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# Bridging of Kings Avenue over Parkes Way at the Russell Roundabout

- 4.1 The bridging of Kings Avenue over Parkes Way at the Russell Roundabout in Canberra as proposed by the National Capital Authority (NCA) is designed to provide improved, more reliable and more readily secured transport links between the city, Parliament House and the airport. The project would also redevelop one of the worst traffic black spots in Canberra. The estimated cost of the project is \$26.6million (excluding GST.)
- 4.2 The proposal was referred to the Committee on 18 March 2008.

# Conduct of the inquiry

- 4.3 The inquiry was advertised in the *Canberra Times* on 19 April 2008 and in *The Australian* on 9 July and 23 July 2008. The Committee received seven main submissions to the inquiry, a number of supplementary submissions, mainly from the NCA, and one exhibit. A list of these can be found at Appendix A.
- 4.4 The Committee undertook an in-camera hearing and public hearing on 6 August 2008 in Canberra. A list of witnesses can be found at Appendix B.
- 4.5 The transcript of the public hearing as well as the submissions to the inquiry are available on the Committee's website<sup>1</sup>. Plans for the proposed works are detailed in Submission 1, NCA.

<sup>1 &</sup>lt;www.aph.gov.au/pwc>

### Need for works

- 4.6 The bridging of Kings Avenue over Parkes Way at the Russell roundabout is one of two key infrastructure projects proposed to meet the transport and access needs of committed Commonwealth Government building projects located along Constitution Avenue and future developments in the Russell Defence precinct.<sup>2</sup>
- 4.7 The Russell roundabout is currently operating at performance capacity and has the highest number of accidents of any intersection in the ACT. There are over 70,000 traffic movements through the intersection per weekday, of which over 6,700 occur in the morning peak hour between 8:00am and 9:00am. In the five year period between 2001 and 2005 the intersection was the site of 475 accidents.<sup>3</sup>
- 4.8 Failure to undertake the project will stop the timely development of essential infrastructure resulting in unacceptable traffic congestion compromising access and safety at the roundabout and will inhibit access throughout the central national areas.<sup>4</sup>
- 4.9 This project alone will not address all of the traffic congestion that will result from the Commonwealth's current commitments to office projects on Constitution Avenue. Duplication of Constitution Avenue will be required if severe congestion is to be avoided (particularly on the Avenue and on Parkes Way at their intersections with Anzac Parade) when these buildings are occupied. The NCA and Department of Defence have developed a Master Plan for future building development opportunities in the Russell precinct. Should the Department of Defence advance these building development options then additional road works and car parking will be required. <sup>5</sup>
- 4.10 A number of concerns about the need for the work were raised in submissions and during the public hearing. These concerns are addressed in further detail below.

<sup>2</sup> Submission 1, NCA, p. 10.

<sup>3</sup> Submission 1.3, NCA, p. 5.

<sup>4</sup> Submission 1, NCA, p. 10.

<sup>5</sup> Submission 1, NCA, p. 10.

## Scope of works

- 4.11 The proposed scope of works is detailed in Submission 1, NCA.<sup>6</sup> In short, the works propose the following:
  - Parkes Way will be lowered and a new bridge will carry Kings Avenue traffic at its existing level over Parkes Way through to the Russell Defence precinct;
  - The new intersection where Kings Avenue passes over Parkes Way will allow traffic movements in all directions and provide safe pedestrian access from the Russell Defence precinct to Kings Park and the shores of Lake Burley Griffin.<sup>7</sup>

# Cost of works

- 4.12 The total out-turn cost of this work is scheduled to be \$26.6 million (excluding GST) which includes construction costs, escalation, contingencies, professional fees and authority charges.<sup>8</sup>
- 4.13 In the public hearing, the NCA referred to savings arising from the proposal due to its impact in reducing accidents, carbon emissions, travel time and reduced vehicle-operating costs. The Chief Executive of the NCA stated that:

the cumulative benefit of these savings will exceed the capital investment by the government within five years of construction.<sup>9</sup>

- 4.14 The Committee received detailed cost plans for the project and held an in-camera hearing with the NCA on the full project costs.
- 4.15 The Committee was satisfied that the costs were appropriate.

# **Options considered**

- 4.16 The NCA considered four options in developing the current proposal:
  - a 'do nothing' approach;

<sup>6</sup> The submission is available on the Committee's website or by contacting the Committee Secretariat.

<sup>7</sup> Submission 1, NCA, p. 11.

<sup>8</sup> Submission 1, NCA, p. 19.

<sup>9</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 3.

