

Parliamentary Standing Committee on Public Works

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REPORT

relating to the

HOUSING DEVELOPMENT, BLIGH PARK, NSW

(Twelfth Report of 1994)

The Parliament of the Commonwealth of Australia Parliamentary Standing Committee on Public Works

Report Relating

to the

Housing development, Bligh Park, NSW

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Thirty-First Committee)

Mr Colin Hollis MP (Chair) Senator Paul Henry Calvert (Vice-Chair)

Senate House of Representatives

Senator Bryant Robert Burns Mr John Neil Andrew MP

Senator John Robert Devereux Mr Raymond Allen Braithwaite MP

Mr Russell Neville Gorman MP

Mr Robert George Halverson OBE MP Hon. Benjamin Charles Humphreys MP

SECTIONAL COMMITTEE ON THE HOUSING DEVELOPMENT, BLIGH PARK, NSW

Mr Colin Hollis MP (Chair)
Senator Paul Henry Calvert (Vice-Chair)
Mr Robert George Halverson OBE MP
Senator Bryant Robert Burns

Committee Secretary: Peter Roberts

Inquiry Secretary: Denise Denahy

Secretarial Support: Sue Whalan

EXTRACT FROM THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES

No. 82 dated Wednesday, 29 June 1994

12 PUBLIC WORKS-PARLIAMENTARY STANDING COMMITTEE-REFERENCE OF WORK-HOUSING DEVELOPMENT, BLIGH PARK, NSW

Mr Walker (Minister for Administrative Services), pursuant to notice, moved—That, in accordance with the provisions of the *Public Works Committee Act 1969*, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Housing development, Bligh Park, NSW.

Mr Walker presented plans in connection with the proposed work.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

HOUSING DEVELOPMENT AT BLIGH PARK, NSW.

By resolution on 29 June 1994, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report to Parliament a housing development at Bligh Park, NSW.

THE REFERENCE

- 1. The Defence Housing Authority (DHA) proposes to acquire between 50 and 65 residential building allotments in a planned extension (Precinct 29) to the Bligh Park residential estate near Windsor, NSW.
- 2. The estimated cost of the proposal when referred to the Committee was \$8.5m.

THE COMMITTEE'S INVESTIGATION

- 3. On 29 September 1994 the Committee appointed a Sectional Committee comprising Mr C Hollis MP, Senator P Calvert, Senator B Burns and Mr R Halverson MP to undertake this inquiry.
- 4. The Committee received a written submission from DHA and evidence was taken from its representatives at a public hearing at Windsor, NSW on Friday 30 September 1994. Prior to the public hearing the Committee inspected the proposed site.
- 5. The following organisations also presented submissions and appeared before the Committee at the public hearing:
 - Vineyard Riverstone Development Committee
 - Mr F Scharfe and Mr L Malcolm.
- 6. Submissions were also received from the following:
 - Royal Australian Institute of Architects

- Mr K Shaw
- . Australian Nature Conservation Agency
- . Commonwealth Environment Protection Agency (CEPA)
- . Commonwealth Department of Primary Industries and Energy
- . Commonwealth Fire Board (CFB)
- LANDCOM NSW Government.
- 7. A list of witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

- 8. DHA was established following recommendations by the 1984 Commonwealth Government Task Force on Australian Public Service and Defence Force Housing Programs. The Task Force was required by the Government to investigate housing for both Commonwealth Government and Service personnel and their families. It found that existing methods for the provision of housing for Service personnel were subjected to many administrative constraints and that poor housing was seen as a significant factor contributing to the loss of skilled personnel from the Defence forces.
- 9. The Defence Housing Authority Act, 1987 provided a legal entity responsible for administering the housing requirements of Australia's Defence personnel. The primary goal of DHA is to provide Defence personnel and their families with housing consistent with community standards and housing which will contribute positively to their quality of life. In achieving this mission, DHA aims to meet Defence operational needs, follow sound commercial principles and be a responsive and innovative organisation.
- 10. DHA is responsible for the management of 24 900 dwellings distributed widely throughout Australia, including dwellings leased out to the private market pending disposal.

- 11. DHA's regional housing needs are managed by a network of Housing Management Centres (HMCs). There are four HMCs located in Sydney which focus on major Defence establishments. These are:
 - . Sydney West (RAAF Base Richmond, RAAF Glenbrook, RAAF Orchard Hills and miscellaneous Navy and Army establishments)
 - . Moorebank (Holsworthy and Ingleburn Army Bases)
 - . Sydney North (Garden Island Naval Base, HMAS *Platypus*)
 - . Sydney South (Garden Island Naval Base, Naval Stores, Victoria Barracks).

Over 6 000 dwellings are managed by these HMCs.

- 12. The Sydney West HMC covers an area extending from Baulkham Hills in the east to Dubbo and Parkes in the west and manages a total housing stock of 2 012 dwellings (April 1994). Of these, 1 647 properties are used for housing Service families.
- 13. Housing for Service families is mainly concentrated around Defence bases at Windsor/Richmond (RAAF Base Richmond), Blue Mountains area (RAAF Glenbrook), Penrith and Quakers Hill (RAAF Orchard Hills).
- 14. The Sydney West HMC also manages housing for Army families serving in facilities at Penrith, Lithgow, Bathurst and Orange, RAAF families serving at Parkes and Dubbo and Navy families who reside in the Castle Hill, Cherrybrook and Baulkham Hills areas. In addition, the Sydney West HMC manages housing for a small number of Australian Defence Industry personnel and their families.
- 15. Each HMC is responsible for ensuring the housing needs of Service families are adequately provided for within their region, including:
 - repairs and maintenance programs
 - . purchase of new housing to meet needs
 - construction of new homes

carrying out improvements to existing homes.

