THE PARLIAMENT OF THE COMMONWEALTH OF THE SHAPE

Parliamentary Standing Committee on Early of the September Of the September

# **REPORT**

relating to the proposed construction of the

# NATIONAL BIOLOGICAL STANDARDS LABORATORY (NBSL)

and

# AUSTRALIAN DENTAL STANDARDS LABORATORY (ADSL)

at

Symonston, Australian Capital Territory

(NINTH REPORT OF 1979)

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

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Australian Government Publishing Service Canberra 1979

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(Twenty-fifth Committee)

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#### COMMONWEALTH GOVERNMENT

Department of Housing and Construction

Departmental

No. 13

Minute Paper for the Executive Council

Subject

Executive Council
Meeting No. 52

ORDER UNDER SUB-SECTION 18 (4) OF THE PUBLIC WORKS COMMITTEE ACT 1969 IN RELATION TO CONSTRUCTION OF NATIONAL BIOLOGICAL STANDARDS LABORATORY AND DENTAL STANDARDS LABORATORY, SYMONSTON, AUSTRALIAN CAPITAL

TERRITORY.

Approved in Council

ZELMAN COWEN

Recommended for the approval of His Excellency the Governor-General in Council that, in pursuance of Sub-Section 18 (4) of the Public Works Committee Act 1969, he declare, by executing the attached Order, that the public work proposed in that Order be referred to the Parliamentary Standing Committee on Public Works

2 August 1979

for consideration and report.

Filed in the Records of the Council

(Signed) R.J. GROOM.

DAVID N. REID.

Minister of State for Housing and Construction.

Secretary to the Executive Council.

#### WITNESSES

- Beech, Dr D.R., Director, Australian Dental Standards Laboratory, 24 Langridge Street, Abbotsford, Viotoria
- de Souza, Dr D., First Assistant Director-General, Therapeutics Division, Department of Health, Furzer Street, Phillip, Australian Capital Territory
- Dodson, Dr L.F., Director, National Biological Standards Laboratory, Department of Health, 9 Morrissett Street, Queanbeyan, New South Wales
- Drake-Brockman, P.M., Esq., Associate Director, A.C.T. Region, Department of Housing and Construction, Furzer Street, Phillip, Australian Capital Territory
- Horne, W.J., Esq., Project Manager, Department of Housing and Construction, Furzer Street, Phillip, Australian Capital Territory
- Johnson, R.A., Esq., Project Architect, Department of Housing and Construction, Furzer Street, Phillip, Australian Capital Territory
- Lane, L.W., Esq., First Assistant Director-General, Management Services Division, Department of Health, Furzer Street, Phillip, Australian Capital Territory
- Wickham, F., Esq., Chief Mechanical Engineer, Department of Housing and Construction, 17 Yarra Street, Hawthorn, Victoria

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#### PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

NATIONAL BIOLOGICAL STANDARDS LABORATORY, SYMONSTON, A.C.T.

#### REPORT

On 2 August 1979 His Excellency the Governor-General in Council referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament the proposed construction of the National Biological Standards Laboratory (NBSL) and Australian Dental Standards Laboratory (ADSL) at Symonston, A.C.T.

The Committee has the honour to report as follows:

#### THE REFERENCE

- The proposal referred to the Committee is for the construction of an integrated laboratory complex to replace existing unsatisfactory premises at various locations in Canberra, Queanbeyan and Melbourne.
- 2. The building complex has been designed to cater for the highly specialised research and testing work carried out by the laboratories, which require high levels of micro-biological security in laboratories and animal breeding facilities.
- 3. In addition to specialised laboratory and related functions, the building is to accommodate the laboratories' administrative and associated services functions.
- 4. The estimated cost of the proposal when referred to the Committee was \$26 million at June 1979 prices.

