35 storey height variation in the centre of the Precinct.

Building height and built form - street wall heights

Extend the 4-8 storey variable street wall height to the new main street.

Miscellaneous built form considerations

- The floorplate control for residential floorplates above 5 storeys should be amended to 900m² (GFA).
- The requirement for a 40m separation between towers be removed and require separation distances consistent with ADG.

Floor space ratio

- Delete Figure 5.6 Central Precinct Site Floor Space Ratio Plan from the Master Plan.
- Review FSR's in the SEPP to ensure recommended height variations can be achieved.

Car parking

- Adopt a single maximum rate for retail parking of 4.5 spaces per 100m² (GLA).
- Expand the provisions relating to above ground/podium car parking to allow well designed podium parking. This should include controls on appropriate sleeving of podium parking with active uses, residential uses or architectural screens

Infrastructure - Open space

GPT is seeking to retain ownership of the future open spaces to be delivered within its site. This structure will allow for the management and maintenance of this open space in partnership and consultation with SOPA.



Attachments

Attachment 1: Summary Analysis of MP Review Provisions

Section 3.0		
Planning Principles		Comment/Recommendation
3.3 Sustainability	Figure 3.3 Planned Structure for the Park	Figure should be updated to reflect recommended urban structure – connections (refer to Sections 2.1.1 and 2.1.2)
3.4 Land Uses	Figure 3.4 Illustrative Land Uses for the	Figure should be updated to reflect recommended land uses (Refer to Section 2.2.1)
	Principles	Principles should be expanded to reinforce core retail uses are to be located within the Central Precinct to underpin the establishment of compact town centre
3.5 Public Domain	3.5.1 Public Spaces Strategy - Urban Parks and Places Figure 3.5 Planned Public Open Space	Update strategy and Figure 3.5 to reflect the recommended open space strategy for GPT's site (Refer to Section 2.1.2)
	3.5.2 Street and Street Hierarchy Figure 3.6 Street Hierarchy	Update street hierarchy to reflect recommended urban structure for vehicle connections (Refer to Section 2.1.1)
	Figure 3.7 Public Art Sites	Update strategy and Figure 3.7 to reflect the recommended urban structure (open space and connections) strategy for GPT's site (Refer to Sections 2.1.1.and 2.1.2)
3.6 Public Domain	Figure 3.8 Landscape Strategy	Update Figure 3.8 to reflect the recommended urban structure (open space and connections) strategy for GPT's site (Refer to Section 2.1.1 and 2.1.2)
3.7 Access and Transport	3.7.1 Vehicular Access principles	Update principles for vehicle access (pg 54) relating to Central Precinct to reflect recommended urban structure – connections, for GPT's site (refer to Section 2.1.1).
	3.7.10 Parking – Figure 3.10 Parking Plan	Update Figure 3.10 to reflect recommended urban structure – connections, for GPT's site (refer to Section 2.1.1).

Section 3.0

	Figure 3.11 Public Transport Plan	Update Figure 3.11 to reflect recommended urban structure – connections, for GPT's site (refer to Section 2.1.1).
	Figure 3.12 Pedestrian and Bicycle Routes	Update Figure 3.1 to reflect recommended urban structure – connections, for GPT's site (refer to Section 2.1.1).
3.8 Built Form and Height	Figure 3.13 Illustrative Building Heights	Update Figure 3.13 to reflect recommended maximum building heights and street wall heights (refer to Section 2.1.1).
3.10 New Facilities and Local Infrastructure	Figure 3.14 Proposed new infrastructure	Update Figure 3.14 to reflect recommended urban structure – open space and connections (refer to Section 2.1.1 and 2.1.2).

Section 4.0

General Controls and Guidelines

4.3 Public Domain

	Figure 4.1 Active Frontage	Amend Figure 4.1 to correspond with the recommended urban structure connections (Section 2.1.1) and for activated streets outlined in Section. Amend Figure 4.1 to identify residential uses along the extension of Park Street to Figtree Drive (Refer to Section 2.2.1).
	Figure 4.2 Awnings and Colonnades	Amend Figure 4.2 update location awnings consistent with the recommended urban structure (Section 2.1) and recommended land uses (Section 2.2.1)
		Figure 4.2 - Delete requirement for colonnade (particularly 2 storey). Appropriate weather protection to be provided. Colonnades are not conducive to a town centre, do not provide an activated street edge and often produce ordinary retail outcomes as they create obstructions and impediments to sightlines.
	4.3.1 Controls 1. Set aside the land for streets, parks, through-site links and public spaces as shown in the site boundaries plan for the relevant precinct. Land dedicated for public purposes is to be vested in Sydney Olympic Park Authority.	GPT is seeking to retain ownership of the future open spaces to be delivered within its site. This structure will allow for the management and maintenance of this open space in partnership and consultation with SOPA.