16. For urgent repairs the tenant telephones the appropriate HMC and a contractor is despatched to conduct the repairs. DHA's staff regularly inspect the properties, usually at the time of tenant changeover. During these inspections, staff review planned maintenance requirements such as painting. The average tenancy is between two and three years.

THE NEED

- 17. Recently DHA carried out a review of housing in the Sydney West HMC as part of its five year housing program. This review revealed a number of matters requiring attention in order to meet Defence housing requirements. This proposal is part of the program to address those needs and improve the housing standards for Service families.
- 18. In the Sydney West HMC, 637 houses available to Service families have been classed as substandard and below the Standard Married Quarters 90 (SMQ 90) classification B1. Of these houses, 450 are in the Richmond/Windsor area, the majority being at Hobartville. These homes are provided primarily for RAAF Base Richmond personnel and their families and were originally built in the 1940s. All need major repairs to the kitchens and bathrooms and a number contain asbestos.
- 19. DHA advised that it carried out an extensive investigation into the redevelopment of the Hobartville area for residential housing. This investigation indicated it was not economically viable to redevelop this area, even after taking into account the potential to increase development yield. The cost of refurbishment and additions to meet married quarters standards, was also not economically viable. A decision was made not to proceed with the refurbishment/redevelopment of Hobartville for Defence housing, but to expend funds to improve the appearance of the houses and the streetscape of the estate. The properties would then be progressively sold over the next three to five years. Some houses have already been refurbished and sold as part of this program.
- 20. In addition to the need to find replacement stock for the substandard Hobartville houses, there is approximately six per cent of Service families living in Temporary Rental Allowance (TRA) accommodation and a further two homes which are part of the Commonwealth/State Housing Agreement (Service Personnel) (CSHA(SP)) which are to be handed back to the NSW

State Government. The Sydney West HMC has an ongoing planning program over the next five years to replace a minimum of 118 substandard homes.

- 21. Defence personnel serving RAAF Base Richmond have historically lived in the Richmond/Windsor area, with a small number of personnel on Temporary Rental Allowance living in localities scattered throughout the region from Castle Hill to Penrith. In providing housing some of the primary concerns of DHA are:
 - location reasonably close to the base (generally travel times greater than 30 minutes are not acceptable)
 - . localities which provide access by public transport and have good cycle/pedestrian facilities.
- 22. DHA advised that a proposal in 1992 to develop a joint venture residential subdivision of 36.4 ha at Kellyville had been abandoned, due to the Rouse Hill Infrastructure Consortium and the Sydney Water Board delaying servicing of the Kellyville area.

Committee's Conclusion

23. A need exists to provide suitable accommodation for Defence personnel who are presently living in substandard accommodation at Hobartville.

THE PROPOSAL

- 24. DHA is proposing to acquire between 50 and 65 lots in a new stage of a residential subdivision Precinct 29 at Bligh Park, located 5 km south of Windsor and 7 km from RAAF Base Richmond. These lots will be used to construct housing to a standard suitable for Service families who will be relocated from substandard housing at Hobartville. The proposed development is the last precinct of a 2 225 dwelling estate.
- 25. The Committee was advised that, although DHA prefers to be the developer of housing proposals, in this case it is merely the purchaser of lots from the subdivision. Therefore, DHA has limited control over the development of Bligh Park. DHA stressed that it has not contracted to purchase the lots but has been in negotiation with the joint venture partners.

Alternatives Considered

26. DHA sought to identify land available for housing convenient to RAAF Base Richmond.

27. Areas not considered satisfactory were:

- Parklea travel time is within acceptable limits but presently limited due to lack of public transport. There is a bus service to Blacktown. This is a possible area for future consideration
- Rouse Hill travel time is within acceptable limits, mainly by private vehicle. Public transport services are limited as the area is new and not substantially developed. The area is considered unacceptable due mainly to the delays in the provision of water and sewerage services
- . Hills District travel time is at the limit of generally acceptable distance. A number of Service families live in the area sufficient to meet Defence needs. Housing is more expensive compared with other areas
- Mount Druitt Area there are social difficulties which are unacceptable to Service families
- . Riverstone Area there are social difficulties which are unacceptable to Service families.

28. Areas considered acceptable included:

Greater Penrith Area - this area includes localities such as Glenmore Park, Mt Pleasant and Cranebrook. The Cranebrook area is considered to be the geographical hub for DHA needs as most Defence establishments are within acceptable travel distances from this locality. Mt Pleasant/Cranebrook is currently being developed and provides 94 homes for Service families but future land and housing supply are dependent on the development of the Cranebrook area. The timeframe for the release of this land is about three to five years away and is outside the immediate program needs

Quakers Hill - this area is acceptable to Defence needs and already provides a considerable number of homes for Service families. The area is 25 minutes travel time by car to RAAF Base Richmond. However, it does have limited local facilities as it is a newly created housing area and the supply of new stock is dwindling and will be dependent on the new release areas in the Parklea area, such as the Landcom estate at Glenwood Park

- Richmond/Windsor Area there are limited opportunities in this area due to natural development constraints. Most of the available area has already been developed with the majority of the remaining area being flood affected or used by institutions such as the University of Western Sydney. There is a small supply of available land but those areas which are available for development have a number of constraints including:
- the cost of land which is generally at a premium due to the overall shortage of developable land in the area
- a substantial proportion is on the western side of the river and there are access problems in times of flood
- in some instances there are difficulties in providing adequate water and sewerage services.
- 29. The Committee queried the long-term future of RAAF Base Richmond. DHA advised that all planning sees the base remaining operational for the foreseeable future.

