State Significant Development Application (SSD 7445)
Environmental Impact Statement

Site 9, Sydney Olympic Park
Mixed Use Development
Submitted to NSW Department of Planning & Environment
On Behalf of Ecove Group Pty Ltd

April 2016 ■ 15719
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Statement of Validity

Development Application Details

Applicant name          Ecove Group Pty Ltd
Applicant address       Locked Bag 1451, Meadowbank
Land to be developed    Site 9, Sydney Olympic Park
Proposed development    Mixed use residential and office building as described in Section 3.0 of this Environmental Impact Statement

Prepared by

Name                   Robert Stark
Qualifications         BUrbRegPlan MPIA
Address                Level 7, 77 Berry Street, North Sydney
In respect of          State Significant Development - Development Application

Certification

I certify that I have prepared the content of this EIS and to the best of my knowledge:

it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000;

all available information that is relevant to the environmental assessment of the development to which the statement relates; and

the information contained in the statement is neither false nor misleading.

Signature

Name                   Robert Stark
Date                   8 March 2016
Executive Summary

Purpose of this Report
This submission to the Department of Planning & Environment (the Department) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). It relates to the proposed development of a 38 storey mixed use office and residential building on Site 9, Sydney Olympic Park.

The proposed development is identified as a State Significant Site in Schedule 2 of State Environmental Planning Policy (State and Regional Development) 2011 as it involves development with a capital investment value of more than $10 million within the Sydney Olympic Park Site. As the proposed development will have a capital investment value of $112.3 million it is SSD.

A request for the issue of Secretary’s Environmental Assessment Requirements (SEARs) was sought on 9 December 2015. The SEARs were issued on 8 January 2016, and amended SEARs were issued on 16 February 2016 following an additional submission from the EPA.

This EIS is in accordance with the Department’s guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

The Site
Site 9 is located at the south eastern corner of Olympic Boulevard and Sarah Durack Avenue, Sydney Olympic Park, as shown in Figure 1. It is legally described as part Lot 2004 in DP1192085.

The site is in the southern portion of Sydney Olympic Park, within the Boundary Creek Precinct. In the vicinity of the site are the GWS Giants Training Facility, the P3 car park, the Netball Centre and the State Sports Centre (as shown in Figure 2).

Overview of the Project
This EIS will accompany a SSD application for the development of Site 9 as a 38 storey mixed use development, with residential, office, retail/club components. The development will have a total gross floor area (GFA) of 25,130m². It is also proposed to provide 353 car parking spaces and 201 bicycle parking spaces. A photomontage of the proposed development is shown in Figure 3.
Figure 1 – Site location
Source: Google Maps

Figure 2 – Surrounding development
Source: Bates Smart
Figure 3 – Photomontage of the proposed development as viewed from the west
Source: Bates Smart
Planning Context
Section 5 of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant SEPPs. The site is zoned B4 – Mixed Use under the provisions of the Major Project SEPP. The proposal is permissible with consent and meets the relevant zone objectives.

Environmental Impacts and Mitigation Measures
This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by the applicant to manage and minimise potential impacts arising from the development.

Conclusion and Justification
This EIS fulfils the requirements of the EP&A Act and addresses the SEARs.

Section 6 sets out the mitigation measures to ensure that the potential impacts of the development are acceptable and are able to be managed.

Given the planning merits of the proposal, the proposed development warrants approval by the Minister for Planning.
1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning & Environment pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for State Significant Development (SSD).

Site 9, Sydney Olympic Park is identified as a State Significant Development Site in Schedule 2 of State Environmental Planning Policy (State and Regional Development) 2011. Development with a capital investment value of more than $10 million on the site is SSD for the purposes of the EP&A Act.

The report has been prepared by JBA on behalf of Ecove Group Pty Ltd, and is based on the Architectural Drawings provided by Bates Smart (see Appendix A) and other supporting technical information appended to the report (see Table of Contents).

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), and the Requirements of the Secretary of the Department of Planning & Environment for the preparation of the EIS. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

1.1 EIS Requirements

A request for the Secretary’s Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement was submitted to the Department on 9 December 2015. On 8 January 2015, in accordance with Section 89G of the EP&A Act, the Secretary of the Department issued the requirements. In response to an additional submission received from the EPA, amended SEARs were issued on 16 February 2016. A copy of the amended SEARs is included Appendix B.

The SEARs established that the proposal must meet the requirements of Schedule 2 of the EP&A Act, specifically the form specifications in Clause 6 and the content specifications in Clause 7. Several stakeholders were identified with whom consultation must occur during the preparation of the EIS.

Table 1 provides a summary of the individual matters listed in the SEARs and identifies where these requirements are addressed in this report and the accompanying technical studies.
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### 1.2 Overview of Proposed Development

This application seeks approval for a 38 storey mixed use development, incorporating the following elements:

- 229 residential apartments on levels 7 to 38;
- Commercial office areas on levels 7 and 8;
- Ground floor retail/club areas;
- Communal roof terrace area and communal room on level 9; and
- Parking for 353 cars and 201 bicycles.

### 1.3 Background to the Development

Site 9 is located within the ‘Boundary Creek Precinct’, Sydney Olympic Park. The precinct was developed as part of the greater Olympic Park in preparation for the 2000 Olympic and Paralympic Games. The area comprised sporting venues such as a Golf Driving Range and supporting uses including the P3 Public carpark.

In accordance with the *Sydney Olympic Park Master Plan 2030* (MP2030) the Precinct is beginning to evolve into a medium-high density mixed used area through the development of commercial and residential uses along Olympic Boulevard.
To meet the evolving needs of the Precinct and wider Olympic Park, MP2030 is currently under review. This review has included a detailed built form analysis of the development sites, including Site 9, by the NSW Government Architect’s Office. As a result of these investigations, SOPA has issued Site 9 Site Development Guidelines.

These Guidelines informed the request for Detailed Proposals process, which was in which the proponent was successful utilising the design by Bates Smart that is the subject of this proposal.

1.4 Objectives of the Development

The proposed development has undergone a thorough design process, including consultation with various stakeholders and an analysis of the existing site conditions and surrounding locality. There have been several key objectives which have guided this process and the design of the proposed development. These objectives include:

- Reinvigorating the precinct with a new building that incorporates additional residential, commercial and retail floor space.
- Upgrading connections to the public domain, including the provision of retail activation.
- Providing a landmark building with new distinctive architectural qualities and befitting the character of the precinct.

In summary, the demand for housing and employment floor space and the desire to revitalise this precinct of Sydney Olympic Park have combined to provide an opportunity to develop the currently underutilised site.

1.5 Analysis of Alternatives

A number of options were open to SOPA in considering the parameters of the Request for Detailed Proposals. The option chosen, being a mixed use development incorporating a slender tower, is the most appropriate for the context of the site. Alternative options are discussed below.

Do Nothing

This option would see the proposed development of the site abandoned. If it was abandoned temporarily, it is very likely that a similar development proposal would be prepared and the site would undergo the same intensity of development anyway. If the site was abandoned permanently, then the opportunity to provide additional residential and commercial floor space close to public transport would be lost, as well as the opportunity for the site to make a significant contribution to the urban form of Sydney Olympic Park.

Alternate Site Uses

The size of the site renders it unsuitable for a sporting facility, which is the only other potentially viable use in this location. If a development on the site only had a singular use (i.e. was fully residential or fully commercial), this would represent a loss of activation and vibrancy compared to the proposed development.
2.0 Site Analysis

2.1 Site Location and Context

Sydney Olympic Park is an important economic centre and urban parkland in metropolitan Sydney. It is located 8 kilometres from the Parramatta CBD and 15 kilometres from the Sydney CBD (refer Figure 4), and is located in the north eastern portion of the Auburn local government area. Covering 680 hectares, the area includes a diverse range sports and entertainment venues; parklands and riverside settings as well as commercial, retail and residential developments. The location benefits from convenient access to Homebush Bay Drive, Parramatta Road and the M4 Western Motorway, as well as Olympic Park railway station.

Figure 4 – Site location
Source: Google Maps
As illustrated in Figure 5, SOP is divided into nine precincts:

- Sports and Education Precinct;
- Stadia Precinct;
- Sydney Showground Precinct;
- Central Precinct;
- Parkview Precinct;
- Haslams Precinct;
- Boundary Creek;
- Tennis Precinct; and
- Southern Sports Precinct.

The site, known as Site 9 is located at the south eastern corner of Olympic Boulevard and Sarah Durack Avenue, within the Boundary Creek precinct. This precinct was initially developed to contain a number of sporting venues such as the Golf Driving Range and supporting uses including the P3 Public car park. The character of the area is now beginning to evolve into a medium-high density mixed use precinct through the development of commercial and residential uses extending along the spine of Olympic Boulevard.
2.2 Land Ownership and Zoning

The site is legally described as part Lot 2004 in DP1192085. The land is owned by the Sydney Olympic Park Authority (SOPA). The site is rectangular in shape and has a total area of 4,071m².

The site is zoned B4 Mixed Use under the Major Development SEPP (see Figure 6). Residential and commercial development and associated club and retail uses are all permissible with consent in the B4 zone; accordingly the proposed development is permissible.

![Figure 6 – SEPP Major Development Land Use Zoning Map](image)

2.3 Existing Development

The site fronts Sarah Durack Avenue and Olympic Boulevard. Site 9 at present accommodates an open at-grade public carpark which services the surrounding sporting, entertainment and employment uses, and an area of soft landscaping. Additionally, the Site provides access to for the maintenance and storage facilities of the Sydney Olympic Park Authority located on the ground floor of the P3 Public car park at the sites northeast boundary.

A survey plan is located at Appendix C. An aerial photo of the site is shown at Figure 7.
The site has a gradual slope towards the north eastern corner. To the southeast of the site is the Boundary Creek landscape corridor, which acts as one of the primary ‘green fingers’ through the Park area.

The site is not listed as a local heritage item nor located within a heritage conservation area. However, Sydney Olympic Park’s physical heritage includes historic State Abattoir buildings and plantings, Sydney 2000 Olympic and Paralympic Games venues, Sydney Showground venues and the associated public domain. Olympic Boulevard which runs parallel to the site has been identified as the grand ceremonial and event axis. Additionally, the vista along Olympic Boulevard to the Tennis Centre (to the south of the site) has also been identified for preservation.
Figure 8 – Site as viewed from the north west

Figure 9 – Site as viewed from the south east
2.4 Surrounding Development

To the north of the site across Sarah Durack Avenue runs the T7 Olympic Park railway line. Beyond the rail line is the Central Precinct which is presently characterised by low density industrial and commercial buildings but is to be developed into a high-density, mixed use area with commercial, retail and residential uses. Significant landscaped areas and mature trees visually separate the Central Precinct from the site.

Adjacent to the site along the northeast boundary is the P3 public car park. The car park comprises of two four storey concrete structures. Vehicle access is via Sarah Durack Avenue. Pedestrian access is via the ticket area in the northwest corner of the car park fronting Site 9.