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### THE COMMITTEE'S INVESTIGATION

- 5. The Committee received a written submission from the Department of Health and a written submission and drawings from the Department of Housing and Construction and took evidence from their representatives at a public hearing at Parliament House, Canberra, A.C.T. on 10 September 1979.
- 6. The Committee also received written submissions from Professor Emeritus H.F. Atkinson, Department of Dental Prosthetics, University of Melbourne; the Australian Dental Association; the Australian Dental Association, Victorian Branch; Southern Dental Industries; the Prosthetic Laboratories Association, Victoria; the Australian Dental Trade Association; the Australian Dental Standards Laboratory Staff Association; the Australian Public Service Association (Fourth Division Officers) and the Professional Officers! Association.
- 7. Prior to the public hearing, the Committee inspected a number of the NBSL's facilities and the site for the proposed building at Symonston, A.C.T.
- 8. The Committee's proceedings will be printed as Minutes of Evidence.

#### BACKGROUND

- 9. Before 1954, controls over medicine were exercised by the States largely by regulating the local practice of pharmacy. These controls were found to be inadequate for products, which were mass-produced and distributed nationally and internationally.
- 10. The enactment of the Therapeutic Substances Act 1953 enabled the Commonwealth to standardise the quality of products nationally, to prevent "dumping" of inferior goods, and to ensure that value was received for Commonwealth expenditure on pharmaceutical benefits.
- II. Wide discretionary powers over the importation of therapeutic goods were provided to the Director-General of Health by the Customs (Prohibited Import) Regulations and these powers extended particularly to those imports of therapeutic substances for which no statutory standard was applicable.

- 12. The National Biological Standards Laboratory (NBSL), established in 1958, has the responsibility for ensuring that therapeutic goods (for both human and veterinary use) available in Australia are safe and effective.

  Policies and administrative practices to ensure the quality and safety of therapeutic goods evolved progressively.
- 13. In 1966, the Therapeutic Substances Act 1953, was replaced by the Therapeutic Goods Act 1966 and the National Therapeutic Goods Committee, consisting of State and Commonwealth representatives, was established.
- 14. Regulating practice was altered and new policies were developed as a result of several events that occurred between 1955 and 1962. These were: the Cutter episode in which 260 people contracted poliomelitis from Salk vaccine; the Kefauver enquiry into the pharmaceutical industry in the U.S.A., which drew world-wide attention to deficiencies in the quality of many drugs; and finally, the thalidomide disaster in which thousands of deformed children were born to mothers who had taken the drug during pregnancy.
- 15. The resulting uniform policy and system of control for therapeutic goods includes the following elements:
  - Evaluation. An assessment is made of the efficiency, safety and quality of products.
  - Inspection. An Australian Code of Good Manufacturing Practice was prepared by the National Biological Standards Laboratory and agreed to by manufacturers. The code is periodically updated.

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- Provision of Standards. Specifications are provided for therapeutic goods that define the product and set limits on its essential properties.
- Testing. Therapeutic goods are tested for compliance with standards.
- Recall Procedures. Goods which are substandard, mislabelled, or found to be dangerous are recalled from sale.
- 16. Responsibility for the administrative measures for the control of therapeutic goods is distributed among the following, and inter-related units of the Department of Health:
  - The National Biological Standards Laboratory, assists in the formulation of therapeutic goods regulatory policy; evaluates the chemistry, microbiology, quality control and labelling of therapeutic goods; develops new or improved standards; tests goods for compliance with standards; inspects manufacturing premises and provides scientific advice to government bodies and industry.

The NBSL is closely linked, through the servicing of the Australian Drug Evaluation Committee and the National Therapeutic Foods Committee, with the Therapeutics Division.

- The Therapeutics Division which, through its Therapeutic Goods Branch, controls imported therapeutic goods and bulk starting materials for pharmaceutical manufacture; co-ordinates the recall of dangerous and substandard therapeutic goods; and is responsible for the censorship of radio and television advertising of therapeutic goods.
- The Australian Dental Standards Laboratory, recently incorporated into the NBSL, is responsible for standards in relation to

dental materials and implements as well as medical devices and bio-materials. It carries out regular surveys of materials on sale in Australia and is concerned with advice to industry and research into dental and medical equipment/materials and processes.

- The Brucella Vaccine Testing Laboratory, which tests products used in the Brucella and T.B. eradication campaign.
- 17. In summary, the main functions of the NBSL may be described as assisting in the formulation of therapeutic goods regulating policy, and the provision of scientific services in connection with Government control over therapeutic goods.