Bligh Park

- 30. Bligh Park is the only major new residential estate to be developed in the Richmond/Windsor area within the last 10 years. Defence advised that it is an attractive area for Defence housing and is highly sought after by Service families. Ninety-two families are already living in the Bligh Park Estate representing five per cent of the total number of families living there.
- 31. The Bligh Park development was undertaken by a joint venture (the Bligh Park Joint Venture) between Hawkesbury City Council and Landcom

(previously under the administration of the Department of Housing but now part of the Property Services Group).

32. The first lots of the development were registered in December 1984 and since then 1 750 lots have been produced providing 2 000 dwellings.

Precinct 29

- 33. Precinct 29 is currently being developed and this will provide an additional 225 lots for residential housing. Fifty per cent of the estate will be released in late November 1994 with the remainder of the allotments becoming available in February 1995. This is the only major new subdivision development currently being undertaken in the immediate vicinity of RAAF Base Richmond.
- 34. DHA advised the Committee that Precinct 29 will provide a wide range of affordable housing lots. These lots will range in size from 365m² to 690m² and will cater for traditional homes, courtyard and villa homes, integrated housing and attached housing. The subdivision contains three large blocks which have been set aside for integrated cluster housing development. The sites will provide between 60 and 70 dwellings. Overall density is expected to be about 14 dwellings per ha, which is consistent with State and Commonwealth policies on affordable housing and effective use of land resources consistent with locally accepted community standards.

Development Design Criteria and Objectives

- 35. It is intended to develop an attractive well planned residential estate. To that end the land and housing proposed for the development will provide a broad variety of land and housing choices to reflect local community standards.
- 36. All streets and public places will be landscaped to provide a streetscape that enhances the living environment and amenity of the development.
- 37. Community facilities required by the Council will be provided within the estate. Most facilities have been provided as part of the earlier development phase of the project. Other facilities are planned to be available by the time the new housing has been constructed and additional open space will be provided as part of the Bligh Park Stage 2 development.

38. The project will be designed to yield at least 225 lots on the land currently zoned Residential 2(a).

39. Other objectives include:

- to develop residential dwelling sites in an attractive well planned environment
- to complete the development and sale of all allotments within the shortest possible time
- to ensure that the development is socially well integrated with existing housing developments in the locality
- to enable DHA to obtain sufficient residential allotments to satisfy the following requirements:
 - that about 30 per cent of the total dwelling units in the development will be for Service families
 - that Defence housing be integrated with private housing such that no section or area of the development can be readily identified as Defence housing
 - to provide a choice of housing types for Service families which are consistent with community standards and requirements for Defence housing
 - to develop the land in a manner which is consistent with State and Commonwealth objectives for housing choice and affordability
 - to provide for the creation of additional community and recreational facilities as may reasonably be needed to service the development, as it may be commercially feasible to provide
 - subject to commercial considerations, to ensure a consistently good quality of landscaping, streetscape development, building design and construction is obtained throughout the development

- to ensure that the total development is in sympathy with the environmental features of the area, consistent with sound commercial practice
- to give ample scope for a comprehensive range of builders to be engaged on the development.
- 40. DHA will also ensure that individual house designs incorporate energy efficiency design principles by consideration of thermal mass, orientation of windows, insulation, sun control and shading, ventilation, landscaping and household electrical appliances.
- 41. DHA advised that building energy efficient homes will help reduce energy consumption, provide greater personal comfort and potentially add to the resale value of the property.
- 42. In addition to the above objectives, DHA will ensure that homes for Service families will be constructed to meet local building codes and regulations and will incorporate mains powered domestic smoke alarms with battery back-up.

The Site

- 43. The site of the proposed subdivision development comprises Lots 1250, 1251 and 1252 (DP 800323) and Part Lot 5 (DP 521396) and has an area of 18.2 ha. It is situated on the northern side of Rifle Range Road, Bligh Park in the Hawkesbury Local Government Area.
- 44. The land in Precinct 29 has been largely left as a natural area unaffected by direct urban settlement due mainly to previous ownership and management practices. There are no identifiable European heritage items located within the area. However, the effects of surrounding urban development are clearly evident. The site has been subject to previous construction works, contains a number of road material stockpiles, bulldozed soils and timber debris, drainage cuttings, household waste material and in some portions of the site along access tracks, car bodies and junk machinery have been dumped. During subdivision construction waste materials will be cleared from the site and disposed of in a controlled landfill site.

Financial and Commercial Considerations

45. The first stage will be the acquisition of land and the second stage the construction of homes for Service families.

Acquisition of Land

46. The cost of acquiring 50 allotments in Precinct 29 is estimated to cost around \$65 000 per lot and totals \$3.25m. Subject to normal DHA approval procedures it is anticipated that the acquisition of land in Precinct 29 would proceed as soon as subdivision construction is completed.

Construction of Homes

47. Construction of the proposed 50 homes will cost \$5.25m estimated at \$105 000 per dwelling. It is anticipated that construction of housing in Precinct 29 will be completed in the financial year 1995/96.

Statutory Approvals

48. Precinct 29 is part of a larger area of Crown land under the control of the Department of Conservation and Land Management (CALM) which has been appropriated to the Department of Housing (Landcom). The Bligh Park Joint Venture has an agreement with CALM to develop the appropriated Crown land holdings at Bligh Park on an agreed profit sharing basis. Approval has been given to proceed with the development of all residential lots east of the proposed primary school site. The area to the east of Road 15 (Refer Appendix B) is still subject to discussion with the National Parks and Wildlife Service. However, it should be noted that the outcome of those discussions has no bearing on the remainder of the development.

