MASTER PLAN REPORT

BLOCK 13 SECTION 9 BARTON
PROPOSED MIXED USE DEVELOPMENT

PREPARED FOR
DEPARTMENT OF FINANCE OF ADMINISTRATION

Prepared by

CAPITAL PLANNERS

February 2006

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1 Introduction

1.1 Background

The land, known as Block 13 Section 9 Barton is currently National Land managed by the Department of Finance and Administration (Finance). It is no longer required for direct Commonwealth development and therefore forms part of Finance's current Divestment Programme. Finance has appointed a consultant team to describe and illustrate how the National Capital Plan and other planning and development considerations will be applied, to allow an appropriate and efficient redevelopment of the site. As a starting point the site was seen as suitable for prestigious offices, residential units and retail facilities although there was no commitment to any particular mix of uses. A parking structure to replace agreed public parking demand was accepted as certainty.

Divestment of the property will lead to the development of the site by the successful purchaser(s). A condition of the sale, and/or new crown lease, will be that the site is developed in accordance with detailed conditions established and approved through the preferred Master Plan and incorporated into the National. The land is within a Designated Area of the National Capital Plan, and partly has an existing land use policy of "Commercial" (part fronting Broughton Street), with the remainder having a land use policy of "Car Park". The part zoned car park allows some minor, ancillary uses, but would require an Amendment to the National Capital Plan to be approved before it could be developed for any major purpose other than car parking.

A number of land use and Master Plan Options, which have been prepared and tested, are all based on a land use mix which includes offices, residential, retail and personal services, and a car parking structure. The respective size and form of each element was determined following market and economic analysis, project costing, and urban design and planning studies. The preferred option has been further evaluated and developed in consultation with the National Capital Authority (NCA). Currently an agreement in principle on the preferred Master Plan Option (Option 5) has been reached, which is discussed in Section 8. This Option, subject to Client agreement will be referred to NCA for formal consideration with a request that it be accepted as a basis for the preparation of a Draft Amendment to the National Capital Plan.

The location of development site is shown at Figure 1, whilst its metropolitan location is shown at Figure 2.

1.2 Project Objective

Finance's primary project objective is to secure a development concept for the site, based on market feasibility and best practice planning and urban design, and which is capable of gaining the agreement of NCA. A second objective of Finance is to have an understanding of likely development costs and returns, and therefore the potential land value. Finally Finance need to ensure that the agreed proposal had been fully discussed with, and to the maximum extent possible, supported, by key stakeholders including NCA, Department of Environmental

& Heritage, neighbouring property owners, and government agencies accommodated in the area.

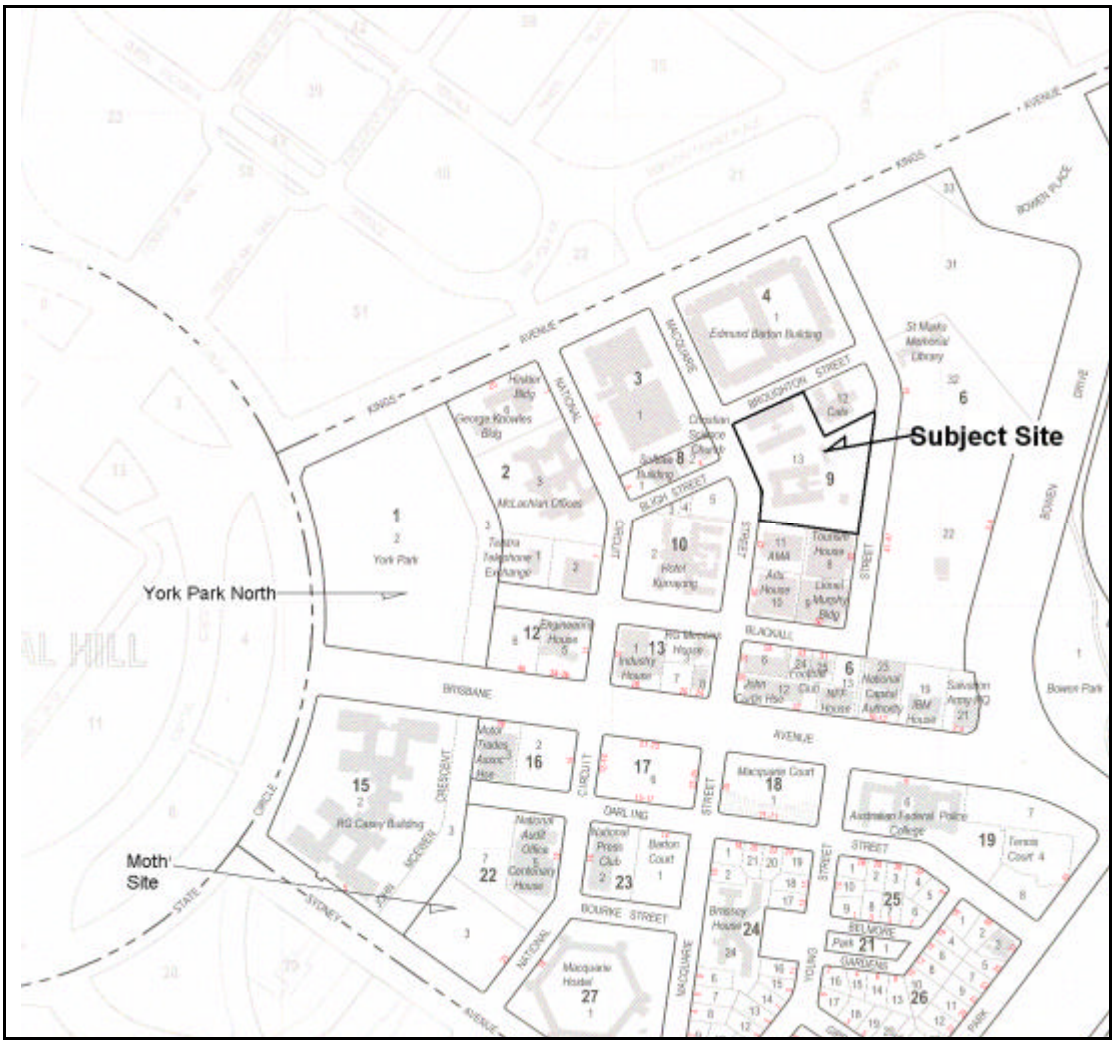

Figure 1: Location of Subject Site

1.3 Project Team and Responsibility

The study was undertaken using the expertise and knowledge of the following project team:

Capital Planners (Malcolm Smith and Dr Kamal Uddin)

Lead consultant (The Consultant), who managed town planning and statutory planning aspects of the project as well as project co-ordination and management. Malcolm and Kamal retained overall direction and control and attended all PCG meetings, as well as all meetings with NCA and other stakeholders.

Colin Stewart Architects (Colin Stewart and Kirsty Westaway)

Colin Stewart Architects (CSA) undertook various aspects of the project such as urban design analysis, strategic design, master planning, options development and architectural concepts.

Maunsell (Neil Graham and Peter Evans)

Maunsell contributed to this project with transport planning, traffic engineering, and physical infrastructure (services), mainly through two of its senior professionals i.e. Neil Graham (Traffic and Parking Assessment), and Peter Evans (Physical infrastructure and water management), supported where necessary by other senior engineering staff.

dsb Landscape Architects

The dsb team (Paul Bombardier and Michael Reeves) undertook landscape analysis and a vegetation assessment. The team also produced a Landscape Master Plan in association with the overall Master Plan.

Ernst & Young

Ernst & Young (through Robert Smyth) contributed to the project by researching and compiling relevant property and market information and provided strategic real estate advice and analysis for each option. It also contributed through providing relevant financial data as a master plan input and determined a risk management strategy.

Wilde & Woollard

Wilde & Woollard (Stuart Fagan) contributed to the project by providing construction cost for each of seven options.

All of the above represented the core team, who attended most PCG and NCA Liaison meetings. Other members of the team, which have provided essential support inputs, were as below, plus Earthtech (detailed site survey), and ACT Geotechnical Engineers (desk top geo-tech and contamination review).

Archaeological Heritage Survey (AHS)

Archaeological Heritage Survey, in consultation with Heritage Unit of Environment ACT examined possible heritage issues.

David Hogg Pty Ltd

David Hogg Pty Ltd (through David Hogg) contributed to the project by providing ecological notes on the subject site.

1.4 The Project Brief

The brief required The Consultant to undertake and/or address the following tasks:

- Develop and Design Master Plan
- Compile existing property, environmental and heritage information
- Detail existing infrastructure and facilities
- Prepare a detailed Survey Plan
- Undertake a Preliminary Site Investigation

- Prepare a Landscape Plan
- Undertake an assessment of environmental and heritage factors
- Identify Architectural Planning Opportunities and Constraints
- Prepare a Traffic Management Plan and Parking Study
- Illustrate existing and proposed engineering services
- Provide Strategic Market Advice
- Manage, Negotiate and Prepare documentation for Statutory Planning Authorities
- Analyse existing data against the requirements of strategic planning guidance
- Prepare a Constraints Plan
- Prepare a Phasing Plan
- Prepare master planning data for Project Control Group
- Prepare a Project Planning Study
- Prepare a Risk Management Strategy
- Prepare an Executive Summary for presentation to Steering Committee
- Deliver preliminary and final report
- Stakeholder Consultation

1.5 Development History

The land has been heavily disturbed as a result of past land use activities. The eastern part of the site has been used as an informal car park for some considerable time. The western part of the site was previously developed with migrant hostel style transportable building consisting of single-storey timber structures supported by above ground brick pier footings. These buildings were provided for Commonwealth Offices, and were known as “The Woolsheds”. These buildings were demolished in about 1997, and the original car park was extended and partly sealed about five years ago. There are now no buildings on the site and it is totally used for parking. The site is not listed on any heritage registers.

2 Project Methodology

A project methodology was developed to ensure that all tasks outlined above where rigorously addressed in an iterative sequence. The main steps and processes followed in the Master Plan development for the site are described below:

- Site Analysis and Assessment

A detailed analysis was undertaken of the site and environs including analysis of topography and landform, detailed assessment of all existing trees, landscape analysis, assessment of any heritage and ecological constraints, desk top geo-tech and contamination study, microclimate assessment (solar access, wind, potential overshadowing), existing site services and need for connections, relocations, or easements, views to and from the site, and nature and form of adjoining development (e.g. Ottoman Restaurant, Edmund Barton Building, etc) and their influence on development).

Transport traffic and parking assessments of the site and wider area also formed an important part of the studies. From these analyses and assessment the constraints to, and opportunities for, development were identified.

- Statutory Planning Framework

Existing land use and development policy as derived from the National Capital Plan, was identified, in particular, the range of permitted purposes (mandatory and optional), development criteria (height, address and set backs, plot ratio, parking provision and access etc). These criteria were checked with NCA at this stage, as was the potential form of any Amendment to the Plan, including Detailed Conditions of Planning and Design and Development.

- Round 1 Stakeholder Consultation

First round of stakeholder consultation mainly involved Commonwealth Agencies and local buildings owners. The objective of theses consultations was to report on all analysis to date, and to canvass various scenarios. All Stakeholders were asked to not only comment on this work, but to also identify issues to be considered in further development of various master planning options. The main issues raised were parking and lack of retail services.

- Development of Optional Concepts

Based on earlier work such as site analysis and assessments, and NCA and stakeholder inputs, several options were generated in the form of conceptual master plans and architectural sketches. The relevant data e.g Gross Floor Area, land use, building height, for each option was identified.

- Costing and Market Inputs to Options

Construction costs and market and real estate considerations were prepared and taken into account in the development of each option.

- Refinement of Options

The Options were evaluated against agreed project objectives and other criteria, including those related to market and real estate matters, site constraints and opportunities, transport parameters, site serviceability, likely costs and returns, and risk assessment. A range of

options were discussed with NCA, and their feedback formed an important part of the refinement process.

- Round 2 Stakeholders Consultation

The second round of stakeholder's consultation was held with the same government and private interests. A possible preferred development scenario was presented. Feedback was generally supportive.

- Testing of Master Plan Options

All development Options were presented to and discussed with the National Capital Authority, including a potential preferred (Option 3A) option. Matters such as land use mix, urban structure, building height flexibility, and parking analysis were discussed in detail. NCA provided comments at the meeting, and follow up written comments.

- Selection of Preferred Master Plan Option

The feedback from NCA led to a new preferred development option to be developed. The new master plan was further costed, evaluated and detailed, and established as the preferred option. It is described in this report as Option 5.

3 Site Analysis and Existing Infrastructure

The various site and area analysis and assessments are described below, and in some cases in more detail in the various Attachments. Various site analysis sketches are included in the Additional Figures at the end of report text.

3.1 Site Location and surrounding development

The site is described as Block 13 Section 9 Barton, ACT, and has an area of 1.85 hectares (approx). It has frontages to Blackall Street, Broughton Street and Macquarie Street. The land is generally flat and for the most part has bitumen and gravel surfaces consistent with its car park use. The land contains a few scattered trees. The site is mainly located in an office precinct between Kings and Brisbane Avenues, consisting of government constructed office buildings and a few private enterprise offices.

The office development is characterised by a series of large buildings, set in generous landscape setting. The adjacent Edmund Barton Building presently occupied by Department of Agriculture, Forest and Fisheries, Australian Public Services, Robert Garran Offices occupied by Attorney General's and McLachlan Offices occupied by Prime Minister and Cabinet. All buildings address avenues and streets, generous verges, mature street trees and established paths and street lighting. These buildings, although accommodating Commonwealth offices, are privately owned following previous divestment actions by Finance. Some of these buildings, eg 1 and 3-5 National Circuit, are being redeveloped, and others will follow. The Hotel Kurrajong, located between National Circuit and Macquarie Street, has been used variously for a residential hostel, a hotel and temporary office accommodation. Currently, Hotel Kurrajong accommodates an International Hotel School.

Though the site is located in a predominately office precinct in Barton, there are few new residential developments including "The Landmark" on the eastern side of Blackall Street and "The National" on Brisbane Avenue. Other residential areas lie within a precinct on the southern side of Brisbane Avenue, bounded by Telopea Park and National Circuit. Brassy Hotel on Belmore Garden is operated as a hotel and occupies a site within the residential precinct. The former Macquarie Hotel site, which is also in the general residential precinct, was also sold by Finance some years ago, and is being redeveloped for a mix of office, hotel and residential uses.

There is no local shopping centre in Barton and Parkes. Residents and employees in Barton area are served by the Kingston and Manuka shopping centres, which are located at a distance of approximately 1.65 and 1.60kms respectively from the centre of Barton. Both provide a diversity of retail outlets, eating establishments and services. Generally these distances are too far to walk, and most visits to either centre would be by car.

The site is within walking proximity to Parliament House, the Parliamentary Triangle and Lake Burley Griffin. The location allows views to Lake Burley Griffin and Parliament House at selected points along the north-east and north-west boundary respectively.

Telopea Park and Telopea Park High School are distinctive landmarks in Barton and are contained within well defined sties. The school dates from 1923 when it was opened as a

primary school to serve the southside residential community. Telopea Park was first shown on Griffin's Plan of 1915, together with Manuka Circle, as part of the formal geometry created by his redesign of the alignment of Canberra Avenue. The park is an extensive linear space, divided by a stormwater channel; with mature a canopy of trees both native and exotic species.

The lake to the eastern side of the proposed development is fronted by the "Landmark" residential complex and the St Marks Theological College and Library site, and the Australian Centre for Christianity and Culture, which have significant vacant spaces protected for ecological reasons. The eastern part of the subject site has a north-eastern aspect and views across Lake Burley Griffin.

3.2 Existing site use and conditions

The land is currently used on a temporary basis, as a free, unrestricted public car park, managed by Finance. The site is generally flat but slopes slightly from the high point at the south east corner to the north west corner, with a change of level of 5 metres over 195 meters. The car park is primarily used by surrounding office workers during office hours and is well utilised during weekdays, but is generally empty during evenings and weekends. The Ottoman restaurant and cafeteria, a relatively recent single storey building, is part of the same Section, but is outside the subject site boundary. In accordance with a licence agreement with Finance it has exclusive use of approximately 40 adjoining parking spaces.

A single access off Macquarie Street allows entry into the car park with three entry points off Blackall Street. There is no access through Broughton Street. Trees on this site range from two large Blue Gums to median and small size Plane and Oak trees which would have been planted around the original buildings and car parks on the site. Although performing a valuable function, the visual quality of the site is poor, with deteriorating bitumen, gravel, and illegally parked cars, and is not commensurate with the environmental and prestige quality of the surrounding office precinct.

3.3 Existing Geotechnical Character

A desk top geotechnical assessment of the development site has been prepared by ACT Geotechnical Engineers Pty Ltd and is attached at Attachment A. The report indicates the following subsurface profile:

Depth Interval	Geotechnical Profile
0m—0.5m/1m	FILL
0.0m/1m—0.5	ALLUVIAL Sandy Clay and Gravely Sandy Clay
0.5m/1.5—1.5m/2m	RESIDUAL Clay and Silty Clay
Below 1.5m/2m	EW/HW & HW SILTSTONE & SANDSTONE BEDROCK (very weak & weak)

Permanent groundwater is expected at about 7m/8m below existing surface levels. Temporary, perched seepages could be encountered at shallower depth, especially after rain.

Fractured rock associated with the geological fault could also provide pathways for seasonal seepages.

The site soils are expected to mostly comprise low and medium plasticity sandy, silty or gravely clays, which are generally suitable for use in controlled fill. The EW/HW and HW bedrock would break down during excavation and compaction to a clayey sandy gravel/clayey sand, which could also be used. It appears that there is no significant geo-tech impediment to development of the site, but on-site testing (drilling) should be undertaken by the developer prior to construction.

3.4 Topography

The site is generally level with slope slightly from the high point at the south east corner to the north-west corner. The whole site is generally at RL 571, with some mounding at the north-east corner (the Blackall Street and Broughton Street corner). A survey plan showing spot levels is included at Figure 3.

3.5 Air Quality and Micro Climate

The site is located within the broad central basin of Canberra, and air drainage is satisfactory. No major air quality issues are anticipated as a result of the development of the site, and the amount of the traffic entering and living the site each day will only be marginally above pre-development volumes. Dust and particle control during construction will be required to conform to standard practices, eg hosing down during windy conditions.

The taller residential developments can be located (e.g Option 5) to minimise any overshadowing of other development (except the parking structure). Standard NCA policy is also to specify non reflective materials to avoid a glare. Wind comfort in public spaces is expected to be acceptable given the protection that will be providing by existing and proposed building and landscaping.

3.6 Contamination

Environment ACT records indicate that underground fuel (storage tank(s) for a boiler fuel system were present on the site at some stage (see Attachment A). It is not known whether these tank(s) are still present. They also indicate that a vehicle wash down or refuelling facility may have existed. The Geo-technical report looked for signs of ground disturbance or filled in excavations. It appears that the present surface levels are similar to natural levels. Some minor fill was found during a previous 1999 test pit investigation carried out by ACT Geotechnical Engineers Pty Ltd, but appears to be associated with the locations of old footings/underground services. There is no evidence of past presence of stockpiles, sheep pens/dips, etc, or any past industrial use.

It appears that, that the land has been used for residential/offices (the Woolsheds) and car parking purposes, and possibly for grazing early in the last century. The developer will be required to undertake a detailed contamination assessment, and where necessary, prepare a remediation plan, prior to construction. Finance has also undertaken a Phase 1 environmental site assessment (DASCEM Holdings Pty Ltd) in April 2002.

3.7 Existing Services

3.7.1 General

There are major visible hydraulic, telecommunications and power services surrounding the site. Plans of existing services surrounding the site are attached as Appendix A of the Attachment B. The supplied plans do not show any easements. Service authorities require easement for their assets when located within private leases irrespective of the use of the site.

3.7.2 Sewer

There are sewer mains running under the verge of Macquarie Street, Broughton Street and the eastern section of Blackall Street. The line of greatest importance is the 525 mm dia line which runs under the north east corner of the site, and which will need to be protected by an easement. A 150 mm dia line runs from Macquarie Street into the north east section of the site. This area also has a tie which originates from the 150 mm dia line in Broughton Street. There is another tie which enters the site from Macquarie Street. Layout plans of the sewer system as supplied by ActewAGL are at Appendix C of Attachment B.

3.7.3 Water Supply

There are a number of old water mains running through the site. A 150 dia line runs along the southern edge of the boundary near the Ottoman Restaurant and continues though the site to Macquarie Street. Another 150 mm dia line runs through the middle of the site from the sites southern boundary and joins the mentioned line in the approximate centre of the site. Another 100 mm dia line runs through the site in an east/west direction in the vicinity of the southern boundary. There are mains in Macquarie Street, Broughton Street, and both the southern and eastern sections of Blackall Street. Complete plans of the water system as supplied by ActewAGL are at Appendix C of the Service Report at Attachment B.