- a single-point urban interchange (SPUI) or one bridge allowing for concurrent right hand turns;
- a twin bridge, tight diamond interchange enabling single right hand turns on the upper level;<sup>10</sup> and
- a four-way at-grade intersection.<sup>11</sup>
- 4.17 The Committee was shown three visual traffic simulation presentations to analyse how each option compared in terms of intersection performance alone and intersection performance in relation to the traffic network. That analysis demonstrated that the most satisfactory option was the single-point urban interchange.<sup>12</sup>
- 4.18 The table below indicates the performance of each model based on an anticipated future building development increase of 520,000 square metres in the centre of Canberra, Russell, Constitutional Avenue, Barton and the Airport Precincts.

<sup>10</sup> This was the preferred option of Submission 4, Mr Erett, p. 1.

<sup>11</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 3. Submission 1, NCA noted that two options were considered.

<sup>12</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 3.

Key Performance Indicators	Existing Roundabout ("Do Nothing")	4-Way At Grade (4 Phase)	Twin Bridge (4 Phase)	Single Point Bridge (SPUI) (3 Phase)
TRAFFIC PERFORMANCE (AM Peak Hour)				
<ul> <li>Average Delay</li> <li>Seconds</li> <li>% Improvement</li> <li>Magnitude of Improvement</li> <li>Queue Length metres</li> <li>Average Speed km/hr</li> </ul>	<b>190</b> 0 % <b>0</b> 2,000 12	<b>270</b> - 42 % <b>-1.4</b> times 1,820 8	<b>141</b> 26 % <b>1.3</b> times 1,160 14	<b>48</b> 75 % <b>4.0</b> times 570 30
BUSINESS CASE (Annual Reductions & Savings)				
CO₂ Emissions <ul> <li>Reduction (kilograms)</li> <li>Cost Savings (\$ million)</li> </ul> Safety	0 \$0	- 445,000 - \$0.009 m	295,000 \$0.006 m	705,000 \$0.014 m
<ul> <li>Reduction         <ul> <li>(Number of accidents)</li> </ul> </li> </ul>	0	58	73	73
<ul> <li>Reduction (%)</li> <li>Cost Savings (\$ million)</li> <li>Travel Time</li> </ul>	0% \$0	51% \$0.52 m - 110.000	65% \$0.70 m	65% \$0.70 m 130.000
<ul> <li>Reduction (Vehicle-hours)</li> <li>Cost Savings (\$ million)</li> <li>Operating Costs         <ul> <li>(incl. Fuel Consumption)</li> </ul> </li> </ul>	\$0	- \$2.00 m	30,000 \$0.49 m	\$2.30 m
Cost Savings (\$ million)	\$0	- \$3.30 m	\$0.98 m	\$3.95
Total Cost Savings (\$ million)		- \$4.79 m	\$2.18 m	\$6.96 m

 Table 4.2
 Key performance indicators and the four intersection models<sup>13</sup>

- 4.19 The Committee heard that during the implementation phase of the proposal traffic speed would be reduced to 40 kilometres per hour. Civil engineering works would be undertaken to relocate communications and gas services where needed, before the road works commence. <sup>14</sup>
- 4.20 Subject to parliamentary approval, the bridge would be constructed within the parameter of the existing roundabout. It is expected that the construction period will be 18 months.<sup>15</sup>

<sup>13</sup> Submission 1.3, NCA, p. 5.

<sup>14</sup> Mr Waite, NCA, Proof Transcript of Evidence, 6 August 2008, pp. 5-6.

<sup>15</sup> Mr Smith, NCA, Proof Transcript of Evidence, 6 August 2008, p. 5.

### Issues and concerns raised

4.21 The Committee received a case against the proposal by the Walter Burley Griffin Society (WBGS) Incorporated. Their objections to the proposal are outlined below.

### Supporting evidence for the single bridge option

4.22 The WBGS claimed that there was insufficient evidence on the public record to make a judgement on the merits of the proposal, noting that:

There is no technical appendix, no data and no figures whatsoever for any independent critical analysis of the type of engineering studies that have been put on the table today.<sup>16</sup>

4.23 The NCA statement of evidence referred to a total of 24 consultant and government reports supporting the preferred single point bridge option. While the Committee did not consider that it needed to call for all documents, the NCA case for the proposal would have been strengthened had the further evidence provided to the Committee at the public hearing and in the eight supplementary submissions, been provided in the original submission.

