

1-11 Australia Avenue, Sydney Olympic Park

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Prepared for **Site 3 Development Company Pty Ltd**



Major Project MP10_0027
Preferred Project Report

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Cover image: View from Figtree Place looking east.

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Quality Assurance

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.....
 Date
 This document is for discussion
 purposes only unless signed.

Appendices

- A** Architectural drawings
prepared by Bates Smart
- B** Response to architectural design issues
Prepared by Bates Smart
- C** Traffic Impact Assessment letter advice
prepared by Colston Budd Hunt & Kafes
- D** Solar Access Analysis
prepared by Windtech
- E** Radio Frequency Assessment Report
Prepared by Radhaz Consulting Pty Ltd
- F** Major Events Noise Assessment
Prepared by Renzo Tonin & Associates
- G** Preliminary assessment of AC condensers on balconies
Prepared by Renzo Tonin & Associates
- H** Final BASIX Certificate
Prepared by Windtech
- I** Storage provision typical unit layouts and storage schedule
Prepared by Bates Smart
- J** Schedule of unit and balcony areas
Prepared by Bates Smart
- K** SOPA Subdivision Approval DA64-09-2010 and Land Title
- L** Submissions
- M** Project Delivery Agreement Annexure B: Affordable Housing
- N** Response to RTA request for additional information
Prepared by Colston Budd Hunt & Kafes
- O** Lift advice
Prepared by NDY
- P** Loading dock management advice
Prepared by Phillippa Russell Lawyer

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1 Introduction

1.1 Preliminary

Following the initial request to the Minister for Planning for the Director General's Environmental Assessment Requirements (DGRs) for the preparation of an Environmental Assessment, correspondence from the Director of Government Sites and Social Projects of the Department of Planning, has been received by the Proponent with the DGRs.

An Environmental Assessment for the Project Application, addressing the DGRs was public exhibited for the period of approximately 5 weeks concluding on 5 August 2011.

The Department of Planning & Infrastructure wrote to the Proponent on 15 August 2011 and provided a link to the submissions received during the exhibition period, on the Department's website. The Department informed the Proponent that a response to the issues raised in the submissions is required in the form of a Submissions Report, under Section 75H of the *Environmental Planning and Assessment Act 1979*, or a Preferred Project Report and revised Statement of Commitments is required if changes to the project are required to minimise Environmental impacts.

The Proponent and its consultant team have reviewed and considered the submissions and in accordance with Clause 75H of the EP&AS Act 1979, this report has been prepared with responses to the submissions, a description of the Preferred Project and a revised Statement of Commitments with additional measures to further minimise environmental impacts of the development.

This report should be read in conjunction with **Appendices A - P** of this report and the Environmental Assessment Report as previously submitted and exhibited under Part3 A of the EP&A Act.

1.2 Consent authority

The site is located within Auburn Local Government Area. The consent authority for this application is the Minister for Planning under the provisions of Part 3A, as determined under Schedule 3 of the SEPP (Major Development) 2005, as it is a project with a capital investment value in excess of \$10 million within Sydney Olympic Park.

1.3 Format of this Report

This document is formatted no four sections as outlined below:

- **Section 2** addresses key issues raised in submissions received to the exhibition and notification of the proposal and forwarded to the proponent. Modifications undertaken in response to submissions are outlined and explained.
- **Section 3** deals with the modifications to the project design and additional mitigation measures that have been incorporated since the exhibition of the project application, incorporating final preferred project architectural drawings. These modifications are

also supported by additional justifications for non-compliances with the relevant development standards and controls.

- **Section 4** provides the revised Draft Statement of Commitments for the Project Application, taking into account the modifications to the proposal.
- **Section 5** provides a conclusion about the merits of the proposal.

1.4 Submissions

Submissions in response to the public exhibition of the Project Application documents were received from the following authorities and agencies and the public:

Authority and agency submissions

The following six (6) public submission were received:

- NSW Department of Planning & Infrastructure
- Sydney Olympic Park Authority
- RailCorp
- Department of Transport
- Sydney Water Corporation
- Office of Environment & Heritage

The Roads and Traffic Authority (RTA) wrote to Proponent and requested additional information. This information has been provided to the RTA and a copy is included at **Appendix N**. Refer also **Table 5**.

Public submissions

A single written public submission was received from:

- The Kador Group (owners of 1 Figtree Place) objecting to overshadowing and view loss impacts.

Additional private submissions were registered on the Department of Planning website

- One (1) objection to scale, density and compatibility with major events and suggested including a supermarket; and
- Four (4) in support.

The issues of scale, density and potential major events impacts are addresses in this report in response to issues raised by authorities and agencies.

1.5 Outline of the Preferred Project

What changes have been made to the exhibited Project Application Environmental Assessment?

The following changes have been made to the project application in response to submissions received during the statutory exhibition period:

- Amendments to the following units in Tower 2 to improve solar access:
 - L23-U08 and L23-U09 combined to dual key 3B unit;
 - L24-U01 split into 1B L24-U01 and 2B L24-U12;
 - L23-U07 and L23-U08 combined to dual key 3B unit;
 - L25-U01 split into 1B L25-U01 and 2B L25-U11;
 - L25-U06 and L25-U07 combined to dual key 3B unit;

- L26-U01 split into 1B L26-U01 and 2B L26-U11;
- L26-U06 and L26-U07 combined to dual key 3B unit;
- L27-U03 reconfigured with living area moved to façade line;
- L28-U03 reconfigured with living area moved to façade line;
- L29-U03 reconfigured with living area moved to façade line.
- Introduction of bicycle parking for visitors to proposed retail shops along the Australia Avenue frontage on the ground floor level.
- Separate retail garbage storage rooms have been introduced on the Ground Floor Level.
- Doors to the backs of the retail tenancies introduced for access to the loading dock and garbage rooms.

What additional information has been prepared in response to the issues raised in submissions and in support of the Preferred Project?

- Architectural drawings prepared by Bates Smart;
- Responses to the following architectural design issues raised by SOPA, prepared by Bates Smart:
 - Building separation;
 - Glass curtain wall;
 - Vertical slots
- Traffic analysis of Preferred Project prepared by Colston Budd Hunt & Kafes;
- Acoustic Impact Assessment of Major Events prepared by Renzo Tonin & Associates;
- Response to acoustic impact issues of balcony mounted condenser units prepared by Renzo Tonin & Associates;
- Solar impact analysis of Preferred Project against Master Plan 2030 and NSW RFDC 2002 requirements prepared by Windtech;
- Radio Frequency assessment prepared by Radhaz Consulting Pty Ltd;
- Final BASIX Certificate prepared by Windtech;
- Schedule of residential storage provision prepared by Bates Smart; and
- Schedule of unit and balcony sizes prepared by Bates Smart

What the Preferred Project seeks consent for?

The following describes the Preferred Project:

- **588 residential units** built across two separate buildings comprising:
 - **Tower 1 – a 24 storey tower** containing **267 residential units**;
 - **Tower 2 – a 29 storey tower** containing **321 residential units**;
- A two level podium comprising **1318m² of retail GF, 807m² of gymnasium and communal facilities and 165m² of residents facilities.**
- **800 car parking spaces and 245 bicycle parking spaces** which are located in 5 levels, with two accesses from Australia Avenue at the northern and southern end of the site;
- **Common open spaces** at the southern end of the site and on the Level 2 podium to be retained in private use for building

- occupants and their guests, comprising a total of **5194m²**;
- Site clearing and excavation works;
- Site landscaping including relocation of existing Fig tree from the centre of the site to the proposed common open space at the southern end of the site; and
- A total Gross Floor Area of 56,266m².

1.6 Revised Draft Statement of Commitments

In response to the issues raised in submissions, the draft Statement of Commitments has been revised to clarify and strengthen future planning and management actions. The revised Statement of Commitments is provided in full at **Section 4** of this Preferred Project Report.

2 Response to submissions

2.1 Introduction

This section of the Preferred Project Report provides a response to the issues raised in submissions under Section 75H of the *Environmental Planning and Assessment Act 1979*. The following public and private written submissions were received from the Department of Planning & Infrastructure:

Authority and agency submissions

The following six (6) public submission were received:

- NSW Department of Planning & Infrastructure
- Sydney Olympic Park Authority
- RailCorp
- Department of Transport
- Sydney Water Corporation
- Office of Environment & Heritage

The NSW Office of Environment and Heritage wrote to the Department of Planning & Infrastructure on 6 July 2011 in relation to the Environmental Assessment. The NSW Office of Environment and Heritage advised it had no comment to make on the application and no further interest in being involved in the proposal. Therefore a response is not considered necessary from the Proponent.

The Roads and Traffic Authority (RTA) wrote to Proponent and requested additional information. This information has been provided to the RTA and a copy is included at **Appendix N**.

Public submissions

A single written public submission was received from:

- The Kador Group (owners of 1 Figtree Place) objecting to overshadowing and view loss impacts.

Additional public submissions were registered on the Department of Planning website

- One (1) objection to scale, density and compatibility with major events and suggested including a supermarket; and

Four (4) in support.

2.2 NSW Department of Planning & Infrastructure

The Department of Planning & Infrastructure wrote to the Proponent on 15 August 2010 requesting the following additional information be provided, following a preliminary review of the Environmental Assessment and in light of the submissions. **Table 1** provides a response to the issues raised.

Table 1. Response to Department of Planning & Infrastructure

Issue	Response
1. Clarification regarding the maximum height of Towers 1 and 2 above existing natural ground level.	Existing ground level is shown on the architectural sections submitted in the Environmental Assessment. For clarity the Architects Bates Smart have updated these sections to show the maximum height limit, which is measured to be 90 metres above existing natural ground level. Refer to Figure 1 and Figure 2. Building height (or height of building) is defined in Part 23 of the Major Development SEPP to mean: <i>"the vertical distance, measured in metres, between ground level (existing) at any point to the highest point of the highest habitable floor (including above ground car parking) of the building, excluding plant and lift overruns, communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like"</i>. Tower 1 has a maximum height measured in accordance with the Major Development SEPP definition of 84.06m, which complies with the maximum 90m height limit. Refer to Figure 1 showing the height limit of the overall development including roof plant and the height limit excluding roof plant zone. Tower 2 has a maximum height of 99.45m measured in accordance with SEPP definition. The additional height of Tower 2 is justified having regard to the Clause 21 of the LEP, which allow variations to development standards to be considered by the consent authority, where it can be justified that: (a) <i>compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and</i> (b) <i>there are sufficient environmental planning grounds to justify exempting the development from that development standard.</i> Compliance with the Development standard is unreasonable and unnecessary as the proposed development is no higher than the tallest building ('Building D') that was previously approved for the site under the Staged Master Plan DA 246-10-2004. Tower 2 is no greater in height than the tallest residential tower approved under the Staged Master Plan DA246-10-2004, although it is proposed in an alternative location on the site further south on the site. The approved tower building C/D had a maximum height of 114.5m RL excluding roof plant zone and RL 120.6m including the roof plant zone.

	The maximum height of the approved building envelopes under Condition A12 of the Stages Master Plan DA 246-10-2004 for each building envelope is: • Tower A: RL 96.20 • Tower B: RL 71.40 • Tower C: RL 96.20 • Tower D: RL 114.80 • Tower E: RL 76.10 • Tower F: RL 94.70 Refer to Condition A12 of the DA246-10-2004 and to Figure 3 illustrating the approved building envelopes. Condition A13 allows for architectural roof features that contribute positively to the skyline and image of Sydney Olympic Park, shall not exceed 6 metres above the top ceiling level of each building and shall contribute to building slenderness. The glazed curtain wall that provides an extension of the building form to the top most point of Tower 2, is less than 6m in height at 5.9 metres in height, which results in an overall building height of RL 120.4m. The proposed development complies with the maximum height of the development in terms of maximum permitted number of the storeys under the Master Plan 2030. The Master Plan 2030 maximum height limit is 20-30 storeys. The proposed development is 29 storeys in height. The proposal has the following floor to floor heights: • Ground Floor Level: 4.4 metres • First floor level: 4.1 metres • Residential x 27 levels: 3.2 metres Tower 2 has a height of 94.9m above ground floor level fronting Australia Avenue. Due to the slope of the existing ground level, the heights between existing ground level at any point to the highest point of the highest habitable floor (Level 29) on the eastern side of the building equates to the maximum height of 99.45m. The floor to floor height at ground level and level 1 are provided for the retail and communal uses and comply with the Master Plan 2030 requirements (CI 4.5.4(6) and Table 4.3). The residential floor to floor heights are proposed at 3.2m, which will allow a floor to ceiling height of in excess of the minimum 2.7m to provide improved environmental amenity, natural ventilation and daylight access into the backs of the units. The additional 9.45m in height will not result in any significant adverse environmental impacts in terms of: • overshadowing and sunlight access to private and public domain areas within Sydney Olympic Park and the adjoining Bicentennial Parklands; • visual impact from significant public views in the region, local area or immediate vicinity of the site; • view loss from public and private land in the vicinity of the site; and • Private impacts are not greatly impacted by the additional height, as the same number residential storey complies with the Master Plan 2030. The height, bulk and scale and massing of the proposal were supported by the design competition jury in selecting the Bates Smart scheme to progress to the Project Application stage.
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The maximum height of Tower 1, measured in accordance with the Major Development SEPP definition is 84.06m. Tower 1 complies with the 90 metre maximum height limit under the Major Development SEPP.

