

2 Fig Tree Drive (Site 53), Sydney Olympic Park

Design Excellence Competition - Jury Report

February 2015

SITE 53 SYDNEY OLYMPIC PARK – DESIGN COMPETITION JURY:

Peter Poulet (Chair)	NSW Government Architect
Caroline Pidcock	Pidcock – Architecture + Sustainability
John Carfi	Mirvac
Nick Hubble	Sydney Olympic Park Authority
Paolo Razza	Mirvac
Richard Francis-Jones	FJMT

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Stephen White
Senior Consultant	Samantha Wilson
Job Code	SA5631
Report Number	Final Jury Report

© Urbis Pty Ltd
ABN 50 105 256 228

All Rights Reserved. No material may be reproduced without prior permission.

You must read the important disclaimer appearing within the body of this report.

URBIS
Australia Asia Middle East
urbis.com.au

TABLE OF CONTENTS

Executive Summaryi

1 Site Description1

2 Competitive Design Process2

2.1 Overview2

2.2 Competition Jury2

2.3 Technical Advisors3

2.4 Design Brief3

2.5 Requests for Information (RFI)3

3 Review of Competition Schemes4

3.1 BVN Architecture4

3.2 Mirvac Design7

3.3 PTW Architects9

3.4 Tony Caro Architecture12

4 Preferred Scheme15

Appendix A Design Competition Brief16

Appendix B Addendums17

Appendix C Planning Assessment18

Appendix D Cost Report19

Appendix E BVN Design Report20

Appendix F Mirvac Design Report21

Appendix G PTW Design Report22

Appendix H TCA Design Report23

Disclaimer29

FIGURES:

Figure 1 – Site 53 Sydney Olympic Park – Perspective Viewi
Figure 2 – Development Site 1
Figure 3 – BVN – Perspective from Fig Tree Drive 5
Figure 4 – BVN – Podium / Ground Floor Plan 6
Figure 5 – Mirvac Design – Perspective from Fig Tree Drive..... 8
Figure 6 – Mirvac Design – Podium / Ground Floor Plan..... 8
Figure 7 – PTW - Perspective from Australia Avenue 10
Figure 8 – PTW - Ground Plane 11
Figure 9 – TCA – Perspective from Fig Tree Drive 13
Figure 10 – TCA – Podium / Ground Floor Plan 14

TABLES:

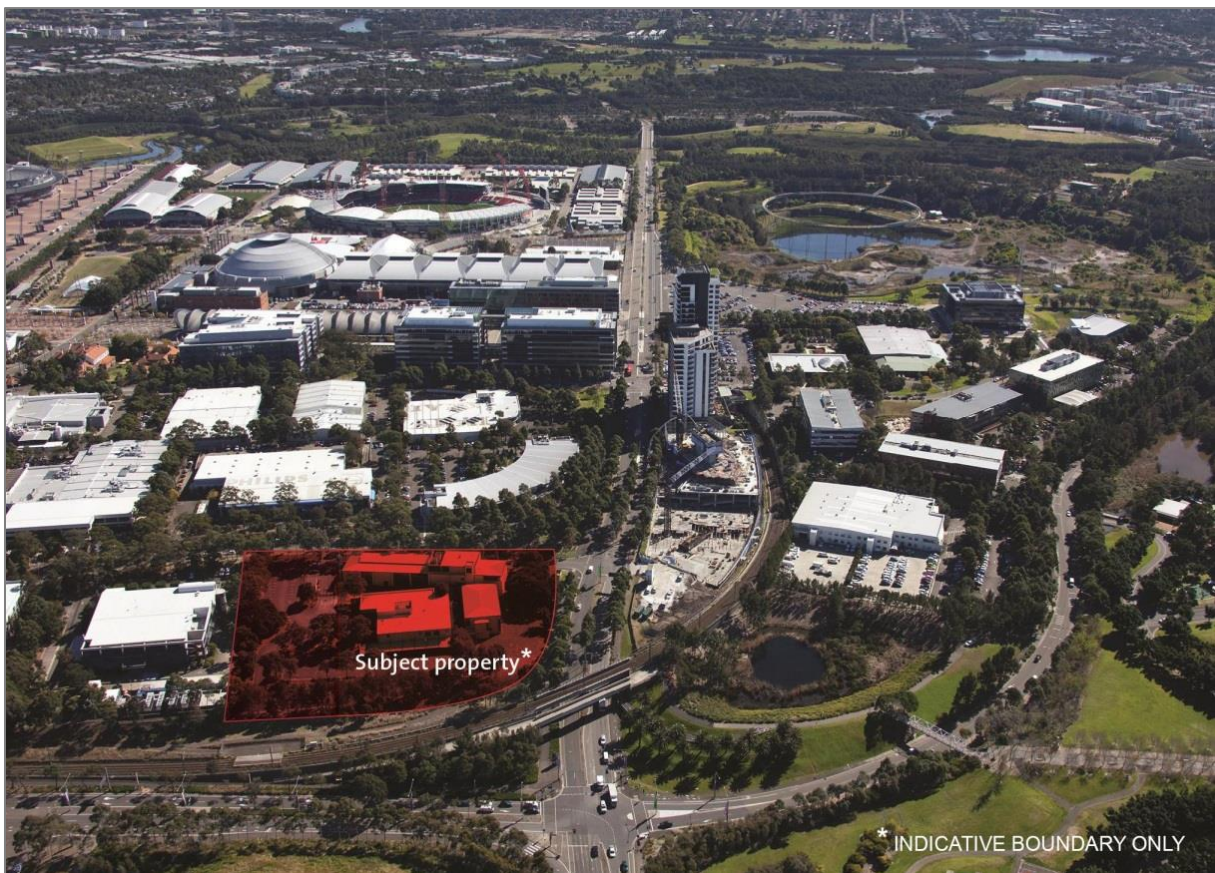
Table 1 – Competition Jury Members..... 2
Table 2 – Technical Advisors 3