#### THE NEED

- 18. After its establishment, the NBSL was located in temporary buildings situated in the grounds of the Australian National University.
- 19. In 1961, a Viral Products Section was formed to deal with urgent problems associated with the manufacture and testing of Salk vaccines. The section, initially accommodated in modified premises on the Australian National University grounds, was transferred in 1962 to more adequate premises adjacent to the Commonwealth Serum Laboratories in Melbourne, Victoria.
- 20. This relocation marked the first expansion of the NBSL which, as problems were encountered and new tasks assigned, required the acquisition and conversion of additional accommodation to meet the NBSL's purposes.
- 21. Over the years, this expansion has resulted in the dispersal of the activities of the NBSL with laboratories and service units scattered throughout the Canberra/Queanbeyan area and in Melbourne where the ADSL is located and where the Viral Products Section remains.

- 22. The activities of the NBSL are now accommodated in 16 separate buildings either owned or leased by the Commonwealth on 8 different sites, and the Department of Housing and Construction in a Summary Dilapidation Report dated April 1978 found that of 12 buildings examined in the A.C.T. and Melbourne areas, 8 were unsuitable for the work being carried out.
- 23. The rental costs of the leased buildings, which are situated at Queanbeyan, N.S.W., Fyshwick, A.C.T. and Abbotsford, Victoria total \$143 000 per annum (approximately) and of the 5 leased premises in these areas, the Administration Section at Queanbeyan, N.S.W. and the ADSL at Abbotsford, Victoria, account for more than half of total rental outlays.
- 24. The buildings are unsuitable for the specialised tasks undertaken by the NBSL because:-
  - the buildings are not purpose-designed;
  - the buildings are overcrowded;
  - there is no area adjacent for expansion;
  - the location of a number of the buildings in residential areas is considered undesirable; and
  - in some buildings, potential fire and safety hazards exist due to an inadequate capacity in both electrical and mechanical services.
- 25. The poor state of many buildings and their scattered location produces many impediments to efficient management, communications and co-ordination of work. There is duplication of equipment and services and problems in the maintenance, supply of stores and library material exist.
- 26. Reasonable limits of improvisation have now been exceeded and the inherent defects of such accommodation impedes the operation of a highly specialised research and testing organisation.
- 27. The Australian Dental Standards Laboratory (ADSL) Of the several written submissions received by the Committee, the majority,

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either in specific or general terms, opposed the need for the relocation of the ADSL from Melbourne to Canberra on the following grounds:

- The fruitful association of the ADSL with Melbourne University, in particular, the Dental School and Engineering Faculty would be broken or severely impaired.
- The dental health of the community can be served best by siting the ADSL in close proximity to a large dental population, a dental faculty and a dental hospital.
- Canberra is not as accessible to many dentists and technicians as is the established Laboratory.
- No relocation can be justified on grounds of cost for the ADSL's present premises are adequate and well equipped.
- 28. The Committee was informed by the Department of Health that the role of the ADSL has been progressively changing and evolving since 1974 and its traditional dental functions and policies, which were the principal concern of most submissions, have been recently widened beyond the normal work relating to dental materials to include the regulation of medical devices and the utilisation of the statutory controls provided by the Therapeutic Goods Act.
- 29. Responsibility for the regulation of medical devices will be divided between the Therapeutic Goods Branch, the NBSL and the ADSL, which will evaluate and test material science aspects of the medical biomaterials field.
- 30. The approval of Cabinet to these policies has been obtained and amendments to the scope of the Therapeutic Goods Act are soon to be brought before the Parliament.
- 31. The Committee was assured that, notwithstanding the amalgamation of the ADSL with the NBSL to develop the medical biomaterials field, the ADSL would retain the word 'dental' in its name and continue its associations with the dental profession in Melbourne and nationally.

- 32. The Committee noted that the Interdepartmental Committee on the Location of Australian Government Employment (LAGE) generally supported, in terms of administrative efficiency, the collocation of all elements of the NBSL and the ADSL.
- 33. The Department of Health offered evidence that of the ADSL's total staff of 14, only 3 officers have indicated, without qualification, that they do not intend to transfer to Canberra.
- 34. The Committee examined the possibility of retaining the ADSL in Melbourne and concluded that as the ADSL's future role is to be expanded to include medical devices, the optimum solution in terms of efficiency and effectiveness is to collocate the ADSL with the NBSL in the proposed building at Symonston, A.C.T.
- 35. <u>Committee's Conclusion</u> The National Biological Standards Laboratory is presently operating in temporary premises which are overcrowded and dispersed. The premises cannot be expanded or adapted to meet the highly specialised research and testing work being undertaken for the regulation and control of therapeutic goods. There is a need for a purpose-designed complex for the National Biological Standards Laboratory and the Australian Dental Standards Laboratory.