Section 4.0

	4.3.1, 12 – Requirement for transparent glazing to 70% of primary retail frontages.	This may preclude opportunities for individual retail expression that provides different experiences with a more varied character. This is vital to achieving an active and lively public domain. Further consideration of this control is required.
4.5 Land Use and Density	4.5.1 Land Use Controls	
	Figure 4.4 Land Use Plan -	Amended to 4.4 to reflect recommended: <ul style="list-style-type: none"> urban structure - connections and open space (Section 2.1); and land uses, including expansion of mixed use zone (Section 2.2)
	4.5.1 Land Use Controls 1. Permitted land uses are to comply with Figure 4.1 Active Frontages Plan and Figure, 4.4 Land Uses Plan and Table 4.2 Allowable Land Uses for the relevant precinct. 3. The following developments and uses are allowed for each land use category. Additional development and uses may be permitted within the category as specified in the Precinct Controls, set out in Section 5.	The relationship between the land uses permitted within the B4 Mixed Use zone applying under the SEPP (SSP) and Section 4.5.1 needs to be clarified so that the MP Review is not inconsistent with the SEPP SSP.
	Table 4.2 Allowable Land Uses	The land uses within the tables are not exhaustive. For example there are a number of omission from the 'Retail uses', including discount department stores and department stores which are characteristic of the town centre that is envisaged under the MP Review and for this reason should be included.
	Retail Plan	There are a number of references to the 'Retail Plan' in the table. However, it is unclear what this is referring to as there is not separate Retail Plan figure.
	Land use category and allowed development and uses	Further clarification and review of this land uses referred to in the table is required. Different expressions are used to describe the same land uses e.g. 'entertainment facilities' and 'entertainment' the same thing. The relationship between these land uses and the land uses applying under the SEPP SSP as defined in Standard Instrument (Local Environmental Plans) Order 2006 also requires further consideration.

Section 4.0

	<p>4.5.2 Floor Space Ratio Controls</p> <p>1. The maximum floor space ratio achievable for each development site is nominated in the Site Floor Space Ratios Plan for the relevant precinct in Section 5.</p>	<p>As per the recommendation in Section 2.4, the FSR Maps in the MP Review should be deleted as they are superfluous to the FSR in the SEPP SSP.</p>
4.6 Building form and amenity		
	4.6.3 Building Depth Controls	
	4.6.3, 2 - The preferred maximum commercial building depth without atria and light wells is 25m.	<p>The 25m building depth is not appropriate for major retail uses. Given retail uses are categorised as commercial uses in 4.5.1 Land Use Controls, this control should be amended to indicate it does not apply to retail uses</p>
	4.6.3, 4 – Underground car parking is to be concentrated under the building footprint and fully under natural ground level.	<p>As outlined in Section 2.1.1, opportunities for basements to extend under roads and public spaces should be provided for.</p>
	4.6.6 Building separation controls	
	Table 4.4 Minimum Building Separation	<p>The separation applying to 5-8 storey and 9-10 storey buildings distances do not accord with SEPP 65 ADG.</p>
	4.6.8 Tower Building Control;	
	<p>Tower Footprint and Setbacks</p> <p>Tower building footprint to a maximum of 800m² (Gross Building Area) are encouraged.</p>	<p>Residential tower footprint/floor plate controls should be amended to 900m² gross floor areas (GFA) as outlined in Section 2.3.</p>
	<p>Separation Distances</p> <p>4.6.8, 6 - Notwithstanding the above, maintain a minimum 40m separation between tower buildings on neighbouring sites.</p>	<p>Residential tower setbacks should be consistent with the maximum separation distances specified in the SEPP 65 ADG as outlined in Section 2.3.</p>
	<p>Maximum Horizontal Dimensions</p> <p>4.6.8, 9 - 9. For residential buildings, floor plates over 600m² GBA and 25m in length should be articulated into separate wings around each lift/lobby zone. Floor plates for levels above 15 storeys should not exceed 800m² GBA..</p>	<p>Residential tower footprint/floor plate controls should be amended to 900m² gross floor areas (GFA) as outlined in Section 2.3.</p>

