Environmental Assessment Report

Building A, 7 Parkview Drive, Sydney Olympic Park

Project Application No. 07_0157

Submitted to
NSW Department of Planning
On behalf of GPT RE Limited

December 2009 ■ 09420

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JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Robert Stark

Signature  Date 23/12/09

This report has been reviewed by: Vivienne Goldschmidt

Signature  Date 23/12/09

Statement of Validity

This Environmental Assessment has been prepared and submitted under Part 3A of the Environmental Planning and Assessment Act, 1979 (as amended) by:

Environmental Assessment

Name	Vivienne Goldschmidt
Qualifications	BA (Hons) MPIA CPP
Company	JBA Urban Planning Consultants Pty Ltd
Address	Level 7, 77 Berry Street North Sydney NSW 2060

Project Summary

Applicant	GPT RE Limited
Applicant address	Level 52, MLC Centre 19 Martin Place, Sydney
Land to be developed	7 Parkview Drive, Sydney Olympic Park
Proposed development	Commercial Building

Declaration

I certify that the following Environmental Assessment Report has been prepared in accordance with the requirements of Part 3A of the *Environmental Planning and Assessment Act, 1979* and Regulation and that, to the best of my knowledge, is not false or misleading.

Signature	
Name	Vivienne Goldschmidt
Date	23 December 2009

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Executive Summary

This Environmental Assessment Report (EAR) in relation to the development of 7 Parkview Drive, Sydney Olympic Park, for a new commercial building is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and State Environmental Planning Policy (Major Development) 2005 (the Major Development SEPP). The proponent is GPT RE Limited.

The 7 Parkview Drive site is located in the northern portion of the Parkview Precinct of SOP and has an area of 2.45 hectares. Surrounding development includes a SOPA storage area, the Brickpit, wetlands associated with the Badu Mangroves, a large car park, and a number of one to four storey commercial buildings.

Proposed Development

This Project Application relates only to Building A, the first stage of the development of 7 Parkview Drive. A total of three commercial and two residential buildings will be constructed with a total gross floor area in the order of 61,200m^2. These buildings will be generally arranged around extensions to Murray Rose and Dawn Fraser Avenues and will be complemented by extensive landscaping to link the various parts of the development.

The overall concept for 7 Parkview Drive is consistent with the building envelope controls stipulated in Master Plan 2030 (MP 2030)[1] and will achieve a floor space ratio less than the maximum allowable 2.5:1.

The project involves the demolition of an existing warehouse and the construction of a new commercial building. In summary, consent is sought for the following:

- Demolition of the majority of the existing warehouse on the former Samsung site (while retaining the existing offices, one bay of the warehouse and the associated car park);
- Construction of a five storey commercial building of 13,227m^2 of gross floor area, including a small retail tenancy;
- Three levels of parking beneath the building with 231 car spaces;
- Associated landscaping; and
- A temporary link road connecting Parkview Drive to the extension of Murray Rose Avenue.

The capital investment value of the project is $42 million in total. The design has been the subject of a design competition and exhaustive consultation process with SOPA. The form and character of the building has been driven by the desire to create a strong connection with the surrounding public domain.

Achievement of ecologically sustainable development (ESD) principles is a key consideration in the development. It is intended to achieve a minimum performance of 5 stars under the Greenstar rating system and a 5 star NABERS (Energy and Water) rating.

The landscaping will include interim works between Building A and the future Building B, ensuring that Building A has appropriate surrounds immediately upon completion.

1 MP 2030 has superseded Sydney Olympic Park Master Plan 2002

Environmental Assessment

The EAR provides an assessment of the environmental impacts of the project and includes a draft Statement of Commitments (see Section 8) which set out the undertakings made by GPT to manage the potential impacts of the development.

The proposal is permissible with consent under the Major Development SEPP and meets the relevant zone objectives. The proposed development is also consistent with the controls of the SOP Master Plan 2030 (MP 2030), other than in relation to the provision of car parking which is discussed in detail in Section 7.5.2. The proposal supports and is consistent with the Metropolitan Strategy, the draft West Central Subregional Strategy and relevant State and Regional Environmental Planning Policies.

As envelope of Building A is consistent with the envelope prescribed in MP 2030, it will make an appropriate contribution to the desired future visual form of the locality and will not impede the significant view corridors to ANZ Stadium from Ryde and Bicentennial Park.

The wind environment for the proposed development is consistent with that of any set of buildings of similar distribution and massing. The extent and impact of overshadowing is considered acceptable on the basis that the key area of the proposed public domain will not be significantly overshadowed by the proposed development. The proposed development has an appropriate degree of accessibility. Compliance with statutory accessibility requirements will be readily achieved.

Car parking will be provided at the rate of one space per 58m^2 of gross floor area. This is not consistent with the MP 2030 controls, which require 1 space per 80m^2. The provision of 1 space per 80m^2 would result in Building A only incorporating 164 parking spaces. Given there could be up to 1,200 staff accommodated in the building, this level of parking combined with limited capacity of the local public transport system would result in an under provision of transport. All traffic movements will operate well with minimal delays during peak periods.

There will be no unacceptable acoustic impact on the proposed development from major events such as the use of ANZ Stadium, the Sydney Showground and the Royal Easter Show. Building A will be impacted by some major events and associated road closures. However, access to the 7 Parkview Drive site will always be maintained.

The site is compatible with the intended commercial use in terms of contamination. The vegetation on the site to be removed has a very low conservation value. The remaining trees are species which do not suit the proposed development and could be removed and replaced with suitable alternatives. It is not anticipated that the proposed development will significantly reduce the movement of Green and Golden Bell Frogs between areas of adjoining habitat. The stormwater drainage system has been designed to ensure that resultant stormwater flows from the site are acceptable in terms of their potential impacts on the neighbouring wetlands.

The proposal represents the outcome of exhaustive consultation with SOPA to achieve design excellence on the site. The proposal will result in positive economic, social and environmental benefits. It is generally consistent with the provisions of MP 2030, and will make a valuable contribution to the development of the commercial component of SOP. The proposed development will have negligible environmental impacts, all of which can be effectively managed, and serves the public interest. We therefore request that the Minister approve this Project Application.

1.0 Introduction

This Environmental Assessment Report (EAR) in relation to the development of 7 Parkview Drive, Sydney Olympic Park, for a new commercial building is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and State Environmental Planning Policy (Major Development) 2005 (the Major Development SEPP).

The report has been prepared by JBA Urban Planning Consultants Pty Ltd on behalf of the proponent, GPT RE Limited, based on plans and supporting technical information provided by the proponent. It describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Environmental Assessment Requirements. It should be read in conjunction with the supporting information appended to this report (refer to Table of Contents).

1.1 Overview

This Project Application relates only to Building A, one of five proposed buildings to be developed at 7 Parkview Drive, Sydney Olympic Park.

The project involves the demolition of an existing warehouse and the construction of a new commercial building. In summary, consent is sought for the following elements:

- Demolition of the majority of the existing warehouse on the former Samsung site (while retaining the existing offices, one bay of the warehouse and the associated car park);
- Construction of a five storey commercial building of 13,227m^2 of gross floor area, incorporating a small retail tenancy;
- Three levels of parking beneath the building with 231 car spaces;
- Associated landscaping; and
- A temporary link road connecting Parkview Drive to the extension of Murray Rose Avenue.

1.2 Background to the Project

The building envelope for Building A is essentially set by the controls relating to height, floor space ratio (FSR) and setbacks in the Sydney Olympic Park Master Plan 2030 (MP 2030). These controls were developed by the Sydney Olympic Park Authority (SOPA) and reflect consultation by the proponent with SOPA. The controls relate not only to the 7 Parkview Drive site but also to the future development of the rest of the wider Parkview Precinct. Further information regarding the overall design of the 7 Parkview Drive site is provided in **Section 3**.

The Precinct Controls provided in MP 2030 are, in effect, a Concept Plan for the site. As detailed in **Section 4.4** of this report, the design of the building was the subject of a design competition negotiated with SOPA. It should be noted that the winning design was considered by both a SOPA and an independent Design Review Panel. The architects' response to the panel's comments are provided in **Section 7.4**.

Sydney Olympic Master Plan 2002 guided development of SOP for the initial post-Olympic period. It was superseded in September 2009 by MP 2030 and accordingly is no longer relevant to this EAR.

1.3 Statutory Context

The Major Development SEPP identifies development to which Part 3A of the EP&A Act applies and which therefore requires approval from the Minister for Planning ('the Minister'). The project falls into the class of development described in Part 23 Clause 5 of Schedule 3 of the SEPP, which refers to "Sydney Olympic Park Site: Part 3A Projects" with "a capital investment value of more than $10 million".

The provisions outlined above were introduced in a recent amendment to the SEPP. When the project was initiated, the provisions in force required the proponent to seek the opinion of the Minister as to whether the project is of the kind to which Part 3A of the Act applies (in accordance with Section 75B of the EP&A Act and Clause 6 of the SEPP). On 4 October 2008 the Director-General of the Department of Planning, as delegate of the Minister for Planning, formed the opinion that the development is of a kind described in Schedule 3 and is thus declared it to be a project to which Part 3A of the Act applies for purposes of Section 75B of the Act. Relevant correspondence is attached at **Appendix A**.

The Director-General subsequently issued the Environmental Assessment Requirements for the project under Section 75F of the Act on 16 January 2009. A copy of these requirements is included at **Appendix B**. A table cross-referencing the location in this report where the requirements are covered is located in **Section 7.1**.

1.4 Capital Investment Value

The capital investment value of the project (that is Building A) is $41.5 million in total (refer **Appendix C**). Capital investment value is defined in the SEPP as all costs necessary to establish and operate the development, including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment (but excluding GST and land costs).

1.5 Consultant Team

The following consultants contributed to this environmental assessment report:

■ Urban planning	JBA Urban Planning Consultants
■ Architecture	Turner and Associates Architects
■ Traffic and transport	Better Transport Futures
■ Noise	Acoustic Logic Consulting
■ Water cycle management	Hughes Trueman
■ Landscaping	Turf Design Studio
■ ESD	Arup
■ Mechanical, Electrical, Fire	Arup
■ Arborist	Hunter Horticultural Services
■ Ecology	Cumberland Ecology
■ Contamination	Douglas Partners
■ Wind	Cermak Peterka Petersen

2.0 The Site

2.1 Location and Context

Sydney Olympic Park (SOP) is located in central western Sydney, 14 kilometres to the west of the Sydney CBD and 8 kilometres to the east of the Parramatta CBD as shown in **Figure 1** below. It is located in the north eastern portion of the Auburn local government area.

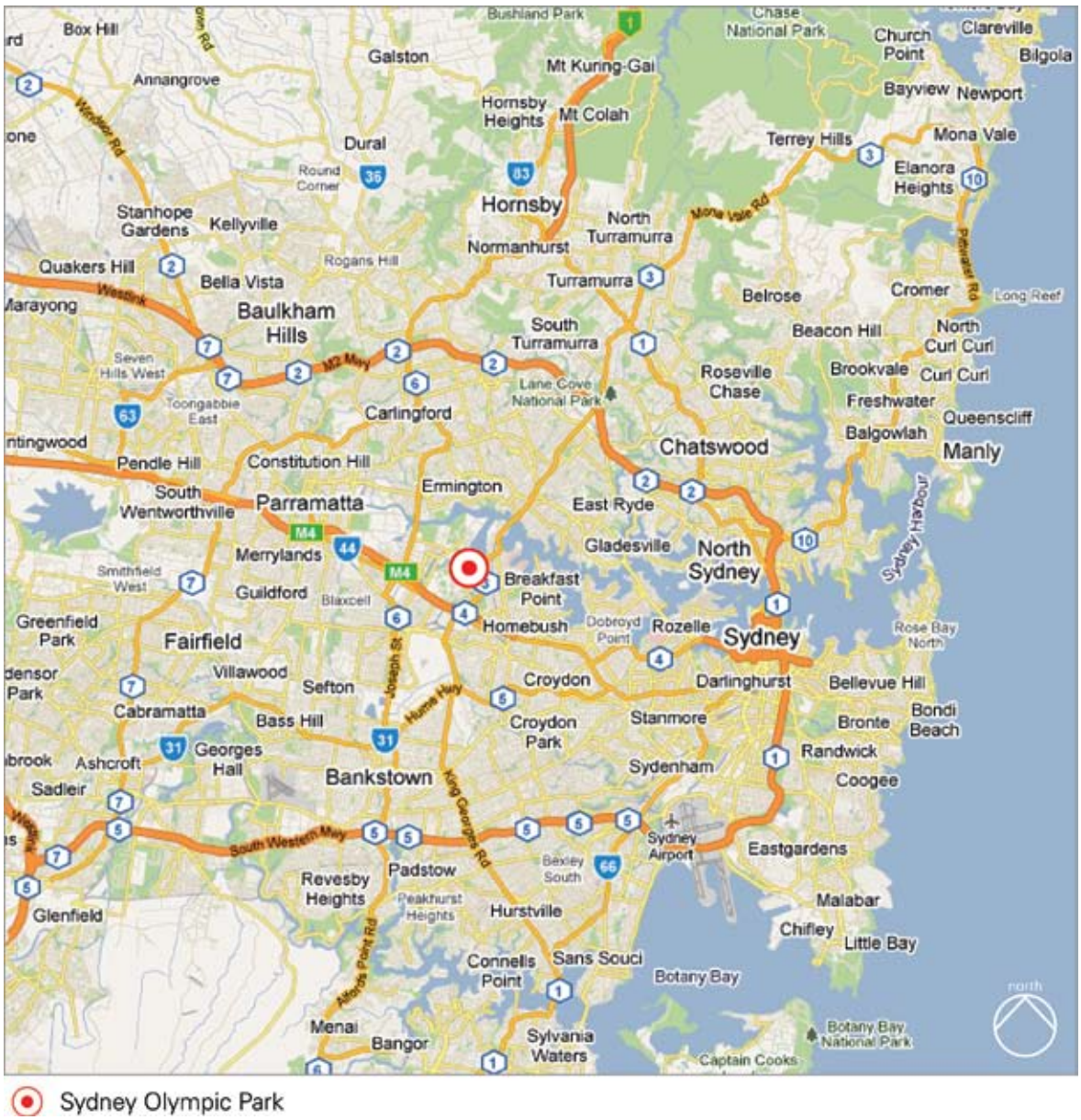

Figure 1 – Locality plan (Source: Google and JBA)