3.7.4 Stormwater

The plans in relation to the current stormwater infrastructure situation supplied by ActewAGL are not clear. It would appear that there are stormwater lines under the northern verge of Broughton Street with two pits on the boundary of the site in the vicinity of the Broughton/Café/site boundary. There is a 300mm dia stormwater service under the eastern verge of Macquarie Street adjacent to the site boundary. Minor lines (unknown dimension stormwater services) enter the site at two locations from Macquarie Street. The first enters the south west corner of the site and runs in an easterly direction for about three quarters the width of the site. The second enters from the midpoint of the Macquarie Street boundary and runs east through the centre of the site for about three quarters of the sites width. These are appended in Appendix C of the Service Report at Attachment B.

3.7.5 Electricity

There are underground electrical services located in the road reserve adjacent to the boundary of the site on all surrounding streets. There are also low voltage (240V) cabling and conduits that service the car park lighting and abandoned services for the Woolshed structures which have been removed. These services run throughout the centre of the car park area. Due to the complexity of the surrounding electricity network, a separate drawing has been included as Appendix B of the Service Report at Attachment B exclusively to show those services and electricity services are not show on the plan in Appendix A of the same report.

3.7.6 Telecommunication

Telecommunications carriers have indicated as follows that there are a number of services which could be damaged by on site excavation. Telecommunications cabling is routed within the road reserve around the study area. Cabling exists within the site from previous developments. On site inspections by those carriers will be required before commencement of works.

Optus
Optus has cables in another utilities duct running along Blackall Street along the edge of the development site (both boundaries). There is also an Optus underground asset running along the eastern kerb of Macquarie Street and the southern kerb of Broughton Street. An Optus representative will be required to attend the site prior to excavation to indicate the exact location of this infrastructure.

Telstra
Telstra has cable and optical fibre located in the road reserve adjacent to the boundary of the study area in Blackall Street, Macquarie Street and Broughton Street. There is also a cable located on the southern boundary of the study area. Telstra cables enter the study area from Macquarie Street in two locations in the vicinity of the south western section of the study area and one location in the north western section. Cable also enters the site from one location on Broughton Street and one location from Blackall Street. A Telstra representative will be required to attend the site prior to excavation to indicate the exact location of this infrastructure.

TransACT
TransACT has indicated that there is optic fibre in the vicinity of Blackall and Macquarie Streets. They have not supplied plans but require a site investigation prior to commencement of any excavation.

Diverse Data Communications
There is ICON optic fibre in the vicinity of the development and Diverse Data Communications require a site visit prior to works commencing.

AAPT
AAPT has indicated they have plant in the vicinity of the proposed site. Their plan indicates they have cable running along Blackall Street into Broughton Street, though the cable is on the opposite side of those streets to the proposed development.

3.7.7 Gas

There are gas mains running along Blackall Street under the southern kerb, Macquarie Street under the western kerb and Broughton Street under the northern kerb. A high pressure steel gas main enters the site from Broughton Street, near the boundary of Block 12. The location of these services is indicated in Appendix A of the Services Report attached at Attachment B.

3.7.8 Vehicular Access

Vehicle access to the site from the surrounding road network is via Macquarie Street and Blackall Street. There are three vehicle driveway crossings along Macquarie Street (Photograph 1), although two of these accesses are blocked with bollards. The remaining access serves the various parking aisles located in the western sector of the Section 9 car park.

Photograph 1: Macquarie Street vehicle accesses

Blackall Street has 3 vehicle access points; two of which access the gravel car parking area, with one access to paved car parking area(Photograph 2).

Photograph 2: Blackall Street vehicle access points

A number of nearby intersections that form the major accesses to the site from the surrounding road system are signalised. These are; Macquarie Street/Kings Avenue, National Circuit/Kings Avenue and National Circuit/ Brisbane Avenue. The intersection of Blackall Street/Kings Avenue is priority controlled but not signalised.

3.8 Existing Vegetation

As assessment of existing vegetation on the site and on contiguous verges was undertaken by DSB Landscape Architects. There were 97 trees assessed individually with respect to their management status, including factors such as species, height, crown diameter, health, and longevity. A management status has been given to each tree e.g. extra high, high, medium and remove.

A full Vegetation Assessment is included at Attachment C. It was found that most of the on site and verge trees are relatively young, and would have been planted as part of the landscape proposals which accompanied the previous development. Consequently very few trees have reached the status of Significant Trees as defined in the ACT's *Tree Protection (Interim Scheme) ACT 2001*. This Tree Protection Act does not currently apply to the subject site, as the land is currently a National Land. However, the Act would become applicable to the land when it is sold and de-gazetted as National Land (thereby any crown lease becoming a Territory lease).

The existing trees on the site vary in condition and value:

- Three large Blue Gums, (trees 45, 63 and 69), *Eucalyptus bicostata* are deteriorating in health and quality resulting from a combination of uncontrolled parking surrounding the trees, the recent drought years, and the lack of landscape maintenance to the surrounding area.
- Groupings of medium size plane trees, *Plantanus acerifolia* (trees 21—34) are of average health and quality due to the same issues.
- Grouping of four median size Pin Oak *Quercus plaustris* (trees 2, 3, 11 and 12) are of average health and quality
- Single Poplar, *Polpulus nigra* (tree 10) median size is of average health and quality
- Cedar, *Cedrus libani* is of average health and quality (tree 18), however, tree 49 is almost dead.
- Street tree plantings along both Macquarie and Blackall street include *Quercus lusitanica* (trees 51, 52 53 64-67) and *Ulmus parvifolia* (trees 19,) respectively are generally deteriorating in health and quality resulting from recent drought and lack of landscape maintenance. Upgrades to street verge and ongoing maintenance may restore them to good health.

The DSB assessment indicates that no trees have Extra High or High Management Rating.

3.9 Ecological Issues

The development site has been totally modified in the course of past development and shows no evidence of the natural temperate grassland that is likely to have characterised the site prior to European settlement. The few trees on the site have all been planted and are of no particular ecological significance. There are no significant wildlife movement corridors

passing through Block 13. The site has thoroughly been disturbed by the past activities. Notes from David Hogg are included at Attachments D.

3.10 Heritage Issues

Heritage ACT has confirmed that there is no heritage issue in regard to the development of Block 13 Section 9 Barton. The proposed development site is not listed on any Heritage Registers. The Heritage Unit of the ACT Government has not received any nominations for this Block. The Unit has confirmed that there are no Aboriginal sites recorded in this area. Notes from Archaeological Heritage Surveys are attached at Attachment E.

3.11 Existing Traffic and Parking

An assessment of exiting traffic and parking conditions was undertaken by Maunsell Australia Pty Ltd and is attached in full at Attachment F. The site is used as an at-grade public parking facility. The formalised (Legal) paved parking area contains about 470 car parking spaces comprising the following areas:

- Broughton Street (northwest area): 147 marked spaces;
- Macquarie (southwest area): 193 marked spaces;
- Blackall Street (eastern area): 130 marked spaces.

Previous counts (NCA, 2000) identified up to 645 cars parked on the site. These counts are assumed to include all marked spaces, plus spaces and informal parking on all unpaved and unmarked areas and/or on site kerbs, verges and aisles.

Recent counts (Maunsell, November 2005) identified about 630 cars parked within the site, including about 100 cars in the unmarked unpaved areas along the southern perimeter of the site. Counts of the different areas identified the following number of parked cars.

- Broughton Street (northwest area): 170 cars (formal capacity – 147 cars)
- Macquarie Street: 280 cars, including 50 in the unpaved area (formal capacity – 193 cars)
- Blackall Street (eastern area): 180 cars, including 50 in the unpaved area (formal capacity 130 cars).

This indicated that the car park is operating at up to 130% of its design capacity, or up to 10% above its capacity if the cars parked on the unpaved areas are excluded. This indicates an obvious parking overflow from surrounding office buildings as parking is free and unrestricted. Typical parking conditions are shown in **Photograph 3** to **Photograph 6**.

Photograph 3: Macquarie Street Informal Car Park Area 1

Photograph 4:_Macquarie Street Informal Car Park Area 2

Source: Maunsell Australia Pty Ltd, 2005

Photograph 5: Macquarie Street Informal Car Park Area 3

Photograph 6: Internal Lane Car Park

Source: Maunsell Australia Pty Ltd, 2005

3.11.1 Pedestrian and Bicycle Access

Key pedestrian and cycle routes in Barton are shown in Figure 4. The majority of bicycle and pedestrian paths are located alongside the lake whilst the majority of primary footpaths are alongside the public roads.

Pedestrian Access

Pedestrian access around the site and to a variety of destinations is catered for by pedestrian pathways alongside public roads. Pedestrian links to the lake and its surrounding pedestrian network is via several pathways through the Landmark Apartment complex, situated between Blackall Street and Bowen Drive.

Kings Avenue and Brisbane Avenue are both wide busy roads and present significant barriers to indiscriminate pedestrian movements. However, a signalised pedestrian crossing is provided on Kings Avenue between Macquarie Street and Blackall Street. Kings Avenue also has signals at the intersections with Macquarie Street and National Circuit, which include pedestrian phases. Brisbane Avenue has three sets of signals along its length which provide pedestrian phases.

Bicycle Access

Access to the ACT bicycle network is provided via Kings Avenue to the north, Brisbane Avenue to the south and the lakeside to the east. The bicycle network is shown on Figure 4.

3.11.2 Public Transport

Barton is relatively well accessed by bus services. There are thirty five routes that pass through Barton, including three express services. Those services provide access to Civic, Woden and Belconnen Interchanges, whilst there are direct services between Barton and 59 suburbs and other destinations. The majority of these routes use either National Circuit or Kings Avenue with about six bus stops located within 10 minutes walk of the site. Typical routes and locations of bus stops are shown in Figure 5.

Although the area has a relatively large number of bus services passing though its boundaries, the utilisation of these services by the local working population is poor.

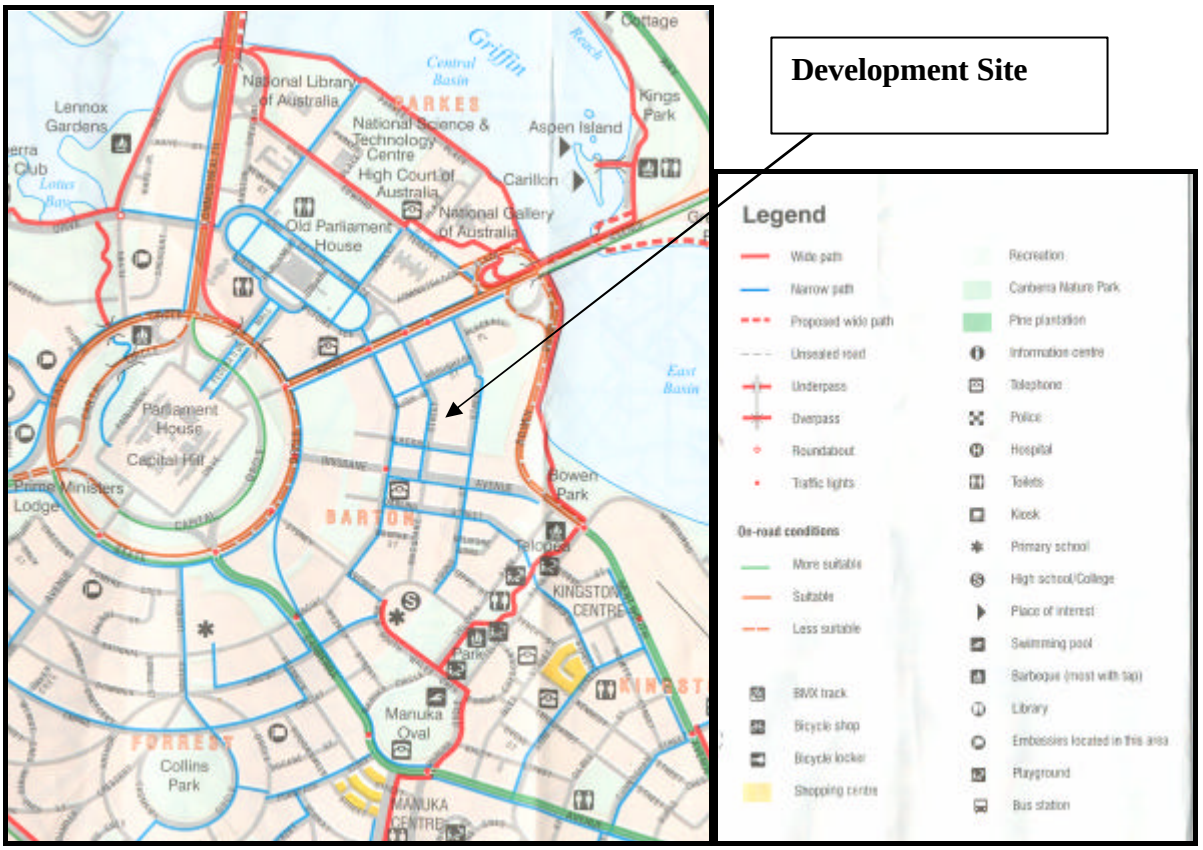

Figure 4: Bicycle and Pedestrian Routes in Barton

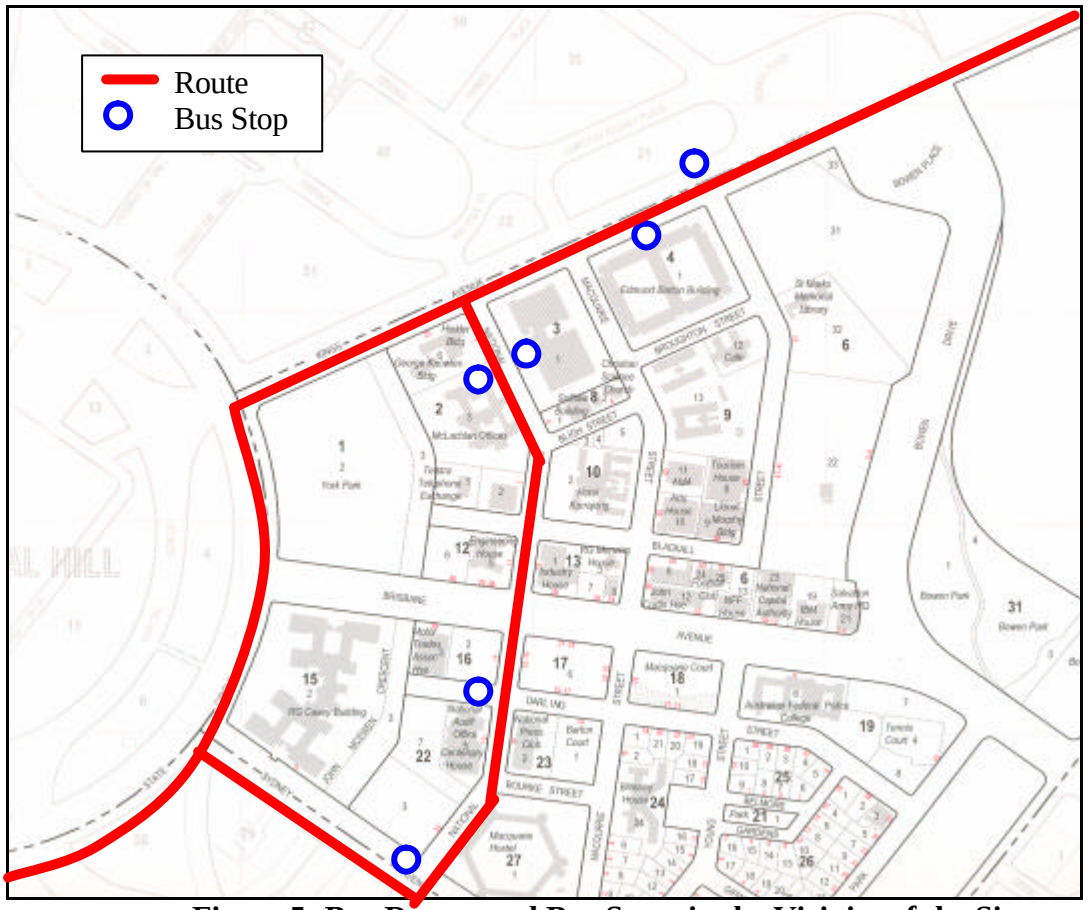

Figure 5: Bus Routes and Bus Stops in the Vicinity of the Site

3.11.3 Road Network

The network immediately surrounding the site is generally controlled by three intersections that provide the majority of access to the site. These are Macquarie Street/Kings Avenue (signalised), Blackall Street/Kings Avenue (priority controlled), and National Circuit/ Brisbane Avenue (signalised). The intersections are shown in Figure 6.

Figure 6: Surrounding Signalised Intersections

Traffic volumes on surrounding roads generally reflect the classification of the roads, either as arterial routes or local roads providing site access. Both Kings Avenue and Brisbane Avenue are arterial roads. Figure 7 shows the surrounding network and recent estimates of daily traffic volumes. Kings Avenue plays a major role in distribution to the regional network while volumes on Brisbane Avenue are significantly lower.

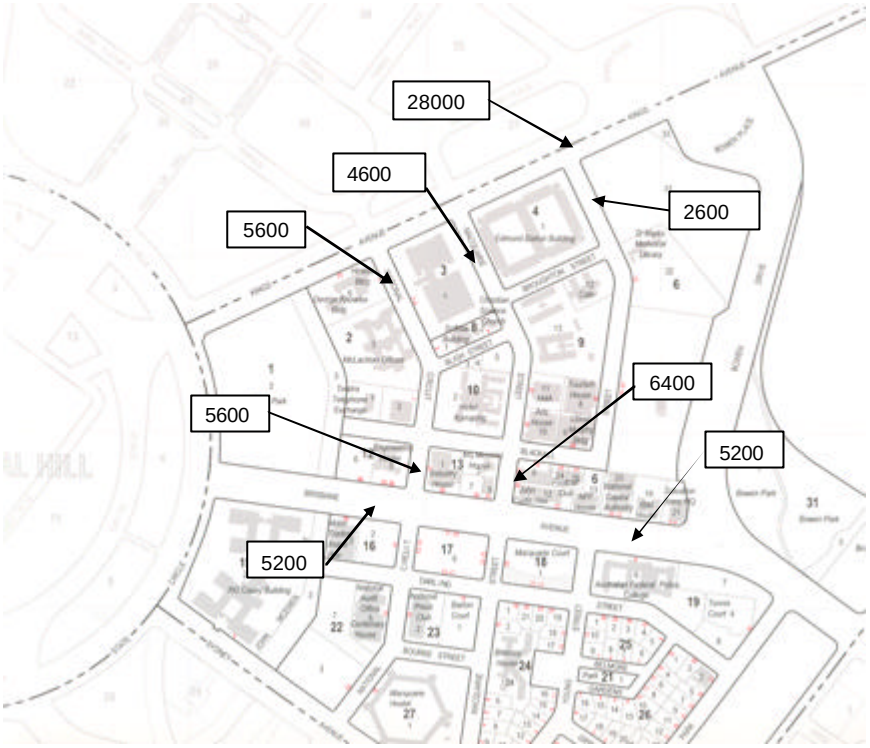

Figure 7: Existing Road Network and Traffic Volumes (vpd)

Macquarie Street and Blackall Street are both local roads with a 50km/hr speed limit. Macquarie Street is access controlled with limited on-street parking and carries about 4,000-6,500 vehicles per day. A pedestrian crossing in Macquarie Street between Bligh Street and Blackall Street helps to facilitate pedestrian access across the road.

Blackall Street operates as a local road currently carrying approximately 2,500 vehicles per day. It services St Marks Church, the on site car park, some access to the Landmark apartment complex and some office buildings. It has adequate mid-block capacity and its main capacity constraint is at the Kings Avenue intersection which is not signalised (**Photographs 7** and **8**). Adjoined by less intensive land uses and some open space Blackall Street is considered to offer significant spare capacity to proposed or future land uses. Broughton Street is a narrow, minor access street, but provides the main vehicular access to the Edmund Barton Building.

Photograph 7: Blackall Street and Kings Avenue Intersection

Photograph 8: Blackall Street and Kings Avenue Intersection

3.11.4 Intersection Operation

Turning Movements

Turning volumes offer a good indication of intersection operation and spare capacity. A qualitative assessment of the turning movements suggests that the AM peak is the critical peak period with a number of significant turning movements. The critical movement is the right turn from Brisbane Avenue into Macquarie Street with 434 vehicles. High volume turns also include the left turns from Kings Avenue into Blackall Street (366 vehicles) and Macquarie Street (324 vehicles). Intersection operation is not critically affected by these movements and significant spare capacity in the intersections is considered to exist.

Network Performance Indicators

The capacity of an urban road network, where intersections are frequent, is controlled by the capacity of the intersections within that network. Average delay is commonly used to assess intersections performance, with 'level of service' (LoS) used as indicator; 'LoS A' representing a good level of operation and 'LoS F' representing oversaturated conditions, where improvements are required. A summary of the level of service criteria is shown in Table 1**.**

Table 1: Performance Criteria for Intersections

Level of Service	Average Delay / Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays	At capacity; requires other control mode
F	>70	Roundabouts require other control modes	At capacity; requires other control mode

Source: Guide to Traffic Generating Developments, NSW Roads and Traffic Authority, 1993

A quantitative assessment of intersection operation was undertaken using the traffic counts and SCATS data. Analysis of the existing operation of the intersections was undertaken using aaSidra 2.0. The results of this analysis are presented below.