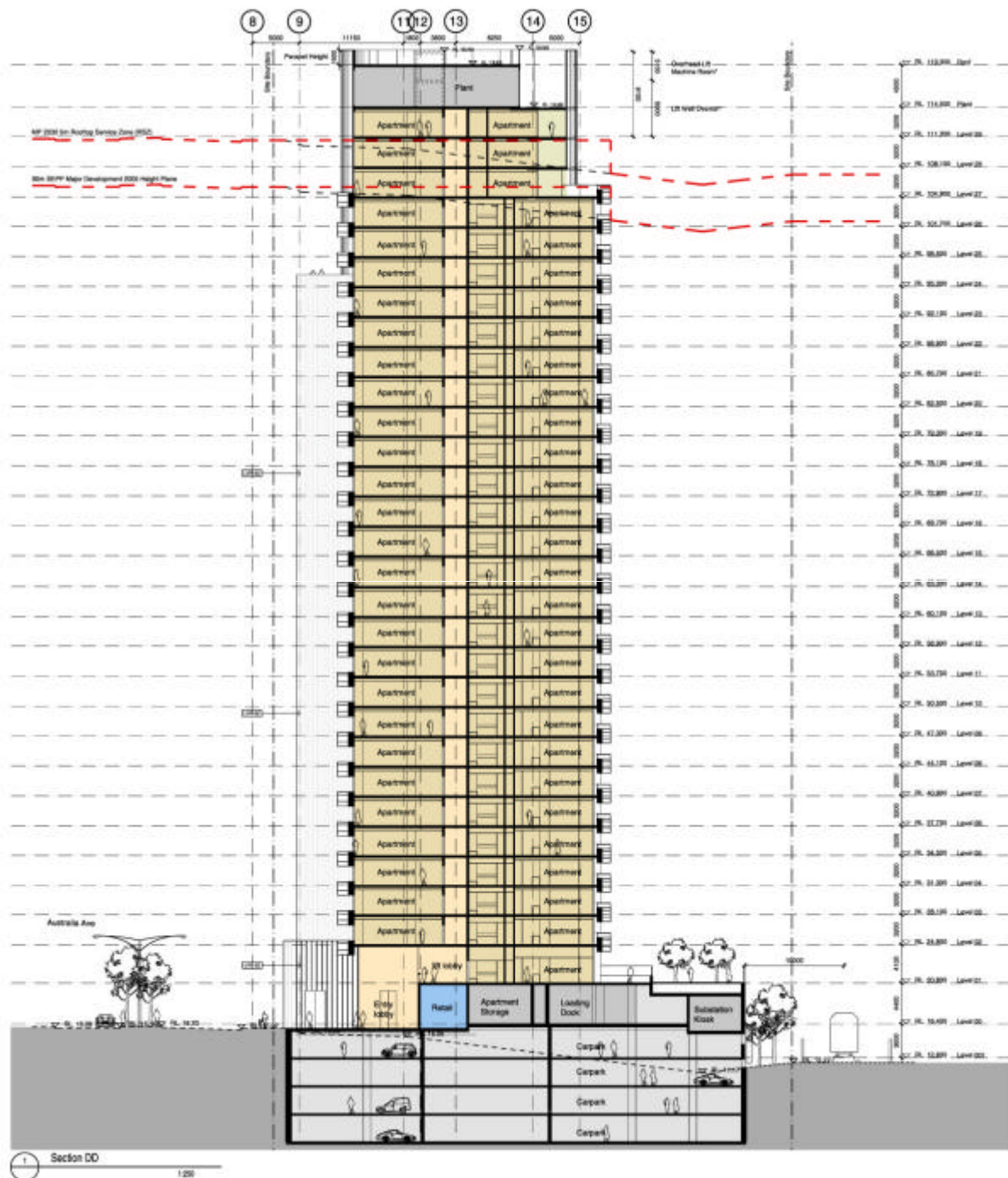


Figure 2. Tower 2 section

The maximum height of Tower, measured in accordance with the Major Development SEPP definition is 99.45m. Tower 2 exceeds the maximum 90 metre maximum height limit under the Major Development SEPP, however at 29 storeys Tower 2 complies with the maximum 30 storey height control under the Master Plan 2030.

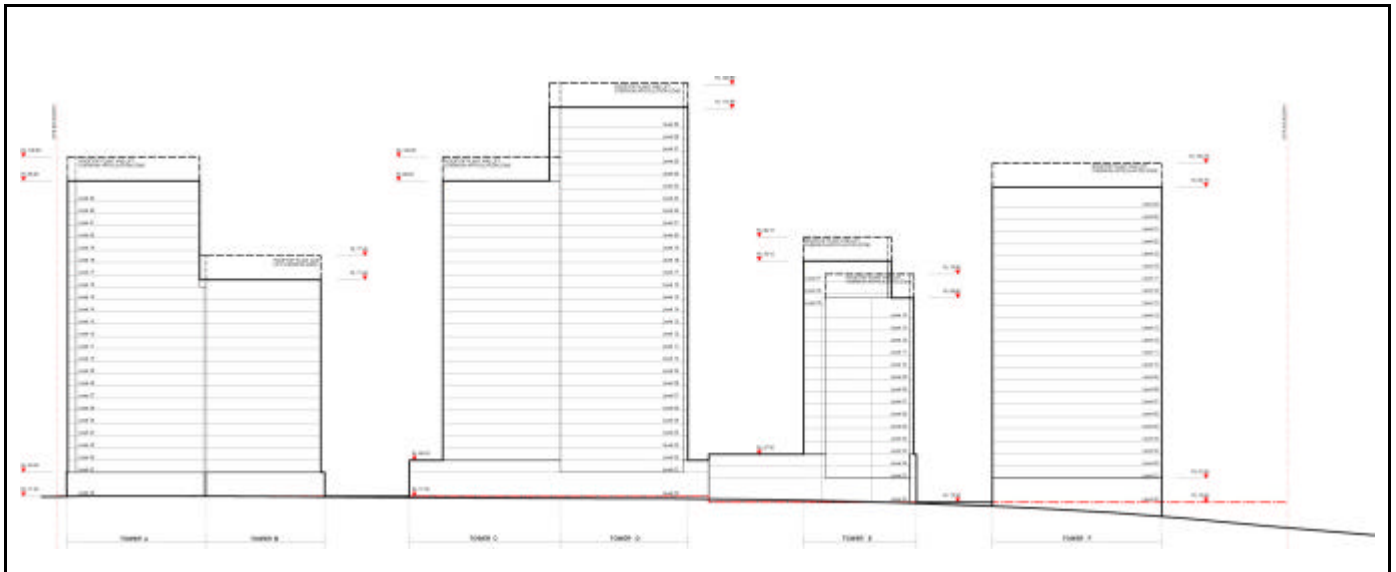


Figure 3. Stage 1 Master Plan building envelope diagram

The maximum height of the approved building envelopes under Condition A12 of the Stages Master Plan DA 246-10-2004 for Tower D at 114.80 plus architectural roof feature is RL 114.80. Condition A13 allows for architectural roof features up to an additional 6 metres above the top ceiling level of each building, which is noted to a maximum height of RL120.80.

2. A rooftop services zone (RSZ) for both towers that complies with Sydney Olympic Park Master Plan 2030, height and setback requirements, or provides justification for any non-compliance.

Under Clause 4.6.5 (1) of the Sydney Olympic Park Master Plan 2030 the maximum height of the Roof Service Zone (RSZ) is 5m above the roof level. The RSZ for Tower 1 has a height of 2.7m above the roof level and is therefore compliant. The RSZ for Tower 2 has a height of 5.9m, which exceeds the maximum height of the RPZ limit by 0.9m.

Norman Disney & Young (NDY) are the lift engineers for the proposed development. The lift engineering consultants to the project. Advice from NDY confirms that the proposed heights of the RSZ is based on the requirement for the high rise scale of the proposed buildings.

The NDY advice at **Appendix O** states that:

"The residential towers (Tower 1 & 2) are high rise developments which require lifts with a relatively high rated speed in order to provide a good quality service".

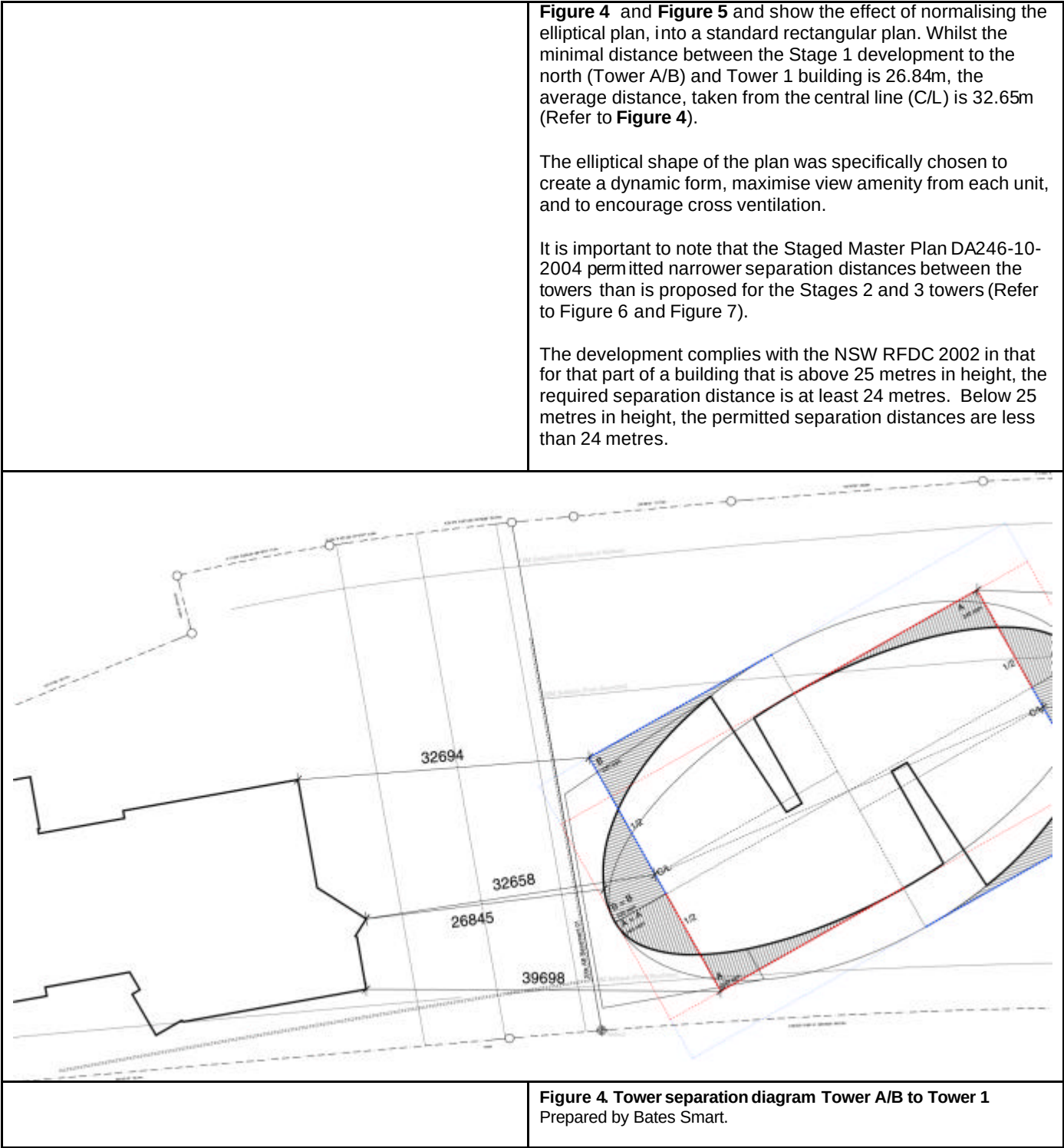
The Master Plan limit on RSZ height applies to all buildings, irrespective of their overall height and servicing and lifting requirements.

On Tower 2 the RSZ is surrounded by the glassed wall which extends to the top of the building and visually encloses the RSZ. This design approach is consistent with the controls 64.6.5 (5) which states that:

"The design of rooftop structures is to be integral with the overall building design".

The proposed RTZ achieves this control, by integrating the RPZ into the overall curved form. The RSZ on Tower 2 mimics the elliptical form of the residential floor plate below.

	Under the Staged Master Plan DA246-10-2004, the maximum height of than architectural roof feature is 6m. The proposed curved glazed architectural roof feature will assist to screen roof plant and equipment when viewed from the Australia Avenue streetscape, street level and broader views of the building. There non-compliance with the maximum RPZ height of Tower 2 is minimal when considering the overall height of the development. The gazed architectural roof feature will appropriate mitigate the impact of the additional RPZ roof height.
3. Clarification regarding compliance with tower separation requirements in the Sydney Olympic Master Plan 2030, or provide justification for any non-compliance.	The design competition endorsed two towers instead of three for the Stages 2 and 3 site. The sitting of the towers was supported by the Design Competition Jury in selecting the scheme to progress to the Project Application phase. The support of the tower locations is expressed in the Jury Report on page 9, as follows: <i>"From long distance the tower separation and differentiation in tower heights provided a desirable articulated skyline. The proposal for two towers allowed for greater separation and visual connections through the site"</i> The intent of the separation distance control, as outlined in the NSW RFDC 2002 is to: - Ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings - To provide visual and acoustic privacy for existing and new residents; - To control overshadowing of adjacent properties and privacy or shared open space. - To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants; - To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow. The deletion of Tower E from the approved Staged Master Plan DA 246-10-2004 at the southern end of the site created an open space in this Stage 2 and 3 Project Application for common use by residents and their visitors and has opened up the public view along Figtree Street to the east and south east. This space allows for additional deep soil landscaping and the retention of existing stormwater infrastructure, which would not have been possible if the site was to be developed in accordance with the Stage 1 Master Plan DA 246-10-2004. Living rooms are not directly facing each other in this location due to the skewed orientation of the buildings, which will limit direct overlooking opportunities and visual and acoustic privacy impacts. The proposal achieved the minimum solar access requirements under the Master Plan 2030 and the NSW RFDC 2002. The 24m separation distance occurs only at the closest point between Towers 1 and 2. A diagram has been prepared by Bates Smart Architects to illustrate the separation distance between the two towers. Refer to Figure 4 and Appendix B.



