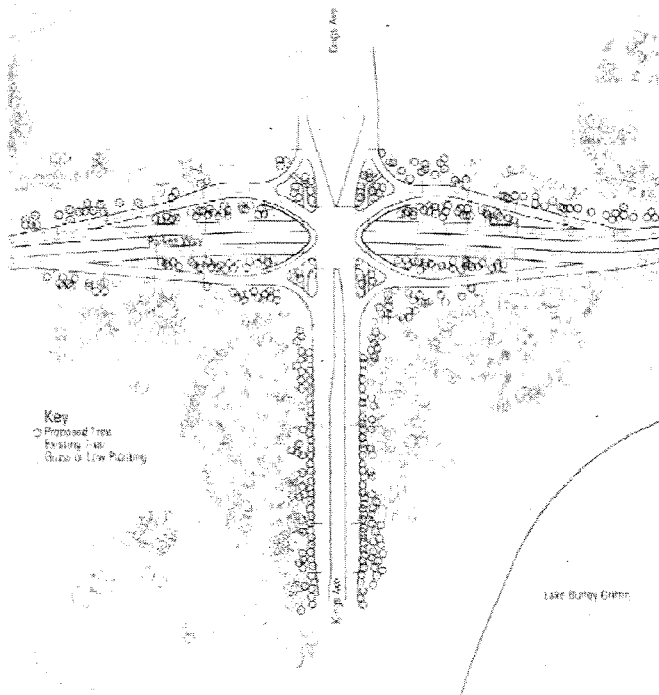


PUBLIC WORKS COMMITTEE

06 AUG 2008

RECEIVED

a.m.  
p.m.



## BRIDGING OF KINGS AVENUE OVER PARKES WAY AT THE RUSSELL ROUNDABOUT, CANBERRA, A.C.T.

Parliamentary Standing Committee on Public Works

Public Hearing  
Parliament House, Canberra

6 August 2008

Professor James Weirick, President  
Walter Burley Griffin Society Inc.  
140 Edinburgh Road  
Castlecrag, NSW 2068

Supplementary Submission No. 6.1  
(Bridging of Kings Ave.)

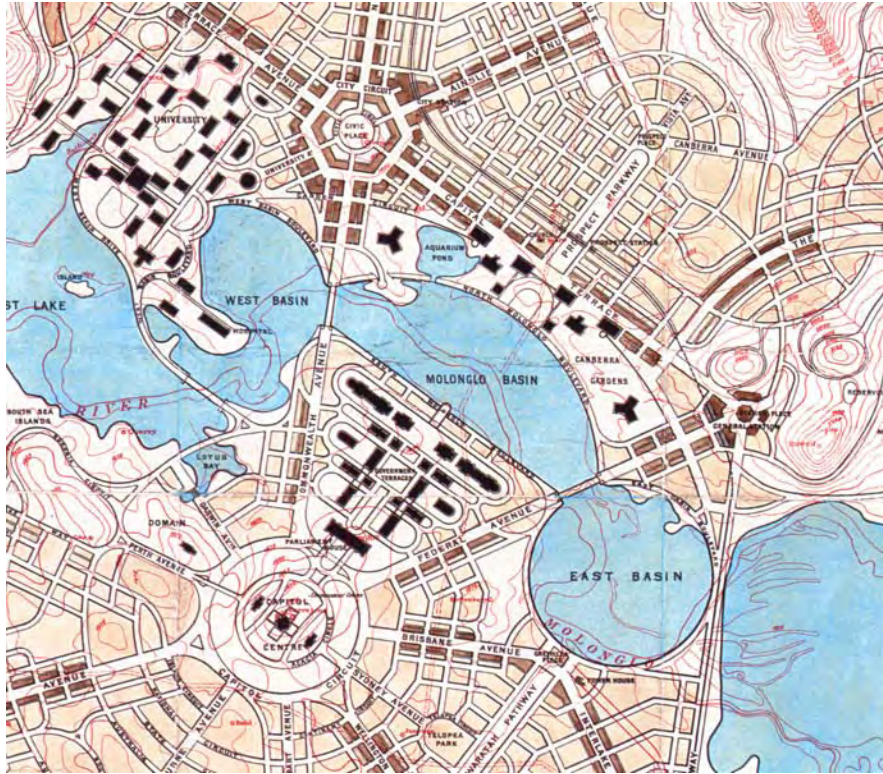
06/08/08

MR.



NCA, *Griffin Legacy*, 2004, p.45 (detail)

## Griffin Plan 1913



Griffin Plan 1918



NCA, *Griffin Legacy*, 2004, pp.110-111

2004 streets overlaid on Griffin Plan 1918



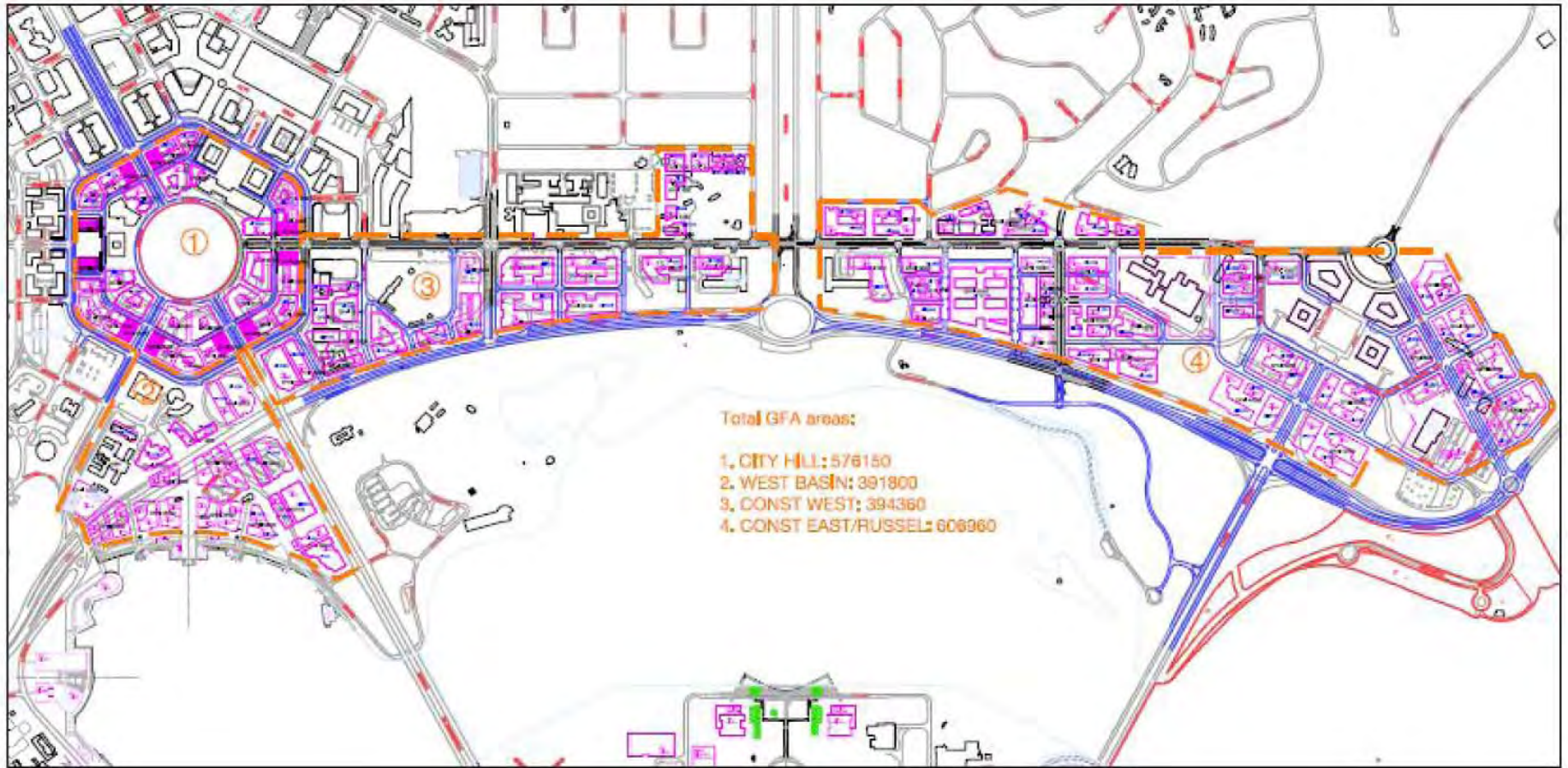
Paul Reid, *Canberra following Griffin*, 2002, p.269

National Capital Development Commission, Parkes Way, 1958-1963



NCA, *Griffin Legacy*, 2004, p.176

NCA Central National Area Redevelopment, 2004 to date



Maunsell AECOM, *Griffin Legacy Implementation Traffic Analysis*, 2006, p.2, 14

## NCA Central National Area Redevelopment, 2031

Commercial GFA	934,000 sq m
Residential GFA	675,000 sq m
Other	236,000 sq m
<b>Total</b>	<b>1,845,000 sq m</b>



Maunsell AECOM, *Griffin Legacy Implementation Traffic Analysis*, 2006, p.2, 14

## Constitution Avenue East & West Redevelopment, 2031

Commercial GFA	613,000 sq m
Residential GFA	343,000 sq m
Other	73,000 sq m
<b>Total</b>	<b>1,029,000 sq m</b>



NCA Proposed Kings Avenue Overpass





Indicative Road Structure

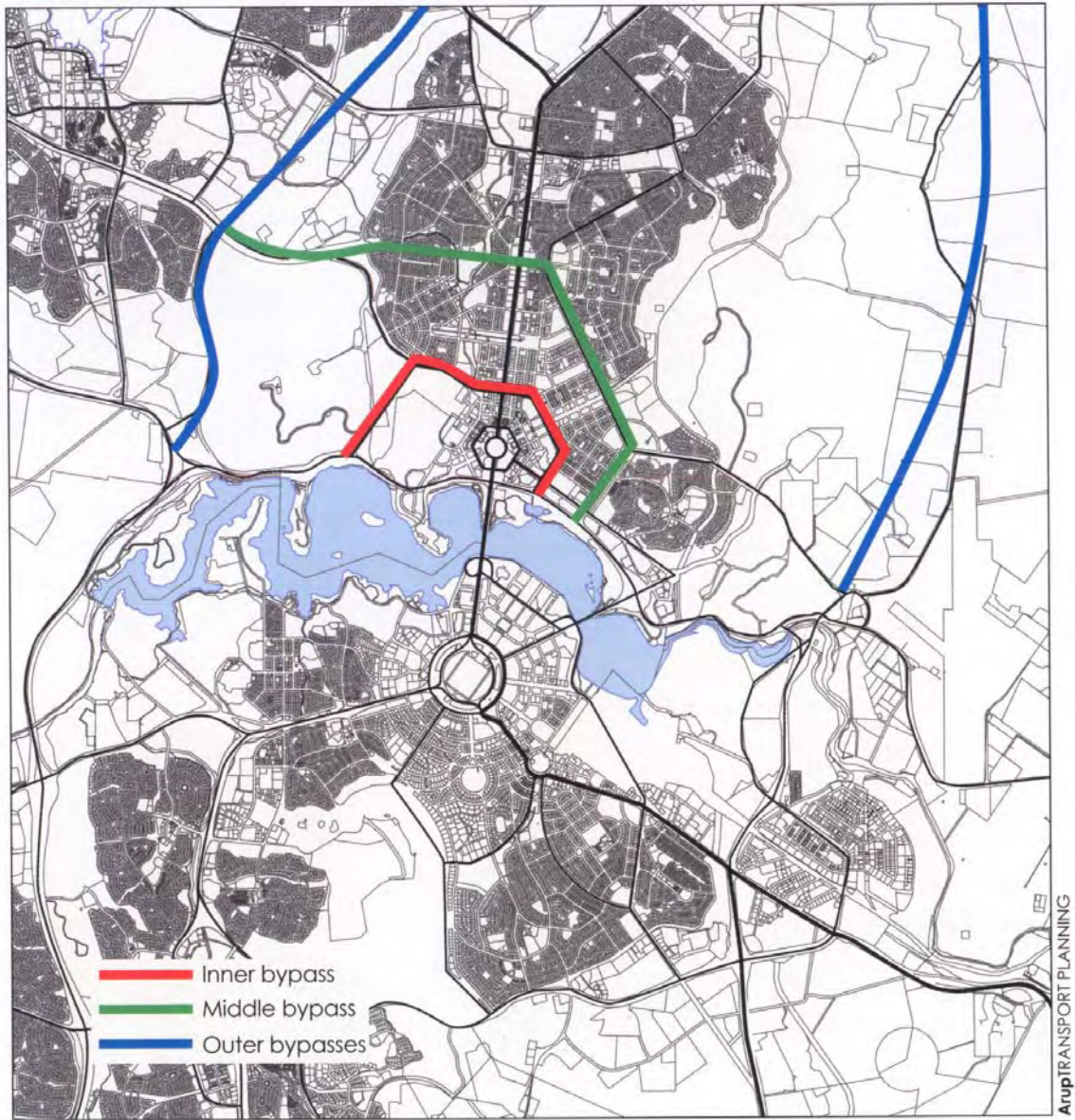
— Main avenues

— Major streets

— Local streets (indicative)