Kings Ave / Blackall St
AM – LoS A, with average delay for right turners out of Blackall St of around 42 seconds.
PM - LoS A, with average delay for right turners out of Blackall St around 47 seconds

Kings Ave / Macquarie St
AM – LoS C, with 95% back of queue lengths over 100m for all approaches
PM – LoS C, with 95% back of queue lengths over 100m on King's Ave approaches only

Brisbane Ave / Macquarie St
AM – LoS B, with minimal delays to all movements
PM – LoS B, with minimal delays to all movements.

The SIDRA results suggest significant capacity in the current network and that any reasonable future increases in traffic at the intersections can be accommodated through appropriate phasing. More detailed results are included in **Appendix B** of the Traffic and Parking Analysis at Attachment.

Journey to Work Data

Journey to Work (JTW) data for ACT from the 2001 Census showed the following travel patterns for the journey to work trip to Barton and Parkes.

Table 2: Journey to Work Summary Table

Mode	Barton		Parkes	
	Number	Percentage	Number	Percentage
Bus	383	5.2%	291	5.8%
Car Driver	5746	77.8%	3877	77.2%
Car Passenger	674	9.1%	508	10.1%
Walk	211	2.9%	66	1.3%
Cycle	180	2.4%	141	2.8%
Other	191	2.6%	139	2.8%
Non Trips*	728		510	
TOTAL	**8113**		**5532**	

*Include work from home / did not go to work / not stated

The JTW data shows over 8,000 full-time or part-time staff working in Barton. About 87% of journeys to work are undertaken by private car (as car driver / car passenger). Only 10.5% of trips use public transport, walking or cycling. On any given day the staff absentee rate is about 9%.

3.11.5 Social Services

Barton suffers from a shortage of facilities and services to meet the social needs of existing residents and office employees. There is no local shopping centre in the Barton Area, thus, residents and employees have no convenient access to facilities to serve their day to day needs. The most notable absence of services in the whole Barton areas are post office, bank, health facilities including a pharmacy, newsagency, dry cleaner, food outlets, recreational facilities and convenience retailing. The closest major retail centres are in Kingston and Manuka 1.65, and 1.60kms respectively from Barton.

There are only few social services available in Barton, and these are scattered across the whole suburb. The Ottoman Restaurant is adjacent to the development site at the north-east corner of Blackall Street and Broughton Street and includes a cafeteria, which is also sells basic items such as bread, milk and newspapers. Some of the offices eg Edmund Barton Building, Tourism House, AMA, Linel Murphy Building, AG Building, and R. G. Casey Building, have a cafeteria or kiosk, some of which are open to the public. The ACT Rugby Football Club, situated on Blackall Street, provides facilities such as bar, dining area and meeting rooms. There is café on Brisbane Avenue, part of "The National" development which is often busy during weekdays. The National Press Club has it own restaurant and also provides conference rooms. The Australian Federal Police College on Brisbane Avenue has it own café and bar, but only used in association with its residential training facilities.

3.12 Employment in Barton

The Cardno Young Report (2004) provided a brief assessment of employment in Barton. The Report assumed that employment was in the vicinity of 7,000 persons in 2001, whilst the 2001 Census Journey to Work (JTW) data indicates 8,113 persons working in Barton and Forrest. Using 1996 JTW data to derive vehicle occupancy, part-time employment and proportion of employees working on any given day the report arrived at an assumed parking demand of 4,800 spaces.

3.12.1 Completed Development

Commercial development recently completed, as noted in the Table below, is likely to reduce demand for surface car parking facilities in Barton / Forrest. By providing two parking spaces per 100m² GFA on site these developments should cater for long-term parking demand. (NCA until recently only required 1 site per 100 square rates to be provided on site, but have recently changed their policy to 2 spaces for 100m^2 GFA)

Table 3: Completed Development

Development	Location	Complete	GFA (m²)		Car Parking	
			was	now	was	now
Eng. House	Crn of National Circuit and Bris. Ave	2005	2,900	6,500	57	123
Dept IT & Arts	Sydney Avenue	2005	0	11,000	0	220
Minter Ellison	Crn of Sydney Ave and Canberra Ave	2005	0	14,000	0	280

New developments also provide barrier controlled tenant parking. Any excess in parking supply could lead to the availability of long-term non-tenant parking (for a cost). The future acceptance of pay parking will enhance the viability of these car parking spaces. However, this is not likely to reduce demand for parking until pay parking becomes accepted, and even then only a minimal number of spaces may become available.

3.12.2 Approved and Likely Future Development

Future commercial development may affect parking demand as additional spaces are provided on-site. Table 4 identifies approved developments and the proposed increase in parking supply.

Table 4: Approved and Likely Future Development

Development	Location	Construction		GFA (m²)		On-Site Parking Provision	
		Start	Finish	current	proposed	current	proposed
1 National*	Cnr of King Ave & National Crt.	2005	2007	3,611	17,000	64	340
3-5 National Circuit McLachlan Offices	National Crt.	2007	2009	15,000	22,500	60	450
Softlaw Building	Bligh Street	2007	2009	2,200	4,600	25	80
Robert Garran Offices	Cnr of King Ave & Macq. St.	2009	2011	17,000	17,000	90	210

* Approved and currently under construction.

Table 4 identifies over 800 additional on-site parking spaces to be constructed by 2011. While many of these spaces will be utilised through the provision of additional employment space, off-site parking demand is expected to decrease significantly. For example the

redevelopment of the McLachlan Offices will provide an additional 7,500m² GFA of floor space with 390 parking spaces. Taking the net increase in supply against likely increases in demand, the actual decrease in demand for off-site surface parking throughout Barton/Forrest could reduce by as much as 500 spaces by 2009, as result of planned developments.

3.12.3 Edmond Barton Building Refurbishment

It is understood that the Department of Agriculture, Fisheries and Forestry, who occupy the majority of the Edmund Barton Building, will be relocated to Civic in 2007 and it is likely that the building will then be refurbished. The refurbishment of the Edmund Barton Building is expected to take place between 2007 and 2009. There will be a temporary reduction in employees within the building during that period, which will result in a temporary reduction in demand for off-site parking spaces. The impacts of parking demands on Block 13, Section 9 will be significant, given the estimated number of DAFF employees (1521), who work in the building, and the limited amount of on-site parking (204).

4 Site Contextual Considerations

4.1 Local Area Context Analysis

Barton is considered to be part of the general Parliamentary Zone, within close proximity to the Parliamentary Triangle. Barton has been developed as a prime location for key Commonwealth offices, National Association offices, and more recently high quality residential units. The Barton area, referred to this document is shown in Figure 1, and includes areas designated in the National Capital Plan, as well as other areas subject to planning policies of the Territory Plan.

There are two main "land use" precincts within Barton, where a predominant land use can readily be identified (Figure 8). They are: (i) Office Areas and (ii) Residential Areas.

4.1.1 The Office Precinct

Barton is regarded as a prestige and desirable area for the office development because of its proximity to Parliament House and key policy departments. Many of the large government offices constructed in Barton have now been sold by Finance as part of its divestment programme.

Office buildings are located mainly between Kings and Sydney Avenues, and consist of large purpose designed government office buildings and smaller offices. The older office developments are generally characterised by large buildings that accommodate internal courtyards enclosed by the buildings, and generous landscape settings on the verges. The large office buildings adjacent to the development site include Edmund Barton Buildings, Robert Garran Offices, and McLachlan Offices (PM&C). The AMA Building and Tourism House represent more modest, later office buildings. All buildings have generous verges, street trees and established paths and street lighting.

The office precinct has extended into the area between Brisbane and Sydney Avenues, and includes a number of recent developments such as RG Casey Building fronting Brisbane Avenue, Centenary House on National Circuit and a number of office developments fronting Sydney Avenue. Brisbane Avenue accommodates buildings such as Engineering House, Industry House, John Curtin House, NFF House, IBM House, and Salvation Army Head Quarter on its north side. However, the south side of Brisbane Avenue has both office and residential accommodation. The office buildings include Motor Trades Association House and Pharmacy House. "The National" and Macquarie Court provide residential apartments. The Australian Federal Police College is an educational facility.

4.1.2 The Residential Areas

The old residential area lies within a precinct bounded by the Telopea Park School, National Circuit, Brisbane Avenue and Telopea Park. It consists of single residential dwellings, set on relatively large blocks. The dwellings are generally consistent in scale, colour and deign and a high level of visual amenity, and have been given heritage status. The Brassy Hotel is a commercial residential building which occupies a larger site within this residential precinct. "The Landmark", the recent residential development between Bowen Drive and eastern side

of Blackall Street, and "The National" on Brisbane Avenue represent new residential apartment buildings which indicate the increasing popularity of the area for residential living.

The former Commonwealth building known as Macquarie Hostel (Hotel) has also been sold by Finance and is being redeveloped for a mixed use development including offices, and accommodation.

4.1.3 York Park and Moth Site

York Park North, and land which is currently protected for environmental reasons (the habitat or adjacent to the habitat of the Golden Sun Moth) are the last remaining undeveloped sites owned by Finance in Barton (see Figure 1). York Park North is the land bounded by Brisbane Avenue, State Circle Kings Avenue and Windsor Walk, and is described as Block 2 Section 1 Barton. It currently contains a car park dedicated for DFAT use, and other public parking (formal and informal). An historic oak plantation at the northern end of the site has heritage protection. The land has a land use policy of National Capital Use, and with the exception of the plantation, has the ability to be developed for office purposes in accordance with the provision of Appendix T2 of the National Capital Plan (York Park and Environs Master Plan). These provisions were amended through Amendment No. 42 to the National Capital Plan and indicated a preferred form for large scale office developments, incorporating a possible pubic parking structure. Part of the development area is identified as a "tall building zone", with a maximum height limit of RL602 metres, compared with a previous maximum of RL591 metres (within still applies to those parts of York Park outside the "tall building zone".

The Moth site is also subject to the York Park and Environs Master Plan (Appendix T2). The specific Moth site (part of Block 3 Section 22 fronting National Circuit) is identified as an "Environmental Protection Area (subject to further study)". Adjacent land (part of Block 3 fronting Windsor Walk), and Block 7 Section 22 are identified as accommodating as office building and a possible public parking structure. All these sites also have a land use policy of National Capital Uses.

In total, these undeveloped Finance assets have the capacity to accommodate a substantial amount of new office development, which will reinforce the role of Barton as a major employment node. At this stage however it is understood that they are not part of an immediate divestment programme, and will follow Block 13 Section 9 in terms of development sequence.

4.2 Existing Streetscape Character

The site has an irregular shape and is bounded by Broughton Street to the north, Blackall Street to the east, and Macquarie Street to the west. The streetscape character of each as follows:

4.2.1 West Boundary—Macquarie Street

The main spatial characteristics of Macquarie Street include a limited canopy, sparse, even planting, and openness because of the set backs and character of adjoining land uses. Other features are:

- Winter sun exposure throughout day
- Pedestrian access via paths at verge
- Verges not well maintained
- Generous open space park next to Kurrajong Hotel
- Generally flat street level
- Scale of adjacent buildings consistent

The opportunity for improving the streetscape are:

- Develop a streetscape character along west boundary in order to provide continuity with the established northern sections of the street
- Develop setback to accommodate possible mixed use frontage incorporating possible seating area
- Establish and widen pedestrian pathways to prioritise pedestrian access from surrounding buildings into site
- Enhance visibility and status of pedestrian crossing

4.2.2 North Boundary –Broughton Street

The main spatial characteristics of Broughton Street are a dense canopy, intimate/enclosed character, significant shade. Other features are:

- Parallel parking both sides of street
- Pedestrian access via footpath provides access to car park and Restaurant/Café (Ottoman)
- Plane trees on south verge give partial screening of Edmund Barton Building when viewed from subject site.
- Flat level street
- Setback to Ottoman Restaurant is wide with well maintained garden.
- Busy morning, midday and evening with pedestrian traffic
- Plane trees (south verge only) allow for winter sun to fall on the entrance of the Ottoman Restaurant and provide shade for pedestrian AND parallel parking
- Blue Gum street planting (north verge only) provide deep shade and screening to Edmund Barton Building
- Whilst providing shade for car parking Blue Gums do produce debris, and fallen gum nuts can be hazardous for pedestrians

4.2.3 East Boundary—Blackall Street

The main spatial characteristics of Blackall Street are an open and airy, light filled, no canopy, dominant vertical presence of facing residence requires screening to soften building height.

- Flat street level
- Lunchtime pedestrian traffic
- Pocket park between restaurant and verge includes substation
- Setback generous
- Possible views to lake from elevated north easterly aspect
- Service entry into Ottoman/café
- Streetscape lacks consistent street trees

4.2.4 South Boundary—boundary with AMA Building and Tourism House

The main spatial characteristics of south side are an open, dominated by vertical presence of adjacent buildings.

- Adjacent office buildings dominate and have varied setback
- Few trees

5 Existing Statutory Planning Framework

Consideration of development proposals for the site is the responsibility of the National Capital Authority, with proposals assessed against the provisions of the National Capital Plan. The relevant planning provision for the subject site is as follows:

5.1 National Capital Plan

The land is within the Designated Area of National Capital Plan. Designated areas are defined in the National Capital Plan and are those areas considered to have the special characteristics of the National Capital. The Commonwealth, through the National Capital Authority, retains responsibility for planning and development control, including Works Approval, within Designated Areas.

Therefore, the development site is subject to the principles and policies of the Plan for the Central National Area, in particular, section *1.4: Detailed Conditions of Planning, Design, and Development.* Consequently the design concepts inherent in the various Master Plan Options have been formulated on the basis of these Conditions. Those which were considered relevant in setting out important criteria for the master plan development are as follows:

(ii) *Other part of the Designed Area will be used in accordance with detailed conditions of planning, design and development shown at Figure 5-17 in National Capital Plan and, where applicable, to the provisions of a Master Plan set out in Appendix T.*

(iii) *Land uses will relate primarily to national functions. This should not, however, preclude the establishment of appropriate ACT Government functions, suitably located.*

(iv) *Consideration of commercial uses in those parts of the Designated Area that lie in the City Division will have regard to the planning effects on Civic Centre as well as on the Central National Area.*

(v) *Special consideration will be given to community, cultural, residential, tourism, entertainment and leisure uses which complement and enhance the function and character of the Designated Area.*

(vii) *The transport system within the Designated Area will be planned and managed for volumes of traffic and parking consistent with the significance and use of the Area. Transport infrastructure should foster the use of transport systems which minimise adverse effects from vehicular traffic.*

(viii) *The urban design of the Area is to achieve an integrated design of the highest quality by managing building height and bulk, and by encouraging building forms and layouts on consistent building alignments which enhance the structure of Griffin's plan.*

(ix) *New development should seek to respect the design and character of adjacent buildings in terms of scale, colour, materials, massing and frontage alignment.*

(x) Individual development proposals will be assessed on their merits in respect to sunlight penetration, amenity, pedestrian and vehicle access. No buildings taller than RL 617m will be permitted in the Designated Area, but the general building height will be 3-4 storeys except where the Authority determines otherwise.

(xi) Buildings in the Area must show an appropriate quality of architectural design consistent with their location in this area of special national concern.

(xii) The design and maintenance of all roadways and parking areas, including their associated landscaping, signs and lighting, will be of a consistently high quality.

(xiv) Landscaping is to enhance the visual setting of the Designated Area and integrate the buildings with their landscape setting. This will be carried out in accordance with a landscape master plan to be prepared by the Authority which particularly emphasises the following landscape themes:

- *the formal and consistent landscaping of main avenues and mall spaces*
- *the combination of formal and informal landscaping which occurs around the lake edge and is the setting for Parliament House and its adjacent areas.*

(xv) Residential shall not be subdivided for separate occupation.

(xvii) Any proposal to subdivide land within the Central National Area will require the approval of the Authority.

With regard to (a) above, the land use policies for the subject site are illustrated at Figure 8 of National Capital Plan, which shown that it partly has a land use policy of "Commercial" (part fronting Broughton Street), with the remainder having a land use policy of "Car Park". There is also a narrow strip separating these two zones which has a land use policy of "Open Space". The part zoned car park, and possibly the part zoned open space (depending on the form of the final, approved Master Plan) would therefore require an Amendment to the National Capital Plan to be approved before it could be developed for any purpose other than car parking and ancillary uses (or open space), e.g. for offices, residential or retail. However, the development of offices and other commercial uses on the part zoned "Commercial" is consistent with the National Capital Plan and would not require the Plan to be amended. Figure 8 of the National Capital Plan is illustrated on the next page.

The annotations on Figure 8 make reference to Appendices U (Section 6 Barton), H (Design and Siting Conditions) and T2 (York Park and Environs Master Plan). It also makes reference to Block specific Land Use Policies on the page following Figure 8, which contains the following specific land use policy for the subject site:

B Block 13 Section 9 Barton

Objective

The objective of the land use policy for this site is to provide an opportunity for the development of a carparking structure with active street frontages, incorporating shops, restaurants and professional services, and a small park.

Land Use Policy
The primary land use policy intended for this block is

- *Carpark*

Other land uses permitted, ancillary to and in association with the primary uses, are:

- *Retail;*
- *Café, bar, restaurant;*
- *Personal services establishment;*
- *Tourist facility; and*
- *Park*

"Development and redevelopment shall accord with the development conditions set out at Appendix U".

Appendix U sets out the Detailed Conditions of Planning Design and Development applying to Section 6, which is land on the eastern side of Blackall Street, formerly known as "The Riverside site, which includes the completed development complex known as "The Landmark". The following Conditions at Appendix U also therefore have some relevance to the subject site.

"The Riverside site, together with the development on the opposite block, Section 9, will become an important public precinct with the development of residential and community uses in close proximity to the office employment areas of Barton and Parkes.

Small scale commercial land uses, such as commercial accommodation, restaurants, cafes and tourist uses are proposed to complement the primary land uses. It is hoped that the diversity of land uses which could emerge will enhance the Parliamentary Zone and attract day and night activities into the formal areas of the National Capital.

Maximum height limit of AHD 591 has been established for the Barton Area…"

Despite the above statement there is no other provision in the National Capital Plan which establishes a height limit of AHD 591 for the whole of Barton, and NCA have agreed that some variety in building height could achieve a better urban design response than the application of a strictly uniform building height. Figure 8 also incorporates the following statement.

On-site car parking shall be provided, at a rate of 1 space per 100 square metres of gross floor area, for new offices approved throughout the Central National Area (Barton) after the coming into effect of Amending Services 3 to the National Capital Plan. A higher on-site and/or off-site provision many be required by the Authority in specific cases, after taking into account the relationship between on-site parking, off-site parking opportunities and the capacity for public transport in the area.

The Authority has confirmed, in a number of discussions with the consultants on this project, that it now applies an on-site requirement of 2 spaces per 100 square metres for new office developments in Barton, e.g as in the approved redevelopment of 1 and 3-5 National Circuit (McLachlan offices).

Other general policies of the Plan which have application to the proposed development include:

- **Transport Policy 6.3 (c)**

  Transport strategies should promote the convenience and efficiency of public transport use.

In this case the provision of a large, full demand of parking structure on the subject site will not assist in improving the current low level of public transport usage to the major employment areas of Parkes and Barton.

- **Urban Design Policies 7.3 (a) (c) (d)**

  (a) *Management of both public and private development in the National Capital should, wherever practicable, seek to achieve harmony between buildings and landscaping to give continuing effect to the garden character of the city.*

  (c) *Buildings in Canberra Central should be of a height generally not greater than the height of the mature tree canopy (typically 3-4 storeys), with the exception of the buildings in the Parliamentary Zone, Civic Centre, Russell and Campbell Park, and on sites adjoining Northbourne Avenue and Constitution Avenue. In Canberra Central no building or structure which protrudes substantially above the tree canopy shall exceed a height of RL 617m.*

  (d) *The siting, bulk, landscaping and external treatment (including materials, colours and the quality of finish) of development in Canberra Central should seek to ensure that buildings, ancillary structures and other works are appropriate to and not discordant with the general development and amenity of the locality.*

For the purpose of the above policies, Barton is generally regarded as being part of the Parliamentary Zone (as distinct say, from the Parliamentary Triangle).

It is envisaged that any Amendment to the National Capital Authority Plan, will not only seek to change the land use policy at Figure 8 and the following page, but also establish Detailed Conditions of Planning, Design and Development of the site. These could either be in the form of a Master Plan and supporting written statement similar to those at Appendix T, or as a stand alone statement similar to that at Appendix U.

5.2 Territory Plan and Land Management

The Territory Plan has no application in relation to the proposed development. Following sale of the land, full ownership in the form of a long term crown lease(s) of the land, will be transferred to the successful purchaser(s). The crown lease will contain certain provisions in the form of development criteria. Any development proposals for the site submitted by the new owner following its divestment by the Commonwealth will be assessed against the National Capital Plan, including the site specific amendment provisions, and the crown lease. Once the site is sold, the "National Land" status will be revoked and the lease will become a Territory Lease.