Local Council

49. Hawkesbury City Council is the responsible local authority and under the Bligh Park Joint Venture is the Project Manager for the subdivision development. Council's formal approval for the subdivision development was issued on 1 March 1994.

Town Planning Context

- 50. Precinct 29 is the last major remaining area which is currently zoned to allow urban residential subdivision and can be readily developed. It is zoned Residential "A" under the provisions of Hawkesbury Local Environmental Plan 1989.
- 51. Council is currently undertaking investigations to release land to the north of Precinct 29 (Bligh Park 2) for residential development. The area comprises 91.5 ha in total of which 82.5 ha would be potentially suitable for urban development. Of this potentially suitable area, 21.5 ha would be used for schools and open space facilities which leaves 61 ha available for residential development. This land could provide up to an additional 740 allotments based on recent preliminary lot development studies.
- 52. However, release of this land and the final yield is subject to resolution of the 1:100 year flood level and the delineation of the development boundary. Hawkesbury City Council is currently holding discussions with the Department of Planning and the Minister for Planning to resolve the flood limit issue so that the processing of a draft Local Environmental Plan can proceed. Hawkesbury City Council has advised that the previous concern regarding emergency access has now been resolved by the State Government making a commitment to fund necessary road upgrading works to provide flood-free access to Penrith.
- 53. DHA has held preliminary discussions with Hawkesbury City Council concerning the future development of Bligh Park 2. Subject to the rezoning of the area proceeding, DHA plans to participate in the development of the area and acquire up to a third of the development lots.

Service Authorities

- 54. The following authorities are responsible for the co-ordination and provision of services to the subdivision development:
 - project management and supervision of construction -Hawkesbury City Council
 - roads Hawkesbury City Council

- . sewerage Hawkesbury City Council
- . water Sydney Water Board
- . power supply Prospect Electricity
- . gas Natural Gas Company
- . telephone services Telecom
- . all other development work Hawkesbury City Council.
- 55. There are no problems anticipated with the provision and connection of these services to the development.
- 56. In addition to the above services, provision will be made for fire fighting. The subdivision development will comply with local regulations with regard to access for fire fighting and the provision of water supply and hydrants that meet fire fighting authority requirements.
- 57. In response to the Commonwealth Fire Board, DHA advised that project homes constructed would conform to the requirements of the Building Code of Australia and with building approval conditions issued by the Hawkesbury City Council. DHA advised that it has in place fire insurance protection coverage covering its housing assets. The extent of coverage and premium is revised annually on a competitive basis having regard to the revaluation of housing stock, changed housing stock and disposal program, claims experience and assessed risk factors.

SERVICES

Community Facilities

- 58. A large number of community facilities have already been developed in the area over the past 10 years. These include:
 - local neighbourhood shopping, postal facilities, children's playground and tennis courts
 - existing primary school and a proposed primary school to be ready for occupation in school year 1995

- . two local neighbourhood community centres will also cater for youth activities
- local open space and sporting facilities including the Windsor Leagues Club
- Bede Polding Catholic College for high school students and a proposed Catholic primary school
- . kindergarten and pre-school
- . child care facilities.

Child Care and Kindergartens

59. Child care in the Hawkesbury area is catered for by both private and Council sponsored facilities. The Council sponsors six long day care facilities, three pre-schools, a number of family day care facilities and one occasional care facility. In addition there are a number of privately operated child care facilities which generally receive State or Commonwealth government assistance. The availability of child care facilities is similar to other areas in Sydney.

High Schools

- 60. Windsor High School is located at McGraths Hill, 7 km from Bligh Park and Richmond High School is 8.5 km away. New high school students will be catered for within the capacity of existing schools. The Department of School Education plans to make provision for a new high school at Bligh Park. This new high school is not expected to be available for student intake for some time and high school students would travel to Windsor High School at McGraths Hill.
- 61. The proposed Bligh Park High School would not be built until development in the Oakville Vineyard area provided high school students in excess of enrolment capacity at Windsor High School. When this occurs the planned high school at Bligh Park would be developed to cater for students in the South Windsor-Bligh Park area, thereby providing capacity at Windsor High School for new enrolments from the developing Oakville-Vineyard area. Such development is not expected for some time.

Tertiary Education

- 62. The University of Western Sydney (Hawkesbury College) is located 9 km away and provides a wide range of courses.
- 63. TAFE colleges are located at Richmond, Blacktown, Penrith and Baulkham Hills.

Community Services

- 64. The closest post office to Bligh Park is located at South Windsor, 3.5 km away, with the nearest public library to be found at the Hawkesbury City Council offices 4.5 km away.
- 65. The police and fire stations are located in Windsor. The ambulance station is located in Richmond and there are hospitals in both Windsor and Richmond.

Shopping and Business Services

- 66. Local shopping services are provided for by the Bligh Park neighbourhood shopping complex, 2 km from the proposed development.
- 67. Depending on the extent of future development in the area a further neighbourhood shopping facility may be developed next to the new neighbourhood community centre which is being built. Council is currently investigating zoning proposals to extend the North Bligh Park development.
- 68. Windsor and Richmond provide a more extensive range of shopping and business services, while additional shopping services are located at South Windsor. Regional shopping facilities are provided at Blacktown and Penrith, 20 km from Bligh Park.

Recreation Facilities

69. There is a wide range of recreation facilities and activities in the Bligh Park area. To the south of the Bligh Park Estate is the Windsor Downs Nature Reserve which is a 290 ha natural bushland reserve managed by the National Parks and Wildlife Service.

