## CONTENTS

1.0 **INTRODUCTION** 04

2.0 **SITE + CONTEXT** 06
   - 2.1 Existing Context 07
   - 2.2 Future Context 07
   - 2.3 The Site 08
   - 2.4 SOPA Masterplan 08
   - 2.5 Solar Access and Wind 09
   - 2.6 Views 09

3.0 **SCHEME OVERVIEW** 10
   - 3.1 Issues with Masterplan massing 10
   - 3.2 Split Block 10
   - 3.3 Residential Floorplate 11
   - 3.4 100% Solar access 11
   - 3.5 Curved Tower Form 12
   - 3.6 Tower Comes to Ground 12
   - 3.7 Commercial Office 13
   - 3.8 Shaped to maximise amenity 13
   - 3.9 Active Ground Plan 14
   - 3.10 Collection of Forms 14

4.0 **PROJECT DESCRIPTION** 16
   - 4.1 Ground level interface 17
   - 4.2 Parking Podium 20
   - 4.3 Workplace 22
   - 4.4 Apartment Tower 24

5.0 **LANDSCAPE + PUBLIC REALM** 32
   - 4.1 Public Domain 32
   - 4.2 Tree Removal 33
   - 4.3 Communal Open Space 35

6.0 **FAÇADE + MATERIALS** 36
   - 6.1 Façade Approach 36
   - 6.2 Material concept 38
   - 6.3 Office façade 40
   - 6.4 Carpark façade 41
   - 6.5 Residential façade 42

7.0 **ENVIRONMENTALLY SUSTAINABLE DESIGN** 46

8.0 **DENSITY + YIELD** 48

### APPENDICES

- Appendix 1: Bates Smart Drawings 49
- Appendix 2: SEPP65 & ADG Compliance Checklist 81
- Appendix 3: Apartment Area and Storage Schedule 97
- Appendix 4: Materials Sample Board 105

### INDEX OF SEPP65 ISSUES

- Principle 1: Context + Neighbourhood Character 06
- Principle 2: Built Form and Scale 10
- Principle 3: Density 48
- Principle 4: Sustainability 46
- Principle 5: Landscape 34
- Principle 6: Amenity 25
- Principle 7: Safety 33
- Principle 8: Housing Diversity + Social Interaction 48
- Principle 9: Aesthetics 37
1.0 INTRODUCTION

Our vision is for 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.

This Design Report has been prepared by Bates Smart on behalf of Ecove Group and forms part of a State Significant Development Application to be submitted to the Department of Planning. It describes the proposed urban design, landscape and architectural response for a site known as Site 9, Sydney Olympic Park and which is identified as Site 9 within Part Lot 2004 in DP 1192085. The proposal has been developed with consideration to the Site 9 Site Development Guidelines.

In summary the development proposes:
/ The construction of a single residential tower comprising 33 residential floors
/ The construction of a single podium comprising ground level retail tenancies, 5 carpark floors and 2 commercial floors
/ Podium roof landscaping including a single communal rooftop garden for residential use
/ Ground level public domain comprising retail colonnade and through-site link

We confirm that Mr Guy Lake of Bates Smart directed the design of the enclosed Development Application and that Mr. Lake is registered as an architect in accordance with the Architects Act 1921.

We confirm that in our professional opinion the proposed design is capable of achieving the design principles set out in State Environmental Planning Policy 65 - Design Quality of Residential Flat Development and has been designed with regard to the publication Apartment Design Guide (ADG).
2.0 SITE + CONTEXT

Principle 1: Context and neighbourhood character
Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area’s existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.
2.1 EXISTING CONTEXT

The site is prominently located at the south-eastern corner of the intersection of Olympic Boulevard and Sarah Durack Avenue in Sydney Olympic Park, approximately 18km west of the Sydney CBD. The site allotment is rectangular and measures approximately 104m by 30m, with a site area totalling 4,071m². The primary street frontages are to Sarah Durack Avenue and Olympic Boulevard.

To the east is an existing four storey carpark known as P3 Carpark and to the southeast is the GWS Giants training facility. As part of the Sydney Olympic Park Masterplan 2030 (MP 2030), new access streets are proposed along the eastern and southern boundaries of the site which will separate the site from these adjacent uses.