6 Constraints and Opportunities

6.1 Site Constraints and Opportunities

There are no major constraints to the development of the site in term of heritage, ecological or landscape values, traffic capacity, accessibility, slope, terrain or microclimate. The constraints relate mainly to the need to remove, retain or augment physical infrastructure, i.e:

- There is a 525 mm dia diameter sewer main running across the north east corner of the development. Correspondence with ActewAGL has determined that this main will need to be retained and protected by a 10 metre easement.
- The sewer tie entering the site from Macquarie Street will have to be removed.
- ActewAGL wish to conduct modelling of the water system surrounding the site as they are concerned that the development could adversely affect water pressure in the surrounding area. This will be conducted after a concept plan for the site is finalised.
- It appears highly likely that the water main which runs along the eastern boundary of the site will need to be extended from the vicinity of the north east corner of Tourism House to join the 150 mm dia line in the vicinity of where it enters the site from Blackall Street to maintain the circuit. This will require off site works. This will be determined by the modelling conducted by ActewAGL.
- The 100 mm dia water main in Macquarie Street may need to be upgraded to a 150 mm dia main which will require substantial verge works. This works will be effected by the trees growing in the verge of Macquarie Street and a further, more detailed tree assessment will be required if there is to be verge works in this area.
- There are a number of issues that should be considered to reduce water usage of the development.
- Landscaping should utilise plants with a low need for water, preferably native plants
- Construction will need to be carefully staged to ensure continuity in the supply of public parking.

6.2 Development Opportunities

- The site is serviced on all its boundaries by road and hydraulic infrastructure, power and telecommunications. The site may be serviced by existing infrastructure to suit the proposed development.
- All existing services have adequate spare capacity to service the site, with the possible exception of the water services. This will be determined by ActewAGL after they conduct modelling of the existing services relative to the concept design.

- Installation of rainwater tanks should be considered as the water collected by the tanks can be utilised for toilets and landscape watering.

- An opportunity to design the development to attain Green Star rating from the Green Building Council of Australia.

- Prestige high quality development on a site which is currently an eyesore

- Meet demand for offices for small agencies & private users

- Introduction of residential opportunities which could provide in excess of 100 units.

- Overcome deficiency in provision of retail and other services

- Meet public parking demand

7 Master Plan Input

7.1 Parking Analysis

7.1.1 Planning Responsibility and Parking

The planning and development of the Barton office precinct with respect to parking falls under the responsibility of both Commonwealth and ACT Governments. The Commonwealth administers the National Capital Plan through the National Capital Authority (NCA) while the ACT Government is responsible for managing the road system, including on street parking, and public transport.

The Canberra Spatial Plan is the Territory's key strategic planning document for directing and managing urban growth and change. It provides strategic directions for the development of Canberra over the next 30 years and beyond. The Spatial Plan integrates with *The Sustainable Transport Plan*, which seeks to achieve a more sustainable transport system for Canberra over the next 20 to 30 years.

A summary of key traffic and transport aspects of these documents follows.

7.1.2 Strategic Plans and Policies and Recent Studies

The National Capital Plan

The National Capital Plan provides a general policy framework for land use and planning in the Territory, and more specifically guides the planning, design and development of areas of the Territory that have been identified as having national capital importance (Designated Areas). It is the overarching strategic plan for the Australian Capital Territory - a land use policy plan that reflects the national significance of Canberra and the Territory.

Relevant matters of national significance in the planning and development of Canberra to be protected as identified in the National Capital Plan include:

- maintaining high quality design for entry points and along approach routes to the Central National Area
- maintaining a legible and functional hierarchy of roads in the Territory
- providing for a system of inter-town public transport
- minimising traffic congestion in the Central National Area

General transport related planning, design and development conditions that apply to the Central National Area include:

- Traffic capacity and traffic arrangements on major routes in the Designated Area will be planned to ensure safe and dignified access for all ceremonial occasions, and for residents, staff, tourists and visitors.
- The transport system within the Designated Area will be planned and managed for volumes of traffic and parking consistent with the significance and use of the area. Transport infrastructure should foster the use of transport systems which minimise adverse effects from vehicular traffic.

- Direct access to and from major roads will be permitted where practicable and not inconsistent with traffic safety requirements. The design and maintenance of all roadways and parking areas, including their associated landscaping, signs and lighting, will be of a consistently high quality.
- Commonwealth, Kings and Constitution Avenues, the avenues connecting the nodal points of the National Triangle, are of critical significance in delineating the geometric form of Griffin's plan. They are not only the primary movement routes, but they are powerful generators of structure and urban form. Their formal expression is paramount and is to be achieved by strong avenue planting, consistent road design, special lighting and detailing. Building heights and setbacks will be planned to ensure consistency and continuity.
- Building, road and landscape maintenance is to conform with Management Plans prepared by the Authority in consultation the ACT Government, which will consider traffic and parking operations, temporary uses and ceremonial events. The Management Plans will also establish levels of maintenance for land, water and infrastructure appropriate to the principles and policies for the Area.

In terms of car parking the NCA's policy decisions are considered to play a primary role in the supply and availability of tenant, off-street and on-street parking throughout Barton and the adjoining areas of Parkes and Forrest. The proximity of Barton to the Parliamentary Triangle and national institutions means that the NCA holds particular interest in redevelopment of existing sites and development of vacant sites with regard to traffic and transport policy.

The Canberra Spatial Plan

One of the goals of the Canberra Spatial Plan is to retain ease of movement and facilitate good travel connections. This goal responds to the very high value that Canberrans place on the ease within which they can get around the city. A closer relationship between jobs, services and homes will enable more people to use walking and cycling as an alternative method of transport that supports a healthy lifestyle.

The relevant key principles underpinning the Spatial Plan include:

- Contain growth within 15km to reduce sprawl
- Increase the number of homes within 7.5km of the City Centre to provide a wider range of housing close to employment and services
- Locate new residential areas close to town centres and transport routes
- Locate employment close to residential areas and transport routes
- Provide good travel connections to minimise journey times and trip lengths

The future major transport connections that form a key part of this Plan are illustrated in Figure 9. It shows a trunk public transport route within the Kings Avenue corridor, which is likely to be bus-based initially and light rail in the long-term. This route accommodates direct and frequent public transport movement between Barton (feeding areas to the south and east such as Woden, Fyshwick and Queanbeyan) and Civic (feeding areas to the north and west). These routes are used to service key employment corridors running both north-south and east-west through Central Canberra.

The Sustainable Transport Plan

The Sustainable Transport Plan is a 25 year implementation plan which was developed to sit under *The Territory Plan* and be directly associated with the recommendations made in *The Canberra Spatial Plan*. *The Sustainable Transport Plan* will move Canberra to a transport system that retains Canberra's high levels of accessibility, but with lower per capita costs and less negative impacts. It will also facilitate a shift of travel from cars towards a greater reliance on walking, cycling and public transport. The transport sector is a major contributor to ACT greenhouse gas emission profile and successful implementation of *The Sustainable Transport Plan* is a critical element of the ACT Greenhouse Strategy 2000.

A key to achieving *The Sustainable Transport Plan* is the progressive shift towards an urban form that supports shorter trips and encourages people to walk or cycle. The Spatial Plan provides this urban form. *The Sustainable Transport Plan* encourages improvement of public transport services at activity nodes along key transport corridors. This will support intensification of development along these corridors in line with the urban containment principle of the Spatial Plan.

The Sustainable Transport Plan proposes the progressive development of a corridor transit system, building onto the existing bus system. Investment in busways will help to reduce public transport travel times on trunk routes and make them more reliable. A range of complementary measures is proposed to support increased public transport patronage. These include the introduction of effective management of parking, real time information for bus passengers, TravelSmart programs, improved interchanges, park and ride facilities and increased services.

The ACT Sustainable Transport Plan (ACT Government, 2005) provides targets for reduced car commuting from 87% (ACT average) in 2001 to 80% in 2011 and 70% in 2026. The contribution of public transport is targeted to increase from 6.7% in 2001 to 16% in 2026.

Parliamentary Zone Review

The Parliamentary Zone Review is a strategic planning document that provides the structure for a major review of buildings, car parking spaces and open spaces in the Zone. The review proposes an increase of up to 8,000 employees in up to 28 redeveloped or new buildings. Car parking needs should be met by underground car parks in each of the new buildings and two new multi-level parking buildings within the Zone. Up to 3,000 publicly accessible spaces in structures could replace the need for the existing surface car parks in the area.

ACT Parking Strategy Study

The ACT Parking Strategy Study for ACTPLA (ARRB, 2005) makes recommendations for more restrictive parking controls being applied to new commercial development. The study makes the following relevant recommendations for the future management of the Parliamentary Zone and adjoining areas:

- Review the strategic planning and administrative control of car parking;
- Implement appropriate enforcement and time restrictions;
- Manage on-street parking as short-stay and off-street parking as long-stay;
- Promote restraint in single occupancy vehicles;
- Integrate mixed use development with car parking structures;
- No additional surface car parks; and
- Apply a sustainable accessibility levy to future development.

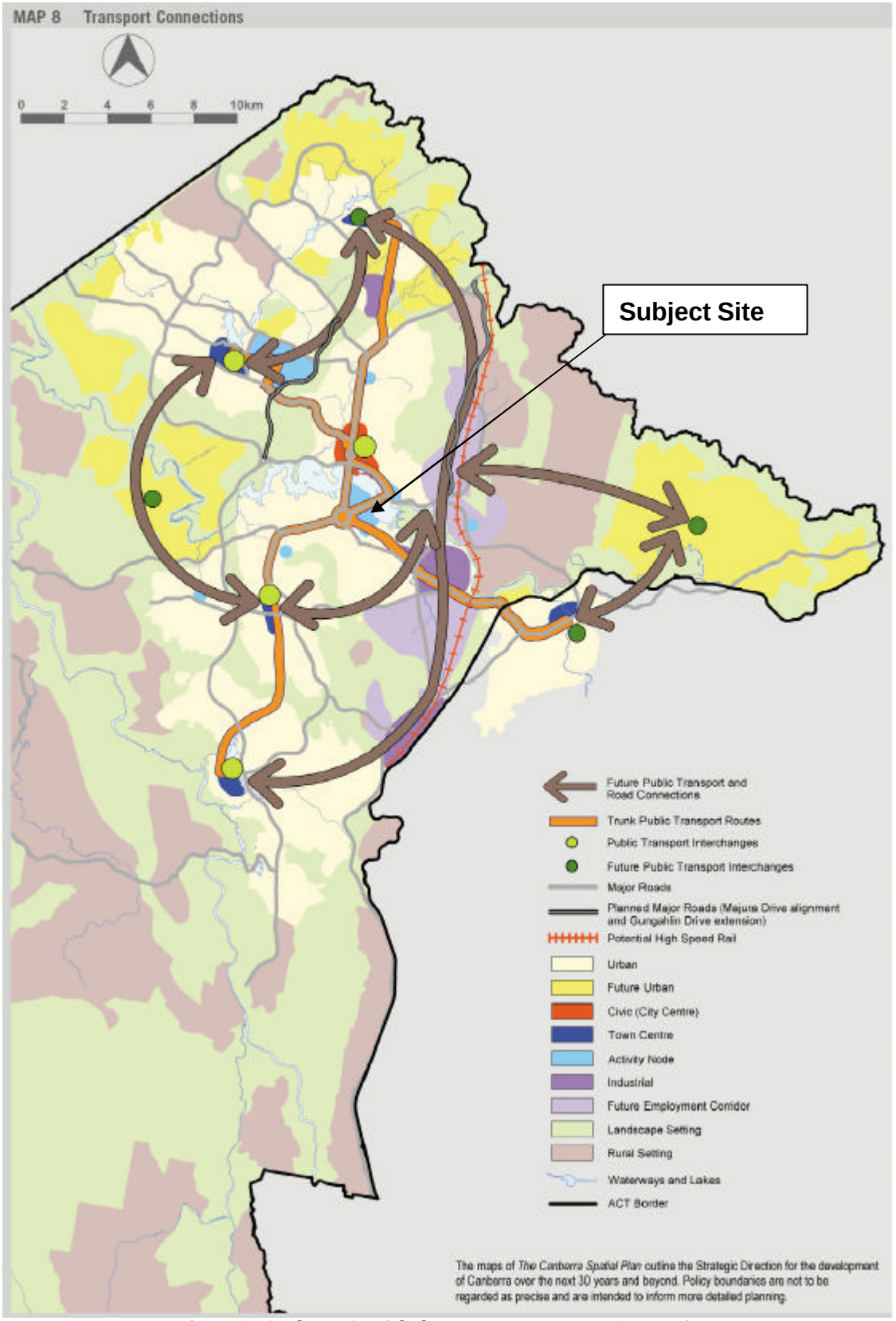

Figure 9: Canberra Spatial Plan – Future Transport Connections

ACT: A Capital Future

"Canberra: A Capital Future - Managing Transport Development" states that Canberra's past reliance on road systems is no longer appropriate and aimed simply at satisfying an ever

increasing demand for private travel. It further states that a better approach is to aim for an affordable balance between the provision of new roads and the creation of a more effective public transport system as a genuine alternative to private car use.

7.1.3 Parking Demand

A detailed analysis of short/long stay parking demand/supply has been undertaken taking account of the following factors:

- Decreased demand from greater provision of on-site parking in new developments in the area;
- Temporary decrease in parking demand as a result of the refurbishment of the Edmund Barton Building; and
- Greater public transport mode split by 2008-09.

This analysis is included at Attachment F (Traffic and Parking Report), but is summarised below.

7.1.4 Long Term Parking Assessment

In terms of the long-term use of the site all surrounding on-street parking spaces will revert to short-term parking, consistent with ACT Government policy. Commercial redevelopments in Barton will generally cater for the employment rates they support and there will be a decreasing demand for off-site long stay parking.

Short Stay Parking

There is currently a lack of short-stay parking in the vicinity of the site. This is shown by the negative surplus (or deficit) in Figure 10. This deficit can be addressed by:

- Immediately enabling parallel on-street parking on the eastern side of Blackall Street, which requires some simple changes to signage (creating about 40 additional spaces), and new right angle parking on the western side of Blackall Street (48 spaces).
- Constructing 40 spaces along the proposed laneway, to be completed in September 2008 (this could be long-stay initially and converted to short-stay later)
- Constructing 20 spaces behind the proposed retail/commercial centre, to be completed in May 2009

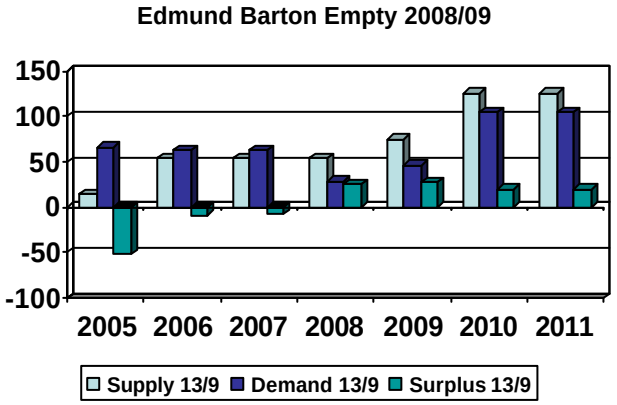

Figure 10: Short-stay Parking Supply/Demand

Long Stay (Commuter) Parking

An assessment of parking supply and demand will enable an estimation of the likely level of car parking to be supplied on the site upon the completion of surrounding development and the development of the site itself. Three methods have been used to provide an estimation of future parking demand for the site:

1. Work backwards from 1,400 spaces using NCA's methodology (NCA 2001) and expected changes in development and parking supply assumptions, consistent with achieving the long-term objectives of the ACT Sustainable Transport Plan.
2. Work forwards from the current parking supply/demand situation at Block 13 Section 9 using data on expected changes in floor space and parking supply.
3. Working forwards from the current parking supply/demand situation using 2001 Census journey to work data and expected changes in floor space and parking supply.

The workings of the methods are included in **Appendix D** of the Traffic and Parking Report at Attachment F. A number of future scenarios are possible for future development. Therefore Methods 2 and 3 are subject to varying assumptions including:

- A percentage of local office employees that would otherwise use the Block 13 Section 9 car park that overspill into Parkes or York Park (e.g. employees of Edmund Barton, Robert Garran, McLachlan and 1 National);
- Changes in employment conditions and journey to work trips, e.g. percentage work at home, casual or part-time work, mode choice, pay parking and other sustainable transport initiatives;
- Staging of development; and
- Occupancy of the Edmund Barton Building.

Method One: NCA Strategy

NCA (2001) identified a requirement for 2,960 parking spaces within three structured car parking buildings, including a 1,400 space car park on Block 13 Section 9. The strategy assumed the provision of one parking space per 100m² GFA on-site (for National Land) and the remainder to be provided off-site.

In reality, 2 spaces per 100sqm has been provided in new buildings since 2001, reducing the requirement for structured car parking by 1/100sqm of new buildings since 2001. Future buildings to be built on vacant land in Forrest would also provide 2 spaces per 100sqm, further reducing the required size of structured car parks. The result of such an analysis is shown in Figure 11, assuming full development by 2015 and no change to the proposed size of the York Park and Moth site car parks. It shows the requirement for a 323 space car park on the site in the long-term, which includes 60 spaces for the commercial development on Site D.

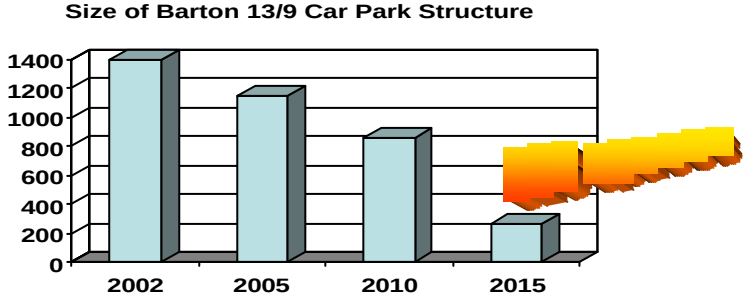

Figure 11: Size of Structured Car Park Using NCA Method

Method Two: Using Floor Space and Parking Supply Data

Figure 12 shows the results of the analysis using method 2. It shows that a temporary 160 space car park is likely to be needed during construction, prior to the completion of the structured car park.

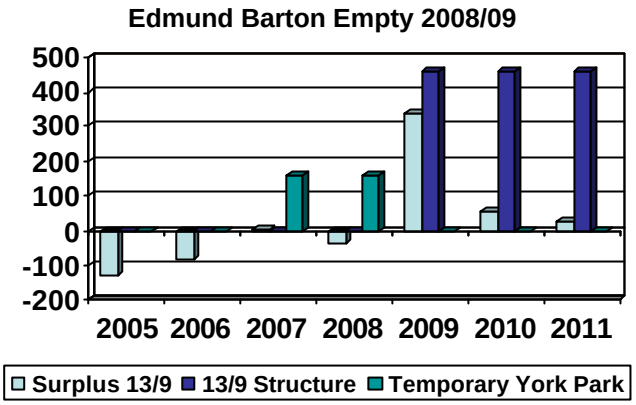

Figure 12: Parking Supply/Demand Analysis Using Floor Space and Parking Supply Data

Method Three: Using JTW and Parking Supply Data

The results of the analyses for a range of scenarios are provided using method 3. Figure 13 shows the results of an analysis that assumes that the ACT sustainable transport mode split targets are achieved. It is dependent on the implementation of pay parking in Parkes/Barton in 2006. It shows that a temporary 160 space car park may be needed for a short period at York Park, assuming that the Edmund Barton Building is still occupied upon commencement of development on the site. In reality, construction is likely to commence shortly after staff move out of the Edmund Barton Building and no temporary parking will be required.

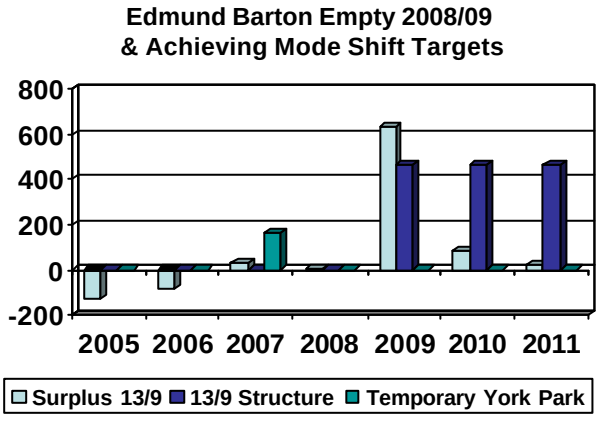

Figure 13: Parking Supply/Demand Analysis Using JTW and Parking Supply Data (Scenario 1)

Further analyses were undertaken for a worst case scenario - mode shift targets not achieved and new tenants in Edmund Barton Building (see Figure 14). This indicates that up to 460 temporary parking spaces would be needed in 2008, based on parking supply and demand calculations for the site. However, it also reveals that the original deficit of 600 spaces for Barton/Forrest would be reduced to almost nothing by 2007. Thus, there is scope to reduce the temporary parking assuming that there will still be spare parking capacity in Parkes for Barton workers to use (about 500 Barton workers currently use car parks in Parkes, based on a 2002 survey by Datacol).