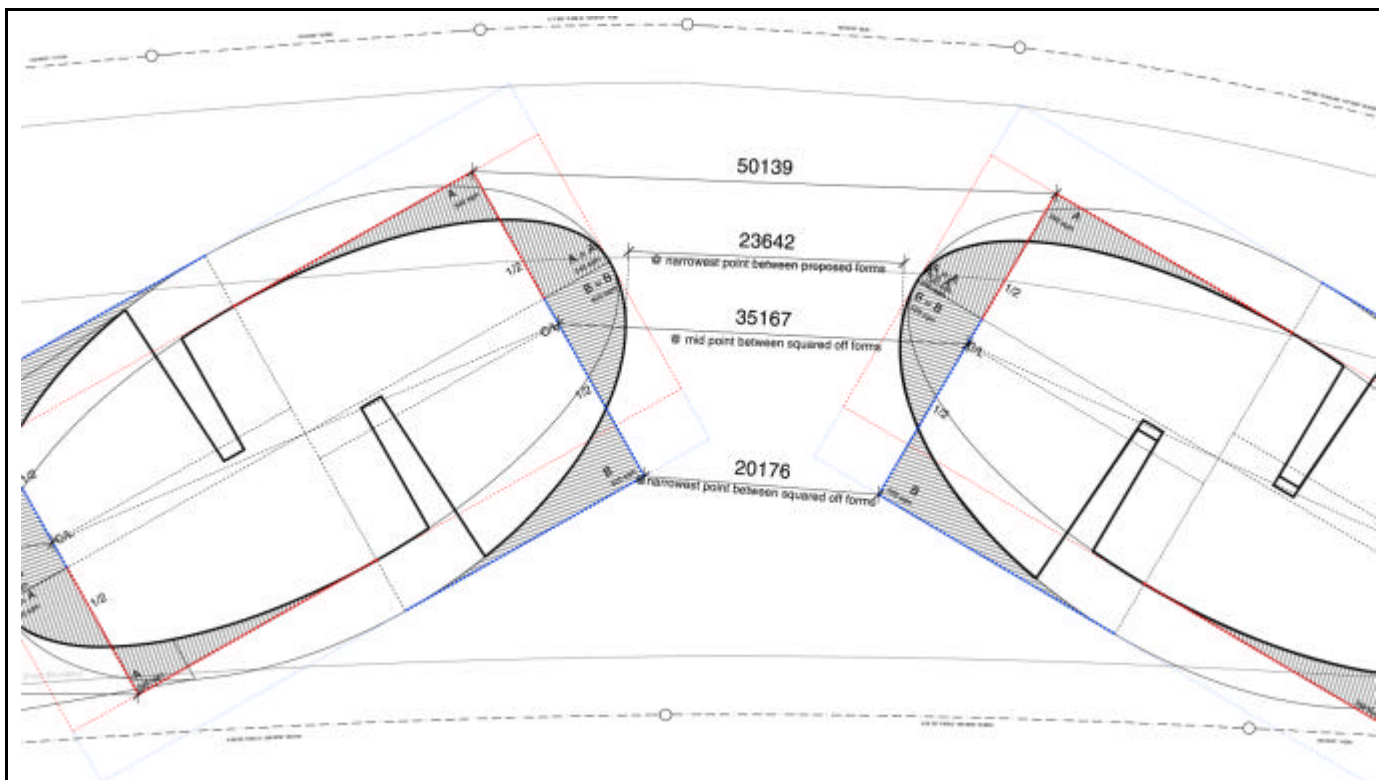


Figure 5. Tower separation analysis diagram Tower 1 to 2
Prepared by Bates Smart.

Figure 1 shows the effect of normalising the elliptical plan, into a standard rectangular plan for Stages 2 + 3. Whilst the minimal distance between the two buildings is 23642mm, the average distance, taken from the C/L of the squared off forms is 35167mm.

A 40m setback is proposed in MP2030 is to prevent overlooking between facing buildings. The towers proposed in Stages 2 + 3 are orientated on a north-south axis and are angled away from each other, meaning the living spaces in the units are orientated away from the neighbouring building.

Further, the proposed scheme is very close to compliance with the Residential Flat Design Code which recommends a 24m building separation between habitable rooms/balconies for buildings above 9 storeys/over 25m.

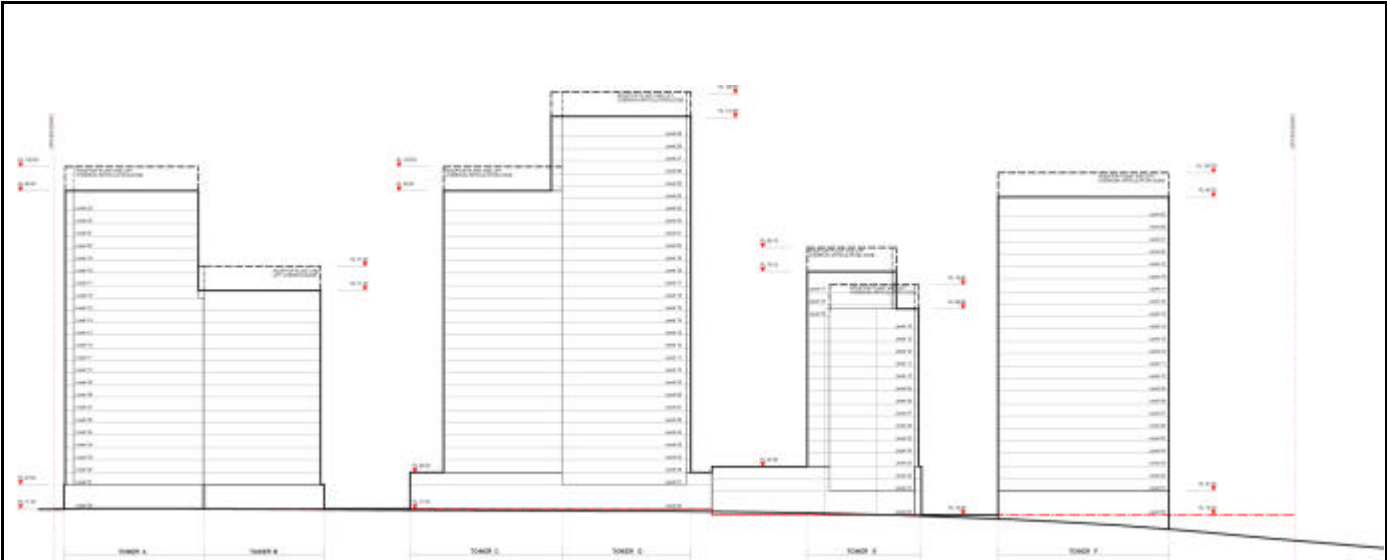


Figure 6. Staged Master Plan DA 246-10-2004 building envelopes Section



Figure 7. Staged Master Plan DA 246-10-2004 building envelopes Plan view and section

4. Clarification regarding the percentage of units that would receive three hours of solar access and justification for any non-compliance with the relevant requirements;

Further analysis of the solar access performance of the development has been undertaken by Windtech. The assessment of the performance of the development against the following Master Plan 2030 criteria at Clause 4.6.17 (16):

“To achieve high quality living environments:

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 results of the sunlight access analysis are summarised as follows:

- 75% of the total number of residential units achieve at least 3 hours of direct solar access to the window(s) of the Living Area between 7.30am and 4.30pm on June 30. This comprises of 63% of the units in Tower 1, and 85% of the units in Tower 2.

	75% of the total number of residential units achieve at least 3 hours of direct solar access to the floor slab of the Private pen Space between 7.30am and 4.30pm on June 30. This comprises of 63% of the units in Tower 1, and 85% of the units in Tower 2. The Preferred Project complies with the SOPA Master Plan 2030 solar access provisions. Applying the SEPP 65/NSW RDFC 2002 criteria of 2 hours of living rooms and private open spaces sunlight access between 9am and 3pm on 21 June for 70% of the proposed units, the results of the analysis reveal the following: 73% of the total number of residential units achieve at least 2 hours of direct solar access to the window(s) of the Living Area between 9am and 3pm on June 21. This comprises of 63% of the units in Tower 1, and 82% of the units in Tower 2. 72% of the total number of the residential units achieve at least 2 hours of direct solar access to the floor slab of the Private Open Space between 9am and 3pm on June 22. Thus comprises of 63% of the units in Tower 1, and 80% of the units in Tower 2. The proposal therefore complies with the NSW Residential Flat Design Code 2002 criteria for a dense and constrained urban site, such as the subject site. Having regard to the solar access performance achieves, it is considered the proposal performs well, considering the constrained width of the site, further constrained of the railway corridor setback zone, and the desire to avoid a wall of buildings, with the same north-south orientation as Tower A/B (Stage 1). This improved sunlight access performance has been achieved through amendments to some of the units, as illustrated in the architectural drawings at Appendix A. Refer also to the Windtech solar access assessment at Appendix D.
5. Details of the retail and commercial car parking arrangements and servicing arrangements.	The proposed retail and commercial car parking is as follows: A total of 26 car spaces will be allocated to the retail tenancies on the site. The proposed car parking complies with the Master Plan 2030 maximum car parking requirements of 1 space per 50sqm. The loading docks have been designed in accordance with the relevant Australian Standards to cater for vehicles up to 12.5 metres large rigid trucks. The loading dock bays will therefore be suitable for garbage trucks, furniture vans and other delivery and maintenance vehicles. Services vehicles will be able to enter and exit in a forward direction, using the two proposed driveways to the site. Colston Budd Hunt & Kafes (CBHK) traffic and parking consultants for the proposed development have provided further detailed on the loading dock bays to the RTA in response to their request for further information. This package of information provided at Appendix N included diagrams illustrating the swept path analysis for 12.5m large rigid trucks.

	SOPA raised concerns about the proposed loading dock arrangements including adequate dimensions to allow for range of vehicles to service the needs of building occupants. A detailed response to SOPA's issues is provided in Table 2 below. A statement has been prepared by Phillippa Russell Lawyer on the proposed strata arrangements for managing the loading dock. Refer to Appendix P. In summary, the loading dock for each stage will be contained on the title to either the residential tower buildings or the retail podium building and will be a shared facility governed by the terms of the registered strata management statement. A strata management statement will be registered with the strata plan for the residential buildings and retail podium building. This document will be registered on title, will bind each owner and occupier of lots in both the residential and the retail buildings and will govern the relationship between these owners and occupiers. The loading dock, even though on the title to one of the buildings, will be a shared facility. Owners and occupiers in both the residential building and the retail building will be entitled to use the loading dock in accordance with the terms of the strata management statement. Costs for the operation, use, maintenance, repair and replacement of the loading dock will be shared between the retail and residential buildings in the manner dictated by the strata management statement.
6. A Final BASIX certificate	An updated BASIX certificate has been provided for those units which have been amended as part of the Preferred Project. The BASIX Certificate has been prepared by Windtech, an accredited BASIX certifier and is provided at Appendix H.

2.3 Sydney Olympic Park Authority (SOPA)

Sydney Olympic Park Authority wrote to the Department of Planning & Infrastructure on 5 August 2011 to provide comments on the Environmental Assessment. A copy of the submission is provided at **Appendix L**. **Table 2** provides the Proponent's response to the issues raised.

Table 2. Response to SOPA

Issue	Response
SOPA raise a number of issues related to consistency with the Staged Master Plan DA	
1 The maximum number of <i>Residential Units</i> of 673 is exceeded by 133 units	The total number of units proposed across Site 3 including (Stage 1 development) is 804, which exceeds the Staged Master Plan DA maximum dwelling condition by 131 units. The proposed floor space ratio is marginally above the maximum 5.25:1 at 5.277:1, which equates to 300m². The additional GFA will have a negligible effect on the bulk and scale of the development. The proposed floor space is consistent with the design competition brief, which was endorsed by SOPA. The unit mix has changed as a result of the Design Competition, and in the 6 years since the original Master Plan was approved the residential market has changes and more smaller 1 and 2 bedroom units are desired. The additional impact of the dwellings on the site has been considered in terms of parking demand and traffic generation by CBHK Traffic and Parking Consultants. Refer to Appendix C. The Traffic Report provides a comparison between the Staged Master Plan DA246-10-2004 and the proposed overall development. In summary the traffic report states that: • The approved Master Plan provides for 673 residential units. • Stage 1 of the approved development currently under construction has a total of 216 residential units. • The proposed Stages 2 and 3 development includes 588 residential units. Therefore the difference between the approved Master Plan and the proposal for Site 3 is 131 units. • Applying the RTA Guide to Traffic Generating Development rates, the proposed residential development plus the development currently under construction in Stage 1 (Tower A/B) would generate some 240 to 320 vehicles per hour two way during weekday morning and afternoon peak hours. This compares to the approved Master Plan development which would generate some 200 to 270 vehicles per hour two-way. • Therefore the additional 131 units would generate an additional 40 to 50 vehicles per hour two-way, compared to the development approved in the Master Plan. This is a low additional generation. • The Traffic and Transport Report submitted with the Environmental Assessment assesses the effects for the additional traffic from Stage 2 and 3 including the 40 to 50 vehicles per hour of the 131 additional units) plus traffic from the Stage 1 development which is currently under construction. It found that the road network will be able to cater from the additional traffic from these developments.

Issue		Response																																		
2	The maximum number of bedrooms of 1360 has not been considered by the Proponent in the EA. It is noted that 1057 bedrooms are proposed for this application (MP 10-0027).	The number of bedrooms proposed in Site 3 including Stage 1, 2 and 3 is 1401. Stage 1 has 377 bedrooms and Stages 2 and 3 has 1024 bedrooms. The Staged Master Plan DA approval was approved with a condition A11 limiting the maximum number of bedrooms across Site 3 to 1360 bedrooms. The proposed Stages 2 and 3 development combined with the Stage 1 approved development has 41 bedrooms more than the Stages Master Plan DA which is the result of changes to the unit mix. The unit mix has changed as a result of the Design Competition and to reflect changes in the residential property market since the Master Plan DA was approved in 2005. A limit on the number of bedrooms is considered excessive and a duplication of the controls, as the Master Plan has a unit mix requirement, as well as a maximum density control (FSR control) under the Major Development SEPP. We understand that the limitations on the number of dwellings and bedrooms related to mitigating the impact of traffic generated by the occupants of the development on the local and regional road network. As noted above, additional impact of the increased number of units and bedrooms on the site has been considered in terms of the additional traffic generation and impact on local and regional roads by CBHK Traffic and Parking Consultants. Refer to Appendix C. The Traffic Report provides a comparison between the Staged Master Plan DA 246-10-2004 and the proposed overall development and concludes that the additional traffic generation is 40-50 vehicles per hour is considered low and that the road network will be able to cater for the additional traffic movements.																																		
3	It is noted that MP 06_0127 MOD 2 (dated 16 December 2010) approved 290 car parking spaces for Stage 1. Therefore the maximum number of car parking spaces is exceeded by 160 spaces.	As above, the unit mix has changed and traffic impacts have been addressed in a supplementary traffic and parking assessment at Appendix C. The provision of 800 car spaces is fewer than the maximum permitted under the Master Plan 2030.																																		
4	The EA only provides a breakdown of the Unit Mix for Stages 2 & 3. The Proponent must provide a breakdown of the Unit Mix across the whole site (Stages 1, 2 and 3).	The unit mix across the entire site 3 (including Stages 1, 2 and 3) is provided as follows: <table><tr><th>Unit type</th><th colspan="2">Number of units</th><th>%</th></tr><tr><td rowspan="3">1</td><td>Stage 1</td><td>77</td><td rowspan="3">36.4%</td></tr><tr><td>Stage 2 & 3</td><td>215</td></tr><tr><td>Sub-total</td><td>292</td></tr><tr><td rowspan="3">2</td><td>Stage 1</td><td>124</td><td rowspan="3">52.2%</td></tr><tr><td>Stage 2 & 3</td><td>296</td></tr><tr><td>Sub-total</td><td>420</td></tr><tr><td rowspan="3">3+</td><td>Stage 1</td><td>15</td><td rowspan="3">11.4%</td></tr><tr><td>Stage 2 & 3</td><td>77</td></tr><tr><td>Sub-total</td><td>92</td></tr><tr><td colspan="2">Total</td><td>804</td><td>100%</td></tr></table>			Unit type	Number of units		%	1	Stage 1	77	36.4%	Stage 2 & 3	215	Sub-total	292	2	Stage 1	124	52.2%	Stage 2 & 3	296	Sub-total	420	3+	Stage 1	15	11.4%	Stage 2 & 3	77	Sub-total	92	Total		804	100%
Unit type	Number of units		%																																	
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	Stage 2 & 3	77																																		
	Sub-total	92																																		
Total		804	100%																																	
5	An EME report (that identifies potential electronic interference from AM radio towers located with SOP, and include mitigation measures) was	The EME issues were not identified in the Director General's Environmental Assessment Requirements.																																		