Executive Summary

This Jury Report has been prepared in accordance with the Design Excellence provisions of the *Sydney Olympic Park Master Plan 2030* and the *Sydney Olympic Park Authority Design Competition Guidelines 2014*. The report describes the competition process and the design brief, provides an assessment of the design merits of each entry submission, sets out the rationale for the selection of the preferred design, describes how it demonstrates design excellence, and concludes with recommendations to the proponent, the selected Architect and the consent authority for the further development of the recommended design.

The *Sydney Olympic Park Master Plan 2030* requires that prior to the issue of development consent for Site 53, an architectural design competition be undertaken. The Site 53 Design Excellence Competition was conducted in accordance with the endorsed Design Competition Brief (Appendix A), which sought architectural schemes for a mixed-use development comprising approximately 400+ dwellings, a supermarket, basement car parking, and a landscaped ground plane.

FIGURE 1 – SITE 53 SYDNEY OLYMPIC PARK – PERSPECTIVE VIEW



The Design Competition was run as an invited single-stage process and was split into two periods with a break over Christmas / New Year.

The four invited Architectural practices presented to the Jury on Friday 6 February 2015. Consistent with the Competition Brief, the Jury decided upon a winning proposal by unanimous agreement, being the scheme presented by BVN Architecture. The BVN scheme achieved the highest level of consistency with the Design Brief and demonstrated Design Excellence.

The Jury has made recommendations on the BVN scheme, which are to be applied by the Proponent, Architects and the Consent Authority in the preparation and assessment of the future Development Application.

1 Site Description

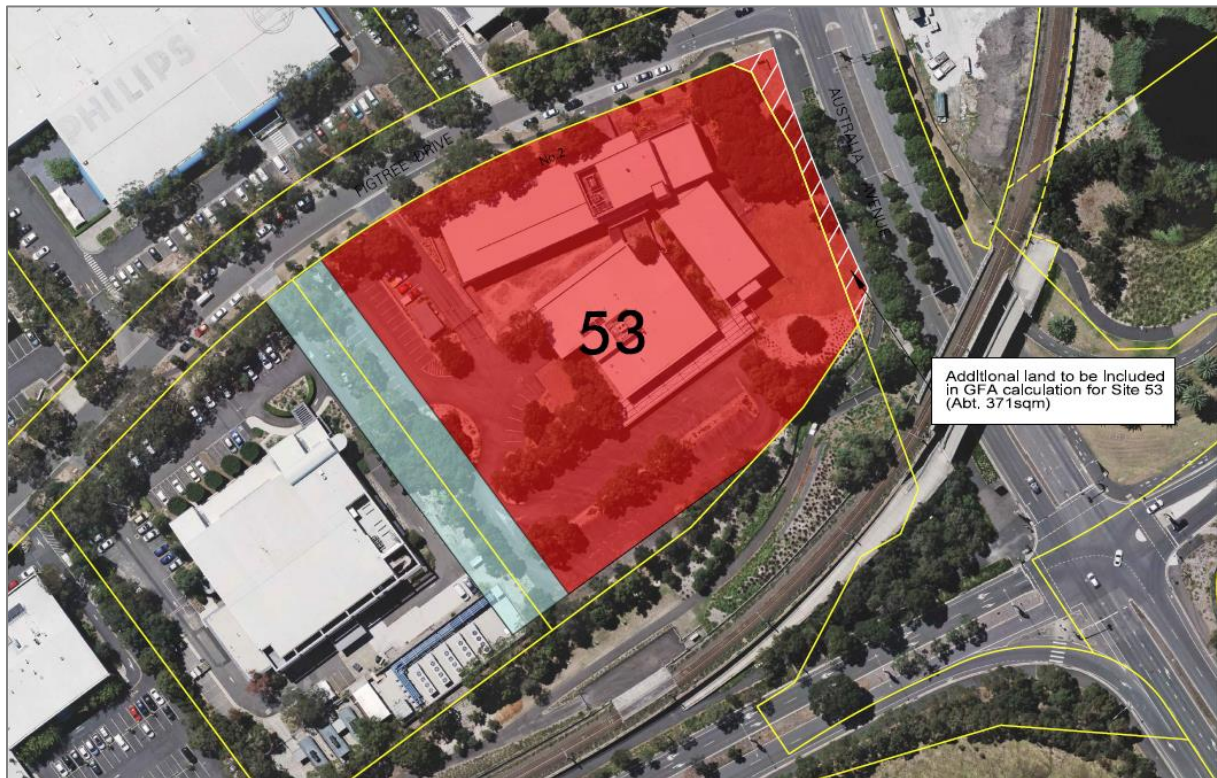
The subject site is known as Site 53 or 2 Figtree Drive, Sydney Olympic Park and is located within the Auburn Local Government Area. The site is legally described as Lot 22 in DP 787402 and has an area of 12,320sqm. In addition an 'adjacent land' parcel of 377sqm (along the Australia Avenue boundary) is to be included as part of the site. The total site area for the Design Competition process is 12,697sqm. Refer to Figure 2.