70. Within the Bligh Park Estate there are two major recreation fields, tennis courts, the Windsor Leagues football field and a number of open space areas. Many of these facilities are linked by pedestrian and cycle pathways. Council proposes to develop a sporting complex with playing fields and passive recreation areas on land it owns adjoining the northern boundary of the proposed Precinct 29 subdivision development. This will be linked to the other facilities by a pedestrian/cycle pathway.

Transport Facilities and Access

- 71. The proposed development is within acceptable road travel distances of the main Defence facilities in the Sydney West HMC.
- 72. There is a regular bus service from Bligh Park to Windsor and Windsor Railway Station. Other services connect Windsor Station to RAAF Base Richmond, Richmond Station and Penrith. Daily train services link Richmond to the City via Blacktown.
- 73. RAAF Base Richmond is located 7 km from the proposed development and is in within easy cycling distance. DHA advised that the estate has been designed to encourage the use of cycles and to encourage walking. Given the relatively flat terrain and the fact that Hawkesbury City Council has made provision for cycleways in the area, DHA believes cycling to be a suitable form of transport. Bus transport links the estate with surrounding communities and together with rail facilities further reduce potential air pollution and dependence on cars.

Committee's Conclusions

- 74. Precinct 29, Bligh Park Estate, is well located for housing for Service families because of its proximity to RAAF Base Richmond and existing and proposed schools, shopping and recreational facilities.
- 75. The Precinct 29, Bligh Park Estate proposal will provide Defence personnel and their families with good quality housing and services consistent with community standards.
- 76. The Bligh Park Estate is a well established area with community facilities having been established over the past 10 years.

ENVIRONMENTAL CONSIDERATIONS

Terrain and Soils

- 77. The Bligh Park area is relatively flat with the low point at 15 m and the high point at 22 m. Precinct 29 has contours ranging from 15 m to 20 m. All engineering design has assumed a minimum River Level of 17.5 m and some allotments will require fill to bring them to that level. This complies with the 1:100 year flood level at the Richmond Bridge.
- 78. All homes will enjoy fairly level building lots and maximum use can be made of outdoor areas for private recreation.

Flora and Fauna

- 79. A natural habitat study and report on the flora and fauna of the area was commissioned by the Hawkesbury City Council and the Department of Housing (Landcom).
- 80. The Committee was advised that two plant species found in the survey area, Dillwynia tenuifolia and Pultenaea parviflora, appear on the list of Rare or Threatened Australian Plants (ROTAP). Both species are conserved within the nearby Windsor Downs Nature Reserve where D. tenuifolia is regarded as common and P. parviflora less common. No species of endangered fauna was found on the site.

Landscaping

- 81. The Joint Venture will carry out landscaping along each side of Rifle Range Road. This road is one of the main entries to the Bligh Park Estate and is likely to be the main entry to Precinct 29. In addition, the Joint Venture is proposing to undertake subdivision landscaping within Precinct 29 to enhance the streetscape.
- 82. Landscaping proposals prepared for planting along Rifle Range Road include the use of *Dillwynia tenuifolia* and *Pultenaea parviflora* species. DHA has advised that it will encourage the planting of trees of appropriate endemic species on the properties it purchases.

- 83. DHA advised that Council has a policy of providing new residents with two free plants per household which can be used to enhance the streetscape of the local neighbourhood.
- 84. Once the subdivision works and substantial building construction have been completed, the Joint Venture will commission a landscape design for the streetscape within Precinct 29.

Committee's Recommendation

85. The Committee recommends that the Defence Housing Authority continues to encourage the planting of native trees and shrubs on its housing developments.

Heritage and Archaeology

86. An archaeological survey revealed that two open sites contain small scatters of Aboriginal artefacts. However, these two sites are not amongst those being considered for purchase by DHA.

Drainage and Flooding

- 87. The Bligh Park Estate lies adjacent to the Hawkesbury-Nepean flood plain and the surrounding area is subjected to flood inundation from time to time.
- 88. Precinct 29 is divided into a number of different sub-drainage catchments which flow into South Creek and then into the Hawkesbury River. A major drainage swale divides the proposed subdivision into two areas, a smaller area to the west containing 52 dwelling allotments and the area to the east which contains 173 dwelling allotments and the site for the proposed new primary school.
- 89. Stormwater management is primarily self-contained within the general development area. The drainage swale which collects runoff from the development area drains into a wet detention basin. Therefore, frequent small volume, short duration stormwater from the surrounding development area is retained within the detention basin and does not enter South Creek. Runoff water from major storms would first fill the wet detention basin before overflowing into South Creek and then the Hawkesbury River.

The likely overall effect on the Hawkesbury River is considered to be minimal.

