



Parliamentary Standing Committee on Public Works

REPORT

relating to the

CONSTRUCTION OF A NEW BUILDING COMPLEX FOR THE AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION AT SYMONSTON, ACT.

(Thirteenth Report of 1995)

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

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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

Senator Bryant Robert Burns
Senator Shayne Michael Murphy*

House of Representatives

Mr John Neil Andrew MP
Mr Raymond Allen Braithwaite MP
Mr Russell Neville Gorman MP
Mr Robert George Halverson OBE MP
Hon. Benjamin Charles Humphreys MP

*replaced Senator John Devereux on 10 February 1995

Committee Secretary: Peter Roberts

Inquiry Secretary: Denise Denahy

Secretarial Support: Mahesh Wijeratne

**EXTRACT FROM THE VOTES AND PROCEEDINGS OF
THE HOUSE OF REPRESENTATIVES**

No. 113 dated Wednesday, 7 December 1994

**PUBLIC WORKS—PARLIAMENTARY STANDING
COMMITTEE—REFERENCE OF WORK—CONSTRUCTION
OF A NEW BUILDING COMPLEX FOR THE
AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION
AT SYMONSTON, ACT**

- 32 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: Construction of a new building complex for the Australian Geological Survey Organisation at Symonston, ACT.

Paper: Mr Walker presented plans in connection with the proposed work.
Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

CONSTRUCTION OF A NEW BUILDING COMPLEX FOR THE AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION AT SYMONSTON, ACT.

By resolution on 7 December 1994 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report to Parliament the construction of a new building complex for the Australian Geological Survey Organisation at Symonston, ACT.

THE REFERENCE

1. It was originally proposed to construct a three-storey building for the Australian Geological Survey Organisation (AGSO) on a 20 ha site in Jerrabomberra Avenue, Symonston, ACT adjacent to the Therapeutic Goods Administration complex. At that time two Earless Dragon Lizards (*Tympanocryptis lineata pinguicollis*) had been recorded as being present on the site. The building was to be constructed subject to the preparation of a plan for the management of the species. Further surveys are now required and these surveys, as well as an environmental clearance of the site, are not able to be completed in adequate time for construction to commence in early 1996. Not enough is known about the lizard to have prepared an adequate management plan for the original site. It is therefore proposed to construct the building on a nearby 16 ha site on the corner of Jerrabomberra Avenue and Hindmarsh Avenue at Symonston.

2. The project will comprise laboratories and related areas, offices and administrative support areas, storage areas, staff amenities, engineering workshops, roads, car parking, civil works and landscaping.

3. The estimated cost of the proposal when referred to the Committee was \$114m at December 1994 prices. Following concerns expressed by the Committee, AGSO has been able to reduce this cost to \$105m. Further details may be found at paragraph 107.

THE COMMITTEE'S INVESTIGATION

4. The Committee received a written submission from AGSO and evidence was taken from its representatives at a public hearing in Canberra on 14 February 1995. Prior to the public hearing the Committee inspected current accommodation at Anzac Park East as well as the then proposed site on Jerrabomberra Avenue.

5. The following organisations also presented submissions and appeared before the Committee at the public hearing:

- . National Capital Planning Authority
- . Strine Design
- . Residents Rally for Canberra

6. Submissions were also received from the following:

- . Energy Conservations Systems Pty Ltd
- . National Trust of Australia (ACT)
- . Department of Finance
- . Australian Nature Conservation Agency
- . Intelligent Lighting Controls
- . ACT Department of Urban Services
- . ACT Electricity and Water
- . Commonwealth Fire Board
- . Australian Council of National Trusts
- . Australian Nuclear Science and Technology Organisation
- . ACT Energy Research and Development Fund
- . ACT Department of the Environment, Land and Planning
- . Master Builders Association of the ACT
- . Australian Estate Management

7. Due to the change of the site to the corner of Jerrabomberra Avenue and Hindmarsh Drive, a further hearing was held on 29 May 1995 at which AGSO again appeared before the Committee.

8. The following organisations also presented submissions and appeared before the Committee at the public hearing on 29 May 1995.

- National Capital Planning Authority
- ACT Department of the Environment, Land and Planning
- Australian Nature Conservation Agency

9. 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

10. AGSO is the Australian Government's principal geoscientific agency. It undertakes research, carried out in a series of scientific programs, which is the basis of advice to Government, industry and the community, to encourage economically and environmentally sustainable management of Australia's minerals, energy, soil and water resources.

11. The core areas of AGSO's research activities include:

- geophysical surveys involving ship operations, airborne operations and seismic field parties
- data collection from and maintenance of earthquake and magnetic observatory networks in Australia and Antarctica
- geological mapping and sampling of potential mineral or petroleum resources, groundwater, and land and coastal environments
- laboratory analysis of oils, groundwater, rocks and minerals
- interpretation and synthesis of data, and production of data bases

- . report and map generation and publication.
12. AGSO has a national role in providing geoscientific information to Government, industry and the community to assist in exploration for and decision making in the economically and environmentally sustainable management of Australian resources. In this role, AGSO is also recognised internationally as a leading geoscientific research organisation.
13. The main research programs of AGSO are as follows:
- . Continental Margins Program
 - . National Geoscience Mapping Accord
 - . Geohazards
 - . National Environmental Geoscience Mapping Accord
 - . Climate Change and Impacts
 - . National Geoscience Infrastructure and Research
 - . National Geoscience Information System
14. Through its responses to a number of recent reviews, the Government has recognised the need to maintain an integrated national geological survey organisation with a clear identity and that AGSO is an important strategic asset as Australia approaches the 21st century.
15. In addition, there has been an increasing demand for environmental geoscientific services and increasing acknowledgment of the contribution which geoscience can make to ecologically sustainable development.
16. In 1946, the Bureau of Mineral Resources, Geology and Geophysics (BMR) was formed in recognition that there were significant national mapping priorities and a need for co-ordination of the activity of State surveys. The then BMR had as its main objective the systematic geological and geophysical mapping of the continent as a basis for informed mineral search.

