



Site 4B Sydney Olympic Park  
Architectural Design Report, Major Project Application December 2006



Client/Builder



Landscape architect



Site 4B  
Sydney Olympic Park  
EA Design Report

BS Project Number 10665/1  
December 2006

Introduction

This design proposal has been prepared by Bates Smart Pty Ltd on behalf of the Bovis Lend Lease and Colonial First State. It forms part of the Environmental Assessment Report prepared in respect of Major Project Application describes the architectural design of the proposed commercial office building located on Site 4b, Sydney Olympic Park.

The proposal is for an 'A' grade commercial office building consisting of 3 basement car park levels, ground level retail, lobby and loading and six levels of commercial office space with a total lettable area of approximately 22000sqm. The design proposal includes the landscaping of the public domain located between the site and the proposed Sofitel Hotel.

Vision

The design should create an environmentally responsive and low energy building that embraces the social changes in the contemporary workspace by providing a spatially open, flexible, naturally lit working environment that encourages connectivity and interaction.

Brief

The design of the building is a direct response to our client's brief that has been based on extensive research into the world's leading work place environments. In addition to this research Bates Smart have undertaken a precedent study of the latest low rise office buildings in Australia and the United Kingdom that are being built as corporate headquarters to gain an good understanding of tenants requirements for the corporate headquarters at the beginning of the 21st century.

Central CBD locations are being left to high end users that require regular face-to-face meetings with other high end users. Examples include legal firms, investment banks, professional services, and development organisations. Due to the impact of the information technology revolution corporate headquarters and support offices are able to be relocated from central city locations to new urban communities such as Sydney Olympic Park. The attractions include the lower rental structure, high quality urban environment and facilities and the ability to accommodate people on larger floor plates, encouraging teamwork and communication.

The brief defined by a best practice approach to a corporate headquarters in today's knowledge economy includes the following:

- >large simple modular floor plates
- >flexible and adaptable workspaces
- >dynamic vertical connectivity
- >social space (hubs) for communication
- >consistent floorplates to minimise churn

In addition to addressing the requirements of the new workplace environment the buildings scale, form and materials must respond to the surrounding context and reinforce the unique character of Sydney Olympic Park.

Below

Artists Impression of Atrium (with indicative tenant fitout)

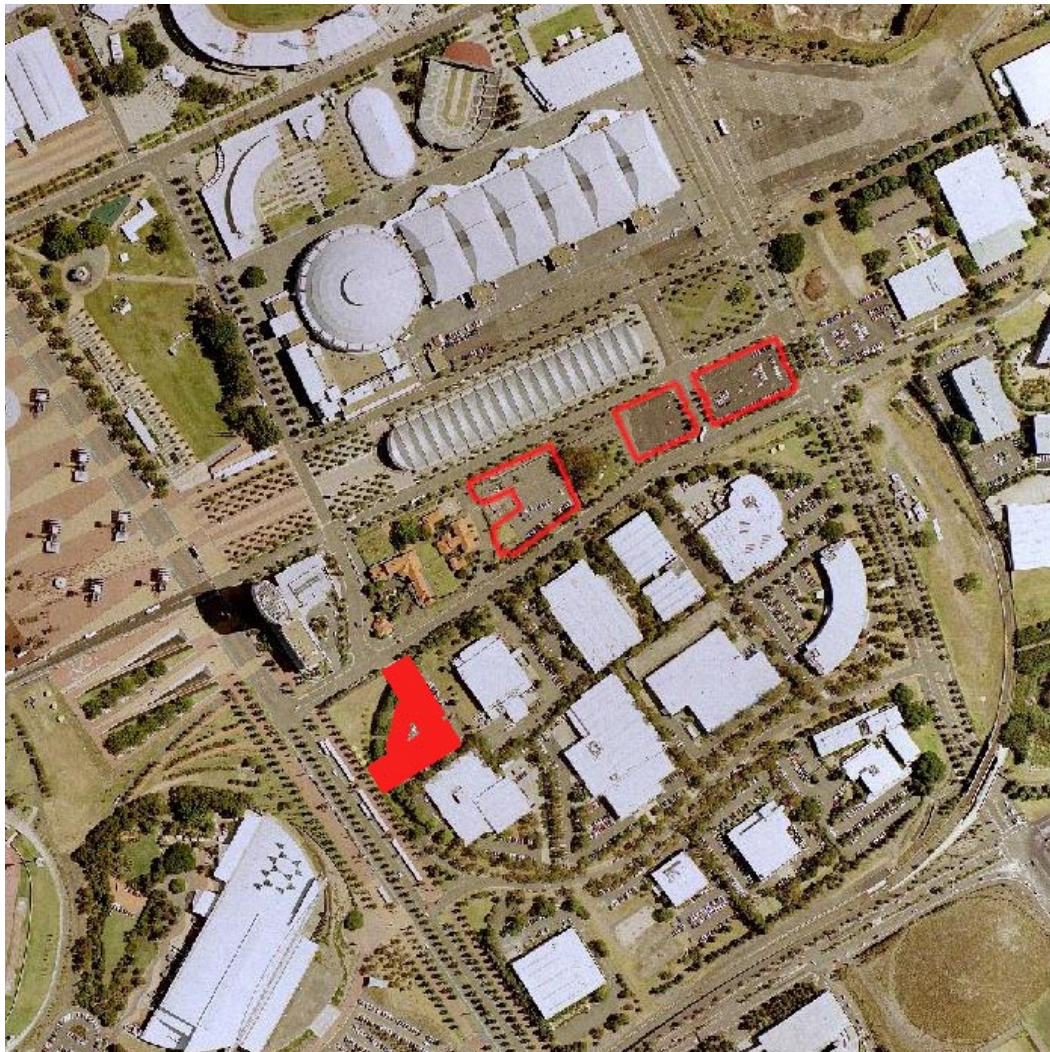
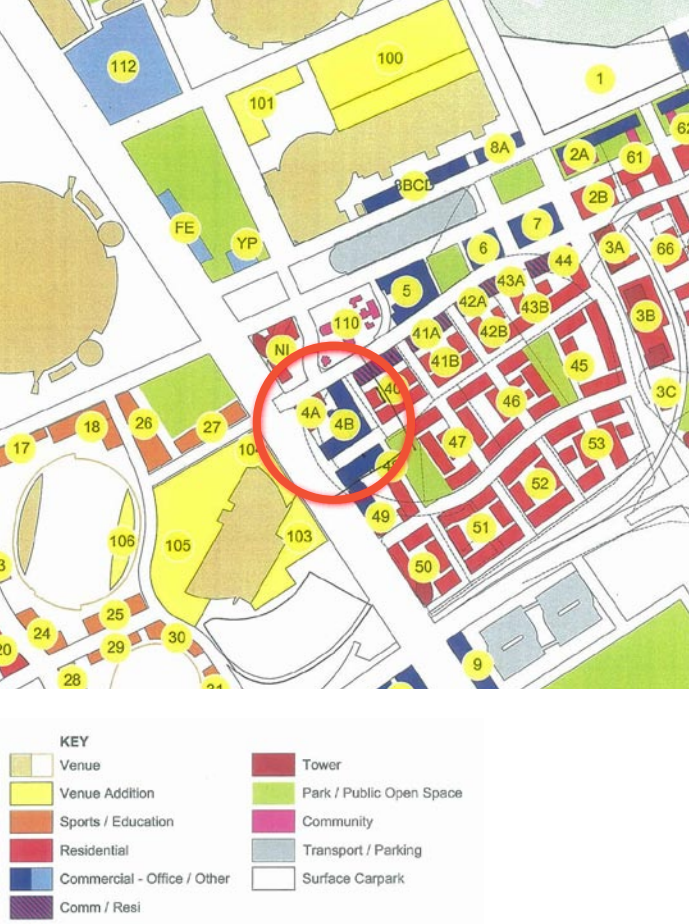
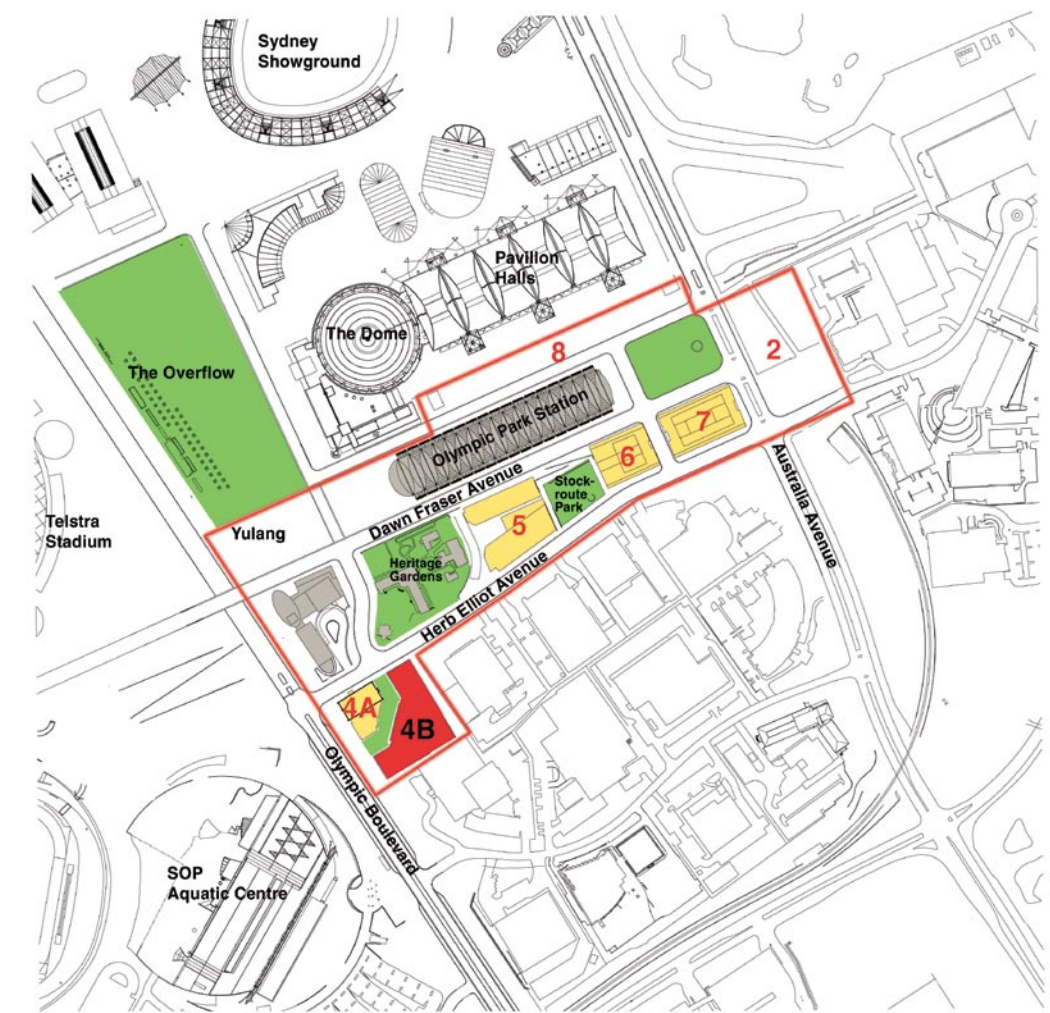