- 90. Effluent from the Bligh Park Estate and from the proposed development flows to the sewerage treatment plant (STP) located at Fairy Road, to the south east of the development. The STP is one of seven full biological nutrient removal plants in Australia. Stage 1 was commissioned in 1987 with a capacity of 14 000 people. This was followed by Stage 2 (additional 8 000 people capacity) which became operational in April 1992. A third stage is being considered which will bring the plant's capacity to 30 000 people, but this is unlikely to be commissioned until later this decade.
- 91. The STP uses an activated sludge extended aeration process producing some of the "cleanest" treated effluent in the country. The treatment process removes nutrients with minimal use of chemicals. Treated effluent is currently discharged to South Creek. However, because of the high standard of treated effluent, the effect on water quality and on the Hawkesbury River is considered to be negligible. Ultimately the treated effluent will be used for irrigation and possibly supply some of the water needs at the University of Western Sydney campus at Richmond.
- 92. Flooding is a major issue in the Hawkesbury region. The previous 1 per cent flood datum used for most of the Bligh Park Estate (Bligh Park 1) has been the 16 m contour level. All residential development land in Precinct 29 will be developed at or above the 17.5 m datum. Some areas within Precinct 29 will require small amounts of fill (up to approximately 2 m) to raise the natural ground level to River Level 17.5 m. This will affect about 65 dwelling allotments.
- 93. The Vineyard Riverstone Development Committee and Mr F Scharfe expressed concern that the proposed development would be built on land which would be subject to flooding. DHA advised the Committee that the lots to be purchased will be at the level of at least 17.3 m and this is above the current planning level that the State Government has imposed on all land that is available for release.
- 94. The NSW State Government through the Hawkesbury-Nepean Valley Flood Awareness Committee has produced information relating to flooding in the Hawkesbury-Nepean Valley (February 1994).

- 95. The existing 1:100 year flood level is estimated to be 17.3 m at the Windsor Bridge. Under the proposed scheme for raising the Warragamba Dam crest, the same flood level would be reduced to about 12.8 m. This work is expected to be completed in about the year 2000. As all residential lots in Bligh Park Precinct 29 will have a RL of 17.5 m or more, it is unlikely they will be affected by a 1:100 year flood.
- 96. In response to concerns expressed at the public hearing concerning the capability of the Warragamba Dam, DHA advised that since the revision of rainfall predictions, the State Government is making sure that the dam is safe in case the Probable Maximum Flood (PMF) ever occurs. This will safeguard the water supply and protect the community downstream from the dam. In 1989 work was carried out to ensure the dam can withstand up to 75 per cent of the PMF.
- 97. The Committee was advised that the dam can now safely handle a 1 in 1 500 chance per year flood. The State Government has stated that the upgraded dam will be able to safely handle the largest possible flood. Not only will the upgraded dam help to reduce flooding in the valley it will also protect Sydney's water supply. In addition to raising the crest of the Warragamba Dam so the dam will have a flood mitigation purpose as well as water supply function, the Government is developing detailed emergency plans in case of a major flood. These have been set out in principle form in the information kit prepared by the Hawkesbury-Nepean Valley Flood Awareness Committee, Managing Floods in the Hawkesbury-Nepean Valley (February 1994).
- 98. Residents in areas likely to be affected by flooding will be evacuated to safe areas. The Vineyard Riverstone Development Committee expressed concern that rescue problems for the State Emergency Service (SES) would be compounded even further with additional families living in this area. DHA advised that the sub-division will have access to the SES on the same basis as the Richmond/Windsor localities. Areas likely to be affected by flooding would be evacuated to safe areas based on well established evacuation procedures. In the Windsor and Bligh Park areas evacuation warnings would be issued when flood waters reached the Windsor Bridge (7 m) and utilities would be shut down when flood waters reached 11 m. Evacuations would be initiated at an early time to allow a sufficient duration for people to safely vacate their residences. People in the Bligh Park area would be evacuated to safe places in the Penrith Area.

Water and Air Quality Issues

- 99. Water quality management in the Hawkesbury-Nepean River valley is a significant issue affecting development on the metropolitan fringe. The creeks draining the Bligh Park area flow to South Creek and Rickabys Creek (only a small portion) then into the Hawkesbury River. The Hawkesbury River system is currently showing considerable signs of pollution stress as a result of rural runoff, drainage from urban development and demands of the system to provide drinking water as well as be the receiving water for a number of waste treatment plants. As a result of declining water quality and flooding issues, water cycle management within the catchment generally is now a matter of critical concern.
- 100. Urban runoff may adversely affect water quality in a number of ways, including increased peak flows, sedimentation, floating pollutants such as litter, increased nutrients and bacteria, oxygen demanding substances, oil and grease and heavy metals.
- 101. The Council proposes to develop a series of lakes to help manage the drainage from the Bligh Park area including the Precinct 29 development site. These proposed lakes will be formed as part of the proposed development of a multi-purpose open space precinct which combines water management features into an area of both active and passive recreation use facilities. It is anticipated that when completed, the multi-use facility will contribute to lessening the impacts of urban development on water quality in the river systems, particularly in controlling stormwater runoff.
- 102. Sedimentation is also a major problem of urban development, particularly during construction stages. Sedimentation control by settling ponds during development of Precinct 29 will be a crucial part of the maintenance of water quality within the catchment. In addition, contractors working on the site will be required to meet Landcom's erosion and sediment control provisions and comply with the requirements of the NSW State Environment Protection Authority in terms of discharges from the development area while it is under construction.
- 103. Air quality is also an issue of significant concern in the Hawkesbury-Nepean Catchment. A recent study has shown that the pattern of air flows in the Sydney airshed tends to transport polluted air from the developed eastern regions of the city into the Hawkesbury Basin.