To the southeast of the site is the Greater Western Sydney Giants Training Facility comprising of surface parking, training centre, café and the Tom Wills Oval. Access is via Olympic Boulevard.

To the south and southwest of the site across Olympic Boulevard are the Sydney Olympic Park Sports Centre and Netball NSW sporting facilities. Vehicle and pedestrian access is via Sarah Durack Avenue and Olympic Boulevard.

To the west along Olympic Boulevard is the Sydney Olympic Park Aquatic Centre and other sporting venues. These are visually separated from Site 9 by roadways, rail line, surface parking and substantial landscaped areas.
Figure 11 – Netball Central

Figure 12 – Netball Central (left) and the Sydney Olympic Park Sports Centre
Figure 13 – Sarah Durack Avenue, looking southwest, with the Olympic Park rail line lying beyond within in a cutting

Figure 14 – P3 Parking Station, with access to SOPA maintenance store visible at ground level
3.0 Proposed Development

This chapter of the report provides a detailed description of the proposed development. Architectural drawings prepared by Bates Smart are included with the Design Report at Appendix A.

3.1 Development Description

This application seeks approval for the development of Site 9 as a mixed use development with residential, office, club and retail components comprising of the following:

- 21,640m² residential tower of 229 dwellings across 32 levels comprising 58 one bedroom apartments, 130 two bedroom apartments, 30 three bedroom apartments and 11 four bedroom apartments;
- 2,540m² commercial component;
- 790m² retail/club component at ground level;
- 160m² retail component at ground level addressing a colonnade along Sarah Durack Avenue;
- 353 car spaces and 201 bicycle spaces;
- Communal roof top garden for residents above the commercial tenancy in the northern podium; and
- Pedestrian through site link on ground level.

The club component is to accommodate a sports club, coinciding with the surrounding major sporting facilities. The space has been flexibly designed to be also suitable for retail premises if there is not sufficient demand for sporting club premises. The fitout and use of this space will be the subject of a separate development application.

A photomontage of the proposed development is shown at Figure 15.

3.2 Numerical Overview

The key numeric development information is summarised in Table 2.

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<th>Proposal</th>
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<td>Site area</td>
<td>4,071m²</td>
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<tr>
<td>Height</td>
<td></td>
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<tr>
<td>Metres</td>
<td>124.45 metres</td>
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<tr>
<td>Storeys</td>
<td>38 storeys plus rooftop ‘crown’</td>
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<td>GFA</td>
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<td>Residential</td>
<td>21,640m²</td>
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<td>Commercial</td>
<td>2,540m²</td>
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<td>Retail/Club</td>
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<td>Retail</td>
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<td>Car parking spaces</td>
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</tr>
</tbody>
</table>
Figure 15 – Photomontage of the proposed development as viewed from the south
Source: Bates Smart
3.3 Architectural Design

The design and development of Site 9 is generally in accordance with the Boundary Creek Precinct controls as provided by the MP 2030 and as amended by SOPAs Site 9 Site Development Guidelines. These controls and guidelines have been developed to achieve design quality and to minimise or remove any adverse amenity impacts.

The Design Report prepared by Bates Smart (see Appendix A) details the rationale behind the proposed design and provides detailed information about the site layout, building design and architectural treatment of the facade.

Figure 16 – Typical tower floor plan
Source: Bates Smart
Figure 17 – Ground floor plan
Source: Bates Smart
3.4 Landscaping and Public Domain

A landscape design has been developed by Turf Design Studio (refer Appendix D). The following summarises the design approach taken by Turf. It should be noted that the proposal includes works outside the site boundary along Olympic Boulevard to replace the existing row of trees that require removal to allow the built form envisaged by the Site 9 Site Development Guidelines (refer Section 5.16).

Public Domain

This proposal creates a public domain that is equally functional and comfortable both for the everyday user and during major events. Fluid and legible connections are established through the site, and the landscape character contributes to the greater SOP aesthetic. (Refer Figure 18.)

Podium Landscapes

Level 7 - a diverse mix of particularly hardy and low maintenance species provides residents with an attractive overlook from their apartments above.

Level 9 - a place people can inhabit regardless of the weather with the inclusion of two garden pavilions. A series of spaces, from a generous open lawn to small seating nooks creates a landscape that can be enjoyed simultaneously by many user groups. Social interaction and private contemplation are equally catered for. (Refer Figure 19.)

Structures & Urban Elements

Elements such as rooftop garden pavilions, paving, furniture, screening and lighting will be developed further during detailed design. All public domain elements will be designed/detailed in accordance with SOPA requirements. The proposed public domain paving is in accordance with SOPA’S Urban Elements Design Manual, and will extend under the colonnade to meet the building line.

Planting Design

A range of species including local native and exotic will be used to promote biodiversity and robustness within the planting scheme. Low-growing plant species will be located where appropriate to ensure clear views and site lines. Consideration has been given to the incorporation of low water demand and low maintenance plant species in all areas to reduce mains consumption and fertiliser contamination of drainage water.

Safety & Privacy

The public domain design ensures open views are retained to maximise passive surveillance. In the planting design, low-growing grasses are proposed and all trees will be underpruned to maintain a crown height above 2m.

Visual privacy needs have been addressed in the landscape and planting design. The desire for an outlook to public areas is balanced with the need for privacy internally and externally, during day and night. Elements such as the garden pavilions have been designed to provide a sense of visual privacy from overlooking apartments.

Wind Considerations

Effective mitigation of wind is key to achieving amenity for the users of level 9 podium. Several techniques have been used, including:

- planting of densely foliating trees to the southern and western edges (source of prevailing winds);
- using the central rooflight structure (in combination with planting) as
  a windbreak; and
- creating garden pavilions with impermeable walls to the prevailing wind edges.

**Accessibility**

Universal access to AS1428 has been achieved for all external spaces, connecting walkways and building entries without compromising design quality. Gently graded pathways will provide accessibility for all age groups and degrees of mobility; ensuring that workers and patrons can access site amenities comfortably.

**Drainage**

All paving will grade away from building entries at a minimum 1:100 fall. Detailed design will specify drainage cell to all soft landscape zones on structure.

**Irrigation**

Irrigation will be included as a design & construction item within the tender package. Irrigation will be provided to all soft landscape areas.

**Soil**

The planting will comprise a complementary mix of indigenous and exotic species. Soil requirements will therefore vary according to varying soil chemistries enjoyed by individual species. For indigenous vegetation, soil profiles will be provided which have modest nutrient levels particularly phosphorus. In areas where exotic species are to be planted an industry standard organic soil mixture will be provided. Consideration will be given to the planting arrangement to ensure species sensitive to nutrient will be grouped together.

**Lighting**

Lighting of external spaces will be provided to ensure access points are well lit, improving visibility and the sense of safety. Importantly, the through-site link will be well-lit to provide safe passage through and around the site at all hours. Public domain light fittings to be confirmed with SOPA to ensure consistency with current precinct-wide preferences.
3.5 Subdivision

A future application will address the subdivision of the development. It is anticipated that each of the residential, commercial, retail /club components will reside within a separate stratum, with the residential and retail components subsequently subdivided into strata lots.
3.6 Staging

It is envisaged that the building will have four construction stages, as follows:

- Piling and in-ground works;
- Ground slab;
- Podium car parking, commercial offices base build and retail/club base build; and
- Residential tower.

Any conditions relating to the requirements for construction certificates should be structured to accommodate the above.

3.7 Signage

A building identification signage zone is proposed as part of this application, at the parapet level of the residential tower. The location and content of the signage has been integrated into the proposed façade design by the project architect, Bates Smart, and is shown in the architectural drawings within the Design Report at Appendix A. Final details of individual signage will be the subject of a future development application.
4.0 Consultation

The proposed development will be placed on public exhibition for 30 days in accordance with Clause 83 of the Environmental Planning and Assessment Regulation 2000. During the public exhibition period, Council, State agencies and the public will have an opportunity to make submissions on the project Environmental Assessment.

SOPA Design Review Panel

A formal Design Review Panel (DRP) presentation was held on 3 December 2015. The DRP was generally supportive of the design, with the following comments provided on the DRP’s advice sheet (refer Appendix BB):

The design has been developed in response to the recommendations by the tender assessment team, particularly in relation to the tower form as well as resolution of the ground floor levels.

The DRP was very supportive of the proposed design refinements, including the proposal to increase tower height beyond the 32 storey MP height limit, particularly as the height is related to improved residential amenity and improvements in the bulk and form of the tower.

A number of relatively minor issues were identified by the DRP and considered by the architects, as detailed in Table 3 below.

Table 3 – Response to the issues raised by DRP

<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>A wind impact assessment be undertaken, with particular emphasis on coordinating with:</td>
<td>A wind impact report has been prepared by CPP (refer Appendix E) and provides a summary of the detailed wind-tunnel testing that was undertaken in order to quantify the wind conditions and to confirm initial qualitative findings. The proposed facade materials and configuration to the podium carpark levels is expected to assist at improving wind conditions at ground level by allowing wind flow to pass through the podium. The proposed shape and configuration of the south-facing facade has been assessed within the wind report. The wind flow is encouraged to pass horizontally around the proposed development, with downwash flows redirected to the south podium roof, thereby reducing wind impacts at ground level. The south podium roof is expected to be subject to localised windy conditions and as such the proposal has been revised to provide a non-trafficable landscaped roof for the purposes of outlook only. Overall, the environmental wind conditions around the proposed development are generally expected to be suitable for pedestrian standing from a comfort perspective, with locations on the corners being slightly windier and classified as suitable for pedestrian walking.</td>
</tr>
<tr>
<td>- façade materials and configurations being investigated</td>
<td>The extremal material and colour palette should include a greater proportion of warm colour and softer natural finishes.</td>
</tr>
<tr>
<td>- shape and configuration of the south facing re-entrant façade</td>
<td>In response to the DRP recommendations, the terracotta facade to the podium has been retained and the tower now incorporates a series of projecting vertical fins and expressed slab edges to provide a unifying texture to the residential facade. The aluminium fins are proposed as the same colour palette as the podium terracotta to emphasize warmth and softness to what was previously a sleek and neutral facade.</td>
</tr>
<tr>
<td>- the southern podium</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Issue</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigate options for increasing the height of the colonnade to 2</td>
<td>In order to accommodate a 2-storey colonnade along Olympic Boulevard the aisle of parking directly above would need to be relocated. This would result in the likely loss of a dedicated commercial parking area will also require an additional half podium level to achieve the parking yield. The additional podium level would raise the north podium height to RL42.12, which sits approximately 6m above the SOPA RL136 podium envelope. This would result in additional podium mass at the prominent intersection corner.</td>
</tr>
</tbody>
</table>

Services Authorities

Consultation has been undertaken as required by the services consultants with the various relevant services authorities to inform the design of the project. This consultation will continue as required throughout the detailed design and construction phases of the project.