- - Lanes (indicative)

## NCA Central National Area Redevelopment

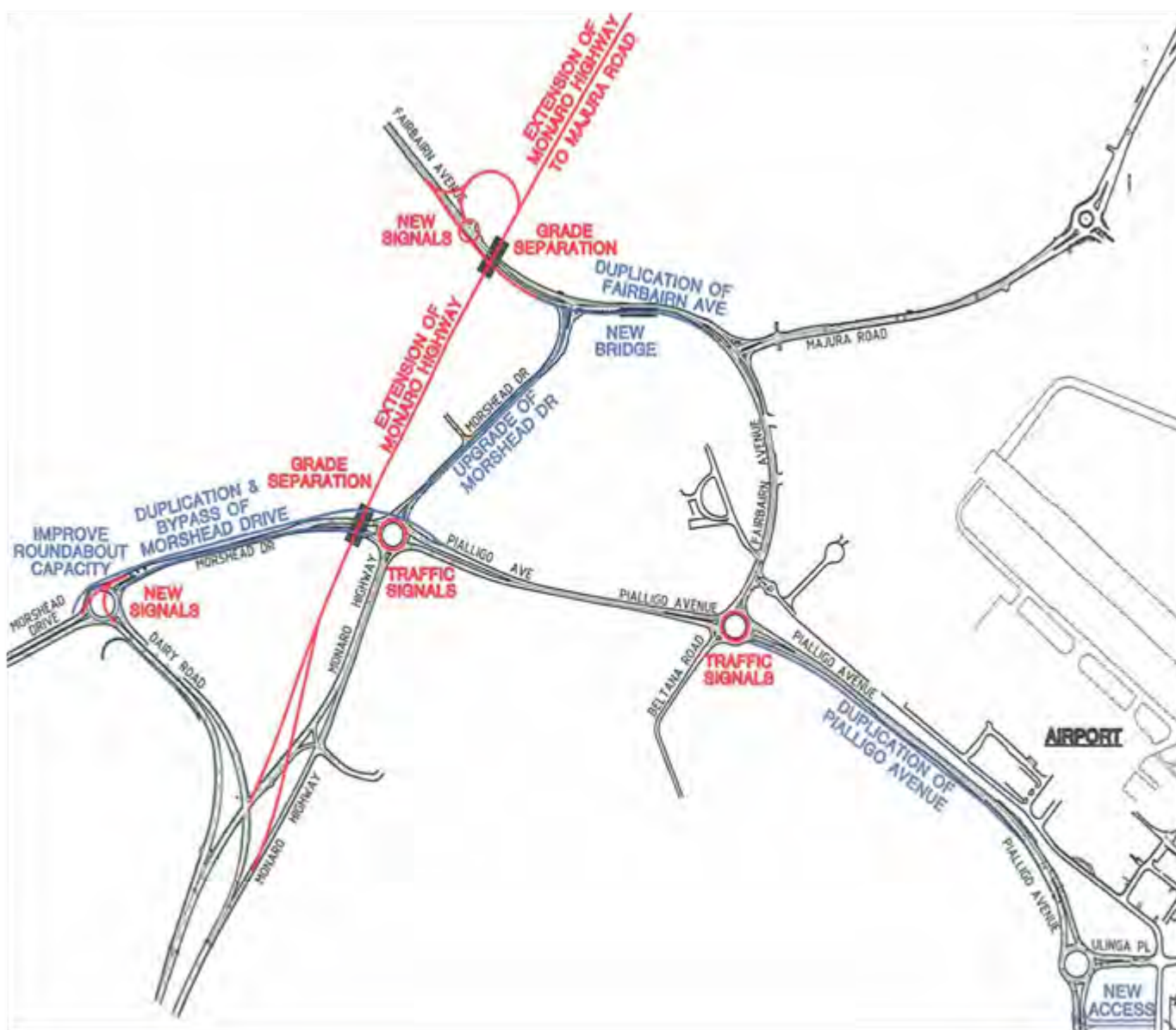


T. Powell, *Civic, The Living City*, 2005, p.34

## Principal Entry Points to Civic



Civic – Canberra Airport Connection



## Canberra Airport Roads Upgrade, 2006 to date

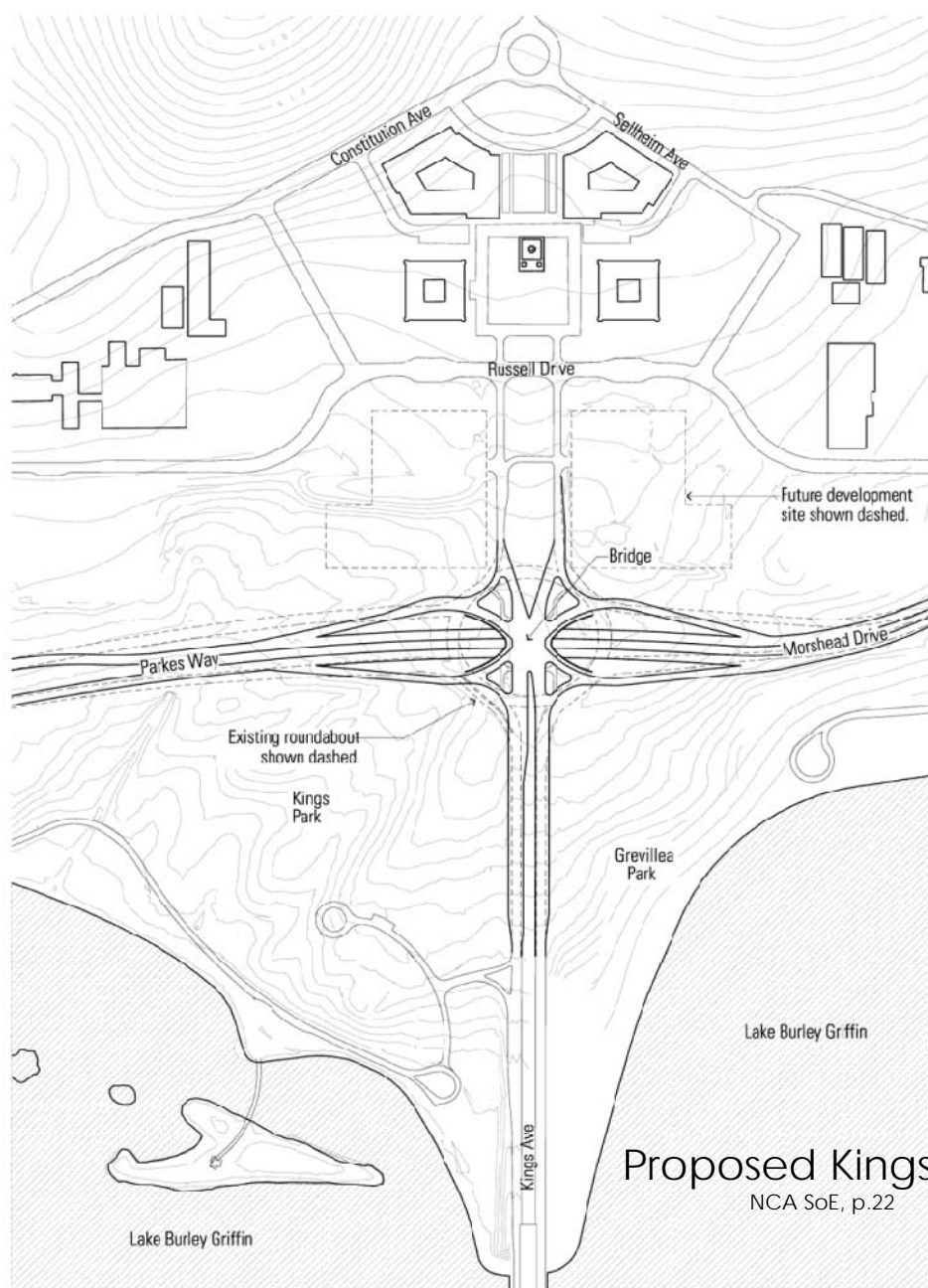
Canberra Airport Roads Working Group, *Report*, 2006, p.6

Stage One – Changes

Stage Two - Changes



NCA Central National Area Redevelopment

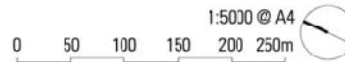


# Proposed Kings Avenue Overpass 2008

NCA SoE, p.22

March 2008

**Johnson Piton Walker**  
 Level 10 Plaza Building  
 Australia Square  
 95 Pitt Street Sydney NSW 2000 Australia

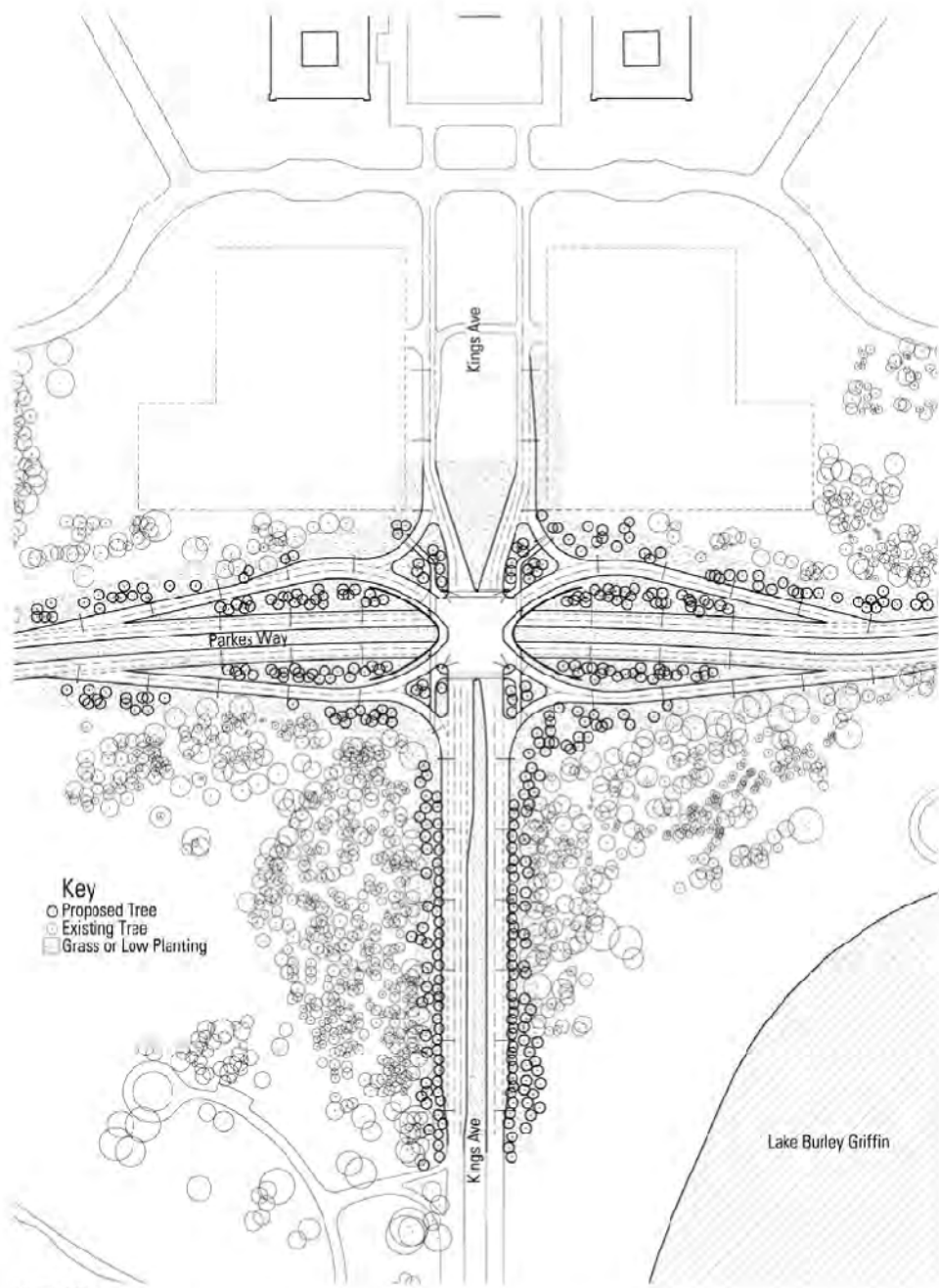


Site  
**Plan**



NCA, *Griffin Legacy*, 2004, p.176

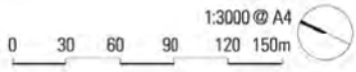
NCA Central National Area Redevelopment, 2004