- 104. At the present time there is little data available on the level of air pollution in the Hawkesbury Basin, but indications are that when weather conditions are conducive to photochemical smog production, the ozone concentrations exceed the health standard. The Hawkesbury Basin also has a climate which is hotter and calmer and more conducive to photochemical smog production than the eastern regions of the Sydney airshed. In the absence of further pollution controls, urban growth during the next 20 years is expected to result in rises of up to 50 per cent in western Sydney ozone concentrations. The Committee queried DHA as to whether it had received complaints from service families concerning smog in the area. DHA advised that it is not aware of any complaints concerning smog.
- 105. Urban haze is also a significant air quality issue in Sydney. The incidence and intensity of both winter and summer haze are predicted to increase in the future, most noticeably in the Hawkesbury Basin. The northern half of the Hawkesbury Basin is also a receptor area for emissions carried north in drainage flows from possible future developments at Macarthur South and South Creek Valley.
- 106. The dominant source of both photochemical smog and urban haze is emissions from motor vehicles. At the present time, however, there is insufficient quantitative knowledge of the dynamics of Sydney's air quality and especially the dynamics of the Hawkesbury Basin, to enable an appropriate air quality management plan to be proposed.
- 107. Further urban development in the region needs to be carried out in the context of strategies which will contribute to a decrease in the level of pollutant concentrations entering the atmosphere.
- 108. A development strategy which focuses on public transport and pedestrian and cycleways and less on local car use will assist in lowering air pollution levels as will strategies designed to bring about improvements in the quality and concentrations of pollutants entering the atmosphere. The Bligh Park Estate has followed these principles.
- 109. Cycle paths, walkways and bus and rail transport will reduce dependence on the car and further reduce air pollution.

CONSULTATIONS

Services and Service Families

- 110. Consultation has taken place with Defence housing officers, Defence facility personnel and the NSW State and Local Government authorities, in particular:
 - . presentations to and consultations with RAAF command structure concerning the provision of housing for Service families
 - consultations with NSW State and Local Government authorities concerning DHA's plans in relation to existing and proposed new housing stock in Bligh Park
 - Service families affected by the proposals are kept informed about plans for providing new housing through the HMC and other issues affecting Defence family housing needs are raised at Tenant Consultative Group meetings.

FINANCIAL ASPECTS

111. The estimated cost of the project is \$8.5m.

Committee's Recommendation

112. The Committee recommends construction of a housing development at Bligh Park, NSW at an estimated cost of \$8.5m.

CONCLUSIONS AND RECOMMENDATIONS

114. The conclusions and recommendations of the Committee and the paragraph in the report to which each refers are set out below:

		Paragraph
1.	A need exists to provide suitable accommodation for Defence personnel who are presently living in substandard accommodation at Hobartville.	23
2.	Precinct 29, Bligh Park Estate, is well located for housing for Service families because of its proximity to RAAF Base Richmond and existing and proposed schools, shopping and recreational facilities.	74
3.	The Precinct 29, Bligh Park Estate proposal will provide Defence personnel and their families with good quality housing and services consistent with community standards.	75
4.	The Bligh Park Estate is a well established area with community facilities having been established over the past 10 years.	76
5.	The Committee recommends that the Defence Housing Authority continues to encourage the planting of native trees and shrubs on its housing developments.	85

6. The Committee recommends construction of a housing development at Bligh Park, NSW at an estimated cost of \$8.5m.

112

Colin Hollis MP

Chair

8 November 1994

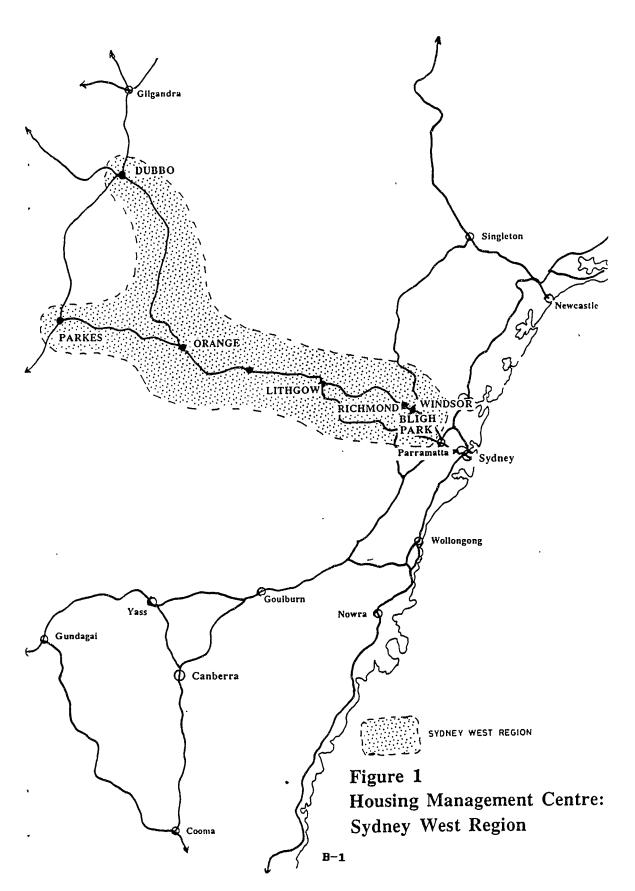
WITNESSES

- BAUER, Mr Garry Philip, Capital Projects Manager, Defence Housing Authority, Moorebank Avenue, Moorebank, NSW, 2170
- BUGGY, Wing Commander Grant Stanley, Deputy Base Commander, Royal Australian Air Force Base, Richmond, NSW, 2755
- DAVID, Mr Edwin Joel Sherring, General Manager, Operations, Defence Housing Authority, 2 Brisbane Avenue, Barton, ACT, 2600
- HEATH, Mr John Terence, Regional Manager, Defence Housing Authority, West Market Street, Richmond, NSW, 2753
- MALCOLM, Mr Laurence Ellis, 5 Dana Close, Castle Hill, NSW, 2154
- MULLINS, Mr John Francis, Capital Projects Officer, Defence Housing Authority, West Market Street, Richmond, NSW, 2753
- SCHARFE, Mr Frank Robert, 63 Level Crossing Road, Vineyard, NSW, 2765
- SHORT, Mrs Florence, Chairperson, Vineyard Riverstone Development Committee, 6 Bourke Street, North Parramatta, NSW, 2151
- SMITH, Group Captain Graeme John Montgomery, Base Commander, Royal Australian Air Force Base, Richmond, NSW, 2755