Site 53 is located on the corner of Australia Avenue and Figtree Drive. Immediately south of the site is the Olympic Park Train Line that loops to the train station and beyond that is Sarah Durack Avenue.

The site presently accommodates a low-rise commercial development. A group of mature fig trees are located on the north eastern corner of the site, with another mature tree located across the western boundary.

The site is located within the "Central Precinct" under the *Master Plan 2030*. This precinct was initially developed as a business park consisting of commercial and light industrial uses. The character of the area is now beginning to evolve into a medium-high density mixed use precinct through the development of new residential and retail uses.

FIGURE 2 – DEVELOPMENT SITE



Site 53 is envisaged to accommodate the following:

- A mixed-use development, comprising approximately 400 residential dwellings, a 1,500m² supermarket or convenience store, and associated basement parking.
- Retention of the existing mature trees in the north-west corner of the site, and the relocation of the Moreton Bay Fig tree from the south-western part of the site to a new position within the site boundary.
- A 20 metre wide view corridor.
- A new public road located on the western boundary of the site, referred to as 'New Street' (#15) in the *Sydney Olympic Park Master Plan 2030*.

2 Competitive Design Process

2.1 OVERVIEW

Consistent with the endorsed Design Competition Brief, the competition was run as an invited single-stage process, over two periods with a break for Christmas / New Year.

Four (4) architectural practices were invited to participate in the competition, including:

- BVN
- Mirvac Design
- PTW
- Tony Caro Architecture

Each participant attended a mid-point design review workshop on 17 December 2014. The workshops were attended by the proponent and technical advisors including planning, building services, structural engineering, and quantity surveying. Participants were given informal feedback during the workshops and were provided written feedback on 5 January 2015.

On 30 January 2015, each participant submitted an A3 '*Design Report*', which articulated their proposed architectural, urban design, and landscape scheme for the subject site. Following lodgement of the *Design Report*, an internal review was undertaken by technical advisors to the Jury.

The opportunity to present the Design Competition schemes was afforded to each of the competitors on 6 February 2015. Architectural practices were asked to describe their approach to the site and explain the benefits of their proposed scheme, as well as compliance with the design, commercial, and planning objectives outlined in the Design Brief.

The schemes were assessed by the Competition Jury, with input from the Technical Advisors, and a recommendation was made.

Copies of the Design Competition Submissions are provided at **Appendix E - Appendix H**.

2.2 COMPETITION JURY

The Design Competition submissions were assessed by a six-person Competition Jury consisting of three members appointed by Mirvac (the Developer) and three members appointed by Sydney Olympic Park Authority (refer Table 1).

TABLE 1 – COMPETITION JURY MEMBERS

PANEL MEMBER	AFFILIATION	CAPACITY
Peter Poulet (Chair)	NSW Government Architect	Architect
Caroline Pidcock	Pidcock Architecture + Sustainability	Architect
John Carfi	Mirvac	CEO Residential Development
Nick Hubble	Sydney Olympic Park Authority	General Manager Commercial and Corporate
Paolo Razza	Mirvac	Development Director
Richard Francis-Jones	FJMT	Architect

2.3 TECHNICAL ADVISORS

The Jury, proponent, and competitors were assisted throughout the Design Competition by various technical advisors (refer Table 2).

TABLE 2 – TECHNICAL ADVISORS

ADVISOR	COMPANY	DISCIPLINE
Stephen White	Urbis	Planning
Samantha Wilson	Urbis	Planning
Richard Rigby	RLB	Quantity Surveyor
Michael Harrold	Stensen Varming	Mechanical / Electrical Engineer
George Pattalis	Acor	Services Consultant
Vince Betro	BG&E	Structural Engineer

The technical advisors provided advice and feedback to the competitors during the mid-point review workshops, and undertook a detailed assessment of the Design Competition submissions. Town Planning and Cost reports were prepared for the Competition Jury and were presented prior to the Jury deliberations (refer **Appendix C** and **Appendix D**).