As illustrated in **Figure 2**, for urban planning purposes, SOP has been divided into nine precincts, as follows:

- The main event areas:
  - Sports and Education Precinct;
  - Stadia Precinct; and
  - Sydney Showground Precinct.
- The residential and commercial areas:
  - Central Precinct;
  - Parkview Precinct; and
  - Haslams Precinct.
- The parks and recreation areas:
  - Boundary Creek Precinct;
  - Tennis Precinct; and
  - Southern Sport Precinct.

Figure 2 – MP 2030 precincts (Source: MP 2030)

The 7 Parkview Drive site is located in the northern portion of the Parkview Precinct, which forms the western part of the larger SOPA defined site known as Site 60. 7 Parkview Drive has an area of 24,505m^2. The site for Building A occupies the north western corner of the 7 Parkview Drive site as shown in **Figure 3** and will have an area of 3,400m^2. The warehouse to be demolished as part of this application is partly located outside the boundary of the Building A site.

Figure 3 – Building A site. The inset shows SOPA's recommended street alignments (Source: MP 2030, SOPA MP 2030 Submissions Report and JBA)

2.2 Land Ownership and Zoning

The land at 7 Parkview Drive is legally described as Lot 88 in DP 870992 and is owned by GPT RE Limited.

The site is zoned B4 Mixed Uses under the Major Development SEPP (see **Figure 4**). Commercial development and associated retail uses are permissible with consent in the B4 zone; accordingly the proposed development is permissible.

Furthermore, the site is identified as Commercial under MP 2030 (see **Figure 5**). Office and business premises are allowable land uses in the Commercial area.

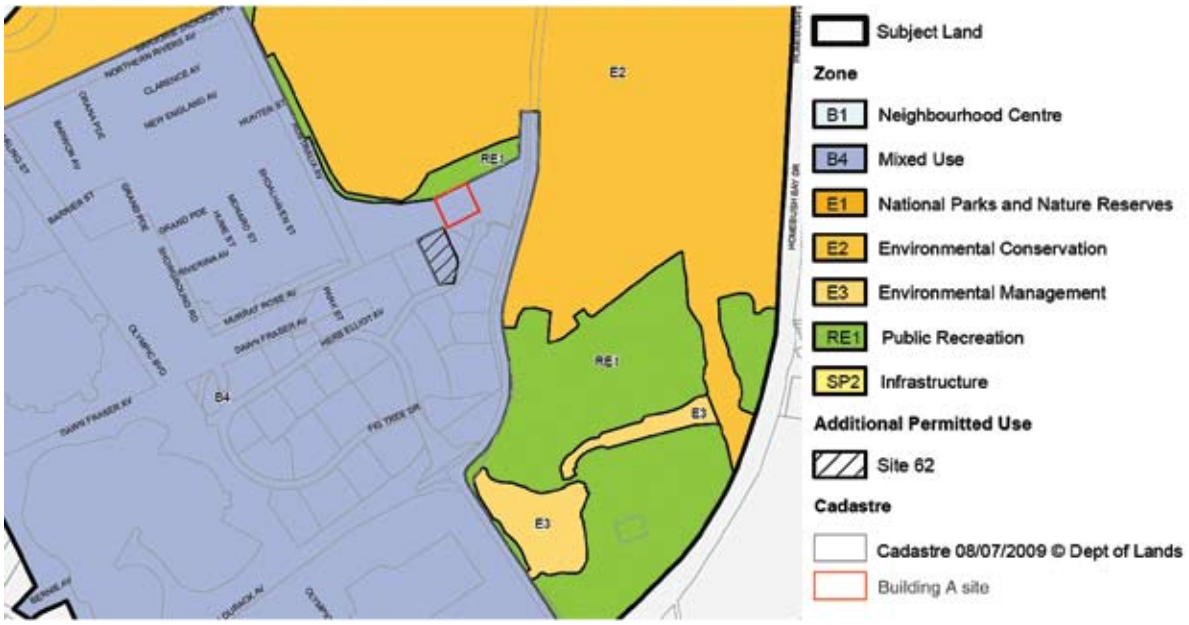

Figure 4 – SEPP Major Development Land Use Zoning Map (Source: Department of Planning)

Figure 5 – MP 2030 Land Use Map (Source: MP 2030)

2.3 Surrounding Development

The site is located to the east of the central spine of Olympic Boulevard, which accommodates the major elements of the Park including ANZ Stadium, the Athletic and Aquatic Centres, Sydney Showground and Olympic Park Station. Since the Olympics in 2000 a number of commercial developments have been completed or are under construction along Murray Rose and Herb Elliot Avenue which link the central spine and the Building A site (see **Figure 7**).

To the north of the site is land managed by SOPA currently used as a storage area for industrial materials such as landscaping supplies, garbage bins, fencing material and the like (refer **Figure 8**). The Brickpit, a former quarry that is now rehabilitated as a conservation area for frogs and wading birds, is located beyond this storage area to the north of the site (refer **Figure 9**). The Brickpit incorporates a number of walking trails and educational information displays to promote its ecological significance.

Wetlands associated with the Badu Mangroves are to the east of the site, across Bennelong Parkway (refer **Figure 10**). These wetlands are a key ecological component of Bicentennial Park. Bicentennial Park covers more than 100 hectares, and offers opportunities for recreation, environmental education and outdoor events. The park has picnic areas, playgrounds, pathways and cycleways, bird hides and access to the wetlands (refer **Figure 11**).

West of the site is a large car park known as P6F accessed from Murray Rose Avenue (refer **Figure 12**). Beyond the car park are various buildings associated with the Sydney Showground, including the Exhibition Halls and the Dome (refer **Figure 13**).

To the south of the site are a number of one to four storey commercial buildings. The most recently constructed of these are known collectively as the Quad, currently tenanted by large organisations such as Samsung Australia, Dairy Farmers and the University Admissions Centre (refer **Figures 14** and **15**).

Figure 6 locates the photographs in **Figures 8** to **15**.

Figure 6 – Aerial photo showing locating the photographs in Figures 8 to 15 (note Figure 11 is located further to the south)

Figure 7 – Herb Elliot Avenue (left) links Parkview Drive with Olympic Boulevard

Figure 8 – The SOPA storage area

Figure 9 – The Brickpit

Figure 10 – The Badu Mangrove wetlands

Figure 11 – Bicentennial Park

Figure 12 – Car parking area P6F with the existing warehouse on the site (to be demolished) in the background

Figure 13 – Exhibition Halls and the Dome

Figure 14 – Building 1 of the Quad development

Figure 15 – Building 4 of the Quad development

2.4 Existing Development

The 7 Parkview Drive site is currently occupied by a large warehouse and associated office building tenanted until recently by Samsung Australia. A car parking area is located to the east of the buildings on the site, and is accessed from Parkview Drive (see **Figures 16** to **21**).

Figure 16 –Aerial photograph of the 7 Parkview Drive site. The locations of the photographs in Figures 17 to 22 are also shown

Figure 17 – The warehouse as viewed from the east with commercial development addressing Murray Rose Avenue and ANZ Stadium in the background

Figure 18 – The warehouse loading docks as viewed from Parkview Drive

Figure 19 – The main entrance to the office building and the entrance to the car park, as viewed from Parkview Drive

Figure 20 – The office building viewed from the north

Figure 21 – The existing car park located to the east of the office building

2.5 Physical Characteristics

The 7 Parkview Drive site is highly modified and generally cleared of natural vegetation. Numerous mature trees are set amongst mown grassed areas, and several garden beds supporting shrubs are located in the vicinity of the existing entrance to the site and throughout the car park (refer **Figure 22**).

A significant fig tree is located to the south of the existing warehouse. This tree is one of a number that were originally planted to provide shade for stock at the abattoir previously located in the locality.

An Aboriginal Heritage Information Management System (AHIMS) Database search has been undertaken in relation to the site (refer **Appendix D**). The results of this search indicate that the site contains no recorded Aboriginal objects or declared Aboriginal places.

The site slopes from the northwest to the southeast, with the lowest point being in the south eastern corner adjacent to Parkview Drive. The topography has been modified to accommodate the warehouse and office buildings, resulting in embankments around the northern and western sides of these buildings.

Figure 22 – Existing landscaping

3.0 Overall Concept for 7 Parkview Drive

Building A is the first stage of the development of 7 Parkview Drive. It is envisaged, in accordance with MP 2030, that a total of three commercial and two residential buildings will be constructed with a total gross floor area in the order of 61,200m^2.

These buildings will be generally arranged around extensions to Murray Rose and Dawn Fraser Avenues and will be complemented by extensive landscaping to link the various parts of the development.

The overall concept for 7 Parkview Drive is consistent with the building envelope controls stipulated in MP 2030 and will achieve a floor space ratio less than the allowable maximum of 2.5:1.

Table 1 summarises the indicative stages, whilst **Figures 23** and **24** provide a plan and a photomontage of the completed development.

Table 1 – Indicative staging of the development of the 7 Parkview Drive site

Stage	Building	Use	Storeys	Approximate GFA (m^2)
1	A	Commercial	5	13,227
2	B	Commercial	5	13,600
3	C	Commercial and retail	5	14,900
	D	Residential	4-8	10,500
	E	Residential	4-8	8,500

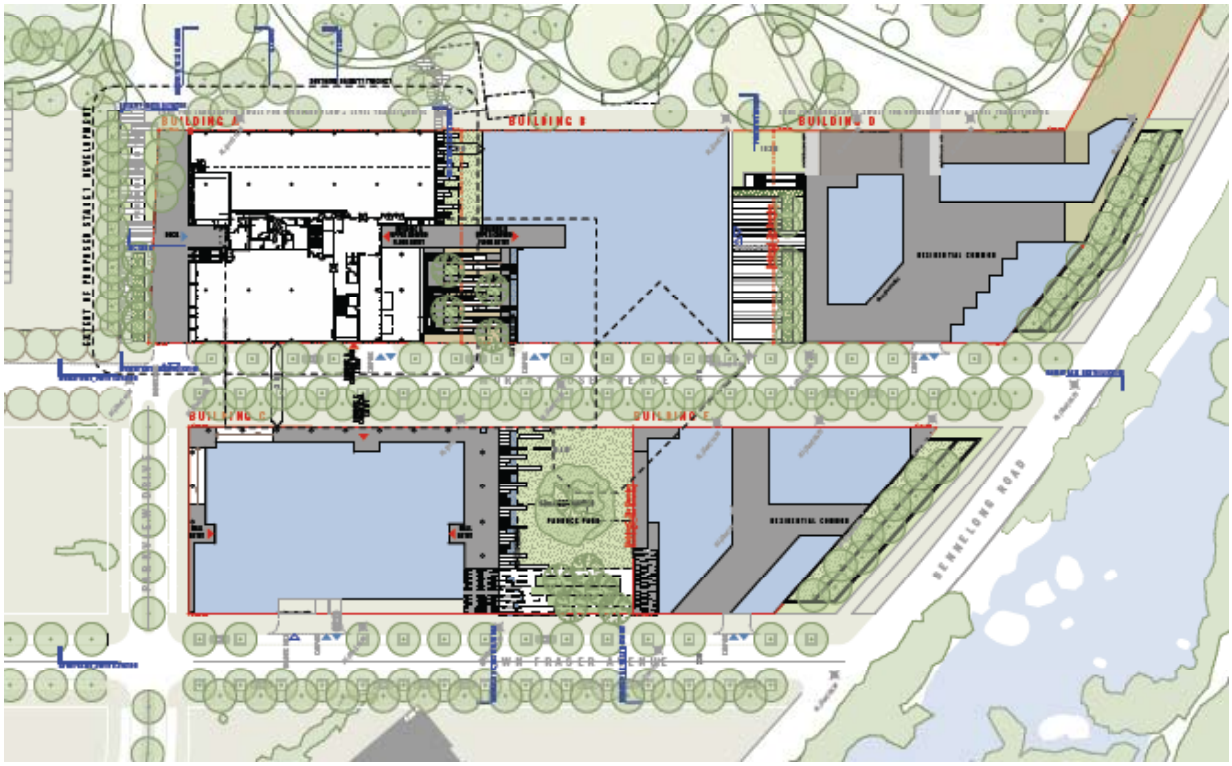

Figure 23 – Overall concept for 7 Parkview Drive

Staging

- **Stage 1:** the proposed development (Building A) forms Stage 1 of the development of 7 Parkview Drive. This first stage will also will also require an extension to Murray Rose Avenue to the east of Building A and the construction of a temporary link road connecting Parkview Drive with the extension of Murray Rose Avenue.
- **Stage 2:** the construction of Building B (commercial) and the extension of Murray Rose Avenue through to Bennelong Road in the east.
- **Stage 3**: the construction of Buildings C (commercial and retail) and D and E (residential) and, importantly, the extension of Dawn Fraser Avenue from Australia Avenue to Bennelong Road. The temporary link road will be replaced with a permanent link road to the west of Building C, which will see the completion of the revised road network.