Issue	Response
required to be prepared and submitted to the Department. No EME report has been submitted as part of the EA.	The EME report was prepared for the Staged Master Plan DA. This is attached at Appendix E to this Preferred Project Report. The EME report prepared by Radhaz Consulting Pty Ltd undertook an assessment of the Radio Frequency Electromagnetic Energy levels at the subject site from the existing AM broadcast services located in the area. The assessment addresses issues of compliance with human exposure standards, radio frequency interference on both therapeutic and electronic equipment. In summary, the report concludes that: <i>"The allowable human exposure limits specified by ARPANSA will not be exceeded within the area of the proposed development. It is expected that the RF EME levels within the area of the proposed development will be consistently lower than those specified by ARPANSA and therefore the proposed site will comply with the ACA regulatory requirements".</i> In relation to the interference of AM Radio Frequency on therapeutic devices, the assessment states: <i>"It is not expected that the transmissions from the AM broadcast services will have any effect on therapeutic devices".</i> In relation to RF interference on electronic equipment, the assessment states that: <i>"As there is no mandatory requirement in Australia for electronic equipment to be immune to RF interference from AM broadcast signals and no control over equipment used by members of the general public is available, it is possible that electronic equipment, with a propensity to be interfered with, may suffer from RF interference from the AM broadcast services".</i>
6 SOPA records indicate Site 3 has an area of 14,913m², which is 77m² less than the area identified in Table 9 (FSR distribution across Site 3) of the EA. Accordingly, based on the FSR of 5.25:1, the maximum permissible GFA for the whole of Site 3 would be only 78,293m² (813m² less than the proposed GFA). The site area is to be verified and the relevant figures amended if necessary.	A site survey confirms the site area is 14,990m². The survey is based on the Registered Plan of Subdivision. The subdivision DA to create the separate lots for Stages 1, and 2/3 was approved by SOPA. Refer to SOPA approval of the Subdivision DA 64-09-2010 and the Land Title at Appendix K. The proposed GFA for Stage 2/3 is 56,266sqm.
7 The EA is inconsistent in relation to the development site area. For example, the EA (page 22) states that 'overall Site 3 has an area of 10,480m²'; however other parts of the EA indicates that 10,480m² is the area for Stages 2 & 3. In this regard, the proponent should confirm that the figures in Table 9 of the EA must be certified to be correct. Furthermore, the proponent should confirm that the GFA figure is inclusive of all retail/commercial/community uses floor area.	The area of 10,480m² is the area for Stages 2 and 3 only. The total GFA figure above is inclusive of all GFA measured in accordance with the definition under the Major Development SEPP inclusive of all retail/commercial/community GFA.
8 Part 4.7 of the EA (page 39) contends inter alia that the 'design competition amended the Site 3 FSR to 5.36:1'. The proponent should document which part of the Design Competition Brief and	The FSR, as noted in the EA for the Stages 2 and 3 development is 5.36:1. The overall GFA for the entire Site 3 inclusive of Stage 1 is 79,106m², which equates to 5.277:1 when applied across the approved and surveyed land area.

Issue	Response
Jury Report supports this FSR increase.	The Design Competition Brief, which prepared by Architectus in consultation with and endorsed by SOPA, states that the maximum GFA for the site is 56,213m ² , which equates to 5.36:1 when applied across the Stages 2 and 3 site only. The Design Competition Brief formed part of the Jury Report and formed the basis for the Design Competition and this Project Application.
9 The EA and relevant plans should be marked with the 90m SEPP Major Development 2005 height plane. This has not been provided. The maximum building height in the SEPP is 90m (measured to the ceiling of the top habitable floor), and MP 2030 provides for an additional 5m for rooftop service zone (RSZ) e.g maximum 95m. The drawings indicate maximum building height of approximately 105m. The height should be reduced, or further justification in accordance with Clause 21 of SEPP MD 2005 and MP 2030 (Part 4.6.8) must be provided.	Updated sections of the tower buildings illustrate the maximum height plane at 90m above the existing natural ground level in accordance with the Major Development SEPP height definition. The proposed Tower 1 has a maximum height of 84.06 metres. Tower 2 has a maximum height of 99.45 metres. The additional height above that permitted by the SEPP Major Development 2005 is consistent with the Master Plan 2030 height range for the site of 20 – 30 storeys. Tower 1 has a height of 24 storeys and Tower 2 has a height of 29 storeys, which complies with the Master Plan 2030 height limits. The towers do not result in any significant overshadowing impacts on surrounding sites. Shadow diagrams provided with the Environmental Assessment, show that the shadows cast in the afternoon over the Bicentennial Parklands are generally within the shadows cast by the building envelop on Site 68, which has a 90 metre and 20-30 storey height limit. The visual impact of the additional 9.45 metres will be minimal having regard to a numerically compliant 90m high building. An urban design rationale for the additional height has been prepared by Bates Smart in the Design Report submitted with the Environmental Assessment. In summary, • The Competition winning scheme explored the potential to differentiate the built form of the three-remaining towers. The design is based on creating a relationship between the buildings, whilst allowing differentiation. • The buildings step with the curvilinear forms stepping up to a high point of Tower 1 opposite Figtree Drive. • The skyline profile provides height at either end of Site 3. Further justification of the height non-compliance has been provided in response to the Department of Planning and Infrastructure comments in Table 1.
10 The proposed RSZ height (Tower 1. is 5.88m high; Tower 2 is 6.1m high) with minimal to nil setback from the respective tower parapets do not comply with MP 2030. The RSZ should have a maximum height of 5m and setback 3m (minimum) from the parapet in accordance with MP 2030. The non-compliance with the SEPP MD 2005 building height limit means that compliance with the RSZ requirement must be achieved. Further details should also be provided in relation to the coverage in plan of the respective	The RSZ is required to exceed 5m in height due to the size of the plant needed to operate the lifts for a tower of this heights proposed. Refer to the lift engineer's advice at Appendix O. The Master Plan limit on RSZ height applies to all buildings, irrespective of their overall height and servicing and lifting requirements. In Tower 1 the RSZ is integrated with the form of the roof, minimising its visual impact and complies with the maximum 5m height limitation. In Tower 2 the RSZ is surrounded by the glassed wall which extends to the top of the building and visually encloses the RSZ and has a height of 5.9m. This design approach is consistent with the controls

Issue	Response
RSZ.	64.6.5 (5) which states that: <i>"The design of rooftop structures is to be integral with the overall building design".</i> The proposed RPZs for both Towers satisfies the intent of this control, by their integration with the curved tower forms. The RSZ on Tower 2 mimics the elliptical form of the residential floor plate below. The roof plant and lift over runs are screened behind the curved curtain glazed wall, which provides an architectural feature at the top of the tower buildings .
11	Compliance with RFDC building separation requirement is noted. However, the MP 2030 provision (Part 4.6.8) is above and beyond that of the RDFC, and requires towers (above 26m) to have minimum of 40 metre separation. Accordingly, this matter is to be adequately addressed by the Proponent and / or separation between Towers 1 & 2 should be increased beyond the 24m currently proposed. The elliptical forms of the towers taper to the closest point of 23.64m. This separation distance occurs only at the closest point between the two towers. Figure 5 illustrates that the separation between the buildings. The two elliptical towers are angled and setback from Australia Avenue, so that the impacts of adjacent habitable living rooms and private open spaces are minimised. Living rooms are not directly facing each other in this location. The development is very close to complying with the RFDC in that for that part of a building that is above 25 metres in height, the required separation distance is at least 24 metres. Furthermore, the design competition endorsed two towers instead of three for the Stages 2 and 3 site. This design strategy allows for usable common open space to be created at the southern end of the site at ground level. Refer to Table 1 for further justification for the proposed separation distances.
12	Further details should be provided in relation to the separation between the Stage 1 development (under construction) & the North Tower (Tower 1) in Stage 2. The Design Competition endorsed the location of the towers on the site. The site plan from the Environmental Assessment has been updated to include the Stage 1 development with Tower 1 and Tower 2 and illustrates the separation distances. Tower has a minimum separation of 26.84m to the Stage 1 building. Refer to Figure 4. The proposed separation complies with the minimum required under the NSW RFDC 2002.
13	Appendix T (page 3) of the EA states that only 2 hours of sunlight is provided to 72% of the development, which does not comply with the MP 2030 minimum requirement of 3 hours of sunlight to 75% of developments. Windtech were commissioned to review the performance of the project application against the sunlight access requirements of the SOPA Master Plan 2030. The assessment of the performance of the development against the following Master Plan 2030 criteria at Clause 4.6.17 (16): <i>"To achieve high quality living environments:</i> <i>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"</i> Refer to response at Table 1.

Issue	Response
14 In addition, the quality of sunlight received is unclear as the terminology used is ambiguous e.g what percentage of the window surface and floor slab receives sunlight, what constitutes floor slab etc. These matters are to be adequately addressed.	The methodology used to determine the amount of sunlight access to living rooms and private open space is explained in the Solar Analysis assessment undertaken for the Environmental Assessment, as follows: <i>“Shadows are able to be cast over the model based on the path of the sun on the mid-winter solstice (21 June), From this, the time of the day when direct solar access is available to the windows of the Living Areas of each residential apartment is determined. Furthermore, the times of the day when direct solar access is available to the Private Open Space (measured at the floor slab level) of each residential apartment is also determined. The results of the study are accurate to within 10minutes”.</i> (Refer to Appendix T of the Environmental Assessment). The Land and Environment Court made a ruling in <i>The Benevolent Society – v Waverley Council</i> (2010) to say what the proportion of a window or floor slab receiving sunlight is undesirable and inappropriate. The specific point made in the Class 1 proceedings in relation to sunlight access was as follows: <i>“For a window, door or glass wall to be assessed as being in sunlight, regard should be had not only to the proportion of the glazed area in sunlight but also to the size of the glazed area itself. Strict mathematical formulae are not always an appropriate measure of solar amenity. For larger glazed areas, adequate solar amenity in the built space behind may be achieved by the sun falling on comparatively modest portions of the glazed area”.</i> The Windtech solar access analysis adopts a method which has been accepted by the NSW Land and Environment Court, to calculate the extent of direct solar access to living rooms and private open space.
15 Bicycle parking spaces should be provided at street level, concentrated at building entrances and around retail activity, and not in the lower basement parking levels.	Bicycle parking racks is proposed to be provided in locations at ground level adjacent to the retail units fronting Australia Avenue and close to the entrances of the two residential towers.
16 It appears that no end-of-trip facilities such as change rooms, showers and lockers have been provided. These facilities must be provided to encourage sustainable transport options.	There are change rooms with showers provided at ground level, adjacent to the manager's office. Staff of the retail tenancies will be able to use the shower and change room facilities. The use of the change rooms will be managed through the Strata Scheme Management Plan. Many of the bicycle users from the site will be residents and their visitors and they will use the showers in each residential unit.
17 The Design Competition Jury, SOPA Design Review Panel, and SOPA Urban Planning / Design Team have consistently opposed the use of balcony mounted AC condenser units for both visual and amenity reasons. The key concern is the heat and noise impacts on the only POS available to each unit. Furthermore, the proponent offered a very workable VRV alternative at the February DPR meeting (refer to Attachment A) which demonstrated that there are feasible alternatives to the balcony units.	The AC condenser units are generally located at the rear of balconies and are proposed to be integrated into a fixed outdoor seat on the balcony, therefore the visual impacts of the units are minimised from the public street view. Renzo Tonin & Associates (RTA) has provided a latter advice on the conditioning condensers units on balconies. It is noted that the air conditioning system has not been selected or finalised at this stage, however RTA have provided 'in-principal noise mitigation and management measures are provided for the air condenser units servicing the development:

Issue	Response
	• An acoustic assessment of the air condenser units will be undertaken during the detailed design and equipment selection phase. The selected condenser units shall not exceed the noise limits in the Acoustic Report prepared for the Project Application Environmental Assessment; • Noise emissions from selected air condenser units can be controlled through implementing common engineering methods, that may include any of the following: - Strategic position of air conditioning units on balconies that are away from sensitive neighbours, maximising intervening shielding between air condenser units; and/or - Selecting air condenser units that incorporate inverter technology and night quiet mode which reduce the operating inverter technology and night quiet mode which reduce the operating sound levels when the outdoor temperature has dropped by a certain amount from the maximum temperature recorded during the day, and/or - Acoustic screens and barriers the air condenser and sensitive neighbouring premises, and/or - Air condenser unit shall be mounted on vibration isolators; and/or - Air condenser units will have their noise specifications and their proposed locations checked on site prior to installation. The RTA concludes that: <i>"By placing air condenser units on the balconies of Stag 2 & 3, the noise levels emitted from the air condenser units are capable of noise levels stipulated in the acoustic report dated 7 June 2011".</i> The AC condenser units generate heat (much the same as a fridge). Locating the units on the balconies will allow the unwanted heat to be dispelled. Heat impacts on amenity of occupants using the balconies can be mitigated through the incorporation of a fan in the condenser unit which forces air over the condenser to help remove heat. It is noted that the Stage 1 development currently under construction is to have condenser units on balconies.
18	The configuration of the vertical slots is still problematic. The narrow dimensions and the lack of openness to the sky provide little privacy and amenity to the habitable rooms facing onto the slots. If the alternative window configuration can't be accommodated, then the width of the slots, and angle of splay should be increased. Bates Smart have provided the following further explanation for the use of the vertical slots, having regard to privacy and amenity of habitable rooms facing the slots: <i>"The vertical slots are intended to maximise natural ventilation across the development, whilst enhancing the amenity to the common corridors. Potential issues with privacy and overlooking between facing units is counteracted by the use of angled vertical louvers.</i> <i>The use of a vertical slot is an increasing common feature of highrise residential towers, as it enables the buildings to meet the cross-ventilation requirements of SEPP65. The examples in the following pages illustrate how it a vertical slot has been incorporated into high-end residential buildings in Sydney. In both examples the slots are narrower than those proposed for Site 3 (Stages 2&3), and do not incorporate any louvers, or staggering of windows to prevent overlooking.</i>