2.4 DESIGN BRIEF

A Design Brief was prepared by Urbis (on behalf of Mirvac) and issued to Sydney Olympic Park Authority and the Competition Jury for comment and endorsement. The architectural practices were given a copy of the endorsed Design Brief (**Appendix A**), which sought architectural schemes for a mixed-use development comprising approximately 400+ dwellings, a supermarket, basement car parking, and a landscaped ground plane.

2.5 REQUESTS FOR INFORMATION (RFI)

The architectural practices asked questions, sought clarification of the brief and requested additional information throughout the Design Competition process. Responses to the RFIs were provided in the form of an addendum to the Design Brief. Refer to **Appendix B** for copies of the all addenda.

3 Review of Competition Schemes

An assessment of the four Competition schemes, having regard to the design, commercial, and planning objectives of the Design Brief is provided below.

3.1 BVN ARCHITECTURE

BVN Architecture presented two schemes which explored alternative approaches to height and massing. The first option, known as the '*complying scheme*' retained the statutory 10-storey height limit, while the second option, known as the '*alternative scheme*' proposed to reduce the height of the northern building to 5-storeys while increasing the height of the southern building to 16-storeys (refer Figure 3).

The '*complying scheme*' did not meet the required residential gross floor area specified in the design brief. It yields 407 residential units, comprising 168 one bedroom (41%), 200 two bedroom (49%), and 39 three bedroom units (10%).

The '*alternative scheme*' meets the required gross floor area specified in the design brief for both residential and retail floor space. It yields 426 residential units, comprising 176 one bedroom (41%), 205 two bedroom (48%), and 45 three bedroom units (11%).

The floor plates, ground plane, apartment types, material pallet, access arrangement, supermarket location, and basement layout remained the same in both schemes.

While the '*complying scheme*' met many aspects of the design brief, the massing was considered to be imposing and harsh, with the scale of the buildings and materials proposed resulting in a feeling of relentlessness. In addition, the internal amenity of apartments and communal open space was compromised due to the built form proposed.

The '*alternative scheme*' resulted in a significant improvement to the internal amenity of the residential apartments, in particular outlook and solar access, as well as the amenity and usability of the communal open space. In addition, the redistribution of floor space created a diversity of architecture not seen in any of the other schemes presented.

The '*alternate scheme*' proposes to increase the height of the southern building to 16-storeys creating a more successful transition between the 30-storey residential towers on Australia Avenue to the future desired lower scale character of the Central Precinct to the west. While the Jury supports the intention and urban design merit of the additional height at the south-east corner of the site, concern was raised regarding the significant non-compliance with the statutory controls.

The Jury is of the opinion that the variety in height enriches the '*alternative scheme*' and should be explored further in order to achieve the correct balance and transition of scale.

The proposed material pallet remains constant across both schemes and provides a sense of diversity and character across the site. The northern building is proposed to be clad in precast brick panels, while the buildings to the south and west are proposed to be clad in a rough cast white render. Soffits and external privacy screens are proposed to be finished in a dark material to create interest and variety.

The use of brick on the northern building creates visual interest and contrast and assists in defining the scale and architectural quality of the smaller building. The marketability of the northern building is also improved with the use of brick, creating a 'boutique' product, unique to Sydney Olympic Park.

The proposed façade treatment of the buildings to the south and west is not as successful and could be improved. The use of rough cast white render becomes severe on the taller 16-storey structure. Further consideration of the massing, material pallet and exploration of façade articulation could assist.

FIGURE 3 – BVN – PERSPECTIVE FROM FIG TREE DRIVE



PICTURE 1 – BVN ‘COMPLYING SCHEME’



PICTURE 2 – BVN ‘ALTERNATE SCHEME’

The floor plate planning is well considered. While each building contains a high number of apartments per core, all corridors have sufficient access to natural light and air, and all lift cores open onto large lobbies with windows providing natural outlooks.

Apartment layouts have been developed with regard to internal amenity, in particular solar access to living rooms and private open space, as well as ventilation, and the usability of spaces. The apartment dimensions are generous given the overall size of apartments proposed.

The proposed two-bedroom 'garden apartments' positioned below the podium are considered a clever use of valuable floor space. Despite facing south towards the railway line these units are provided with large terraces, private at-grade access, and skylights and will activate the southern boundary of the site.

The proposed supermarket is located below the podium with access via Australia Avenue. A large expanse of north and east facing glazing is provided creating a sense of address to Australia Avenue. The design creates an opportunity for a more intimate north facing space, such as a café with outdoor seating provided under the existing Fig Trees.

The proposed ground plane incorporates grand entry spaces to apartment lobbies, an active zone through the centre, turf areas, and the potential for a children's playground to the south-west. The usability of the internal courtyard is improved through the reduction in scale of the northern building. However, further consideration of the nature of public and private spaces is required. In addition, solar penetration to the internal courtyard space should be explored.