Sydney Trains

A meeting was held between the proponent and representatives of Sydney Trains on 4 March 2016. The location and scope of the project was detailed by the proponent, and Sydney Trains indicated that based on the information presented there would be no impact on Sydney Trains assets, especially considering that there is minimal excavation as the carpark was above ground.

In response to a request made by Sydney Trains, Douglas Partners have confirmed that the piles and in ground structure system would not impact Sydney Trains assets (refer Appendix F).

The also confirmed that luffing cranes would be used so there would be no encroachment over the rail corridor during construction.
5.0 Environmental Assessment

This section contains our assessment of the environmental effects of the proposed development as described in the preceding chapters of this report.

Under section 79C(1) of the EP&A Act, in determining a development application the consent authority has to take into account a range of matters relevant to the development including the provisions of environmental planning instruments; impacts on the built and natural environment, the social and economic impacts of the development; the suitability of the site; and whether the public interest would be served by the development.

The assessment includes only those matters under section 79C(1) that are relevant to the proposal. The planning issues associated with the proposed development are listed in Table 4 below.

The Mitigation Measures at Section 6.0 complement the findings of this section.

<table>
<thead>
<tr>
<th>Planning Issues</th>
<th>SEE</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with Relevant Strategic and</td>
<td>Sections 5.1</td>
<td>Technical Study</td>
</tr>
<tr>
<td>Statutory Plans and Policies</td>
<td>and 5.2</td>
<td>n/a</td>
</tr>
<tr>
<td>Built Form and Urban Design</td>
<td>Section 5.3</td>
<td>Appendix A</td>
</tr>
<tr>
<td>Environmental Amenity</td>
<td>Section 5.4</td>
<td>Appendices A, E &amp; J</td>
</tr>
<tr>
<td>Residential Amenity</td>
<td>Section 5.5</td>
<td>Appendix A</td>
</tr>
<tr>
<td>Ecologically Sustainable Development</td>
<td>Section 5.6</td>
<td>Appendix G</td>
</tr>
<tr>
<td>Contamination</td>
<td>Section 5.7</td>
<td>Appendix H</td>
</tr>
<tr>
<td>Geotechnical Investigations</td>
<td>Section 5.8</td>
<td>Appendix L</td>
</tr>
<tr>
<td>Transport</td>
<td>Section 5.9</td>
<td>Appendix K</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Section 5.10</td>
<td>Appendix I</td>
</tr>
<tr>
<td>Major Events Management</td>
<td>Section 5.11</td>
<td>Appendices J &amp; K</td>
</tr>
<tr>
<td>Utilities</td>
<td>Section 5.12</td>
<td>Appendices M, N, O,</td>
</tr>
<tr>
<td>Contributions</td>
<td>Section 5.13</td>
<td>N/A</td>
</tr>
<tr>
<td>Integrated Water Management</td>
<td>Section 5.14</td>
<td>Appendices R &amp; U</td>
</tr>
<tr>
<td>Flooding</td>
<td>Section 5.15</td>
<td>Appendix R</td>
</tr>
<tr>
<td>Tree Removal</td>
<td>Section 5.16</td>
<td>Appendix T</td>
</tr>
<tr>
<td>Construction Management</td>
<td>Section 5.17</td>
<td>N/A</td>
</tr>
<tr>
<td>Building Code of Australia</td>
<td>Section 5.18</td>
<td>Appendix V</td>
</tr>
<tr>
<td>Environmental Risk Assessment</td>
<td>Section 5.19</td>
<td>N/A</td>
</tr>
<tr>
<td>Waste Management</td>
<td>Section 5.20</td>
<td>Appendix W</td>
</tr>
<tr>
<td>Heritage</td>
<td>Section 5.21</td>
<td>Appendix X</td>
</tr>
<tr>
<td>Archaeology</td>
<td>Section 5.22</td>
<td>Appendix Y</td>
</tr>
<tr>
<td>The Public Interest</td>
<td>Section 5.23</td>
<td>N/A</td>
</tr>
</tbody>
</table>
5.1 Statutory Context

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARs are addressed below and in Table 8.

5.1.1 Environmental Planning & Assessment Act 1979

The SEARs require that the consistency of the project with the objects of the EP&A Act be considered. Clause 5 of the Act sets out that the Objects of the Act are:

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment;

(ii) the promotion and co-ordination of the orderly and economic use and development of land;

(iii) the protection, provision and co-ordination of communication and utility services;

(iv) the provision of land for public purposes;

(v) the provision and co-ordination of community services and facilities, and

(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and

(vii) ecologically sustainable development, and

(viii) the provision and maintenance of affordable housing, and

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The Objects of the Act relevant to the proposed are (a)(i),(ii), (vi), (vii) and (viii). The SSD Application is consistent with the Objects of the EP&A Act, for the following reasons:

- It provides a new residential and commercial development within the Boundary Creek Precinct at Sydney Olympic Park, which is consistent with the Major Project SEPP and MP 2030. It therefore contributes to the proper development of Sydney Olympic Park.
- It provides for the orderly and co-ordinated use of the land by revitalising a vacant site with a high quality development which is in keeping with surrounding developments and will provide a better quality environment.
- It provides an ecologically sustainable development with excellent water and energy saving performance.
- There will be few or no environmental impacts arising from the construction and operation of the development, and none that cannot be managed.
- It includes an Affordable Housing component of 3% of residential lots to be dedicated to SOPA.
5.1.2 State Environmental Planning Policy (Major Development) 2005

Sydney Olympic Park is listed as a State Significant Site in Schedule 3 of the Major Development SEPP. Part 23 refers to Sydney Olympic Park and sets out the planning provisions which apply to development within the site. The relevant planning provisions are addressed below.

The site is zoned B4 Mixed Use. The objectives of B4 Mixed Use zone and the proposed development's consistency with the objectives are addressed in Table 5. The proposed development is also consistent with the development control provisions as detailed in Table 6.

**Table 5 – Consistency with the objectives of the B4 Mixed Use zone**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) to protect and promote the major events capability of the Sydney Olympic Park site and to ensure that it becomes a premium destination for major events</td>
<td>The proposed development has been designed to ensure it does not significantly impact upon the capability of Sydney Olympic Park to host major events. Refer to Section 5.11.</td>
</tr>
<tr>
<td>b) to integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling</td>
<td>The proposed residential, commercial and retail/club development is accessible to public transport and attractive to cyclists and pedestrians. Refer to Section 5.9.</td>
</tr>
<tr>
<td>c) to ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney</td>
<td>The proposed development will encourage the growth of Sydney Olympic Park’s town centre by providing a quality development set within an attractive environment.</td>
</tr>
<tr>
<td>d) to provide for a mixture of compatible land uses</td>
<td>The proposed development of Site 9 is located within a broader development precinct which incorporates a mix of land uses, including residential, commercial and sporting development.</td>
</tr>
<tr>
<td>e) to encourage diverse employment opportunities</td>
<td>The internal layout of the proposed building has been designed to ensure it is suitable for a variety of commercial businesses.</td>
</tr>
<tr>
<td>f) to promote ecologically sustainable development and minimise any adverse effect of land uses on the environment</td>
<td>ESD principles have guided the detailed design of the proposed development, ensuring that it will minimise its impacts on the environment. Refer to Section 5.6 and Appendix G.</td>
</tr>
<tr>
<td>g) to encourage the provision and maintenance of affordable housing</td>
<td>The proposed development incorporates a variety of apartment types to ensure that it is attractive to a wide segment of the residential market.</td>
</tr>
</tbody>
</table>
### Table 6 – The proposed development’s consistency with the provisions of Part 23 of Schedule 3 of the Major Development SEPP

<table>
<thead>
<tr>
<th>Clause</th>
<th>Control</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Height of Buildings</td>
<td>122 metres</td>
<td>121.45 metres</td>
</tr>
<tr>
<td>19. Floor Space Ratio</td>
<td>4.5:1</td>
<td>6.17:1 Refer to Section 5.3.2</td>
</tr>
<tr>
<td>20A Demolition requires consent</td>
<td>The demolition of a building work may be carried out only with consent.</td>
<td>Approval for the demolition of an existing at grade car park and access road is sought as part of this DA.</td>
</tr>
<tr>
<td>23. Public utility infrastructure</td>
<td>The development must have public utility infrastructure available or adequate arrangements in place to make that infrastructure available when required.</td>
<td>SOPA will provide all relevant service utility infrastructure connections.</td>
</tr>
</tbody>
</table>
| 24. Major event capability | Protect and promote the major events capability for the Sydney Olympic park site and ensure it remains a premium destination for major events. | • Traffic generated by the development will not cause the local road network and connections to the regional road network to become saturated.  
• The development will not prevent the effective management of crowd movement and transport services.  
• The development will not compromise the effective functioning of major event infrastructure.  
• The development will not conflict with the emergency management plans of government agencies or the emergency evacuation plans of major events venues.  
• Refer to Section 5.11. |
| 25. Transport | The development must include measures to promote public transport use, cycling and walking. | The measures incorporated into the development to encourage the use of public transport, cycling and walking are detailed in Section 5.9. |
| 26. Master plan | The development must consider MP 2030. | Consistency of the proposed development with MP 2030 is addressed in Section 5.2.1. |
| 30. Design excellence | Development consent must not be granted for the erection of a new building unless the consent authority has considered whether the proposed development exhibits design excellence. | To demonstrate design excellence, the proposed development has been rigorously reviewed by SOPA’s Design Review Panel, with the panel’s comments incorporated into the final design of the development. |

---

1 The Major Development SEPP defines height of building as: *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.*
5.1.3  State Environmental Planning Policy (Infrastructure) 2007

Under clause 104 and Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007 (ISEPP), development including parking for 200 or more motor vehicles must be referred to NSW Roads and Maritime Services (RMS).

Given the proposed development provides 353 car spaces, this application is required to be referred to the RMS for comment.

5.1.4  State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The Building Sustainability Index (BASIX) aims to deliver equitable, effective water and greenhouse gas reductions across the state. BASIX Certificates are located at Appendix G.

5.1.5  State Environmental Planning Policy No.55 - Remediation of Land

State Environmental Planning Policy No.55 - Remediation of Land provides controls and guidelines for the remediation of contaminated land. In particular the policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. As discussed in Section 5.7 and Appendix H, the site can be made suitable for the development.

5.1.6  SEPP 64 – Advertising and Signage

A ‘business identification’ signage zone is proposed as part of this application as detailed in the Architectural Drawings provided at Appendix A. The zone is located on the building elevation below parapet level. As the proposed signage will be ‘business identification signage’, the provisions of Division 3 of State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) do not apply. It is considered that the proposal is generally consistent with the matters for consideration identified in clause 13 and schedule 1 of the SEPP, in that the proposed signage:

- does not give rise to any road or pedestrian safety impacts;
- contributes positively to wayfinding in the vicinity of the site;
- has been integrated into the building design by the project architect, Bates Smart;
- does not impact on any significant views; and
- is separated from sensitive residential uses; and.