**Context Analysis**  
Site 4 is located on the corner of Olympic Boulevard and Herb Elliott Avenue in the South East corner of the Town Centre Precinct. The site is subdivided into two lots, Site 4A and 4B, separated by a public through site link that diagonally connects Herb Elliott Avenue and Olympic Boulevard. Site 4a has approval for the construction of a new 17-storey Sofitel Hotel.

The site is located in close proximity to the Railway Station and directly opposite the heritage significant Vernon Buildings and Maiden Gardens that form part of the original State Abattoir precinct.

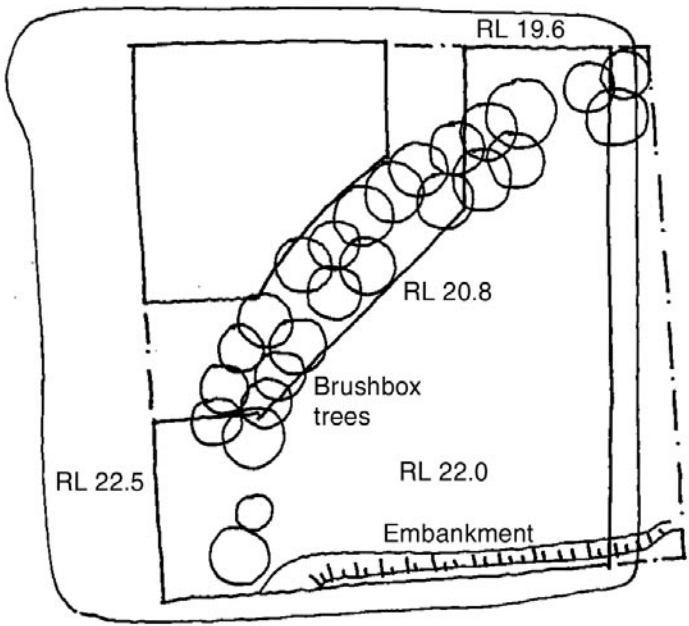
New roads are proposed by the SOPA Master Plan 2025 to the south and east of site 4. These form the boundary to the mixed use Australia Centre Precinct with future commercial development proposed off Olympic Boulevard to the south and along Herb Elliot Avenue to the east, and residential development to the east. A new park is proposed to the south east of the site.

**Below**  
left bottom      Aerial Photograph showing location of site  
left top      Location Plan showing Site, Town Centre  
Precinct, Public Open Space and new development sites  
right      SOPA Masterplan 2025 (part)