Figure 24 – Photomontage of future development across the site (Buildings C and E)

4.0 Description of Proposed Building A

In summary, the project consists of the following elements:

- Demolition of the existing warehouse on the site (other than a single bay), while leaving the adjoining office building intact for continued occupation.
- Construction of a five storey (upper ground floor with four levels above) commercial building of 13,227m^2 GFA including:
  - a retail tenancy at the upper ground floor;
  - three levels of parking underneath the building (two basement levels and one lower ground floor level).
- Landscaping and public domain works.
- Temporary link road connecting Parkview Drive to Murray Rose Avenue.

4.1 Numerical Overview

The following table provides a numerical overview of the proposed development.

Table 2 – Numerical overview

Element	Proposal
Gross floor area (m^2)	
Commercial	13,109
Retail	118
Total	13,227
Building Height	22.7 metres
Number of storeys	5
Building length	62 metres
Building depth	53 metres
Car parking spaces	231
Bicycle parking spaces	115
Motorcycle parking spaces	22
ESD Rating	
Greenstar	5 star
NABERS (Energy and Water)	5 star

4.2 Architectural Design

The design has been the subject of exhaustive consultation with SOPA (see **Section 6**). Architectural Drawings prepared by Turner and Associates Architects are located in **Appendix P** and an Architectural Design Statement in **Appendix E**. The form and character of the building has been driven by the desire to create a strong connection with the surrounding public domain.

4.2.1 Design Excellence

Whilst not required by the DGRs, a design competition was undertaken by GPT with four leading Australian architectural firms invited to compete. The competition related to the entire 7 Parkview Drive site, ensuring that future development stages across the site would be consistent with the controls embodied in Master Plan 2030.

The key objectives of the competition was for the 7 Parkview Drive site to contribute to the development of a higher density mixed used precinct with a vibrant and leafy street character, and to specifically deliver a strong architectural statement whilst harmoniously blending into the unique ecological surroundings of the Brickpit and neighbouring wetlands.

Turner and Associates Architects won the competition and then went on to develop their design in more detail. This detailed design was presented to a Design Review Panel convened by SOPA, as discussed in **Section 6.1.2**. The architects have responded in detail to the comments raised by the panel relating to the following aspects of the design (refer **Table 3**):

Table 3 – Response to issues raised by DRP

Issue	Response
Investigate providing building entry lobby from Murray Rose Avenue	Addressed in presentations made to SOPA on the 12 October and 9 November 2009. The building now incorporates a double height lobby from Murray Rose Avenue, whereby both stair and lift access is provided to the Upper Ground Level. The distinctive façade treatment to separately identify the lobby from the remainder of the buildings Murray Rose Avenue elevation combined with the innovative "celebrated" bicycle storage facility is expected to positively contribute to an activated street edge.
Setting future residential development back from the site boundary	This issue is not relevant to this application. Residential development will form part of future stages.
Review elevation treatments to improve articulation, create recesses and depth in the facade and articulation of the parapet	This issue was addressed in presentations made to SOPA on the 12 October and 9 November 2009. The addition of four balconies along the Northern elevation, facing the Brickpit, provides additional articulation and depth. In addition, numerous horizontal and vertical corner bay windows have been introduced to the design. The building retains the facade of the Upper Ground Floor as essentially floor to ceiling glazing so that the upper levels appears to float above base of the building. The textured layering of the facade, which draws its inspiration from the stratification of the Brickpit, also contributes to the sense of depth. The western corner of the building is differentiated through a vertical facade treatment that acts as a distinctive marker for the building.
Provide sun shading to all elevations	Sun shades will be provided in the appropriate locations to assist with the building achieving the 5 Star Green Star and 5 Star NABERS (Energy)
Review the potential for service vehicle access from Murray Rose Avenue	MP 2030 identified the combined pedestrian / service vehicle road that links the future Brickpit edge park with the extension of Murray Rose Avenue. Accordingly, the design of the building has progressed with service vehicles using this roadway and as such this recommendation is not adopted.

4.2.2 Design Objectives

The design objectives that guided the architectural development of the proposal are to:

- Provide a strong connection with the surrounding landscape and demonstrate current building technology in terms of detailed design and selection of materials.
- Assist with the establishment of the Parkview Precinct as a mixed use, compact urban neighbourhood with a vibrant and leafy street character.
- Provide street frontage to Murray Rose Avenue, so assisting to define the Murray Rose Avenue corridor as an extension of the open space spine that will link the Parkview Precinct to the Town Centre.
- Promote visual and pedestrian connections to the adjacent Brickpit and landscaped areas.
- Separate the operational elements by providing the following separate entries:
  - lower ground floor building entry from an activated street edge;
  - upper ground floor building entry from an active landscaped public space;
  - loading dock entry to the west; and
  - basement car park entry from Murray Rose Avenue.
- Minimise the visual impact of the above ground component of the car park by activating the street edge with other uses.

4.2.3 Description of Design

A solid base provides definition and responds to the topography of the site. On top of this base is a concourse level that incorporates a café and associated outdoor terraces. This concourse level has access to both Murray Rose Avenue and landscaped public domain known as the northern cutting (refer **Section 4.1.4**). Above the ground plane and separated by a change in facade articulation are the five upper levels of the building, 62 metres in length and 53 metres in depth.

The upper levels are split into two bar forms running east west and aligned with the central core (refer **Figure 25**). The core contains bathrooms, lifts, fire stairs, mechanical risers and other services. The split in the floor plates allows the legible segregation of office tenancies but more importantly reduces the apparent building bulk and scale of the building.

The proposed materials and finishes have been selected to reflect the stratification of the neighbouring Brickpit, with the colours and design reflecting the various layers of soil (refer **Figure 26**).

The facade on the western elevation closest to Murray Rose Avenue is deliberately different to highlight the gateway to the 7 Parkview Drive site. It is intended that this feature will be repeated in the future development of Building C.

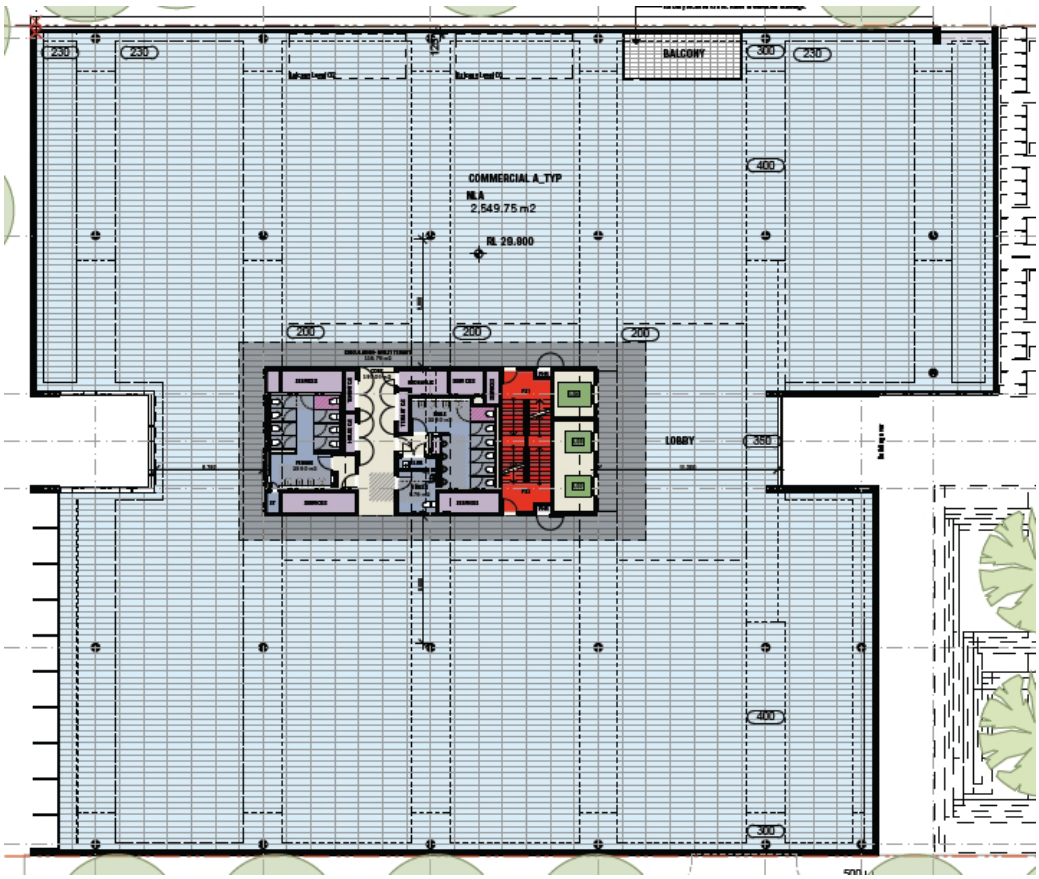

Figure 25 – Typical floor plate

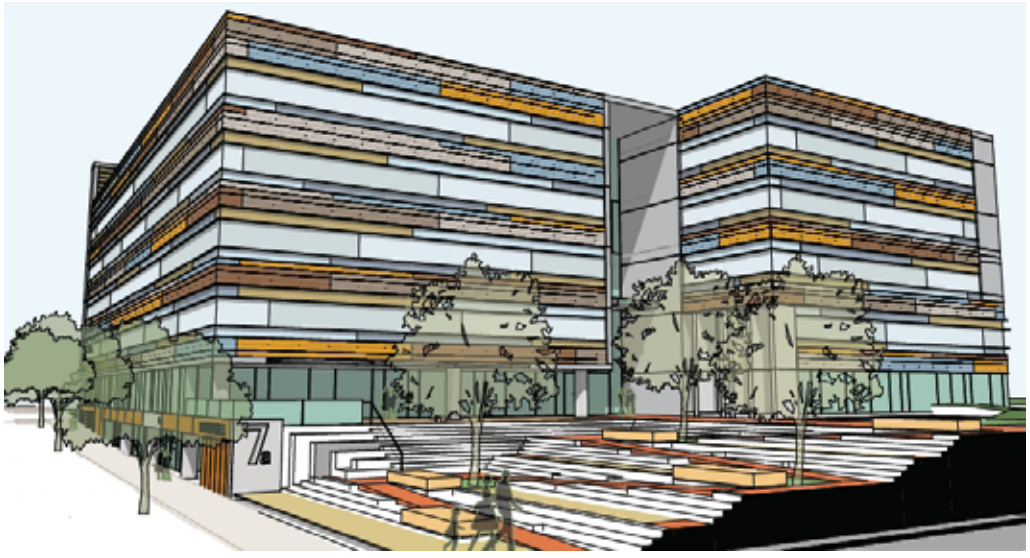

Figure 26 – Perspective of the proposed Building A as viewed from Murray Rose Avenue

4.3 Proposed Uses

The building will predominately accommodate commercial floor space, with a small area of retail (118m^2) at the upper ground level adjacent to the entrance to the building. It is anticipated that the retail area will be used as a café or the like and include an area of outdoor seating.