**Key**  
 ○ Proposed Tree  
 ⊙ Existing Tree  
 ▨ Grass or Low Planting

March 2008

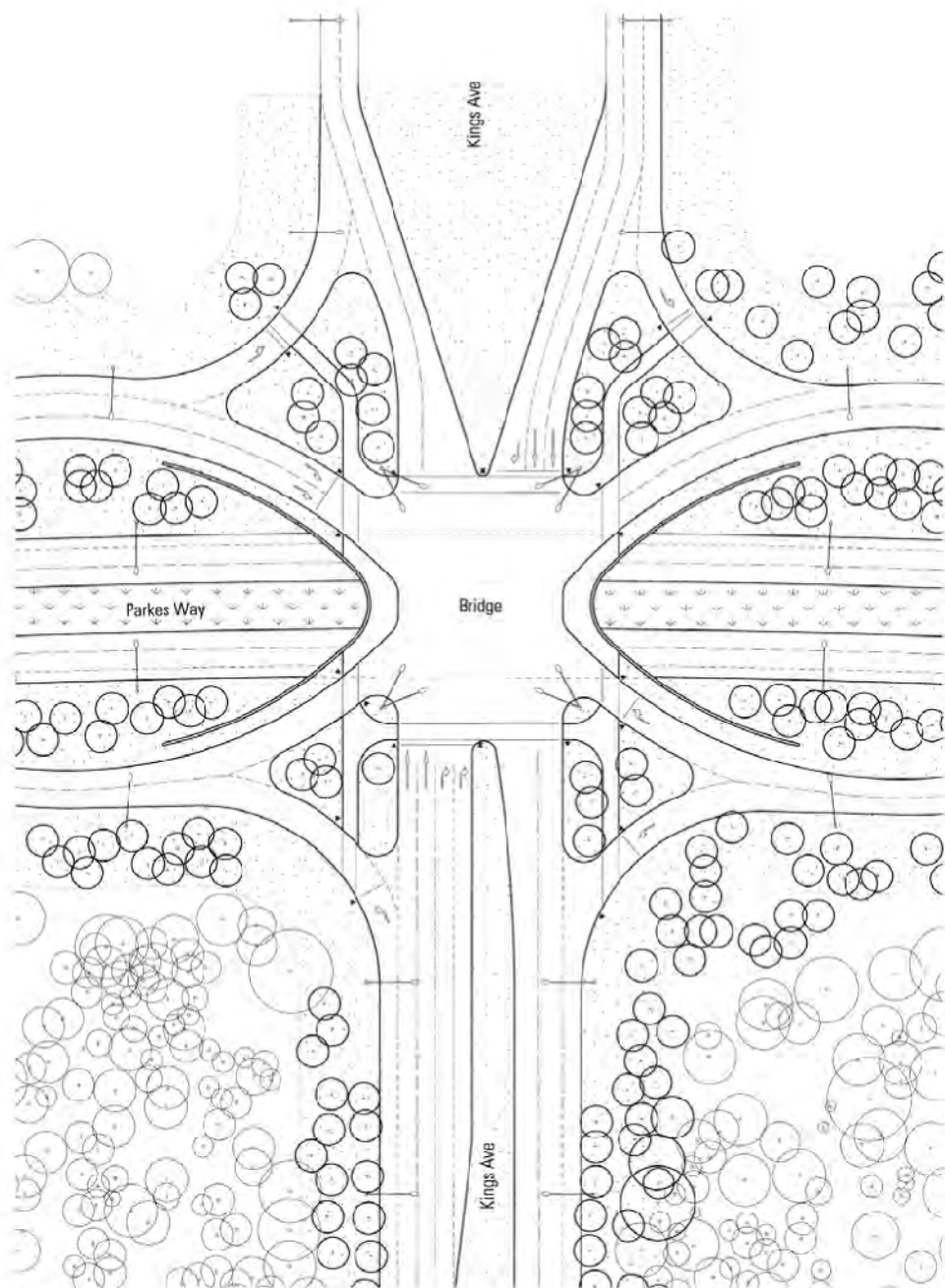
**Johnson Pilton Walker**  
 Level 10 Plaza Building  
 Australia Square  
 95 Pitt Street Sydney NSW 2000 Australia



1:3000 @ A4

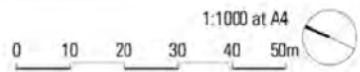
**Landscape Plan**





March 2008

**Johnson Piton Walker**  
 Level 10 Plaza Building  
 Australia Square  
 95 Pitt Street Sydney NSW 2000 Australia



**Intersection  
 Plan**



N

Image © 2008 DigitalGlobe

©2008 Google

35°17'51.31" S 149°08'54.01" E

Eye alt 4302 ft

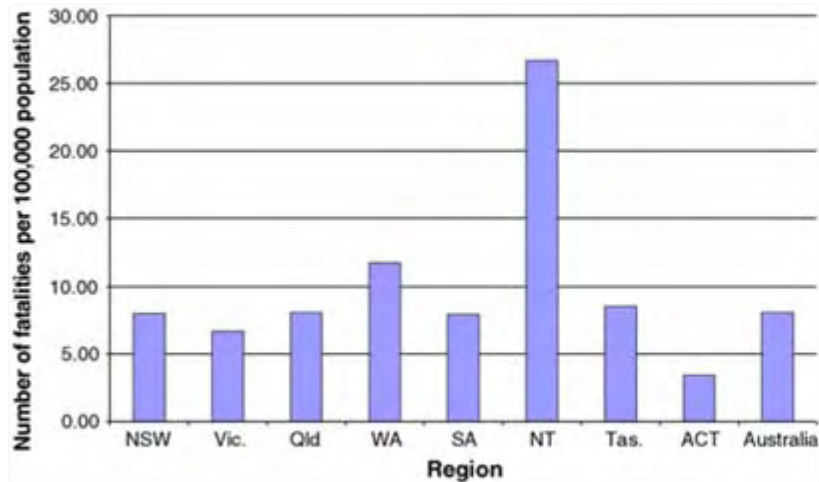


Fig. 1. Number of road traffic crash fatalities per 100000 population: Australia, states and territories, 2003.

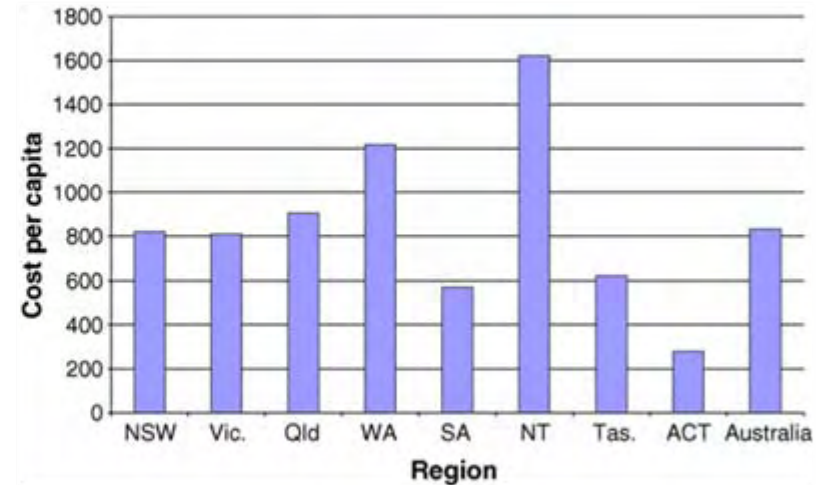


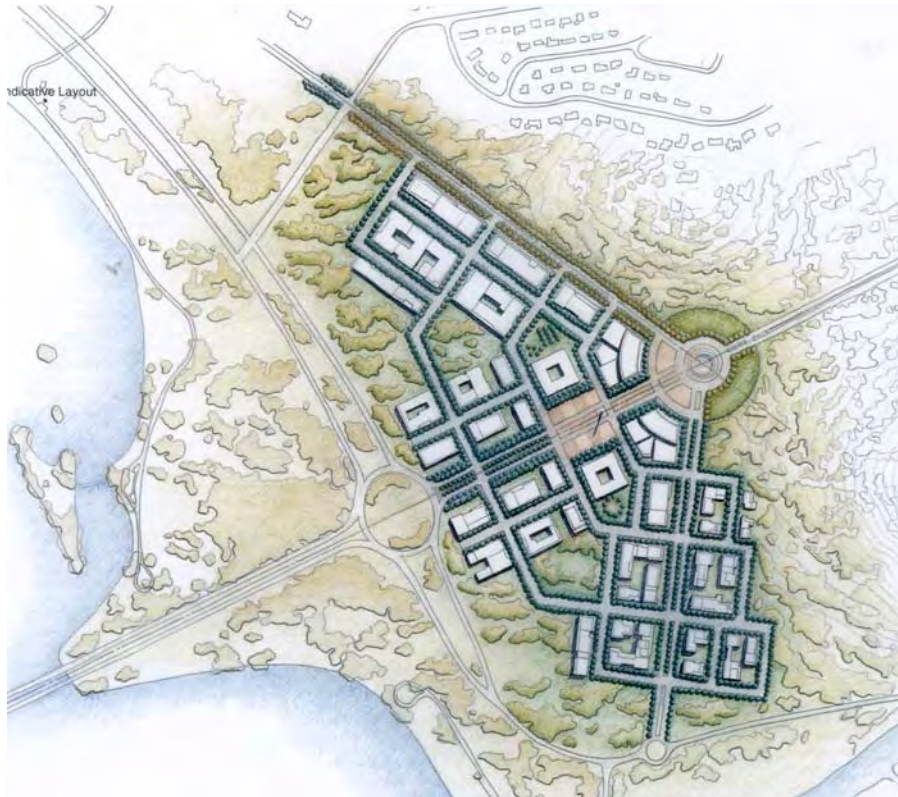
Fig. 2. Total cost per capita (AUD, 2003) of road traffic crashes: Australia, states and territories.