17. The BMR was renamed the Australian Geological Survey Organisation in 1992 to reflect its widening role and national responsibilities. In August 1992 the Government commissioned a review of AGSO's composition, structure and administrative arrangements by a panel headed by Dr Max Richards, the Chairman of Aberfoyle Resources.

18. The Richards Review was received in May 1993 and recommended some restructuring of AGSO programs, provision of additional resources for several programs and confirmed the need for a new building to overcome existing occupational health and safety (OH&S) problems. This new building was also seen to provide "accommodation appropriate to a high profile national geological survey organisation."

19. The Government accepted the Review's recommendations for the need to establish a new building complex, by approving funds totalling \$114m in the 1993/94 budget for its construction.

20. The Government also agreed to additional funding for the Continental Margins Program and the National Geoscience Mapping Accord, and to new funding for the establishment of a National Environmental Geoscience Mapping Accord and a National Geoscience Information System.

21. In addition, the Government required AGSO to become more customer focused and business-like in its activities and, as part of this goal, charged AGSO with earning an additional 30% in funds over and above its Government appropriation.

22. With the Australian Government ratification of the United Nations Convention on the Law of the Sea, the Government has endorsed the Continental Margins Program as the nominated vehicle for collection and analysis of geoscientific data to support Australia's claim for jurisdiction of extensions to its continental shelf beyond the 200 nautical mile zone.

THE NEED

Occupational Health and Safety

23. The majority of AGSO staff and facilities are currently accommodated in the Anzac Park East offices on Constitution Avenue, Parkes, ACT. OH&S regulatory authorities have identified serious deficiencies in this building, which not only subject AGSO staff to unacceptable risks, but also

place the Commonwealth in a position of potentially having AGSO's valuable geoscientific data bank and associated scientific equipment irreparably damaged or destroyed.

24. The following conditions exist in the Anzac Park East building:

- . laboratories do not comply with current construction codes
- . fire regulations are contravened
- . serious OH&S deficiencies exist including:
 - . inadequate storage of dangerous and hazardous substances
 - . poor ventilation with potential for contamination
 - . inadequate fume exhausts
 - . fume exhausts contravening current codes
 - . trade waste plumbing not in accordance with regulations.

25. The Committee queried what had been done in the past to improve OH&S conditions. AGSO advised that \$600 000 has been spent over the past five years on improvements. Work undertaken included:

- . improved fume extraction to reduce health risks to staff working in those areas
- . improved laboratory layouts and safety measures to reduce safety hazards
- . process air conditioning for heat emitting equipment located in areas occupied by staff.

26. Further delay to resolution of the existing problems will escalate the legal, financial and human risk currently faced by the Commonwealth.

Collocation

27. AGSO advised the Committee that collocation of activities will reinforce AGSO's effectiveness, efficiency and accountability to its client groups, and will strengthen the position of AGSO as the premier geoscientific mapping agency in Australia and the region. Collocation of the seven separate AGSO sites in Canberra is not possible in Anzac Park East.

28. AGSO advised that consolidation on a single site is necessary for the following reasons:

- to ensure ready and identifiable access to it by industry and the public
- to achieve economies of scale in provision of shared facilities and services
- to provide the flexibility to respond to organisational change.

29. AGSO advised that collocation will result in some staff reductions in the support areas, in the amount of travel costs currently experienced and in duplication in some of the equipment used at various locations.

30. AGSO advised that it expects frequent visits from professional colleagues, clients, overseas government officials, interested members of the public and groups from educational institutions. AGSO will play an important part in facilitating workshops and seminars for the geoscientific community.

31. The new building will bring together the professional, technical and administrative elements of the organisation in a more cohesive and cost effective manner.

Committee's Conclusions

32. A need exists to provide a safe working environment for staff employed by the Australian Geological Survey Organisation.

33. Collocation of staff will result in more efficient work practices and reduce duplication of some services.

THE PROPOSAL

34. The proposed building will accommodate 550 professional, technical and administrative support staff, and will consist of offices, laboratories, staff amenities, workshops and storage. Roads, car parking and landscaping will also be provided.

35. The new building complex will address the increasingly serious breaches of occupational health and safety regulations in the Anzac Park East building currently occupied by AGSO, as well as bringing together in the one location a number of key AGSO functions currently located in other suburbs of Canberra.

Options Considered

36. In 1993 an Interdepartmental Task Force identified four options relating to accommodation arising from the Richards Review for consideration in the Budget context:

- . option 1 - Budget-funded full development on one site
- . option 2 - Budget-funded staged development on one site
- . option 3 - Budget-funded Laboratory facility and leased office component on separate sites
- . option 4 - Off-Budget private development on one site.

37. The Task Force concluded that the major OH&S issues associated with AGSO's continued occupation of Anzac Park East needed to be addressed as a matter of urgency. The nature of AGSO's operations, in particular its analytical laboratory work, makes it neither possible nor pragmatic to pursue the option of upgrading and/or modifying Anzac Park East. The relevant planning policies of the NCPA for the Parliamentary Triangle also preclude a retention of all AGSO's operations on this site.

38. Net Present Value analysis of the proposals by the Task Force concluded that there is only a marginal cost difference between Option 1 and Option 3. However, the additional cost and disadvantages caused by accommodating AGSO in separate office and laboratory buildings makes collocation under Option 1 the preferred proposal.

39. A "do nothing" option and acceptance of the contingent liability is not tenable. Continued contravention of existing OH&S regulations is not acceptable. To continue with facilities at different locations will not improve the operational effectiveness of AGSO.