The proposed development is anticipated to operate during normal business hours (8.00am to 6.00pm Monday to Friday). However, future tenants may have a requirement for extended operating hours for call centres or other specialist operations. Building A will accommodate in the order of 1,200 employees.

4.4 Ecologically Sustainable Development

Achievement of ecologically sustainable development (ESD) principles is a key consideration in the development of Building A. It is intended to achieve a minimum performance of 5 stars under the Green Building Council of Australia Greenstar rating system for the Base Building. The design will be to the standard of a 5 star NABERS (Energy and Water) rating.

The following elements of the building facilitate achievement of ESD:

- Siting the building to accommodate existing site levels thereby reducing the need for cut and fill.
- Orientating the building to maximise passive solar efficiency.
- Shading devices in the form of structural overhangs will be provided where appropriate. The sizes of these overhangs will be optimised to reduce solar load in the building during summer times, but still use the winter sun to minimise heating requirements.
- Incorporating performance glazing in the facade to reduce heat loads within the building.
- Including a component of car parking above ground, thereby reducing the extent of excavation, mechanical ventilation and artificial lighting.
- Incorporating chilled beam technology into the mechanical service design, resulting in superior indoor air quality, reduced energy costs and reduced CO_2 emissions.
- Including a sophisticated Building Management Control System (BMCS) into the electrical service design, so reducing energy costs and CO_2 emissions.
- Connecting the hydraulic services to SOPA's recycled water system, thereby reducing the demand on potable water.
- Providing landscaping that encourages outdoor activity and is suitable for the local climatic conditions.

4.5 Landscaping

Turf Design Studio have prepared a Landscape Plan (refer **Figure 27** and **Appendix Q**) in relation to the development of Building A, including an indicative concept design for the overall 7 Parkview Drive site.

The landscaping for Building A will include interim works between Building A and the future Building B. This will ensure that Building A has appropriate surrounds immediately upon completion. It will also allow the indicative concept design for the 7 Parkview Drive site to be progressively constructed as future stages are developed. The development of Stage 2 (Building B) will require excavation into the interim landscaping constructed with Building A.

The landscaping design has also taken into account future public domain works by SOPA, including the replacement of the storage area to the north with a park along the rim of the Brickpit and street tree planting along Murray Rose and Dawn Fraser Avenues.

The two key components of the landscape design are referred to as the southern cutting and the northern cutting. The southern cutting will provide a link between Murray Rose Avenue and the future park along the rim of the Brickpit. The design incorporates a mix of hard and soft elements, including an area of lawn, formal garden beds and paving to be shared by both pedestrians and service vehicles accessing the loading dock.

The northern cutting is the main arrival space for Building A. It incorporates broad terraces and ramps to accommodate the topography of this part of the site and reflect the stair providing access from Murray Rose Avenue to the lobby of the building. Linear bioswales will capture overland flows and discharge into drainage at Murray Rose Avenue, and planting in the area will include native grasses, sedges, rushes and eucalypts.

4.6 Car Parking, Access and Circulation

The proposed development includes two levels of car parking below grade and a single level of car and bicycle parking on the lower ground level. A total of 231 car spaces,115 bicycle spaces (91 inside and 14 outside) and 22 motorcycle spaces are proposed. Accessible car parking spaces are provided at the ground floor parking level, and a shuttle lift is provided for access to the upper ground floor level. The lower ground level parking level incorporates showers and changing facilities for cyclists.

The car park is to be accessed from Murray Rose Avenue. The entrance to the car park is to be controlled by boom gates operated by remote electronic fobs. The fobs will enable drivers to operate the boom gates on approach, ensuring the vehicles are not required to queue as the boom gates open. Circulation through the car park is via centrally located ramps.

A loading dock is located on the upper ground floor level of the building, accessed via a driveway from Murray Rose Avenue. The loading dock is capable of accommodating medium rigid trucks, and a turning area is provided so that vehicles using the loading dock are able to enter and leave the site in a forward direction.

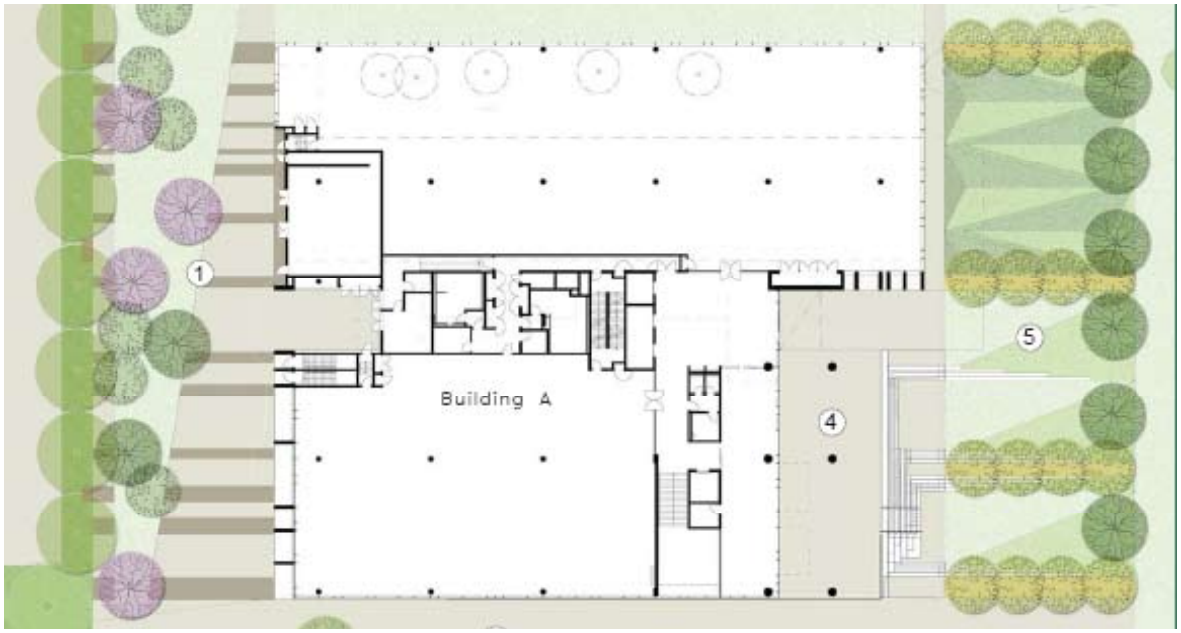

Figure 27 – Landscape plan

4.7 Site Preparation

4.7.1 Demolition

As previously outlined, the majority of the existing warehouse on the site is to be demolished to allow for the construction of Building A. The existing office and car park associated with the warehouse are to be retained and will be demolished as part of the development of future stages (and hence the subject of future applications).

As the warehouse and office building are currently connected, the portal frame of the warehouse closest to the office building is to be retained. This portal frame houses all of the mechanical and electrical plant for the office building. The resultant west facing opening will be clad using materials removed during the demolition of the warehouse.

A plan illustrating the proposed demolition has been prepared by Turner and Associates Architects (refer **Appendix P**). Throughout the construction of Building A access will be maintained to the office and car park via the existing entrance from Parkview Drive.

4.7.2 Excavation and Bulk Earthworks

Once the existing warehouse has been demolished, bulk earthworks will commence to provide appropriate benching and levels for the development to proceed.

4.8 Infrastructure

4.8.1 Stormwater Drainage

The stormwater drainage design involves piped connections to the existing culvert adjacent to Bennelong Road, which eventually discharges into Bennelong Creek. Flows from the site have been assessed in accordance with SOPA's requirements, and accordingly the proposed stormwater system can accommodate flows up to the 100 year ARI storm event.

The Infrastructure Report (refer **Appendix F**) details the following measures that are incorporated the stormwater drainage design to mitigate any potential impacts on the surrounding environment:

- Soil erosion and sedimentation controls to reduce the amount of sediment reaching estuaries;
- Stormwater will be managed to provide appropriate water quantity and quality discharge into the mangroves and wetlands; and
- Nutrient loads will be managed through appropriate filtration.

4.8.2 Utility Services

Hughes Trueman have reviewed the existing services in the vicinity of the site and the servicing requirements of Building A (refer **Appendix F**). Due to the proposed extension of Murray Rose and Dawn Fraser Avenues and the realignment of a portion of Parkview Drive, extensive service relocation will be required.

5.0 Planning Framework

This chapter details the relevant environmental planning instruments (EPI) applying to the site and the proposal. An assessment of compliance with relevant planning controls is provided in **Chapter 7**.

5.1 Strategic Plans

5.1.1 Metropolitan Strategy

In December 2005, the NSW Government released the Sydney Metropolitan Strategy titled City of Cities – A Plan for Sydney's Future. The MetropolitanStrategy provides commentary and direction for the next 25-30 years at a regional level on issues such as land use, economic development, jobs, transport, innovation, centres and corridors, and residential areas within Sydney.

The Metropolitan Strategy sets the planning and economic context for the provision of suitable employment lands in strategic areas. SOP is identified as a planned specialised centre land in the West Central Subregion. The subregion is intended to provide an additional 61,000 jobs by 2031, with 25,000 of these to be provided at SOP in addition to an additional 10,000 residents and 15,000 students. The proposed development will contribute to meeting this target.

5.1.2 West Central Subregion – Draft Subregional Strategy

The draft West Central Subregional Strategy was released in December 2007 and is a key part of the implementation of the 2005 Metropolitan Strategy. The Subregional Strategy is intended to guide land-use planning until 2031 in the Parramatta, Bankstown, Auburn, Fairfield and Holroyd local government areas, as well as for SOP.

The proposed development is consistent with the key relevant directions of the Draft Subregional Strategy, which include:

- Providing local employment opportunities; and
- Planning for housing growth close to public transport corridors.

5.2 Environmental Planning Instruments

State Environmental Planning Policy (Major Development) 2005

State Environmental Planning Policy (Major Development) 2005 zones the land and sets development standards for height and floor space ratio. Amendment No. 20 to the Major Development SEPP rezoned SOP, with the site zoned B4 Mixed Use. The proposed development is permissible with consent in the zone.

The Major Development SEPP also provides objectives for the B4 Mixed Uses zone and development controls in relation to the height of buildings, floor space ratio, major events, transport and design excellence. The proposed development's consistency with these objectives and development controls is provided in **Section 7.2.1**.

5.2.1 State Environmental Planning Policy (Infrastructure) 2007

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State, including providing for consultation with relevant public authorities about certain development during the assessment process.

In this respect, under clause 104 the Roads and Traffic Authority is to be made aware of traffic generating development and given the opportunity to provide comment. The proposed development is considered a traffic generating development by virtue of Schedule 3, which requires referrals for all commercial development over 10,000m^2 in area.

5.2.2 State Environmental Planning Policy No. 55 Remediation of Land

SEPP 55 - Remediation of Land applies to the site. This SEPP aims to provide a State-wide planning approach to the remediation of contaminated land in order to reduce the risk of harm to human health or the environment. The SEPP defines when consent is required for remediation work, and requires that remediation work meets certain standards and notification requirements. **Section 7.8** of this report discusses contamination issues relating to the site.

5.2.3 Sydney Regional Environmental Plan 24 – Homebush Bay Area

Although referred to in the Director General's Environmental Assessment Requirements, Sydney Regional Environmental Plan 24 – Homebush Bay Area is not applicable to the subject site.

5.2.4 Sydney Olympic Park Master Plan 2002

Sydney Olympic Master Plan 2002 guided development of SOP for the initial post-Olympic period. It was superseded in September 2009 by MP 2030 and accordingly is no longer relevant to this EAR. Nevertheless, the proposed development remains consistent with the vision of MP 2002 for Sydney Olympic Park including to be:

- Sydney's premier destination for entertainment, leisure, business tourism, sports and lifestyle orientated commercial and residential communities;
- a highly sough after location of a variety of employment generating uses and activities, housing, recreation and other entertainment facilities, enhancing the vitality and viability of the Greater Homebush; and
- an outstanding example of sustainable urban development and natural asset management.

5.2.5 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 and superseded Sydney Olympic Master Plan 2002.

Following diverse stakeholder input and further refinement and testing, MP 2030 was announced by the NSW Government on 30 September 2009. The announcement provided for the continued sustainable development of Sydney Olympic Park over the next 21 years. SOP is forecast to grow to accommodate a population of around 30,000 workers, 14,000 residents and 5,000 students, while maintaining its major event capabilities and 430 hectares of parklands. To support this, 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 the 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.

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 under Section 74D of the Act. A shown in **Figure 28**, the Parkview Precinct is covered by the planning provisions of MP 2030.