The northern side of Sarah Durack Avenue accommodates low rise commercial buildings. A railway line is located to the north of Sarah Durack Avenue with a distance of approximately 30.2m to the site boundary. This railway line serves as the main outbound train route for trains departing Olympic Park Station towards the CBD.

To the west, across Olympic Boulevard, lies the State Sports Centre and Netball Centre with a forecourt angled to the street grid. An allotment known as “Site 12” is located to the south of the site and is zoned for future mixed use development under the MP 2030.

2.2 FUTURE CONTEXT

Under the MP 2030 Olympic Boulevard is to be defined by a consistent 6-8 storey high street wall height to the podium with slender towers above.

The Site 9 Development Guidelines identifies Site 50 to the northern side of Sarah Durack Avenue and Site 12 to the south of the site as future mixed use development. Sites 12 and 50 will both have podiums built to the boundary with slender towers above.

The Site 9 Development Guidelines identifies Site 25, located to the northwest of the intersection, as future sport / education uses. Both Site 25 and Site 13, on the west of Olympic Boulevard, will have a 6-8 storey street wall.

PICTURED
1. Looking east towards the Olympic Boulevard from the current driveway on site 9.
2. Looking north along the Olympic Boulevard towards the Pullman Hotel, from the current driveway on site 9.
3. Looking across the site from the corner of Olympic Boulevard and Sarah Durack Ave towards P3 Carpark.
4. Looking east from the southern corner of Olympic Boulevard and Sarah Durack Ave, showing ‘green finger’ tree planting and the P3 Carpark.
5. Looking north along future Street 21 towards Sarah Durack Ave.
6. Looking south along the Olympic Boulevard towards the Tennis Centre, from the current driveway on site 9.
2.3 THE SITE

The site is located on the south-eastern corner of the intersection of Olympic Boulevard and Sarah Durack Avenue. To the east is an existing four storey carpark and to the south east is the GWS Giants training facility. A new street is proposed along the eastern and southern boundaries of the site which will separate the site from these adjacent uses. To the west, across Olympic Boulevard, is the State Sports centre with its forecourt angled to the street grid.

2.4 SOPA MASTERPLAN

The site development guidelines propose envelopes which comprises two towers of up to 32 storeys above a continuous podium. The podium height at RL36m frames the Athletics Centre and defines a continuous street wall. The ground level is setback to create a continuous colonnade and a through site link breaks down the length of the block at ground level. Towers are required to be set back 5m from the southern and western frontages.
2.5 SOLAR ACCESS AND WIND
The rectangular site is oriented with the Olympic Boulevard frontage facing 30 degrees south of west. The eastern and northern frontages will receive 3 hours sunlight on the winter solstices. The prevailing winter wind direction requires that any tower forms be set back from the street wall on the southern and eastern sides.

2.6 VIEWS
The site benefits from panoramic views to the east and north. There are magnificent views across Bicentennial Park to the CBD and Sydney Harbour from the south to the north east; and views to Homebush Bay and the Parramatta River from the north east to the north.
3.0 SCHEME OVERVIEW

3.1 ISSUES WITH MASTERPLAN MASSING
The masterplan massing proposes two towers above a consistent podium. This massing has several issues, the response to which forms the basis of our design response.

- An 104m long podium creates an imposing presence on Olympic Boulevard.
- Two tower forms could create proximity issues and weakens the reading of Olympic Boulevard as a consistent street wall with separated towers above.
- Only half the tower floorplates benefit from prime views and optimum solar orientation.

3.2 SPLIT BLOCK
The site has been split to create a through site link aligned with geometry of the State Sports Centre Forecourt. This breaks down the length of the podium and provides the office building and the residential building with separate identities.

Principle 2: Built form and scale
Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.
Good design also achieves an appropriate built form for a site and the building’s purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.
Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.
3.3 RESIDENTIAL FLOORPLATE
Apartments have been oriented within a single tower to optimise solar orientation and maximise the number of apartments with prime views. The tower is located at the south end of the site to minimise the visual impact and reflected heat of the adjacent car park.

3.4 100% SOLAR ACCESS
Southwest facing floor area which would otherwise receive limited solar access has been transferred to the top of the tower, creating a smaller floorplate which achieves 100% of apartments with 2 hours solar access at midwinter.
3.5 CURVED TOWER FORM
The boomerang shaped form has been curved at the corners to minimise downdraft and wind impact to the public domain.