#### THE PROPOSAL

- 36. The proposal is for the construction of an integrated laboratory complex to accommodate the scientific, administrative and support components of the National Biological Standards Laboratory, the Australian Dental Standards Laboratory and sections of the Therapeutics Division of the Department of Health, which are presently dispersed at various locations in the Australian Capital Territory, New South Wales and Victoria.
- 37. The highly specialised research and testing work carried out by the National Biological Standards Laboratory requires purpose-designed accommodation and facilities. High levels of microbiological security are required, particularly in relation to breeding specific pathogen free (SPF) animals and the maintenance of microbiologically clean conditions within the laboratories.

38. The Department of Housing and Construction has accumulated a great deal of experience over many years in the design and construction of buildings and services specifically dealing with the unique demands of microbiological security. This experience, augmented by the knowledge gained from a special joint inspection in 1978 of many overseas institutions by an engineer of the Department of Housing and Construction and a veterinary officer from the NBSL, has been applied to the design of this proposal.

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- 39. The Brucella Vaccine Testing Laboratory, a subsection of the NBSL, was erected on the 20 hectare site at Symonston, A.C.T. in 1974 (Committee's 17th Report of 1971 refers) and this Laboratory, which is dependent on services from other sections of the NBSL for its efficient operation, was designed to be part of a permanent complex of NBSL buildings.
- 40. Planning and Design The building has been designed with the contours of the site on an east-west axis to take advantage of the most favourable orientation, which will assist the provision of controlled natural lighting to laboratories, minimise air conditioning costs, ensure adequate dispersal of effluent from flues and air discharged from exhaust systems, and limit the extent of earthworks.
- 41. The building is proposed as a two-storey structure extending for approximately 220 metres along the site with three storeys at the western end. The buildings are designed to face north/south and are divided longitudinally by an open pedestrian and services concourse.
- 42. The laboratories are distributed along the northern side of the concourse with administrative, animal facilities and service areas to the south.
- 43. The central services plant room connects the two wings of the building at the eastern end.
- 44. Subsidiary plant rooms housing air conditioning, ventilation and other services are located on the roof of the area they serve.

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- 45. The linear arrangement of the building enables a simple and direct method of circulating goods and services and ensures ease of personnel movement from one section to another. Enclosed walkways will provide weather protected links where functionally required.
- 46. Planning provides for the control of airborne contaminants and micro-organisms by establishing patterns for materials and personnel movement and by structure enclosures. These enclosures or "barriers" comprise a system of walls, floors, ceilings, doors and air locks, which are required to be built to close tolerances and high standards of workmanship with functionally effective finishes.
- 47. The building is planned on a modular grid, which rationalises construction and provides flexibility for future change.
- 48. Site Works and Stormwater Control The building site impinges on a natural stream which drains the surrounding pastures, and flow in the stream is presently controlled by three dams originally built for stock watering purposes: a small dam upstream of the building site, one downstream of the Brucella Vaccine Testing Laboratory both of which are located beyond the site boundary and one immediately adjacent to the proposed building.
- 49. The small upstream dam has only limited effect on the natural drainage system and if the area in the vicinity of the larger downstream dam is developed, it will require attention if the natural drainage system is to be retained.
- 50. The proposal seeks to disturb the site as little as possible and, although the water run-off from the building and car parks will increase the volume and rate of stormwater discharge, the design intention is to retain the drainage system generally in its current balance.
- 51. The planning design, which has been provided to cause the least possible disturbance to the site hydrology, requires the expansion of the existing dam adjacent to the proposed building not only to control the flow in the stream but also to function as an erosion and sediment control device.