5.1.7  State Environmental Planning Policy No.65 - Design Quality of Residential Apartment Development

The residential component of the development has considered the design principles of SEPP 65. The Design Report prepared by Bates Smart (Appendix A) addresses the design quality principles in detail, demonstrating that the design is the optimum response to the site, context and location.
5.1.8 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The site is not located in the Foreshore & Waterways area and is not ‘zoned’ under the SREP, where the majority of the plans aims and provisions apply. However, the proposal is consistent with these aims in that the development will:

- create a high quality and ecologically sustainable urban development on the site;
- ensure a healthy, sustainable environment by effectively managing all environmental impacts associated with the development (erosion, sediment control, stormwater, etc.);
- contribute to the vibrancy of the precinct through high quality residential and commercial space with an active public domain at ground level.
- will not impede public access to foreshore; and
- maintain a high quality urban environment through urban design, and will not detract from long distance views and vistas that may be available from the surrounding public domain to and from the harbour (with the proposal not readily directly visible from the harbour).

5.1.9 Other Approvals

As required by Clause 7(1)(d)(v) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000, the following additional approvals will be required in order to permit the proposed development to occur.

Table 7 – Additional approval requirements

<table>
<thead>
<tr>
<th>Act</th>
<th>Approval Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation that does not apply to State Significant Development</td>
<td></td>
</tr>
<tr>
<td>Coastal Protection Act 1979</td>
<td>N/A</td>
</tr>
<tr>
<td>Fisheries Management Act 1994</td>
<td>N/A</td>
</tr>
<tr>
<td>Heritage Act 1977</td>
<td>N/A</td>
</tr>
<tr>
<td>National Parks and Wildlife Act 1974</td>
<td>N/A</td>
</tr>
<tr>
<td>Native Vegetation Act 2003</td>
<td>N/A</td>
</tr>
<tr>
<td>Rural Fires Act 1997</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Management Act 2000</td>
<td>N/A</td>
</tr>
<tr>
<td>Legislation that must be applied consistently</td>
<td></td>
</tr>
<tr>
<td>Fisheries Management Act 1994</td>
<td>No</td>
</tr>
<tr>
<td>Mine Subsidence Compensation Act 1961</td>
<td>No</td>
</tr>
<tr>
<td>Mining Act 1992</td>
<td>No</td>
</tr>
<tr>
<td>Petroleum (Onshore) Act 1991</td>
<td>No</td>
</tr>
<tr>
<td>Protection of the Environment Operations Act 1997</td>
<td>No</td>
</tr>
<tr>
<td>Roads Act 1993</td>
<td>No</td>
</tr>
<tr>
<td>Pipelines Act 1967</td>
<td>No</td>
</tr>
</tbody>
</table>
5.2 Policies

5.2.1 Sydney Olympic Park Master Plan 2030

MP 2030 was prepared in accordance with the requirements of the *Sydney Olympic Park Authority Act 2001* and the Major Development SEPP. The purpose of MP 2030 is to:

- provide a comprehensive approach to the development of Sydney Olympic Park;
- ensure Sydney Olympic Park becomes an attractive and vibrant town within Metropolitan Sydney;
- protect the role of Sydney Olympic Park as the premier destination for cultural, entertainment, recreation and sporting events;
- protect and enhance the public domain;
- protect and enhance the Sydney Olympic Park parklands; and
- provide detailed planning and design principles and controls to encourage development that responds to its context and contributes to the quality of the built environment and the future character and cultural significance of the site.

MP 2030 is currently under review to ensure that it is appropriately aligned with the vision for Sydney Olympic Park. It is understood that the review process is ongoing, with no public exhibition of proposed amendments imminent.

Section 95 of the EP&A Act deems that MP 2030 is taken to be a development control plan adopted by the Director General of the Department of Planning & Infrastructure under Section 74D of the EP&A Act.

The proposed development is generally consistent with the general and precinct specific controls as set out below.

General Controls

- **Sustainability (Clause 4.2):**
  - an ESD consultant has been engaged as a core member of the project team;
  - the development will be connected to SOP’s recycled water system;
  - materials have been selected on the basis of their sustainability; and
  - the development will meet the relevant minimum environmental ratings.

  Further details are provided in Section 5.6.

- **Public Domain (Clause 4.3):**
  - the proposed development makes provision for through-site links between Olympic Boulevard and Road 21;
  - a colonnade is provided along the Olympic Boulevard frontage;
  - weather protection will be provided at the entrances of the building;
  - opportunities for casual surveillance over the public areas will be provided via the high level of glazing incorporated into the development’s design;
  - multiple entrances into the building will be provided; and
  - the facades of the proposed building are modulated through design features, materials, and balconies to provide interest for passers-by.

- **Event Access and Closures (Clause 4.4):**
  - as outlined in Section 5.11 access to the site will not be significantly compromised by road closures for minor or major events.
• Land Use and Density (Clause 4.5):
  – The Site 9 Site Development Guidelines issued by SOPA in May 2015 detail that residential, office, retail/club premises are allowable land uses within the site;
  – the overall concept for Site 9 will be consistent with the building envelope controls stipulated in MP 2030 as refined by the Site 9 Site Development Guidelines and will achieve a floor space ratio less than the maximum allowable FSR of 2.5:1 across the site;
  – the existing and proposed road networks will have adequate capacity to support the development, as outlined in Section 5.9.

• Building Form and Amenity
  – the proposed building will incorporate through-site links and maintain view corridors;
  – the proposed building incorporates appropriate solar access, access to natural light and ventilation, communal outdoor areas and access to views;
  – an accessibility review report has been prepared by Accessibility Solutions as required by the controls (refer to Section 5.10 and Appendix I);
  – design excellence has been achieved as demonstrated at Table 6.
  – the proposed built form is appropriately expressed as detailed in Section 5.3;
  – appropriate consideration has been given to the safety and security of the proposed development throughout the design process as demonstrated in Section 5.4.6;
  – acoustic impacts have been considered as required by the controls, refer to Section 5.4.4 and Appendix J; and
  – an operational waste management plan has been prepared that demonstrates how the principles of waste avoidance, reduction, re-use and recycling will be implemented into the operation of the proposed development (refer to Section 5.16).

• Access and Parking (Clause 4.7 and Clause 4.8)
  – the proposal's consistency with regard to the access, parking and transport controls is discussed in detail in Section 5.9.

• Landscape and Site (Clause 4.9)
  – the proposed landscaping responds to the existing contours and features of the site;
  – sufficient open space is provided meet the recreational needs of the future residents and workers and to complement the surrounding public domain;

Precinct Controls
The Boundary Creek Precinct controls relevant to the site are all embodied in the MP 2030 general controls. However it is noted that the proposed development is consistent with the land use plan for the precinct, including the vehicle access points.
Table 8 – Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines

<table>
<thead>
<tr>
<th>Instrument/Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW State Priorities</td>
<td>The proposed development is consistent with a number of State Priorities, including the requirement to provide additional employment opportunities and to deliver additional housing supply.</td>
</tr>
<tr>
<td>A Plan for Growing Sydney</td>
<td>A Plan for Growing Sydney aims to Sydney remains a competitive economy with world-class services and transport. The proposed development accords with a number of Directions provided by the Plan, including: Direction 1.3: Prioritise the growth area from Greater Parramatta to the Olympic Peninsula Direction 1.4: Transform Western Sydney through growth and investment Direction 1.6: Expand the Global Economic Corridor to support jobs’ growth Direction 1.7: Grow centres that provide more jobs closer to homes Direction 2.1: Improve housing supply across Sydney Direction 2.2: Ensure more homes closer to jobs Direction 2.3: Improve housing choice to suit different needs and lifestyles Direction 3.3: Create healthy built environments Direction 4.3: Manage the impact of development on the environment</td>
</tr>
<tr>
<td>NSW Long Term Transport Master Plan</td>
<td>The project is consistent with the Masterplan in that it will: ▪ support the expansion of the Light Rail System, by providing housing in direct proximity to existing rail stations; ▪ encourage public transport use by providing residential, employment, club and retail uses in close proximity to rail and bus services; and ▪ support a reduced reliance on private vehicles, assisting in improving the modal split between cars and public transport.</td>
</tr>
<tr>
<td>Guide to Traffic Generating Developments</td>
<td>The Transport Impact Assessment (refer Appendix K) assesses the traffic generation of the proposed development with reference to RMS Guidelines, with adequate capacity in the surrounding road network to accommodate the proposal.</td>
</tr>
<tr>
<td>Guide to Traffic Management- Part 12: Traffic Impacts of Development</td>
<td>The project provides a through site link and is well integrated into the surrounding public domain to facilitate walking and cycling, supporting a reduced reliance on private vehicles.</td>
</tr>
<tr>
<td>NSW Planning Guidelines for Walking and Cycling</td>
<td>A Noise and Vibration Management Plan has been prepared (Appendix J) to appropriately address noise impacts to surrounding receivers.</td>
</tr>
<tr>
<td>Interim Construction Noise Guideline</td>
<td>The clear definition of the sequences of the common spaces, including entry foyers and naturally lit lobbies, will positively contribute to the safety and security of the future inhabitants of the development. The entries have been designed to provide architectural, landscape and spatial interest and a clear address. The design of the development optimises safety and security, both internal to the development and for the public domain. Safety and security has also been considered in accordance with Crime Prevention Through Environmental Design principles of surveillance, access, territorial reinforcement and space management.</td>
</tr>
<tr>
<td>Crime Prevention through Environmental Design Principles</td>
<td></td>
</tr>
</tbody>
</table>

5.2.2 SOPA Policies

The objectives and guidelines contained within the following policies have been considered and incorporated into the design of the project:

- Sydney Olympic Park Access Guidelines 2015;
- Sydney Olympic Park Major Event Impact Assessment Guidelines;
- Sydney Olympic Park Urban Elements Design Manual;
- Sydney Olympic Park Environmental Guidelines;
- Sydney Olympic Park Stormwater and Water Sensitive Urban Design Policy;
- Sydney Olympic Park Remediated Land & Contaminated Development Policy.
5.2.3 Other Policies

To ensure potential impacts on and from the proposed development are appropriately mitigated, the following policies were applied to the project:

- Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP); and

5.3 Built Form and Urban Design

The Design Report prepared by Bates Smart (refer Appendix A) outlines the vision of the project and extensively details how the design of the building has been developed in response to the context of the site.

The vision for the project is as follows:

...an integrated mixed-use development which provides Sydney Olympic Park Authority with a sustainable office premises and a strong sense of identity. The residential tower has been designed to maximise amenity and contributes to SOPA’s vision for Olympic Boulevard of widely spaced slender towers above a consistent street wall and activated ground plane.

5.3.1 Future Urban Character

The proposed development is located at the south-east intersection of Sarah Durack Avenue and Olympic Boulevard. Figure 20 details the locations of Site 9, Site 13 (approved development for commercial offices), Site 25 (future sport / education development) and Site 50 (future mixed use development).