## Canberra - higher motor vehicle use and markedly lower accident rate than the rest of Australia

### Motor Vehicle Registrations and Kilometres Travelled. 2000

Data	ACT	Aust Average	Source
Total Registrations of Passenger Vehicles per 000 population	524	499	ABS: Survey of Motor Vehicle Use. Cat:9208.0. 2000
Average Kilometres per vehicle per annum.	16,200	14,300	ABS: Survey of Motor Vehicle Use. Cat:9208.0. 2000

NCPA, *Draft Russell Master Plan Explanatory Report*, 1994, p.2



NCPA Russell Master Plan 1994



Russell Defence Precinct 2008

NCA, Amendment 60 NCP: Constitution Avenue, 2006, p.16

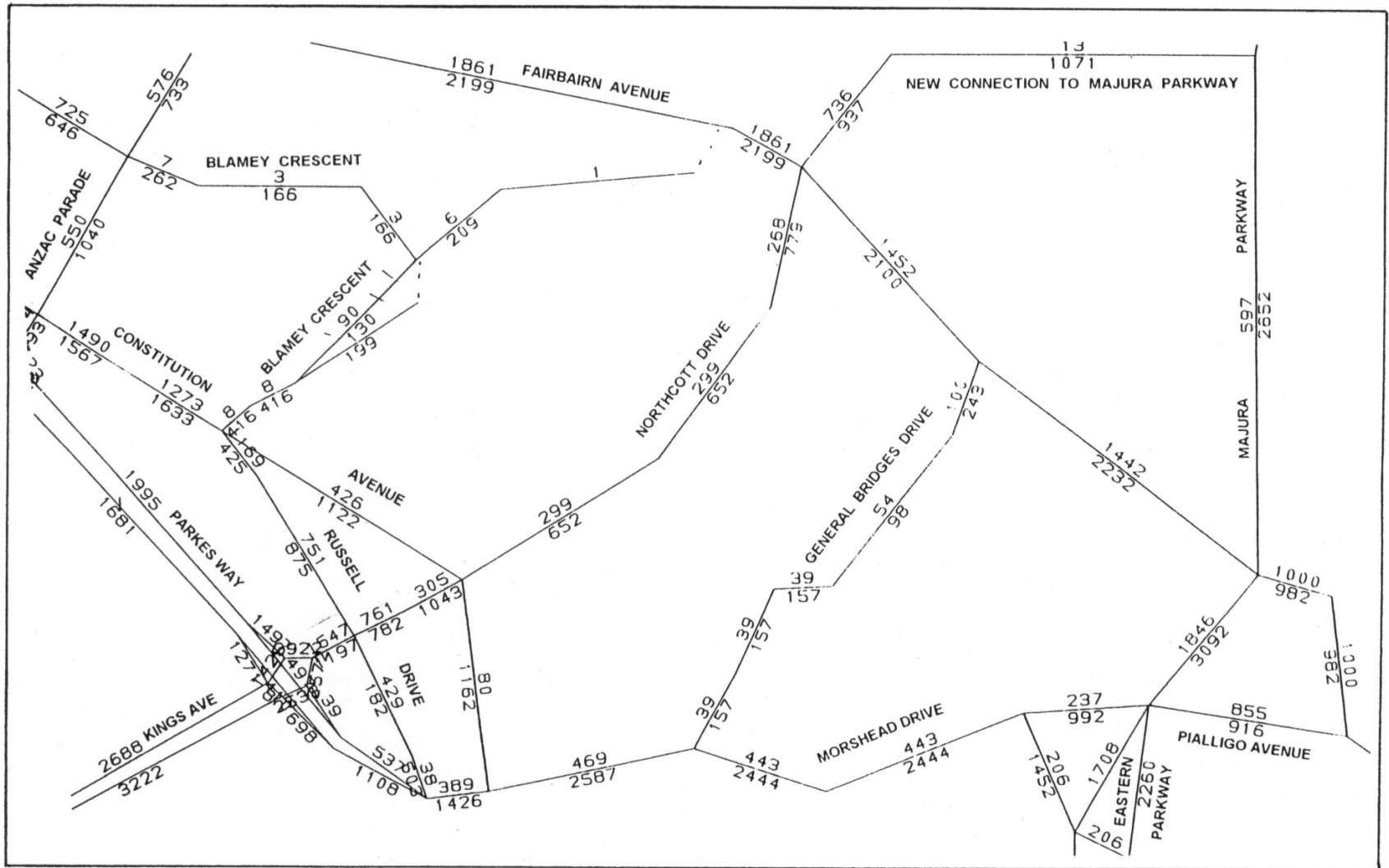


NCA Russell Master Plan 2006



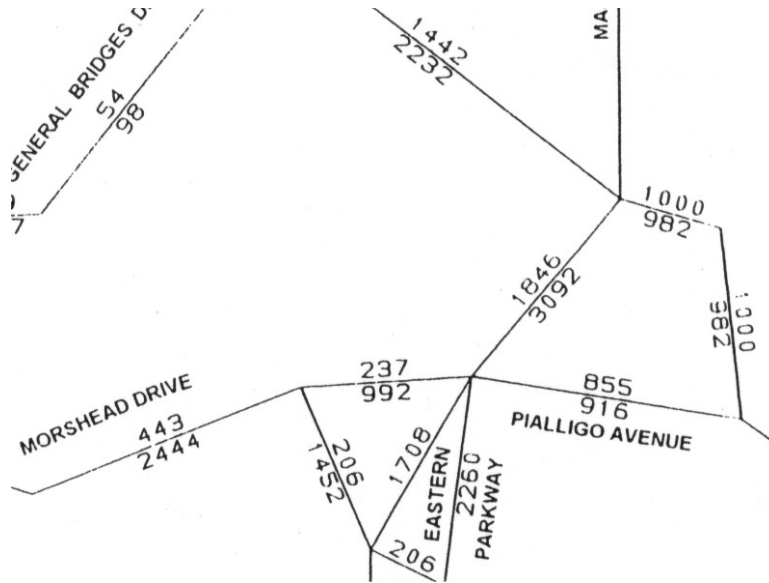
Russell Defence Precinct 2008

Figure 3.1 Traffic flow estimates 2016



JSCNET, Report: Draft Amendment no.12 (Russell) of the National Capital Plan, 1995, p.27

NCPA 1994 Traffic Flow Estimates, Russell – Canberra Airport, AM Peak, 2016



1994 AM Peak Estimate for 2016

2006 AM Peak Traffic Count

eastward flow on Morshead Drive – 327% increase on 1994 estimate



N

Image © 2008 DigitalGlobe

©2008 Google

35°17'51.31" S 149°08'54.01" E

Eye alt 4302 ft



COMMONWEALTH and ACT GOVERNMENT (ACT)  
GRIFFIN LEGACY FORUM

GRIFFIN 21C PROJECT

MEMORANDUM OF UNDERSTANDING

November 2006

Page 1 of 7

Memorandum of Understanding: Griffin Legacy Implementation

Signed this 26<sup>th</sup> day of December, 2006 at Canberra in the Australian Capital Territory.

Mike Harris

Name

Chief Executive CMD

Title

on behalf of the ACT Chief Ministers

Department

M. J. Harris

Signature

Neil Savery

Name

Chief Planning Executive

Title

on behalf of the ACT Planning and Land

Authority

Signature

CHRIS BEE

Name

AGASCO

Title

on behalf of the Department of Defence

Signature

Paul East-Hopkins

Name

First Assistant Secretary

Title

on behalf of the Department of Finance and

Administration

Signature

ANDREW BEEHUN

Name

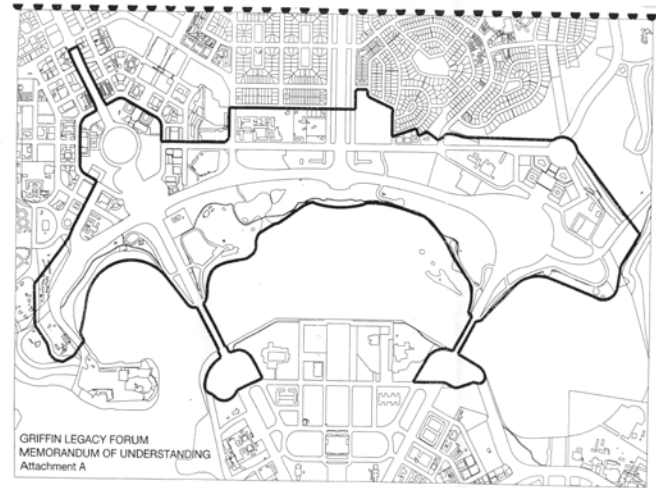
CHIEF EXECUTIVE

Title

on behalf of the National Capital Authority

Signature

Page 7 of 7



## 4.0 STATEMENT OF MUTUAL BENEFITS

- 4.1 The *Griffin Legacy* Propositions and Strategic Initiatives deliver benefits to the Commonwealth Government, ACT Government and the Canberra community including:
- (a) increased land value with a high rate of return on public investment to both the Australian and ACT Governments (a catalyst for economic and community growth in the Territory);
  - (b) focused growth along the Constitution Avenue corridor, consolidating the 'great triangle' with people and commerce, and delivering a compact and vibrant city with a more efficient use of existing infrastructure;
  - (c) reinforcing City Hill as the heart of the City and as an important ceremonial space for the capital;
  - (d) extending the city to the lake at West Basin to create a new urban waterfront esplanade to celebrate our nation's diversity and to link the National Museum to the city and Parliamentary areas; and
  - (e) making Russell Defence Headquarters more secure through rationalising land management and consolidation of control of civil infrastructure.



Maunsell AECOM, *Griffin Legacy Implementation Traffic Analysis*, 2006, p.2, 14

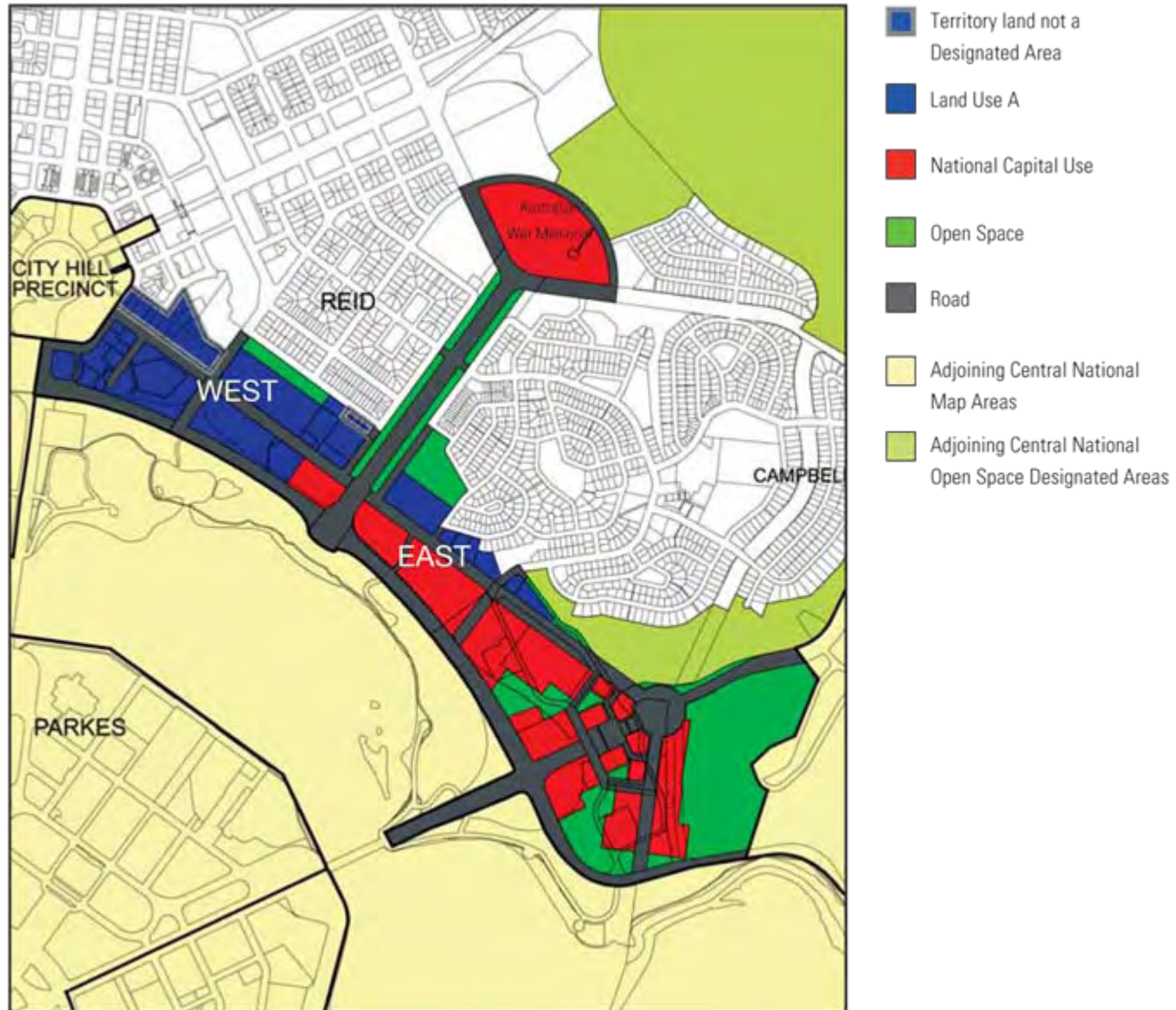
## NCA Central National Area Redevelopment – Trunk Infrastructure

Kings Avenue Overpass	26.6 million
Constitution Avenue Duplication	46.5 million
West Basin Landfill/Reclamation	?
Corranderk St Roundabout Reconst.	?
Constitution Avenue Overpass	?
400m wide Landbridge, Acton	?
<b>Total</b>	<b>\$100 - \$150 million</b>





## NCA Central National Area Redevelopment – National Land



NCA Central National Area Redevelopment – Land Use Zoning

## CONSTITUTION EAST - PARKES

### URBAN DESIGN GUIDELINES

Detailed conditions of planning design and development in accordance with the National Capital Plan.