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- 52. The Committee examined several alternative proposals for the control of the discharge of stormwater traversing and leaving the site.
- 53. The Committee has some reservations concerning the proposed solution and asks that the construction of the dam and drainage plans should be thoroughly re-evaluated during design development with a view to obtaining savings in construction costs and reductions in maintenance commitments.
- 54. Roads and Car Parks Access roads and car parks will have low cost treatments and will generally blend with landscape proposals to minimise their visual impact.
- 55. <u>Future Expansion</u> It will be possible for the various sections of the building to be extended in the future. The design allows for limited expansion of functional units at low cost with minimum disturbance to work being carried out in adjacent areas. Any large scale expansion can be catered for by the addition of another wing to the south of the building.
- 56. Committee's Conclusion The proposed complex has been designed to meet the special facilities, including micro-biological security, required for the efficient pursuit of highly specialised research and testing work. The Committee asks that the construction of the dam and drainage plans should be thoroughly re-evaluated during the design development with a view to obtaining savings in construction costs and reductions in maintenance commitments.

#### THE SITE

- 57. The site for the proposed National Biological Standards Laboratory is known as part of Section 126, Symonston, A.C.T. and consists of approximately 20 hectares.
- 58. The present site was determined after examination of a number of sites in the A.C.T.
- 59. In 1962, a site adjacent to the CSIRO in Acton, A.C.T. was offered by the National Capital Development Commission (NCDC) but it proved to be inadequate in area and was encumbered by two large water mains; a further site adjacent to the National Mint was proposed in the same year but in 1968 this site was withdrawn by the NCDC.

- 60. After further consideration of possible sites in the Narrabundah area, the present site was chosen and endorsed by both the Department of Health and the NCDC.
- 61. The site, which has a frontage to Narrabundah Lane about 300 metres west of Jerrabomberra Avenue, is slightly undulating, open, improved pastureland extending down the Jerrabomberra Valley. The site has been predicated to some extent by the location of the Brucella Vaccine Testing Laboratory, on part of the site, and its relationship to the proposed Laboratory.
- 62. Sub-surface investigations indicate clay over highly weathered rock, which will provide a sound building foundation.
- 63. The area, which is designated "Institutional", is remote from existing office and service areas but is close to the junction of arterial roads which provide good access to all commercial areas in Canberra and the airport.
- 64. The site is located approximately 5 km east of Capital Hill and is within 10 km of the Head Office of the Department of Health at Phillip.
- 65. Existing bus services will be extended to provide public transport to and from the site at the morning and evening peak periods, giving access to Woden Town Centre, Fyshwick and Civic.
- 66. In 1973, an Environmental Impact Statement submitted by the Department of Health was approved by the then Department of Environment. A Notice of Intention, which updated the original statement, was submitted to the Department of Science and Environment in May 1979; that Department advised that under the Environmental Protection (Impact of Proposals) Act, no Environmental Impact Statement is required.
- 67. <u>Committee's Conclusion</u> The site selected is suitable.

#### CONSTRUCTION

68. <u>Structure</u> The building will be a reinforced concrete frame supported on reinforced concrete pad footings.

- 69. The administration and laboratory areas and the central services plant rooms of the building will have reinforced concrete columns, flood and roof.
- 70. External Finishes
  with insulated metal panels. Windows will be double glazed and
  the roof will be insulated and finished with a trafficable
  weatherproof membrane. Plant room roofs will be metal decking.
- 71. <u>Internal Finishes</u> The building will be of fire resisting construction and will be sub-divided into compartments by fire rated walls, floors and fire doors.
- 72. Internal walls will be rendered concrete block and laminate finished partitions to laboratory areas; concrete block to workshops and stores; plasterboard partitions to administration areas; epoxy finish to all barrier areas and ceramic tiles to toilets and showers.
- 73. Floors will be welded sheet vinyl to laboratory areas; epoxy to barrier areas; carpet to the administration areas and the library; ceramic tiles to toilets and showers and trowelled concrete finish to all stores and plant rooms.
- 74. Suspended ceilings will be provided in laboratory areas requiring dust control and in the administration areas. Ceilings in stores and workshops will be off-form concrete. Barrier areas will have a suspended ceiling finished with epoxy.
- 75. Built-in laboratory furniture, benches and fume cupboards will be provided.
- 76. <u>Mechanical Services</u> The air conditioning and ventilation systems for the building comprise systems for specific functional needs with human comfort incidental to such needs.
- 77. Specific functional requirements include close temperature control, humidity control and prevention of uncontrolled movement of infective or other unwanted agents in or out of prescribed areas.
- 78. Areas requiring close temperature control and humidity control include the animal breeding area and experimental animal houses, which are designated barrier areas, and sections of the workshops and Dental Standards Laboratory.