Issue	Response
	<i>All living spaces (kitchen, dining room and living room) have been placed away from slot to maximise the distance between the most habitable rooms. The only rooms facing onto the slot are bedrooms and bathrooms, including ensuites, meaning the main living spaces benefit from the maximum amount of privacy. The windows looking out of the rooms facing the slot are staggered to maximise the sense of separation".</i> The bedroom windows facing onto the vertical slots have angled louvres to restrict direct overlooking between habitable rooms facing the vertical slots. The habitable living rooms do not face onto the slots, instead are oriented to balconies and the views beyond and afforded good privacy and amenity. It is not considered necessary to open up the vertical slots any further as adequate levels of amenity will be achieved for the habitable rooms facing into the slots. The examples of projects, which have been designed by highly respected international architects at the former Calton and United Brewery Site on Broadway known as Central Park, by Jean Nouvel (approved by the Minister for Planning) and Lumiere Apartments on George Street in Central Sydney approved by the Central Sydney Planning Committee). These projects demonstrate that narrower slots, with lower quality amenity and privacy for habitable rooms have been accepted by planning authorities in Sydney. The proposed splayed design is a good design solution to optimise natural ventilation of the internal corridor spaces and to units for proposed buildings.
19	A Materials and Finishes Board is to be provided by the Proponent. The Materials and Finishes Board has been given to the Department of Planning and Infrastructure and this was available for public view during the exhibition period at their central Sydney location.
20	The outer wall (above Level 22/23 in Tower 1, and above Level 24/27 in Tower 2) becomes a full curtain glass wall, comprising operable louvers to living rooms and fritted curtain wall glazing to the remainder, apparently without any other openable windows or sunshade devices. The application should include: A description of the sun-shading system and how it works for these upper levels. A description of how natural ventilation will be achieved for the upper levels. Elevations that show the sunshade system as well as the openable windows. Bates Smart prepared additional diagrams to illustrate the architectural solution for the curved glazed curtain wall to demonstrate the natural ventilation performance of these upper levels. Refer to Appendix B. A plan of the upper levels of operable and fixed louvers. Natural ventilation is achieved through the inclusion of the operable louvres and sliding doors with the operable glass louvres to living rooms at these upper levels. Sun shading is provided to these upper levels through the use of fritted glazed panels to allow the architectural design of the glazing elements of the buildings to be expressed. Vertical sun shading blades are also provided. Sketches are provided from Bates Smart of the detailed sections of the upper level glazed façade to illustrate the sun shading solutions proposed.
21	Given that there is no provision for on-street car parking along Australia Avenue, parking for the retail premises should be provided in the private streets. This includes the corridor between Stages 1 and 2, as well as 'Fig Tree Place'. It is recommended that the design of 'Fig Tree Place' be reviewed to have the 'appearance' of a public street, with provision for generous and legible public parking to service the retail tenancies & 'Fig Tree Garden'. Note: The alternative of providing vehicle on-street car parking on Australia Avenue is not The provision of parking within Fig Tree Place is inappropriate and unnecessary. The retail parking within the development is "walk up retail", for which customer parking is not required as customers will be primarily residents of the site, workers from surrounding commercial areas and passers by. Parking for retail workers is provided in the basement car parking and is to be conveniently located at ground floor level and located close to the car parking entry/exit doors to avoid the need for retail staff to transit through the residential car parking areas.

Issue	Response
	supported as loss of tree cover will increase the effect of wind turbulence and downdrafts generated by the tower, and contribute to the gradual loss of avenue planting that distinguishes the street, Fig Tree Place is a pedestrian zone, a small park on the site which is common open space for residents, employees and the general public. Parking adjacent to this will adversely affect the amenity and safety of the park and conflicts with the shared pedestrian and private vehicle use of this space. Allowing cars to park in these spaces will detract from the landscape quality and amenity of the common open space, create conflicts with pedestrians and is therefore undesirable. The private street between Stages 1 and 2 is not part of this Project Application. The design of the space between Stages 1 and 2 was approved in the Stage 1 Project Application MP06_0127.
22	A detailed Accessible Path of Travel Plan to be prepared by a suitably qualified Access Consultant, detailing existing kerb / gutter, footpaths, road and ramp levels and proposed finished levels, to ensure that the interface between the proposed development and public domain comply with the Disability (Access to Premises – Buildings) Standards 2010. The Accessibility Report submitted with the Environmental Assessment has determined that there are accessible paths of travel within the site and has made recommendations where necessary to improve these. It is appropriate for the Project Application to be conditioned to ensure that prior to the Issue of a relevant Construction Certificate related to the ground floor level and public domain interface, compliance with Disability (Access to Premises – Buildings) Standards 2010 is demonstrated.
23	The EA indicates that an Event Impact Statement (EIS) will be provided closer to the completion of the development. However, this ad-hoc approach is not supported and accordingly the Proponent must prepare an EIS and demonstrate that major event operations have been considered and to develop strategies to resolve any issues that are identified. The EIS is to be developed in consultation with, and endorsed by, SOPA's Executive Manager – Precinct Coordination. The traffic report has considered the impact of major events and concluded that there is no adverse impacts, either on the development of the site or on the operation of major events, from construction or operational traffic. Parking for major events is required to be in designated areas, and patrons are encouraged to use public transport. The proposed construction or operation of the site for the mixed use development is unlikely to result in any significant adverse impacts on parking availability for major events, as all parking for the development is provided on-site. The acoustic report has been updated (see comment below) to further address the impact of major events on future occupants of the site. Refer to Appendix F. Based on the above assessments, there are no significant adverse impacts of major events on the subject site or future occupants. As on-going impacts of major events have been considered. The draft Statement of Commitments requires an Event Impact Statement to be prepared prior to the commencement of construction. The Major Events Statement is best prepared in having regard to the events envisaged during the construction programme. Construction traffic management principles included in the traffic and parking assessment with the Environmental Assessment include the following principles: • Provide a convenient and appropriate environment for pedestrians; • Minimise effects on pedestrian movements and amenity; • Provide appropriate safety fencing/hoardings around the perimeter of the construction site • Manage and control vehicular movements to and from the site; • Provide works zones on Australia Avenue next to the site; • Maintain existing on-street parking in the vicinity of the site;

Issue	Response
	• Restrict construction vehicle activity to designated truck routes through the area to the identified by the appointed builder; • Construction activity to be carried out in accordance with the approved hours of construction; • Maintain safety for workers; and • The preparation of the construction traffic management plan, signage details control of pedestrians and control and management of construction vehicles in the vicinity of the site will be the responsibility of the appointed builder. The Event Management Plan will be prepared in consultation with SOPA and will have the benefit from input from the construction contractor, who will be able to offer solutions to manage construction traffic related impacts to avoid impacting the operation of Sydney Olympic Park for major events and vice-versa.
24	It is noted that the Acoustic Report (Appendix Z) includes a section on event noise impacts. However, given that the consultant's recommendations are based on train airborne noise readings of 60dbA (Leq), but noise from major events is permitted under legislation to be as high as 85dB (A) (LA10, 15 mins) at the façade of residential buildings (Clause 48A of the SOPA Act 2001) the recommendations may need to be reviewed. At a minimum, further analysis is required for the impact of major events on the proposed development. Renzo Tonin & Associates have provided a further Sydney Olympic Park Major Events Noises Assessment. Refer to Appendix F. RTA identified typical major sports and entertainment events at Sydney Olympic Park which could potentially impact on acoustic amenity of the proposed residential development. These events include: • Australia Avenue Car Park Easter Show (annual event operating up to 10pm) • Howie Pavilion Dance parties, music festivals (events can operating till midnight) • Sydney Showground Concerts, Music Festivals such as Bib Day Out (events can operate till midnight) • ANZ Stadium Football games (occurs at least once a fortnight, normally finishes at 10pm) Noise generated from major events occurring at these events have the potential to impact existing residential receivers within Sydney Olympic Park, including the Novatel Hotel, Hotel Ibis and Pullman Hotel on Olympic Boulevard, and the Formula 1 Hotel. With the exception of the Australia Avenue Car Park, all event locations are closer to existing long-standing receiver locations. It is expected that noise levels at the Stage 2 & 3 development will be lower than that at the existing receiver locations. RTA states that: <i>"From previous experience, we are aware of major event management noise levels of 65dB(A) at the façade used for the existing receiver locations".</i> The results of the major event noise assessment by RTA indicate that external noise levels at the Stages 2 and 3 development are expected to be no greater than 65dB(A) during major events and therefore the recommendations set out in the acoustic assessment report for the Environmental Assessment have not been modified.
25	The Transport & Traffic Report (Appendix L) does not address access arrangements for the commercial / retail component of the proposed development. Due to the high volumes of traffic along Australia Avenue (particularly during morning / afternoon peaks and major events), it Shared loading docks for deliveries are provided at the north and south ends of the site, accessed from Parkview Drive and Australia Avenue respectively. No deliveries or customer parking are proposed along Australia Ave.

Issue		Response			
	is essential that all services, deliveries and customer parking is prohibited along Australia Avenue. There is no capacity to provide Loading Zones or permit parking (or any other like arrangement) on Australia Avenue, so all arrangements must be accommodated within the development footprint. Relevant plans are to clearly identify the location of customer parking and the delivery area(s) for the commercial / retail uses.	The retail activities on the site will be “walk up” retail, with customers likely to be being workers from the site and surrounding sites, local residents and passers -by. The intent for the retail tenancies are that will be small multiple tenancies. Consistent with the Master Plan 2030, the proposed retail tenancies are not large format supermarket type retail, which is understood to be desired by SOPA elsewhere in Sydney Olympic Park. Therefore no customer parking is proposed. This approach to managing parking demand supports sustainable transport objectives of the Sydney Olympic Park Master Plan 2030, to promote public transport, walking and cycling.			
26	Appendix J (page 14) of the EA states that no affordable housing (AH) units will be provided at this stage. This is not supported. In accordance with MP 2030, 3% of the development shall be designated for use as AH. The Statement of Commitment (SOC) and relevant plans shall confirm the total number and location of AH units, and that AH units will be constructed to a standard consistent with other units within the development.	The draft Statement of Commitments includes the requirement for affordable housing units to be provided to the satisfaction of the Sydney Olympic Park Authority in accordance with the Site 3 Development Agreement. Refer to Appendix M .			
27	The development does not provide the minimum 15% mix of 3-bed units. The Proponent is to provide a breakdown of the Unit Mix across the whole site (Stages 1, 2 and 3). Any variation to the Unit Mix requirement across the whole site is to be adequately addressed by the Proponent.	A total of 77 x 3-bed and 4-bed units are proposed. This equates to 13% of the total residential unit in the development. The reason for the slightly lower proportion of 3-bed units is that more 1 and 2-bed units are appropriate for the development’s town centre location, with its good access to public transport as well as for affordability reasons. The number of 3+ bedroom units in the Stages 2 and 3 development is almost double that which was approved in the Stage 1 development. The breakdown of units across the entire Site 3 are:			
		Unit type	Stage 1	Stages 2 & 3	Total
		1 bed	77 (36%)	215 (37%)	292 (36%)
		2 bed	124 (57%)	296 (50%)	420 (52%)
		3 bed	15 (7%)	77 (13%)	92 (12%)
		Total	216	588	804 (100%)
28	It appears that some units on each floor appear to not meet the minimum room size requirement of MP 2030 & the RFDC, when consideration of internal storage requirement is taken into account. Furthermore, it appears that some units have not been provided with internal storage space. These matters are to be addressed.	A schedule of storage provision is provided at Appendix I, which demonstrates compliance with the NSW RFDC 2002 and the Master Plan 2030. A total 4428 cubic metres of storage is required for the Stage 2 and 3 development. In accordance with the RFDC, 50% of the storage requirements will be provided within the units. Typical 1, 2 and 3 bedroom unit layouts are provided at Appendix I showing the location of storage within the units. 50% of the storage requirement will be provided in the basement levels. The sizes of the proposed units are provided in the schedule at Appendix J prepared by Bates Smart. The minimum unit sizes inclusive and exclusive of balconies under the Master Plan 2030 are in the table below:			

Issue		Response		
			Minimum zone with external balcony	Minimum size with balcony included within unit
		Studio and 1 bedroom unit	50m ²	59m ²
		2 bedroom unit	70m ²	82m ²
		3 bedroom unit	95m ²	110m ²
		The schedule of unit areas provided at Appendix J shows that all of the units meet or exceed the minimum unit sizes of NSW RFDC 2002 for developments targeted at providing an affordable mix of units. The unit size requirements of the NSW RFDC 2002 are inclusive of residential storage. The Master Plan 2030 storage requirements are additional to the minimum unit size requirements. The typical floor plans of the residential units are provided in Appendix I illustrate that storage can comfortably be accommodated in accordance with the NSW RFDC 2002 minimum requirements within both the units and in the basement levels. Storages within the units is in addition to kitchen cupboards and bedroom wardrobes and is proposed in convenience locations with living rooms, hallways and studies, whilst maintaining good amenity and flexibility of furniture layouts in living rooms within each unit. On balance the amenity of the units are considered to be of a good standard.		
29	The total residential storage (internal and external) allocation to each unit is unclear. Compliance with MP 2030 & RFDC requirement for storage should be confirmed.	A schedule of storage volumes for the units is provided at Appendix I. The storage schedule shows that all units will achieve the minimum storage volume requirements of the Master Plan 2030 and the RFDC. The schedule provides an overall calculation of the site requirements for the proposed residential units and identified that at least 50% of the storage volumes will be provided in the residential units, with the balcony being provided in the basement levels. Typical 1, 2, 3 and 4 bedroom unit layouts show where internal unit storage has been accommodated.		
30	Some balconies on each floor (including podium level) appear to not meet the minimum size / dimension requirements of MP 2030 & the RFDC.	Clause 4.6.17 (10) states that the minimum dimension of 1.5m is required for primary balconies however a minimum depth of 2.4m is preferred. All units have at least one balcony of a useable size and dimension, allowing adequate space for a small table and chairs. Some units also have a smaller secondary balcony off the main bedroom in addition to the main balcony. The balconies are generally consistent with the minimum dimension requirements, with some minor non-compliances, where the balcony tapers allowing for the curved building form.		