3.6 TOWER COMES TO GROUND
The tower form comes down to ground to reduce the scale of the podium, enhance the identity of the tower, and define the entry to the tower.
3.7 COMMERCIAL OFFICE
The visual prominence of the commercial office is enhanced by being located on the primary street corner at the top of the building.

3.8 SHAPED TO MAXIMISE AMENITY
The office floors have been shaped to maximise amenity. To the north, east and west they accommodate outdoor terraces with views of the park and its surrounds. A central atrium ensures that the entire floorplate has access to natural light. The office roof is connected to the residential tower and provides a landscaped garden for residents.
3.9 ACTIVE GROUND PLANE
Lobbies and retail uses are provided in a colonnade at ground level to activate the frontages to Olympic Boulevard and Sarah Durack Avenue.

3.10 COLLECTION OF FORMS
The proposed massing has been arranged as three interlocking objects representing the three primary uses on the site: office, retail and residential. The façade design is developed to reinforce the identity of these separate uses.
This section describes the design approach and planning arrangement for the four principal parts of the building: the ground level interface, the parking podium, commercial offices, and the residential tower.
4.1 GROUND LEVEL INTERFACE

The proposed ground level uses provide active frontages to Sarah Durack Avenue, Olympic Boulevard and the new street on the southern boundary. These three pedestrian frontages propose a 4m deep colonnade which is consistent with the requirements of the Site 9 Development Guidelines and the future alignment of Site 12 colonnade. Vehicle entries and service areas are collocated on the eastern frontage. Bicycle parking for commercial and residential visitor use are located along the colonnade.

The continuous colonnade cuts across the northwest corner of the site allowing the glazed lifts for the commercial offices to come to ground as a standalone feature.

The main building is split into two wings either side of a publicly accessible through site link which is 5.4m wide (a minimum of 4.5m is required by the Site 9 Development Guidelines). North of the link, five retail/club tenancies line the western and northern colonnade.

Immediately south of the link, fronting Olympic Boulevard, the residential entrance is defined by the curved form of the residential tower breaking the length of the podium. Additional retail/club tenancies line the western and southern frontages of the southern wing. The internal floor levels step gradually down the site providing regular entries into the tenancies.

Retail tenancies are also provided at the eastern end of the link towards Street 21, located to the east of the site, for increased ground activation. WCs for retail patrons are accessed off the through-site link.

Street 21 provides carpark and service access. A combined carpark entry is located at the northern end of the street alongside a services zone which includes two kiosk substations and a waste room servicing commercial and retail facilities. South of the through site link is a loading dock, retail waste room, residential waste room, and fire services.
OFFICE ENTRY

In the northwest corner of the site is a glazed lobby with glass lifts that provide access to the commercial offices on levels seven and eight. Rather than following the edge of the site, the continuous colonnade cuts in from the corner to provide a pedestrian short cut and to define the commercial lobby as a standalone feature. The lobby is accessed from within the colonnade providing good protection from wind and rain. The north-facing colonnade is activated by retail space with excellent solar access making it ideal for outdoor dining.
RESIDENTIAL ENTRY
Fronting Olympic Boulevard, alongside the through site link, is a double height residential lobby located under the tower form. The southern podium volume curves in from the western boundary, enabling the tower form to come to ground and break down the length of the podium.
Above ground parking is arranged over four and half levels within the podium structure. The two podium volumes are separated by half level ramps enabling traffic to circulate continuously.

The office parking is located in a secure zone on level three. A bypass ramp is provided on level two to allow continuous circulation to the secure zone. Access to the office is via the lifts in the northwest corner of the carpark.

Parking for the retail/club employees is accommodated on level two in the southern wing. Access to the retail/club tenancies will be shared with the residential lifts through a secure swipe system.

The remaining areas are allocated to residential parking, with accessible parking spaces for adaptable apartments located close to the lift core. Residents and visitors have controlled access into the residential lifts.
4.3 WORKPLACE

The top two levels of the northern wing will accommodate a new workplace creating a strong visual presence on the corner of Olympic Boulevard and Sarah Durack Avenue.