### Public consultation on the proposal

- 4.24 The NCA consulted widely with government and industry about the proposal. The NCA also consulted the public about the broad framework to complete Walter Burley Griffin's plans for the national capital, known as the *Griffin Legacy* project, of which this proposal is part. Further consultation on the *Griffin Legacy* was held as part of an inquiry by the Commonwealth Joint Standing Committee on the National Capital and External Territories.<sup>17</sup> However, neither of these exercises appeared to have specifically involved public consultation by the NCA on the bridging project itself.
- 4.25 During the public hearing the NCA referred to the public consultation on the *Griffin Legacy* amendments and also noted that the PWC 'hearing constitutes much of that [public] discussion' on the proposal.<sup>18</sup>

<sup>16</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 16.

<sup>17</sup> Submission 1, NCA, p. 7.

<sup>18</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 7.

- 4.26 The Committee promoted the inquiry into the bridging of Kings Avenue on its website and in the print media however, no further submissions on the proposal were received from the public that supported the plan. In fact, all three non-government submissions to the Committee opposed the proposal.
- 4.27 The Committee's inquiry process is not a substitute for adequate public consultation by a proponent agency. Rather, the Committee should be provided with the outcome of specific public consultation measures relating to the particular proposal in the statement of evidence. Submissions to the Committee from the public should supplement that original consultation rather than be a form of consultation in itself.
- 4.28 The Committee is not convinced that the public were adequately consulted on this specific proposal prior to referral. It is difficult to determine the level of public support or even awareness of the proposal.

### Only a partial solution

- 4.29 The NCA acknowledges that the proposed bridging of Kings Avenue will not in itself address all of the future traffic problems in the area. Further works required include the duplication of nearby Constitution Avenue, and works on Constitution Avenue at its intersections with Coranderrk Street and Anzac Parade.<sup>19</sup>
- 4.30 Roads ACT indicated the support of the ACT Government for the proposal and noted that additional major works would be required on the Monaro Highway.<sup>20</sup> The Committee also heard that the Menindee Drive roundabout could also become a traffic problem.<sup>21</sup>
- 4.31 WBGS rightly pointed out that the cost of the associated infrastructure, likely to require Commonwealth funding, is not clear.<sup>22</sup>
- 4.32 WBGS also claimed that much of the increase in traffic would be caused by inappropriate development along Constitution Avenue, at the airport and in the centre of Canberra.<sup>23</sup>

<sup>19</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 8.

<sup>20</sup> Mr Gill, Roads ACT, Proof Transcript of Evidence, 6 August 2008, p. 8.

<sup>21</sup> Mr Gill, Roads ACT, Proof Transcript of Evidence, 6 August 2008, p. 12.

<sup>22</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 18.

<sup>23</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 17.

4.33 In relation to consolidation of development at the centre of Canberra and the airport, the NCA pointed out that from a sustainable development point of view, such consolidation was preferable to urban sprawl:

The fact is that urban consolidation is considered to be a good thing from a sustainability aspect not only in Australia but throughout the world, that the airport has been divested and that the nature of airports has changed throughout Australia...<sup>24</sup>

4.34 One aspect that all sides of the debate agreed on was the need for further works on Constitution Avenue.<sup>25</sup> The 2007/08 Federal Budget allocated funding for the duplication of Constitution Avenue although the funding was withdrawn in February 2008. The recent report by the Joint Standing Committee on the National Capital and External Territories strongly encouraged the reinstatement of that funding. <sup>26</sup> While the Committee notes the likely need for works on Constitution Avenue, the issue is beyond the terms of its inquiry into the bridging of Kings Avenue.

### Consistency with the intentions of Walter Burley Griffin

4.35 The proposal forms part of the NCA's *Griffin Legacy* project.<sup>27</sup> However, it was put to the Committee that the project had 'nothing to do with Walter Burley Griffin' and that a more appropriate description for the project would be the 'central national area redevelopment scheme'.<sup>28</sup> The WBGS submitted to the Committee that:

> Planning and design of this area in accordance with Griffin's principles would see removal of Parkes Way; expansion of Commonwealth and King's Parks to the north; construction of major cultural institutions on the park side of Constitution Avenue; conservation of Canberra Olympic Pool; and construction of light rail along the tree - lined medians of

<sup>24</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 26.

<sup>25</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 7; Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 14.

<sup>26</sup> JSCNCET, The Way Forward, Inquiry into the role of the National Capital Authority, July 2008, p. 47

<sup>27</sup> Submission 1, NCA, pp. 3-8.

<sup>28</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 15.