There is potential to reduce the size of the structured car park on the site and the amount of temporary car parking provided during construction. This is illustrated in Figures 15 and 16. The latter scenario is closer to reality and shows no temporary parking and a 320 space car park on the site.

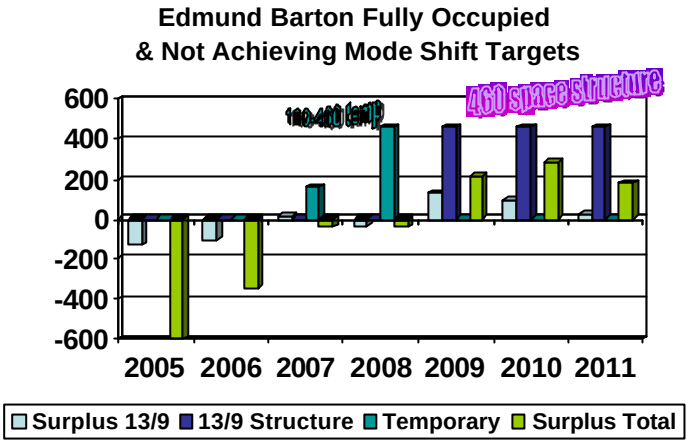

Figure 14: Parking Supply/Demand Analysis Using JTW and Parking Supply Data (Scenario 2)

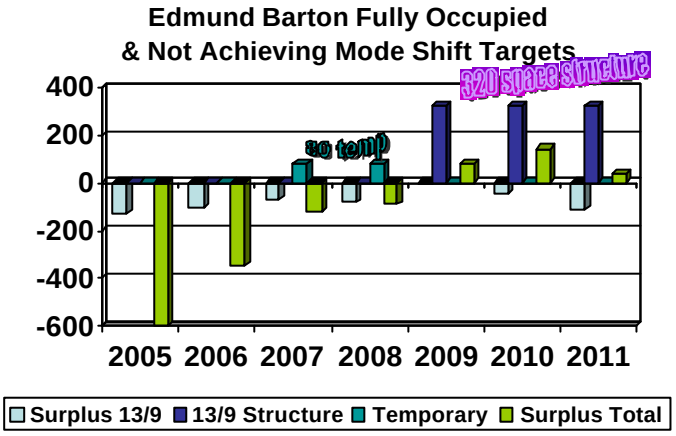

Figure 15: Parking Supply/Demand Analysis Using JTW and Parking Supply Data (Scenario 3)

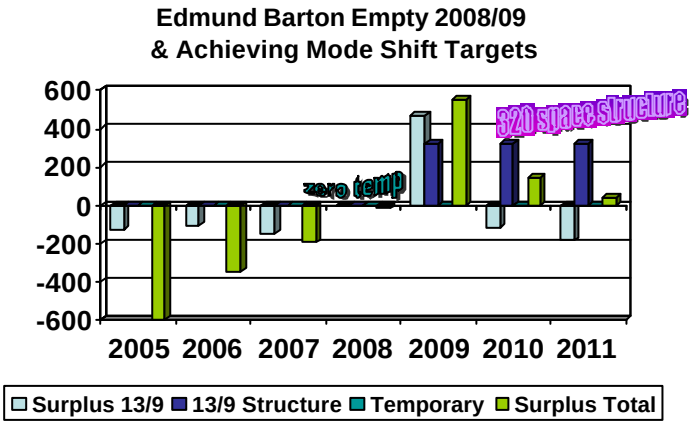

Figure 16: Parking Supply/Demand Analysis Using JTW and Parking Supply Data (Scenario 4)

Long Stay Parking Summary

The timing of development suggests that, based on current demand, a potential parking shortfall of up to 220 spaces between January 2008 (when all on-site parking is lost) and August 2008 (when the multi-storey car parking becomes available). However, future demand needs to be taken into account in order to provide a better assessment. Future parking demand is dependant on the following factors:

- Decreased demand from greater provision of on-site parking from redevelopments throughout Barton;
- Temporary decrease in parking demand as a result of the refurbishment of the Edmund Barton Building; and
- Greater public transport mode split by 2008-09.

Taking these variables into account, analysis indicates that parking demand by 2008/09 will decrease sufficiently to allow for a surplus of 145 temporary car parking spaces. After this time the multi-storey car parking structure will become operational, thereby allowing for additional and permanent long-stay parking.

Emphasis on the provision of on-site parking for approved and future development is expected to result in a fall in off-site long-stay parking demand of up to 500 parking spaces by 2009 throughout Barton/Forrest. A temporary drop in demand for parking is also likely to occur as a result of the refurbishment of the Edmund Barton Building during 2008/09.

In summary the three methods of assessment indicate that a structured car parking facility providing about 320 public long-stay spaces would cater for the reasonable needs of commuters in the area. It is likely that no temporary parking will be needed during construction, but this needs monitoring. An opportunity exists to provide temporary parking at York Park North (on the Windsor Walk alignment) if necessary.

7.1.5 Interim Parking Plan

As discussed there are currently 470 formal parking spaces on site; all spaces will be displaced at some point during construction. However, not all the spaces will necessarily be lost at one time, as the development is proposed to be staged. The initial development of offices on Site A1 & A2, corner of Broughton Street and Macquarie Street will displace about 150 parking spaces by early 2007. The establishment of a laneway (permanent site access) along the southern part of Site A1 & A2 will initially enable construction vehicle access, but become available for parking from September 2008. Up to 50 — 90 degree long stay car parking spaces should be available along the southern side of the laneway.

The development of a parking structure (Site C) will also require the removal of up to 50 marked spaces from September 2008. This should coincide with the availability of the laneway spaces. The remaining 220 marked spaces will be required in May 2009 for the development of residential (Site B), and retail facilities (Site D).

Off-site parking demand from displaced parking spaces during the development of the site is therefore about 150 spaces from January 2007 until September 2008. Other influences on temporary parking demand will be influenced by other decisions, e.g. the refurbishment and development of commercial buildings throughout the area. Depending on the extent and

timing of new surface parking e.g Blackall Street and the laneway, it may be possible to avoid a need for temporary of site car parks (depending on which programme option is realised , see Gantt Charts at Section 11.2 of this report).

If these additional spaces in Blackall Street and the on-site laneway are operated as long stay parking, until the parking structure is operational, then the demand for temporary off site parking can be significantly reduced or removed.

7.1.4 Temporary parking sites

Off site car parking opportunities include temporary on-street parking along the eastern side of Blackall Street and the development of Windsor Walk in York Park. Further parking may also be available at the rear of the Moth Site.

Blackall Street Temporary Parking
Current parking restrictions prevent car parking along the eastern side of Blackall Street. Analysis shows that up to 40 parallel parking spaces could be temporarily or permanently provided on Blackall Street for short-stay parking, to address a short-fall in short-stay parking in the area. Right angle parking (approximately 48 spaces) on the western side of Blackall Street is also proposed in all master plan options.

York Park Temporary Parking
Parts of Windsor Walk are currently being used for informal parking. The development of the southern section of Windsor Walk north of Brisbane Avenue plus an adjoining proportion of York Park North would enable more efficient parking plus a greater area to be used. Available space (excluding a landscaped strip along Brisbane Avenue) is in the order of 4,000m², which would provide up to 160 additional car parking spaces, if required (applying an average rate of 25m² per vehicle/manoeuvring space). Access would preferably be via Brisbane Avenue (left-in/left-out). Access to National Circuit via Blackall Street is possible, but would place greater pressure on the intersection of Blackall Street / National Circuit.

Moth Site
The development of land at the rear of the Moth Site for temporary parking could provide up to 300 spaces if required. Access could be provided directly off Sydney Avenue (left-in/left-out). However, potential environmental impacts and community opposition would need to be considered.

7.1.7 Road Network

Potential traffic generated from the development of Block 13 Section 9 may affect the operation of the surrounding road network. This section assesses those potential impacts and provides mitigation measures where necessary.

Traffic Generation
The development will only marginally increase the volume of traffic generated within Block 13 Section 9. Recent counts indicated that 551 vehicles were generated by the site during the peak hour. This reflects a very high arrival rate (about 87% of vehicles parked at the site arrived in the peak hour); as a comparison in Russell the peak hour arrival rate is about 65% of parking demand.

About 750 long-stay spaces will be provided in new development on the site, including that for the 120 residential units eg:

a. Office (A1 & A2)	= 240 Spaces
b. Residential (B1, B2, B3)	= 180 Spaces
c. Structure, including long stay demand for D	= 330 Spaces
Total	= 750 Spaces

Assuming a peak trip generation rate of 80% of parking spaces for the commercial car parking and 0.6 veh/hr/unit for residential uses, the site could generate up to 636veh/hr (ie, a 15% increase in traffic). However, actual trips rates are likely to be lower in 5 years time and a 5-10% increase is more likely.

The increased traffic (85 vehicles) was distributed to the network using current desire patterns (reflected in turn movements at the car park accesses). Account was taken of the changed access arrangements on Macquarie St and changed traffic patterns on Blackall St (with more residential). In addition, allowance was made for additional traffic on Macquarie St generated by the redevelopment of part of Robert Garran Offices. It indicated that there will be very little change in traffic on Macquarie Street, but a small increase on Blackall Street.

Intersection Operation
A qualitative assessment of future traffic generation on the road network suggests that the additional traffic can be accommodated within the existing road network and intersection configuration. The results of a more detailed quantitative assessment are included below.

A quantitative assessment of intersection operation in 2011 was undertaken using current distribution and the following assumptions:

- Background growth of 2% pa;
- Full occupation of approved future developments by 2011;
- Reoccupation of Edmund Barton Building by 2011; and
- 65% occupation of short-term parking on the site and immediately adjoining streets (to take into account visitor parking).

Analysis of the critical AM peak operation of the intersections with the development was undertaken using aaSidra 2.0. The results of the analysis are presented below.

Kings Ave / Blackall St
LoS A, with average delay for right turners out of Blackall St of around 66 seconds.

Kings Ave / Macquarie St
LoS C, with 95% back of queue lengths over 100m for all approaches

Brisbane Ave / Macquarie St
LoS B, with minimal delays to all movements

The SIDRA results suggest that there will be very little change in intersection operation with the development. More detailed results are included in Appendix B.

7.2 Real Estate & Market Environment

The detail of various Master Planning Options have been developed, and assessed taking into account information provided by quantity surveyor, Wilde & Woollard and Real Estate Advisory Services, Ernst & Young. This has allowed the financial and economic performance to each option to be established. There have been 7 Options prepared for the Master Planning of the site, known as Options 1, 2A, 2B, 3, 3A, 4 and 5. The Real Estate and Financial Analysis is attached in full at Attachment G.

Ernst & Young provided Real Estate and Financial Analysis after a rigorous analysis of current economic and market situations and its relevance to the Canberra market. The report indicates that economic developments over recent months point to a slowing in the growth of the Australian economy. Further, the balance of growth in the economy appears to be changing from household consumption to business investment, with increased levels of business activity proving a positive factor for the domestic economy.

Based on the economic information currently available and excluding unforeseen events that could have a dramatic impact on the global and local economy, it is expected that Australian economic fundamentals will remain relatively steady in the short to medium term despite a recent slowing in the economy. There are likely to be continual corrections in the market caused by changing levels of business and consumer confidence.

7.3 The Canberra Office Market

Canberra has approximately 1.57 million square metres of office space in inner-city and town centres. Civic has approximately 443,855 square metres of office space, representing about 29% of Canberra's total office space (as at July 2005), and out side the city areas there are approximately 1.13 million square metres of space ie. 71% of Canberra total. Approximately 60%-70% of that space is occupied by Government tenancies.

In the 12 months to July 2005, the total Canberra office market has seen the addition of approximately 35,063 square metres of space, in Civic, Belconnen, and the Airport. The following table details the change in office stock in Civic and Non-Civic (including Barton and other selected suburbs), from July 2000 to July 2005.

There have not been any significant office developments in Civic since July 2002. However, there are several projects under construction, which will add considerably to the precinct's office stock in 2006, including:

- QIC Westpoint's development at Precinct B, Section 84, City – a four to eleven-storey building with 23,000 square metres of office space, due for completion in 2006, together with a 40,000 square metre building at Precinct C Section 84;
- Consolidated Builders/Snow's office development at Blocks 3 & 4, Section 88, where a 14-storey building with 21,500 square metres of office space is due for completion in 2006 for DITR;
- An eight-storey building of 8,000 square metres of office space to be constructed by Willemsen on Marcus Clarke Street;

- Universal Portfolio Services, a joint venture owned by Mirvac Group and Leighton Properties secured approval in February 2005 for a 12-storey office building of 29,400 square metres GFA, on Block 16, Section 61(Marcus Clarke Street);

Table 5: Canberra Office Market Stock: July 2000 to July 2005

Office Precinct	Jul-2000 (sq metres)	Jul-2001 (sq metres)	Jul-2002 (sq metres)	Jul-2003 (sq metres)	Jul-2004 (sq metres)	Jul-2005 (sq metres)
Civic						
Civic	443,887	439,630	439,630	435,382	433,763	**443,855**
Non-Civic (Selected Suburbs)						
Airport	0	4,000	16,000	18,700	40,700	**45,400**
Barton	190,393	188,532	186,061	191,308	191,308	**190,002**
Belconnen	131,890	132,568	128,878	134,878	134,878	**149,578**
Campbell	51,625	51,625	51,625	51,625	51,625	**51,625**
Forrest	14,815	14,815	15,140	27,593	37,093	**37,093**
Parkes	48,062	39,502	63,836	63,836	67,236	**67,236**
Phillip	122,652	122,652	122,652	122,652	122,652	**122,511**
Russell	110,299	110,299	110,299	110,299	110,493	**110,493**
Tuggeranong	66,474	66,474	68,144	68,144	68,144	**68,144**
Other	265573	265,873	276,764	277,264	289,346	**287,822**
Total Non-Civic	1,001,783	996,340	1,039,399	1,066,299	1,113,475	**1,129,904**
Overall Canberra Market						
Total	1,445,670	1,435,970	1,479,029	1,501,681	1,547,238	**1,573,759**

Source: Property Council of Australia – Office Market Report - July 2005

- A five storey building 9,200 square metres of office space to be constructed by London 11 Pty Limited on Block 20, Section 10 (London Circuit) former YMCA site;
- The Evri Group acquired Section 92 at auction in August and will develop 8,000 square metres of office accommodation (Marcus Clarke Street)
- Leighton Properties has entered into an agreement to provide NICTA with 6,200 square metres of A Grade accommodation as part of a building of approximately 17,000 square metres on London Circuit.
- The intended relocation of Department of Agricultures, Fisheries and Forestry from the Edmund Barton Building to Civic in 2007/8.

The most dramatic growth in stock of Canberra's office precinct sub-regions has been the Brindabella Business Park at Canberra Airport, being a total of 45,400 square metres of office space since January 2001, and demonstrates the strong growth of the Canberra Airport office precinct.

Other developments in Non-Civic Canberra office sub-regions include:

- Two projects by Industry Superannuation Property Trust (ISPT) on adjoining sites in Barton at 1 National Circuit and 3-5 National Circuit, providing 15,000 square metres and 18,000 square metres of office space respectively, with projected completion of 1 National Circuit in late 2006 and a projected completion of 3-5 National Circuit in 2008/2009.
- A 40,000 square metre office building in Tuggeranong, to accommodate Centrelink has recently been announced with a completion date of 2007.
- The Glass House in Phillip a 14,000 square metre building is under construction and due for completion in 2006.

Given the number of pre-commitment leases that have been negotiated or are in negotiations and the lease expiry profile in 2007, market sources anticipate that the vacancy rate in 2007/08 will increase from 2.9% to somewhere between 12 – 15% predominately, in B to C Grade buildings.

7.4 Residential unit market

Analysis undertaken by the Land Development Agency (LDA) indicates that currently there are approximately 3,000 units, in the pipeline with a further 2,000, having been identified for construction within the next three years. There were some 2,200 units under construction in the ACT as at 30 June 2005. There are 32 DA's issued, but no building applications lodged, for multi unit developments, 22 of which are in the Central Canberra district, that are expected to yield approximately 630 separate dwellings. The potential 3 year additional multi unit development provides for an additional 1,937 dwellings of which 1,213 are within the Canberra Central district.

The majority of unit sites are in the Canberra Central area (which includes Barton). The LDA's June 2005 Residential Land and Building Activity Report suggests that 63% of units under construction are in the Canberra Central area.

Overall, the demand for multi unit sites is somewhat subdued, compared to 12 to 18 months ago. A site on Kingston Foreshore was put to auction in August by the LDA and failed to reach reserve and has not been sold since. There are a number of developers that have considerable land banks of residential unit sites available to bring on line when market demand increases.

The 'Landmark' residential unit complex, located opposite the subject site on Blackall Street, has sold relatively well as a consequence of its elevated located, unit layout design and general value for money. The development reinforces the acceptance of residential unit development in the immediate area.

The following table provides an historic perspective of the median prices achieved for residential units throughout greater Canberra and the suburb of Barton from 1991 to current. It will be noted that in 2004 the Barton market represented 12.2% of the total greater Canberra market.

Table 6: Unit sale Statistics – Greater Canberra and Barton

Year	Canberra Median Unit- $	Canberra Unit Transfers	Barton Median Sale Price	Barton Total Sales	Barton % Total Sales to Canberra
2000	144,950	2,958	$220,000	23	0.8%
2001	165,000	3,321	$362,000	21	0.6%
2002	205,000	3,232	$380,000	13	0.4%
2003	262,000	2,790	$370,000	164	5.9%
2004	300,000	2,787	$395,000	341	12.2%
2005	314,250	1,801	$430,000	65	3.6%

Source – www.allhomes.com.au

The following table indicates that the Greater Canberra median unit prices have continued to increase through to the latest reported quarter i.e. June 2005.

Table 7: Canberra Summary of median unit prices - September Quarter 2005

Period	Canberra Total
September Quarter 2005	$294,500
June Quarter 2005	$295,000
March Quarter 2005	$291,500
June Quarter 2004	$284,000
% Change March 2005 – September 2005	1.03%
% Change June 2004 – September 2005	3.70%

Source Real Estate Market facts – September Quarter 2005

Canberra's median residential rentals are measured to be the highest of any of the capital cities, and its vacancy rate the lowest of any of the capital cities.

Table 8: Summary of Median Weekly Rents – September Quarter 2005

Quarterly Median Rent $/week	Quarterly % Change	Annual % Change
$280	0.0	3.7

Source Real Estate Market facts – June Quarter 2005

An analysis of the most recently available information indicates that unit sales growth continues.

Table 9: Canberra Unit Prices September Quarter 2005 by District

City/Zone	Sample Size	Preliminary Median Price	Current Preliminary median compared with preliminary medians in earlier quarters		Lower Quartile	Upper Quartile
			Change over Quarter %	Change over Year %		
Canberra Total	350	$294,500	-0.2	5.9	$250,000	$355,000
Inner Central	131	$320,000	-3.3	5.8	$280,500	$424,500
Inner South	53	$265,000	-11.7	-10.2	$199,000	$355,000
West & North	95	$270,000	-4.4	-2.9	$245,000	$315,000
Outer South	71	$273,000	-1.3	-2.9	$251,300	$310,000

Source Real Estate Market facts – June Quarter 2005

7.5 Retail uses

There is no shopping centre in the Barton area. It is considered that the predominant local user group will be the weekday Commonwealth office employee base and there would be sufficient call for convenience retailing. It is believed that there would be appropriate levels of demand for a sub-newsagency and/or a post office outlet. Although these operations do not have a high profit margin they would certainly add value to other convenience retailing. The

immediate area is supported by the relatively recently completed 'Landmark' residential unit complex and other residential areas in Barton.

Indicative retail and service retail uses may include:

- Restaurant/café
- Small grocer or convenience store
- Other convenience shops and services
- Drycleaners
- Bank or credit union

The possible GFA of such a centre would be 700 to 1000square metres.

7.6 Carparking Management

There is no operating commercial pay parking station within one kilometre radius of the subject site. As such, no Fringe Benefit Tax (FBT) on carparking provided by an employer exists. Should a pay parking station operated, FBT for employer provided carparking would prevail within one kilometre radius of that pay parking station. The employer who is currently providing the free parking will be levied the FBT, at the current rate of $6.28 per car per day.

The analysis of the existing car parking supply in Barton/Forrest has confirmed that there has been a strong demand for parking in the immediate area, as evidenced during business hours on this free parking site on a Monday to Friday basis. A new structured parking facility whether "free" or on a pay parking basis would be very well patronized during business hours, from Monday to Friday. The financial analysis for the development of this site indicates that under a longer term lease or license agreement carpark rentals are in the order of $1,500 per space per annum excluding GST.

7.8 Main Issues of Risk and Mitigation Strategies

Table 10 outlines the main risks that have been identified as part of the Master Plan Options analysis process. Only those risks are identified that are considered to be applicable and to have an element of 'scale'. The consequence of each identified risk has been assessed, and given a rating status (significant or high) and its mitigation strategies.