40. Proposals to relocate AGSO date back to the late 1970s but until now have not been approved. The geological survey office was not seen to be an appropriate use for the Parliamentary Triangle and the Anzac Park East building was considered to be more effectively used by policy departments.

41. Whilst some works have been undertaken to improve the working conditions in selected areas, Anzac Park East was constructed in the early 1960s as office accommodation and is unsuitable for the laboratories essential to AGSO's research and functional needs.

42. Studies in 1989 and again in 1992 addressed the condition of Anzac Park East. These studies identified a number of options. Whilst the study in 1989 examined the option to refurbish Anzac Park East together with the construction of additional space, the National Capital planning policies applicable to that area did not support such a development. Other proposals considered at that time are no longer available. Options necessitating the continuance of dispersed locations failed to overcome operational and functional inefficiencies.

43. The Committee asked why Canberra is the logical and cost effective location to house the new AGSO facility. AGSO advised that it works closely with a number of major scientific and research organisations, as well as industry bodies that are based in the National Capital (e.g. ANU, CSIRO, Australian Mining Industry Council, Australian Petroleum Exploration Association). All staff have been located in the ACT for some time and no staff transfers are involved.

The Site

44. The proposed 16 ha site is located on the corner of Jerrabomberra Avenue and Hindmarsh Drive and is located 300m diagonally opposite the earlier proposed site. It is of a suitable size and shape to take the existing design with relatively little change. The Committee was advised that the move to the new site has resulted in changes to the lower ground floor of the main building to account for the different site conditions.

45. The Committee was advised that the site is presently leased for grazing, with the condition of a week's notice for resumption of the land.

46. The building will be located close to the Barton headquarters of the Department of Primary Industries and Energy, AGSO's principal clients and the airport.

47. The NCPA and the ACT Planning Authority have confirmed that the Draft Development Control Plan for this site permits construction of the proposed complex.

48. AGSO advised the Committee that the ACT Government supports the proposal from a planning and an environmental perspective. ANCA and the Environment Protection Agency (EPA) have endorsed the proposed process for the surveying for, and removal of any lizards, should they be found on the site. The Department of Finance has been consulted and has advised its support. Australian Estate Management has advised that there are no impediments to the site being acquired this financial year.

49. The Committee queried the earthquake rating for the area. AGSO advised that the structure is classified as a general structure type 2, except for the seismological centre which is located on the ground floor and classified as a general structure type 3. The Committee was advised that the acceleration coefficient for Canberra is .08. Canberra has experienced several small earthquakes in the past 30 years. Therefore, the earthquake hazard must be considered in the Canberra region and current provisions in the Australian building code make provisions for this. The building will be designed to the building code AS 1170.4 and supplement No 1.

Earless Dragon Lizards

50. The Earless Dragon Lizard is a species not currently listed as endangered, but is considered vulnerable by reptile experts and is expected to be listed under the *Commonwealth Endangered Species Protection Act* 1992 later this year. DELP advised that there appears to be a number of varieties of subspecies. Recent research funded by the ACT has shown that the subspecies found in the ACT is a species in its own right.

51. DELP advised the Committee that the ACT Parks and Conservation Service is in the forefront of the research and survey for these species. Not

a lot is known of their full distribution. They inhabit part of a community of lowland native grasslands of which less than half a per cent of the original extent in south-eastern Australia is now existing. The community in which they live is already threatened and these species are threatened within that community. Part of this grassland community extends from the Monaro through the Jerrabomberra Valley. It would have extended originally through central Canberra into Gungahlin. At present development in Canberra is infringing on that remnant grassland. The Committee was advised that the natural predators of the Earless Dragon are the raptor birds, hawks and falcons. However, although they are prevalent in the area, they are reducing in numbers due to encroaching urbanisation.

52. The Committee was advised that there are about six or seven places around Canberra where the Earless Dragon may be found. The largest of these is the Jerrabomberra Valley. It is unknown whether populations exist in NSW, apart from Queanbeyan. DELP advised the Committee that there has been greater agricultural use of land in NSW as opposed to the ACT. The lizards have, therefore, been left relatively undisturbed in the ACT.

53. DELP stressed that there is only a small area of the western edge corner of the site which has relatively undisturbed native grassland where the Earless Dragon could live. It is extremely unlikely that the dragons would be found throughout the whole site, which in the main has been disturbed and the habitat conditions no longer exist. DELP advised that this site is not considered viable in the long term for either the Earless Dragon Lizard or the already listed Legless Lizard (*Delma impar*) as it is a locked site bounded by Jerrabomberra Avenue, Hindmarsh Drive and a greyhound track.

54. ANCA advised the Committee that upon transfer from the ACT Government the land will become Commonwealth land and therefore subject to the *Commonwealth Endangered Species Protection Act 1992*. Under s87 of that Act, a person must not knowingly or recklessly take, trade, keep or move any member of a listed native species that is in or on a Commonwealth area. As construction would not commence until early 1996, the species would be listed by then. The penalty for contravening s87 of the Act is \$50 000. However, the provisions of the Act provide that the penalty does not apply if the action is done in accordance with a permit allowing the removal of the species for scientific study, in this case by the ACT Parks and Conservation Service. ANCA stressed that the current site is a locked area, whereas the original site was part of continuous grasslands

which formed the major habitat for the Earless Dragon.

55. A management process for dealing with the Earless Dragon Lizard and Legless Lizard, should any be found on the new site, has been proposed to ANCA (responsible for the *Commonwealth Endangered Species Protection Act*) 1992 with the assistance of DELP. ANCA has endorsed the proposed management process, namely, to survey for, and remove any lizards found between 1 November 1995 and 28 February 1996 and submit them into the care of the ACT Conservator of Flora and Fauna. The Committee was advised that a second phase of trapping to the end of March 1996 has also been agreed to, if required, but this would not impact on the proposed starting date of construction of 1 March 1996.