The proposed mix of uses for Sites 13, 25 and 50 create a balanced land use mix for the area, whilst enhancing the existing uses in the vicinity, being the State Sports Centre, Netball Central and the P3 Carpark facility. The proposed Site 9 development, comprising residential, commercial and retail uses, will complement the mix and urban character around the intersection.
The proposed retail colonnade at ground level in conjunction with a through-site link permitting access to the P3 carpark will encourage pedestrian activity and will create opportunities for retail tenancies that cater for the adjoining commercial and sport / education uses, and for the Site 9 occupants and future Site 50 occupants.

The proposed Site 9 commercial offices located at the intersection responds well to the approved commercial development situated directly opposite on Olympic Boulevard.

Aesthetically the proposed Site 9 development provides a unique, high quality and articulated architecture to the prominent intersection, appropriate for its landmark location on Olympic Boulevard. The 6-8 street wall with a tower typology has been implemented in line with SOPA’s built form controls, which will be complemented by the future development of Site 50 which is subject to similar built form controls.

5.3.2 Height

As previously detailed, SOPA is currently undertaking a review of MP2030. As part of this review process, the NSW Government Architect’s Office prepared a development concept and urban design study for the site. This was presented to the Department of Planning and Environment in January 2014 and SOPA’s Design Review Panel in March 2014, with positive responses received. The Government Architect’s Office then finalised development concept into the Site 9 Site Development Guidelines (the Site 9 Guidelines), which informed the tender process and the detailed design of the building.

The Site 9 Guidelines state the following:

An urban design study for Site 9 tested existing MP2030 controls as well as the following adjustments in relation to the overarching urban design principles for Olympic Boulevard and the Boundary Creek Precinct:

- Increase Floor Space ratio for Site 9 from 4.5.1 to 6.1
- Increase height limit from 6 storeys to include towers up to 30 storeys
- Allow for above ground parking

The Department of Planning and Environment advised that it would support, in principle, the proposed modifications using Clause 22 of the SEPP.

The proposed 38 storey tower exceeds the height limit provided in MP2030 (six storeys) and the Site 9 Site Development Guidelines provided by SOPA (30 storeys). However, the height of the tower is less than the maximum building height applying to the site as proscribed by State Environmental Planning Policy (Major Development) 2005. The proposed height is 121.45 metres, whereas the SEPP allows a maximum height of 122 metres.

The proposed variation to the Site Development Guidelines is a result of a desire to eliminate south facing single aspect apartments from the development, with the gross floor area instead located at the top of the tower. This ensures that 100 percent of apartments achieve the solar access requirement, which is highly commendable for residential apartments in an urban environment. Further discussion of the proposed height is provided in detail in the Design Report (Appendix A).
5.3.3 Floor Space Ratio

As detailed above, the Site 9 Site Development Guidelines increase the maximum floor space ratio (FSR) for the site from 4.5:1 to 6:1. The existing maximum FSR of the site of 4.5:1 is specified in the Major Development SEPP. The proposed development seeks an FSR of 6.17:1, with a gross floor area of 25,130m$^2$ and a site area$^2$ of 4,071m$^2$.

Request to Vary a Development Standard

Clause 22 of Part 23 of Schedule 3 of the Major Development SEPP allows the consent authority to grant consent for development even though the development contravenes a development standard imposed by the SEPP. The Clause aims to provide an appropriate degree of flexibility in applying certain development standards to achieve better outcomes for and from development.

Clause 22 requires that a consent authority be satisfied of three matters before granting consent to a development that contravenes a development standard:

- that the applicant has adequately demonstrated that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case;
- that the applicant has adequately demonstrated that there are sufficient environmental planning grounds to justify contravening the development standard; and
- that the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out.

The consent authority’s satisfaction as to those matters must be informed by the objective of providing flexibility in the application of the relevant control to achieve better outcomes for and from the development in question.

The Land and Environment Court has established questions to be addressed in variations to developments standards lodged under State Environmental Planning Policy 1 – Development Standards (SEPP 1) through the judgment of Justice Lloyd, in Winten Property Group Ltd v North Sydney Council [2001] 130 LGERA 79 at 89. The test was later rephrased by Chief Justice Preston, in the decision of Wehbe v Pittwater Council [2007] NSW LEC 827 (Wehbe).

These tests and considerations can also be applied to the assessment of variations under clause 22 of the SEPP. Accordingly, this variation request is set out using the relevant principles established by the Court.

An additional principle was established in the recent decision by Commissioner Pearson in Four2Five Pty Ltd v Ashfield Council [2015] NSWLEC 1009 (Four2Five), which was upheld by Pain J on appeal.

$^2$ The Site 9 Site Development Guidelines state:

The base area for site 9 is 3,959m$^2$. However, the Sydney Olympic Park Master Plan 2030 allows for a proportion of the future adjacent street 22 to be added to the site area when calculating allowable Gross Floor Area (GFA), bringing the total site area for GFA calculation to 4,071m$^2$. 
Clause 22 states:

(1) This clause applies to development on land within the Sydney Olympic Part site, other than development that is part of a transitional Part 3A project.

(2) The objectives of this clause are:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(3) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(4) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

(b) that there are sufficient environmental planning grounds to justify contravening the development standard.

(5) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant’s written request has adequately addressed the matters required to be demonstrated by subclause (4), and

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

(b) the concurrence of the Director-General has been obtained.

(6) In deciding whether to grant concurrence, the Director-General must consider:

(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and

(b) the public benefit of maintaining the development standard, and

(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.

... 

Development Standard to be Varied

Clause 19 of Part 23 of Schedule 3 of the Major Development SEPP stipulates that the maximum FSR for a building on any land within the Sydney Olympic Park site is not to exceed the FSR shown for the land on the Floor Space Ratio Map, which shows a maximum FSR of 4.5:1 for the site.
As detailed above, the site has an area of 4,071m², providing for an allowable Gross Floor Area (GFA) of 18,320m². This application proposes a GFA of 25,130m², with a resultant FSR of 6.17:1. This represents an FSR variation of 1.67:1, or a GFA variation of 6,810m².

Is the Planning Control in Question a Development Standard?

Development Standard is defined under Section 4(1) of the EP&A Act as follows:

“development standards means provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development, including, but without limiting the generality of the foregoing, requirements or standards in respect of:

(c) the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of a building or work…”

Clause 19 of Part 23 of Schedule 3 of the Major Development SEPP is clearly and unambiguously a development standard.

What is the Underlying Object or Purpose of the Standard?

No objectives are given for the maximum gross floor area development standard as detailed in the Major Development SEPP.

However, the purpose of the standard is clearly to restrict the built form of development to ensure that its bulk and scale is compatible with the desired future character of the locality, and to mitigate against undesirable amenity impacts.

Compliance with the Development Standard is Unreasonable or Unnecessary in the Circumstances of the Case

Clause 22(4)(a) of Part 23 of Schedule 3 of the Major Development SEPP requires the departure from the development standard to be justified by demonstrating:

that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

In the decision of Wehbe, the Chief Justice expressed the view that there are five different ways in which an objection to a development standard might be shown as unreasonable or unnecessary and is therefore well founded. Of particular relevance in this instance is the first way, as follows:

1. The objectives of the standard are achieved notwithstanding noncompliance with the standard.

Notwithstanding that there are no applicable objectives for the floor space ratio development standard, the generally accepted principles behind such standards is to ensure that the proposed developments have scale and density that is compatible with the surrounding character, to ensure the development does not cause unreasonable amenity impacts on surrounding properties and to protect public and private views.

These principles are satisfied by the proposal (as detailed throughout this report) despite the numerical non-compliance with the Floor Space Ratio standard.
Having regard to the above, it would be unreasonable and unnecessary to enforce compliance with the floor space development standards contained within the Major Development SEPP as this development standard is effectively outdated, and will be replaced with an increased allowable maximum as part of the MP2030 review process.

There are Sufficient Environmental Planning Grounds to Justify Contravening the Development Standard

Clause 22(4)(b) of Part 23 of Schedule 3 of the Major Development SEPP requires the departure from the development standard to be justified by demonstrating:

that there are sufficient environmental planning grounds to justify contravening the development standard.

There are considered to be sufficient environmental planning grounds to justify contravention of the Floor Space Ratio development standards in this specific instance.

In Four2Five, the Court found that the environmental planning grounds advanced by the applicant in a variation request must be particular to the circumstances of the proposed development on that site.

In this instance, the Site 9 Site Development Guidelines that have informed the bulk and scale of the development are entirely specific to the site. Furthermore, the proposed development has been specifically designed to achieve a high quality built form that is compatible with the envisaged built form of the locality.

Consistency with Zone Objectives

Clause 22(5)(a)(i) of Part 23 of Schedule 3 of the Major Development SEPP requires the demonstration that the proposed development is in the public interest because it is consistent with the objectives of the development standard and consistent with the zone objectives.

As discussed above, there are no objectives for the development standard in question. The proposed development’s consistency with the B4 Mixed use zone objectives is detailed in Section 5.1.2 of this report.

Director-General’s Concurrence

Clause 22(5)(b) of Part 23 of Schedule 3 of the Major Development SEPP requires that development consent for the contravention of a development standard not be granted until the concurrence of the Director-General (now Secretary-General) has been obtained. Clause 22(6) outlines the relevant matters for consideration, which are discussed below.

Whether contravention of the development standard raises any matter of significance for the State or Regional environmental planning

The proposal demonstrates that a variation to the floor space ratio development standard is acceptable in terms of significance for State and Regional planning matters. The variance of the development standards will not contravene any overarching State or regional objectives or standards, or have any effect outside the site’s immediate area.

The public benefit of maintaining the development standard

Maintaining the development standard would not result in any public benefit in this situation. Reducing the floor space to meet the standard would represent a ‘roll-back’ of the current urban design work that has been undertaken on the site by SOPA, the NSW Government Architect’s Office and Bates Smart.
Further, the development as a whole will deliver a number of public benefits to the area, including:

- providing additional housing to contribute to overcoming the shortfall of housing in Sydney;
- supporting the ongoing development of Sydney Olympic Park;
- promoting ecological sustainability and sustainable practices through the achievement of BASIX targets.

Any other matters required to be taken into consideration by the Director-General before granting concurrence

No other matters require consideration by the Director-General. The proposed variation will allow the orderly redevelopment of the site and will better service future occupants of the building.

5.4 Environmental Amenity

5.4.1 View Loss

The site currently accommodates a car parking area and an area of landscaping. These existing areas do not block views from surrounding properties. The Site 9 development will be constructed in place of the existing car park and open space on the site and will significantly change the visual characteristics of the site. As the proposed podium envelope is generally consistent with that defined in the Site 9 Guidelines, any potential loss of views is consistent with the envisaged character of the precinct.

5.4.2 Overshadowing

Shadow Diagrams have been prepared by Bates Smart that illustrate the impacts of overshadowing resulting from the proposed development. They are included in the Design Report at Appendix A.