Issue	Response
	Tables 4.13 of the Master Plan 2030 includes minimum open space provision for different unit types, as follows: • Studio & 1 bedroom unit: 9sqm • 2 Bedroom unit: 12sqm • 3 bedroom unit: 15sqm A schedule of balcony sizes is provided at Appendix J of this Preferred Project Report. The following number of units have minor non-compliances with the area requirements of the Master Plan 2030: <u>Tower 1</u> • 1 bedroom units: 11/95 units (12%) • 2 bedroom units: 11/132 units (8%) • 3 bedroom units: 1/27 units (4%) <u>Tower 2</u> • 1 bedroom units: 23/120 (19%) • 2 bedroom units: 13/164 (8%) A total of 59 units have slightly less balcony space with the minimum Master Plan 2030 requirements, which equates to 10% of the total 558 units proposed. In both towers the non-compliances in balcony area range is as follows: • 1 bedroom units: 1-3m² • 2 bedroom units: 1-3m² • 3 bedroom units: 5m² The provision of additional common open space at the southern end of the suite, at ground floor level and having regard to the large amount of regional open space very close to Sydney Olympic Park at Bicentennial Parklands, the size of proposed balconies is considered on balance to provide acceptable amenity for occupants.
31	All ground floor uses shall be retail in accordance with MP 2030 (Table 4.2).
	All ground floor uses will be retail uses. Refer to Ground Floor Plan at Appendix A .
32	All ground floor retail tenancies should be provided with direct access (via doors at the rear of each tenancy) to garbage room, loading docks etc.
	The amendments to the Ground Floor Plan plans has been made to provide direct access from the retail tenancies to the garbage room, loading docks with doors introduced at the rear of the tenancies. Refer to Appendix A .
33	It appears that the southernmost ground floor tenancy (Tower 2) has been divided in two, with no means of access to the rear portion of that tenancy. This matter should be clarified.
	This was an error on the drawing submitted with the Environmental Assessment. The retail tenancy subdivision line has been deleted in the updated Ground Floor Plan. Refer to Appendix A .

Issue	Response
34 The respective loading docks must be provided with sufficient horizontal and vertical clearance to ensure that a variety of vehicles can adequately service the development. For example high vacancy turnover is generally associated with unit accommodation, and accordingly a high frequency of home removalist vehicles servicing these developments. In this regard the loading docks must be able to accommodate the largest waste collection trucks, home removalist trucks, delivery (retail) trucks etc. Compliance with the relevant standards must be documented.	The Traffic Report submitted with the Environmental Assessment states at Section 3.15 that rigid trucks of 12.5 metres in height will be able to access the loading docks, thus making them accessible for the largest garbage trucks, removalist trucks, and other delivery and service vehicles. Supplementary swept path analysis submitted to the RTA and included at Appendix N shows that 12.5 metre large rigid trucks will be able to enter the site from Australia Avenue, reverse into the loading bays and exit in a forward direction.
35 It is considered that the Waste Management Plan (Part 14 of Appendix X) is conservative in its estimate e.g that 588 residential units will only generate 15 cubic metres of putrescibles waste per week. In this regard, further detail is to be provided by a suitably qualified person in relation to the on-going waste management of the proposed development. It is suggested that some form of automated waste compactor carousel be utilised to ensure efficient and practical management of waste.	Further research has been undertaken by the Proponent and their Architects on the waste generation rates of future occupants. The following waste generation rates have been used to determine the number of waste and recycling bins required, and in turn the size of the garbage rooms for each of the residential towers. Garbage collection will occur twice a week. <u>Tower 1</u> <i>General waste</i> Required: 267 Units x 110L waste = 29,370L 45 x 660L bins / 2 collections per week Proposed: 23 bins located on Level 00 <i>Recycled waste</i> Required: 267 Units x 80L recycled waste = 21,360L 89 x 240L bins / 2 per week = 45 bins Proposed: 33 bins located on Level 00 16 bins located on Level 001 - Total recycled waste bins provided = 49 bins <u>Tower 2</u> <i>General waste</i> Required: 321 Units x 110L waste = 35,310L 54 x 660L bins / 2 per week Proposed: 27 bins located on Level 00

Issue	Response
	<i>Recycled waste</i> Required: • 321 Units x 80L recycled waste = 25,680L • 107 x 240L bins / 2 per week = 54 bins Proposed: • 43 bins located on Level 00 • 14 bins located on Level 001 • Total recycle waste bins provided = 57 bins Waste compactors for general waste will be provided in the Ground Floor Level compactor rooms. A waste storage room is provided at each level of the building, with space for storage recyclables for the collection by the building manager to bring bins to a central waste and recyclables room for garbage truck collection on site. Refer to the updated Ground Floor Level Plan at Appendix A.
36	Access between the loading dock and retail / residential lobby for the South Tower (Tower 2) must not require transit through the garbage room. Access has been provided between the loadings docks and the building lift lobbies at ground floor level without the need to transit through a garbage room. Refer to the revised Ground Floor Plan at Appendix A.
37	Designated waste management areas should be allocated to retail tenancies. The Ground Floor Plan has been revised to include separate retail waste storage areas in the garbage rooms that are accessible to the retail tenancies. These rooms will be secure and only accessed by the retail tenants.
38	Accessible car parking for residents should be nominated on the relevant plans. Accessible and adaptable parking areas were nominated on the plans submitted with the Environmental Assessment. Accessible parking is shown on the architectural drawings with an accessible disabled parking symbol for the accessible retail/commercial uses. This is considered suitable by Morris Goding Accessibility Consultants under the DDA Premises Standards. Adaptable parking spaces allocated to adaptable units are shown noted with AD on the drawings. Basement Level B01 has 17 adaptable unit car bays designated. Ground Floor Level has 42 adaptable unit car bays designated. This represents 1 adaptable car bay for each adaptable unit, suitable under Australia Standard AS4299.
39	The EA (page 93) states that the development is committed to the recommendations of the Wind Impact Assessment (WIA) and to refer to the Draft SOC. No references to WIA were found within the draft SOC. The draft Statement of Commitments has been revised to include reference to the Wind Impact Assessment recommendations prepared by Windtech.
40	The EA (page 3) indicates that '558 units' are proposed. However, the general figure is '588'. The number 558 units was a typographic error. The description of the preferred project includes the number of units proposes as 588.
41	Table 8 & Table 11 of the EA contain conflicting information regarding the unit mix. For example, Table 8 indicates that there are 58 '3-beds' but Table 8 indicates that there are only 56 '3-beds'. A total of 61 x 3 bedroom units are proposed in the preferred project. There are also 16 x 4 bedroom units proposed.

Issue	Response
42 Table 12 of the EA (Consistency with staged DA 246-10-2004) contains several anomalies / omissions. The following should be amended / addressed: 1. A1, dot point 1 should be '4 to 2' 2. A1, dot point 2 should be '673 to 806' 3. A1, dot point 4 should be '930 to 1090' 4. Provide an additional dot point for A1, with a comparison between the maximum number of bedrooms approved under DA 246-10-2004 of 1360 (including all 'live / work' units), and the total number of bedrooms (including all 'live / work' units proposed for Site 3 (Stages 1, 2 and 3)). It is noted that 1057 bedrooms are proposed for this application (MP 10_0027). 5. Provide an additional dot point for A1, with a comparison between the maximum number of units approved under DA 246-10-2004 of 685 (inclusive of 673 residential units, 6 'live / work' units, 4 retail units, 1 childcare and 1 community facility), and the total number of units (inclusive of all the abovementioned categories) proposed for Site 3 (Stages 1, 2 and 3)	This Preferred Project Report addresses these anomalies and omissions. Refer to the response to points 1-4 above.

2.4 NSW Department of Transport

The NSW Department of Transport wrote to the Department of Planning & Infrastructure on 12 August 2011 to provide comments on the Environmental Assessment. A copy of the submission is provided at **Appendix L**. **Table 3** provides the Proponent's response to the issues raised.

Table 3. Response to Department of Transport

Issue	Response
1. As the site is highly accessible to public transport, the DoT would support a further reduction in the number of proposed car parking spaces to encourage the use of proposed public transport services available.	The number of car parking spaces proposed is 800, less than the maximum permitted number under the SOPA Master Plan 2030 for the development, which is 868 car spaces. It is assumed the car parking rates under the Master Plan 2030 were prepared having regard to residential parking demand expected with influences such as the proposed public transport services identified under the Transport Management Plan for Sydney Olympic Park.
2. As listed in the Traffic & Transport Assessment, one of the objectives of the SOPA Master Plan is management of car parks for complementary uses. The DoT recommends implementation of this measure for the different residential, commercial and retail uses of the site, as well as the inclusion of car share spaces to assist in reducing the amount of car parking spaces.	As noted above, the 800 car parks provided are less than the 868 maximum car spaces which are permitted. The car park will be managed in accordance with a Strata Management Statement, which will restrict the use of car spaces to building occupants and their intended users (i.e. retail and residential parking). It is not expected that customers of the retail tenancies will generate demand for parking spaces. The retail tenancies are expected to service the local community. A total of 26 car spaces will be allocated to the retail tenancies on the basis that these spaces will be used by staff.
3. Measures to promote public transport usage, as requested by the DGRs, could be progressed further by including workplace travel planning (WTP) or green travel planning requirements to help promote public and active transport use by residential, visitors and workers to site. This measure should be included as part of the final statement of commitments or as a condition of consent.	The draft Statement of Commitments has been revised to include a requirement to prepare a Green Travel Plan for building occupants and visitors, which will aim to promote public and active transport. Refer to Section 4 of this PPR.
4. DoT notes the inclusion of bicycle parking on basement level 2 and 3. DoT would also support the inclusion of bicycle parking facilities at ground level for visitors to site. These facilities should be located near entrances, in a visible and weather protected location and subject to casual surveillance, in accordance with the Planning Guidelines for Walking and Cycling.	The number of bicycle parking spaces have been increased in the Preferred Project through the inclusion of bicycle racks along the Australia Avenue frontage close to the building entries. This amendment will provide visitors cycling to the site the opportunity to park their bicycles in a safe and convenient location and further reduce demand for car parking spaces for the retail tenancies. Refer to the revised Ground Floor Plan at Appendix A .
5. As well as providing a convenient and appropriate environment for pedestrians and minimising effects on pedestrian movement and amenity, as indicated in the Traffic and Transport Assessment, the Construction Management Plan should also mitigate any potential impacts to accessibility, amenity and safety of public transport use and cyclists during construction. This should be included in the final statement of commitments or as conditions of consent.	The draft Statement of Commitments will be updated to include the requirement for the Construction Management Plan to address transport and traffic impacts, including those on cyclists using Australia Avenue.

Issue	Response
6. Bus route 401 runs along Dawn Fraser Avenue at Olympic Park Station to Lidcombe Station. The route no longer runs to Olympic Park Wharf as indicated in the Traffic and Transport Assessment. Furthermore, route 553 runs services towards Olympic Park on weekday mornings and to Chatswood in the afternoon only. The converse is indicated in the Traffic and Transport Assessment.	This has been noted, however should not effect the conclusions of the Project Application Environmental Assessment in terms of traffic and transport impacts.

2.5 RailCorp

RailCorp wrote to the Department of Planning & Infrastructure on 2 August 2011 to provide comments on the Environmental Assessment. A copy of the submission is provided at **Appendix L**. **Table 4** provides the Proponent's response to the issues raised.

Table 4. Response to RailCorp

Issue		Response
1 – 16	The submission requests that a number of conditions be included by the Department of Planning and Infrastructure in the development approval. These conditions relate to the following matters: • Property and title search and survey; • Services searches; • Dilapidation surveys; • Noise and vibration; • Stray currents and electrolysis from rail operations; • Geotechnical and structural stability and integrity; • Building, balconies and window design; • Derailment protection of structures; • Use of lights and reflective materials; • Demolition, excavation and construction impacts; • Crane and other aerial operations; • Drainage; • Physical access to RailCorp's facilities; • Graffiti, screening and landscaping; • Fencing; • Maintenance of development.	All of the conditions in points 1 to 16 of RailCorp's submission are considered acceptable and will be included as part of a staged Construction and Occupation certification. At this stage the Proponent, will seek to construct the development in 4 stages, following the issue of separate Construction Certificates: • Construction Certificate 1: Excavation and support structures (i.e. piling where required); • Construction Certificate 2: Structures up to and including the podium; • Construction Certificate 3: Tower 1 • Construction Certificate 4: Tower 2 This staged construction certification and occupation process is outlined in the revised draft Statement of Commitments.
17.	Car parking and promotion of public transport RailCorp believes that 800 car parking spaces is a superfluous amount of car parking spaces, especially given the development's close proximity to a major transport node, i.e. Olympic Park Station. RailCorp encourages the Department of Planning and Infrastructure to consider a reduction of car parking spaces. In particular, there is an opportunity to reduce the provision of visitor parking.	The provision of 800 car parking spaces is less than the maximum 868 permitted for the development. A reduction of parking could lead to pressure for parking on streets around the site, which is undesirable in this tower centre location. Refer to previous response to a similar issue raised by the Department of Transport.
18.	Bicycle parking provision The Sydney Olympic Park Master Plan 2030 indicates that "on-site bicycle parking should be provided at the same rates as for cars". However, 245 bicycle parking spaces have been allocated, as opposed to a proposed 800 car parking spaces. RailCorp believes that the proponent should strongly consider increasing the amount of on site bicycle parking spaces to reflect the objectives of the Master Plan.	The provision of the same number of bicycle parking spaces as car spaces is not supported, as it is considered excessive and not inline with expected bicycle ownership rates for the development. The proposed provision of 245 bicycle parking spaces is considered a sufficient number of spaces based on bicycle parking controls for similar Specialised and Major Centres in the Sydney metropolitan area.

2.6 Roads and Traffic Authority (RTA)

The RTA wrote to the Proponent to request additional information following the Sydney Regional Advisory Committee meeting of 27 July 2011. **Table 5** provides the Proponent's response to the issues raised. **Appendix N** provides a copy of the Proponent's response to the RTA request.

A formal submission from the RTA had not been received at the time of preparing this Preferred Project Report. If the Department of Planning and Infrastructure receives a formal submission from the RTA prior to the determination, a response from the Proponent can be provided if required.