Committee's Recommendation

56. The Committee recommends that projects should not be referred to it until issues relating to site selection including environmental clearances have been clarified.

Possible contamination

57. The Committee queried whether the site had been surveyed for contaminated wastes. AGSO advised that DELP had conducted surveys to identify sheep dip sites and any other causes of land contamination in the ACT. During this survey DELP had no reason to suspect that the proposed site had a sheep dip site or any other cause of contamination. DELP advised AGSO that it had searched its records and consulted old aerial photographs and survey maps. DELP had been unable to find any information which would indicate contamination on the site. DELP concluded that any check of records cannot absolutely rule out the existence of contamination of the soils. However, there is nothing which leads DELP to believe that there is any contamination on the site.

Accommodation

58. The proposed design solution has been prepared in response to the site conditions, planning criteria, the tenant brief and technical, functional and operational requirements of AGSO.

59. The project will include approximately 39 000m² of laboratories, offices, workshops and storage spaces. The laboratories and offices are

generally in the main building and the workshops and stores are in a support building.

60. The three storey building design incorporates a single point of control at the ground floor level for both visitors and staff.

61. The top two floors of offices will be located on a half level difference from the first floor main laboratories to provide close physical and visual communication between staff and their related offices and laboratory areas.

62. The laboratory and office spaces in the building will be linked by a central walkway to facilitate interaction between different parts of the organisation and to introduce natural lighting throughout the structure.

SERVICES

Childcare

63. AGSO advised that based on current staffing requirements, childcare facilities will not be provided within the new complex. A number of childcare facilities are available in the local area. On-going consultations with ACT Government and community agencies will be undertaken.

64. The Committee was advised that AGSO had conducted a survey, which concluded that about 13% of staff actually used childcare facilities. AGSO believes that overall the impact on childcare centres would be minimal.

Car Parking

65. Parking will be provided on-site to cater for visitors and staff and separately for AGSO service vehicles. All parking will have shade planting and be well lit for evening security.

66. To minimise the visual impact of car parking, parking for staff is located to the south side of the main building away from site entry in a compact semi-circular arrangement, which results in a short distance of travel to the point of building entry. Staff parking is based on 85% of building population.

67. Reserved visitor parking adjacent to the building entry is located on the north or approach side to the building with the purpose of promoting the AGSO image and make the building easily accessible. This will include spaces for disabled staff and visitors. Provision will be made for school buses.

68. An internal ring road provides access to car parking and for emergency vehicles.

Provision for the Disabled

69. The building design will incorporate Commonwealth Guidelines and Australian Standards covering access for disabled persons.

Materials and Finishes

External Finishes

70. External facades will generally incorporate precast concrete panels, lightweight prefinished panels and double glazed window units. Sunscreen systems to suit orientation performance requirements will be provided. Roofing will generally be insulated prefinished metal sheeting of appropriate colour.

Internal Finishes

71. Office floors will be finished to commercial standards with carpet tile on computer floors, demountable ceilings or set plasterboard ceilings where appropriate. Internal partitioning will incorporate vision glass panels to increase visual transparency within the building, particularly in the north south direction.

72. Finishes to the entrance lobby, reception and public areas will include stone finishes to reflect the nature of AGSO interests. Amenities and administration areas will incorporate glazed or demountable partitions, carpet and acoustic ceilings suitable to their particular functions.

73. Throughout laboratory areas, partitioning will be steel-framed with plasterboard cladding and glazed where appropriate. Fire compartments will be provided to satisfy the Laboratory Code. Special treatment will be given to control transmitted noise where this is necessary. Plasterboard or metal

pan acoustic ceilings will be provided as appropriate and floors will be covered with welded sheet vinyl.

74. Cement sheet and masonry walls will be used in service areas subject to mechanical damage, together with heavy industrial floor finishes appropriate to traffic and working conditions.

ENGINEERING SERVICES

Structural

75. A reinforced concrete structural system is proposed to satisfy design criteria. A combination of one-way slab and bond beams for the laboratory building and flat slab and drop panels for the office building is proposed.

76. The proposed structural frame will be supported on reinforced concrete pad footings or bored piers. Structural steel framing will be used to support the roof and sunscreens on the facade.

Mechanical Services

77. Air conditioning will be provided to all office and laboratories areas throughout the building in accordance with relevant Australian Standards. Use of fresh air will be maximised where ambient conditions permit. Laboratory air conditioning and exhaust systems will be designed to suit the special temperature, humidity, dust control, pressurisation, fume control and hazardous situation requirements of each laboratory.

78. The Committee was advised that AGSO has investigated in excess of 10 different air conditioning systems. There is a requirement in the contract to carry out life cycle costing on various options. This includes charges on the capital as well as replacement, maintenance and energy costs over the life of the systems. Following these investigations, AGSO has identified the geothermal heat pump air conditioning system as the appropriate system for the office section of the building. There is the advantage of lower than normal demand on electricity, which has the effect of slowing the growth of power generation requirements in the community.

79. The Committee was advised that the geothermal system takes advantage of the ambient temperature in the ground and by circulating water used for heating and cooling through it, reduces the amount of

reheating or re-cooling that has to be done within the system. This system eliminates the need for cooling towers on top of buildings and therefore the risk of Legionnaires disease.

80. Central plant comprising water chillers, water heaters, compressed air and vacuum system will be installed.

81. Chilled water and heating water will be reticulated to each of the air handling plant rooms serving the offices and laboratories. Specialist services including piped gases, compressed air and cooling water will be reticulated to the laboratories.