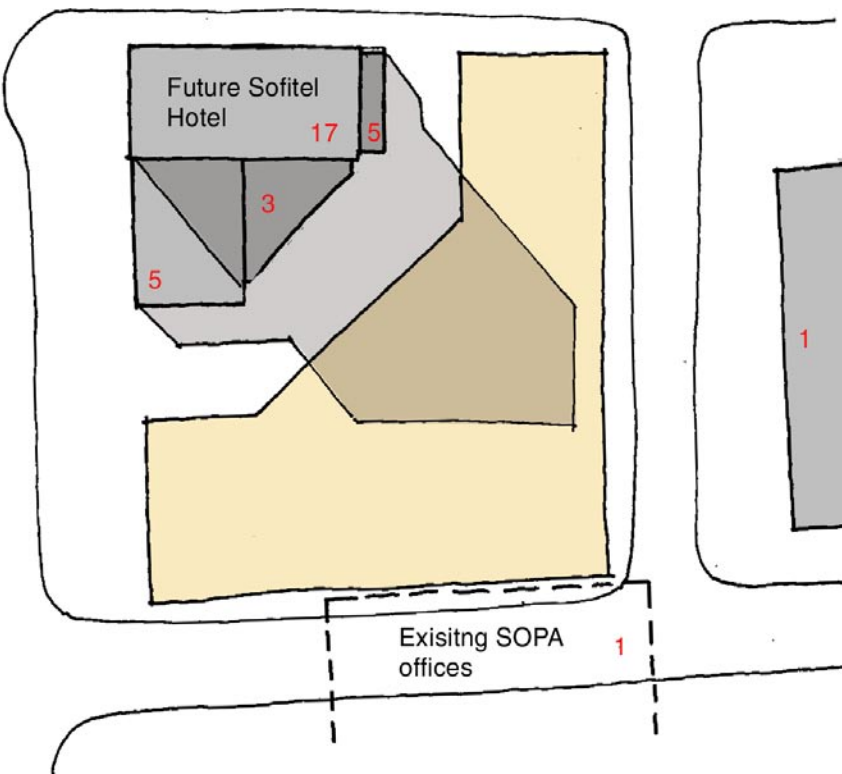




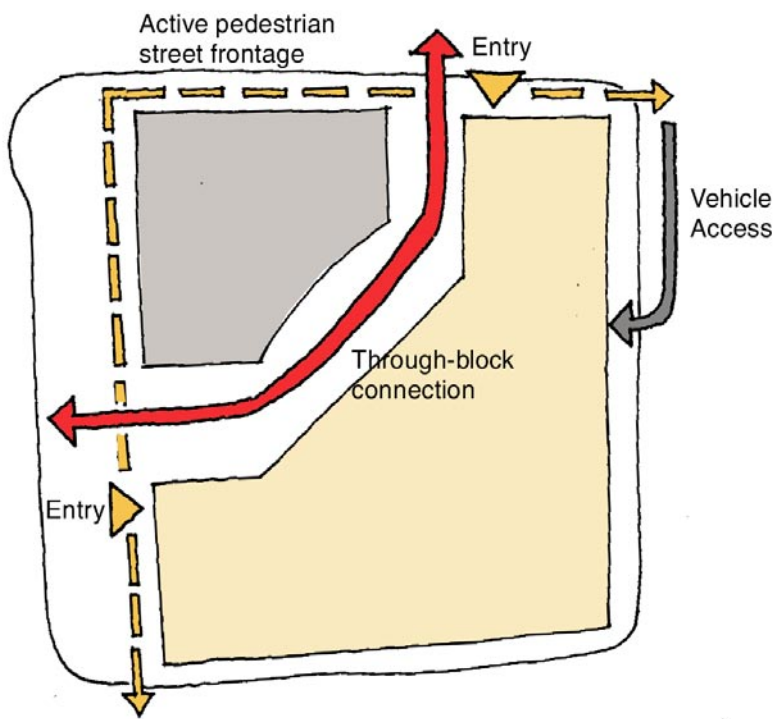
Site Boundaries



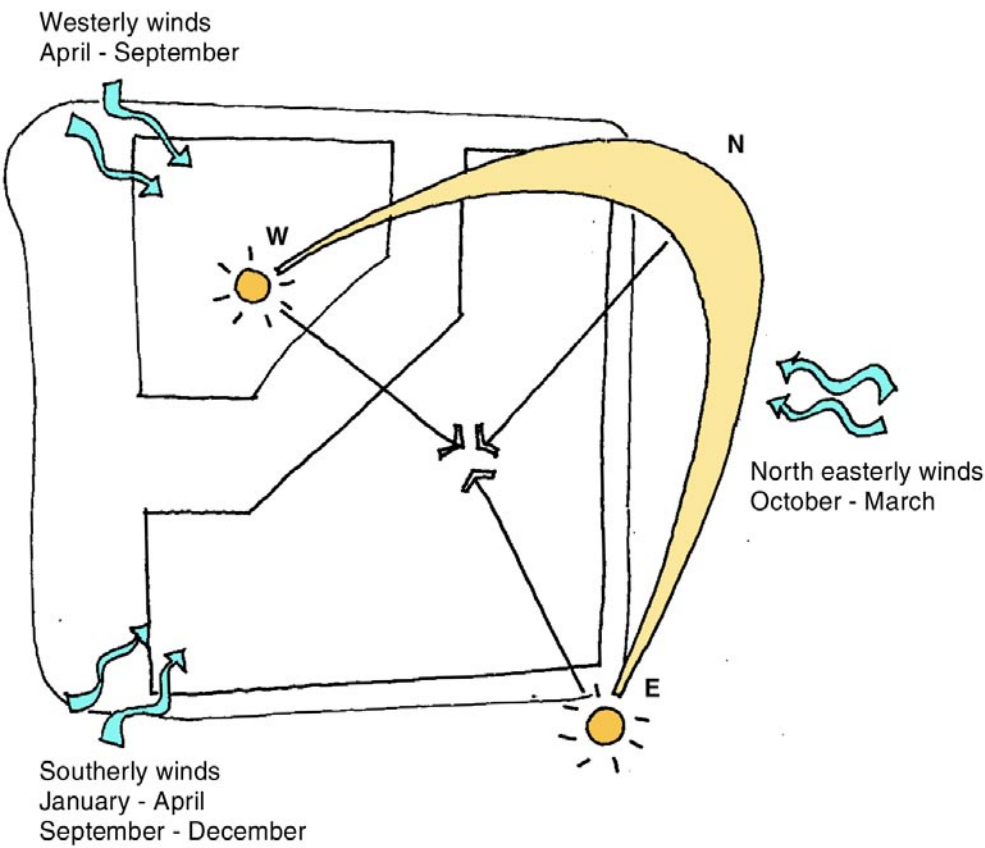
Landscape & Topography



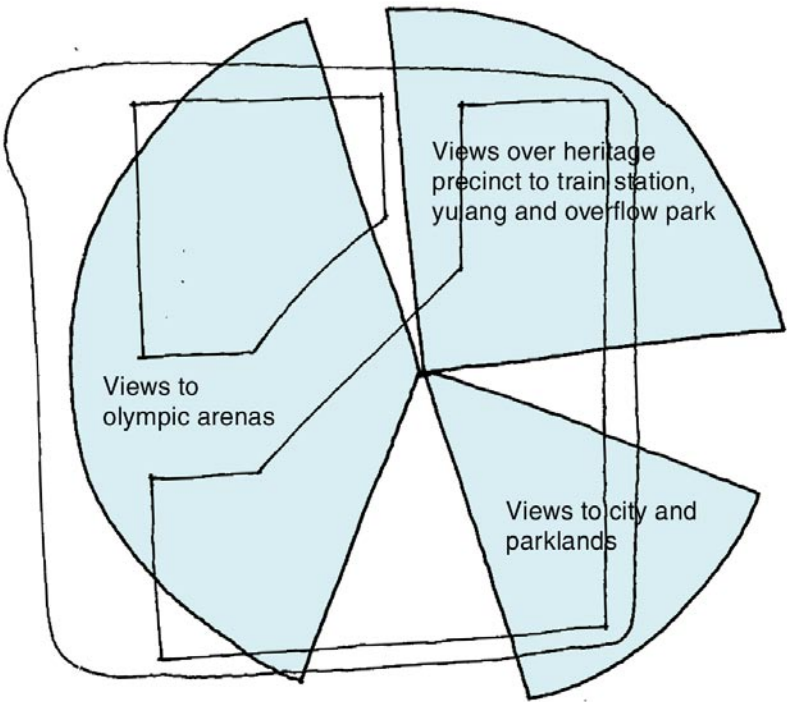
Neighbouring Buildings



Vehicular & Pedestrian Connections



Environmental



Views

**View Opportunities**  
The site enjoys views to the north over the Abattoir Heritage Precinct towards the Train Station, Yulang and the Overflow Park. To the west are views over Olympic Boulevard, the Aquatic Centre, Athletic Centre and Telstra Stadium. The the east are city and parkland views.

Keyplan



View 1a, b, c

View 2



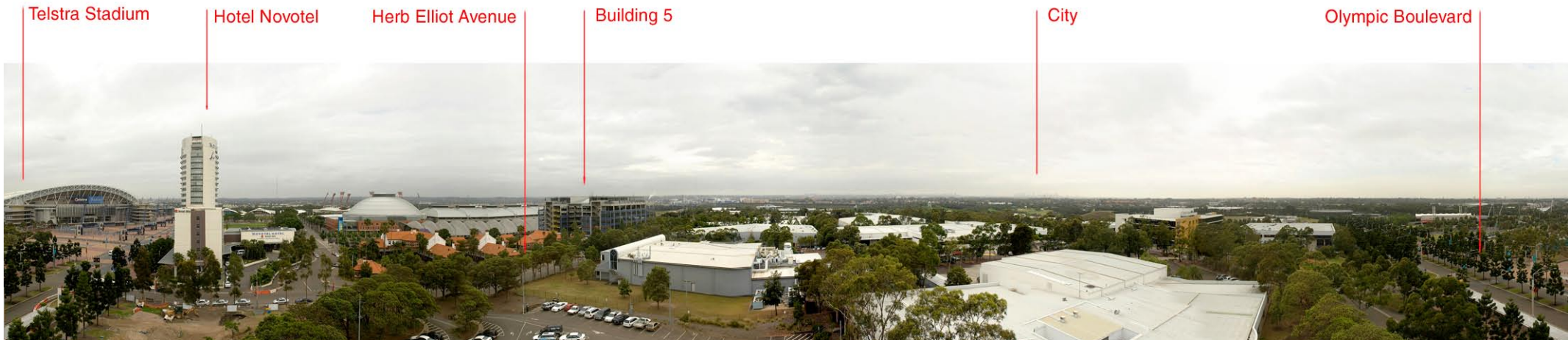
View 1a



View 1b



View 1c



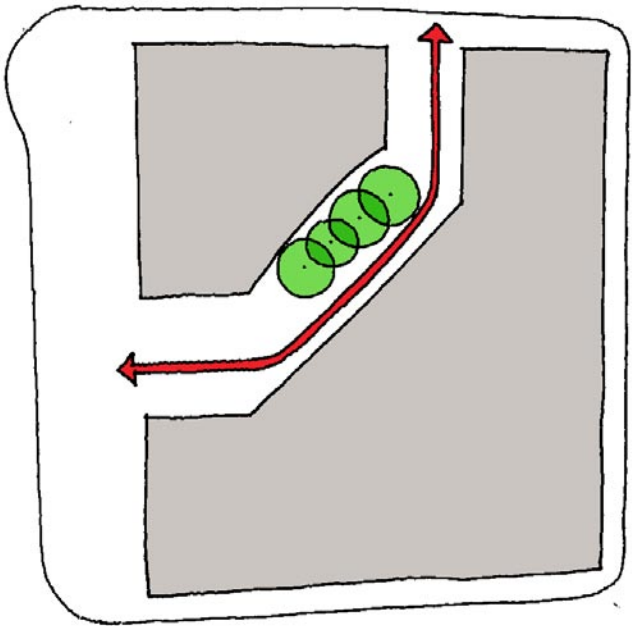
View 2

**Ground Plane Concept**  
The building is entered off both Herb Elliot and Olympic Boulevard via a generous double height colonnade leading into a large entry lobby adjoining the public domain and through site link. Continuous glazing provides increased visual and physical connections between the public domain and the interior spaces.

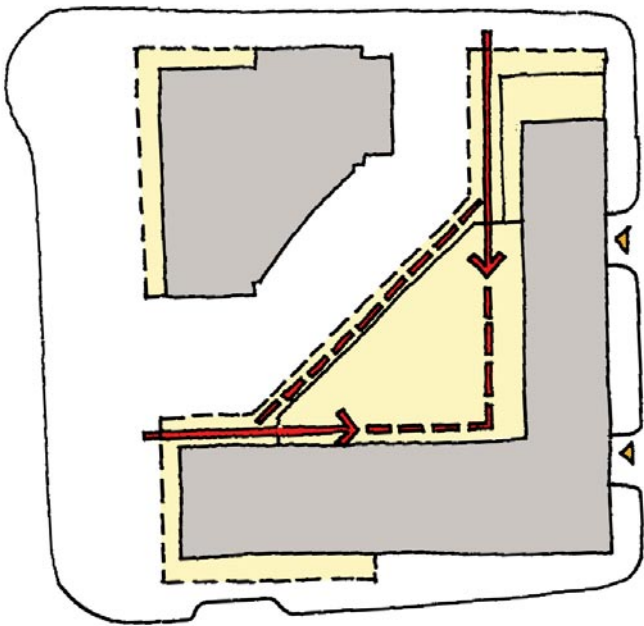
The lobby accommodates reception, waiting and informal meeting facilities that are vertically connected and naturally lit by the full height atrium to the office levels above. The line of security is located at the lift lobby allowing public access to the lobby during business hours. A north facing café with provision for outdoor seating provides street activation to Herb Elliot Avenue.

Loading facilities, car park entry, back of house areas and car park shuttle lifts are located along the North East edge of the site away from the primary street frontages. Temporary driveway access located within the boundary of the site will be provided off Herb Elliot Boulevard until such time as the new eastern road is constructed.

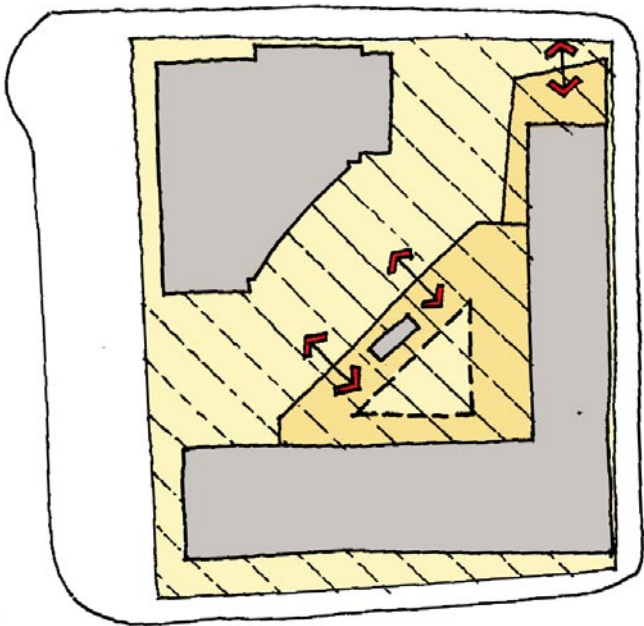
Ground floor office/ future retail space is located under the southern office floor plate.