- 79. Areas requiring the control of airborne contaminants or micro-organisms include special areas in specific laboratories associated with the viral products, bacteriology, antibiotics, pharmacology, animal sciences and pharmaceutical chemistry. Other barrier areas include the animal breeding area and experimental animal houses.
- 80. The degree of control of airborne contaminants and microorganisms will vary from very high level control, in the specific pathogen-free (SPF) and germ-free animal breeding areas, the viral products experimental animal house and critical laboratory areas, to lower levels of control in other experimental animal houses and less critical laboratory areas.
- 81. Laboratory areas other than those listed will be air conditioned to normal comfort standards with filtration sufficient to minimise the general level of dust and contaminants.
- 82. Other areas of the complex, with the exception of workshops, stores and plants rooms, will also be air conditioned to normal comfort standards.
- 83. Areas not air conditioned will be mechanically ventilated where natural ventilation is impracticable and heated if regularly occupied.
- 84. The main plant room at the eastern end of the building will house central services plant which will include chilled water plant, steam boilers, compressed air plant and incinerators.
- 85. Services will be reticulated from the central plant to various points of usage via the walkways and roof plant rooms.
- 86. Steam boilers will be oil fired with provision for conversion to gas firing. Hot water will be generated by a combination of solar energy, electricity and steam. Electricity will provide the energy for the building heating systems.
- 87. A number of specialised services will be provided within laboratory, animal holding and experimental areas. These will include compressed air, L.P. gas, nitrogen gas, vacuum and treated animal drinking water.

- 88. Storage and Handling of Animal Bedding Approximately 200 cubic metres of softwood shavings will be stored on site to ensure a continuous and reliable supply of animal bedding. This material will be stored in two steel silos on the eastern extremity of the complex. Pneumatic loading equipment and mechanical unloading equipment will be incorporated.
- 89. <u>Hydraulic Services</u> The building will be connected to the Canberra water supply and sewerage systems. Water will be reticulated for domestic and fire fighting services.
- 90. Wastes discharged to the sewerage system will meet the requirements of the Canberra Sewerage and Water Supply Regulations and design of the stormwater drainage system will comply with normal practice in the A.C.T.
- 91. <u>Electrical Services</u> Two 11 000 volt feeders will be provided and each will be fed from separate zone substations to ensure maximum security of supply. These feeders will terminate at a high voltage switchboard within the main electricity switchroom at the eastern end of the building.
- 92. The main switchboard will be divided into essential and non-essential loads so that either feeder or the emergency generation plant can supply the essential loads.
- 93. The load is of such proportions and so distributed that it is necessary to establish stepdown transformer substations at strategic positions within the building to reduce the voltage to 415 volts for subsequent distribution.
- 94. Emergency Power Supply Emergency generating plant with a capacity of approximately 550 kVA will supply electric power so that interruptions to the mains power supply will not endanger the progress of essential biological tests. Emergency power will supply essential lighting and ventilation plant, small air conditioning systems maintaining the environment in animal isolators, heating elements for animal holding areas and essential laboratory and engineering equipment.
- 25. Lighting will generally be of the fluorescent type with fittings designed to ensure microbiological security and to withstand decontamination processes where necessary.