Kings Avenue and Constitution Avenue as part of a comprehensive, city - wide system.<sup>29</sup>

4.36 However, according to the heritage consultant for the NCA the proposal does reinforce the original Griffin principles:

what is proposed reinforces what the original Griffin principle proposed in terms of the dominance of Kings Avenue and what the [National Capital Development Commission] proposed in terms of a separated grade to reinforce that dominance. In that context it actually produces positive benefits, whereas, at the moment, although the current roundabout is part of a wider NCDC program, it actually dissipates the impact of the axis.<sup>30</sup>

4.37 A related concern expressed to the Committee was the likely adverse impact of the proposal on landscape harmony and vistas. The Canberra Chapter of the WBGS told the Committee:

> In Canberra we have a work of art in this sense. It is finely balanced and still has potential. But this particular structure would seem already to disturb the shape of that side of the triangle. It clearly changes vistas.<sup>31</sup>

4.38 The WBGS emphasised the modernist aesthetics of the landscape:

This is a great modernist landscape of the NCDC. It was compromised by the removal of those original buildings and what has been built instead but, still, this is all of a piece – the roads, the roundabouts, the bridges, the lake and the Carillon; it all has the aesthetics of the mid-20<sup>th</sup> century. <sup>32</sup>

4.39 However, the WBGS went on to argue that the definition of the vista used by the NCA was inadequate:

... the so-called Parliament House vista ... does not include what you see from Parliament House. It is an arbitrarily constructed line which cuts out Kings Avenue itself and cuts out the Australian American memorial – that is not in the Parliament House vista – and the Defence headquarters and the backdrop of Mount Pleasant.<sup>33</sup>

<sup>29</sup> Submission 6, WBGS, p. 15.

<sup>30</sup> Ms Hill, NCA, Proof Transcript of Evidence, 6 August 2008, p. 28.

<sup>31</sup> Mr Odgers, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 13.

<sup>32</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 20.

<sup>33</sup> Professor Weirick, WBGS, Proof Transcript of Evidence, 6 August 2008, p. 20.

4.40 The NCA statement of evidence argued that the proposed works would have no adverse impacts on the vistas.<sup>34</sup> The NCA further advised the Committee that a referral under the *Environment Protection and Biodiversity Conservation Act 1999* would be made to assess any potential impact of the proposal on the vistas.<sup>35</sup>

### Alternative proposal

4.41 As an alternative to the proposed bridge, the WBGS proposed that a better response to the current situation would be to calm the traffic system down:

The current confused combination of freeway/motorway/arterial conditions from Civic to the Airport needs to be re - designed as an integrated spatial sequence and calmed to the consistent conditions of an urban boulevard similar to Anzac Parade, Moore Park in Sydney or the great avenues of Melbourne: Royal Parade, Victoria Parade, St Kilda Road.<sup>36</sup>

4.42 The NCA indicated, however, that it believed that the calming of traffic would not be a viable option into the future and that without the proposed works, traffic movement would 'drop dead'.<sup>37</sup>

### Committee comment

- 4.43 The National Capital Authority proposal to bridge Kings Avenue over Parkes Way should have been better prepared and substantiated. The additional information provided by the NCA at the public hearing and in supplementary submissions should have been provided in the original statement of evidence to the Committee. Furthermore, the Committee is concerned that the NCA did not adequately consult the ACT community on the specific proposal. The Committee will closely scrutinise any future proposed public works by the NCA to establish the extent of public consultation.
- 4.44 Criticisms of the NCA proposal were raised in submissions and in the public hearing. The Committee suspects that many of those arguments stem from the different philosophical outlook of the

<sup>34</sup> Submission1, NCA, p. 12.

<sup>35</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 2.

<sup>36</sup> Submission 6, WBGS, p. 26.

<sup>37</sup> Ms Pegrum, NCA, Proof Transcript of Evidence, 6 August 2008, p. 27.

main parties. On one side, the Walter Burley Griffin Society interested in maintaining a version of the Griffin's original intentions and the broad planning directions of Canberra, and on the other side, the NCA focused on solving a traffic problem in a practical cost effective manner.

- 4.45 However, the Committee's concerns about the proposal were addressed by the supplementary submissions provided by the NCA following the public hearing.
- 4.46 On balance and despite its concerns about the lack of public consultation and the quality of the original statement of evidence, the Committee has assessed the scope of the works and finds the proposal suitable to provide an improved, safe and efficient intersection. The Committee is accordingly satisfied that this project has merit in terms of need, scope and cost and that it is expedient that the proposed works proceed.

### **Recommendation 3**

The Committee recommends that the House of Representatives resolve, pursuant to Section 18 (7) of the *Public Works Committee Act* 1969, that it is expedient to carry out the following proposed work: Bridging of Kings Avenue over Parkes Way at the Russell Roundabout, Canberra, ACT.