Despite MP 2030 being in force, the final document itself has not been released by SOPA. Therefore, this report has been prepared with reference to Draft Master Plan 2030. It is understood that the final MP 2030 document will not differ substantively from the draft plan, other than those matters discussed in **Section 7.2.3**.

The proposed development's consistency with the general and precinct specific controls is discussed in **Section 7.2** of this report. The general controls relate to the following aspects of development:

- Sustainability;
- Public domain;
- Land use and density;
- Building form and amenity;
- Access and parking; and
- Landscape and site.

The Parkview Precinct controls relate to the following:

- Land use;
- Site configuration;
- Floor space ratio;
- Building zone and setbacks;
- Building height; and
- Events.

Figure 28 – The site is covered by planning provisions of Master Plan 2030 (Source: Master Plan 2030)

6.0 Consultation

In accordance with the Environmental Assessment Requirements for this project issued by the Director-General consultation must be undertaken with relevant public authorities, community groups and affected landowners. This chapter details the consultation undertaken by GPT RE Limited as part of the preparation of the proposal.

GPT made its first acquisition in SOP in 2001 and is one of the largest land holders at SOP. GPT is committed to the long term sustainable renewal of SOP into a vibrant specialist economic centre. To assist with achieving this vision in a collaborative manner, GPT has been a long standing Board Member of the Sydney Olympic Park Business Association. The Business Association was formed in 2000 in order to provide a common voice for all owners and operators within SOP.

6.1 Sydney Olympic Park Authority

6.1.1 Master Plan 2030

GPT has completed numerous developments under the provisions of Sydney Olympic Park Master Plan 2002 including the Quad Business Park Development. The quality of the Quad development is demonstrated by the industry awards that have been received including:

- 2008 Urban Task Force Award for Development Excellence
- 2009 Property Council of Australia Award for Business Park

Furthermore, Quad 4 was the first speculative development in NSW to achieve a 5 Star Green Star design rating.

During the development of the Quad Business Park, GPT had ongoing dialogue with SOPA including discussions regarding SOPA's development of Vision 2025 and then Master Plan 2030. Over the last two years GPT has been actively involved in SOPA's consultation process for Master Plan 2030 and specifically the Precinct Controls that would apply to 7 Parkview Drive.

Importantly, SOPA's consultation process to create Master Plan 2030 was exhaustive and included a public exhibition to which GPT made a submission. GPT's overall concept for the 7 Parkview Drive site (and hence for Building A) is essentially consistent with Master Plan 2030.

6.1.2 Building A

Consultation has been undertaken with SOPA as part of the development of the design of Building A. A summary of recent consultation is provided below:

- February 2009 — SOPA approved Design Competition brief
- 24 July 2009: — Presentation to SOPA following Design Competition
- 24 September 2009: — SOPA Design Review Panel (DRP)
- 12 October 2009: — Presentation to SOPA regarding DRP Comments
- 9 November 2009: — Presentation of draft Building A Project Application scheme to SOPA

The content of these consultation sessions is detailed below.

Presentation to SOPA

GPT and the winning consortium consisting of Turner & Associates Architects and Turf Design Studio presented the scheme to SOPA.

SOPA acknowledged the extent to which the design had progressed and generally commented that the design was of high quality and responded well to its immediate surroundings.

SOPA Design Review Panel

The formal DRP presentation was held 24 September 2009 in the offices of the NSW Government Architect. The elements of the scheme that the DRP indicated required improvement were principally:

- Setting future residential development back from the site boundary;
- Review the potential for service vehicle access from Murray Rose Avenue;
- Investigating providing building entry lobby from Murray Rose Avenue;
- Reviewing elevation treatments to improve articulation, create recesses and depth in the facade and articulation of the parapet; and
- Providing sun shading to all elevations.

It should be noted that the setbacks of future residential development are not relevant to this application.

The access for service vehicles is proposed to be from the combined pedestrian / service vehicle road that links the future Brickpit edge park to the extension of Murray Rose Avenue, as documented within the MP 2030. Accordingly, this recommendation has not been adopted.

The remaining issues were subsequently addressed by the proponent in presentations made to SOPA on 12 October and 9 November 2009.

Presentation to SOPA regarding DRP

Following receipt of the DRP's comments, the architectural team progressed the design to feature more activation on the Murray Rose Avenue frontage through incorporation of an innovative bike storage facility and a small lobby providing access to the car park and the upper ground lobby via a shuttle lift.

The revised design was presented to SOPA. SOPA was of the view that the lobby provided to Murray Rose Avenue had not yet achieved an acceptable entry into the building and that GPT had yet to demonstrate sufficient activation of the facade. It was generally agreed that GPT together with its design team would present the final Project Application scheme to SOPA before lodgement of the Environmental Assessment Report with the Department of Planning.

Presentation of Project Application scheme to SOPA

The final presentation made to SOPA prior to the lodgement of the scheme was made on the 9 November 2009. The following issues were discussed by the architects in relation to the specific concerns of the DRP that SOPA considered had not yet been adequately addressed.

- Cutting Park / Staging for Landscaping: The Building A landscape design was outlined, and details of how this area of the public domain is temporary were provided as this area will be largely excavated again in the future as part of the construction of Building B.

- Murray Rose Avenue Lobby: The design of the lobby to Murray Rose Avenue has been further refined to incorporate a stair in addition to the car park shuttle lift, directly connecting it with the upper ground floor lobby above. Whilst the architects consider that this lobby will have far less importance once Building B is constructed, it has been given greater prominence through incorporation of a double height space, high grade finishes and a different treatment at the facade. In addition the bicycle storage area has been further detailed to demonstrate how it will contributed to an active street edge. In response, SOPA indicated that these changes to the design resulted in the desired street activation, and that the bicycle storage being displayed at the street edge was a challenging and innovative design response.
- Brick Pit Edge Park Facade: Four balconies have been inserted into the northern facade to create additional depth and activation as recommended by the DRP. Furthermore, additional vertical and horizontal corner bay windows have been incorporated into the design to increase the articulation of the facades.

6.2 Auburn City Council

Representatives of the consultant team met with Auburn City Council staff on 16 December 2009 to discuss the potential impacts of Building A on any infrastructure assets owned by the Council.

The overall scheme for the 7 Parkview Drive site was presented and Building A was discussed in detail, in particular issues relating to:

- Topography of the site;
- Proposed extensions to Murray Rose and Dawn Fraser Avenues;
- Location of Building A;
- Existing infrastructure, in particular stormwater; and
- Staging.

Stormwater issues discussed in detail related to the design of internal allotment drainage systems, quantity and quality of run-off and the potential recycling of water. It was confirmed that Building A would utilise SOPA's reticulated recycled water system.

Council staff advised that they had no particular comments to make at this time, and they will respond formally to the Department of Planning when the application is referred to them as part of the exhibition process.

6.3 Neighbouring Landowners

All land owners within SOP had the opportunity to comment on the draft MP 2030 during the public exhibition period. The proposed development is essentially in accordance with the provisions of MP 2030.

7 Parkview Drive adjoins two other sites, being 8 Parkview Drive and 5 Parkview Drive. 8 Parkview Drive is owned by GPT. 5 Parkview Drive is owned by a private party. GPT met with this party on 16 November 2009 to discuss the Project Application and to present the architectural drawings. The key points of discussion included:

- Compliance with the building height controls;
- Proposed car parking is wholly contained within the building envelope; and
- The strategy for the expression of the building and the selection of materials and finishes.

No major concerns were raised and no request was made for further consultation.

7.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs) located at **Appendix B**. The draft Statement of Commitments at **Section 8** complements the findings of this section.

7.1 Director-General's Environmental Assessment Requirements

Table 4 identifies the location in this report and/or the appended technical studies where the matters listed in the DGRs are addressed.

Table 4 – Director General's Environmental Assessment Requirements

Director-General's Requirements	Report Location
General Requirements	
Executive Summary	Page 6
Site analysis	Section 2
Description of the proposed development	Section 4
Assessment of potential impacts and draft Statement of Commitments	Sections 7 and 8
Statement of validity	Page 5
Compliance with BCA	Appendix O
QS Certificate of Cost	Appendix C
Conclusion and justification of suitability of the site for proposal	Section 9
Key Issues	
Relevant EPIs, policies and guidelines	Sections 5.2 and 7.2
Built Form	
▪ Design excellence	Section 4.2.1 and Appendix E
▪ Height, bulk and scale	Section 7.3
▪ Views and overshadowing	Sections 7.4.1 and 7.4.3
▪ Treatment of above ground car parking	Section 7.3
Gross Floor Area	Section 4.1
Use	
▪ Hours of operation	Section 4.3
▪ Number of employees	Section 4.3
Urban Design	Sections 4.2, 4.5, 7.2 and 7.3

Director-General's Requirements	Report Location
Amenity	
■ Solar access	Section 7.4.3
■ Acoustic impacts	Section 7.4.4 and Appendix I
■ Visual privacy	Section 7.4.5
■ Servicing requirements	Section 4.6
■ View loss	Section 7.4.1
■ Wind impacts	Section 7.4.2 and Appendix H
Transport and Accessibility	Appendix J
■ Staging arrangements	Section 3 and Appendix J
■ Provision of car parking	Section 7.5.2 and Appendix J
■ Traffic generation	Section 7.5.4 and Appendix J
■ Required intersection upgrades	Appendix J
■ Servicing arrangements	Section 4.6 and Appendix J
■ Public transport, pedestrian and cycle linkages	Section 7.5.3 and Appendix J
■ Major events	Section 7.8.2 and Appendix J
Ecologically Sustainable Development	Section 7.7 and Appendix K
Contributions	Section 7.10
Contamination	Section 7.8 and Appendix L
Consultation	Section 6
Major events	Section 7.9
Threatened species	Section 7.10
Staging and infrastructure	Sections 3 and 4.8 and Appendix F
Plans and Documents	
■ Site Survey	Appendix R
■ Site Analysis Plan	Appendix P
■ Locality Plan	Appendix P
■ Architectural Drawings	Appendix P
■ Stormwater Concept Plan	Appendix F
■ Erosion and Sediment Control Plan	Appendix F
■ View Analysis	Appendix P
■ Landscape Plan	Appendix Q
■ Shadow Diagrams	Appendix P
■ Arborist Report	Appendix N
■ Traffic Management Plan	Appendix J
■ Heritage Plan	Not applicable

7.2 Consistency with Relevant Strategic and Statutory Plans

7.2.1 The Major Development SEPP

The proposed development's consistency with the objectives of the B4 Mixed Use zone is outlined in **Table 5**. The proposal is consistent with all of the applicable objectives. The proposed development is also consistent with the development control provisions contained in Part 23 of Schedule 3 of the SEPP as detailed in **Table 6**.

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

Objective	Response
(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	The proposed development has been designed to ensure it does not significantly impact upon the capability of Sydney Olympic Park to host major events. See **Section 7.9**.
(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	The proposed commercial development is accessible to public transport and attractive to cyclists and pedestrians. See **Section 7.5**.
(c) to ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney	The proposed development will encourage the growth of Sydney Olympic Park's town centre by providing a quality commercial development set in attractive landscaping.
(d) to provide for a mixture of compatible land uses	The proposed development of Building A is the first stage in a broader development that will incorporate a mix of land uses, including residential and commercial development. See **Section 3**.
(e) to encourage diverse employment opportunities	The internal layout of the proposed building has been designed so that is suitable for a variety of commercial businesses.
(f) to promote ecologically sustainable development and minimise any adverse effect of land uses on the environment	ESD principles have guided the detailed design of the proposed development, ensuring that it will minimise its impact on the environment. See Section 7.7.
(g) to encourage the provision and maintenance of affordable housing	This objective is not applicable to the proposed development.

Table 6 – The proposed development's consistency with the development control provisions of Part 23 of Schedule 3 of the Major Development SEPP.

Clause	Control	Proposal
18. Height of Buildings	33 metres	22.7 metres
19. Floor Space Ratio	2.5:1	0.54:1
24. Major Events	To protect and promote the major events capability of the Sydney Olympic Park site and to ensure that 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 event venues. ▪ See **Section 7.9**.
25. Transport	The development must include measures to promote public transport use, cycling and walking.	The measures incorporated into the development to encourages the use of public transport use, cycling and walking are detailed in **Section 7.5**.
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 was the subject of a design competition as detailed in **Section 4.2.1**.

7.2.2 Other Statutory Plans

Table 7 provides a summary of consistency with other key strategic plans relevant to the project.

Table 7 – Summary of consistency with key strategic and statutory plans

Instrument/Strategy	Comments
Metropolitan Strategy	The proposed development will facilitate the implementation of the Metropolitan Strategy through the retention of employment lands.
Draft West Central Subregional Strategy	The project is consistent with the relevant key directions in the strategy as it will contribute positively to achieving employment targets and retains the site for employment uses.
SEPP 55	The Environmental Site Assessment concluded that the site is suitable for commercial use (see **Section 7.8**).
SEPP (Infrastructure)	The proposed development will be referred to the RTA in accordance with the SEPP.