While the fitout is outside the scope of this development application, the workplace has been designed to be a sustainability exemplar and is proposed to achieve 6-star GreenStar using the Interiors rating tool.

Two large-span floorplates are designed to optimise sustainability and flexibility. At the centre of the floorplate a two-storey lightwell provides vertical connectivity between levels and assists with the ventilation strategy.

The northern edge of Level 7 accommodates a large north facing terrace, alongside which the staff breakout area is proposed. Level 8 will accommodate the reception and front of house meeting rooms, all located on the northern façade to enjoy views back up Olympic Boulevard to the main stadium. Smaller outdoor terraces are provided on the western and eastern facades to provide external breakout space.

The plans below show indicative layouts of the office fitout which will be developed and submitted as a separate development application. On both levels, the workspace will accommodate a mix of open plan workstations, enclosed offices, secondary work settings, collaborative areas and support spaces. The southern end of the floorplate accommodates toilets, services and escape stairs which act as a visual buffer to the carpark.

EXTERNAL TERRACES

The façade curves inward at key locations to provide outdoor terraces. The large north facing terrace on level 7 is located alongside the staff breakout area and can support outdoor meetings or breakout activities. The slab projects beyond the façade line to provide weather protection and shading.
INTERNAL LIGHTWELL

The lightwell at the centre of the office space acts as a social hub and anchors the ventilation strategy. An operable external façade combines with the stack effect created by the atrium to support a night purge system to minimise cooling loads. An open circulation stair is located within the lightwell to provide a visual link between levels and enable staff to easily move around the office.
The plan form of the apartment tower has been arranged to maximise the number of apartments with the optimum orientation and maximise amenity outcomes. The boomerang shaped plan has been configured with the two primary frontages facing north and north east, providing 100% of living rooms and balconies benefiting not only from the optimum solar orientation but also having access to magnificent views of Homebush Bay and Parramatta River, Bicentennial Parklands, and the Sydney city skyline.

Generally, bedrooms are located at the facade line with inboard living rooms opening onto generous balconies. The three corner apartments have their balconies enclosed as wintergardens to minimise wind impact.

The southwest facade accommodates the vertical circulation elements, with natural light, ventilation and magnificent views provided from the lift lobby and the common areas.

The tower is stacked in five floorplate types: Low rise, Mid rise, High rise, Lower penthouse, and Upper penthouse.

LOW RISE PLAN
The typical low rise floorplate has a GFA of 681 m² and accommodates 8 residential apartments, consisting of 2 one bedroom apartments and 6 two bedroom apartments. The larger two bedroom apartments are generally located in the three curved corners of the floorplate, with glazed wintergardens providing protection from the higher wind speeds at the curved ends of the tower.

A mix of one and two-bedroom apartments are positioned on the north and northeast facing facade. The typical low rise plan includes two adaptable apartments (one 1-bed and one 2-bed two) both positioned on the northeast facade.

Three residential lifts are located in a structural lift core with the lift lobby oriented to the south. A glazed facade flanking the lobby ensures high quality outlook as well as views down to a landscaped podium roof below.

A compact scissor stair, garbage chute and recycling store is located to the south of the floorplates. A plant room housing condenser units for the 3 wintergarden apartments is located adjacent to the scissor stair and is ventilated directly through the facade.

LEVELS 9-14 PLAN
Principle 6: Amenity
Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

SOLAR ACCESS
The tower form has been driven by a desire to achieve 100% apartments with good solar access. All but one apartments achieve at least 3 hours of solar access to living rooms and balconies between 9am and 3pm on Winter Solstice. Due to NE-NW aspect of the apartments the majority of living rooms have been set back behind a recessed balcony to provide shading during the summer months but admit low angle sun during winter.

VIEWS
The optimum solar orientation coincides with the optimum views. Consequently all but three apartments benefit from magnificent views of Homebush Bay and Parramatta River to the north and/or Bicentennial Parklands and the Sydney city skyline to the east.