APPENDIX B

PROJECT DRAWINGS

Housing Management Centre - Sydney West Region	B-1
Provision of Defence Housing - HMC Sydney West	B-2
Bligh Park Estate	B-3
Precinct 29 - Subdivision Development	B-4
Precinct 29 - Subdivision Development	B-5
Precinct 29 Development Schedule	B-6
Schematic Development Proposal - Precinct 29	B-7



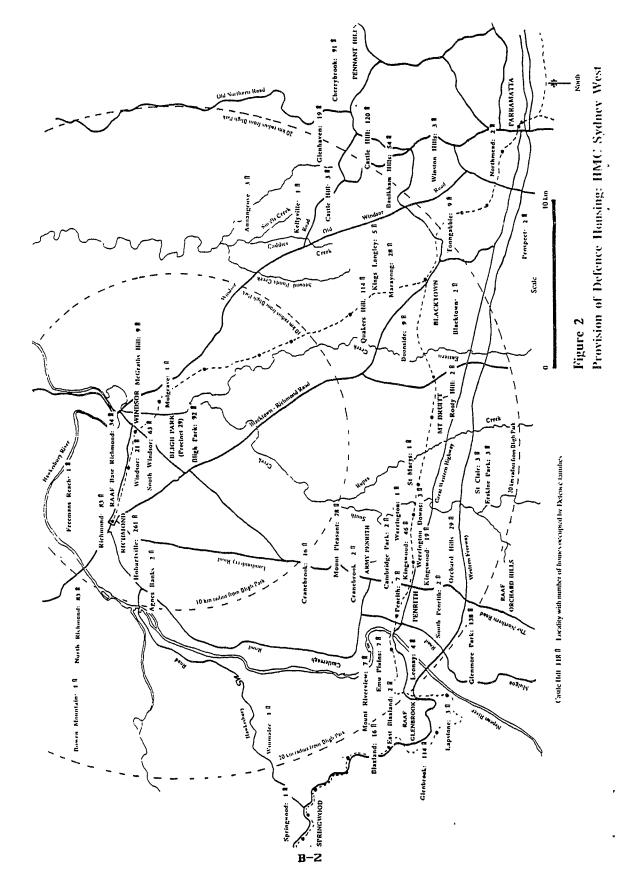
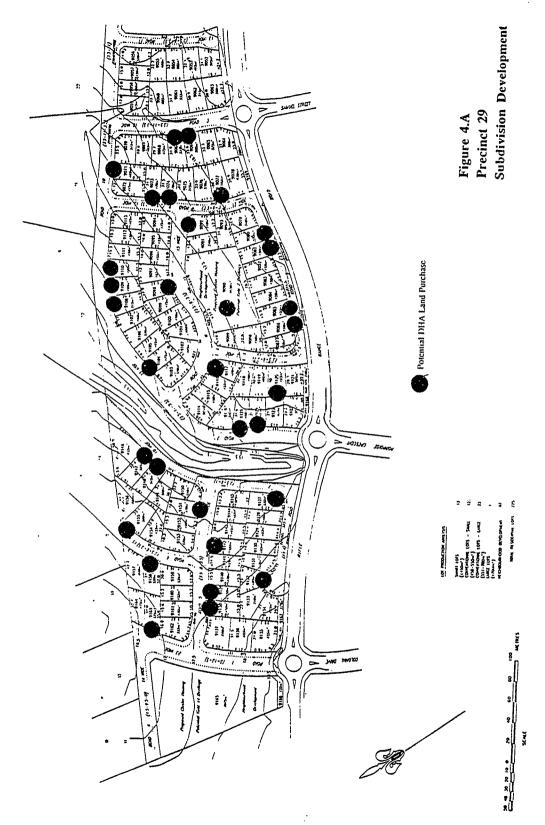
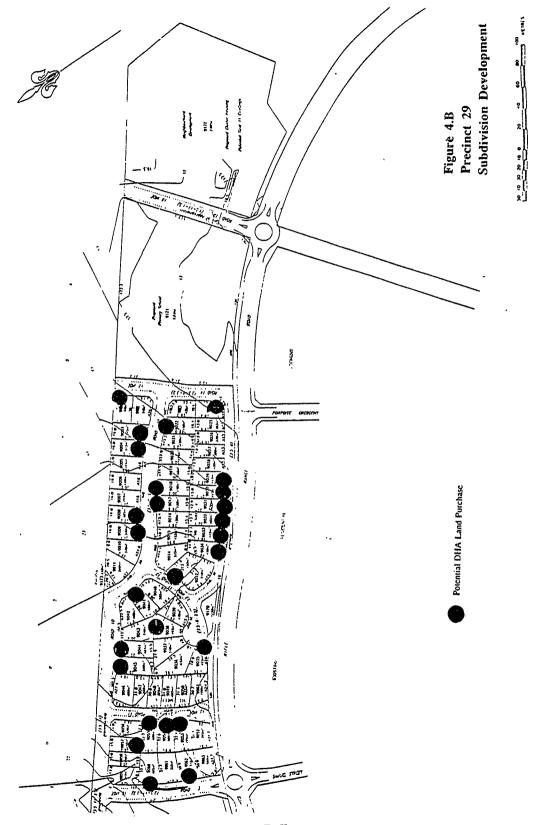


Figure 3 Bligh Park Estate



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Figure 5
Precinct 29 Development Schedule