These guidelines are consistent with *The Griffin Legacy - Canberra the Nation's Capital in the 21st Century*.



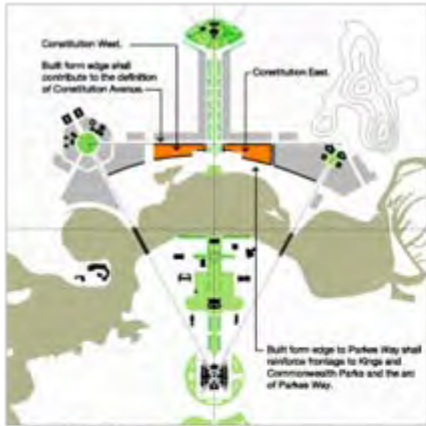
Version 3 - 11 May 2006



AERIAL PHOTOGRAPH (April 2004)

1. Reinforce and enhance the geometry of Constitution Avenue and Parkes Way with appropriate built form.
2. Contribute to the national significance of Constitution Avenue's at the base of the 'Great Triangle' as a diverse and active 'high street' of the city.
3. Develop Constitution Avenue and Parkes Way as a prestigious setting for national capital uses, related employment and amenities.
4. Reinforce the 3 dimensional structure based on the City's topography and the landscape containment of the inner hills.
5. Ensure off-site infrastructure capacity supports proposed and projected development (up to 7,000 in Constitution East precinct).
6. Maximise development opportunities for Constitution East by establishing a robust subdivision pattern that allows for staged development and growth.
7. Ensure conveniently located parking in a manner that does not dominate the public domain.
8. Integrate perimeter security with streetscape elements that enhance the public domain.
9. Ensure pedestrian accessibility to Lake Burley Griffin and Kings Park.
10. Minimise impacts to the heritage values of the adjacent Commonwealth Heritage listed Parliament House Vista, particularly the aesthetic values for the Vista which relate to the designed area set within natural features of forested hills, patterns and textures of architectural massing accentuated by planned open spaces, water planes and tree plantings that are arranged across the area.
11. Minimise the visual impact of new building development on the important parklands identified as part of the Commonwealth heritage being for the Parliament House Vista, in particular Kings Park.

### OBJECTIVES



NATIONAL CAPITAL CONTEXT



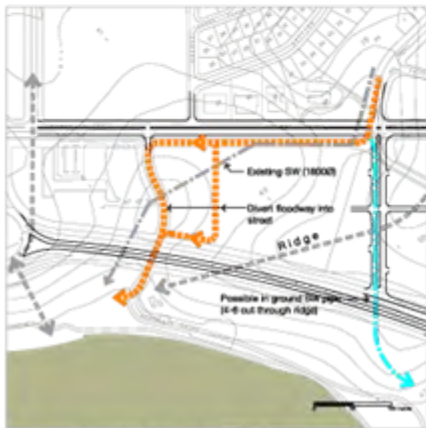
MASTER PLAN CONTEXT



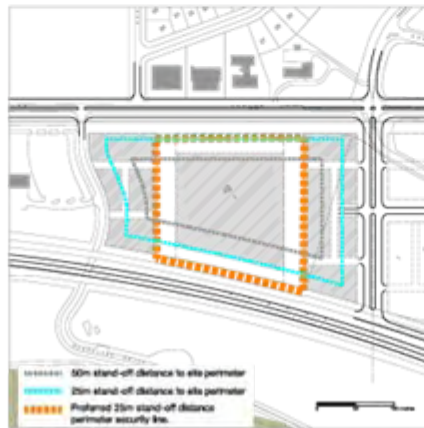
URBAN BLOCKS



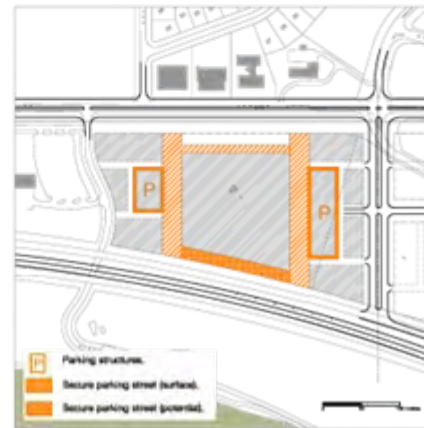
HEIGHT



TOPOGRAPHY / STORMWATER



SECURITY



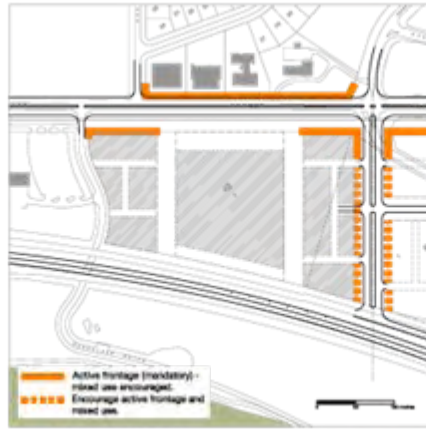
PARKING



ACCESS AND BUILDING ENTRY



LANDSCAPE



ACTIVE FRONTAGES



HIERARCHY OF ADDRESS



INDICATIVE ADDRESS TO CONSTITUTION AVENUE



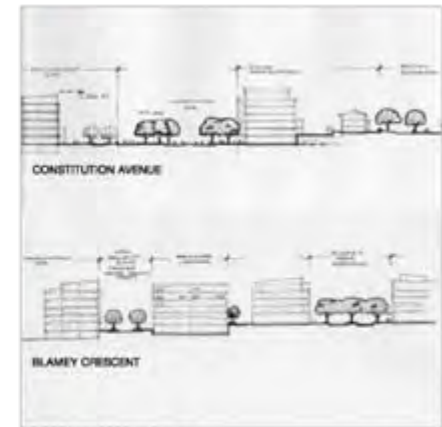
PEDESTRIAN CONNECTIONS TO KINGS PARK



SITE AND EMPLOYMENT CAPACITY

Block	Area (m <sup>2</sup> )	GFA 4:1 (m <sup>2</sup> )	GFA 8:1 (m <sup>2</sup> )	Employment 1/20m <sup>2</sup> (GFA 4:1)
Area: Park East	-	10,000	-	500
1	5,300 (approx)	21,300	21,800	1060
2	3,150	12,600	18,900	630
3	1,300	5,200	7,800	260
4	2,880	11,520	15,360	512
5	24,800	99,200 (stage 18.2)	99,200 (stage 18.2)	3,250
6	2,200	10,980	15,130	504
7	2,880	11,520	17,160	572
8	2,760	11,040	18,880	596
<b>Sub Total</b>	<b>28,870</b>	<b>91,880</b>	<b>132,820</b>	<b>7,844</b>
9	2,320	10,980	15,130	504
10	2,760	11,040	18,880	596
11	2,440	9,760	14,840	488
12	2,440	9,760	14,840	488
13	2,670	10,680	14,230	474
<b>Total</b>	<b>58,090</b>	<b>143,160</b>	<b>209,740</b>	<b>10,408</b>

TABLE



TYPICAL SECTIONS





NCA, *Griffin Legacy*, 2004, p.176

NCA website

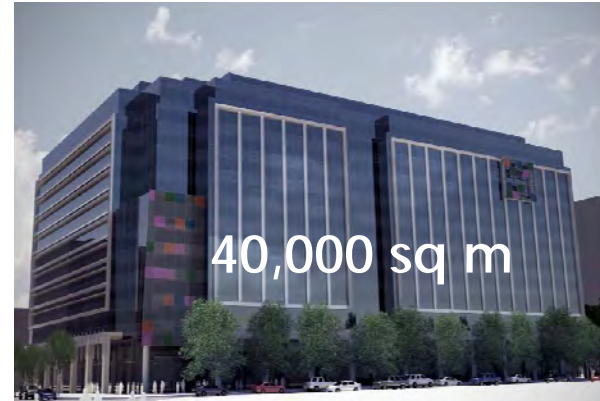


SITE AND EMPLOYMENT CAPACITY

Block	Area (m2)	GFA 4:1 (m2)	GFA 8:1 (m2)	Employ'1 @ 1/25m2 (GFA 4:1)
Anzac Park East	-	10,000	-	500
1	5,300 (approx)	21,200	31,800	1060
2	3,150	12,600	18,900	630
3	1,300	5,200	7,800	260
4	2,560	10,240	15,360	512
5	24,800	65,000 (stage 1& 2)	65,000 (stage 1& 2)	3,250
6	2,520	10,080	15,120	504
7	2,800	11,440	17,160	572
8	2,780	11,120	16,680	556
<b>Sub Total</b>	<b>39,970</b>	<b>91,890</b>	<b>132,820</b>	<b>7,844</b>
9	2,520	10,080	15,120	504
10	2,750	11,000	16,500	550
11	2,440	9,760	14,640	488
12	2,440	9,760	14,640	488
13	2,670	10,680	16,020	534
<b>Total</b>	<b>58,090</b>	<b>143,160</b>	<b>209,740</b>	<b>10,406</b>

TABLE

Commercial GFA 40,000 sq m  
Staff 2550  
Density 15.5 sq m per person



Department of Education, Employment & Workplace Relations (DEEWR), Block 9, Section 31, Canberra



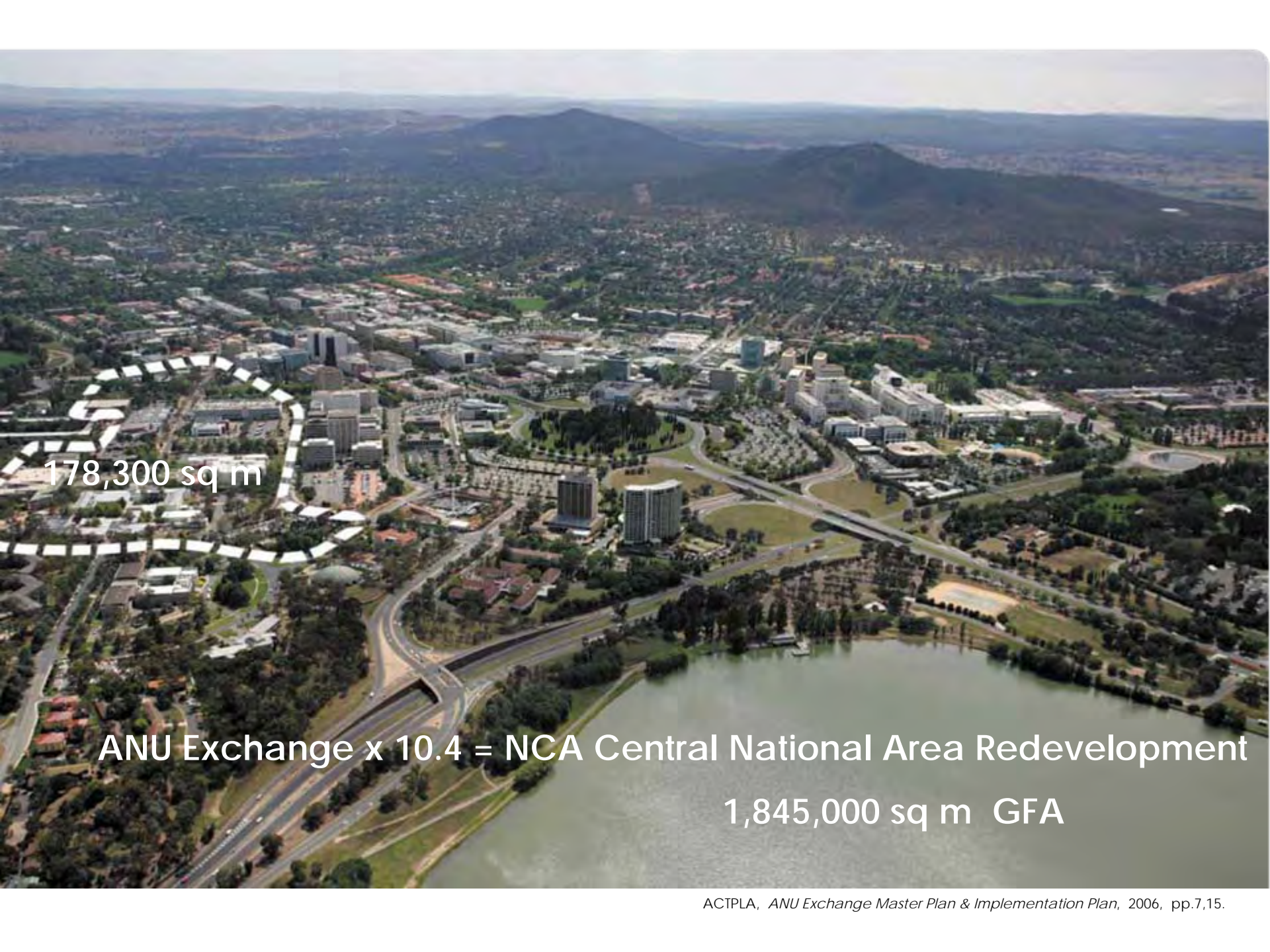
DEEWR, *Proposed Fit out of Leased Premises, Block 9, Section 31, Canberra*, SoE to Public Works Committee, 2008, pp.6, 30, 37

DEEWR x 4.5 = ANU Exchange



ACTPLA, *ANU Exchange Master Plan & Implementation Plan*, 2006, pp.15, 36.