Table 5. Response to RTA request for further information

Issue	Response
1. Electronic copy of SIDRA models in .sip or .aap format.	Electronic copies of the SIDRA modelling have been separately submitted to the RTA.
2. The swept path analysis plans of the longest vehicle entering and exiting the subject site and the loading dock, as well as manoeuvrability through the site and car parking area.	Swept paths of 12.5 metre large rigid trucks (the largest vehicles which will access the development, i.e. removalist trucks) are attached as Figures 1 and 2 of the response by CBHK. It was noted that 12.5 metre large rigid trucks will be able to enter the site from Australia Avenue, reverse into the loading bays and exit in a forward direction.
3. Details of the movements restrictions at the proposed southern access to the subject site, which is opposite to Figtree Drive.	As noted in the traffic and [parking assessment submitted with the Environmental Assessment, Figtree Drive intersects Australia Avenue at an unsignalised t-intersection controlled by stop signs. All turns are permitted between Australia Avenue and Figtree Drive. The southern of the two existing site driveways on Australia Avenue is opposite Figtree Drive. Right turns from Australia Avenue into the site are not permitted and there are "all traffic left" signs for vehicles exiting the development onto Australia Avenue. The existing site driveway opposite Figtree Drive will provide one of the access points to the proposed development. Turns at this driveway will be left in/left out, as provided for by the existing intersection controls.

2.7 Sydney Water Corporation

Sydney Water Corporation wrote to the Department of Planning & Infrastructure on 4 August 2011 to provide comments on the Environmental Assessment. A copy of the submission is provided at **Appendix L**. The following points were may by Sydney Water Corporation.

- **Water**

The drinking water main available for connection is the 250mmm main on the western side of Australia Avenue.

- **Wastewater**

The wastewater main available for connection is the 375mm main traversing the property on the north east area of the site.

- **Sydney Water Servicing**

Sydney Water will further assess the impact of any subsequent development when the developer applies for a Section 73 Certificate.

All of these points are noted by the Proponent and will be considered prior to the issues of Construction Certificate, in accordance with the Department of Planning and Infrastructure standard conditions of consent.

2.8 Public submissions

The Kador Group wrote to the Department of Planning & Infrastructure on 12 August 2011 to provide comments on the Environmental Assessment. A copy of the submission is provided at **Appendix L**. **Table 6** provides the Proponent's response to the issues raised.

Table 6. Response to The Kador Group

Issue	Response
1 Solar access and overshadowing The Environmental Assessment and Solar Access Analysis report do not adequately address overshadowing impacts to the surrounding developments. Shadow diagrams demonstrating the overshadowing impacts on 1 Figtree Drive have not been provided, nor has a detailed assessment of the number of hours of direct solar access that 1 Figtree Drive will achieve as a result of the development.	Shadow diagrams submitted with the Environmental Assessment demonstrate the overshadowing impacts on 1 Figtree Drive. The shadow cast by the proposed development will have moved from the 1 Figtree Place site by between 12noon and 12.30pm. The diagrams demonstrate that 3 hours of direct sunlight will be maintained to the 1 Figtree Drive site throughout the day during in midwinter (21 June). This is consistent with Clause 4.6.17 (6) of the SOPA Master Plan 2030. Refer to shadow diagrams below.
21 June, 9.00am – Existing and proposed	
	
21 June, 12pm – Existing and proposed	
	

	21 June, 3.00am – Existing and proposed	
		
2	View loss The EA does not provide any diagrams or visual aids such as a photomontage to demonstrate visual impacts of the proposed building envelopes. As such, further view analysis is required to adequately consider view loss impacts from 1 Figtree Drive and other key viewing locations.	Key view corridors are identified in the Master Plan 2030 in Figure 3.2 with easterly views to Sydney CBD and Chatswood The siting of the two towers proposed for Stages 2 and 3 of the site are consistent with the Design Competition winning scheme. The Staged Master Plan DA 246-10-2004 for the site proposed three buildings for Stages 2 and 3 area of the site (Refer to Figure 8 and Figure 9). The proposal included two towers and removes the building (Building F) which was intended to be located at the southern end of the site and replaces it with Fig Tree Place (common open space). Refer to Figure 10. This change will result in an improvement of the views from 1 Figtree Place towards central Sydney, when compared with the building envelopes approved under the Stages Master Plan DA particularly from the southern part of 1 Figtree Place, which under the Master Plan 2030 is designated for a 10 Storey residential building(s). Views across the site to the north east and east to Chatswood may be impacted worse from 1 Figtree Place with this proposed Stages 2 and 3 buildings, however the improvement in the views to Central Sydney compensates for this.

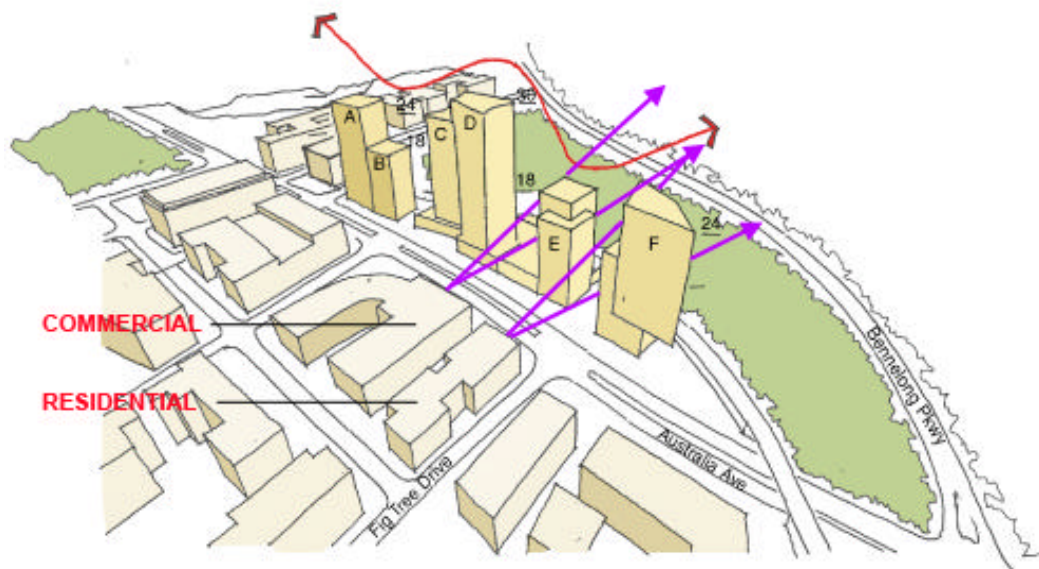


Figure 8. DA 246-10-2004 building massing
View corridors showing diagrammatically from 1 Figtree Place.

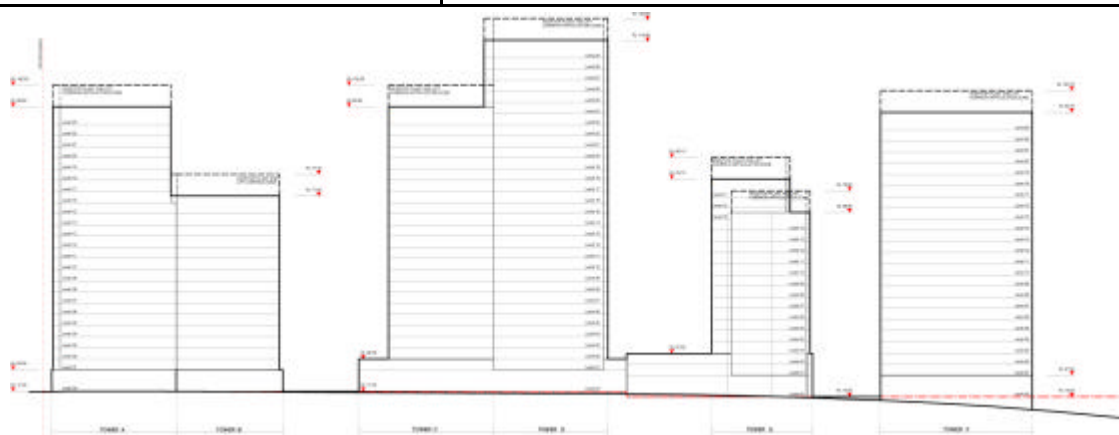


Figure 9. Building envelope diagram and Indicative elevation
View looking east. Source: Staged Master Plan DA 246-10-2004.

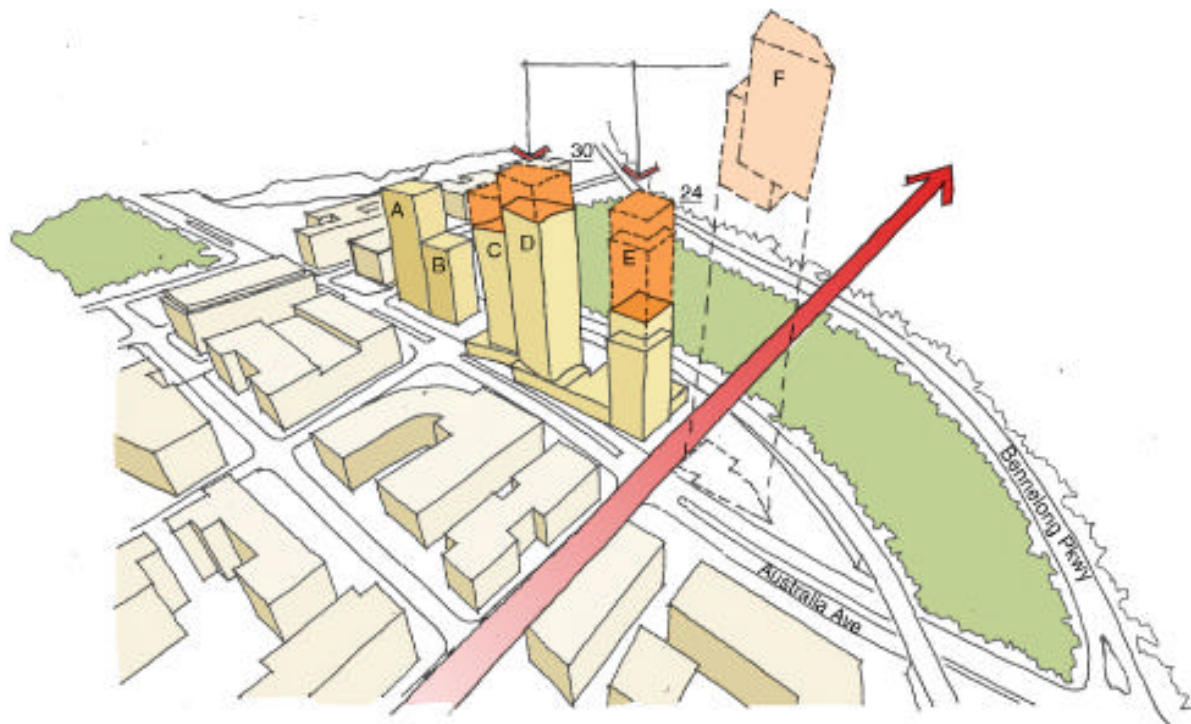


Figure 10. Removing Tower F from Staged SA massing

By removing Tower F, the view corridor along Figtree Place and from the property at 1 Figtree is significantly enhanced to the east and south east.

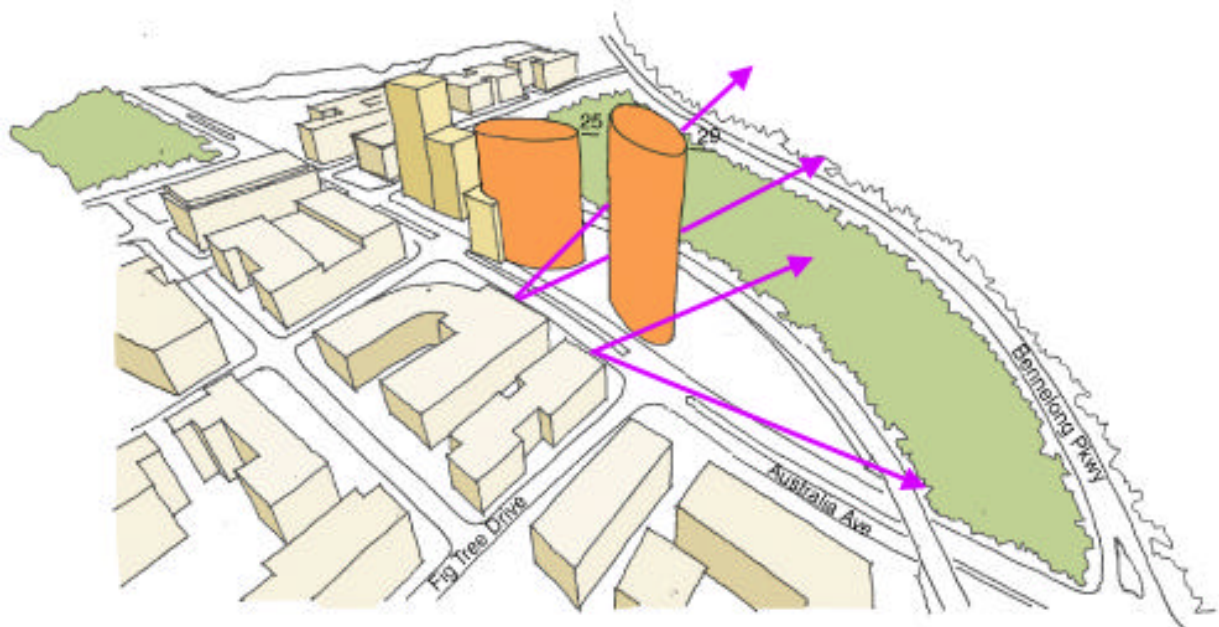


Figure 11. Proposed Stages 2 & 3 building massing

View corridors shown diagrammatically from 1 Figtree Place.

3 Preferred Project

3.1 Introduction

The proposed development as exhibited has been amended in response to the submissions received and the issues raised by the Department of Planning and Infrastructure. In summary the preferred project development comprises the following:

- **588 residential units** built across two separate buildings within the subject lot, comprising;
 - **Tower 1 – a 24 storey tower** containing **267 residential units**;
 - **Tower 2 – a 30 storey tower** containing **321 residential units**;
- A two level podium comprising **1318m² of retail GFA, 807m² of gymnasium and communal facilities and 165m² of residents facilities**.
- **800 car parking spaces and 245 bicycle parking spaces** which are located in 5 levels, with two accesses from Australia Avenue at the northern and southern end of the site;
- **Common open spaces** at the southern end of the site and on the Level 2 podium to be retained in private use for building occupants and their guests, comprising a total of **5194m²**;
- Site clearing and excavation works;
- Site landscaping including relocation of existing Fig tree from the centre of the site to the proposed common open space at the southern end of the site; and
- A total **Gross Floor Area of 56,266m²**.