FIGURE 4 – BVN – PODIUM / GROUND FLOOR PLAN



Overall, the Jury considered that the BVN 'alternative scheme' provided the greatest level of certainty that the design issues identified could be addressed and that the scheme could be developed in order to achieve Design Excellence. The Jury has made recommendations on the BVN 'alternative scheme' to be applied during the preparation of the future Development Application. These are discussed at Section 4 below.

3.2 MIRVAC DESIGN

The Mirvac Design scheme proposed a series of four residential buildings, generally rectangular in shape, positioned at each corner of the site. The buildings range in height from 10 to 13 storeys and work with the levels of the site to provide a transition of scale.

The scheme meets the required gross floor area specified in the design brief for both residential and retail floor space. It yields 409 residential units, comprising 5 studio (1%), 165 one bedroom (40%), 198 two bedroom (48%), and 41 three bedroom units (10%).

The proposed building layouts create a large internal courtyard and through site links which run east-west and north-south. The courtyard provides access to three of the four buildings and has been designed as an exclusive space, gated from the general public. The courtyard space is grand and has the ability to provide a high amount of amenity for the residents of the development.

The proposed supermarket has been positioned below the podium level in the south-east corner of the site with extensive glazing fronting the rail corridor. Public access is provided via Australia Avenue, while residents have access via the internal courtyard.

The main address for the development is via Fig Tree Drive, with access to three of the four buildings provided via the internal courtyard. As a result, the scheme does not provide a sense of address for each of the residential buildings and results in a lack of activation of adjacent streets.

The scheme provides a large community room on the ground floor of the south-east building which could be used as a resident's room and fitted with a kitchen, television, and furniture. Mirvac Design is commended for including residential facilities in an accessible location, adjacent to the communal open space, and with good access to sunlight and southern views of the Bicentennial Marker.

The scheme proposes to relocate the existing Fig Tree from the south-west boundary of the site to the Australia Avenue frontage. This is a logical and well-considered location for the existing tree, creating a row of substantial mature trees at the entrance to Sydney Olympic Park and an immediate sense of address for the development.

The scheme proposes a consistent material palette across all four buildings of aluminium, alucobond, and concrete. However, the consistency of materials at this large scale results in a level of monotony and relentlessness. Further consideration could have been given to the proposed material pallet in order to create variety and interest across the four buildings.

The façade of each building responds to changes in orientation alternating solid and permeable materials, screening devices, and balcony depths to improve on the internal amenity of the units. Mirvac Design is commended for this approach to façade design.

While the scheme met the commercial brief in most aspects, the internal amenity of many apartments appeared to be compromised. In particular:

- The scheme achieves a poor level of solar access, with only 65% of units receiving 3 hours of solar access between the extended profile of 8am to 4pm.
- The building depths range from 22 to 32 metres, resulting in depths of up to 12 metres for some single orientated one bedroom apartments.
- While private open space is provided for all units, the minimum size provisions have not been met for a majority of units on the upper levels. Further, the dimensions of some balconies compromise the usability of the spaces.

Overall, Mirvac Design is commended for their considered approach to the usability and amenity of the internal communal open space. However, in order to achieve design excellence the scheme would require significant changes to the material pallet, building layout, and apartment planning, and as such presents too greater risk to the developer and the Jury.

FIGURE 5 – MIRVAC DESIGN – PERSPECTIVE FROM FIG TREE DRIVE



FIGURE 6 – MIRVAC DESIGN – PODIUM / GROUND FLOOR PLAN



3.3 PTW ARCHITECTS

The PTW Architects scheme proposed two residential buildings, orientated to maximise solar penetration and southern views. Each building has a maximum height of 10-storeys and each works with the levels of the site to provide a transition of scale.

The scheme meets the required gross floor area specified in the design brief for both residential and retail floor space. It yields 407 residential units, comprising 8 studio (2%), 157 one bedroom (39%), 202 two bedroom (50%), and 40 three bedroom units (10%).

The proposed building envelope has been developed using sun angles, with each building positioned and orientated to maximise solar access to residential apartments. Despite this approach, the scheme achieves a poor level of solar access in comparison to the other schemes presented, with only 49% of apartments receiving three hours of solar access between 9am and 3pm.

The PTW scheme places significant emphasis on the available views to the south over the Bicentennial Marker and Bicentennial Park. The built form frames the view, while the internal apartment planning allows for distant views from the primary living and private open spaces of a high number of units.

While a high number of apartments receive good views to the south, the mirrored approach to building layouts and the emphasis on placing living rooms at the façade has resulted in direct overlooking of adjacent apartments, causing privacy and noise concerns.

The scheme proposes to relocate the existing Fig Tree from the south-west boundary of the site to the northern Fig Tree Drive frontage adjacent to the view corridor. While this location appears logical when viewed above ground, the impact on the basement configuration is significant. The location of the tree combined with the proposed built form appears to compromise the layout of the basement and as a consequence it is highly inefficient, when compared to the other schemes presented.

The proposed treatment of the ground plane focuses on public access through the site. While this will encourage activation of the space, it reduces the usability of the area as communal open space for the residents of the development. Furthermore, the proposed access arrangement for each building, as well as ground floor units, appears to be unresolved. Concerns were also raised in regards to potential channelling of southerly winds through the site.