7.2.3 Master Plan 2030

As discussed in **Sections 5.2.4** and **5.2.5**, MP 2030 supersedes Sydney Olympic Park Master Plan 2002.

General Controls

The following summary demonstrates the proposed development's consistency with the MP 2030 general controls.

- Sustainability (Clause 4.2):
  - An ESD consultant was engaged as a core member of the project team;
  - The development will be connected to SOP's recycled water system;
  - Materials have been specified on the basis of their sustainability; and
  - The development will meet the relevant minimum environmental ratings, being 5 star Greenstar and 5 star NABERS (Energy and Water).

  Further details are provided in **Section 7.7**.
- Public domain (Clause 4.3):
  - The public domain will incorporate pedestrian access that is continuous and accessible;
  - Weather protection will be provided to the entrance of the building;
  - Opportunities for casual surveillance have been provided; and
  - An active use, being the café including an appropriate area for outdoor seating, has been incorporated into the ground level of the building.
- Event access and closures (Clause 4.4):
  - As outlined in **Section 7.8.2**, access to the site will not be compromised by road closures for major or minor events.
- Land use and density (Clause 4.5):
  - Office premises are an allowable land use within the commercial land use category applicable to the site;
  - The overall concept for 7 Parkview Drive is consistent with the building envelope controls stipulated in MP 2030 and will achieve a floor space ratio less than the maximum allowable 2.5:1;
  - The proposed floor space ratio of Building A in relation to the 7 Parkview Drive site is 0.54:1[1], and therefore it complies with the maximum of 2.5:1.; and
  - The surrounding road and transport networks have adequate capacity to support the development, as outlined in **Section 7.5**.
- Building form and amenity (Clause 4.6):
  - The proposed building is wholly within the prescribed building zone;
  - The proposed building forms a key component of the overall development of the 7 Parkview Drive site, which will incorporate through site links and maintain view corridors;

1 The FSR of 0.54:1 excludes the existing office building and the small portion of the warehouse to be retained, which are to be demolished as part of a future development stage. If these elements are included in the calculation, the FSR is 0.65:1.

- Building A incorporates appropriate solar access, access to natural light and ventilation, communal outdoor areas and access to views;
- Car parking is located under the building footprint;
- The proposed height (five storeys) is less than the prescribed maximum of eight storeys;
- The proposed floor to ceiling heights of 3.7 metres for the ground floor and 2.75 metres for above ground floor levels exceed the minimum requirements of 3.3 metres and 2.7 metres.
- The design of the proposed rooftop service zone has been integrated into the overall aesthetic of the building, is not more than 5 metres in height and is appropriately set back from the parapet;
- No specific setback controls relate to the site, however the building facade has been located to reinforce the street alignment;
- A Disability Access Report has been prepared by Morris Goding Accessibility Consultants as required by the controls (refer **Appendix G**);
- Design excellence has been achieved as demonstrated in **Section 4.2.1**;
- The proposed built form is appropriately expressed as detailed in **Section 7.3**;
- Appropriate consideration to safety and security has been given to the proposed development throughout the design process;
- Acoustic impacts have been considered as required by the controls and as discussed in **Section 7.5.4**; and
- A Waste Management Plan will be prepared that demonstrates how the principles of waste avoidance, reduction, re-use and recycling will be implemented in the proposed development.

This measure forms part of the draft Statement of Commitments.

- Access, parking and transport (Clause 4.7 and 4.8)
  - The proposal's consistency with regard to the access, parking and transport controls is discussed in detail in **Section 7.5**.
- Landscape and site (Clause 4.9):
  - The proposed landscaping responds to the existing contours and features of the site;
  - Sufficient open space is provided to provide a high quality setting for the proposed building and complement the surrounding public domain; and
  - The car park is located under the building footprint to maximise the area of deep soil.

Precinct Controls

The Parkview Precinct controls relevant to the Building A site are all embodied in the MP 2030 general controls. It should be noted that the proposed commercial use is consistent with the land use plan for the precinct and the proposed development will not be unduly impacted by major events at ANZ Stadium or the Royal Easter Show.

Anticipated Changes to MP 2030

The Department of Planning has indicated that a number of changes are proposed to MP 2030, which has been gazetted but yet not published. These changes are addressed below:

- Education uses permitted within the commercial land use category:
  - Not applicable, as Building A does not incorporate educational uses.
- Car parking rate for commercial development is 1 space per 80m^2 of GFA:
  - The car parking assessment for Building A is based on a rate of 1 space per 80m^2 of GFA (refer **Section 7.5.2**).
- Non-residential development proposals are to submit a Workplace Travel Plan aimed at increasing public transport use and addressing the 40% journey to work public transport mode share target:
  - Workplace Travel Plans will be prepared by each tenant of the building, and this requirement will be incorporated into GPT's lease documentation (refer **Section 7.5.3**). This measure forms part of the draft Statement of Commitments (refer **Section 9**).
- Solar access to be provided to public domain:
  - An assessment of solar impacts is provided at **Section 7.4.4**, which confirms that the extent and impact of overshadowing is acceptable.
- Greater flexibility for residential apartment mix:
  - Not applicable, as Building A does not incorporate residential uses.
- Amended road alignment for Site 60:
  - The proposed development is consistent with the amended road alignment.

7.3 Built Form

The built form of Building A has been primarily informed by the development controls contained in MP 2030 (refer **Section 7.2.3**), and refined through the design excellence and consultation process (refer **Sections 4.2.1** and **6.1.2**).

Located at the corner of Murray Rose Avenue and the future relocated Parkview Drive, Building A holds not only an important place in the planning of the 7 Parkview Drive site but also in its relationship to the future park along the edge of the Brickpit and connection to the broader Sydney Olympic Park town centre.

The key driver of the built form is the building's relationship with the surrounding public domain. All of the building's facades respond to an area of public domain, and therefore there are no secondary or rear elevations. The primary building address and entry is located at street level on Murray Rose Avenue. The double height entry foyer together with the café, outdoor terrace and upper concourse provide an activated street frontage.

Instead of the usual practice of hiding bicycle storage within the basements of buildings, the bicycle store is located 'on display' at street level as a means to advertise and encourage alternative means of transport. Where possible, services and plant rooms are located to not open directly onto areas of public domain - so assisting the activation of the street frontage.

The topography of the site dictates that the base of the building is at the same grade as the natural ground level to the north and west, and exposed to the south along Murray Rose Avenue. This 'exposed' base results in a portion of the car parking being located above ground. To ameliorate any impacts of this arrangement, no parking facilities are visible from the street. The entrance lobby and bicycle parking described above are located between the car parking area and Murray Rose Avenue.

7.4 Amenity

7.4.1 Visual Impact

Existing conditions

The site is located close to a prominent ridge that runs along the edge of the Brickpit to Olympic Boulevard. Therefore, any development in the vicinity of this ridge will be visually prominent when viewed from surrounding suburbs and beyond.

Assessment

Turner and Associates Architects have prepared photomontages that demonstrate the impact of the proposed development on views from the Brick Pit and Bicentennial Park (refer **Figures 29 and 30** and Drawing EA006 in **Appendix P**). The form, height and proportions of Building A are relative to its business park context. The montages show that Building A is of a similar scale to existing buildings in the locality, such as the Quad and Exhibition Halls.

MP 2030 envisages an 'urban spine' along the ridge described above, and subsequently extensive consideration was given to ensuring that the proposed building envelopes would contribute to this spine and therefore provide the appropriate built form when viewed from outside SOP. In particular, Building A will not impede the significant view corridors to ANZ Stadium from Ryde and Bicentennial Park.

The proposed envelope of Building A is consistent with the envelope prescribed in MP 2030, and therefore Building A will make an appropriate contribution to the desired future visual form of the locality.

The development of the future stages on the 7 Parkview Drive site are also anticipated to be consistent with the envelopes in MP 2030, and therefore the final form of the development will be appropriate in terms of its visual impact.

Figure 29 – Photomontage of Building A (blue) as viewed from the Brickpit

Figure 30 – Photomontage of Building A (blue) as viewed from Bicentennial Park

7.4.2 View Loss

Existing Conditions

The site currently accommodates a warehouse and office building, which obstruct some views from the public domain to the wider region. These existing structures also impact on some district views from neighbouring existing commercial developments, in particular the lower levels of Building 4 of the Quad development.

Assessment

Building A is generally located in the same location as the existing warehouse on the site that is to be demolished. Therefore from the perspective of pedestrians there will only be minor impacts on views from the public domain. Importantly, views from Murray Rose Avenue to ANZ Stadium and other significant structures will be retained.

The construction of Building A will result in increased view loss from the upper levels of the surrounding commercial buildings. The views impacted are generally to the north over the Brickpit and Badu Mangroves, and in the distance the Hills district. However, the affected buildings will retain views to the east, west and south of Bicentennial Park, the Olympic Stadia and suburban Sydney respectively. It should also be noted that the envelope of Building A is consistent with that defined in MP 2030, and therefore any anticipated view losses are consistent with the envisaged character of the precinct.

7.4.3 Wind

The impact of the proposed commercial building on local wind conditions has been assessed, and recommendations made to mitigate any unfavourable impacts. The assessment carried out by Cermak Peterka Petersen is included at **Appendix H**.

Existing Conditions

An analysis of the existing wind environment was undertaken using meteorological data from Bankstown Airport. (The Bureau of Meteorology anemometer site at Homebush is known to produce directionally biased wind measurements, due to its proximity to surrounding developments.)

Key characteristics of the local wind climate are:

- Strong (>30 km/h) summer winds from the south-east and west quadrants. Frequent lower intensity winds occur from the north-east. South winds generally provide the strongest gusts during summer.
- Autumn, late winter, and spring winds occur mainly from the south and west quadrants.
- West quadrant winds tend to produce the strongest winds affecting the site throughout the year.

Assessment

The wind environment for the proposed development is consistent with that of any set of buildings of similar distribution and massing. In relation to wind impacts on the Building A development, the majority of the site is considered suitable for public access, with the exception of a potential localised condition discussed below.

Without amelioration, the café area associated with the retail tenancy may have unacceptable wind conditions during periods of strong wind from the south. These winds will accelerate around the eastern corner of the building and create uncomfortable conditions.

Management

A high vertical screen, meeting the underside of the awning roof, will be installed along the southern boundary of the terrace associated with the retail café to offer protection to patrons and therefore mitigate any adverse wind conditions.

7.4.4 Solar Access and Overshadowing

Shadow Diagrams have been prepared by Turner and Associates Architects that illustrate the impacts of overshadowing resulting from the proposed development. They are included as part of the Architectural Drawings at **Appendix C**.

Assessment

The shadow diagrams illustrate that Building A will overshadow the following areas of the public domain:

- The extension to Murray Rose Avenue at the following times:
  - Noon and 3.00pm at the winter solstice;
  - Noon and 3.00pm at the equinox; and
  - 3.00pm at the summer solstice;
- The path to the south west of Building A linking Murray Rose Avenue and the future Brickpit edge park at the following times:
  - 9.00am, noon and 3.00pm at the winter solstice,
  - 9.00am and noon and at the equinox; and
  - 9.00am at the summer solstice.

The extent and impact of this overshadowing is considered acceptable on the basis that the key area of the proposed public domain, being the east cutting park, will not be significantly overshadowed by the proposed development. Furthermore, it should be reiterated that the built form of Building A is consistent with the envelope set by MP 2030.

7.4.5 Noise

A detailed environmental noise assessment has been undertaken in relation to the proposed development by Acoustic Logic Consultancy (refer **Appendix I**). The assessment considers the current noise conditions in the vicinity of the site and measures to mitigate any adverse impacts for the future occupants of the building.

Existing Conditions

Ambient noise levels in the vicinity of the site were determined using long term, unattended noise logging conducted on site conducted between 11 and 16 March 2008.

Furthermore, noise from ANZ Stadium was measured on 4 October 2009 during the Rugby League Grand Final. Given the size of the Sydney Showground is similar to ANZ Stadium and that they are both located a similar distance from the site, noise from the Showground is expected to be similar in noise level to that from ANZ Stadium. During the site visit, noise from ANZ stadium (crowd and amplified music) was inaudible at Parkview Drive. The only audible noise associated with the event was from the media helicopters flying over the stadium.

The most significant potential noise impact on the site is from Easter Show rides, as amusement rides will be located as close as 25 metres from the western facade of Building A. In order to determine the noise levels likely to be generated, a noise survey of the Luna Park amusement park (Milsons Point) was undertaken.

Assessment

Using the results of the noise surveys, Acoustic Logic was able to set amenity criterion for Building A to ensure the protection of the acoustic amenity for future occupants as detailed in **Table 8** below.