- 96. Emergency lighting to aid escape from the building in the event of a power failure will be provided. Roadway, car park and building security lighting will be provided.
- 97. <u>Power Outlets</u> General purpose outlets will be provided throughout the building. Where necessary outlets will be designed to ensure microbiological security and to withstand contamination processes.
- 98. <u>Intruder Alarm System</u> An intruder alarm system will be provided.
- 99. <u>Communications</u> A PABX for 300 telephone extensions and localised intercom systems are proposed. Block cabling for the systems will be provided.
- 100. <u>Lifts</u> One passenger lift will be provided servicing three levels at the western end of the building. Two goods/ passenger lifts will be provided to service the entire complex with respect to movement of goods from the loading dock, stores and workshops and between the animal services and animal breeding areas.
- 101. A small goods hoist will be provided in the animal breeding area to enable movement of essential materials between the animal services and animal breeding areas in the event of failure of the goods/passenger lift.
- 102. <u>Lightning Protection</u> Boiler and incinerator flues will be protected against lightning in accordance with Australian Standard 1768.
- 103. <u>Fire Protection</u> The complex will be protected by automatic fire sprinklers generally. In areas where sprinklers are undesirable for microbiological reasons, fire detection systems will be provided. The sprinkler and detection systems will be interconnected with mechanical plant to initiate smoke exhaust modes or shut down of systems in the event of fire.
- 104. Laboratory fume cabinets will be protected by their own fire extinguishing systems.

- 105. Fire protection measures will include the provision of portable fire extinguishers and small bore hose reels throughout the complex. Fire hydrants will be provided at strategic positions around the site.
- 106. The fire alarm systems will be connected to the local fire brigade.
- 107. <u>Disposal of Wastes</u> Plant will be provided to incinerate animal bedding, carcasses and pathological waste. The plant will be designed to comply with the requirements of the N.S.W. Clean Air Act.
- 108. Acids will be rendered harmless by dilution and neutralising before discharge to the sewerage system.
- 109. Provision will be made for chemical solvents to be collected in metal safety cans from laboratories and disposed of by commercial trade waste collection or by incineration.
- 110. Provision will be made for radioisotopes to be disposed of in accordance with the requirements stated by the National Capital Development Commission in their report entitled "The Disposal of Radioactive Wastes in the A.C.T." and will conform with the proposed radiation requirements of the Capital Territory Health Commission.
- 111. <u>Pathogenic Organisms</u> Provision will be made for containers and cultures of mirco-organisms to be rendered harmless by sterilising, after which the contents will be discharged into the sewerage system.
- 112. <u>Staff Amenities</u> The amenities provided are in accordance with the provisions contained in the Public Service Board Circular 1978/28 "Standards of Staff Amenities in Commonwealth Work Places" dated 6 October 1978.
- 113. No canteen has been provided as the proposed food service sought by the Department of Health does not meet government financial policy criterion of a self-supporting operation.
- 114. However, a common lunch room has been substituted and the Committee notes that the design of the building is such that the central amenities area can be

extended to incorporate a canteen when the demand for a food service is estimated to be financially viable.

- 115. Other facilities incorporated in the building are in accordance with those stated in the Code of Practice 305
  Personal Facilities: Occupational Safety and Health in Commonwealth Government Employment.
- 116. Roads and Car Farking A total of 189 car parking spaces will be provided for staff and visitors and apart from the construction of a bus layby and an entry from Narrabundah Lane, no additional roadworks will be required.
- 117. The single entrance road from Narrabundah Lane will divide within the site into a staff/visitor access and service access. The Brucella Vaccine Testing Laboratory will be connected to the service road.
- 118. The entry of cars from the site onto the road network will be through two intersections on Hindmarsh Drive, both of which are controlled by traffic lights.
- 119. Fencing, Faddocks and Yards
  The area around the NBSL site will be fenced by stock and vermin proof fencing into three paddocks. The paddocks will be provided with specialist stock facilities adjacent to the service area at the eastern end of the building and will include:
  - a central loading ramp;
  - yards;
  - race and crush; and
  - feed and equipment shed with shearing and experimental area.
- 120. <u>Landscaping</u> Landscaping will form a natural extension of the existing woodland on the western fringe of the site. It will screen car parking, provide protection from prevailing wind, provide a shelter for stock and integrate the building into the landscape.
- 121. Design and Siting Approval The National Capital Development Commission, after reference to the National Capital Planning Committee has approved the design and siting

of the proposed works under the Buildings (Design and Siting) Ordinance.

- 122. <u>Staff Consultations</u> Staff of the NBSL, the ADSL and the Therapeutic Goods Branch have been kept informed of the progress of the proposal and representatives of those Staff Associations directly concerned with the project have been formally advised of the proposal.
- 123. The Committee notes that it is the intention of the Department of Health to hold further discussions with the Public Service Board and Staff Associations as the project proceeds.
- 124. <u>Committee's Conclusion</u> The Committee recommends the construction of the work in this reference.