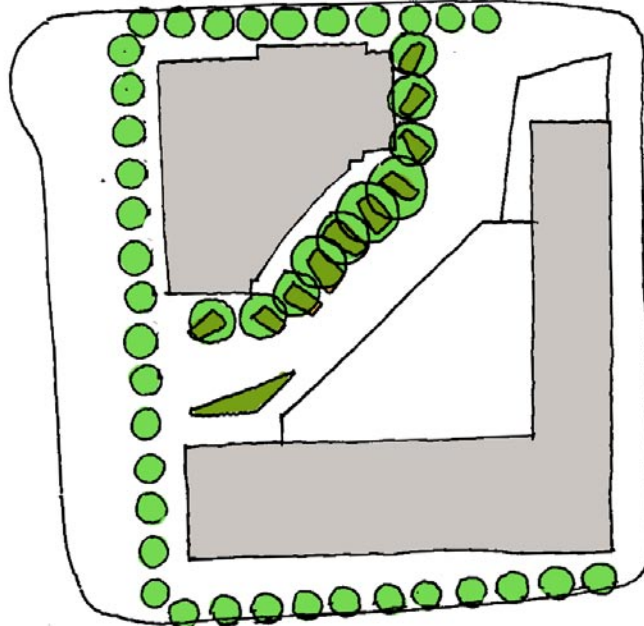
- 1.
- > through site connection to be reinforced
  - > four existing trees retained



- 2.
- > colonnades along street edge and through site connection
  - > pedestrian entries off Olympic Boulevard
  - > carpark and service vehicle access off new eastern road



- 3.
- > atrium extends to ground plane
  - > public domain & lobby visually and physically connected
  - > activation of street and through site connection with cafe, lobby & lounge areas
  - > landscaped ground plane ties site together

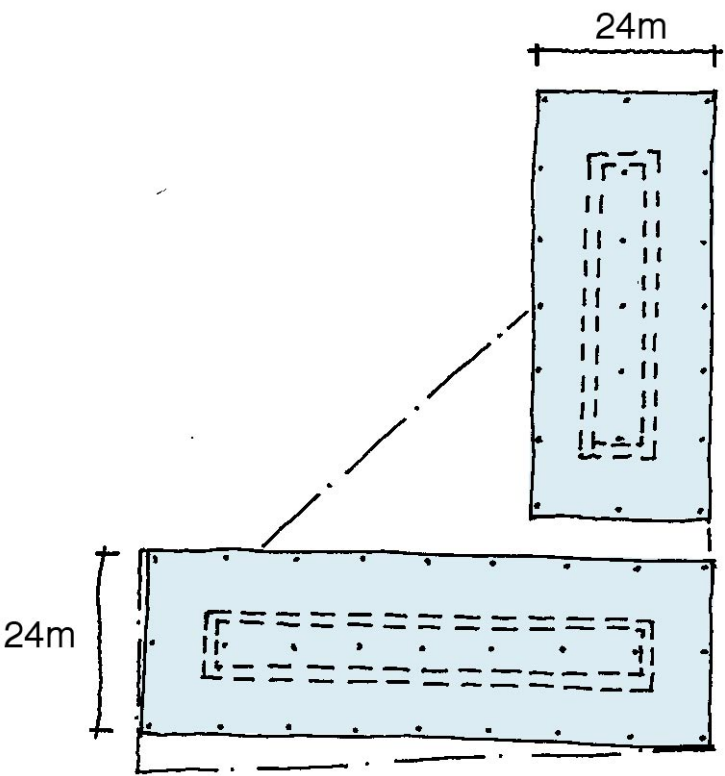


- 4.
- > planting beds and trees reinforce legibility of through-block connection
  - > public domain finishes to match SOPA's design guidelines

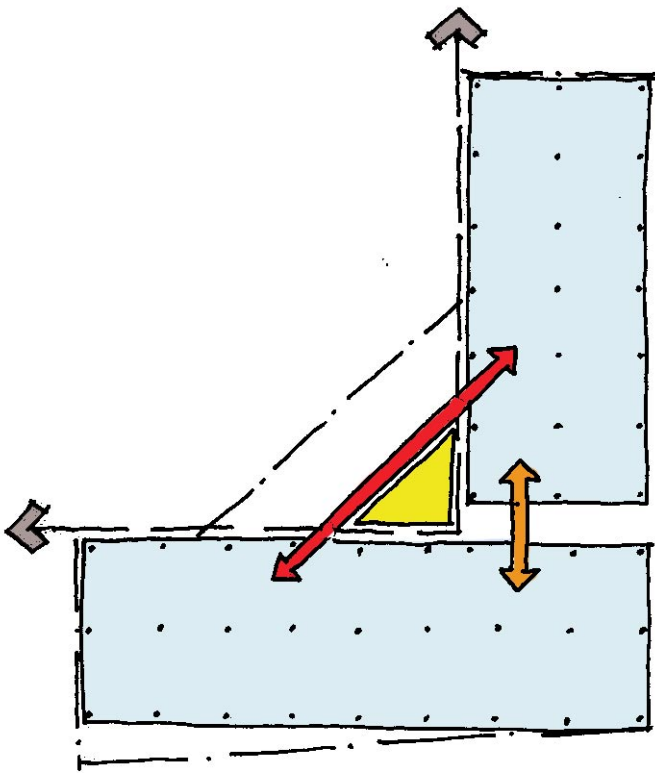
**Floor Plate Concept**  
Two 24m wide large open floor plates are located at 90 degrees to each other to accommodate the 'L' shaped geometry of the site. The floor plate has columns located on the perimeter at 9m centres. These span 11.4m to a single centrally located row of columns resulting in a flexible and unencumbered floor plate.

The floor plates are horizontally connected by primary circulation angled at 45 degrees to the floor plates in response to the geometry of the western site boundary and the proposed Sofitel Hotel. The lift core, amenities and hub spaces are located off this circulation route that along with the floor plates define the edges to a large full height triangular shaped atrium.

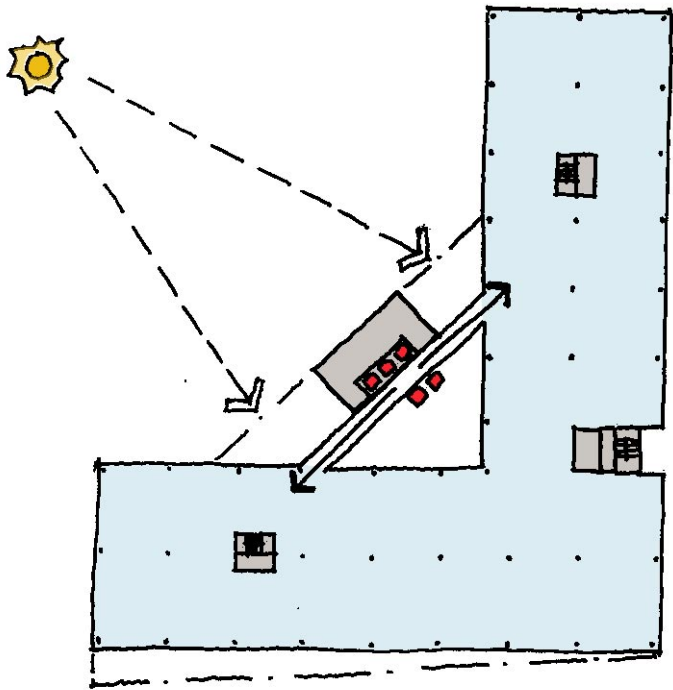
This planning concept results in a flexible working environment that encourages a high level of interaction and presents the atrium as the communal heart of the building. The detached lift core and amenities ensure maximum flexibility for the office areas and offer centrally located points of entry on to both floor plates. In addition these built elements provide the atrium with good protection from low angle winter sun. The hub spaces provide a strong visual connection between the atrium and the exterior.



