

## Issues

### Introduction

- 5.1 This chapter provides comment on the main issues that arose during the Inquiry. They are:
- environmental impact;
  - heritage considerations;
  - concerns of the Jondaryan Shire Council; and
  - energy conservation measures

### Environmental Impact

- 5.2 Defence commissioned an environmental assessment of the Oakey proposal that concluded that there are no significant environmental issues that would require referral of the project to Environment Australia in accordance with the *Environmental Protection and Biodiversity Conservation Act 1999*.
- 5.3 Defence advised the Committee that it would prepare an Environmental Certificate of Compliance in accordance with its own Environmental Management Policy. The Oakey Base is managed in accordance with the current Base Environmental Management Plan.
- 5.4 Contractors will be required to produce an environmental management plan for construction as a contractual obligation, and these procedures will be audited as an element of project management. Defence stated that work

could be stopped if the managing contractor or subcontractors are not complying with the agreed Environmental Management Plan.<sup>1</sup>

## Heritage Considerations

- 5.5 Defence advised that a cultural and heritage assessment was carried out in April 1998 and based on the results of this study, Defence believes there are no heritage issues associated with any element of the project. However, the Australian Heritage Commission (AHC) stated in its submission that, while there are no places entered in the register of the national estate likely to be affected by the proposed redevelopment, the Army Aviation Centre at Oakey has potential cultural heritage significance. Also, it may contain a threatened bluegrass (*dicanthium sericeaum*) grassland ecological community.
- 5.6 Based on information currently available, the AHC believes it is possible that the Army Aviation Centre may have national estate significance. This potential significance arises from its use as a strategic RAAF base during the Second World War, its illustration of the military relationship between Australia and Singapore since the 1980s and its function as the primary Australian Army Aviation base.
- 5.7 The AHC advised the Committee that the preparation of the cultural heritage assessment did not identify any places or items of Indigenous heritage significance. However, the resulting AHC report indicated that grass cover and depositing of fill (from construction activities) reduced ground surface visibility. As a result, archaeological material could be hidden.<sup>2</sup>

## Defence response

- 5.8 In response to the issues raised by the AHC, Defence made the following points.
- 5.9 First, Defence believes that the project will not materially impact on any heritage value or sites of national heritage significance. While the Base was used as a strategic RAAF base during the Second World War, there is only one building on the Base from this era, a Bellman hanger, and it is not part of the redevelopment project.

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1 Submissions, pp. 14-15, 73; Evidence, p. 15.

2 Submissions, pp. 15, 63-65.

- 5.10 The military relationship between Australia and Singapore is demonstrated at Oakey by the presence of 126 Squadron of the Republic of Singapore Air Force. At Oakey the Singaporean facilities are largely quarantined from the remainder of the Base, and will not be affected by the redevelopment project.
- 5.11 The significance of the base as the primary Australian Army Aviation base is also recognised by Defence. This is demonstrated by the capital investment in the base since it was taken over by the Army in 1969. This significance will be enhanced under this project through the relocation of the Army component of the ADF Helicopter School from RAAF Fairbairn in Canberra to Oakey, and the training of aircrew for the new armed reconnaissance helicopter.
- 5.12 In relation to the *Dicanthium Sericeaum*, Defence commissioned a specialist consultant in early July 2001 to determine if it exists on any of the green field sites at Oakey. Preliminary investigation did not reveal any evidence of the *Dicanthium* species. However, it was recognised that as the survey was undertaken in a dry period this will need to be reviewed prior to construction. The Committee notes that Defence's advice that, if a threatened species is found, appropriate action will be taken to ensure the effects of the project are not detrimental to the species. The Australian Heritage Commission will be consulted on any plan of action that may be required.
- 5.13 Defence agrees that any areas of cultural heritage significance need to be identified and managed appropriately. This will be evaluated prior to any construction activities occurring.
- 5.14 While the cultural and heritage assessment prepared in consultation with local Aboriginal groups did not identify any places or items of Indigenous heritage significance, Defence notes the possibility that historical or indigenous archaeological material may be located in the area. Contractors will be required to report and protect any such sites that are uncovered during construction.<sup>3</sup>

## Concerns of Jondaryan Shire Council

- 5.15 The Jondaryan Shire Council raised a number of issues in relation to the proposed redevelopment of the Army Aviation Centre. The Council advised that:

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<sup>3</sup> Submissions, pp. 71-72.