Table 10: Risk and Mitigation Strategies

Risk	Consequence of Risk	Risk Rating	Mitigation Strategies
Fringe Benefits Tax (FBT) being crystallised for current free car parking within one (1) km where a public pay parking station is developed and operated	▪ Whole of Government potential impact when a pay parking station is opening for first time. Potential impact on all agencies within 1km. ▪ Consequence is MAJOR (impact to large number of Government agencies that currently are not liable for FBT) ▪ If property is sold a developer may crystallize the issue with major impact	HIGH	▪ Fully understand the ramifications of the applicable taxation determination ▪ Finance to be advised of the issues and implications ▪ Consider whole of government implications i.e. cost ▪ Structured carparking could be leased or licensed rather than be operated as a pay parking station.

Risk	Consequence of Risk	Risk Rating	Mitigation Strategies
	to Government. FBT rate is currently $6.28 per car per day.		
NCA requirement for existing publically available carparking to be replaced as a development condition in the granting of a new Crown Lease for new development.	▪ The NCA will likely require the site developer to develop structured carparking to replace existing grade carparking in addition to parking required for new commercial premises. ▪ Consequence is MAJOR	HIGH	▪ Fully discuss and debate the issue with the NCA ▪ Consider options to reduce the impact of the proposed development condition ▪ Understand the financial implications of the proposal i.e. cost to provide and potential returns ▪ Consider appropriate and defensible financial and legally based strategies to manage the issue
NCA may require the supply of a temporary carparking facility to accommodate displaced carparks while the site is redeveloped	▪ Potentially significant due diligence issue that may affect the sale negotiations and pricing of the site when sold ▪ Major non-revenue cost to a developer to provide temporary facility ▪ Potential difficulty in sourcing sufficient volume of temporary spaces	HIGH	▪ Finance to fully understand implications prior to sale and where possible negotiate appropriate Crown Lease terms with the NCA ▪ Finance to identify and if possible determine Heads of Agreement or an MOU for the occupation of a site(s) to assist in facilitating a sale
For commercial and possibly carpark leases to the Government ensure that a sale is not deemed a Finance Lease	▪ Sale would not be reflected in the books of the Commonwealth (based on the assumption that the property is sold with a sublease or agreement to sublease in place) ▪ Consequence is MAJOR	HIGH	▪ Review of overall sale structure and lease arrangements ▪ Strong valuation and accounting advice throughout process
A potential purchaser is not willing to enter into commercial terms in accordance with the nominated Masterplan	▪ A sale of the site could be affected in terms of price and or ability to sell ▪ Consequence is MAJOR	Significant	▪ Finance to ensure that the masterplanning is not so rigid over the site that future developers are required to enter into protracted negotiations with the NCA to alter the Masterplan
Development of a site may not meet the timing requirements of Finance i.e. the divestment program of Finance	▪ Finance may not be able to carry out its preferred divestment transaction as originally contemplated ▪ Consequence is MAJOR	Significant	▪ Finance must ensure that it will enter commercially acceptable sale terms and conditions, and where appropriate development control agreements
Delays and cost increases in rental, fitout and other occupational costs	▪ Costs may inhibit the ability to negotiate a sale agreement on acceptable terms and conditions ▪ Consequence is MAJOR	Significant	▪ Finance to be fully cognisant of the development and real estate cycles (e.g. rental and yield levels), and when best to sell to ensure the best value for money
Reg. 10, PWC and/or other approval(s) not occurring	▪ Project could be delayed ▪ Consequence is MAJOR	Significant	▪ Early engagement with stakeholders ▪ Develop strong Business Case for a Government precommitment to the site
Preferred precommitment lease terms not readily achievable due to changes	▪ Less favourable lease terms and conditions ▪ Possible less desirable	Significant	▪ Confirm possible competitive demand by other Departments ▪ Determine favoured lease, terms and

Risk	Consequence of Risk	Risk Rating	Mitigation Strategies
in the real estate market	site(s) ▪ Executive's requirements not met ▪ Consequence is MAJOR		conditions ▪ Early negotiations on preferred locations
Not correctly identifying precommitment requirements in base building brief, contracts and leases	▪ Precommitment may fall over ▪ Consequence is MAJOR	Significant	▪ Flexibility to cater for change as late as possible ▪ Lease terms and conditions to be sufficiently documented ▪ Agreement to Lease documents to include necessary information ▪ Effectively identifying and drawing out requirements

8 Master Plan Options

A number of land use and Master Plan options have been prepared and tested, and each is based on a land use mix which includes offices, residential retail and personal services, and a car parking structure. All Master Plan options have been designed to respond to a number of Principles, which were established as an output from the various analyses and assessments. They are as follows:

8.1 Principles

8.1.1 Landuse

a. The development site should be investigated as a prestigious mixed use area comprising, residential, office, retail, and public parking.
b. Limited retail and service outlets should be provided to service those employed or living in the general area.
c. Open space (s) should be provided as an amenity and setting for any new development, and to allow retention of the main group of mature trees.
d. To ensure the parking structure is related to the long term needs for pubic parking on this site.

8.1.2 Urban Design

a. Align buildings mainly with street frontages to ensure community safety, legibility, good address, and clarity of building form.
b. Efficient and Functional building footprints should be designed to optimise planning and design of buildings, structure and services as well as optimising northern orientation for residential use.
c. Ensure an efficient and direct system which not only provide attractive and convenient linkages to surrounding areas and systems, but also enhances the legibility and address of the various elements within the development.
d. Ensure that any parking structure is not a dominated element in the development.
e. Generous spaces should be provided between buildings to facilitate natural ventilation and air movement, to ensure privacy and amenity for occupants and to allow space for deep root planting where possible.
f. A plaza as a central meeting place and public place at the bend on Macquarie Street opposite an existing pedestrian crossing and pocket park and northern forecourt to the Kurrajong Hotel, is to be investigated as the preferred location for a retail centre.
g. A range of building heights rather than a uniform building height should be used to create a varied profile for this high ground in Barton North, achieving urban design, social and environmental objectives.
h. Extend the existing streetscape typology of Barton, incorporating footpaths / landscaped verges and street trees, 90° and parallel parking on Blackall Street and appropriate and landscaped frontages to all buildings.
i. An ensemble of distinct building elements capable of staged construction, which achieves a cohesive sense of place and place making, and delivers a much needed meeting place in north Barton.

8.1.3 Landscape

The landscape plan for the proposed development should be designed to achieve the following landscape design principles:

a. Reflect the landscape character of the wider area and enhance the urban design quality of the proposed development.
b. Reinforce the existing pattern of streetscapes/street trees/ and shaded pathways
c. Create simple uncluttered green spaces carrying over the simple nature of the Kurrajong 'pocket park'.
d. Refined design for the possible retail plaza on Macquarie Street to create a sense of place and appropriate setting for outdoor dining.
e. Accentuate the changing levels within the open space area, with the elevated private address drive and turnaround square overlooking the public space.
f. Use of strong built walls, pergolas and edges to define the various landscape areas at a quality befitting Barton and the Kings Avenue Landscape area.
g. Avoid unnecessary clutter with non-essential street furniture etc, but provide seating and lighting as necessary, utilising fixtures already in use in north Barton.
h. Utilise water sensitive urban design practises.

8.1.4 Transport and Parking

a. A parking structure should be proposed to accommodate future pubic parking demand taking into account the need to encourage greater use of public transport for the journey to work consistent with the ACT Governments Sustainable Transport Plan.

b. Parking for all new development will be provided at rates and in locations consistent with the ACT Parking and Vehicular Access Guidelines.

8.1.5 Pedestrian Movement

a. Pedestrian pathways will be provided to enable safe and convenient movement and should connect to major external paths.
b. Pedestrian safety should be achieved through appropriate architectural designs and natural surveillance.
c. Pedestrian pathways will be designed to satisfy the Crime Prevention Through Environmental Design (CPTED) principles.

Based on the above principles, a number of land use responses were developed which were basically common to all options i.e:

- The preferred location for offices suitable for government occupation is the land fronting Broughton Street, partly because of the interface with existing office buildings, and partly because of existing land use policy (Commercial).
- The preferred location for residential development is land fronting Blackall Street, where it will reinforce existing residential developments, and exploit any views of the lake.
- The preferred location for a retail/services centre and smaller private offices is Macquarie Street, because of its centrality, relationship with the open spaces opposite and pedestrian systems, and its attractive leafy and open character.

- The preferred location for the parking structure is adjacent to the southern boundary, where it has an opportunity to be screened by buildings fronting Macquarie Street and/or Blackall Street, and can have good accessibility from either or both streets.
- The preferred location for a small park (public or private) is the adjacent to the south west corner of the Ottoman sit, where it can be take advantage of the main tree group on the site and provide an attractive setting for any north facing residential development.

All options were not produced at the same but represent a progression of ideas following detailed testing, inputs from stakeholders and feedback from NCA. The main differences related mainly to variation in building height and foot prints, and the size of the parking structure. Each of the option is as illustrated and contains the following elements.

8.2 Options

8.2.1 Option 1 (Figure 17)

This option comprises the following main elements.

- 5 levels of office building with parking fronting Broughton Street (Building A1 & A2, Figure 17). In total Buildings A1 and A2 will provide 12,000m^2 GFA. There will be two levels parking on-site, 120 cars per level, one of which is a basement and the other an undercroft with natural ventilation at a provision rate of 2 spaces per 100GFA. The building is designed so that it can accommodate 2 tenancies of 6000m^2 each, with a common entrance and atrium.
- Three residential buildings (A4, B2 and B3) fronting, or with access from, Blackall Street. Various levels such as 5, 6 and 8 stories are proposed for the buildings B3, A4, and B2 respectively. All with basement parking. In this option all residential buildings will have 90 units in total—20 units in B3, 30 units in A4, and 40 units in B2. 135 parking spaces are proposed for all residential buildings in a basement.
- A parking structure (Building C) adjacent to southern boundary, with access from either Blackall Street or Macquarie Street. Parking structure could either be 5 levels or 6 levels. This is intended to generally accommodate existing parking displaced by development of the site. The parking structure can accommodate 100 cars per level.
- A3 is 3 storey building fronting Macquarie Street, containing street level retail and services activities, with either offices or residential above. 24 parking spaces are proposed at the rear of the building.
- E will be same as A3 for commercial, and no parking is proposed.
- Small address roads, pedestrian systems, pocket parks (allowing retention of the best tree group) and paving (in front of the shops/cafes) constitute the main structural elements

As with all options, additional short stay parking is provided on Blackall Street (88 spaces) and internal laneways (40 spaces), which can satisfy residential visitor and other short stay parking needs, but which can be used to satisfy long stay needs until the parking structure is completed.

8.2.2 Option 2A and Option 2B (Figure 18)

Proposed building A1 and A2 will remain the same as Option 1. The main differences are in the height of the residential buildings, as described below:

- Two residential buildings B1 and B2 are proposed with various levels from 6 to 10 levels. Building B1 could either be 6 levels (Option 2B), or 8 levels (Option 2A). Similarly, Building B2 could either be 8 levels (Option 2B) or 10 levels (Option 2A). Option 2A would provide 90 units in B1 and B2 with 8 and 10 levels respectively. This Option would provide 135 parking spaces in one Basement and one Undercroft level. Option 2B will provide 64 units at 6 and 8 levels respectively.
- A parking structure (Building C) is located adjacent to southern boundary, with access from Blackall Street. Parking structure could be 5 levels and would provide 450 parking spaces. This is intended to generally accommodate existing parking displaced by development of the site. The parking structure is 2800m^2 per level.
- A 4 is 3 levels with 970m^2 footprint, 1 retail level, and 2 commercial levels. 2 levels of carparking, 110 parking spaces are proposed in one basement and in one undercroft.

8.2.3 Option 3 (Figure 19)

- Two 5 storey office building with basement parking fronting Broughton Street (Building A1 and A2).
- Three residential building fronting, or with access from, Blackall Street. Two are proposed at 6 stories (B1 and B3) and one at 8 stories (B2), all with basement parking.
- A parking structure adjacent to the southern boundary of the site, with a frontage to Blackall Street. This is intended to generally accommodate existing parking displaced by development of the site. Parking structure could be 4 levels with 460 spaces proposed.
- A 3 to 4 storey building fronting Macquarie Street containing street level retail and services activities, with either offices or residential above (D). 60 parking spaces will be provided in parking structure.
- Small address roads, pedestrian systems, pocket parks (allowing retention of the best tree group) and paving (in front of the shops/cafes) constitute the other main structural elements.

8.2.4 Option 3A (Figure 20)

Option 3A is a variation in Option 3, in which building B2 is increased from 8 stories to 10 stories, with a commensurate reduction in B3, from 6 stories to 4 stories. Building A1 and A2 will remain the same as Option 1. Other features are:

- Three residential building fronting, or with access from, Blackall Street and proposed for 100 units. Various levels are proposed such as 6 stories (B1, 30 units), 10 stories (B2, 50 units), and 4 stories (B3, 20 units), all with basement parking. 150 carparking spaces at Basement, 18 cars undercroft at B3, 20 cars on external podium, total car spaces are 188.
- A parking structure adjacent to the southern boundary of the site, with a frontage to Blackall Street. This is intended to generally accommodate existing parking displaced by development of the site. Parking structure could be 4 levels with 460 spaces proposed.
- A 3½ storey building fronting Macquarie Street containing street level retail and services activities, with either offices or residential above (D). 60 parking spaces will be provided in parking structure, and 20 spaces on site behind building. No basement is proposed.
- Small address roads, pedestrian systems, pocket parks (allowing retention of the best tree group) and paving (in front of the shops/cafes) constitute the other main structural elements.

8.2.5 Options 4 (Figure 21)

Sites A1 and A2 will remain the same as Option 1. Other features are:

- Two residential buildings (B1, B2) fronting, or with access from, Blackall Street. Various levels such as 6 and 8 stories are proposed for the buildings B1, and B2 respectively. 100 parking spaces are proposed in 1 basement with 20 cars on external podium. Total 120 cars. 70 units are proposed.
- C is structure parking, proposed 4 levels, and will provide 460 spaces in total, including 60 dedicated spaces for Building D. Total footprint is 3050m^2
- D is commercial development as same as Option 3. It will be 3½ levels with 1000m^2 footprint, 3000m^2 Office, 1000m^2 retail and services
- No basement is proposed for the building D.

8.2.6 Option 5 (Figure 22)

Sites A1 and A2 will remain the same as Option 1. This option is similar to Option 3A, in term of it design, the main change in the footprint and size of the parking structure. Currently parking structure pushed back to the west leaving a space for residential development facing Blackall Street to replace the proposed residential building (B3), located immediately to be south of the Ottoman in Option 3A. This allows the site to be developed as an attractive and valuable park (public open space). All other features are described below:

- Two residential buildings (B1, & B2), facing north towards the open space, with access from Blackall Street. B3 is facing Blackall Street. Various levels are proposed. B1 and B2 are proposed at 10 levels each, and one at 4 levels (B3). In total all residential buildings will have 24 floors of apartments, and will provide 120 units. 180 car spaces are proposed.
- C is parking structure, which is smaller compared to other options, however, 5 levels are proposed, with 66 spaces per level. In total 330 spaces will be provided, consistent with the recommendations of the parking analysis.
- D is commercial development as same as Option 3. It will be 3½ levels with 1000m^2 footprint, 3000m^2 Office, 1000m^2 retail
- 60 car spaces in parking structure will be provided for the building D, and 20 spaces on site behind the building.
- No basement is proposed for the building D.
- A park public open space is provided in front of Building B1 & B2.

A common element in all options is an east-west road which will provide service and basement access to A1 & A2, and to the service yard of the Ottoman. It is intended as a shared space with special paving and will include right angle (short stay) parking spaces.

8.2.7 Preferred Master Plan

All Master Plan Options have been examined and tested in accordance with the National Capital Plan and other criteria. Stakeholder's consultations and other agencies comments have been considered. The options have been prepared and refined in close consultation with NCA. Considerations have also been given to the specialists sub consultant reports, including traffic and parking assessment, construction costs. Option 5 is considered the preferred Master Plan

Option, making best use of available land and creating an urban design solution and Master Plan layout. It also achieves good economic performance.

A more detailed Master Plan drawing for Option 5 follows (Figure 23), together with elevations (Figure 24) and an isometric (Figure 25)

8.3 Proposed Traffic and Parking Facilities

Traffic generation does not vary significantly between the development options.
All development options are considered to provide adequate vehicular and pedestrian access through the provision of laneways and pathways connecting between Macquarie Street and Blackall Street.

Pedestrian access is similar for all options through the provision of pedestrian footpaths alongside public roads and laneways plus additional pathways through open space.

8.3.1 Parking Supply

Parking supply for each option is as follows.

> **A1 / A2 Office Building**: 2 spaces per 100m² GFA for all options; and proposed 240 car in 1 Basement level and 1 Undercroft level.
>
> **B1/ B2 / B3 Apartments**: 1.5 spaces per unit for Options 1-3; 1.7 spaces per unit for Option 4; Option 1 depends on some on-street parking; Option 5 will provide 100 carparking spaces in undercroft, 40 on half basement, 20 cars undercroft at B3, and 20 cars external on podium. In total 180 cars will be provided.
>
> **C Car park**: 450 spaces for Option 2; 460 spaces for Options 3 & 4, including 60 spaces for Site D; 500 spaces for Option 1; and 330 for Option 5 (including 60 for D).
>
> **D Commercial**: 2 spaces per 100m² GFA for Options 3, 4 & 5 (located in Site C); 2.6 spaces per 100m² GFA for Option 1 (located in Site C); 3.7 spaces per 100m² GFA for Option 2;
>
> **E Commercial Corner**: No parking provided for Options 2 & 3;

Option 5 will provide the most suitable level of on-site parking, (see information provided in Chapter 5 of the Traffic and Parking Report).

8.3.2 Public Transport Access

In terms of access to the public transport network, all options provide a similar level of access to public transport service on Kings Avenue & National Circuit.

A shift in public transport usage from 6.9% in 2001 to 16% in 2016 has been targeted in the ACT Sustainable Transport Plan. The introduction of pay parking throughout the area should help to achieve this mode shift. There are a number of easily accessible bus stops within 400 metres walk of major commercial buildings in the area. These are located on Kings Avenue

and National Circuit as shown in Figure 5. Future pressure on the provision of off-site parking spaces will help to encourage a shift towards higher public transport patronage over time.

8.4 Landscape Master Plan (Figure 23)

A Landscape Master Plan has been developed in conjunction with Option 5 and is illustrated Figure 23. It involves the development of an understanding of the landscape opportunities and constraints for the site. This understanding is based on site information, an evaluation of the existing landscape features and settings together with the landscape context of the surrounding area. The broader surrounds of the site are characterised by formal and mature street tree plantings. Verges are generally non-irrigated grass and not well maintained setbacks to buildings may vary between five and ten metres and have provided opportunity for well maintained gardens which add to the overall 'Park Like" setting of the area.

Many other issues have also been considered in the preparation of the Landscape Master Plan such as density of residential complex the "Landmark" on Blackall Street, surrounding office buildings, and the small Park on the corner of Macquarie Street and Bligh Street. Two grouping of trees have been identified as having the potential to be integrated in future landscape schemes. A report on Landscape Master Plan has also been prepared and is attached in full at Attachment H.

The overall design concepts are based on the surrounding streetscape character, existing infrastructure and proposed building layout and usage. The sites opportunities and constraints identified from the landscape analysis allowed the following landscape detail to be formulated.

A1 AND A2 Office Building

- Formalized entrance defined by feature paving and feature planting
- Low shrub plantings required for security and define building podium (undercroft) limitations
- Plantings to integrate site landscape and streetscape

B1, B2, B3 Apartments

The proposed three residential apartment buildings provide an area for green space, between, and at the rear of the buildings, which will primarily be utilized by the residents. This space has been landscaped to create a pedestrian access point from the north-south path (between B1 & B2) and is quality open space for the residential precinct.

- Pergola structure works associated with the visitor parking at the front of B1 & B2, will provide a formal entrance to the residential park and create a separation of the public and private open space
- Plane trees will visually enclose the garden setting and the space will provide for possible residential community based activity
- Entry points to apartments from Blackall Street will be defined with feature plantings and paving treatment

C, Carpark

- Planting around the parking structure, not only provides an amenity for residents, but also screening in order to minimize the impact of the carpark on surrounding office and residential blocks.

D, Commercial

- Proposed paved and landscaped terrace fronting commercial shops has been designed to promote an active frontage and space for outdoor dining.
- Small deciduous trees are planted to allow winter sun and provide a buffer to the street frontage.
- Raised planter beds enhance the landscape setting in line with surrounding buildings and provide a sense of enclosure.
- connectivity to pedestrian crossing on Macquarie St provided access to commercial frontage.

Central Park

The configuration of the residential apartment blocks in Option 5 has allowed the provision of an attractive central park that is available for use by residents, and office workers and the general public. The space has been landscaped to retain existing trees, to augment the shared pedestrian/short term parking areas and to provide a quality open space for the precinct. The central park area provides a landscape link between adjacent developed areas that contributes to the Barton landscape setting and structure. Passive and active recreational pursuits are provided for within the park. Whilst the park could be constructed by the developer, in accordance with agreed sale conditions (Landscape Plan) on going maintenance and management responsibility is still to be resolved.