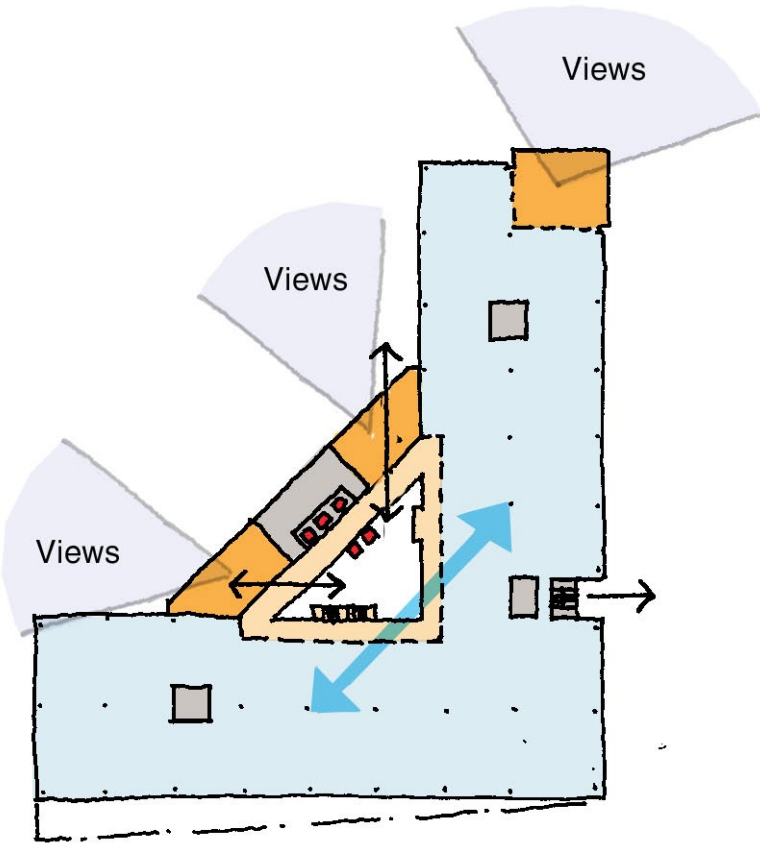
Flexible Floor Plates



Floor Plate Connections



Core Location

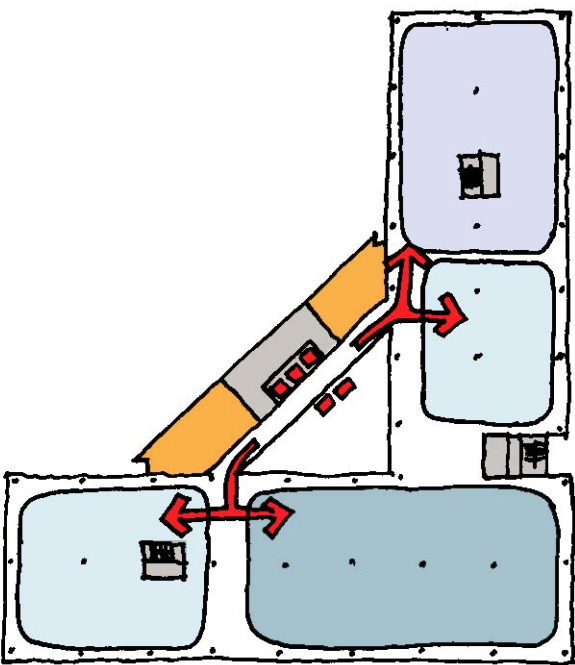
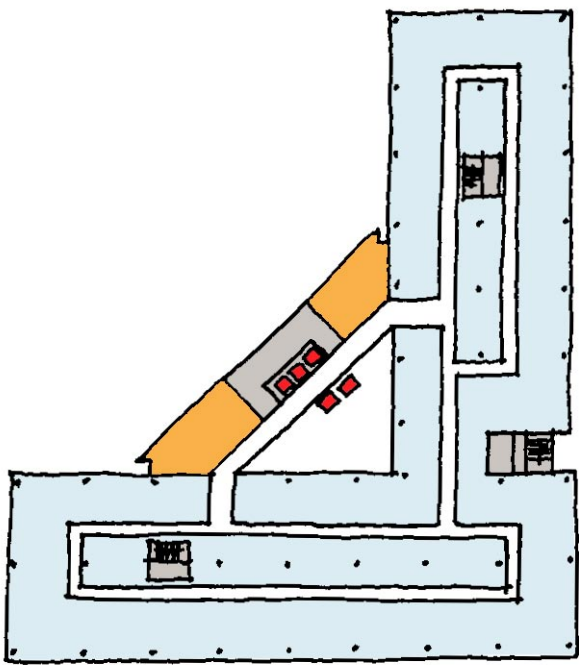


Interaction

**The Atrium**  
The large triangular atrium forms a natural 'hub' for the building encouraging vertical connectivity and being readily accessible from the floorplates and lift lobby. The void contains lobby bridges with glass lifts and interconnecting stairs to create vertical connectivity between floors and a sense of contiguous space. The adjoining hub spaces, amenities and location of meeting spaces encourage interaction within the campus like environment.

**Below**  
Artists Impression of Atrium (with indicative tenant fitout)



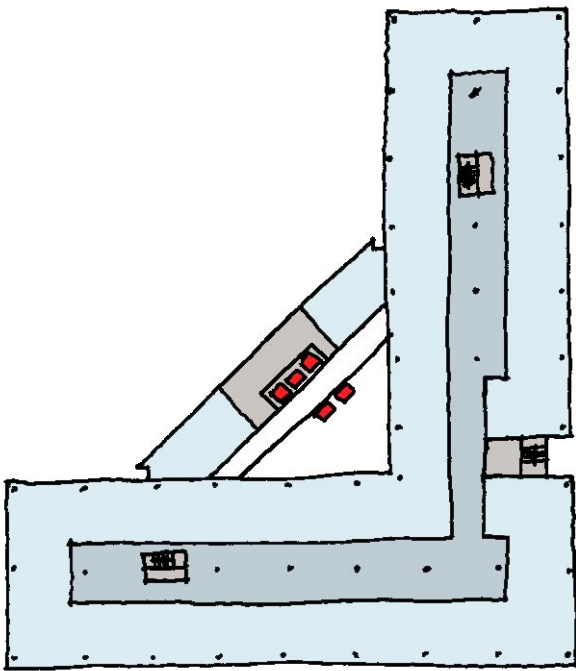


**Tenant Efficiency**

The 24m wide unencumbered floor plate results in an excellent tenant efficiency of over 90%.

**Flexibility & Team Zones**

Large open floor plates with centrally located points of entry to the floor allow for easy subdivision into separate tenancies and team zones



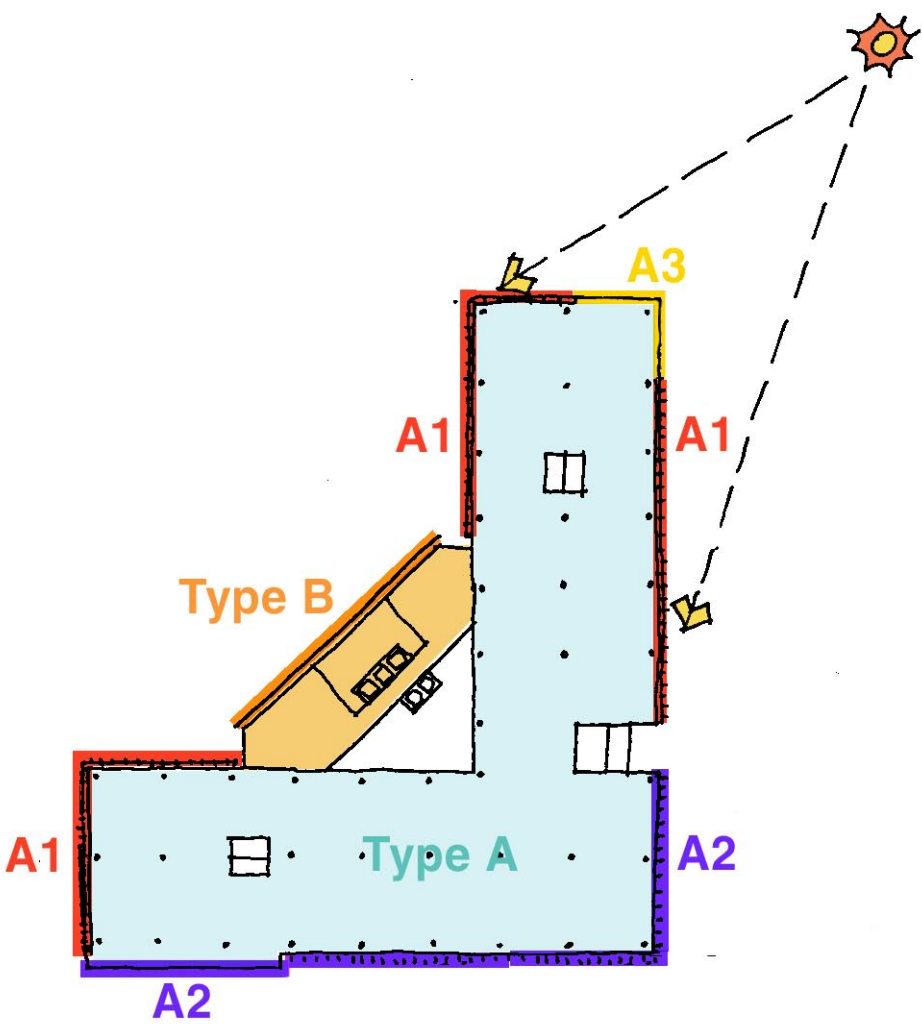
**Natural Light (building depth)**

The office space has good access to natural light with 60% of the floor plate being type A space (within 6m of natural light) and 40% type B space (within 6 - 12m of natural light)

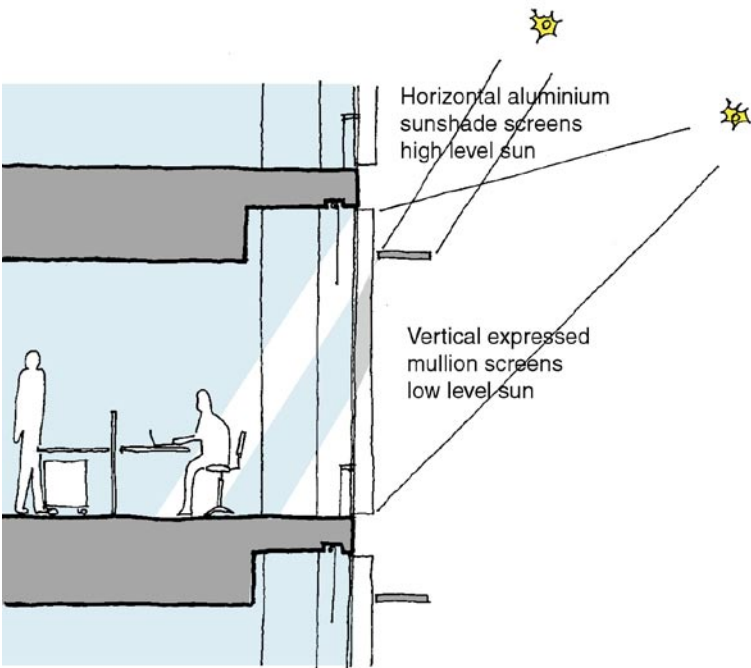
**Facade Concept**  
The unencumbered floor plates are glazed on all sides emphasising the openness of the floor plate, and maximising the natural light, transparency and outlook from the working environment. To ensure that good thermal comfort and energy efficiency is achieved a system of vertical and horizontal aluminium sunshades are proposed that responds to the orientation of the building.