- it is keen to receive details regarding the standard and location of the proposed new civil terminal and to have input to the design;
- it is yet to be consulted on the responsibility for maintenance of the proposed terminal and would be concerned if this responsibility rested with Council;
- it wishes to be consulted with regard to the location and standard of vehicular access to the proposed terminal;
- discussions need to be held regarding the need for additional sewage treatment or water supplies; and
- the existing Base traffic has a significant impact on local roads and discussions need to take place to consider the impact of increasing traffic and how improvements are to be made to Corfe Road and the Oakey-Kelvinhaugh Road. The Shire Council does not have the financial capacity to upgrade these roads to the required standard.<sup>4</sup>

5.16 In evidence to the Committee, the Mayor of Jondaryan Shire Council, Mr Peter Taylor, said that while Council recognised the Army Aviation Centre is an important part of the regional economy, increasing traffic in the vicinity of the Base would become an issue for Army. He also pointed out that the impact on the local community of a facility such as Oakey is not considered in the same way as a normal commercial development, which would have to lodge a development application with the Council. However, he believed that all issues of concern to the Council could be resolved satisfactorily.<sup>5</sup>

## Defence response

5.17 In response to the issues raised by the Jondaryan Shire Council, Defence indicated that the civil terminal and associated infrastructure would be relocated to the eastern end of the main runway, with public access off Oakey-Kelvinhaugh Road. The standard and capacity of the facility would be similar to existing as agreed with the Council in 1995. The design of the new facilities would be undertaken by the managing contractor once appointed (late 2001), at which time the Council would be consulted and invited to provide input into the design. In particular, the location and standard of the access road for the civil terminal would require Council input.

5.18 As agreed with the Council in 1995, the maintenance of the new terminal and associated facilities will be undertaken by the Commonwealth. A

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4 See Appendix C for roads surrounding the Army Aviation Centre.

5 Submissions, pp. 53-54; Evidence, p 34.

lease agreement for the new terminal is yet to be negotiated. At the public hearing Brigadier Kelly indicated that the current understanding was that Defence would build and maintain the terminal and the Council would have a lease on the facility.

- 5.19 Based on preliminary investigations, Defence advised that the services to the Base, including sewerage and water supply, appeared to be adequate for the redeveloped facilities with no significant increase in demand envisaged. Following doubts expressed by Mr Taylor at the public hearing as to the capacity of the existing sewerage works, Defence advised that the amount of sewage generated by the Base has significantly decreased rather than increased since 1995. This was due to a reduction in numbers of staff living on the base, and the outsourcing of some support functions.
- 5.20 The Commonwealth recognises the significant impact of Base traffic on local roads, and as such contributes to the maintenance of local roads under the 'Roads of Access Payments' agreement. In particular, the Commonwealth currently pays for the following maintenance works:
- the sealed section of Corfe Road – 100%;
  - Beale St from the Base entrance to the Oakey-Kelvinhaugh Rd Intersection – 100%; and
  - Beale St from the Oakey-Kelvinhaugh Rd Intersection to the Railway Crossing (entrance to Oakey Township) – 60%.
- 5.21 The unmade section of Corfe Road is a State Road Reserve, and as such is not the responsibility of the Commonwealth. There is no funding allocated to this work under the Oakey Redevelopment Project. The relocation of the civil terminal is not expected to increase Defence use of either Corfe Rd or Oakey-Kelvinhaugh Rd. Brigadier Kelly pointed out that it was his understanding that the new passenger terminal will not require access from a dirt or gravel road.<sup>6</sup>

## Energy Conservation Measures

- 5.22 Defence advised that the Commonwealth is committed to improved energy management to ensure ecologically sustainable development and the reduction of greenhouse gas emissions. In compliance with this commitment, energy efficiency is to be a key objective in the design, development and delivery of Defence facilities projects.

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<sup>6</sup> Submissions, pp. 59-60 and 83; Evidence, p. 42.

- 5.23 All facilities projects are to include an analysis of energy delivery and consumption systems, incorporating an estimate of any additional energy consumption and costs that are expected to result from the implementation of the proposal. The energy efficiency of new and refurbished buildings is to be audited within twelve months of occupancy, and Defence must report annually to the Minister and Parliament on its energy management performance, and on its progress towards meeting the Government's energy efficiency targets.
- 5.24 In terms of this project, Defence stated that design and construction will take account of the following factors:
- the siting buildings to ensure maximum use of prevailing winds and the sun for temperature control and lighting;
  - the use of insulation materials and weatherproof seals;
  - the use of solar energy and solar hot water systems where considered cost effective;
  - the use of gas fuelled heating systems;
  - the use of geothermal air conditioning systems if feasible and cost effective;
  - the use of energy efficient lighting and lighting control systems appropriate to the purpose;
  - the use of energy efficient plant and equipment;
  - the provision of capability to control energy use by zones within the facility; and
  - the use of building energy management systems as part of an area energy management strategy.<sup>7</sup>
- 5.25 In its submission to the Committee, the Australian Greenhouse Office (AGO) stated that its interest in the project lies in the extent to which the Commonwealth Government's energy policy has been observed in the planning stages for the project and in minimising greenhouse gas emissions from all stages of the project including its operational life.
- 5.26 It is a specific requirement of the Commonwealth energy policy that:
- the AGO Government Operations Team assesses and reports on proposed major construction projects for consideration by relevant parliamentary committees; and

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7 Submissions, pp. 18-19.