#### ESTIMATE OF COST

125. The estimated cost of the work when referred to the Committee was \$26 million at June 1979 prices, made up as follows:

	26	000	000
Site works		860	000
Centralised energy systems	1	833	000
Special and external services	3	983	000
Hydraulic services		659	000
Electrical services	1	387	000
Mechanical services	4	029	000
Building works including structural	13	249	000

#### PROGRAM

- 126. Documentation will reach a degree of completion to allow tenders for initial site works to be called approximately 12 months after approval is given to proceed.
- 127. The main construction activity will take approximately 36 months and as it is proposed to carry out site preparation works prior to completion of design documents, there will be concurrent design and construction activities.

## RECOMMENDATIONS AND CONCLUSIONS

120.	The summary of recommendations and conclusions of	or the
Committee	is set out below. Alongside each is shown the	paragraph
in the rep	port to which it refers.  Par	agraph
1.	THE NATIONAL BIOLOGICAL STANDARDS LABORATORY IS PRESENTLY OPERATING IN TEMPORARY PREMISES WHICH ARE OVERCROWDED AND DISPERSED.	35
2.	THE PREMISES CANNOT BE EXPANDED OR ADAPTED TO MEET THE HIGHLY SPECIALISED RESEARCH AND TESTING WORK BEING UNDERTAKEN FOR THE REGULATION AND CONTROL OF THERAPEUTIC GOODS.	35
3.	THERE IS A NEED FOR A PURPOSE-DESIGNED COMPLEX FOR THE NATIONAL BIOLOGICAL STANDARDS LABORATORY AND THE AUSTRALIAN DENTAL STANDARDS LABORATORY.	35
4.	THE PROPOSED COMPLEX HAS BEEN DESIGNED TO MEET THE SPECIAL FACILITIES, INCLUDING MICRO- BIOLOGICAL SECURITY, REQUIRED FOR THE EFFICIENT PURSUIT OF HIGHLY SPECIALISED RESEARCH AND TESTING WORK.	56
5.	THE COMMITTEE ASKS THAT THE CONSTRUCTION OF THE DAM AND DRAINAGE PLANS BE THOROUGHLY RE-EVALUATED DURING THE DESIGN DEVELOPMENT WITH A VIEW TO OBTAINING SAVINGS IN CONSTRUCTION COSTS AND REDUCTIONS IN	•
	MAINTENANCE COMMITMENTS.	56
6.	THE SITE SELECTED IS SUITABLE.	67
7.	THE COMMITTEE RECOMMENDS THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.	124
	2110 11-01-10 ALL THEN THE PARTICULE	

Paragraph

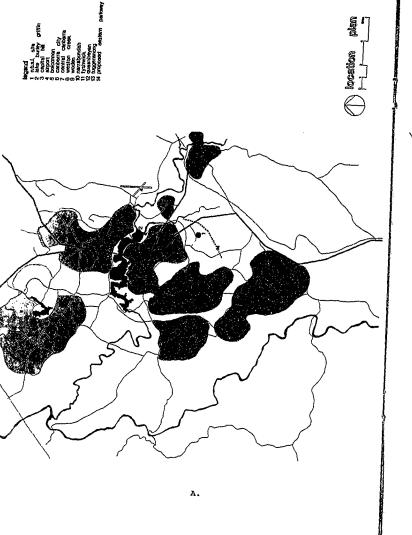
8. THE ESTIMATED COST OF THE WORK WHEN REFERRED TO THE COMMITTEE WAS \$26 MILLION AT JUNE 1979 PRICES.

125

(M.H. BUNGEY Chairman.

Parliamentary Standing Committee on Public Works, Parliament House, CANBERRA.

6 November 1979.

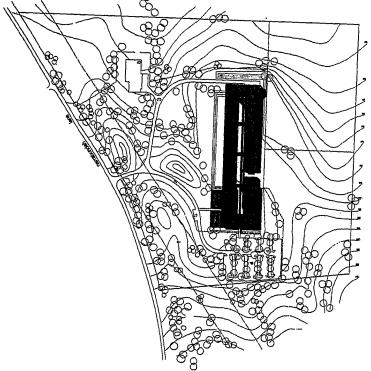












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