Horizontal sunshades located at ceiling level provide shade to the vision glass during the middle of the day. In addition external aluminium mullions provide vertical shading at 1500mm centres to facades exposed to low angle east and west sun. The façade is articulated by a series of horizontal terracotta (or similar) bands located at floor level. Combined with the sun shading these achieve a highly articulated façade and strong horizontal expression consistent with that of Buildings 4, 5 & 6.

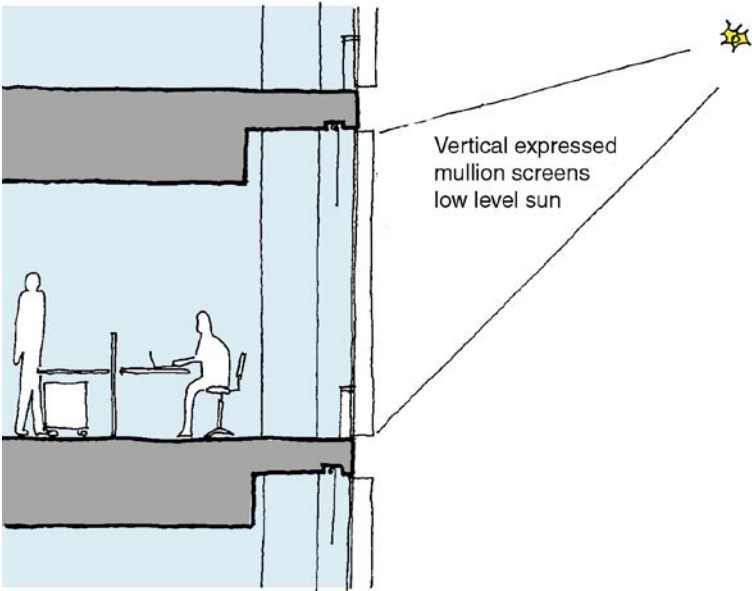
The hub spaces and bridge linking the floor plates are expressed as a detached element with full height vision glass in contrast to the office volumes. A fine terracotta(or similar) screen is hung from the steelwork to provide vertical sun shading to the west facing glass.



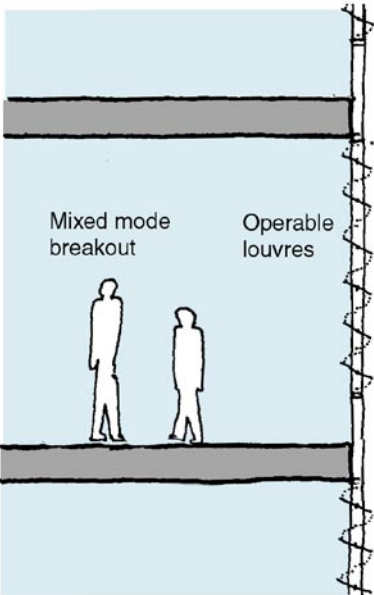
Facade Key Plan



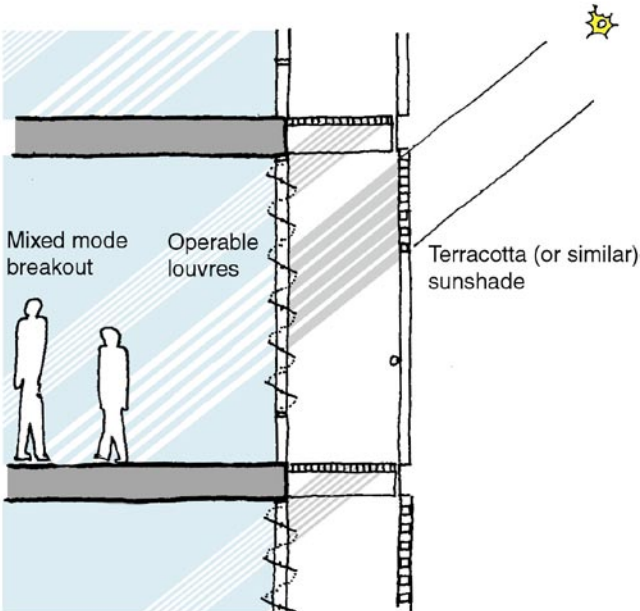
Facade Type A1 (North/West/East Orientation)



Facade Type A2 (South/East Orientation)



Facade Type A3 (Expressed Breakout areas)



Facade Type B (Core)

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- External Finishes Legend
- 1. Terracotta (or similar) cladding
  - 2. Horizontal natural anodised aluminium sunshades
  - 3. Vertical black anodised aluminium sunshades
  - 4. Performance vision glass DGU
  - 5. Glass shadowbox spandrel
  - 6. Anodised aluminium cladding

**Below**  
Part section of proposed office facade



Landscape Design Statement

The intent of the Landscape Design for SOPA Site 4B is to create a green, legible and public through site link between two new town centre developments (Site 4A and 4B). The space provides shade, opportunities for seating and an integrated public art program. The public through site link connects Herb Elliot Avenue to Australia Avenue.

This vegetated through site link will encourage a pedestrian connection between the Railway Station, the Abattoir Heritage Precinct and the Sydney Aquatic Centre and will strengthen the campus character of the strip of buildings to the south of the Sydney Olympic Park Railway Station of the Sydney Olympic Park town centre precinct.

The general arrangement of the design is based on the retention of four existing *Lophostemon confertus* (Brush Box) which form a part of an avenue planting which lined the stock route to the former abattoir.

Each of the four trees are surrounded by a large garden bed which strengthens their vigour, and provides a low level green overlay to the site. One new Brush box is proposed to the south-eastern end to strengthen the group and the former arc.

New trees of *Toona sinensis* (Chinese Toona) are proposed to reinforce the line of the existing *Lophostemon confertus* on each side of the through side connection and emphasise the link to the Historical garden on Herb Elliot Avenue.

The *Toona sinensis* has a light spreading habit which will form an “umbrella” canopy allowing filtered shade in summer and views along the through site link.

Existing and new trees and garden beds are set back from the Site 4B building and form a clearly defined through site link.

These decorative planting beds are planted with a selection of species which display some of the characteristics of the garden beds in the Maiden Gardens (former Abattoir) located opposite on Herb Elliot Avenue, predominately gardenesque, shade loving perennials. The planting proposed; *Alpinia caerulea*, *Aspidistra* spp., *Asplenium australasicum*, *Canna* spp., *Clivea* spp., *Cordyline* spp., *Ctenanth* spp.e, *Doryanthes palmeri*, Lillies and *Trachelospermum jasminoides* is designed to thrive in the relatively shaded condition of the through site link.

Planting beds of the same size are spread through the space to create a strong sequence, viewing the garden by wandering through it.

The ground surface of the public domain will match with SOPA's UEDM Design guidelines paving strategy. Concrete unit pavers will be extended into the public through site link to achieve SOPA's desired continuity across the ground plane.

Decorative steel edges and strip drains enforce a diagonal rhythm and enhance a visual connection between Sites 4A and 4B with a continuation into the buildings atrium. The garden beds are anchored to these diagonal lines.

Benches are clearly and rationally distributed along the garden bed edges and a large sculptured bench forms a backdrop to the space providing shaded seating.

Existing Streetscape conditions

The site is located between Olympic Boulevard and Herb Elliot Avenue, within the urban core of Sydney Olympic Park. Herb Elliot Avenue currently consists of *Corymbia maculata* (Spotted Gum) which are located in gravel mulch within a grass verge. Where the building addresses Herb Elliot Avenue 4 existing street trees are to be removed to clarify the buildings address. Existing asphalt pavement material is to be retained along the length of the site.

On Olympic Boulevard the existing street trees and pavements are to be retained.

Pavers are to be continued between the existing *Araucaria cunninghamiana* (Hoop Pine) in accordance with the UEDM.

Streetscape proposal:

In accordance with the Sydney Olympic Park Master Plan 2006 two new roads are proposed to the eastern and southern boundary of the new development. These roads create a secondary frontage to the proposed building. The design of the streetscape will follow SOPA's UEDM guidelines.