These demonstrate that the shadow from the proposed building is slender and fast moving, meaning that the surrounding allotments still receive adequate access to sunlight even at midwinter.

5.4.3 Wind

The impact of the proposed development on the pedestrian level local wind environment has been assessed by Cermak Peterka Petersen (refer to Appendix E).

Existing Conditions

An analysis of the existing wind environment was undertaken using meteorological data from the Bankstown Airport Bureau of Meteorology (BoM) anemometer, which is located approximately 10km south-west of the site. (The BoM anemometer at Homebush is known to be directionally influenced by surrounding buildings, topography and landscaping, therefore readings are considered to be unreliable for pedestrian level wind comfort analysis).

The key characteristics of the local wind climate are:

- South-east quadrant winds, which have a cold tendency and can last several days and occur throughout the year;
- West quadrant winds which tend to produce the strongest winds affecting the site throughout the year; and
- South and west quadrants winds associated with rain.
Assessment

The wind environment around Sydney Olympic Park is considered to be relatively mild. The key findings of the assessment are that the orientation and shape of the tower are such that winds will tend to flow horizontally around the building. Any downwash will tend to be deflected by the podium elements.

Wind tunnel testing was undertaken to confirm the wind impacts of the proposed development. In summary, the resulting wind conditions are considered acceptable given the intended use of these areas. Furthermore, all locations pass the relevant pedestrian comfort criterion, and no amelioration measures are considered necessary.

5.4.4 Acoustic and Noise Impacts

Renzo Tonin & Associates were engaged to conduct an environmental noise assessment of the proposed development (refer Appendix J). The following potential acoustic issues were identified:

- Road traffic noise associated with Sarah Durack Avenue and Olympic Boulevard;
- Rail noise associated with the Olympic Park railway line located in a land cutting approximately 33m north of site;
- Major sporting and entertainment events at Sydney Olympic Park; and
- Operational noise emission from mechanical plant rooms on dedicated floor levels of the building onto areas of the proposed development and existing adjacent buildings.

External noise and vibration intrusion into the development was assessed in accordance with the relevant guidelines and standards:

- State Environmental Planning Policy (Infrastructure) 2007;
- Development Near Rail Corridors and Busy Roads - Interim Guideline 2008;
- Australian Standard AS2107:2000 ‘Recommended Design Sound Levels and Reverberation Times for Building Interiors’; and
- Sydney Olympic Park Master Plan 2030.

The assessment of airborne road and rail noise intrusion into the proposed development found that appropriate noise control measures can be incorporated into the building design (such as acoustic glazing) to achieve compliance with the acoustic requirements stipulated in the relevant guidelines and standards.

‘In principle’ acoustic advice and noise management measures have been provided to appropriately address noise emission during the construction and operational phases of the development.

5.4.5 Privacy

The building separation distances between Site 9 and existing and future buildings within close proximity of the site are considered to be acceptable to maintain appropriate levels of privacy.
5.4.6 Safety and Security
Consideration of safety and security has been integral to the design for Site 9, as follows:

- public and communal spaces have been designed to be open, well-lit and clearly visible with legible ‘lines of sight’ from key nodal points around the site and beyond;
- building entry points are easily identifiable;
- alcoves have been avoided;
- the facades of the building, particularly at ground level are substantially glazed to encourage natural surveillance;
- the car parking areas have been designed with a linear car parking configuration and legible pedestrian access points; and
- landscaping around the building has been designed to minimise opportunities for concealment.

5.5 Residential Amenity

5.5.1 Design Quality Principles
The proposal provides a high degree of amenity for future occupants of the development. This is achieved through careful design which responds to the constraints and opportunities of the site and surrounds, the provisions of the SOPA planning controls, and the Apartment Design Guide. Bates Smart has provided a detailed assessment of the proposed development against the nine design quality principles established by SEPP 65 in the Design Statement (refer Appendix A). This assessment demonstrates that the development exhibits a high degree of design quality and will make a significant positive contribution to Sydney Olympic Park.

5.5.2 Apartment Design Guide Compliance
The Design Report includes a detailed assessment of the proposed development against the provisions of the Apartment Design Guide. This assessment demonstrates that the relevant design considerations have been taken into account to ensure that the building will deliver a very high standard of amenity for the future residents.

5.6 Ecologically Sustainable Development
An ESD Report has been prepared in relation to the proposed development by Arup (refer Appendix G). This details that the proposed development achieves the following in terms of BASIX rated performance:

- **BASIX comfort**: The design specifies low e double glazing that has a high visual light transmission and excellent winter and summer performance. The average comfort score for all apartments is 6.5 stars, which means they are using 67% less energy to cool and 47% less energy to heat the apartments than the allowable BASIX caps.

- **BASIX water**: the proposed development achieves a greater than 40% improvement above the minimum BASIX water score. The building will connect to the WRAMS system, and water efficient appliances are specified throughout.
- **BASIX energy**: The proposal complies with a 20% reduction for the energy systems, even though this is difficult to achieve in high rise residential towers. LED and fluorescent lighting has been used throughout with smart automated lighting controls in all common areas and natural ventilation of common areas and corridors.

Details of the measures proposed to achieve these targets are provided in the ESD Report. The report also details the sustainability inclusions that are over and above the minimum code compliance requirements. These include measures relating to:

- Management;
- Indoor environmental quality;
- Energy;
- Water;
- Waste management; and
- Materials.

All the sustainability commitments will be reported in a Sustainability Management Plan (SMP) which will be used to monitor the sustainability performance throughout the design, construction and operation periods of the project. The SMP will be a report style document that lists all sustainability requirements and how they intend to be achieved. This will ensure that the sustainability strategies are delivered.

### 5.7 Contamination

DLA Environmental Services (DLA) have been prepared a Remediation Action Plan (RAP) for the site (refer Appendix H). This identifies the site and proposed development, a summary of previous environmental investigations, and the contamination status of the site. The principal contamination sources are associated with the landfill waste material, associated leachate and landfill gases.

The RAP details the preferred remedial strategy for the site, which is capping and containment. The RAP provides details in relation to remediation, validation, soil management, environmental management and contingency plans.

The RAP provides the following conclusion:

*The Site can be made suitable for the intended land-use through remedial works as part of the redevelopment works in accordance with State Environmental Planning Policy No.55 (SEPP 55).*

James Davis of Envirowiew has been engaged to provide the services of a NSW EPA Contaminated Land Accredited Site Auditor, to conduct a Site Audit in relation to the site in accordance with the *Contaminated Land Management Act 1997* and relevant guidelines under s.105 of that Act.

A Site Audit Interim Advice has been prepared by the Site Auditor (refer Appendix CC). The interim advice states:

*In general the RAP provided meets the requirements of the guidelines, is practicable and it is my opinion that the site can be made suitable with the implementation of the RAP.*
5.8 Geotechnical Investigations

A Geotechnical Investigation Report has been prepared in relation to the proposed development by Douglas Partners (refer Appendix L). This provides the following conclusions:

**Excavation and Site Preparation**

Excavation is likely to be required for minor site re-grading works. This should be readily achievable using conventional earthmoving equipment such as excavators with bucket attachments. Bulk excavation in rock will not be required.

The proposed building is likely to be fully supported on piles to rock and therefore structural filling will probably not be required for long term support. However, a piling platform may need to be constructed to support the piling rig.

**Excavation Support**

Minor excavations (i.e. less than 2 m deep) should be able to be supported by temporary batters cut no steeper than 1(H):1(V). As bulk excavation is expected to be limited to minor depths, temporary shoring support is unlikely to be required.

**Groundwater**

Groundwater was observed at depths of between 1.4 m and 5.2 m during. The shallower observations are likely to have been perched water within the filling. As the proposed building will be constructed primarily above the existing surface levels, the groundwater levels are somewhat irrelevant for the long-term case. However, groundwater may need to be removed from bored pile and other excavations during construction.

**Foundations**

Spread footings (i.e. pad or strip footings) will not be suitable for supporting the proposed structure due to the presence of a significant depth of uncontrolled filling and refuse on the site. A raft slab is also considered unsuitable due to the unpredictable properties of these materials. As such, all structural loads will need to be supported by piles founded uniformly in rock.

Continuous flight auger (CFA) piles should be suitable for supporting the building. CFA piles are constructed by inserting a hollow-stem auger into the ground to a nominated depth. Concrete or grout is injected through the stem of the auger as the auger is withdrawn. A column of concrete or grout is then formed upon complete auger withdrawal and a steel reinforcing cage is lowered into the column to complete the pile. The contractor should be made aware of the presence of landfill materials to ensure an appropriate concrete/grout mix is used.

Alternatively, bored piles could be used to support the building although casing will be required from the ground surface down to the top of residual clay or rock to prevent the filling materials from collapsing during drilling.

Driven precast concrete, steel-tube or steel-H piles could also be used to support the proposed building loads. Driven piles have an advantage in that they are also full-displacement piles (i.e. no pile spoil produced) and can usually support higher loads than piles cast in place.
5.9 Transport and Accessibility

A Traffic Impact Assessment has been prepared by Traffic and Parking Consultants (refer Appendix K). Key findings of this assessment are provided below.

5.9.1 Existing Transport Facilities

The subject site is located at the intersection of Sarah Durack Avenue and Olympic Boulevard, which provide access to Homebush Bay Drive to the east. Homebush Bay Drive provides links to a number of regional and state roads and the greater Sydney road network.

The development is well serviced by buses, and trains with two bus interchanges located within 350 metres and Sydney Olympic Park Train Station located 650 metres from the development site.

Sydney Olympic Park contains an extensive bicycle network, providing links to all areas of the park, the public transport network and the wider Sydney cycle network. The development site is served by an on road cycle way along Sarah Durack Avenue and an off road cycle route along Olympic Boulevard.

5.9.2 Traffic

Existing Traffic Volumes

In order to assess the existing traffic conditions in the vicinity of the site, traffic intersection surveys were undertaken at the surrounding intersections. In order to confirm the current operation of these intersections, an assessment was undertaken using SIDRA Intersection modelling software. A summary of the SIDRA results is provided in Table 9 below.

Table 9 – Existing SIDRA intersection performance

<table>
<thead>
<tr>
<th>Period</th>
<th>Intersection</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak</td>
<td>Sarah Durack Avenue and Australia Avenue</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Sarah Durack Avenue and Olympic Boulevard</td>
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<td></td>
<td>Olympic Boulevard and Shirley Strickland Avenue</td>
<td>A</td>
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<td></td>
<td>Shirley Strickland Avenue and Australia Avenue</td>
<td>A</td>
</tr>
<tr>
<td>PM Peak</td>
<td>Sarah Durack Avenue and Australia Avenue</td>
<td>C</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Shirley Strickland Avenue and Australia Avenue</td>
<td>A</td>
</tr>
</tbody>
</table>

Proposed Traffic Generation

Applying the RMS ‘Guide to Traffic Generating Developments’ rates to the proposed car parking indicates that the projected peak hour generation is 87 vehicle trips during the AM peak and 78 trips in the PM peak.