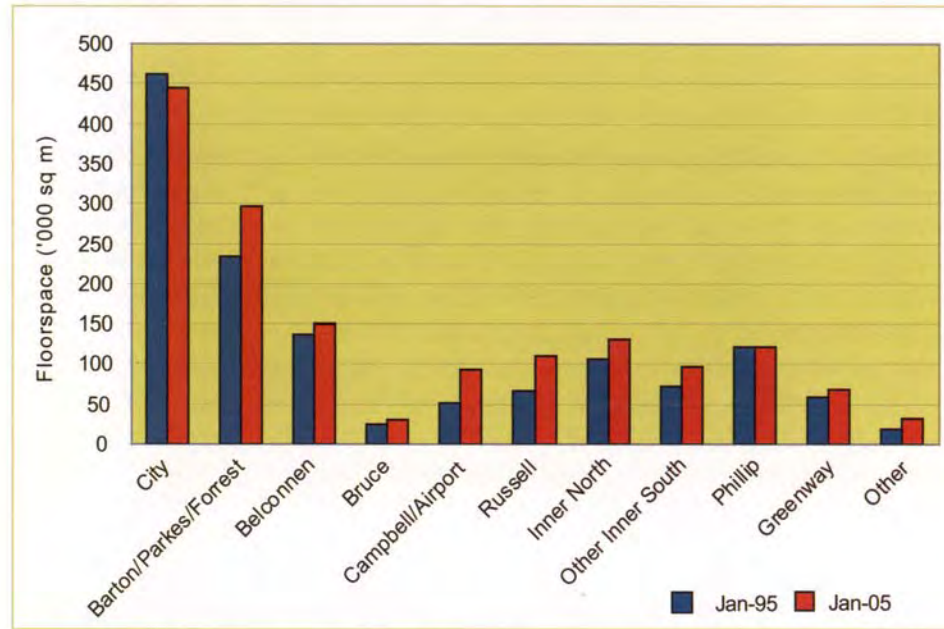
ANU Exchange Master Plan, City West, Canberra



178,300 sq m

ANU Exchange x 10.4 = NCA Central National Area Redevelopment  
1,845,000 sq m GFA

Figure 1: Office Floorspace Distribution 1995 and 2004



Source: Property Council of Australia, Office Market Report (2004)

ACTPLA, Residential, Commercial & Community Land Supply Strategy, 2005-2006 to 2009-2010, 2005, p4.

NCA Central National Area Redevelopment 2031 –  
Commercial Floor Space, 913,000 sq m

= combined total of all Commercial Floor Space in  
City, Russell, Airport, Belconnen and Phillip (Woden)  
in 2004

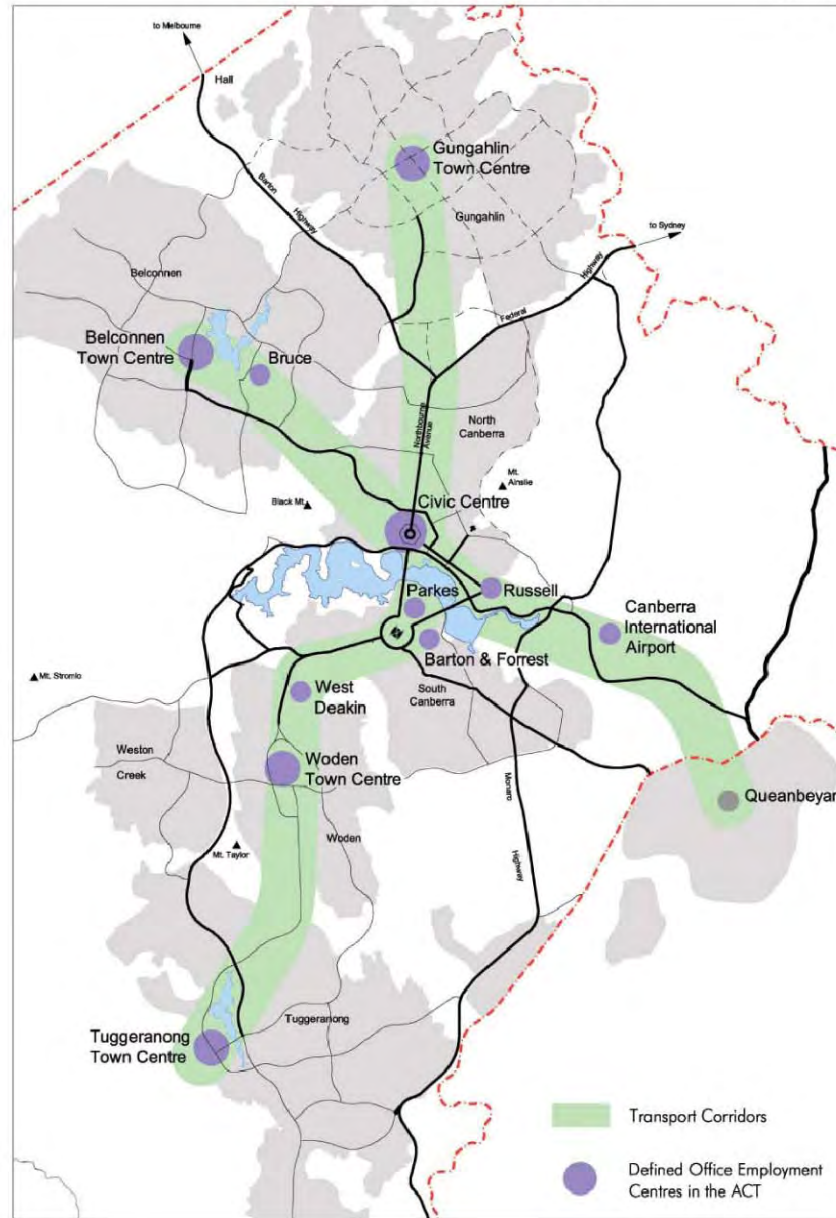
= 45,000 workers @ 1/20 sq m



Maunsell AECOM, *Griffin Legacy Implementation Traffic Analysis*, 2006, p.2, 14

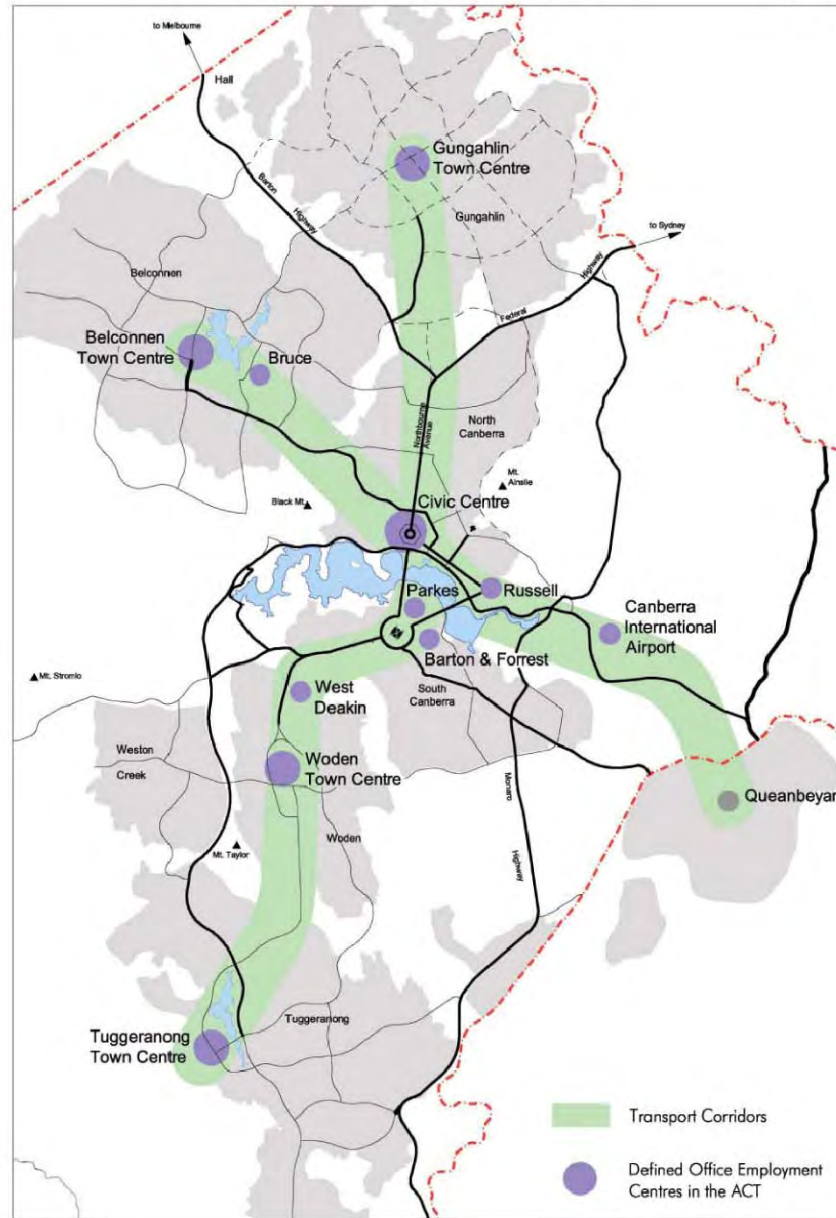
NCA Central National Area Redevelopment 2031 –  
Residential Floor Space, 675,000 sq m

= 14,000 residents, equivalent to the combined  
population of Campbell, Reid, Ainslie, Turner and  
City in 2006



NCA Amendment 44, National Capital Plan – Office Employment Location 2005





Integrated Transport Information System (ITIS)



Civic – Canberra Airport Connection



Indicative Road Structure

— Main avenues

— Major streets

— Local streets (indicative)

- - Lanes (indicative)

## NCA Central National Area Redevelopment



■ ■ Indicative Public transport route

## NCA Central National Area Redevelopment

# Towards a More Sustainable Canberra

An Assessment of Canberra's  
Transport, Energy and Land Use



Peter Newman and Jeff Kenworthy

Institute for Science and Technology Policy  
Murdoch University  
Perth, Western Australia

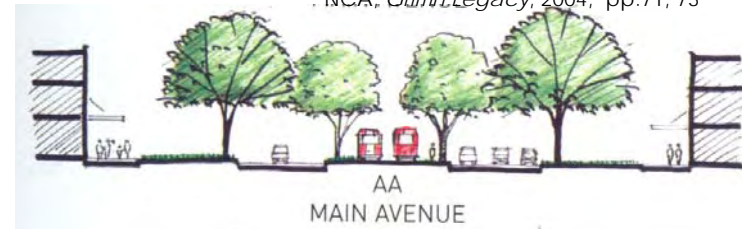
Newman & Kenworthy, *Sustainable Canberra*, 1991