NATURAL VENTILATION
Natural ventilation of apartments has been considered using the principles described for high rise buildings (10+ storeys) in the SEPP65 Apartment Design Guide (ADG).
On the straight parts of the façade, open balconies are proposed, sliding doors and operable windows will provide all apartments with natural ventilation.
In order to mitigate the higher wind speeds at the corners and the top of the tower, both the three corner apartments on all levels and all apartments on the three penthouse levels, we have proposed to enclose the balconies with operable glazing so they function as wintergardens. Operable windows are proposed to the wintergardens to ensure good natural ventilation is achieved.
The typical mid rise floorplate comprises 8 residential apartments consisting of 3 one bedroom apartments, 4 two bedroom apartments and 1 three bedroom apartment.

The three bedroom apartment is located on the northern curved corner of the floorplate which enjoys sweeping panoramic views to the Sydney CBD to the northeast and Parramatta River to the northwest.

Recessed balconies are provided to all apartments located on the straight faces of the floorplate for wind protection.
**TYPICAL HIGH RISE PLAN**

The typical upper rise floorplate comprises 7 residential apartments, consisting of 1 one bedroom apartment, 4 two bedroom apartments and 2 three bedroom apartments.

The floorplate is similar to the typical mid rise plan with the exception of a three bedroom apartment replacing the two 1-bedroom apartments on the straight northeast facade.

This apartment benefits from a generous living and dining room set back behind a recessed balcony.
LOWER PENTHOUSE PLAN
The typical high rise floorplate comprises four 4-bedroom apartments of 148 - 160m² internal area, including one adaptable apartment.
Each apartment is provided with a glazed wintergarden located on the curved tower corner to mitigate high wind impacts. The wintergardens are designed immediately adjacent to the living areas to afford panoramic outlook from both living rooms and wintergardens.
UPPER PENTHOUSE PLAN

The upper penthouse level comprises three 4-bedroom apartments ranging from 170 - 188m² in size. Similar to the apartments below, the penthouses have been designed to orient the living and adjoining glazed wintergarden rooms to the curved tower corners to take advantage of panoramic views and dual orientation.

A 4 bedroom penthouse is located on Level 39 of the tower and is accessed by a fourth lift serving levels 38 and 39. Provision has been made for hot water, AC condenser and stair pressurization plant to be located on the Level 39 rooftop.
SITE 9 SYDNEY OLYMPIC PARK
STATE SIGNIFICANT DEVELOPMENT APPLICATION DESIGN REPORT

1 BEDROOM APARTMENT: PRE ADAPTATION

2 BEDROOM APARTMENT: PRE ADAPTATION

1 BEDROOM APARTMENT: POST ADAPTATION

2 BEDROOM APARTMENT: POST ADAPTATION
ACCESSIBILITY - ADAPTABLE APARTMENTS

New residential developments are to include continuous accessible paths of travel and circulation spaces and should be designed with universal design principals so as to be visitable by people with disabilities, as well as to provide a diverse mix of adaptable apartments.

All 229 residential apartments include a visitable toilet with a 1250x900mm clear zone to the front of pan and clear entry door widths of 920mm. Further details are provided in the accessibility report.

The proposed development provides 23 adaptable apartments comprising 10% of the total development. The mix of adaptable apartments consists of 13 one bedroom apartments, 8 two bedroom apartments and 2 four bedroom apartments.

The one and two bedroom apartments are provided on the low and mid rise apartment levels located on the northeast facade of the tower. The adaptable four bedroom apartments are located on the lower penthouse levels.

All common internal and external areas will be accessible as required. Each adaptable apartment is provided with an accessible carspace in compliance with either AS4299 or AS2890.6 within close proximity to the lifts in the carpark podium.
5.0 LANDSCAPE + PUBLIC REALM

5.1 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.

All public domain elements will be designed/detailed in accordance with SOPA requirements. The proposed public domain paving (Trihex) is in accordance with SOP UEDM, and will extend under the colonnade to meet the building line. Refer accompanying landscape report for proposed materials & finishes.

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.

Gently graded pathways will provide accessibility for all age groups and degrees of mobility; ensuring that workers and patrons can access site amenities comfortably.

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 precinctwide preferences.
Principle 7: Safety
Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

5.2 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. Further to this two existing Araucaria trees T2 and T7 located immediately outside the site to the east of the public footpath are proposed to be removed, in order to promote pedestrian connectivity through the site in response to the site development guidelines. The row of existing Araucaria trees to the west of the public footpath are to be retained.
Principle 5: Landscape
Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.