82. The Committee was advised that various options had been considered for domestic hot water. A report by Bassett Consulting Engineers reviewed seven systems for detailed financial evaluation, namely:

- . gas mains pressure units
- . solar panels with gas mains pressure units as a backup
- . geothermal with gas mains pressure units as a backup
- . solar panels with off peak electric mains pressure units as a back up
- . electric mains pressure units
- . off peak mains pressure units
- . solar with instantaneous electric backup

83. The report concluded that based on the financial evaluation, the preferred system is gas.

84. The Committee was advised that AGSO has energy targets for the project based on the Building Owners and Managers Association, as agreed to by Australian Construction Services. There is a capability of computer modelling to predict energy in buildings for different climates. This is being carried out and will continue during the project.

Fire Services

85. The Commonwealth Fire Board agreed that AGSO's concerns for the safety of staff are well founded and agreed that the fire protection proposed should adequately address AGSO's concerns about the safety of staff and visitors and the protection of the Commonwealth's assets. The buildings will be fitted with fire sprinklers, hydrants, hose reels, fire alarms and smoke detectors to meet the requirements of the BCA and relevant Australian Standards. Special detector systems will be installed in high risk areas.

86. Special fire protection systems will be provided to service hazardous locations such as bulk flammable liquids storage, bulk chemical storage and unattended laboratories.

Grey water

87. The Committee queried the possible use of "grey water" and was advised by AGSO that its use had been investigated but not considered viable. The presence of a water course crossing the north-west corner of the site and a retention basin in the north-east corner of the site could allow "grey water" used for irrigation to enter the stormwater system. This would breach the *ACT Water Pollution Act 1984*. AGSO advised that there is minimum "grey water" produced on site and this is from hand basins only. Trade waste effluent from sinks in the laboratories, although treated on-site with settling and neutralisation prior to discharge to the sewer may contain traces of chemicals not suitable for irrigation.

88. Landscape irrigation will be restricted to the areas immediately adjacent to the buildings and on-site bore water will be used.

89. AGSO concluded that due to the small amount of "grey water" which will be generated in the proposed complex, the potential risk of environmental pollution from the reuse of laboratory water, the availability of on-site bore water for the limited extent of irrigated landscape and the lack of guidelines for the safe re-use of "grey water", its use is not considered a viable option.

Ecologically Sustainable Development

90. This project will represent the largest building project within the portfolio of the Department of Primary Industries and Energy during the

next several years, and will allow the practical demonstration of the principles of Ecologically Sustainable Development (ESD) embraced by the Department and towards which much of the AGSO activity is directed.

91. Within the functional and cost restraints applying to the project, the design will demonstrate appropriate responses to matters such as:

- . a design to suit the Canberra climate while limiting energy consumption
- . an appropriate orientation and sensitivity to natural features and microclimate
- . the use of landscaping to assist thermal control
- . the use of available daylight
- . a maximum use of outside air for air conditioning where ambient conditions suit
- . an incorporation of low energy, high efficiency plant, fittings and equipment
- . the use of innovative means of thermal control
- . waste management.

Staffing Numbers

92. AGSO advised that it has approximately 520 staff at various locations in Canberra. There is likely to be a slight reduction in these numbers once collocation occurs in the proposed building. This is due to a present requirement to duplicate some of the support facilities from site to site. Reductions will occur mainly in the office support area.

Landscaping

93. Landscaping will consist mainly of Australian native shrubs and trees with a small amount of deciduous trees. The Committee was advised that the landscaping is designed for low maintenance and will use little water. The aquifer which is under the site will supply water for the landscaping.

Committee's Conclusion

94. The proposed building complex will meet the Australian Geological Survey Organisation's duty of care and associated standards of legal responsibility to its staff and visitors.

ENVIRONMENTAL ISSUES

95. The proposed facility will comply with the requirements of the Environmental Protection Agency and ACT Government. Close liaison with relevant government authorities will be maintained throughout the detailed design and approval stages.

96. The building will be constructed in an area zoned for the intended purpose of the facility.

97. In accordance with the Government's *Environment Protection (Impact of Proposals) Act 1974*, due regard has been given to the effect buildings will have on the environment. Features of the design include:

- visual compatibility with surroundings
- landscaped areas around the buildings and car parks using native plant species
- fume exhaust systems will be the subject of wind tunnel testing to ensure appropriate dispersal of emissions
- all emissions will comply with relevant authorities' and agencies' requirements.

98. Discussions have been held with EPA throughout this project and a Notice of Intention has been prepared for EPA under the *Commonwealth Environment Protection (Impact of Proposals) Act 1974*.

99. Other studies including stormwater, traffic, and impact on existing community facilities may be required during the development of the project.

100. AGSO advised that based on available information, it considers that the proposed development will have no adverse impact on the physical, cultural, social or economic environment.

CONSULTATIONS

101. Consultations have been undertaken with relevant Commonwealth and ACT authorities and other agencies during the preparation of this proposal.

102. Organisations consulted include:

- . ACT Dangerous Goods Branch
- . ACT Department of Urban Services (Traffic Branch)
- . ACT Electricity and Water (ACTEW)
- . ACT Fire Brigade
- . ACT Government Department of Environment and Land Planning
- . ACT Heritage Council
- . ACT Office of Sport and Recreation
- . ACTION Buses
- . AGSO Staff Associations
- . Australian Council of Rehabilitation of the Disabled
- . Australian Estate Management
- . Australian Heritage Commission
- . Environmental Protection Agency
- . Energy Program Branch, DPIE
- . National Capital Planning Authority
- . Natural Gas Company

- . Optus
- . Telecom

103. In addition, AGSO has an active program of ongoing consultations with adjacent neighbours, community and business organisations, government bodies and existing Federal, State and Territorial politicians. The purpose of these consultations is to provide information about the status of the project and to ensure co-operation with relevant organisations.

104. AGSO advised that it has held consultations with staff associations and a number of meetings and special sessions have been conducted with staff in recent months to bring them up to date with progress.