Table 8 – Acoustic amenity criterion

Space Type	Time	Criterion
Commercial / Retail	When in use	45dB(A)$L_{eq(Worst\ 1\ hour)}$

Management

To meet the specified amenity criterion, minimum glazing requirements are provided as described in **Table 9**.

Table 9 – Minimum glazing requirements

Location	Required Glazing	Acoustic Seals	Minimum STC of Installed Window
Northern and western facade	6.38mm laminated/12mm airgap/6mm	Required	33
Southern and eastern facade	6mm/12mm airgap/6mm	Required	31

A preliminary analysis indicates that noise emissions from plant items can be adequately addressed using standard acoustic treatments, as outlined below:

- Generator
  - An acoustic screen will be installed between the generator and the nearest property. The screen is to be constructed of an imperforate material (supplemented with louvers or perforations) and will be equal in height to the top of the generator.
  - Testing will not to be conducted during night time periods.
- Chillers
  - An acoustic screen will be installed between the chillers and nearest property. The screen is to be constructed of an imperforate material (supplemented with louvers or perforations) and will be equal in height to the top of the chillers.
- Base building cooling tower
  - Air intake will not be directed towards nearest development to the east or west of the site.
- All plant items will be installed on appropriate vibration isolation equipment to prevent structure borne noise transfer to offices below.

7.4.6 Privacy

To ensure that appropriate levels of privacy are maintained, Building A is separated sufficiently from future stages of development at 7 Parkview Drive and the neighbouring commercial development to the south.

Building A is located approximately 35 metres from the neighbouring commercial development to the south east, 95 metres from the neighbouring commercial development to the south and 45 metres from the existing office to be temporarily retained to the east.

In relation to future development at 7 Parkview Drive, Building A will be located approximately 95 metres from the closest residential dwelling. This separation will ensure the privacy of future residents in the locality.

Accordingly, potential loss of privacy is not considered to be an issue for this or any future building.

7.4.7 Accessibility

An Accessibility Review has been prepared by Morris Goding Accessibility Consulting in relation to the proposed development (refer **Appendix G**). The review was undertaken to ensure that ingress and egress, paths of travel, circulation areas and toilets all comply with relevant statutory guidelines, including the SOPA's Access Guidelines 2002.

Assessment

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

7.5 Traffic and Access

In accordance with the DGRs, GPT commissioned Better Transport Futures to assess the traffic and parking impacts of the development (refer **Appendix J**), in particular:

- Details of access arrangements, including in relation to future stages;
- The road network serving the site, the prevailing traffic conditions and the public transport circumstances;
- The traffic related impacts of the proposed development on the surrounding road network;
- The measures to be implemented which encourage travel to / from the site by public transport, cycling and walking;
- The adequacy of the proposed parking provision;
- Assess the suitability of the proposed vehicle access, internal circulation and servicing arrangements; and
- Consideration of the operation of the site during major event road closures.

Existing Conditions

The following roads form the local system:

- Homebush Bay Drive: a major arterial road with a dual carriageway and grade separated interchanges with other major roads.
- Australia Avenue: a sub-arterial road providing the primary access to SOP.
- Bennelong Parkway: a collector road that provides access to the Brickpit and Bicentennial Park.
- Herb Elliot Avenue, Dawn Fraser Avenue and Murray Rose Avenue: local access roads.
- Parkview Drive: a local access road terminating in a cul-de-sac.

Traffic volume data was collected in September 2007 and October 2009. This data indicates that traffic flow along Australia Avenue was in the order of 960 vehicles per hour during the morning peak period and 1050 vehicles per hour during the afternoon peak. The level of service of the local roads surrounding the 7 Parkview Drive site was assessed as very good.

Four SOPA operated public car parks are located in the vicinity of the 7 Parkview Drive site, with a total capacity of approximately 890 spaces.

SOP was planned to operate with excellent public transport facilities, however these facilities are being provided gradually as demand justifies their construction or provision. It is widely accepted that transport provisions, in particular rail services, are inadequate to service the current daily population of SOP.

Sydney Olympic Park Railway station is within 330 metres walking distance of the Building A site, however direct services to the wider CityRail network are restricted to an hourly service during the day. The Olympic Sprint service to Lidcombe runs on a 20 minute schedule all day, but requires commuters to change trains at Lidcombe.

The four bus routes servicing Olympic Park are:

- 401 to Lidcombe running on a 20minute service in the peak hour, dropping to a 30 minute service off peak;
- 450 to Hurstville, running on a 15 minute service during the peak hour;
- 533 to Chatswood, running on a 15 minute service during the peak hours; and
- 525 Burwood to Parramatta via Olympic Park, running on a 10 minute service during peak hours.

These provide commuters with a reasonable service during peak hours but any travel outside these peak hours can result in a long wait. Surveys of commuters have included comments regarding problems with having to change trains, unreliable services and inconvenient schedules.

Existing facilities for pedestrians and cyclists are extensive in the general vicinity of the site, primarily for recreational purposes to access the nearby Bicentennial Park, the Brickpit and the Parramatta River foreshore. There are approximately 16 kilometres of on-road cycle lanes and approximately 24 kilometres of pedestrian paths and cycleways within SOP linking various attractions, residential areas and parks. The path network also links to the regional cycleway network, and as such provides a quality alternative to car based travel.

7.5.1 Access

Assessment

Full turning movements will be available into the proposed driveway to the parking area, located off Murray Rose Avenue. Furthermore, full movements will also be available to the shared access driveway to the loading dock. Vehicles waiting to turn right into or out of the driveways will obstruct following traffic, however this is an accepted outcome in the locality as it contributes to lower traffic speeds and discourages drivers seeking short cuts.

Adequate sight distances are available to the access points, and all vehicles will be able to enter and leave the site in a forward direction. The functionality of the shared access driveway to the loading dock is considered acceptable due to the low number of vehicles making deliveries (5 to 12 per day) and the fact that trucks will be required to give way to pedestrians.

7.5.2 Parking

Assessment

Building A incorporates 231 car parking spaces, which equates to a rate of one space per 58m^2 of gross floor area. This provision is not consistent with the MP 2030 controls, which require 1 space per 80m^2.

SOPA is seeking to restrict the provision of parking as a travel demand management tool. The MP 2030 control will, in the long term, reduce reliance on private vehicles. This restricted parking rate was originally intended to be introduced when public transport services to SOP had improved to the stage they offered a viable alternative to the private car for the majority of workers.

However, SOPA has introduced the restricted rate before public transport has become a viable alternative for the majority of workers. The Transport Strategy for the Park provides that currently only 15 percent of workers use public transport. Furthermore, none of the planned significant improvements to public transport have been constructed or provided in the interim.

The provision of 1 space per 80m^2 would result in Building A only incorporating 164 parking spaces. Given there could be up to 1,200 staff accommodated in the building, this level of parking combined with limited capacity of the local public transport system would result in an under provision of transport.

It is fundamental to the growth of SOP that the parking provision reverts to the previous rate of 1 space per 55m^2 of gross floor area until such a time that available public transport improves. This view is supported by the SOP Transport Strategy[2], which listed amongst its key findings:

> *Decrease the provision of commercial private parking from 1 space per 55m^2 to 1 space per 80m^2 over time linked to major public transport improvements.*

The Strategy identifies a range of projects that, combined, will support this reduction in the parking ratio. Surveys have shown currently only 15% of workers use public transport. The Strategy targets the achievement of an initial mode share of 25%, increasing to 41% with the introduction of the West Metro. However, the implementation of these projects is still being planned and as yet, there has been no "major" public transport improvement within the SOP over recent years to justify or support the reduction in the parking ratio at this time.

The internal layout of the proposed car park is in accordance with the requirements of Australian Standard 2890.1.2004. This standard specifies that a queuing length of five vehicles should be provided on the approach to the entry to the car park. The proposed development can only accommodate three vehicles inside the building and on the verge, with a further car in the kerbside lane, providing a queue of four vehicles in total.

Management

The car park control is proposed to be by a remote key fob controlled system similar to personal garages. The commercial versions of these systems open the gates in approximately ten seconds providing an entry capacity of approximately five vehicles per minute or up to 250 vehicles per hour. This indicates the entry has a theoretical capacity to allow entry to the entire car park in any one hour. This is unlikely to occur as 45% of the traffic is expected to arrive at the building outside of the peak hour, with only 55% arriving in the peak hour. This equates to 124 vehicles arriving in the peak hour. Whilst there will be some peak arrivals which will result in temporary queuing across the footpath, the footpath and verge are 5 metres wide allowing pedestrians to walk around any queuing vehicle.

7.5.3 Public Transport, Pedestrians and Cyclists

Assessment

Building A has the potential to accommodate up to 1,200 staff. In order to provide adequate transport options for this number of people a range of modes of transport are required. It is not considered that there is adequate capacity on the existing weekday public transport services to transport this number of staff over a peak hour.

The proposal incorporates bicycle parking in excess of SOPA's requirements, in that 105 spaces have been provided when only 86 are required. The bicycle storage area has been placed in a prominent position overlooking Murray Rose Avenue to increase the activation of the streetscape.

2 Sydney Olympic Park Master Plan 2030 Transport Strategy, prepared by Parsons Brinckerhoff Australia for SOPA in August 2008.

Management

Workplace Travel Plans will be prepared by each tenant of the building, and this requirement will be incorporated into GPT's lease documentation.

This measure forms part of the draft Statement of Commitments.

7.5.4 Traffic generation

Assessment

The traffic generation of Building A was calculated to be approximately 2,270 vehicle trips per day. For the purposes of the capacity assessment it was assumed all traffic would use the Australia Avenue/ Parkview Drive intersection.

A SIDRA analysis of this intersection was undertaken to determine the potential amount of waiting time for vehicles. The analysis confirmed that the additional traffic flows associated with the construction of Building A can be accommodated at the intersection of Australia Avenue and Parkview Drive. All traffic movements will operate well with minimal delays and congestion for traffic during both the morning and afternoon peak periods.

Management

A Construction Traffic Management Plan will be prepared prior to the commencement of works. This plan will require the following:

- Construction vehicles are to access the site via Australia Avenue and Parkview Drive.
- The RTA is to be consulted regarding proposed truck routes.
- Construction of the extension to Murray Rose Avenue is to be concurrent with the construction of Building A and the responsibility of SOPA.

This measure forms part of the draft Statement of Commitments.

7.6 Safety and Security

Consideration of safety and security has been integral to the development of the design of Building A, as follows:

- Public and communal spaces have been designed to be open, well lit and clearly visible with a legible 'line 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 passive surveillance.
- The bicycle storage area is visible from Murray Rose Avenue, rather than being relegated to a basement level.
- The basement has been designed with regular parking bays and legible pedestrian access points.
- A security room is provided at street level with a clear line of site to both the pedestrian and vehicle entry points.
- Spatial allowances have been made in the design of the upper ground level foyer for security gates if required.
- Landscaping around the building has been designed to minimise opportunities for concealment.

7.7 Ecologically Sustainable Development

The proposed development has been designed to achieve outstanding sustainability performance. The aim is to achieve a 5 Star Green Star Office design rating and 5 star NABERS Energy and Water Performance rating in design. Arup have prepared a summary (refer **Appendix K**) of the proposed ESD measures to be incorporated into the project including the following:

- An energy efficient chilled beam air conditioning system, with a supplementary air system provide fresh air to the building;
- High efficiency mechanical equipment;
- Variable speed drives on pumps and fans where applicable;
- Shading devices in the form of structural overhangs will be provided where appropriate. The sizes of these overhangs will be optimised to reduce solar load in the building during summer times, but still use the winter sun to minimise heating requirements;
- More cyclist facilities than the numerical requirement will be provided to encourage sustainable transport to work;
- The installation of energy efficient T5 lights; and
- The utilisation of the SOP recycled water system to minimise mains water use on site.

As a result of the above initiatives the following savings are expected:

- At least a 70% saving in the consumption of potable water compared to an average building[3]. This equates to a potable water saving of more than 6,500,000 litres per year
- At least a 55% saving in greenhouse emissions associated with energy use compared to an average building. This equates to a saving of more than 680,000 kg CO_2 per year.

These savings will also result in significantly reduced operating costs compared to an average building.

The proposed development is consistent with the five accepted principles of ESD described below. The proponent is committed to ESD principles (as evidenced by the commitments above) and has reinforced this through this Environmental Assessment.

Integration Principle

The integration principle holds that decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.

The design of Building A has been developed with reference to economic, environmental and social considerations for SOP. It will complement both the future stages of development at 7 Parkview Drive and existing recent commercial developments in the locality, such as the Quad development.