3.2 Architectural drawings

This section of the Preferred Project Report describes the architectural drawings prepared by Bates Smart that have been referred to in the preparation of this report. **Table 7** lists the architectural drawings. All drawings are reproduced under separate cover.

Table 7. Architectural drawings

Drawing number	Description	Revision
DA00.001	Site Plan	A
DA02.100	Basement 004	A
DA02.101	Basement 003	A
DA02.102	Basement 002	A
DA02.103	Basement 001	B
DA02.200	Ground Floor Plan	C
DA02.201	Plan Level 01 (Podium)	A
DA02.202	Plan Level 02-8	A
DA02.209	Plan Level 09-11	A
DA02.212	Plan Level 12	A
DA02.213	Plan Level 13-21	A
DA02.222	Plan Level 22	A
DA02.223	Plan Level 23	B
DA02.224	Plan Level 24	B
DA02.225	Plan Level 25-26	B
DA02.227	Plan Level 27	B
DA02.228	Plan Level 28-29	B
DA02.230	Plan Level 30 (Plant Room)	A
DA02.231	Plan Roof Level	A
DA05.01	North and South Elevation	A
DA05.02	West Elevation	A
DA05.03	East Elevation	A
DA06.01	Section AA	A
DA06.02	Section BB	A
DA06.03	Section CC	A
DA06.04	Section DD	A
DA06.05	Section EE	A

3.3 Numerical overview

This section of the report provides a numerical overview of the Preferred Project, in comparison to the Environmental Assessment

Table 8. Numerical overview

		Environment al Assessment	Preferred Project
Site area (Stage 2 and 3)		10,480m ²	10,480m ²
Maximum building heights	Storeys (Master Plan 2030)	Tower 1: 24	Tower 1: 24
		Tower 2: 29	Tower 2: 29
	Metres (SEPP (Major Development))	Tower 1: 84.06m	Tower 1: 84.06m
		Tower 2: 99.45m	Tower 2: 99.45m
Gross Floor Area (GFA)	Total	56,266m ²	56,266m ²
	Residential	54,176 m ²	54,176 m ²
	Office	644 m ²	-
	Resident facilities	165 m ²	165 m ²
	Retail	474 m ²	1318m ²
	Gym/communal facilities	807 m ²	807 m ²
Floor Space Ratio (FSR) (Stages 2 & 3)		5.36:1	5.36:1
Floor Space Ratio (FSR) Stages 1, 2 & 3)		5.28:1	5.28:1
Open space area		5194m ²	5194m ²
Car parking spaces		800	800

3.4 Proposed uses

The proposed residential/mixed use development comprises the following uses:

- **Residential** on all levels above Level 1 in both tower buildings;
- **Retail** on the ground floor level; and
- **A community centre and gymnasium** on the podium level;

These uses are described in detail below:

Residential

The Preferred Project consists of 588 units, with a mix of one, two, three and four bedroom units. The unit mix is shown in **Table 9** below:

Table 9. Unit mix

Unit type	No. of units	Unit mix
One bedroom	215	36.6%
Two bedroom	296	50.3%
Three bedroom	61	10.4%
Four bedroom	16	2.7%
Total	588	100%

The Preferred Project has increased the number of 3 bedroom units from 58 to 61 which has resulted in a reduction in the number of 4 bedroom units from 19 to 16.

Retail

The podium contains a number of retail tenancies, which reinforce the human scale of the streetscape. All ground level retail tenancies are located along the Australia Avenue frontage.

The commercial office space at ground floor level and level 1 has been deleted and replaced with retail tenancies for consistency with the Sydney Olympic Park Master Plan 2030.

Community centre and gymnasium

Level 01 of the podium provides a number of facilities for residents of the development including a community centre and a gym. A roof garden provides a semi-private landscaped space for all residents of the development.

Permissibility of proposed uses

The Subject site is zoned B4 Mixed Use under Part 23 of Schedule 3 of the Major Development SEPP. The following uses are permissible with consent in the B4 Mixed Use Zone:

“roads; any other development not specified in subclause (2) or (4)”

As the proposed residential, retail, commercial, gymnasium and common facilities are either permissible without consent (subclause 2) or prohibited development (subclause 4), all proposed uses are permissible with consent in the B4 Mixed Use Zone.

3.5 Floor space and density

The floor space ratio of the entire site including Stage 1 is 5.25:1 which is in compliance with the design competition which amended for the Stage 2 and 3 development of FSR to 5.36:1.

The proposed GFA for the Stage 2 and 3 development is 56,266m². The site area for the part of Site 3, the subject of this Project Application is 10,480m². The proposed Stages 2 and 3 development therefore has an FSR of 5.36:1.

The approved GFA for the Stage 1 Development is 22,840m². Refer to Minister's consent MP06_0127. The site area for the Stage 1 development is 4510m². The FSR for the approved Stage 1 development is 5.06:1.

Therefore the total GFA for the development is 79,106sqm and total FSR for the entire Site 3 is 5.277:1. The proposed development has a minor variation from the maximum FSR of 5.25:1 under the Master Plan 2030. This variation represents 0.38% of the total permissible floor space or approximately 300m², which will have a negligible effect in terms of bulk and scale, as well as traffic related impacts.

The FSR distribution across the entire Site 3 is shown at **Table 10** below.

Table 10. FSR distribution across Site 3

	Stage 1	Stages 2/3	Entire site
Site area	4510m ²	10,480m ²	14,990m ²
GFA	22,840m ²	56,266m ²	79,106m ²
FSR	5.06:1	5.36:1	5.277:1

4 Revised Draft Statement of Commitments

4.1 Introduction

Implementation of the following Proponent commitments are recommended for the Stages 2 and 3 development. The exhibited draft Statement of Commitments have been reviewed in light of the submissions received and have been revised to provide additional commitments in order to mitigate environmental impacts.

4.2 Future application

The Proponent commits to prepare future applications for the following development:

- Fit out of the proposed retail and commercial tenancies; and
- Building identification and tenant signage;
- Strata subdivision

4.3 Prior to the issue of a Construction Certificate

The following commitments are to be satisfied prior to the issue of construction certificates:

Reflectivity

The Proponent is to adopt the recommended reflectivity mitigation measures in the assessment report prepared by Windtech and submitted with the Environmental Assessment prior to the issue of a Construction Certificate.

Wind mitigation measures

The proponent commits to adopt the recommendations of the Wind Impact Assessment prepared by Windtech and submitted with the Environmental Assessment prior to the issue of a construction certificate.

Erosion and sediment control

An Erosion and Sediment Control Plan shall be prepared, by an appropriately qualified civil engineer, and submitted to the Certifying Authority prior to the issue of a Construction Certificate. This plan should be prepared in accordance with the 'Managing Urban Stormwater-Soils and Construction Volume 1 (2004) by Landcom' (The Blue Book).

Event Information Statement

The Proponent commits to prepare an Event Information Statement to be prepared in accordance with SOPA's guidelines prior to the issue of a Construction Certificate to demonstrate that the development will not have any adverse impact on events carried out in the near vicinity of the site in terms of access and traffic.

Rail related conditions

The Proponents commits to satisfy the conditions of consent recommended by RailCorp prior to the issue of a Construction Certificate or occupation certificate outlined in the following table:

Recommended RailCorp Condition	Construction Certificate
1. Property & Title Search and Survey	No. 1
2. Services Search	No. 2
3. Dilapidation Surveys	No. 2
4. Noise and Vibration	No. 3
5. Stray currents and electrolysis from Rail Operations	No. 1
6. Geotechnical and structural stability and integrity	No. 3
7. Building, Balconies and Window Design	No. 2
8. Derailment Protection of Structures	No. 2
9. Use of lights and reflective materials	No. 2
10. Demolition Excavation and Construction Impacts	No. 2
11. Crane and Other Aerial Operations	No. 2
12. Drainage	No. 3
13. Physical Access to RailCorp's Facilities	No. 2
14. Graffiti, Screening and Landscaping	No. 3
15. Fencing	No. 1

Notes to table:

- Construction Certificate No 1: Excavation and support structures (i.e. piling where required);
- Construction Certificate No 2: Structures up to and including the podium;
- Construction Certificate No 3: Tower 1
- Construction Certificate No 4: Tower 2

4.4 Prior to the commencement of construction

Construction Management Plan

A Construction Management Plan will be prepared by Site 3 Development Company Pty Ltd prior to the commencement of works on site. This plan will include the following information:

- Proposed hours of work,
- Contact details of FDC site manager;
- Traffic Management:
- Ingress and egress of vehicles to site;
- Management of loading and unloading materials;
- Number and frequency of vehicles accessing the site;
- Changes to on-street parking restrictions on local roads;
- Management of construction traffic and car parking demand;
- Management of existing vehicular and pedestrian movements around the site throughout various stages of construction;
- Major event coordination / management;
- Dust control measures;
- Construction waste management;
- Erosion and sediment control measures;
- Construction noise and vibration management; and
- Any other relevant information relating to construction and its potential impact on the surrounding area.

Tree relocation measures

The Proponent commits to adopting the temporary and permanent relocation measures for the *Ficus macrophylla* – Morton Bay Fig, referred to as Tree No. 4 in the Arboricultural Assessment report by Urban Tree Management submitted with the Environmental Assessment.

4.5 Prior to the issue of a Subdivision Certificate

Easements

The Proponent is to provide details of all necessary easements to the PCA prior to the issue of a Subdivision Certificate for the site.

Affordable housing

The Proponent will provide 3% of the proposed units as affordable housing units. Documentary evidence that 3% of the units are to be provided as Affordable Housing in accordance with the terms of the Site 3 Development Agreement will be provided to Sydney Olympic Park Authority prior to the issue of a Subdivision Certificate. The affordable housing units are to be nominated on the strata subdivision plans.

4.6 Prior to the issue of Occupation Certificate(s)

Embellishment of common open space areas

The common open space area at the southern end of the site will be embellished in accordance with the landscape plans prepared by Turf Design Studio and submitted with the Environmental Assessment prior to the occupation of first residential unit in Tower 2.

Embellishment of public domain interface

The interface with the footpath along Australia Avenue is to be embellished in accordance with the landscape plans prepared by Turf Design Studio and submitted with the Environmental Assessment prior to the occupation of the first residential unit in Tower 2.

Security Management Plan

The Proponent commits to prepare a Security Management Plan to minimise potential crime and to maintain safety and security for building occupants in accordance with the recommendations contained in the Environmental Assessment submitted with the Project Application.

Green Travel Plan

A Green Travel Plan will be prepared by the Proponent prior to the occupation of the first residential unit or the first retail tenancy, whichever comes first. The Green Travel Plan will address as a minimum the following matters:

- The limited street parking available in the area and detail the reasons why this is the case (i.e. availability of on-site resident parking) and the desire to promote public transport patronage;
- Rail, bus and ferry timetables;
- Details of the car share schemes available in the area;
- Details of the available regional cycleway plan and associated facilities, including details of local cycling groups in the area.

Rail related conditions

The Proponents commits to satisfy the conditions of consent recommended by RailCorp outlined in the following table:

Recommended RailCorp Condition	Timing
16.Maintenance of Development	Occupation Certificate

5 Conclusion

The proposed development the subject of this Project Application represents a positive improvement to the urban fabric of the locality. It has been designed generally in accordance with the parameters of the relevant Environmental Planning Instruments and Policies. Development Consent is sought for the following development:

- **588 residential units** built across two separate buildings within the subject lot, comprising;
 - **Tower 1 – a 24 storey tower** containing **267 residential units**;
 - **Tower 2 – a 30 storey tower** containing **321 residential units**;
- A two level podium comprising **1318m² of retail GFA**, **807m² of gymnasium** and **communal facilities** and **165m² of residents facilities**
- **800 car parking spaces** and **245 bicycle parking spaces**, which are located in 5 levels, with two accesses from Australia Avenue at the northern and southern end of the site;
- **Common open spaces** at the southern end of the site and on the Level 2 podium to be retained in private use for building occupants and their guests, comprising a total of **5194m²**;
- Site clearing and excavation works;
- Site landscaping including relocation of existing Fig tree from the centre of the site to the proposed common open space at the southern end of the site; and
- A total **Gross Floor Area of 56,266m²**

The proposed development is an exemplary example of high rise, mixed use developments, and has been endorsed by the Design Competition Jury for exhibiting Design Excellence. The proposal:

- **Provides diversity in housing choice** in a highly accessible area of Sydney. The site provides the opportunity to provide additional housing in an areas of established communities and transport links, which included smaller more affordable dwelling types;
- **Is Generally consistent with the SOPA's Master Plan 2030**, providing residential accommodation adjacent the Town Centre core area, which will support a 24 hour urban centre
- **Is sustainable both environmentally and economically**;
- **Is dynamic**, providing for the creation of a high quality architecturally design addition to the urban form of the locality;
- **Is environmentally sensitive**, being designed with much care to minimise environmental impacts on neighbouring properties, public domain areas or the locality generally;
- **Is highly liveable**, both in terms of its likely enjoyment by future residents of the site and by the existing local residents and workers. The proposed development has been formulated to fit well with the surrounding built environment, as well as the desired character for the Parkview Precinct within the Sydney Olympic Park;

- Will provide **a boost to the local economy** both during construction and the later operational phases of the development in terms of employment opportunities and flow on benefits for local businesses;
- Is **appropriately located**, recognised by the site's zoning as being a desirable place for mixed use multi-unit residential and retail development. The site is located within an established urban area with established network of support services including public transport, utilities, recreation and community services. It is located in close proximity to the employment opportunities within the Central Precinct and the wider Sydney Olympic Park area and is easily access to Parramatta and Central Sydney via road and rail transport; and
- It is **consistent with the principles of a compact city**, which is a major element of the Metropolitan Plan for Sydney 2036 and the Inner West Subregional Strategy.

Changes have been made to the Project Application in response to the issues raised in submissions. Having regard to the relevant Environmental Planning Instruments and Policies, and considering the site and its location and potential impacts of the non-compliances proposed, strict application of Floor Space Ratio and building height standards under the Major Development SEPP are unreasonable and unnecessary.

Accordingly it is recommended that the Minister for Planning approve the proposed development subject to the appropriate conditions of consent and the Draft Statement of Commitments.