8.5 Proposed Engineering Services

8.5.1 General

The 525 mm dia trunk sewer is a constraint on the development. ActewAGL will require access to this main.

8.5.2 Sewer

The site has access to two sewer ties, one from Macquarie Street and one from Broughton Street. One of these could be utilised by the development provided they are functioning. If they are not, a 150mm dia tie will need to be constructed from 225 mm dia line in Macquarie Street. The 525 mm dia line should be protected by an easement. The sewer is a major link on the local sewer network and requires a ten metre wide unencumbered easement for maintenance purposes along its route within the site.

All other redundant services comprising sanitary drainage may be abandoned and terminated at their point of origin. Abandoned pipes may be removed from the site.

8.5.3 Stormwater

Stormwater discharge from the proposed development will be similar to existing flow from the site. Stormwater discharge from the site should connect into the 300 diameter pipe along the western side of the site. This line currently drains the site. There is a risk of stormwater

entering the site via the vehicle access points on Blackall Street. These access points should be altered to prevent localised flooding.

All other redundant services comprising stormwater drainage may be abandoned and terminated at their point of origin. Abandoned pipes may be removed from the site.

8.5.4 Water Supply

Water supply is available from the 150 mm dia pipe on the eastern side of the site. A 150 mm dia tie from Blackall Street will be required to provide adequate fire flows. The line will need to be extended from the vicinity of the north east corner of Tourism House to join the 150 mm dia line in the vicinity of where it enters the site from Blackall Street to maintain the circuit. This will require off site works.

ActewAGL wish to conduct modelling of the water system surrounding the site as they are concerned that the development could adversely affect water pressure in the surrounding area. This will be conducted after a concept usage for the site is developed.

It appears highly likely that the water main which runs along the eastern boundary of the site will need to be extended from the vicinity of the north east corner of Tourism House to join the 150 mm dia line in the vicinity of where it enters the site from Blackall Street to maintain the circuit. This will require off site works. This will be determined by the modelling conducted by ActewAGL. The 100 mm dia water main in Macquarie Street may need to be upgraded to a 150 mm dia main which will require substantial verge works. These works will be effected by the trees growing in the verge of Macquarie Street and a tree assessment will be required if there is to be verge works in this area. The need for these works will be determined by the modelling conducted by ActewAGL.

The existing 150mm dia water main traversing the northern portion of the site may be abandoned and/or utilised as a service connection for the new development. The water main which is abandoned in Macquarie Street verge must be terminated with an end cap and fire hydrant for flushing purposes to avoid water stagnating in the dead end.

New 150mm dia water main connections into live water mains are to be undertaken by ActewAGL at the developer's expense.

Services to be abandoned are shown on the ActewAGL Water Network drawing in Appendix D and marked [xx] denoting the abandoned service at Attachment B.

8.5.5 Electrical

The existing street lighting circuit will need to be removed or may be abandoned and terminated at their point of origin. Abandoned pipe and cables may be removed from the site. Care will need to be exercised when excavating the site during its redevelopment and construction phase if the existing lighting is to be retained. Power supply will most likely come from Macquarie Street.

8.5.6 Telstra

All redundant telecommunications services may be abandoned and terminated at their point of origin. Abandoned pipe and cables may be removed from the site.

It is understood to be Telstra's policy that connection will be provided to the block boundary at Telstra's expense subject to commercial viability of the demand.

8.5.7 Gas

Existing services to the Ottoman Restaurant must be retained including the gas pipeline nearby.
It is understood to be Agility's policy that connection will be provided to the block boundary, subject to the commercial viability of the ultimate demand.

8.5.8 Environmental Considerations and Water Conservation

There are a number of issues that should be considered by in more detailed design stages to reduce water usage of the development.

- Landscaping should utilise plants with a low need for water, preferably native plants
- The use of more permeable pavements should be considered
- The introduction of a dual system for plumbing should be considered in the design
- Installation of rainwater tanks should be considered as the water collected by the tanks can be utilised for toilets and landscape watering.
- Consideration should be given to designing the development to attain Australian Building Green House Rating (ABGR) and Green Star rating.

Overland Flow
The site topography slopes towards the North West corner of the development.

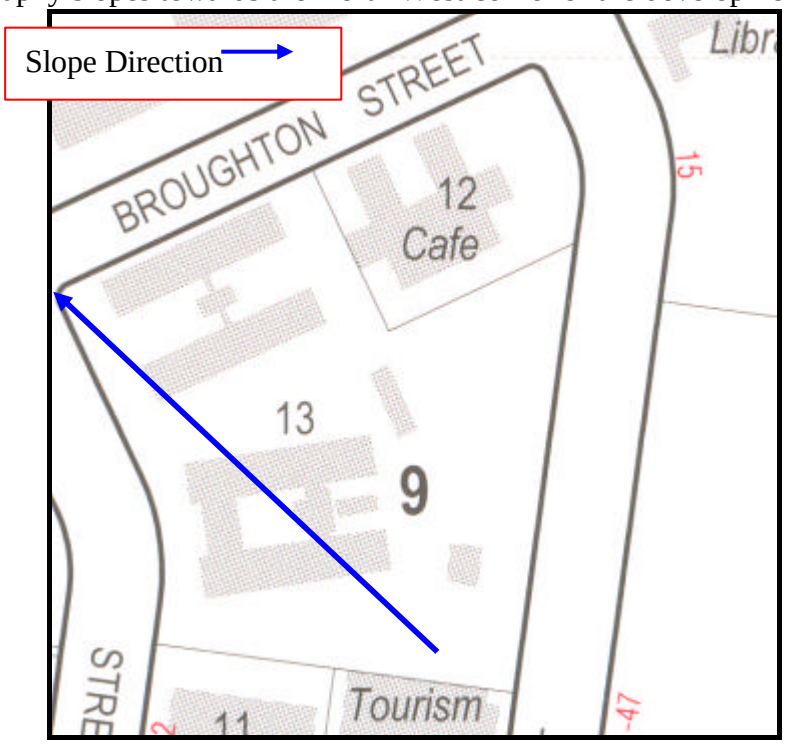

Figure 27: Overland Flow

Overland stormwater flows for the peak storm event are contained within the abutting road reserves. The site is neither on an overland flow route nor subject to flooding from peak storm events.

8.5.9 Summary of Proposed Services and Easements

The site is adequately serviced around its entire perimeter with hydraulic, power and telecommunication services, as well as road access. The site has adequate opportunities for redevelopment utilising the existing infrastructure adjoining the site with minimal upgrading of existing services.

Electrical services drawings supplied by ActewAGL do not indicate the presence of extensive lighting and underground cabling within the site. Nonetheless, care will need to be exercised when excavating the site during its redevelopment and construction phase if the existing lighting is to be retained.

The major constraint is the presence of a large 525mm dia trunk sewer traversing the north eastern portion of the site in the vicinity of the Ottoman Restaurant abutting Broughton Street and Blackall Street. The sewer is a major link on the local sewer network and requires a ten metre wide unencumbered easement for maintenance purposes along its route within the site. In addition, and although not a constraint to redevelopment of the site, a new 150mm dia water main will need to be installed in Blackall Street to restore the integrity of the water supply network caused from pipe which is abandoned within the site.

Existing services to the Ottoman Restaurant must be retained including the 525mm dia trunk sewer and gas pipeline nearby. All other redundant services comprising water supply, stormwater drainage, sanitary drainage, power supply and telecommunications may be abandoned and terminated at their point of origin. Abandoned pipe and cables may be removed from the site.

The existing 150mm dia water main traversing the northern portion of the site may be abandoned and/or utilised as a service connection for the new development. The water main which is abandoned in Macquarie Street verge must be terminated with an end cap and fire hydrant for flushing purposes to avoid water stagnating in the dead end.

New 150mm dia water main connections into live water mains are to be undertaken by ActewAGL at the developer's expense.

8.6 Heritage and Conservation Issues

A specialist heritage consultant, in consultation with ACT Heritage Unit, has confirmed that the land in question has no Indigenous and European Heritage Value. This site is not listed on any heritage registers, as the land has heavily been disturbed as a result of past landuse activities. Notes from Archaeological Heritage Surveys are included at Attachment E.

8.6.1 EPBC Referral

The proposed development does not impact on any of the six matters of national environmental significance subject to the EPBC Act 1991. The referral has been submitted to Department of Heritage on 29 November 2005, only because the proposed action is to take place on Commonwealth land and in order to demonstrate that there is no significant impact on the environment generally. Department of Environment and Heritage approved the referral application on 22 December 2005, confirming that the proposed development is not a controlled actvitity. The letter of approval of EPBC Referral is attached in Attachment I.

9 Agency Comments & Stakeholders Consultations

9.1 Consultation with stakeholders

The study process has involved regular consultation with key stakeholders. Firstly there have been regular meetings with NCA throughout the study process. These have been in the form of intensive working discussions where NCA, and Finance and its consultant team, have been able to exchange ideas and work through issues in relation to the type and form of future development. This process has allowed an understanding to be reached on the master plan approach, urban design, land use, height and setbacks, size and location of the parking structure etc. The preferred Master Plan concept has been progressively refined through this process, to the point where Option 5 has been mutually agreed as the one which best satisfies both National Capital Plan policies and aspirations, and the divestment objectives of Finance.

Consultations with other stakeholders have focussed on those with an interest in the immediate area. It included building owners e.g. ISPT (1 and 3-5 National Circuit, and Robert Garran Offices), Stockland (Edmund Barton Building), and Serif Kaya (Ottoman). Government Agencies with accommodation in the area were also consulted i.e. Department of Agriculture, Fisheries and Forests, and Australian Public Service Commission (Edmund Barton Building), Attorney Generals Department (Robert Garran Building) and Prime Minister and Cabinet (McLachlan Offices).

The above group of stakeholders were all consulted separately, on two different occasions, i.e. after site analyses were completed, and when a preferred concept was emerging.

The meetings were useful in that the consultant's team was able to find out about the redevelopment and refurbishment plans and programmes of the building owners, and the likely longer term accommodation strategies of the agencies.

The building owners were concerned to ensure that an equitable approach to parking in relation to new development was adopted, to ensure they were not disadvantaged in the level of on-site provision they had been asked to incorporate in their new developments e.g. 2 spaces per 100m2 for offices. These assurances were able to be given.

The government agencies were mainly concerned to ensure that an adequate supply of public long stay parking was provided for their employees, both during construction and on completion of the development. Mr Kaya emphasised the continuing need for short stay parking adjacent to the Ottoman because of the importance of the lunch time trade.

All stakeholders agreed that the lack of convenient shops and other services was a major issue for the ever increasing employment and residential population of Barton. The incorporation of this type of facility in the proposed development was therefore supported. Otherwise stakeholders generally supported the mixed use concepts being developed for the site.

Separate discussions were held with Department of Environment and Heritage because of the need for an EPBC referral. The referral has since been prepared and endorsed.

9.2 NCA's comments on preferred master plan Option 5

NCA had commented on all Options as they were generated, and ultimately confirmed their 'in principle' support to the preferred master plan (Option 5). The basic layout, land use, scale height of the scheme has been supported, including the location and size of the parking structure, shops, residential and commercial development.

NCA confirmed that the building heights proposed –ie, generally upto RL 591 are appropriate, however, a taller building element could also be supported where it can be demonstrated that it enhances the skyline of the precinct which, when viewed from a distance, currently suffers from an unnecessary degree of visual uniformity. Consideration of a taller building would take into account protection of amenity and overshadowing, and should not detract from the primacy of Parliament House in the background.

The number of proposed parking spaces in the parking structure (330 spaces0 is also supported. NCA also advised that self-contained parking either in basements/undercrofts or concealed behind building frontages should be provided to all new developments.

The proposed short stay on-street parking for residential and office visitors and access to shops, restaurants and personal services is also supported. Car parking consisting of 330 in parking structure (including 60 spaces for Building D) and additional 135 new on-street car parks (short-stay) is also supported.

The location of the proposed retail centre is supported, although NCA suggested that it could also potentially be extended along the Macquarie Street frontage and around the corner into Broughton Street if necessary.

10 Development Cost & Market Issues

10.1 Cost planning

Development cost estimates, prepared for 7 options by Wilde and Woollard, are included at Attachment J. All the development costs are based on various buildings proposed and their size, height, gross floor areas and uses. The cost estimates also assume that all the proposed buildings within various options would provide building quality appropriate for Parliamentary Zone including good quality façades as required to the car park structure. In addition undercroft and basement parking will be required for Buildings A1 & A2, B1, B2 and B3. External works e.g paving and landscaping of appropriate quality have also been considered. Table 11 summaries capital costs for all development options.

10.2 Valuation Advice

A financial and market based valuation analysis was undertaken to test all seven options. Each option has been tested and compared financially utilising a residual land pricing mechanism i.e. 'Estate Master'. The calculations have determined for each option the total indicative land price as at December 2005, as well as indicative land prices for each main component of the various options. Calculations for "staged development", as well as, "in one line" development scenarios have been undertaken.

The calculations require a relatively large number of assumptions, supported by market data, information and subjective assessment. For each main stage of each option, a hypothetical development was undertaken, whereby major assumptions were selected for following financial and market indicators:

- Commercia l rentals, sale yields and pricing structures
- Commercial rental leasing incentives
- Development periods, including periods to negotiate town planning and works approvals
- Sale prices and rates for completed residential units
- Car park rentals and pay parking rates and occupancy levels for the structured car park
- Development costs (provided by Wilde and Woollard and illustrated at Table 10)
- Holding costs
- Anticipated developers profit i.e. profit and risk factor
- Sale and marketing costs
- Marketing periods and settlement of sale dates

As discussed earlier that two development scenarios for each option were assumed:

a) There is an assumed development leasing and or sale of each stage of each option (as applicable); and

b) Development of the whole site "in one line", noting that with the development of the commercial office building (A1 and A2) developed ahead of the remaining site due to existing town planning and assumed pre-lease conditions being met.

In either case there is an overall assumption that the site or stages (as the case may be) will be offered for initial sale by Finance to a hypothetical third party developer.

The following tables outline summaries of the results of the financial calculations to determine the estimated levels of land residual process as at December 2005.

The tables are as follows:

- Table 12: Summary of indicated land price options
- Table 13: Financial ranking of indicated land price options
- Tables 14 to 20: Details of individual land prices by potential use.

It should be noted that all development options were prepared and tested in accordance with design and costing information provided by the specialist sub-consultants. In particular development massing, diagrams and development capacities were undertaken by Colin Stewart Architects, and construction cost data was prepared by Wilde & Woollard.

As a consequence of issues pertaining to the position and risks with potential FBT for a hypothetical structured carpark, various alternative financial calculations were undertaken for nominated options, with a pay parking arrangement and alternatively with an assumed lease(s) or licence(s) over the structured carpark. A total of 28 financial scenarios have developed for the seven options, where each of these options is considered on a staged development basis or development in one line, and for each of these alternatives a pay parking and a lease(s) or licence(s) option in relation to the structured carpark component.

As will be noted from Table 13 from residual land pricing criteria the development scenario that is the most financially attractive to Finance is Option 5 – development of the site in one line with a pay parking component (rather than predetermined licence type arrangements). It should also be noted that Option 5 scenario provided 4 of the 'top 10' most superior financial scenarios to Finance.

Table 12: Summary of indicated land price options

Option No.	Total Estimated Land Price ($) (assumed no pay parking)		Total Estimated Land Price ($) (assumed with pay parking)	
	Staged Development	Development in One Line	Staged Development	Development in One Line
1	6,670,000	7,380,498	8,087,065	8,797,563
2A	7,930,985	8,738,594	9,364,685	10,121,669
2B	3,867,000	4,347,931	5,275,000	5,755,931
3	8,878,000	9,676,788	9,952,000	10,750,788
3A	11,591,500	12,458,800	12,050,500	12,917,800
4	8,347,000	9,111,498	9,444,000	10,208,498
5	11,091,213	11,768,786	12,661,213	13,338,786

Table 13: Financial ranking of indicated land price options

Ranking by Price	Option No.	Description of Option	Estimated Land Price ($)
1	5	Development in one line - with pay parking	13,338,786
2	3A	Development in one line - with pay parking	12,917,800
3	5	Staged development - with pay parking	12,661,213
4	3A	Development in one line - without pay parking	12,458,800
5	3A	Staged development - with pay parking	12,050,500
6	5	Development in one line - without pay parking	11,768,786
7	3A	Staged development - without pay parking	11,591,500
8	5	Staged development - without pay parking	11,091,213
9	3	Development in one line - with pay parking	10,750,788
10	4	Development in one line - with pay parking	10,208,498
11	2A	Development in one line - with pay parking	10,121,669
12	3	Staged development - with pay parking	9,952,000
13	3	Development in one line - without pay parking	9,676,788
14	4	Staged development - with pay parking	9,444,000
15	2A	Staged development - with pay parking	9,364,685
16	4	Development in one line - without pay parking	9,111,498
17	3	Staged development - without pay parking	8,878,000
18	1	Development in one line - with pay parking	8,797,563
19	2A	Development in one line - without pay parking	8,738,594
20	4	Staged development - without pay parking	8,347,000
21	1	Staged development - with pay parking	8,087,065
22	2A	Staged development - without pay parking	7,930,985
23	1	Development in one line - without pay parking	7,380,498
24	1	Staged development - without pay parking	6,670,000
25	2B	Development in one line - with pay parking	5,755,931
26	2B	Staged development - with pay parking	5,275,000
27	2B	Development in one line - without pay parking	4,347,931
28	2B	Staged development - without pay parking	3,867,000

The details of individual land prices by potential land use have been provided in Tables 14 to 20.

Table 14: Option 1 Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	5,675,120	11,645,889	70,815,000	138,276,009
Project cost (excl. land)	40,014,624	9,502,580	7,630,956	47,855,212	105,003,372
Net development profit	6,540,576	-3,827,460	1,520,015	8,578,279	12,811,410
Individual IRR	33.24%	n/a	30.79%	30.57%	34.58%
Development margin	15.00%	14.67%	15.01%	15.00%	14.99%
Individual land value components - assumes staged development					
Land value	2,582,000	-4,667,000	2,262,000	6,493,000	**6,670,000**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,738,035	-4,667,000	2,396,435	6,913,028	**7,380,498**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**14,873,409**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**-394,691**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	7,600,000	11,645,889	70,815,000	140,200,889
Project cost (excl. land)	40,014,624	9,502,580	7,630,956	47,855,212	105,003,372
Individual land value components - assumes staged development					
Land value	2,582,000	-3,249,935	2,262,000	6,493,000	**8,087,065**
Development in one line					
Land value	2,738,035	-3,249,935	2,396,435	6,913,028	**8,797,563**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	99,744,815
Holding costs	1,059,811
Interest	6,545,911

Table 15: Option 2A Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	4,967,000	15,300,000	52,806,267	123,213,267
Project cost (excl. land)	40,106,250	8,264,552	11,155,664	31,987,831	91,514,297
Net development profit	6,540,950	-3,297,552	1,995,651	6,262,616	11,501,665
Individual IRR	33.38%	n/a	35.42%	27.76%	33.72%
Development margin	15.00%	15.00%	15.00%	15.00%	15.00%
Individual land value components - assumes staged development					
Land value	2,490,000	-4,044,700	1,842,685	7,643,000	**7,930,985**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,693,825	-4,044,700	1,948,816	8,140,653	**8,738,594**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**8,962,824**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**-998,676**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	6,800,000	15,300,000	52,806,267	125,046,267
Project cost (excl. land)	40,055,729	8,264,552	11,155,664	31,987,831	91,463,776
Individual land value components - assumes staged development					
Land value	2,540,000	-2,661,000	1,842,685	7,643,000	**9,364,685**
Development in one line					
Total land value	2,693,200	-2,661,000	0	8,140,653	**8,172,853**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	93,856,833
Holding costs	1,131,808
Interest	5,992,028

Table 16: Option 2B Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	4,967,000	15,300,000	37,000,000	107,407,000
Project cost (excl. land)	40,301,296	8,288,834	11,356,998	23,765,854	83,712,982
Net development profit	6,540,904	-3,321,834	1,996,002	4,390,510	9,605,582
Individual IRR	33.38%	n/a	35.42%	27.76%	33.72%
Development margin	15.00%	15.00%	15.00%	15.00%	15.00%
Individual land value components - assumes staged development					
Land value	2,295,000	-4,069,000	1,641,000	4,000,000	**3,867,000**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,431,663	-4,069,000	1,733,518	4,251,750	**4,347,931**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**9,648,324**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**-3,153,603**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	6,800,000	15,300,000	37,000,000	109,240,000
Project cost (excl. land)	40,301,296	8,288,834	11,356,998	23,765,854	83,712,982
Individual land value components - assumes staged development					
Land value	2,295,000	-2,661,000	1,641,000	4,000,000	**5,275,000**
Development in one line					
Total land value	2,431,663	-2,661,000	1,733,518	4,251,750	**5,755,931**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	84,488,943
Holding costs	734,945
Interest	4,943,940