Section 4.0

4.6.11 Building Expression Controls	<ul style="list-style-type: none"> 4.6.11, 7 Provide individual off-street entry to at least 75 per cent of ground floor apartments in mixed use zones and 50 per cent of ground floor apartments in residential zones. 	Clarification required given residential development is not permitted at ground level within mixed use areas under Precinct Land Use Plan.
	4.6.11, 8 - Car parks located fully underground. Amend - need flexibility as pre above.	
4.6.17 Residential Building Controls		General comment – The controls should be consistent with the SEPP 65 ADG.
	Table 4.9 Minimum Apartment Sizes	The apartment sizes and balcony sizes in this table should be consistent with the ADG minimum apartment sizes (including provision for larger apartments for additional bathrooms) and minimum private open spaces size and depth requirements.
	Balconies 10. A minimum dimension of 2.4m is required to primary balconies	Balcony depths should be consistent with ADG which requires 2m for one and two bedroom apartments and 2.4m for three bedrooms.
	Solar Access provide a minimum of three hours of direct sunlight per day to living rooms and private open spaces in at least 75 per cent of dwellings within a residential development on 30 June.	The solar access requirements should be amended to be consistent with the ADG which specifies two (2) hours solar access.
4.7 Access and Parking	4.7.1 Controls	
	<p>Vehicular Access and Servicing:</p> <ol style="list-style-type: none"> 1. All parking is to be underground. 2. Where above ground parking cannot be avoided due to site conditions (i.e. sloping sites), it must be sleeved with active habitable uses that create good address to the public domain.(As outlined in Section 2.5 opportunities for podium parking should be permitted.
	Vehicle Parking: Table 4.10 Maximum Vehicle Parking Rates – Non-Residential Uses	Retail parking rates to be amended as outlined in Section 2.5 and the recommendations contained in in the Assessment of Traffic and Transport

Section 4.0

	Table 4.11 Maximum Vehicle Parking Rates – Residential Uses	Outcomes, prepared by GTA included at Attachment 2. The visitor residential parking rates should be reduced as outlined in the Assessment of Traffic and Transport Outcomes, prepared by GTA included at Attachment 2.
4.9 Landscape	4.9.1 Controls	
	Residential Open Space 6. A minimum of 30 per cent of the site area is to be open space, ground level private open space and/or ground level communal open space and/or setbacks. Table 4.13 Minimum Open Space Provision – Residential Uses	The open space requirements should be amended to be consistent with the communal and private open space requirements of the ADG.
	4.9.1, 21 - Maximising deep soil - issue for integrated basement. Refer earlier comments. Amend.	

Section 5.0

Precinct Controls and Guidelines

5.2 Central Precinct

5.2.1 Description		The description should be amended to reinforce core retail uses are to be located within the Central Precinct to underpin the establishment of compact town centre
5.2.2 Site Configuration Controls	Figure 5.5. Central Precinct Site Boundaries Plan	Update Figure 5.5 to reflect recommended urban structure – connections and open space (Refer to Section 2.1)
5.2.3 Floor space ratio controls	Figure 5.6 Central Precinct Site Floor Space Ratios Plan	Delete Figure 5.6 in accordance with the analysis and recommendations outlined in Section 2.4.
5.2.4 Land Use Controls	Figure 5.7 Central Precinct Land Uses Plan	Update Figure 5.7 to reflect recommended urban structure – connections and open space (Refer to Section 2.1) and land use strategy (refer to Section 2.4).

Section 5.0

	5.2.2, 5 Provide active frontages, awnings and colonnades in accordance with Figure 4.1 Active Frontages Plan and Figure 4.2 Awnings and Colonnades Plan.	Active frontage are to be updated in accordance with recommended land use strategy outlined in Section 2.2. Requirement for colonnades on active frontages should be reconsidered for reasons outlined above.
5.2.5 Building Heights Controls	Figure 5.8 Central Precinct Building Heights Plan.	Update Figure 5.8 to reflect recommended building heights and street wall heights (refer to Section 2.3) and recommended urban structure (Refer to section 2.1)
5.2.6 Building Zone and Setback Control	Figure 5.9 Central Precinct Building Zones and Setbacks Plan	Update Figure 5.9 to reflect recommended urban structure (refer to section 2.1).
	5.2.6, 3 – Building is not permitted in the easements, setbacks or public land dedicated for public domain, land dedicated for ICF funded streets or easements dedicated for development funded streets.	This needs to be amended to allow the opportunities for basement areas to be located under roads and other public spaces where appropriate.
5.2.7 Event Controls	5.2.7, 1 - Vehicle access points to be adjusted to suit our proposed street network and lots.	
Appendix B New Public Spaces - Urban Park – Central Precinct	Intent/Character Guidelines Area Predominant Uses	Update the design guidelines and character statements to reflect the recommended urban structure – open space (Refer to Section 2.1).
	Status To be dedicated to the Sydney Olympic Park Authority, with the option to negotiate private access under a maximum of 50% of the park.	GPT is seeking to retain ownership of the future open spaces to be delivered within its site. This structure will allow for the management and maintenance of this open space in partnership and consultation with SOPA.
Appendix C Street Plans and Sections		Hierarchy, scale and character of streets and public spaces to be amended to reflect recommended urban structure (refer to Section 2.1).

Attachment 2: Sydney Olympic Park Master Plan 2030 (2016 Review) -
Assessment of Traffic and Transport Outcomes
prepared by GTA Consultants