Proposed Traffic Distribution

The assessment assumes that road users would predominantly utilise the shortest route available to the closest state road, being Homebush Bay Drive. Based on this assumption and the projected traffic generation, the projected traffic volumes have been applied to the surrounding road network and a SIDRA analysis applied (refer Table 10).
Table 10 – Post-development SIDRA intersection performance

<table>
<thead>
<tr>
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</tr>
</thead>
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<tr>
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</tbody>
</table>

Post-Development Intersection Modelling

The intersection modelling indicates that, during both the morning and afternoon peak periods, the four intersections will continue to operate similarly to the existing situation. There is a minor decrease in performance for two intersections during the evening peak, however these still operate at better than ‘at capacity’ operation. In this regard, the development proposal will not cause any detrimental impact on the operation of the road network in the context of the existing traffic activity.

5.9.3 Parking

Cars

The proposed development accommodates a total of 353 car parking spaces, allocated as shown in Table 11 below. The proposed provision of 353 car spaces is within the maximum allowance of 389 required by the Sydney Olympic Park Masterplan 2030.

Table 11 – Car parking provision

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>MP2030 Rate</th>
<th>Maximum Spaces</th>
<th>Allocated Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>One bedroom apartment</td>
<td>58</td>
<td>1.0 space per apartment</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Two bedroom apartment</td>
<td>130</td>
<td>1.2 spaces per apartment</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td>Three bedroom apartment</td>
<td>30</td>
<td>1.5 spaces per apartment</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Four bedroom apartment</td>
<td>11</td>
<td>2 spaces per apartment</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Residential Visitors</td>
<td>229</td>
<td>0.25 spaces per apartment</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>2,540m²</td>
<td>1 space per 80m²</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Retail</td>
<td>160m²</td>
<td>1 space per 50m²</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Retail/Club</td>
<td>790m²</td>
<td>1 space per 50m²</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Maximum Permitted</td>
<td></td>
<td></td>
<td>390</td>
<td></td>
</tr>
<tr>
<td>Total Proposed</td>
<td></td>
<td></td>
<td>353</td>
<td></td>
</tr>
</tbody>
</table>
Bicycles
The proposed bicycle parking provision of 201 is below the minimum requirement of 387 spaces. The Traffic Impact Assessment provides the following discussion and considers that the proposed provision is acceptable.

In particular, the rates used to determine minimum bicycle parking requirements for residential use (an average of 1.25 bicycle spaces per unit) are the same rates used to determine the maximum number of car parking spaces permitted for residential use under the limitation policy. In effect, therefore, the masterplan dictates that more bicycle parking spaces should be provided on the site for residential use than car parking spaces.

When applying the masterplan rates to the development, there is a requirement to provide 281 resident bicycle parking spaces for the 229 apartments. This is considered an excessive provision as some residents may not own, or be physically able to ride a bicycle. Furthermore, owners of particularly valuable bicycles may not feel comfortable storing their bike in areas of the basement which are accessible to all residents of the development.

The proposed development will provide an on-site bicycle parking provision of 201 spaces, comprising of:

- 90 spaces within the ground floor bike store (72 in a double stack arrangement and 18 vertically mounted);
- 16 spaces within the public domain; and
- 95 spaces spread out within the five (5) parking levels.

In addition to this, of the 229 storage cages provided within the development, 186 are suitably sized to accommodate bicycle storage, if required.

The bicycle parking will be allocated, excluding the storage cage provision... therefore providing 93 spaces for the proposed 229 residential units. This equates to a rate of 1 bicycle space per 2.5 residential units.

This rate of application for the bicycle parking provision is in line with recent similar developments undertaken within Olympic Park. For example, the recently approved development at Site 68 utilised a 1 space per 2.5 units bicycle provision.

Also, it is noted that the Masterplan provision exceeds the resident bicycle parking requirements outlined for similar precincts in the vicinity of Olympic Park, which currently provide or are planned for high density residential developments, with similar access to alternative modes of transport (i.e., bus and rail). For example, the Rhodes West Development Control Plan (2014) specifies minimum residents’ bicycle parking provision of 1 space per 3 units.

Design
The traffic Impact Assessment provides an analysis of the following elements of the development and concludes that they meet the requirements of the relevant Australian Standards and applicable guidelines:

- Vehicular access;
- Pedestrian access;
- Sight distance;
- Car park arrangement;
- Internal circulation; and
- Servicing.
5.10 Accessibility

An Accessibility Review has been prepared by Accessibility Solutions in relation to the proposed development (refer to Appendix I). The review was undertaken to ensure that ingress and egress, paths of travel, circulation areas, lifts, toilets and car parking comply with relevant statutory guidelines, including SOPA’s Access Guidelines.

The review demonstrates that the proposed development provides an appropriate degree of accessibility. The architectural drawings indicate compliance with statutory requirements pertaining to site access, common area access, accessible parking and accessible sanitary facilities can be readily achieved.

Accessibility Solutions has made a number of recommendations in its report to ensure that the development meets the relevant statutory requirements and standards. The recommendations will be incorporated into the detailed design of the development and submitted with the construction certificate documentation.

5.11 Major Events Management

Sydney Olympic Park hosts a number of major events during a typical year, most notably the Royal Easter Show over the Easter Period and the Sydney 500 V8 Supercar Race during early December. In addition to these events, Sydney Olympic Park hosts numerous sporting events and entertainment events within ANZ Stadium and Acer Arena. The proposed development has been considered against the relevant provisions of SOPA's Major Event Impact Assessment Guideline, as discussed below.

5.11.1 Noise

Potential noise impacts from major events such as the use of ANZ Stadium, the Sydney Showground and the Royal Easter Show have been assessed to ensure that there will be no unacceptable impact on the proposed development. The Acoustic Assessment (refer to Appendix J) concludes that provided the recommended windows and glazing are provided to attenuate the noise, compliance with the required acoustic criteria will be achieved.

The noise impacts from the V8 Supercar Street circuit were not assessed for the following reasons:

- As the circuit will only be in use for one weekend per year, it is not considered necessary to assess potential impacts or upgrade the building to negate such an infrequent event.
- In any case, the race promoters have indicated that the race itself will be relocated to the Central Coast.

5.11.2 Traffic

The Traffic Impact Assessment (refer Appendix K) details the traffic implications of the following events for the proposed development:

- Royal Easter Show;
- Sydney 500 Supercar Race
- Stadium events.

Due to the location of the site in relation to these events, access and egress would still be available via Homebush Bay Road, Australia Avenue and Sarah Durack Avenue. The assessment does provide a number of measures to ensure there is minimal disruption on the events from the development and vice versa.
5.12 Utilities and Services

The proposed development will be connected to the available services to the site, in accordance with the requirements of the relevant service providers. The following reports detail the specific requirements for the development:

- Electrical Services Overview Report prepared by Haron Robson (Appendix M);
- Preliminary Fire Safety Measures Statement prepared by Defire (Appendix N);
- Fire Services Concept Design Report prepared by Insync (Appendix O);
- Hydraulic Services Concept Design Report prepared by Insync (Appendix P); and
- Mechanical Services Concept Design Report prepared by Insync (Appendix Q).

5.13 Contributions

No section 94 Contribution Plan applies to Sydney Olympic Park. Contributions under the Infrastructure Contributions Framework 2030 will be a commercial discussion between the proponent and SOPA and will address all commercial matters relevant to the project.

5.14 Integrated Water Management

The proposed development is to be connected to the Water Reclamation and Management Scheme (WRAMS) which is a large scale integrated urban water management system operated by SOPA across Sydney Olympic Park. Its key features include:

- collection and treatment of sewage;
- collection, treatment and storage of stormwater;
- supply of recycled water for non-drinking uses to all residents, commercial premises and sporting venues; and
- a capacity to service a population up to 20,000 people.

Connection to the WRAMS system will also ensure that the site will be serviced by non-potable water for use in the cooling towers and for toilet flushing, irrigation and external hose taps.

Details of the proposed stormwater arrangements are provided in the Certificate of Stormwater Services Design prepared by AJ Whipps (refer Appendix R) and the associated Stormwater Services Drawings prepared by Insync (refer Appendix S).

5.15 Flooding

An assessment of onsite flood risk was undertaken by AJ Whipps (refer Appendix R). No flooding constraints were identified for this site. The site is positioned well away from any creek and overland flow paths so will not experience any impact from sea level rise. Adequate provision for overland flow paths within the site will cater for any future increases in rainfall intensities.
5.16 Tree Removal

The Site 9 Site development Guidelines require that the podium be built to the boundary of Olympic Boulevard and Sarah Durack Avenue for a minimum of 80% of the frontage. This necessitates the removal of the existing trees within site boundary and impacts on the Tree Protection Zones of the avenue of 14 Araucaria trees located immediately outside the site to the east of the footpath.

While the arborist has advised that the encroachment within the Tree Protection Zones of all trees is generally calculated as less than 10%, over time as the trees continue to grow and develop their future size may result in their demise due to increased physical structure, form, canopy height and crown spread (refer to Preliminary Tree Report prepared by Stuart Pittendrigh at Appendix T). Furthermore the construction of the development will require scaffolding and tree protection measures which will decrease the viability of retaining the trees.

The proposed design (refer Appendix D) replaces the existing trees with trees of a more slender canopy further offset from the building, so as to prevent conflict with the podium alignment. The row of existing Araucaria trees to the west of the footpath are to be retained.

5.17 Construction Management

The proposed construction works for the development are not expected to give rise to any unacceptable detrimental impacts. A comprehensive Demolition, Construction and Waste Management Plan will be prepared in relation to the proposed development prior to the commencement of works on site. This plan will set out the environmental management requirements for the following aspects of the project:

- access, egress and compound management;
- civil structures;
- demolition;
- dust management;
- emergency response;
- excavation works;
- flood contingency;
- sewer and water management;
- hazardous material management;
- noise management;
- occupational health and safety;
- soil management; and
- waste management.

The comprehensive Demolition, Construction and Waste Management Plan would include a construction Traffic Management Plan, which would outline the following measures:

- Details of construction traffic volumes and, if required, any marshalling areas;
- A detailed description and route map of the proposed truck/construction vehicle access routes, utilising primary routes where ever possible;
- The locations of any proposed Construction Works Zones along the site frontage with Olympic Boulevard and Sarah Durack Avenue;
Details of the construction staging;
Identification of specific locations for construction staff parking to minimise the impact on the existing infrastructure and promote alternative modes of transport;
Provision of relevant Traffic Control Plans (certified by an RTA accredited person);
Provision of relevant Pedestrian Management Plans;
Provision of mitigation measures (if required) for traffic, public transport, cyclists and pedestrian access around the site;
A site plan which indicates site entrances and exits, turning areas within the site for construction and spoil removal vehicles allowing a forward ingress and egress for all construction vehicles on the site (superimposed truck swept path diagrams); and
Details of the impact of major events during the construction program.