- funding for building construction and refurbishing be contingent on certification by suitably qualified persons, through the AGO Government Operations Team, and that the building meet the required energy standards.
- 5.27 With regard to the Oakey redevelopment project, AGO identified a number of concerns regarding the extent to which energy efficiency issues will be appropriately addressed. They are:
- while ‘energy efficiency is to be a key objective’ in design, development and delivery of the project, there does not appear to be any indication of how that objective would be realised in the extensive period of the project;
  - there is no expressed intention of consultation with the AGO or other relevant Commonwealth bodies regarding energy efficiency matters; and
  - there does not appear to be an appropriate mechanism to assess the extent to which ‘maximum energy efficiency’ has been achieved.
- 5.28 AGO stated that Defence may wish to consider a number of steps to address these concerns and as a means of ensuring that energy efficiency is appropriately embodied in the Oakey project. The steps were:
- appointment of an expert energy adviser to assist the development team with energy and environmental issues;
  - development of an agreed energy targets for the design and operation of major facilities on the Base;
  - periodic assessment of the project progress by the energy adviser, and
  - sign-off of the energy performance for each project at hand-over stage.
- 5.29 In evidence to the Committee, the Manager of AGO’s Government Operations Team, Ms Jacquie Shannon, stated that the total energy usage attributed to Defence non-operational activities amounted to 48 percent of total Commonwealth energy usage. The next most significant agency in terms of energy consumption is CSIRO and it reported only 9 percent of the total Commonwealth usage.
- 5.30 AGO therefore believes that a project such as Oakey presents a tremendous opportunity for improving energy efficiency. There is scope in the Oakey project alone to cut energy usage by as much as the combined efforts of a dozen or more of smaller Commonwealth agencies.<sup>8</sup>

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<sup>8</sup> Submissions, pp. 69-70; Evidence, p. 26.

- 5.31 Defence advised the Committee that prior to the public hearing Defence representatives had met with AGO officers and both parties agreed to further develop specific guidelines for the proper application of the Commonwealth's energy policies within current and further capital works projects by Defence.
- 5.32 With regard to the incorporation of 'maximum energy efficiency', Defence pointed out that in developing the design of a facility it must balance the purpose of the facility, the functionality and cost effectiveness of the design with the desired energy efficiency outcomes to ensure proper use of Commonwealth funds.
- 5.33 Defence has agreed to engage an expert energy adviser to achieve maximum possible energy efficiency wherever possible on the project. An energy efficiency target would be set for the design and operation of the facility at an appropriate time and the expert energy adviser would undertake periodic assessment of project progress in energy efficiency matters.
- 5.34 It is the intention of Defence to include consultation with the AGO on energy efficiency matters on all other future capital works projects at the time of their submission for consideration by the Committee.
- 5.35 In relation to the use of alternative energy sources such as solar and geothermal, Defence advised the Committee in a supplementary submission that the cost estimate for the Oakey project includes the use of conventional heating and cooling systems only rather than alternative sources. Defence indicated that once design progresses past the concept design phase, alternatives such as solar and geothermal are investigated and if feasible are compared to conventional systems against a number of criteria including capital cost, life cycle costs, energy efficiency, and greenhouse gases used in both production and operation.
- 5.36 The cost of alternative energy systems is dependent on local environmental factors and the design solution. Defence believes it is not possible to estimate the cost of these systems without first developing concept designs for the facilities. On other projects where this has been investigated, the cost increases for alternative energy systems has been up to 10 percent of the building costs.
- 5.37 The energy efficiency of a building is also dependent on the architectural design. Building size, shape and orientation are equally important to reduce the energy consumption in a building. Professional advice obtained by Defence indicates that architectural measures to reduce energy consumption do not necessarily increase the cost of a building.



Defence advised the Committee that it will pursue all avenues to make designs as energy efficient as possible.<sup>9</sup>

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<sup>9</sup> Submissions, pp. 75-76 and 81-82.