TENDERING

105. The Committee queried the method of payment of subcontractors. AGSO advised that the normal contract arrangements are for subcontractors to be paid through the main contract. The Committee, however, believes that payment of subcontractors should be included as a condition in contracts.

Committee's Recommendation

106. The Committee recommends that the Australian Geological Survey Organisation includes in its contract documents a clause stating that subcontractors must be paid before progress payments are made to contractors.

FINANCIAL ASPECTS

107. The proposal was originally referred to the Committee at a limit of cost of \$114m. AGSO has advised that this cost has now been reduced to \$105m. This has come about through savings in building designs and briefs, external works and services, pre-contract allowances, post contract allowances, site acquisition and other minor items.

Committee's Recommendation

108. The Committee recommends that the Australian Geological Survey Organisation continues to carry out value management studies in an endeavour to further reduce the cost of the project.

109. The Committee was advised that the change of site will result in expenditure of an additional \$650 000. Of this amount, \$350 000 is for design fees due to the necessary change to the design of the building. The remainder will be paid for a series of building related costs. As the site is steeper than the original site there are various earthwork-type costs.

110. The \$3m cost of the new site equates to the cost of the previous site. The Committee noted that AGSO had carried out preliminary design work on previous sites including \$0.82m on Section 34 at Narrabundah. This site was preferred as no site near the Therapeutic Goods Administration Building in Symonston was available, as the ACT Planning Authority had other plans for the Narrabundah Lane, Symonston site. However, once this site became available, both the NCPA and ACT Planning Authority preferred it to the Section 34 Narrabundah site. This was because the Symonston site would not require a variation to the Territory Plan as would be required with the Narrabundah site. The Narrabundah Lane Symonston site also better suited the Employment Location Policies of the National Capital Plan by decentralising employment to regional centres such as the new Symonston area rather than an isolated employment centre such as Narrabundah.

111. However, as indicated in paragraph 1, due to the presence of the Earless Dragon on the Narrabundah Lane site, the proposed building will now be constructed on a site on the corner of Jerrabomberra Avenue and Hindmarsh Drive.

CONSTRUCTION

112. The project is currently proposed to be contracted as a single lump sum price with a handover date for a fully commissioned facility by mid 1998.

Committee's Recommendation

113. The Committee recommends construction of a new building complex for the Australian Geological Survey Organisation on the corner of Jerrabomberra Avenue and Hindmarsh Drive, Symonston, ACT at an estimated cost of \$105m.

CONCLUSIONS AND RECOMMENDATIONS

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

	Paragraph
1. A need exists to provide a safe working environment for staff employed by the Australian Geological Survey Organisation.	32
2. Collocation of staff will result in more efficient work practices and reduce duplication of some services.	33
3. The Committee recommends that projects should not be referred to it until issues relating to site selection including environmental clearances have been clarified.	56
4. The proposed building complex will meet the Australian Geological Survey Organisation's duty of care and associated standards of legal responsibility to its staff and visitors.	94
5. The Committee recommends that the Australian Geological Survey Organisation includes in its contract documents a clause stating that subcontractors must be paid before progress payments are made to contractors.	106
6. The Committee recommends that the Australian Geological Survey Organisation continues to carry out value management studies in an endeavour to further reduce the cost of the project.	108

7. The Committee recommends construction of a new building complex for the Australian Geological Survey Organisation on the corner of Jerrabomberra Avenue and Hindmarsh Drive, Symonston, ACT at an estimated cost of \$105m.

113



Colin Hollis MP
Chair

22 June 1995

APPENDIX A

WITNESSES

BAIN, Ms Lynn Maree, Director, National Environmental Consulting Services, 30 Windeyer Street, Watson, Australian Capital Territory, 2602

BUTT, Mr Eric Graham, Architect and Proprietor, Strine Design, 1st Floor, 25 Bentham Street, Yarralumla, Australian Capital Territory

CALLAGHAN, Mr Robert Ernest, Manager, Land Sales Section, Land Supply Branch, Department of Environment and Land Planning, John Overall Offices, 220 Northbourne Avenue, Braddon, Australian Capital Territory 2600

COFFEY, Mr John Innes, Principal, Bassett Consulting Engineers, 616 St Kilda Road, Melbourne, Victoria 3004

CRENNAN, Mr James Edward, Director, Endangered Species Unit, Australian Nature Conservation Agency, 153 Emu Bank, Belconnen, Australian Capital Territory 2614

JACKA, Mr Harvey Gordon, Executive Director, Australian Geological Survey Organisation, cnr Constitution Avenue and Anzac Parade, Campbell, Australian Capital Territory 2601

JOHNSON, Mr Daniel William, Senior Town Planner, ACT Planning Authority, John Overall Offices, 220 Northbourne Avenue, Canberra, Australian Capital Territory 2600

KEETLEY, Mr Trevor Robert, Director, Eagleston Macdonald Proprietary Limited, 215 Grattan Street, Carlton, Victoria 3053

KERSHAW, Mr John Miles, President, Residents Rally for Canberra, 19 Mannheim Street, Kambah, Australian Capital Territory

MACDONALD, Mr John Andrew, Director, Eggleston Macdonald, Pty Ltd, 215 Grattan Street, Carlton, Victoria 3053

McLEAN, Mr Peter Sidney, Director, Barry Webb and Associates (NSW) Pty Ltd, 37 Ryde Road, Pymble, New South Wales 2073

MOSCHNER, Mr Kenneth William, Manager Facilities, Australian Geological Survey Organisation, cnr Constitution Avenue and Anzac Parade, Parkes, Australian Capital Territory 2600

NEWTON, Mr Barry Leo, Consultant Senior Project Manager with Australia Pacific Projects Corporation Pty Ltd, Australian Geological Survey Organisation, 1st Floor, 36 Thesiger Court, Deakin, Australian Capital Territory 2600