Erosion and Sedimentation Control Plan have been prepared in relation to the proposed development (refer to Appendices U).

5.18 Building Code of Australia

A BCA Assessment has been prepared for the development proposal by McKenzie Group Consulting and is provided at Appendix V. The report provides that the proposed development is capable of achieving compliance with the BCA, subject to further detail at the design development stage. Some aspects of the design are proposed to be addressed by way of a fire engineered Alternative Solution to meet the relevant Performance Requirements of the BCA.

5.19 Environmental Risk Assessment

An Environmental Risk Assessment (ERA) establishes residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the Site 9 project has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools with the methodology described below.

The Risk Assessment Matrix at Figure 21 illustrates how the residual environmental impacts of a proposal are assigned. The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented as follows:

- the significance of impact is assigned a value between 1 and 5 based on:
  - the receiving environment
  - the level of understanding of the type and extent of impacts
  - the likely community response to the environmental consequence of the project; and

- the manageability of environmental impact is assigned a value between 1 and 5 based on:
  - the complexity of mitigation measures
  - the known level of performance of the safeguards proposed
  - the opportunity for adaptive management.
The ERA addresses, as appropriate:

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

**Table 12** presents the environmental risk assessment for this project.
<table>
<thead>
<tr>
<th>Item</th>
<th>Phase</th>
<th>Potential Environmental Impact</th>
<th>Proposed Mitigation Measures and/or Comment</th>
<th>Significance of Impact</th>
<th>Manageability of Impact</th>
<th>Residual Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity</td>
<td>C</td>
<td>• Loss of vegetation within the development site&lt;br&gt;• Potential to impact on biodiversity of the site</td>
<td>• Vegetation to be removed during construction will be replaced with new planting in landscape areas. Particularly significant trees are to be retained.&lt;br&gt;A site specific Green and Golden Bell Frog plan will be commissioned conjunction with SOPA.</td>
<td>2</td>
<td>1</td>
<td>3 Low</td>
</tr>
<tr>
<td>Aboriginal Heritage</td>
<td>C</td>
<td>• Potential to encounter unanticipated Aboriginal cultural material during construction</td>
<td>• The potential to encounter Aboriginal cultural material on the site has been assessed as low.&lt;br&gt;• Should unanticipated Aboriginal cultural material be encountered then it is proposed that all works cease, the OEH be contacted immediately, a management strategy be developed, and the find be recorded to mitigate any potential impacts.</td>
<td>2</td>
<td>2</td>
<td>4 Low / medium</td>
</tr>
<tr>
<td>Hazards</td>
<td>C</td>
<td>• Potential to encounter asbestos&lt;br&gt;• Potential to encounter contaminated materials</td>
<td>• Should asbestos be encountered then it should be removed by a licenced contractor.&lt;br&gt;Should any contaminated material be found then an ‘Unexpected Finds Protocol’ should be implemented.</td>
<td>4</td>
<td>2</td>
<td>6 Medium</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>C + O</td>
<td>• Increase in noise and vibration levels during construction activities</td>
<td>• The Acoustic Assessment details that adequate control of construction noise can be achieved through the development of a Construction/ Demolition Noise Management Plan.&lt;br&gt;Subject to finalisation of equipment specifications, appropriate sound minimisation measures are to be incorporated within the proposed development.</td>
<td>C – 2</td>
<td>C – 2</td>
<td>4 Low / medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O – 2</td>
<td>O – 1</td>
<td>3 Low</td>
</tr>
</tbody>
</table>

**Key:**<br>C - Construction<br>O - Operation
5.20 Waste Management

A Waste Management Plan has been prepared by Elephants Foot (refer Appendix W) that details the proposed waste management during the operational phases of the development. The key features of the operational waste management plan are described below.

Each apartment will be provided with an adequate internal area to store household waste and recyclables. Residents will then transfer their household waste and recyclables to the waste chutes located on each floor. Bins for recycling are provided in the waste room on each level.

The building manager will be responsible for transferring the waste from the compactors in the garbage room near the core and the recycling bins from each waste room to the ground level holding room for collection. The ground level also contains storage rooms for waste and recycling from the commercial, and retail/club areas.

5.21 Heritage

A Heritage Impact Statement has been prepared by Artefact (refer Appendix X) to ascertain potential impacts caused by the proposed development on any heritage items in the vicinity of the site. The statement provides the following conclusions:

- The proposal would not physically impact any heritage items or impinge on the curtilage of any heritage item.
- Heritage visual impacts were assessed for the proposal. All state-significant listed heritage items within 2,500 metres of the proposed development were assessed for potential visual impacts.
- The proposal would not impact any heritage significant views of any state-significant heritage items. While the proposed development would be visible from several heritage items due to its height, it would not impact any heritage significant vistas. In particular, views from Millennium Park (Newington Armament Depot and Nature Reserve) would not be noticeably impacted due to pre-existing high-rise developments visible from the park.
- No heritage impact mitigation measures are required for the proposed development.

5.22 Archaeology

An Archaeological Assessment has been prepared by Artefact (refer Appendix Y) in relation to the site. The assessment provides the following conclusions:

- The study area has been largely used for agricultural and pastoral purposes since the nineteenth century until the late-twentieth century
- There is a high level of landform modification in the study area from late twentieth century contamination fills and subsequent urban redevelopment for Sydney Olympic Park
- There is nil-low potential for historical archaeological ‘relics’ or Aboriginal heritage to be located within the study area
- The proposed works are unlikely to impact archaeological relics or Aboriginal heritage in the study area.
5.23 The Public Interest

The proposed development will revitalise a significant site and provide quality residential apartments and commercial spaces that are in high demand with the surrounding locality.

As detailed in the proceeding sections of this report, the proposal is well integrated into the precinct and responds to the desired future character of the area.

Furthermore, the amenity of the adjoining properties will not be detrimentally impacted upon by the proposed development, through various design measures to mitigate overshadowing, overlooking and noise impacts. For these reasons the development is considered consistent with the public interest.
6.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in Table 13 below. These measures have been derived from the previous assessment in Section 5.0 and those detailed in appended consultants’ reports.

Table 13 – Mitigation Measures

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Management and Construction Traffic Management</strong></td>
</tr>
<tr>
<td>• A Construction Environmental Management Plan, incorporating a Construction Traffic Management Plan, is to be prepared after the appointment of a head contractor but prior to the commencement of works on the site</td>
</tr>
<tr>
<td><strong>Traffic and Access</strong></td>
</tr>
<tr>
<td>• Prior to the issue of an Occupation Certificate, a Travel Plans and Travel Access Guides will be prepared for distribution to new residents, staff and visitors to the site.</td>
</tr>
<tr>
<td><strong>Acoustic Impacts</strong></td>
</tr>
<tr>
<td>• The recommended noise control measures within the Acoustic Assessment prepared by Renzo Tonin and Associates (Appendix J) will be incorporated into the detailed design of the proposed development.</td>
</tr>
<tr>
<td><strong>Waste Management</strong></td>
</tr>
<tr>
<td>• Waste facilities will be provided in accordance with the Waste Management Plan prepared by Elephants Foot (Appendix W).</td>
</tr>
</tbody>
</table>
7.0 Justification of the Proposal

In general, investment in major projects can only be justified if the benefits of doing so exceed the costs. Such an assessment must consider all costs and benefits, and not simply those that can be easily quantified. As a result, the EP&A Act specifies that such a justification must be made having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.

This means that the decision on whether a project can proceed or not needs to be made in the full knowledge of its effects, both positive and negative, whether those impacts can be quantified or not.

The proposed development involves the construction of a 38 storey mixed use development on a currently underutilised site. The assessment must therefore focus on the identification and appraisal of the effects of the proposed change over the site’s existing condition.

Various components of the biophysical, social and economic environments have been examined in this EIS and are summarised below.

7.1 Social and Economic

The proposed development will provide a number of positive social and economic benefits as it:

- Provides a choice of apartments sizes;
- Provides a mix of apartment types to suit a range of people;
- Provides non-residential uses which will provide significant employment opportunities;
- Provides construction employment opportunities;
- Ensures the full environmental investigation and remediation of the site from its previous uses;
- Allows for greater natural surveillance of internal and external spaces on the site promoting safety;
- Promotes state government initiatives in relation to urban consolidation by increasing the density of residential housing in close proximity to required services and facilities, in particular public transport; and
- Integrates well with the existing and future community in the locality.

It is estimated that the following number of jobs will be created by the future development during the construction and operational phases:

- Direct construction: 350
- Ongoing commercial premises: 150
- Ongoing retail premises: 20
- Ongoing building management: 6

Overall, the proposed development will have a very positive social impact on the existing and future Olympic Park community and will provide a high quality environment for its residents and workers.
7.2 Biophysical

The environmental impact assessment of the proposed development has demonstrated that:

- the proposal does not give rise to any impacts on the local road or transport network;
- noise from the operation of the proposed development will not give rise to any impacts on nearby sensitive receivers;
- future occupants of the building will not be subject to adverse noise impacts;
- there is not expected to be any impacts on Indigenous or European heritage values associated with the site;
- water and energy consumption will be reduced in accordance with contemporary standards;
- any potential contamination of the site can be addressed and the site made suitable for the proposed use;
- wind impacts associated with the development of the proposed building have been appropriately addressed and can be further refined through the detailed design process;
- waste will be managed in an efficient and coordinated manner to avoid potential wastage, odour impacts or pollution;
- the site will be managed during construction to avoid amenity or physical environmental impacts; and
- the proposed development is able to be adequately serviced by existing utilities and stormwater management infrastructure.

7.3 Ecologically Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not relevant to the proposal.
Intergenerational Equity

Intergenerational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- maintaining heritage listed items for future generations to appreciate and enjoy;
- implementing safeguards and management measures to protect environmental values.
- facilitating job creation and the provision of housing in close proximity to public transport; and
- Improving the public domain and amenity in The Haymarket precinct.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

Conservation of Biological Diversity and Ecological Integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area.

Improved Valuation, Pricing and Incentive Mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.
8.0 Conclusion

The Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the proposed mixed use development at Site 9, Sydney Olympic Park. The EIS has addressed the issues outlined in the Secretary’s Environmental Assessment Requirements (Appendix B) and accords with Schedule 2 of the EP&A Regulation with regards to consideration of the proposed development’s social, economic and biophysical impacts.

The proposed development will make a valuable contribution to the urban fabric of Olympic Park, as well as delivering significant benefits by providing much needed housing stock and by injecting new activity into the precinct. Provision of well-designed and appropriate residential, commercial and retail/club floor space will deliver improved social and economic outcomes for NSW. Furthermore, the proposed development does not give rise to any significant environmental effects that cannot be effectively managed through the normal conditions of consent and the implementation of the mitigation measures identified in Section 6.0 of this EIS.

Given the merits described above it is requested that the application be approved.