Art proposal

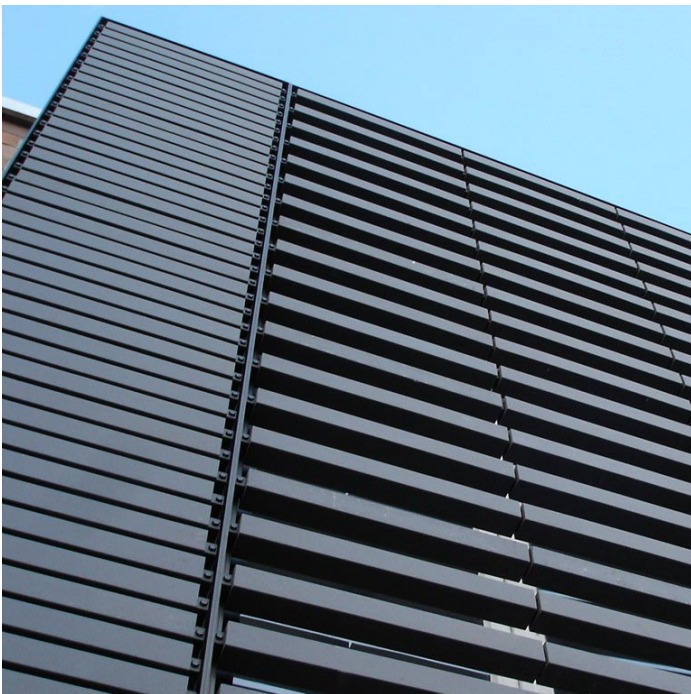
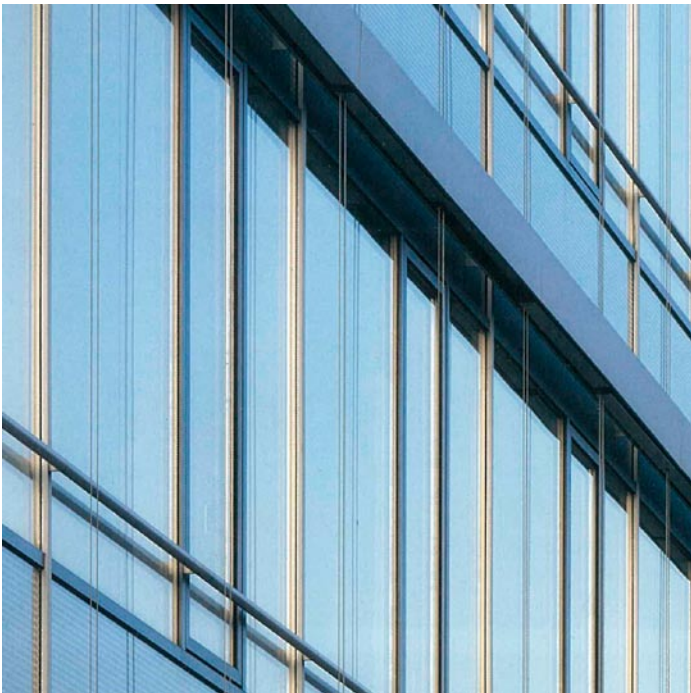
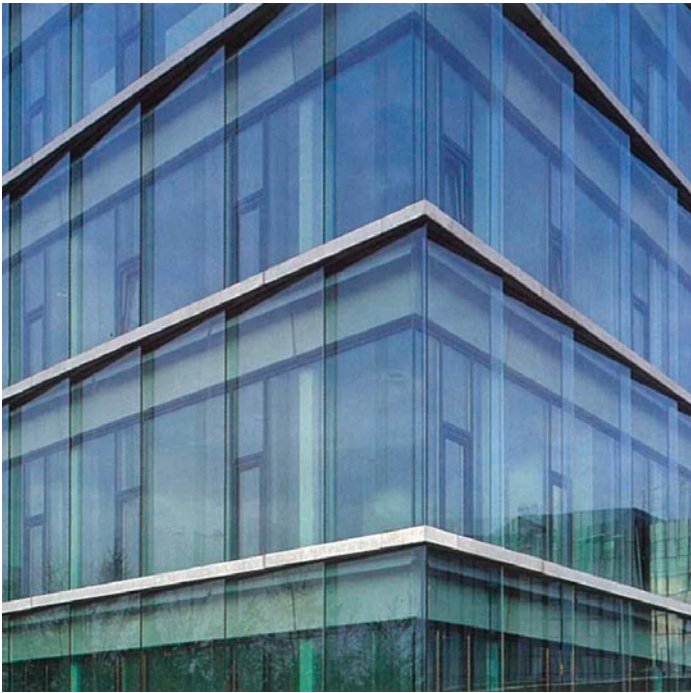
A site specific public art overlay is proposed for this site. The art overlay is to fit seamlessly into the infrastructure of the link, reinforcing the landscape design and amplifying the character of the 'lane way' space. A detailed brief for the Public Art has been prepared by SOPA and will be used to underpin the design of the artworks.



**Below**  
Artists Impression of View from Herb Elliot Avenue



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| 15.12.06           |                       |       |
|--------------------|-----------------------|-------|
| Level              | Use                   | GFA   |
| Level 003 Basement | Parking               | N/A   |
| Level 002 Basement | Parking               | N/A   |
| Level 001 Basement | Parking//Change       | 132   |
| Level 00 Total     | Office, Retail, Lobby | 2530  |
| Level 01           | Office                | 3450  |
| Level 02           | Office                | 3704  |
| Level 03           | Office                | 3704  |
| Level 04           | Office                | 3704  |
| Level 05           | Office                | 3563  |
| Level 06           | Office                | 3610  |
| Level 07           | Plant                 | N/A   |
| Total Area         |                       | 24397 |

The definition we have to use for calculation of gross floor area is as follows:

“gross floor area” means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls as measured at a height of 1 400 millimetres above each floor level excluding:

- (i) columns, fin walls, sun control devices and any elements, projections or works outside the general line of the outer face of the external wall,
- (ii) lift towers, cooling towers, machinery and plant rooms and ancillary storage space and vertical air-conditioning ducts,
- (iii) car-parking needed to meet any requirements of the council and any internal access thereto,
- (iv) space for the loading and unloading of goods.

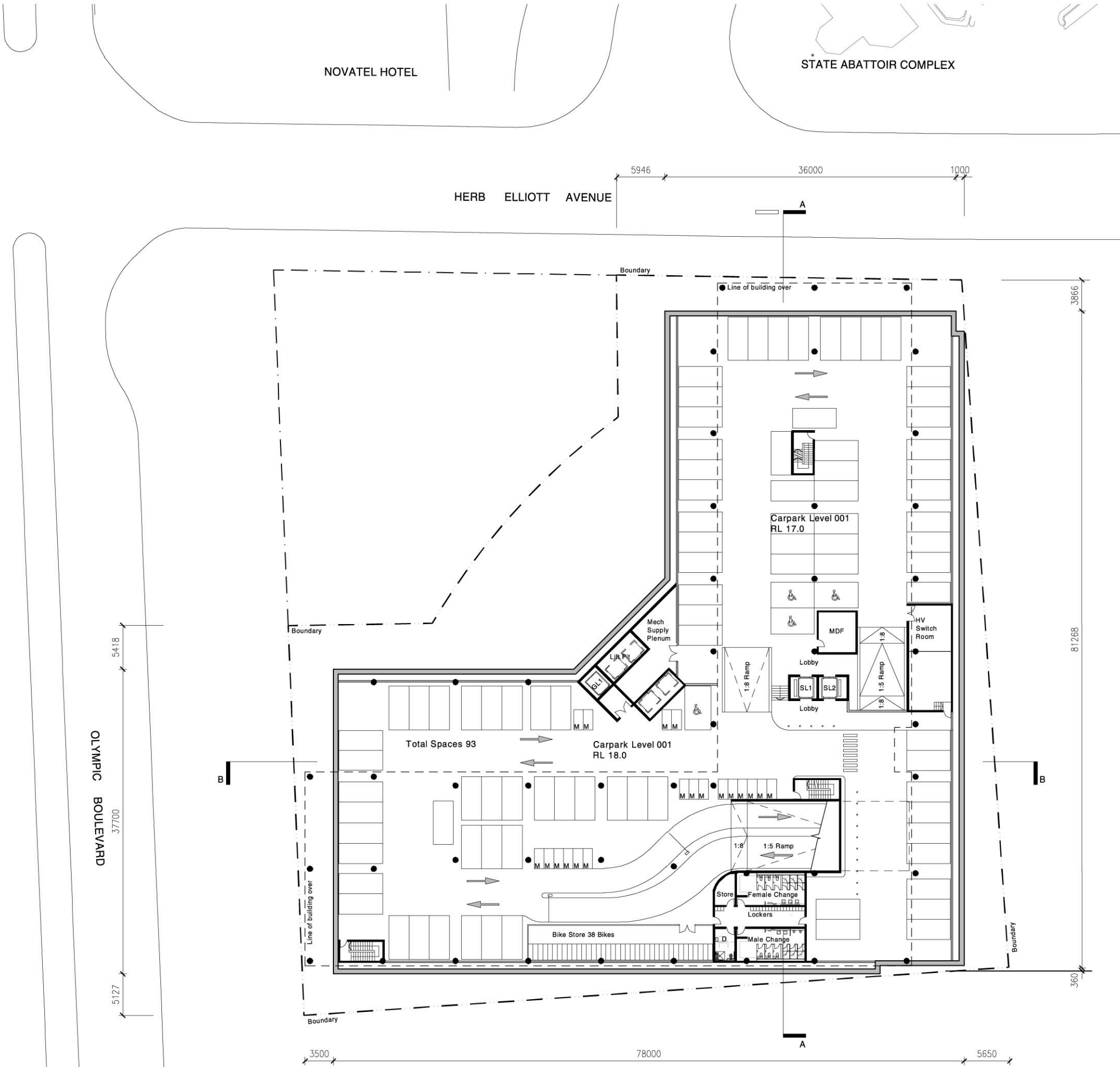
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SOPA 08 December 2006

|             |                                  |       |
|-------------|----------------------------------|-------|
| AR-EA-2.01  | Floor plan Basement Level001     | 1:500 |
| AR-EA-2.02  | Floor plan Basement Level002     | 1:500 |
| AR-EA-2.03  | Floor plan Basement Level003     | 1:500 |
| AR-EA-2.04  | Floor plan Level00               | 1:500 |
| AR-EA-2.05  | Floor plan Level01               | 1:500 |
| AR-EA-2.06  | Floor plan Level02-03            | 1:500 |
| AR-EA-2.07  | Floor plan Level04               | 1:500 |
| AR-EA-2.08  | Floor plan Level05               | 1:500 |
| AR-EA-2.09  | Floor plan Level 06              | 1:500 |
| AR-EA-2.10  | Floor plan Level07 Plant         | 1:500 |
| AR-EA-2.11  | Roof plan                        | 1:500 |
| AR-EA-5.01  | North Elevation                  | 1:500 |
| AR-EA-5.02  | East Elevation                   | 1:500 |
| AR-EA-5.03  | South Elevation                  | 1:500 |
| AR-EA-5.04  | West Elevation                   | 1:500 |
| AR-EA-6.01  | Section A-A                      | 1:500 |
| AR-EA-6.01  | Section B-B                      | 1:500 |
| AR-EA-21.01 | Shadow Analysis December 22      | NTS   |
| AR-EA-21.02 | Shadow Analysis June 21          | NTS   |
| AR-EA-21.03 | Shadow Analysis March 21/Sept 23 | NTS   |