POWELL, Dr Trevor, Deputy Director, Australian Geological Survey Organisation, cnr Constitution Avenue and Anzac Parade, Campbell, Australian Capital Territory 2601

SERCOMBE, Mr Stephen Paul, Director, Wilde and Woollard Consultants Pty Ltd, 39 Torrens Street, Braddon, Australian Capital Territory

SHORTHOUSE, Dr David Jeremy, Acting Manager, Wildlife Research Unit, ACT Parks and Conservation Service, Department of the Environment, Land and Planning, O'Connor Depot, Cnr Dryandra Street and Belconnen Way, O'Connor, Australian Capital Territory 2601

TAYLOR, Mr John Leigh, Managing Director, Pacific Projects Corporation Proprietary Limited, Level 5, 90 Mount Street, North Sydney, New South Wales 2060

WILLIAMS, Dr Neil, Executive Director, Australian Geological Survey Organisation, Anzac Park East Building, Corner Constitution Avenue and Anzac Parade, Canberra, Australian Capital Territory

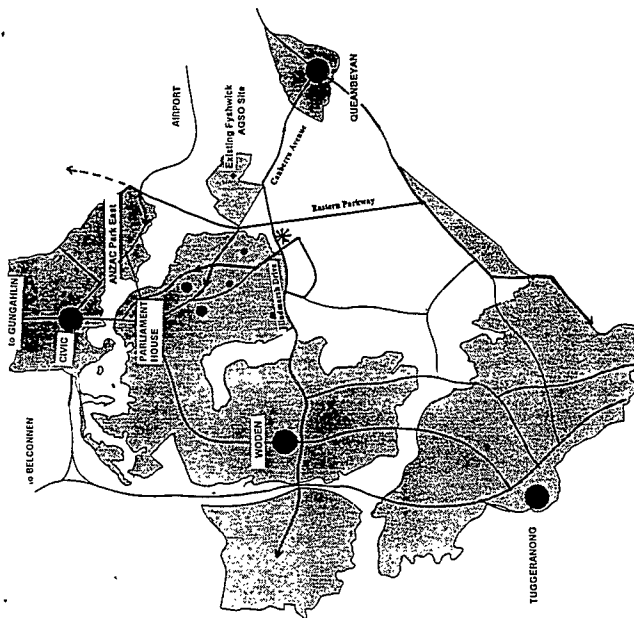
WOLFE, Ms Jane Alice Margaret, Director, Corporate Services Division, Australian Geological Survey Organisation, Corner Constitution Avenue and Anzac Parade, Campbell, Australian Capital Territory 2601

WRIGHT, Mr David Terrence, Director, Statutory Planning, National Capital Planning Authority, 10-12 Brisbane Avenue, Barton, Australian Capital Territory 2600

APPENDIX B

PROJECT DRAWINGS

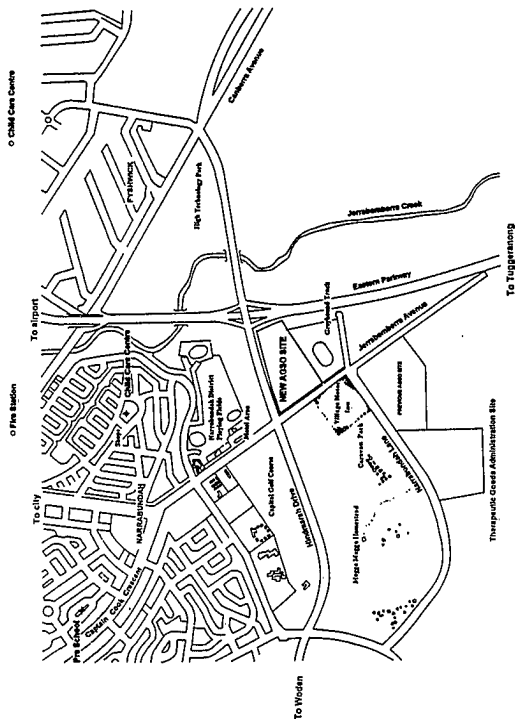
	Page
Location Plan	B-1
Precinct Plan	B-2
Site Plan	B-3
Landscape Plan	B-4
Perspective	B-5
Lower Ground Floor Plan	B-6
Ground Floor Plan	B-7
First Floor Plan	B-8
Second Floor Plan	B-9
Elevations	B-10
Sections	B-11



- Legend**
- * Site
 - Town Centres
 - Group Centres
 - Local Centres
 - ↔ Urban Arterial Roads



LOCATION PLAN
NEW BUILDING COMPLEX for AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION



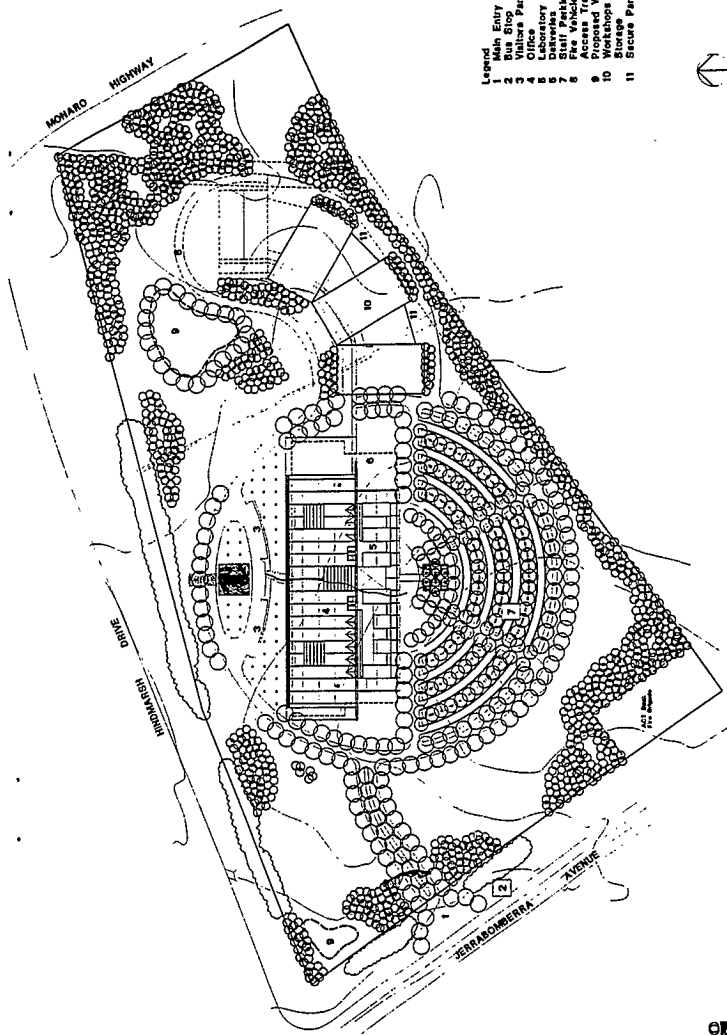
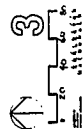
PRECINCT PLAN NEW BUILDING COMPLEX for AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION



2

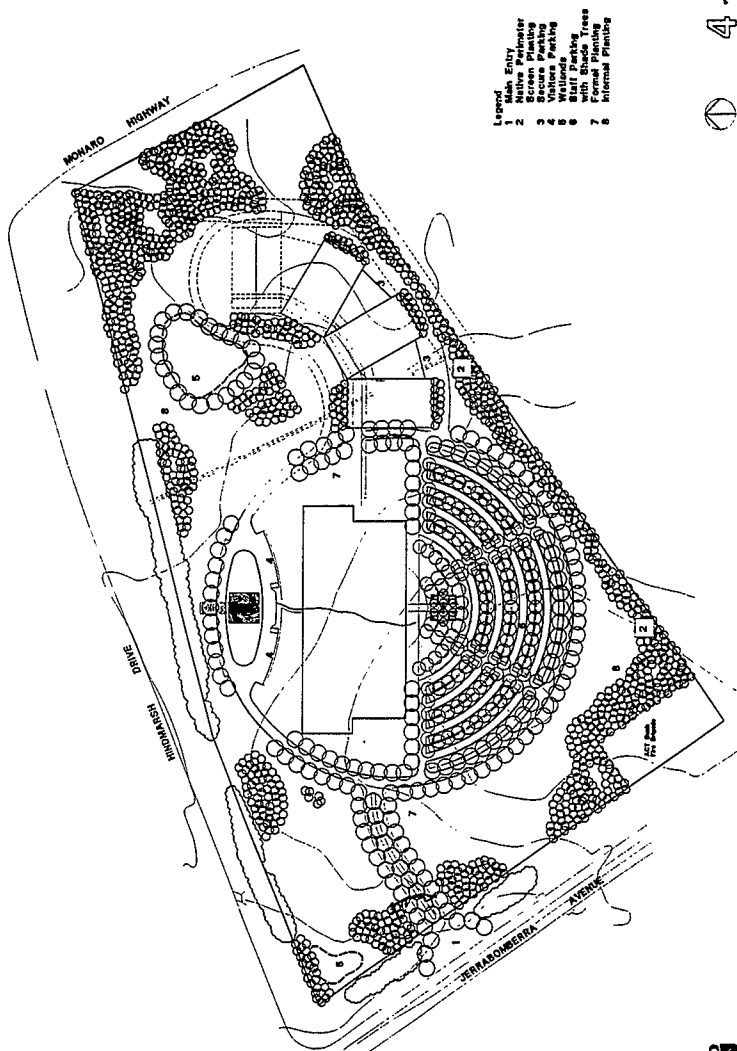
PRECINCT PLAN

- Legend
- 1 Main Entry
 - 2 Main Stairs
 - 3 Visitors Parking
 - 4 Office
 - 5 Laboratory
 - 6 Datacentre
 - 7 Staff Parking
 - 8 Fire Vehicle
 - 9 Access Track
 - 10 Proposed Wetlands
 - 11 Workshops & Storage
 - 12 Secure Parking

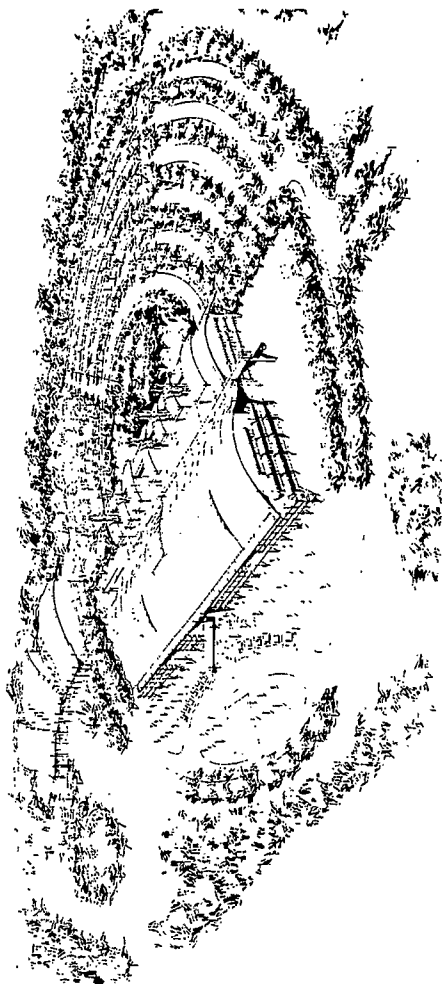


SITE PLAN
NEW BUILDING COMPLEX for AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION

PROJ. NO. 84200 - 10-12-80



B-4



B-5