Newman & Kenworthy, *Sustainable Canberra*, 1991, p.xv



Light Rail Avenue, Zurich

NCA, *Griffin Legacy*, 2004, pp.71, 73



NCA analysis: Griffin's Light Rail Avenues



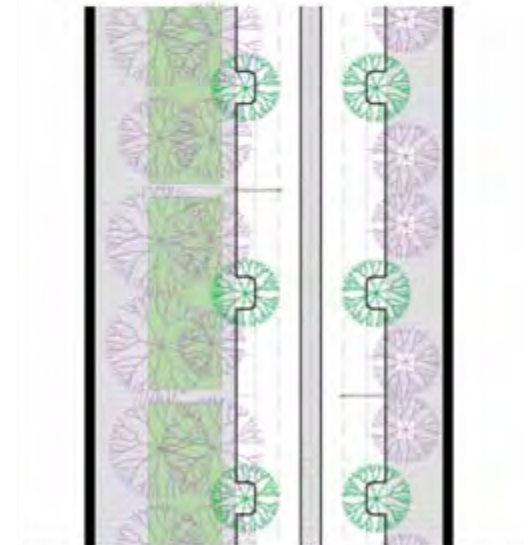
Griffin Avenue Section

NCA website

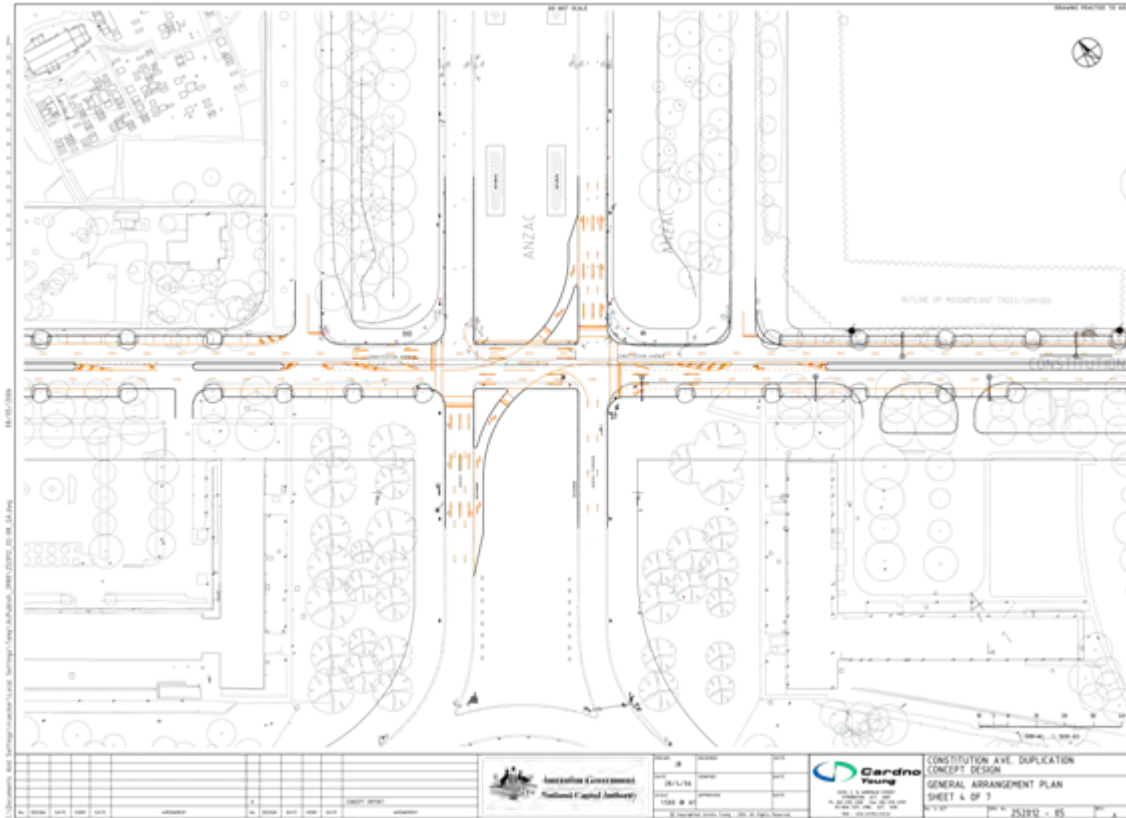
NCA website



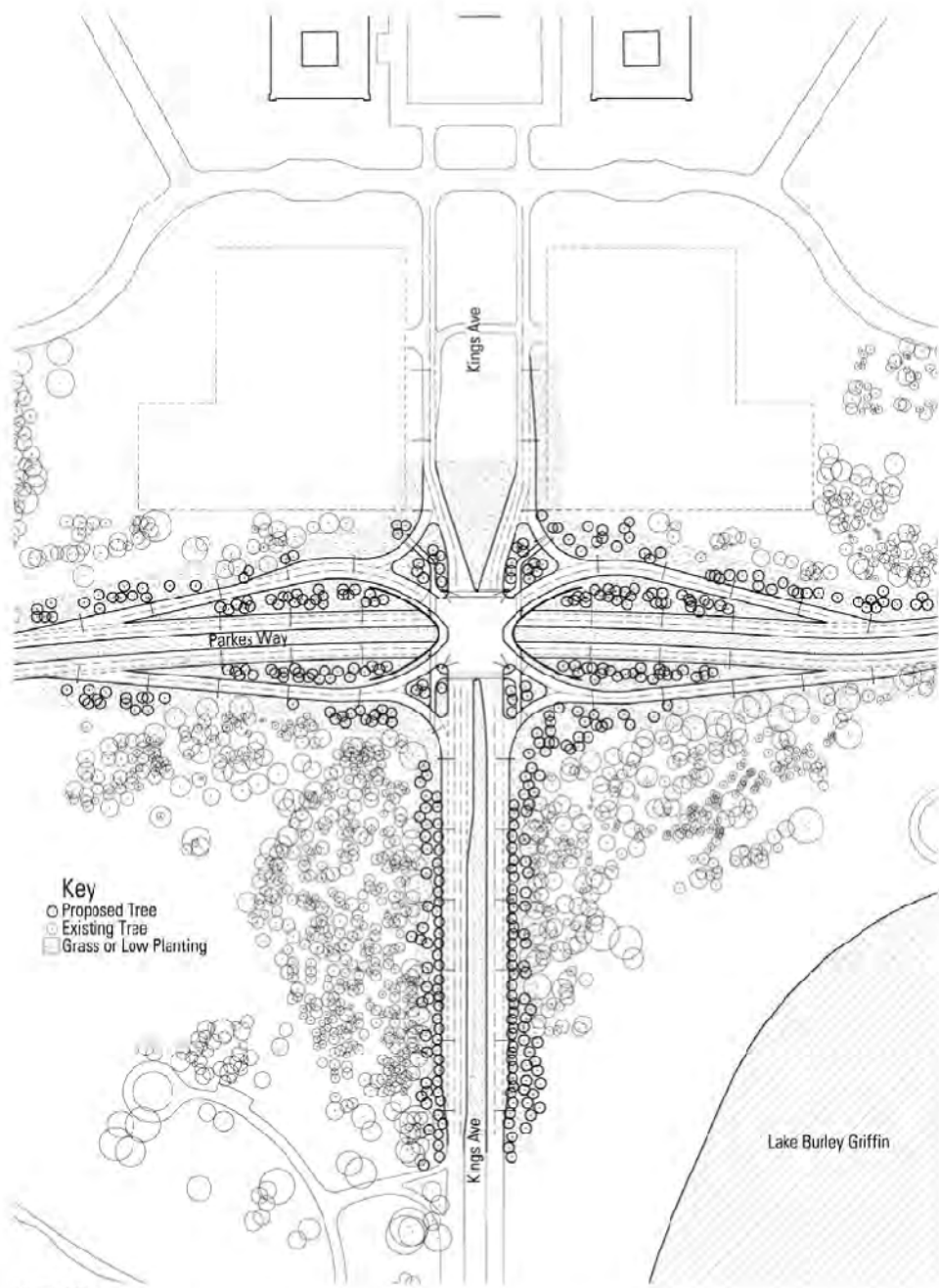
CONSTITUTION AVENUE PROPOSED SECTION



NCA Avenue Section

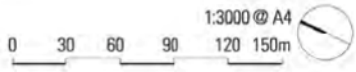


NCA Constitution Avenue Duplication Project, 2007



March 2008

**Johnson Pilton Walker**  
 Level 10 Plaza Building  
 Australia Square  
 95 Pitt Street Sydney NSW 2000 Australia



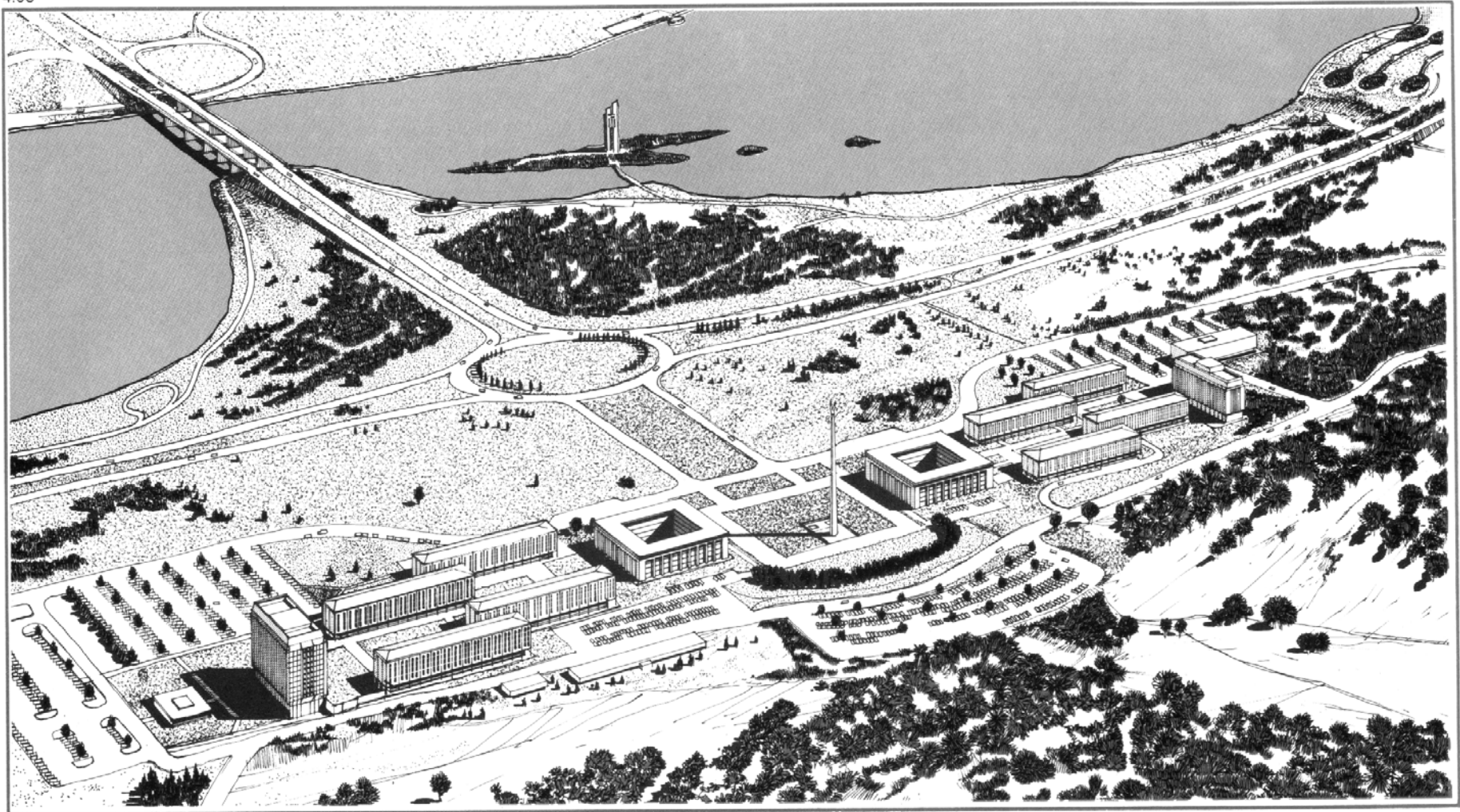
**Landscape Plan**



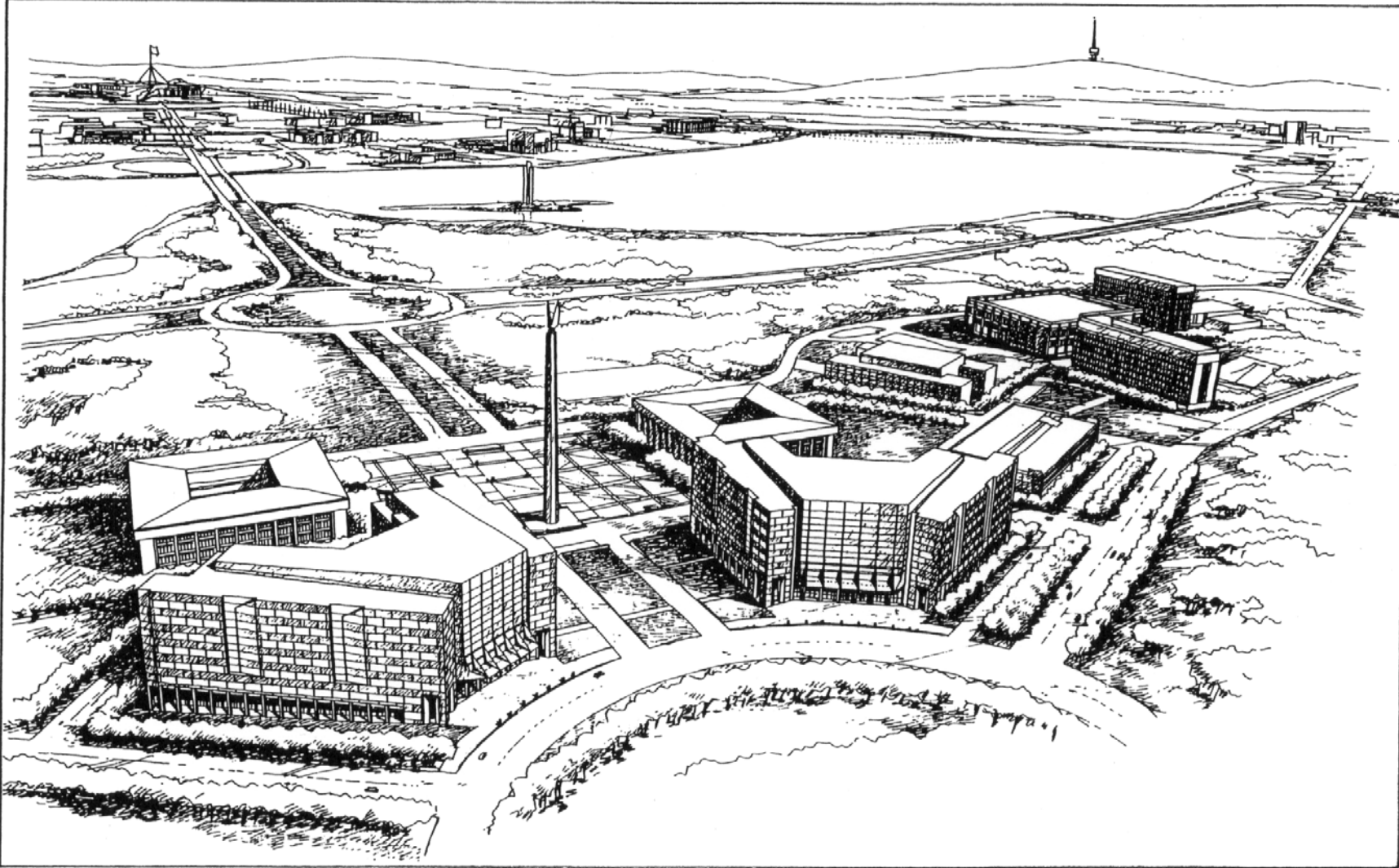
## NCA Central National Area Redevelopment, 2031

Commercial GFA	934,000 sq m