Scale 1:250 @ A1  
1:500 @ A3



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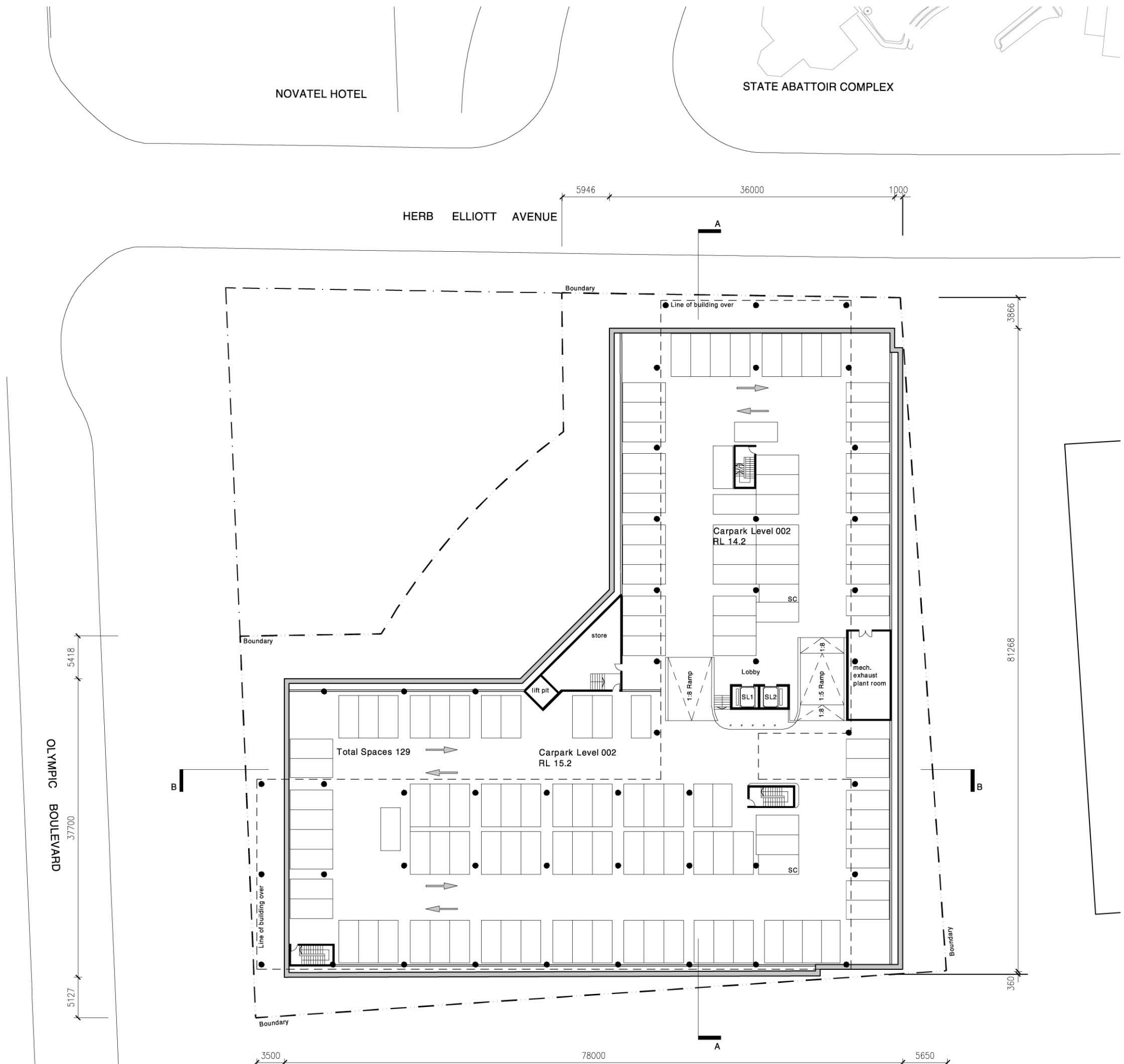
| Car Park Bays |     |
|---------------|-----|
| Level 001     | 93  |
| Level 002     | 129 |
| Level 003     | 137 |
| Total         | 359 |

| Legend |                          |
|--------|--------------------------|
| SC     | Small Car Bay            |
| M      | Motorbike parking space  |
| MDF    | Main distribution frame  |
| SL     | Shuttle lift             |
| GL     | Goods/service lift       |
| L      | Passenger lift           |
| ♿      | Accessible parking space |

Scale 1:250 @ A1  
1:500 @ A3



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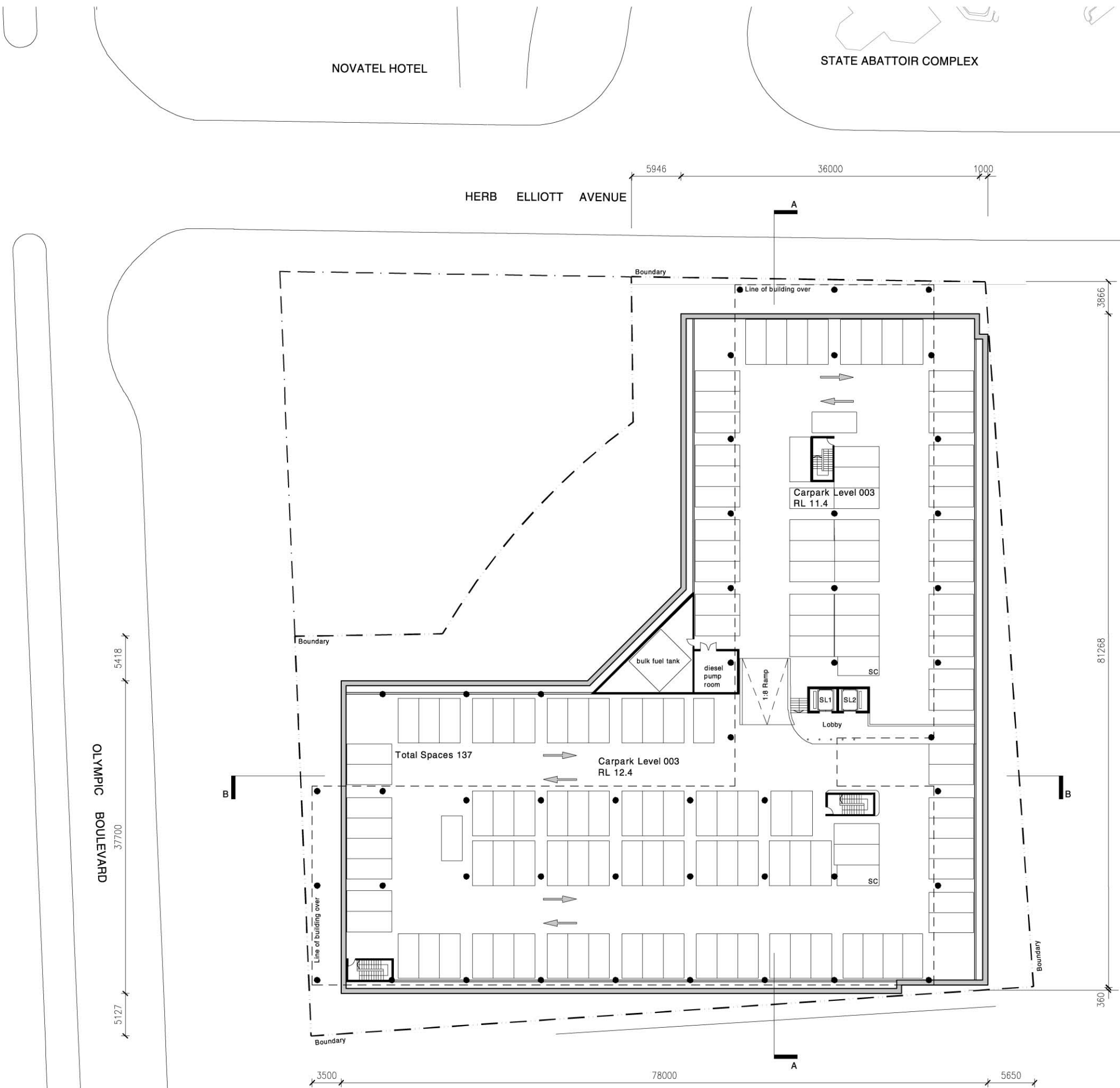
Legend

- |                                                                                       |                          |
|---------------------------------------------------------------------------------------|--------------------------|
| SC                                                                                    | Small Car Bay            |
| M                                                                                     | Motorbike parking space  |
| MDF                                                                                   | Main distribution frame  |
| SL                                                                                    | Shuttle lift             |
| GL                                                                                    | Goods/ service lift      |
| L                                                                                     | Passenger lift           |
|  | Accessible parking space |

Scale 1:250 @ A1  
1:500 @ A3



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- Legend
- SC Small Car Bay
  - M Motorbike parking space
  - MDF Main distribution frame
  - SL Shuttle lift
  - GL Goods/service lift
  - L Passenger lift
  - Accessible parking space