The PTW scheme proposed to locate the supermarket below the podium, with access provided via Fig Tree Drive to the north. Concerns were raised regarding the lack of activation of Australia Avenue, as well as the interface between Fig Tree Drive and the supermarket.

While the scheme met the commercial brief in many aspects, the floor plate and apartment planning appeared to be compromised by the overall built form arrangement. In particular:

- The building depths are in excess of 18 metres and up to 24 metres at certain points. This results in depths of up to 12 metres for some single orientated one bedroom apartments.
- Each building contains a high number of units per floor and corridor. While slots provide access to natural light and air, their positioning within the floor plate reduces their ability to improve the amenity of these spaces.
- While private open space is provided for all units, the minimum size provisions have not been met for a majority of units on the upper levels. Further, the dimensions of some balconies compromise the usability of the spaces.

Overall, PTW was commended for avoiding the typical urban typology and providing an innovative and unique architectural concept. The overall built form proposed created visual interest and diversity and the focus on opening up the views was a refreshing approach to the site planning. However, the built form appeared to compromise the internal amenity of the residential apartments, in particular solar access, ventilation, and privacy.

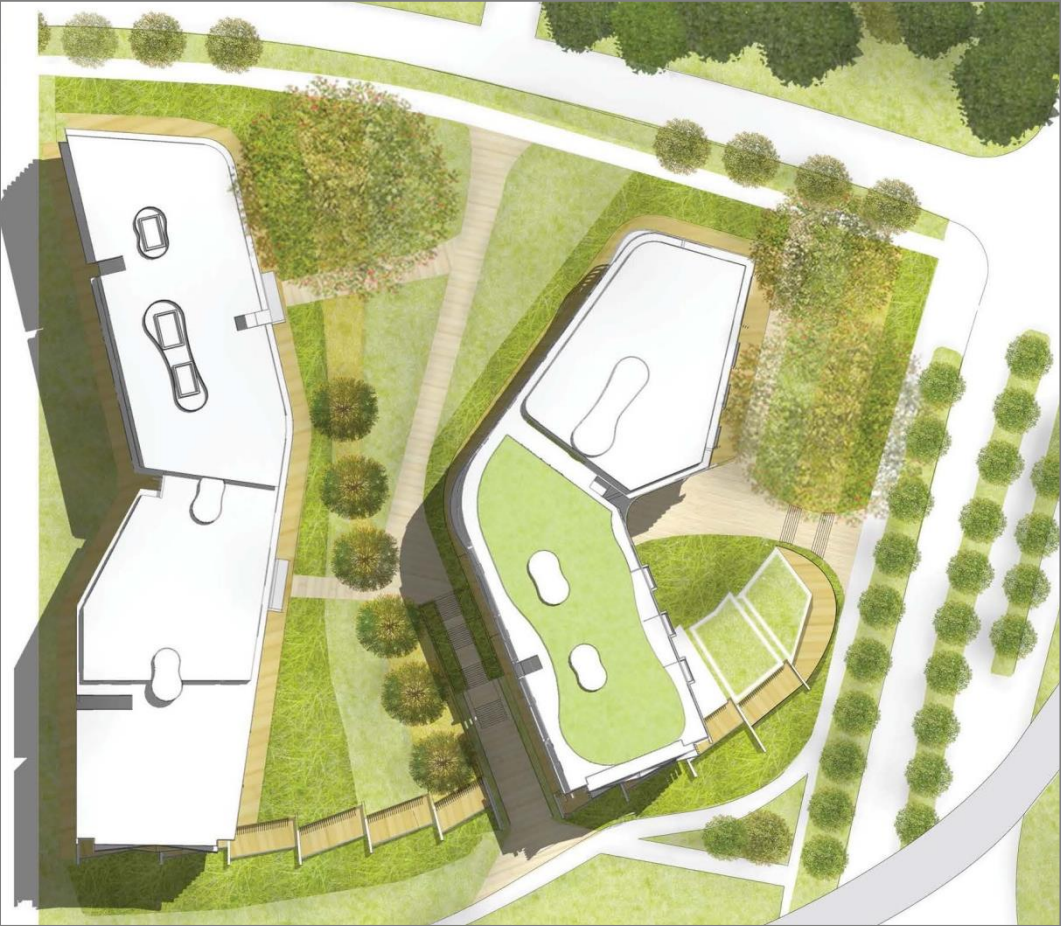
FIGURE 7 – PTW - PERSPECTIVE FROM AUSTRALIA AVENUE



PICTURE 3 – PTW – PERSPECTIVE OF INTERNAL COURTYARD FACING SOUTH



FIGURE 8 – PTW - GROUND PLANE



3.4 TONY CARO ARCHITECTURE

Tony Caro Architecture (TCA) presented two schemes which explored alternative approaches to height and massing. The first option, known as the '*complying scheme*' retained the statutory 10-storey height limit across two perimeter buildings, while the second option, known as the '*alternative scheme*' proposed to reduce the two perimeter buildings to 7-storeys and add a 32-storey tower to the south-east corner of the site (refer Figure 9).