Residential GFA	675,000 sq m
Other	236,000 sq m
<b>Total</b>	<b>1,845,000 sq m</b>

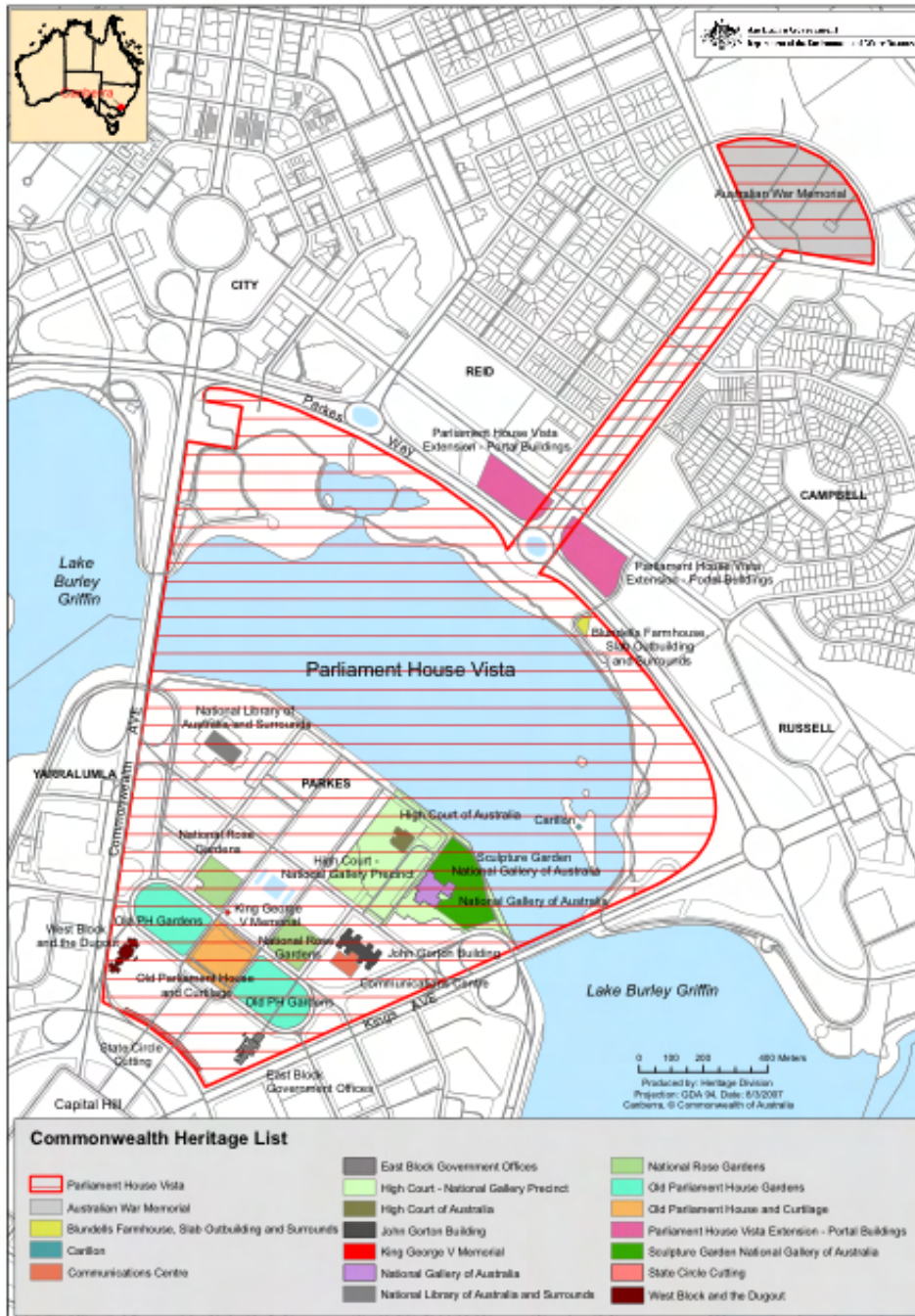




NCDC Russell Defence Precinct, 1958-1963



NCPA Russell Defence Precinct, 1994



Parliament House Vista

Australian Heritage Database website



N

Image © 2008 DigitalGlobe

©2008 Google

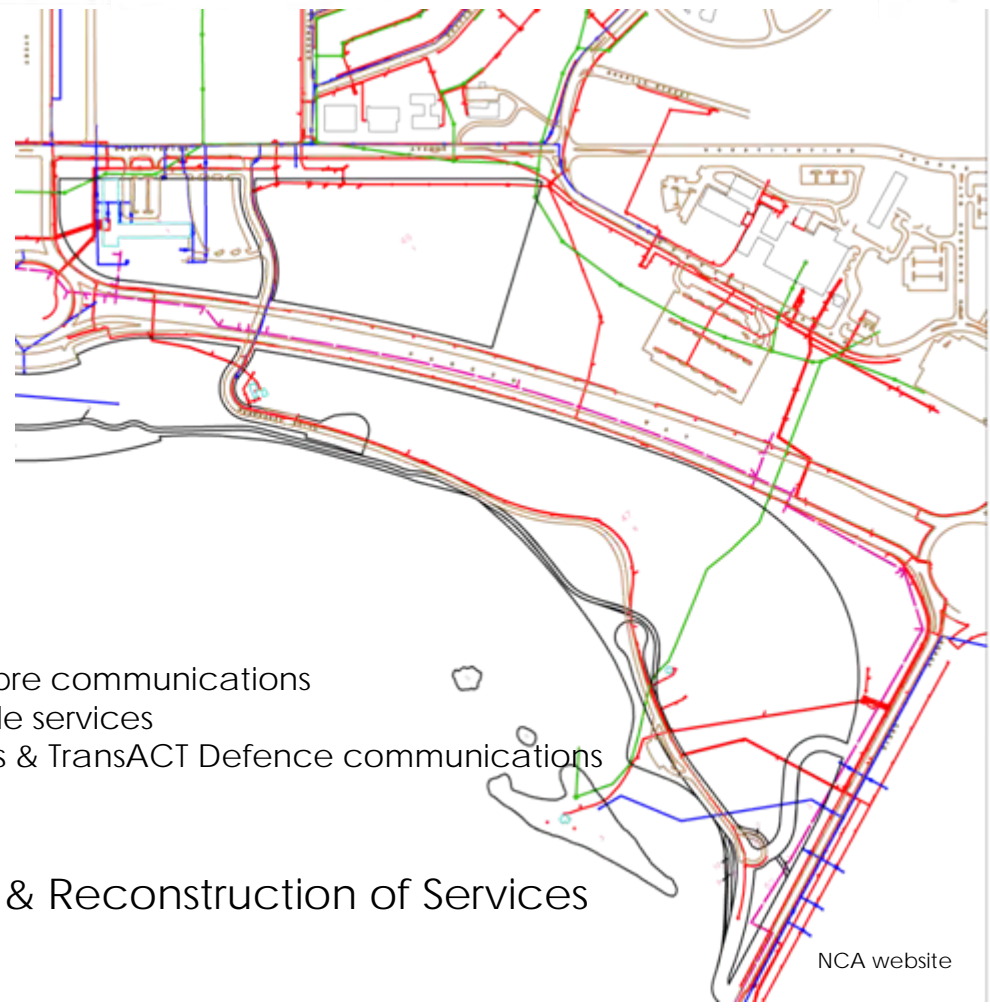
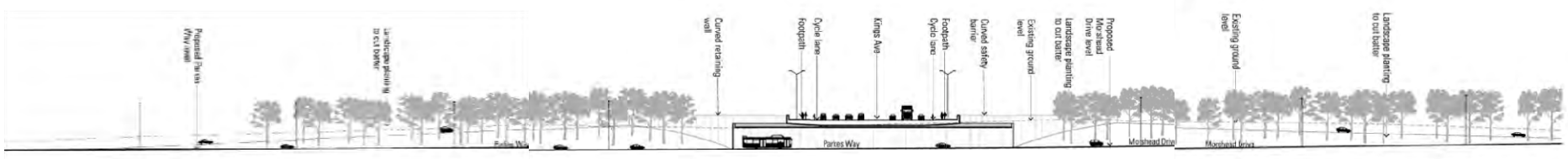
35°17'51.31" S 149°08'54.01" E

Eye alt 4302 ft



Indicative Reclamation and Land Bridge





- trunk stormwater
- high voltage power
- water
- sewer
- gas
- Telstra copper and fibre communications
- ICON fibre optic cable services
- AAPT Powertel, Optus & TransACT Defence communications

## Proposed Excavation & Reconstruction of Services







NCA Proposed Kings Avenue Overpass