3 Average building based on NABERS 2.5 star rating

Precautionary Principle

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 proposal is supported by multiple environmental studies and technical reports which conclude that there are no environmental constraints that preclude the development of the site in accordance with the proposal, subject to appropriate management in future planning, design, construction and operational stages.

Intergenerational Equity

The principle of inter-generational equity holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal as a whole will directly benefit current and future generations in that it contributes to the long term development of SOP.

Biological Diversity

Under the biodiversity principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.

There is no significant natural vegetation on the site and it does not contain any threatened or vulnerable species, populations, communities or significant habitats. Construction and ongoing operations of the facility will be managed in accordance with the draft Statement of Commitments, ensuring no significant indirect impacts on the Brickpit or Badu Mangroves.

Valuation and Pricing of Environmental Resources

Under this principle, improved valuation, pricing and incentive mechanisms should be promoted. The costs of infrastructure and measures to ensure an appropriate level of environmental performance on the site have been incorporated into the cost of development.

7.8 Contamination

A Preliminary Contamination Assessment and In Situ Waste Classification Report was prepared by Douglas Partners (refer **Appendix L**) in relation to an earlier similar scheme for the site. Douglas Partners have reviewed the proposed development against their previous assessment and confirmed that it remains relevant (refer **Appendix L**).

In preparing the assessment, the following were undertaken:

- A review of site history information primarily from historical title deeds and aerial photographs;
- Drilling of test bores;
- Collection of soil samples from the bores; and
- Screening and laboratory analysis on selected soil samples.

Assessment

The assessment was limited by the presence of the existing warehouse on the site and further assessment will be undertaken after its part demolition and prior to any development.

The preliminary assessment of that part of the site that was accessible concluded that contaminant concentrations in all soil samples obtained from the site and tested were within the NSW EPA Health-based Investigation Levels for commercial sites. Given the low concentrations of contaminants detected

in the soil samples, the potential for off-site migration and down-gradient migration of contaminants was assessed as low.

The preliminary assessment report concludes that it appears that the site is compatible with the intended commercial use.

Management

A detailed assessment will be undertaken once the warehouse is demolished to verify the findings of the preliminary investigation.

This measure forms part of the draft Statement of Commitments.

7.9 Major Events

The proposed development has been considered against the relevant provisions of SOPA's Major Event Impact Assessment Guideline, as discussed below.

7.9.1 Noise

Potential noise impacts from major events such as the use of ANZ Stadium, the Sydney Showground and the Royal Easter Show were assessed to ensure that there will be no unacceptable impact on the proposed development. The Acoustic Assessment (refer **Appendix I**) 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 two reasons. Firstly, the closest the circuit will come to the site is approximately 250 metres. Secondly, as the circuit will only be in use for one working day per year, it is not considered necessary to assess potential impacts or upgrade the building to negate such an infrequent event.

7.9.2 Traffic

Building A is to be located on the periphery of the "Major Event Operations Zone" and will be impacted by some major events and associated road closures. The site is adjacent to car park 6F, which used for the Royal Sydney Easter Show, and it is anticipated that a section of Murray Rose Avenue adjacent to the car park will be closed for a month during this event each year.

Discussions with SOPA have indicated Australia Avenue is always maintained open south of Dawn Fraser Ave during major events to retain access to the commercial areas of SOP. Parkview Drive will also always remain open, and consequently access to the 7 Parkview Drive site will always be maintained.

However, there will be an impact on pedestrian access if Murray Rose Avenue is closed to pedestrians between Australia Avenue and Building A during the Royal Sydney Easter Show. The pedestrian route to bus stops and the railway station would be blocked, a SOPA would need to provide either a safe pedestrian link along this route or a viable alternative that does not extend the pedestrian distance excessively.

The biggest impact on the operation of Building A during major events is likely to be the reduction in on-street public parking available. This will require users to find alternative methods of transport or parking facilities. In these situations commuters should be encouraged to use public transport, with travel plans circulated to inform workers of transport options available.

7.10 Flora and Fauna

A Flora and Fauna Impact Assessment of the proposed development has been prepared by Cumberland Ecology (refer **Appendix M**). As previously described, the key ecological habitats in the vicinity of the site are the Brickpit and the Badu Mangroves. The assessment was undertaken for the whole of the 7 Parkview Drive site, but the following relates only to potential impacts on the Building A site.

It is important to note that the Flora and Fauna Impact Assessment incorporates formal assessments of significance in relation to the NSW *Threatened Species Conservation Act 1995* (TSC Act) and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). These assessments find that no significant impacts are likely to occur to any NSW or Commonwealth listed species or community. Furthermore, a referral to the Commonwealth Minister of the Environment under the provisions of the EPBC Act is not required.

Existing Conditions

Native vegetation on the subject site is limited to planted eucalypts and shrubs in landscaped garden beds which contain various local and non-local species. This vegetation will be cleared for the development of Building A.

A significant fig tree is located to the south of the existing warehouse. This tree is one of a number that were originally planted to provide shade for stock at the abattoir previously located in the locality.

Coastal salt marsh and swamp oak floodplain forest are located in the vicinity of the subject site. Both of these habitats are listed as endangered ecological communities (EECs) under the TSC Act.

Assessment

The proposed development will have direct and indirect impacts on threatened species in the locality. Direct impacts include vegetation clearance and a reduced area for the movement of frogs.

The vegetation for removal consists of planted native and exotic trees, shrubs and ground-cover species. These types of vegetation have very low conservation value in the context of the site, as they do not contribute to a functioning ecological community or provide significant resources for local fauna.

The trees proposed for removal were assessed by Hunter Horticultural Services, with their findings contained in an Arborist's Report (refer **Appendix N**). The report found that a number of trees on the site are in poor condition and should be removed.

The remaining trees are considered to be in good condition, however they are species which when fully mature are too large to suit the proposed development, and therefore could be removed and replaced with suitable alternatives.

The most significant indirect impact of the proposed development is potential increased flow and reduced quality of stormwater flows into the Badu Mangroves. The Infrastructure Report (refer **Appendix F**) assessed the flow of stormwater within the proposed system during a 1 in 100 year event, and found that the velocity of the flows would not cause scour. To ensure that the resultant stormwater flows from the site are acceptable in terms of their potential impacts on the mangroves, the measures detailed in **Section 4.8.1** will be implemented.

Other indirect impacts include altered light regimes and increased human activity. These impacts have been considered and found to be negligible due to the distance of the proposed development to the endangered ecological communities.

The site is identified as being part of a movement corridor for Green and Golden Bell Frogs, broadly linking the Brickpit and the Badu Mangroves. Building A will impact upon this movement corridor. However, the preferred movement corridor for the frogs is via an alternative path using existing underpasses under Bennelong Parkway. Furthermore, the proposed landscaping incorporates linear garden beds planted with suitable grasses that will provide cover for the frogs. For these reasons, the Flora and Fauna Impact Assessment concludes that it is not anticipated that the proposed development will significantly reduce the movement of the frogs between areas of adjoining habitat.

Management

The following measures will ensure the retention of appropriate conditions for Green and Golden Bell Frogs:

- Connected garden beds provided with suitable sheltering plants for frogs will not include pedestrian pathways and will generally deter people from accessing these areas.
- A site specific Green and Golden Bell Frog Plan will be prepared prior to the start of works. This plan will be prepared in conjunction with SOPA and with regard to *Best Practice Guidelines – GGBF Habitat* (DECC (NSW)) and the *Frog Hygiene Protocols* (DECCW). The plan will also incorporate the following:
  - If Green and Golden Bell Frogs are detected, works should cease immediately.
  - Detailed instructions for the management of the frogs and their habitat; and
  - Protocols for the cleaning of equipment to minimise the likelihood of transmitting any from pathogens.

Appropriate protection measures for the fig tree will be incorporated into Construction Management Plan to be prepared before the commencement of works.

These measures form part of the draft Statement of Commitments.

7.11 Heritage

Existing Conditions

To enable the construction of the existing warehouse and office building, the site was levelled involving both excavation and filling. The Preliminary Contamination Assessment and In Situ Waste Classification Report prepared by Douglas Partners (refer **Appendix L**) details that fill was found at a depth of 0.5 to 1.5 metres in two of the three boreholes drilled across the site.

Furthermore, the majority of the site is occupied by the existing warehouse and office building. The construction of the footings of these structures would have involved excavation and resulted in significant disturbance to the soil on the site.

An Aboriginal Heritage Information Management System (AHIMS) database search was undertaken in relation to the proposed site (refer **Appendix D**). The results of this search indicate that the site contains no recorded Aboriginal objects or declared Aboriginal places.

Assessment

Due to the extensive previous disturbance to the site and the lack of any recorded Aboriginal significance, it is not anticipated that any items of archaeological or Aboriginal cultural significance are located on the site.

Management

Should any historical relics be unexpectedly discovered all excavations or disturbance to the area will stop immediately in accordance with Section 146 of the *Heritage Act 1977*.

In the event that unexpected Aboriginal remains be discovered during excavation at the site, all works in that area will cease and DECCW will be notified in accordance with Section 91 of the *National Parks and Wildlife Act 1974.*

These measures will be incorporated into the Construction Management Plan to be prepared before the commencement of works.

These measures form part of the draft Statement of Commitments.

7.12 Contributions

No section 94 Contribution Plan applies to SOP.

Contributions under the Infrastructure Contributions Framework 2030 will be a commercial discussion between GPT and SOPA and will address all commercial matters relevant to the project. Therefore no Voluntary Planning Agreement is intended, as discussed with the Department of Planning and SOPA at a meeting regarding the 7 Parkview Drive proposal on 25 August 2009.

8.0 Draft Statement of Commitments

In accordance with the Director-General's Environmental Assessment Requirements, the proponent is required to include a Draft Statement of Commitments in respect of environmental management and mitigation measures on the site. The following are the commitments made by GPT to manage and minimise potential impacts arising from the project.

8.1 Waste Management

GPT will prepare a Waste Management Plan for the development prior to the commencement of works. This plan will demonstrate how waste avoidance, reduction, re-use and recycling will be implemented in the proposed development.

8.2 Transport Management

GPT will require Workplace Travel Plans to be prepared by each tenant of the building prior to occupation. GPT undertakes to incorporate this requirement into the lease documentation.

8.3 Construction Management

A Construction Management Plan will be prepared by GPT prior to the commencement of works. This plan will include the following:

- Construction vehicle access to the site via Australia Avenue and Parkview Drive.
- Consultation with the RTA regarding proposed truck routes.
- Concurrent construction of the extension to Murray Rose Avenue and Building A.
- Protection measures for the significant fig tree located in the vicinity of the warehouse.
- Should any historical relics be unexpectedly discovered all excavations or disturbance to the area will stop immediately in accordance with Section 146 of the *Heritage Act 1977*.
- In the event that unexpected Aboriginal remains be discovered during excavation at the site, all works in that area will cease and DECCW will be notified in accordance with Section 91 of the *National Parks and Wildlife Act 1974*.

8.4 Contamination

To verify the findings of the preliminary site assessment, GPT undertakes to prepare a detailed contamination assessment once the existing warehouse on the site is demolished.

8.5 Fauna Management

GPT will undertake the following to mitigate any potential impacts to Green and Golden Bell Frogs:

- A site specific Green and Golden Bell Frog Plan will be prepared prior to the commencement of works in conjunction with SOPA and with regard to the *Best Practice Guidelines – GGBF Habitat* (DECC (NSW)) and the *Frog Hygiene Protocols* (DECCW).
- Connected garden beds containing plants suitable for sheltering frogs will not include pedestrian pathways to deter people from accessing these areas.

9.0 Conclusion

The proposal represents the outcome of exhaustive consultation with SOPA to achieve design excellence on the site. The assessment of the proposal has demonstrated that the proposal will result in positive economic, social and environmental benefits. It is generally consistent with the provisions of MP 2030, and will make a valuable contribution to the development of the commercial component of SOP.

ESD principles have guided the design of the development, and furthermore there are no environmental impacts as a result of the proposal in relation to amenity, traffic, contamination or flora and fauna. The proposed development will not significantly impact on, or be impacted by, major events at SOP.

The built form of the new building is appropriate for its commercial context and the proposed materials and finishes respond to the surrounding environment.

The surrounding areas of public domain are to be appropriately landscaped.

The site is considered suitable for the proposed development for the following reasons:

- It is zoned for the proposed use.
- It achieves design excellence.
- It will form a key part of the development of the overall 7 Parkview Drive site.

Approval of the proposed development is sought on the following grounds:

- It will enable the provision of quality commercial floor space. Thus supporting the growth of SOP.
- The development is highly sustainable in that it will achieve 5 Star Green Star Office design rating and 5 Star NABERS Energy and Water Performance rating in design.

The proposed development will have negligible environmental impacts, all of which can be effectively managed, and serves the public interest. We therefore request that the Minister approve this Project Application.