The '*complying scheme*' meets the required gross floor area specified in the design brief for both residential and retail floor space, however it does not meet the required yield. The scheme provides 403 residential units, comprising 16 studio apartments (4%), 152 one bedroom (38%), 203 two bedroom (50%), and 32 three bedroom units (9%).

The '*alternative scheme*' meets the required gross floor area specified in the design brief for both residential and retail floor space, however it does not meet the required yield. The scheme provides 403 residential units, comprising 8 studio apartments (2%), 151 one bedroom (37%), 214 two bedroom (53%), and 30 three bedroom units (7%).

Neither scheme provides the required number of three-bedroom units. In order to meet this aspect of the brief it is assumed that the total yield would be reduced further, which represents a significant risk to the Developer.

While TCA provided justification for the additional height proposed in the '*alternate scheme*', the level of non-compliance with the statutory controls presented a significant risk to the developer and the Competition Jury. As such, the '*alternate scheme*' was not supported by the Jury.

The TCA scheme proposed an elegant façade system of vertical blades and discreet glass balustrades. By creating a nominal 1.1m external floor zone around the perimeter of the building, the proposed treatment ensures there are no solid wall surfaces on the building perimeters, while also providing weather protection. While the Jury commended TCA for this approach, the additional gross building area, glazing, slab edge detailing, and vertical fins was costed at approximately \$11 million, and brought the overall estimated cost of development to \$158 million, \$30 million over the construction budget.

The proposed supermarket is located at ground level with access via Fig Tree Drive (refer Figure 10). An additional café is provided adjacent to the supermarket creating a public plaza area on Fig Tree Drive. The public plaza opens out into the large internal courtyard which is divided into two zones, an access zone providing a direct public route through the site, and a landscaped zone providing access to the western residential building and an area for residents to use as communal open space.

Concerns were raised by the Jury regarding the location and treatment of the retail space. In particular, the large expanse of blank wall facing the internal courtyard created by the location of the supermarket. The proposed public plaza creates a successful treatment to Fig Tree Drive. However, the public nature of this space may impact on the amenity of the surrounding residential apartments and the usability of the communal open space.

The scheme proposes to relocate the existing Fig Tree from the south-west boundary of the site to the Australia Avenue frontage. This is a logical and well-considered location for the existing tree, creating a row of substantial mature trees at the entrance to Sydney Olympic Park and an immediate sense of address for the development.

TCA are commended for their considered approach to apartment planning, in particular the sizes, dimensions and layouts of smaller units. However, concerns were raised regarding the usability of private open space particularly on upper level apartments.

TCA are also commended for their considered approach to the roof top, with communal open space provided for all residents. The proposed design of these spaces incorporates BBQs, outdoor seating, appropriate planting, and visual screening elements, and would provide great amenity to the residents of the development.