Table 17: Option 3 Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	4,856,000	17,000,000	65,108,900	137,104,900
Project cost (excl. land)	39,903,034	7,892,781	10,154,230	42,689,277	100,639,322
Net development profit	6,540,965	-3,036,781	2,216,657	7,434,801	13,155,642
Individual IRR	33.31%	n/a	28.88%	29.51%	33.24%
Development margin	15.00%	14.99%	14.99%	14.37%	14.71%
Individual land value components - assumes staged development					
Land value	2,540,000	-3,767,000	4,035,000	6,070,000	**8,878,000**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,693,200	-3,767,000	4,289,113	6,461,475	**9,676,788**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**17,169,501**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**2,247,253**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	6,600,000	17,000,000	65,108,900	138,848,900
Project cost (excl. land)	39,903,034	7,892,781	10,154,230	42,689,277	100,639,322
Individual land value components - assumes staged development					
Land value	2,540,000	-2,693,000	4,035,000	6,070,000	**9,952,000**
Development in one line					
Total land value	2,693,200	-2,693,000	4,289,113	6,461,475	**10,750,788**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	97,823,812
Holding costs	1,160,241
Interest	6,583,202

Table 18: Option 3A Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	3,157,563	17,000,000	65,108,900	135,406,463
Project cost (excl. land)	39,615,799	5,854,176	11,065,092	41,558,914	98,093,981
Net development profit	6,541,401	-2,696,613	2,214,908	7,726,640	13,786,336
Individual IRR	32.68%	n/a	30.46%	29.39%	29.39%
Development margin	15.00%	14.98%	14.98%	15.01%	15.01%
Individual land value components - assumes staged development					
Land value	2,980,000	-2,068,500	3,380,000	7,300,000	**11,591,500**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	3,162,900	-2,068,500	3,589,900	7,774,500	**12,458,800**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**19,636,512**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**5,277,838**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	4,345,000	17,000,000	65,108,900	136,593,900
Project cost (excl. land)	39,615,799	5,854,176	11,065,092	41,558,914	98,093,981
Individual land value components - assumes staged development					
Land value	2,980,000	-1,609,500	3,380,000	7,300,000	**12,050,500**
Development in one line					
Total land value	3,162,900	-1,609,500	3,589,900	7,774,500	**12,917,800**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	93,914,408
Holding costs	1,267,319
Interest	6,702,507

Table 19: Option 4 Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	4,856,000	17,000,000	45,576,241	117,572,241
Project cost (excl. land)	40,047,309	7,908,606	10,203,495	28,093,318	86,252,728
Net development profit	6,540,803	-3,052,606	2,215,430	5,405,244	11,108,871
Individual IRR	33.51%	n/a	28.98%	28.63%	33.49%
Development margin	15.00%	15.19%	14.99%	15.00%	15.01%
Individual land value components - assumes staged development					
Land value	2,405,000	-3,790,000	3,990,000	5,742,000	**8,347,000**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,549,088	-3,790,000	4,241,075	6,111,335	**9,111,498**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**13,087,527**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**-60,330**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	6,600,000	17,000,000	45,576,241	119,316,241
Project cost (excl. land)	40,047,309	7,908,606	10,203,495	28,093,318	86,252,728
Individual land value components - assumes staged development					
Land value	2,405,000	-2,693,000	3,990,000	5,742,000	**9,444,000**
Development in one line					
Total land value	2,549,088	-2,693,000	4,241,075	6,111,335	**10,208,498**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	86,494,459
Holding costs	1,112,018
Interest	5,786,808

Table 20: Option 5 Key Results

Component	A1 & A2 Offices	Structured Carpark	Other Commercial	Residential	Total
Assuming a long term lease(s) for 75% of the structured carpark i.e. not pay parking					
Construction start	Jan-07	Aug-08	May-09	May-09	Jan-07
Construction complete	Aug-08	May-09	May-10	May-10	May-10
Revenue	50,140,000	3,547,000	17,000,000	77,975,000	148,662,000
Project cost (excl. land)	40,039,812	6,218,271	10,203,495	50,510,111	106,971,689
Net development profit	6,541,388	-2,671,271	2,215,430	9,247,253	15,332,800
Individual IRR	33.27%	n/a	28.98%	24.10%	33.52%
Development margin	15.00%	14.97%	14.99%	15.01%	15.00%
Individual land value components - assumes staged development					
Land value	2,566,000	-3,204,000	3,990,000	7,739,213	**11,091,213**
Construction start					Jan-07
Construction complete					May-10
Development in one line					
Land value	2,720,955	-3,204,000	4,241,075	8,010,756	**11,768,786**
Construction start					Jan-07
Construction complete					Nov-08
Sensitivity Analysis 1					
Increase revenue by 5% and decrease project costs by 5%					
Land value					**18,710,876**
Sensitivity Analysis 2					
Decrease revenue by 5% and increase project costs by 5%					
Land value					**2,928,080**
Assuming a lease to a carpark operator for 100% of the structured carpark and pay parking					
Revenue	50,140,000	5,574,000	17,000,000	77,975,000	150,689,000
Project cost (excl. land)	40,039,812	6,218,271	10,203,495	50,510,111	106,971,689
Individual land value components - assumes staged development					
Land value	2,566,000	-1,634,000	3,990,000	7,739,213	**12,661,213**
Development in one line					
Total land value	2,720,955	-1,634,000	4,241,075	8,010,756	**13,338,786**

Note: Major project costs include:

Wilde & Woollard costs (as at July 2006)	99,187,476
Holding costs	1,471,172
Interest	8,465,048

10.3 Sales Advice

The following tables indicate the key financial assumptions that were adopted to undertake the financial development scenarios, the key results of which are outlined in Tables 12 to 20.

The tables are as follows:

- Table 22: Option 1 key assumptions
- Table 23: Option 2A key assumptions
- Table 24: Option 2B key assumptions
- Table 25: Option 3 key assumptions
- Table 26: Option 3A key assumptions
- Table 27: Option 4 key assumptions
- Table 28: Option 5 key assumptions

Various planning, disposal and development assumptions in respect to sale and development of the whole site are assumed acknowledging the current zoning of the land that is proposed for a 12,000 sq metre GFA commercial office development (A1 & A2). The assumptions in the above tables assume that the 12,000 sq metre GFA site could be sold sooner than the balance of the site. In respect to the development of the structured carpark, the decision as to when to develop this component is a commercial one. For this exercise it is assumed that a developer would construct this component following the completion of A1 & A2, but before the balance of the site i.e B1, B2, B and D. NCA will also require the parking structure to be one of the early stages to ensure a continuing parking availability.

Timing assumptions and estimates for the sale and development of the 12,000 sq metre GFA office site (A1 & A2) and the balance of the site are mentioned in Table 21, based on 4 scenarios as below:

- Scenario 1- Sale of the site with significant design of buildings A1 and A2 undertaken prior to the sale (i.e. approximately 80%) the balance of design undertaken post sale (i.e. approximately 20%), and without referral to the Joint Parliamentary Committee;
- Scenario 2 - Sale of the site with some design of the building A1 and A2 undertaken prior to the sale (i.e. approximately 40%) the balance of design undertaken post sale (i.e. approximately 60%), and with preparation and referral to the Joint Parliamentary Committee;
- Scenario 3 - Sale of the site with most of the detailed design and documentation of buildings A1 and A2 undertaken prior to the sale (i.e. approximately 90%) the balance of design undertaken post sale (i.e. approximately 10%) and with preparation and referral to the Joint Parliamentary Committee; and
- Scenario 4 - Sale of the site with a minor component of the detailed design and documentation of buildings A1 and A2 undertaken prior to the sale (i.e. approximately 10%) the balance of design undertaken post sale (i.e. approximately 90%) and with preparation and referral to the Joint Parliamentary Committee.

Table 21: Timing and Development Estimates

Milestone	Scenario 1 date completed	Scenario 2 date completed	Scenario 3 date completed	Scenario 4 date completed
Executed Agreements for lease with two sublessees (assumed)	14 / 6/ 06	14 / 6/ 06	14 / 6/ 06	14 / 6/ 06
Development of user tenant brief by Finance as part of precommitment negotiations	19 / 5 / 06	19 / 5 / 06	1 / 8 / 06	19 / 5 / 06
NCA Board Meeting to ratify Masterplan	8 / 2 / 06	8 / 2 / 06	8 / 2 / 06	8 / 2 / 06
Finalise draft amendment to the NCP	5 / 5 / 06	5 / 5 / 06	5 / 5 / 06	5 / 5 / 06
Minister approves amendment to the NCP	9 / 6 / 06	28 / 07 / 08	28 / 07 / 08	28 / 07 / 08
Gazetted Notice of Amendment to NCP	15 / 6 / 06	3 / 8 / 06	3 / 8 / 06	3 / 8 / 06
Sale due diligence period completed	16 / 6 / 06	4 / 8 / 06	4 / 8 / 06	4 / 8 / 06
Sale RFT released	22 / 6 / 06	7 / 8 / 06	7 / 8 / 06	7 / 8 / 06
Sale contract(s) exchanged	13 / 9 / 06	26 / 10 / 06	26 / 10 / 06	26 / 10 / 06
Settlement of sale(s)	13 / 10 / 06	13 / 11 / 06	14 / 11 / 06	14 / 11 / 06
Works Approval documentation to NCA	30 / 10 / 06	1 / 2 / 07	4 / 12 / 06	2 / 4 / 07
NCA issues Works Approval	8 / 12 / 06	14 / 3 / 07	12 / 2 / 07	8 / 6 / 07
Release of RFT for building contract	30 / 10 / 06	15 / 1 / 07	20 / 11 / 06	5 / 3 / 07
Construction of buildings A1 and A2 commences	3 / 1 / 07	20 / 3 / 07	10 / 1 / 07	13 / 6 / 07
Construction of buildings A1 and A2 completed (including integrated fitout)	15 / 8 / 08	31 / 10 / 08	29 / 08 / 08	13 / 2 / 09
Relocation of tenants into buildings A1 and A2 complete and operational	1 / 9 / 08	17 / 11 / 08	15 / 9 / 08	2 / 3 / 09
Commence structured carpark construction	18 / 08 /08	3 / 11 / 08	1 / 9 / 08	16 / 2 / 09
Completion structured carpark construction	15 / 5 / 09	31 / 7 / 09	29 / 5 / 09	18 / 11 / 09
Commence residential and other buildings construction	18 / 5 / 09	3 / 8 / 09	1 / 6 / 09	19 / 11 / 09
Completion Commence residential and other buildings construction i.e. all development	19 / 5 / 10	30 / 7 / 10	29 / 5 / 10	19 / 11 / 10

Table 22: Option 1 Key Assumptions

Assumptions	A1 & A2 Offices	C Structured Carpark	A3 Retail & Commercial	E Corner Blg	A4 Residential	B2 Residential	B3 Residential
Data for Commercial Buildings (A1 & A2, A3, C & E)							
Gross Floor Area (sq metres)	12,000		1,800	900			
Net Lettable Area (sq metres)	10,200		1,620	810			
Car spaces	240	524	-	-			
Construction cost @ July 2006	36,833,580	10,265,640	4,550,490	2,206,890			
Construction cost @ December 2005	33,245,418	9,128,680	6,202,898	Included in A3			
Construction start date	Jan-07	Aug-08	May-09	May-09			
Construction end date	Aug-08	May-09	May-10	May-10			
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	400.00			
Net retail rental ($/sq m pa) at December 2005			450.00				
Outgoings ($/sq m pa) at December 2005	50.00						
Car park rent ($ pa per space) at December 2005	1,500	1,500					
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	7.25			
Value @ December 2005 assuming completion	50,140,000	5,675,120	11,645,880	Included in A3			
Settlement date	Aug-08	May-09	May-10	May-10			
Data for External and Street park							
Construction cost @ July 2006							
Construction cost @ July 2005							
Data for Residential Units (A4, B2, B3)							
Number of 2 bedroom units					18	24	
Number of 3 bedroom units					12	16	20
Total number of units					30	40	20
Construction cost @ July 2006					12,743,976	16,095,200	11,333,910
Construction start date					May-09	May-09	May-09
Construction end date					May-10	May-10	May-10
Construction period (months)					12	12	12
Average unit value on completion @ December 2005					682,500	878,500	760,000
Value @ December 2005 assuming completion					20,475,000	35,140,000	15,200,000
Other data and assumptions							
Holding costs:							
. Interest rate (%pa)	9.00%						
. Rates and Land Tax estimate ($ pa)	200,000						
. Stamp Duty	5.50%						
Leasing and sales commissions at market levels							
Construction cost includes fees and contingency							
Construction cost excludes GST							

Table 23: Option 2A Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	A4 Retail & Commercial	B1 & B2 Residential
Data for Commercial Buildings (A1 & A2, C & A4)				
Gross Floor Area (sq metres)	12,000		2,910	
Net Lettable Area (sq metres)	10,200		2,619	
Car spaces	240	466	-	
Construction cost @ July 2006	36,833,580	8,918,910	11,284,434	
Construction cost @ December 2005	35,079,600	8,494,200	10,747,080	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B2 & B3)				
Number of 2 bedroom units				54
Number of 3 bedroom units				36
Total number of units				90
Construction cost @ July 2006				31,104,780
Construction cost @ December 2005				29,623,600
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				586,736
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

Table 24: Option 2B Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	A4 Retail & Commercial	B1 & B2 Residential
Data for Commercial Buildings (A1 & A2, C & A4)				
Gross Floor Area (sq metres)	12,000		2,910	
Net Lettable Area (sq metres)	10,200		2,619	
Car spaces	240	466	-	
Construction cost @ July 2006	36,833,580	8,918,910	11,284,434	
Construction cost @ December 2005	35,079,600	8,494,200	10,747,080	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B1 & B2)				
Number of 2 bedroom units				36
Number of 3 bedroom units				28
Total number of units				64
Construction cost @ July 2006				21,736,890
Construction cost @ December 2005				20,701,800
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				578,125
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

Table 25: Option 3 Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	D Retail & Commercial	B1, B2 & B3 Residential
Data for Commercial Buildings (A1 & A2, C & D)				
Gross Floor Area (sq metres)	12,000		4,000	
Net Lettable Area (sq metres)	10,200		3,550	
Car spaces	240	460	-	
Construction cost @ July 2006	36,833,580	8,801,515	9,595,740	
Construction cost @ December 2005	35,079,600	8,382,396	9,138,800	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B1, B2 & B3)				
Number of 2 bedroom units				60
Number of 3 bedroom units				40
Total number of units				100
Construction cost @ July 2006				36,877,848
Construction cost @ December 2005				35,121,760
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				651,089
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

Table 26: Option 3A Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	D Retail & Commercial	B1, B2 & B3 Residential
Data for Commercial Buildings (A1 & A2, C & D)				
Gross Floor Area (sq metres)	12,000		4,000	
Net Lettable Area (sq metres)	10,200		3,550	
Car spaces	240	303	-	
Construction cost @ July 2006	36,833,580	5,897,255	9,595,740	
Construction cost @ December 2005	35,079,600	5,616,432	9,138,800	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B1, B2 & B3)				
Number of 2 bedroom units				60
Number of 3 bedroom units				40
Total number of units				100
Construction cost @ July 2006				36,929,928
Construction cost @ December 2005				35,171,360
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				651,089
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

Table 27: Option 4 Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	D Retail & Commercial	B1 & B2 Residential
Data for Commercial Buildings (A1 & A2, C & D)				
Gross Floor Area (sq metres)	12,000		4,000	
Net Lettable Area (sq metres)	10,200		3,550	
Car spaces	240	460	-	
Construction cost @ July 2006	36,833,580	8,801,515	9,595,740	
Construction cost @ December 2005	35,079,600	8,382,396	9,138,800	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B1 & B2)				
Number of 2 bedroom units				42
Number of 3 bedroom units				28
Total number of units				70
Construction cost @ July 2006				25,548,495
Construction cost @ December 2005				24,331,900
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				651,089
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

Table 28: Option 5 Key Assumptions

Key Assumptions	A1 & A2 Offices	C Structured Carpark	D Retail & Commercial	B1, B2 & B3 Residential
Data for Commercial Buildings (A1 & A2, C & D)				
Gross Floor Area (sq metres)	12,000		4,000	
Net Lettable Area (sq metres)	10,200		3,550	
Car spaces	240	330	-	
Construction cost @ July 2006	36,833,580	6,333,188	9,595,740	
Construction cost @ December 2005	35,079,600	6,031,608	9,138,800	
Construction start date	Jan-07	Aug-08	May-09	
Construction end date	Aug-08	May-09	May-10	
Gross office rental ($/sq m pa) at December 2005	380.00		380.00	
Net retail rental ($/sq m pa) at December 2005			450.00	
Outgoings ($/sq m pa) at December 2005	50.00			
Car park rent ($ pa per space) at December 2005	1,500	1,500		
Yield (%) on completion assumed fully leased	7.00	10.00	7.25	
Settlement date	Aug-08	May-09	May-10	
Data for Residential Units (B1, B2 & B3)				
Number of 2 bedroom units				80
Number of 3 bedroom units				40
Total number of units				120
Construction cost @ July 2006				45,669,212
Construction cost @ December 2005				43,494,488
Construction start date				May-09
Construction end date				May-10
Construction period (months)				12
Average unit value on completion @ December 2005				649,791
Other data and assumptions				
Holding costs:				
. Interest rate (%pa)	9.00%			
. Rates and Land Tax estimate ($ pa)	200,000			
. Stamp Duty	5.50%			
Leasing and sales commissions at market levels				
Construction cost includes fees and contingency				
Construction cost excludes GST				

11 Conclusions

11.1 Preferred Option—National Capital Plan Amendment

To accommodate the development concept identified on the preferred option, i.e Option 5, an Amendment to the National Capital Plan will be necessary. It is suggested that this be in the form of a new Figure 8, and the addition of Detailed Conditions of Planning Design and Development to the Appendices of the Plan.

With regard to Figure 8 it is suggested that the best approach would be to allocate a land use policy of "Commercial" to the whole site, i.e the same policy that currently applies to the part of the site fronting Broughton Street. Although there is no definition of "Commercial" in the Plan, it is understood that NCA have previously interpreted this term to include a range of land uses, e.g Section 10 City, where both residential and office redevelopments have been approved by the Authority.

This is considered preferable to the alternative approach of having a specific land use policy for each type of development identified on the preferred option i.e office, residential, commercial, car park, and open spaces. Such a prescriptive approach would deny any flexibility the end purchaser/developer may seek to propose a slightly different concept. The integrity of the preferred option is better protected through detailed conditions, than through a prescriptive land use policy.

Consequently the Detailed Conditions of Planning, Design and Development have important role in establishing an effective statutory planning framework, consistent with the analysis and outputs of this study. They can deal with important principles of land use, urban design, landscape design, traffic and parking, and built form, whilst still allowing some flexibility for a modified approach. It is suggested that the Conditions be appended to the Plan in a similar manner to those for adjacent land on the opposite side of Blackall Street, i.e Section 6 Barton (at Appendix U of the National Capital Plan).

A possible format for the Detailed Conditions of Planning Design and Development is therefore included at Attachment K, and a proposed new Figure 8 of the National Capital Plan is included at Attachment L.

11.2 Staging Strategy

Initial development of the offices on 'Site A1 and A2' would displace up to 150 parking spaces by January 2007 (see scenario 1—best case scenario, below). The establishment of a laneway along the southern boundary of site A1 & A2, and the Ottoman site, will initially enable construction vehicle access. Nearing completion of A1 & A2 in September 2008 the laneway will become a public road including parking. About 40 right angle long-stay car parking spaces should be available along the southern side of the laneway from September 2008 until the completion of the parking structure, thereafter reverting to short-term parking. 48 right angle spaces on the western side of Blackall Street, and 40 parallel spaces on the eastern side (total 88 spaces) can also be developed as part of the first stage (with A1 & A2),

and be available for long stay parking until completion of the parking structure, then also reverting to the short stay parking.

The development of the car parking facility on 'Site C' will require the removal of up to 50 marked spaces (excluding illegal and informal spaces) from September 2008. This should coincide with the availability of the laneway and Blackall Street spaces. The remaining 220 marked spaces within the existing car park will be required in May 2009, i.e after the completion of the parking structure for the development of Site's B and D.

Subject to an effective Staging Strategy as described above, and given the likely refurbishment of Edmund Barton Building in 2007-2009, the development is capable of being managed without the need for any temporary off site parking.

The proposed Staging Strategy based on Scenario 1 below, is identified at Figure 28.

With regard to planning and construction timelines, 4 scenarios have been prepared and are illustrated on the following Gantt Charts. The scenarios differ mainly in the process to be followed with regard to Buildings A1 and A2, and are:

- Scenario 1 Sale of the site with some design of the buildings undertaken prior to the sale, and without referral to the Joint Parliamentary Committee (best case scenario).

- Scenario 2- Sale of the site with some design of the buildings undertaken prior to the sale (most post the sale by the purchaser), and with referral to the Joint Parliamentary Committee.

- Scenario 3 - Sale of the site with detailed design of the buildings undertaken prior to the sale (some post design after the sale by the purchaser), and with referral to the Joint Parliamentary Committee.

- Scenario 4 – Sale of the site without any design, and with referral to the Committee (worst case scenario)

ADDITONAL FIGURES

(SITE ANALYSIS)