FIGURE 9 – TCA – PERSPECTIVE FROM FIG TREE DRIVE

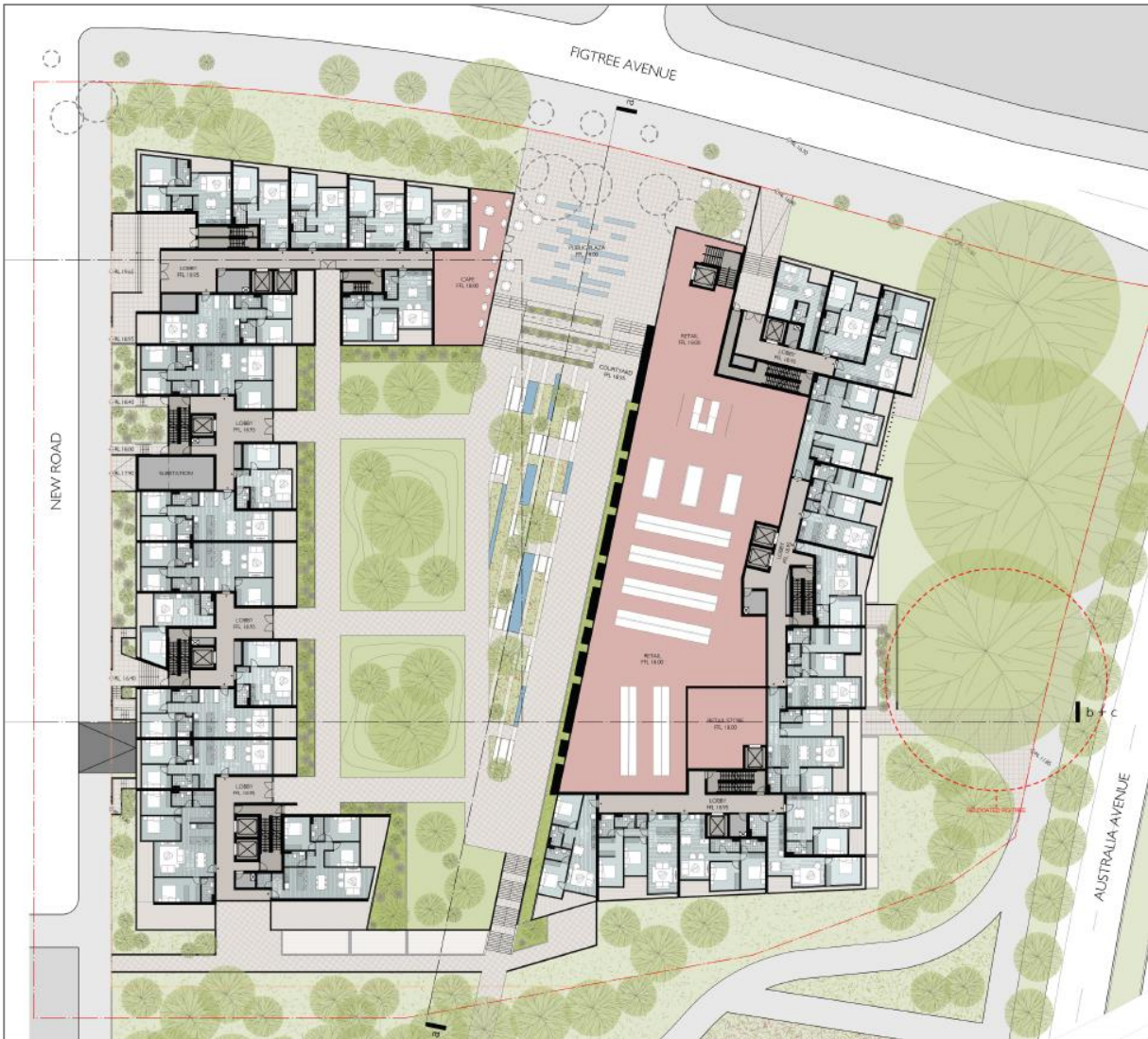


PICTURE 4 – TCA 'COMPLYING SCHEME'



PICTURE 5 – TCA 'ALTERNATE SCHEME'

FIGURE 10 – TCA – PODIUM / GROUND FLOOR PLAN



4 Preferred Scheme

The Competition Jury was satisfied that the BVN scheme met the objectives of the Design Brief and is nominated as the preferred proposal having regard to the recommendations noted below. These recommendations are made by the Jury for consideration by the Proponent, the selected Architect, and the Consent Authority:

Ground plane

- Consideration should be given to the design of the ground plane and communal open space. In particular, careful consideration should be given to the size and proportions of the space, the form and definition of the open space, the separation of public and private spaces, the level of solar access achieved, privacy and weather protection, and the usability of the spaces. If necessary, alternative building layouts and arrangements could be explored to improve on these aspects of the ground plane.

Communal facilities

- Consideration should be given to the inclusion of a community space within the development. The space should be in an accessible location and ideally have direct access to open space. The space should be designed for a range of user groups.

Height

- The Jury supports the intention and urban design merit associated with the redistribution of floor space from the northern building to the southern building in the *'alternative scheme'*. The reduction in height on the northern building results in improved amenity and urban design outcomes and is therefore supported. The increase in height on the southern building creates a more successful transition between the 30-storey residential towers on Australia Avenue and the future desired 10-storey character of the Central Precinct, and is therefore supported.
- However, the Jury considers the scale of the proposed 16-storey southern building to be too imposing in the context of the surrounding environment. As such, consideration should be given to the height and massing of each building in order to achieve a successful balance. The internal amenity and usability of the communal open space and residential apartments should be key considerations when exploring the redistribution of floor space. In addition, consideration should be given to the materiality and articulation of each building to assist in defining the scale of the buildings.

Material palette

- Consideration should be given to the treatment of the façade on the buildings to the south and west. The sole use of rough cast white render is considered severe, particularly on the taller southern building, and the lack of articulation results in a flat and imposing structure. Consideration should be given to the diversity of materials and articulation across the site.

RECOMMENDATION

In accordance with the Competition Brief and the intent of the Design Excellence requirements of the *Sydney Olympic Park Master Plan 2030*, the Jury recommends that BVN be retained by the Proponent to prepare a Development Application, taking into account the recommendations identified in this section of the report.

Disclaimer

This report is dated February 2015 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Mirvac (**Instructing Party**) for the purpose of Design Excellence Competition (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

Sydney

Tower 2, Level 23, Darling Park
201 Sussex Street Sydney, NSW 2000
t +02 8233 9900
f +02 8233 9966

Melbourne

Level 12, 120 Collins Street
Melbourne, VIC 3000
t +03 8663 4888
f +03 8663 4999

Brisbane

Level 7, 123 Albert Street
Brisbane, QLD 4000
t +07 3007 3800
f +07 3007 3811

Perth

Level 1, 55 St Georges Terrace
Perth, WA 6000
t +08 9346 0500
f +08 9221 1779

Australia • Asia • Middle East
w urbis.com.au e info@urbis.com.au