



Parliamentary Standing Committee on Public Works

REPORT

relating to the proposed

CSIRO/UNIVERSITY OF QUEENSLAND JOINT BUILDING PROJECT, ST LUCIA, QUEENSLAND

(First Report of 2000)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
2000

The Parliament of the Commonwealth of Australia

**CSIRO/University of
Queensland Joint Building
Project, St Lucia,
Queensland**

Parliamentary Standing Committee on Public Works

3 February 2000
Canberra

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Membership of the Committee

Chair Hon. Judi Moylan MP

Deputy Chair Hon. Janice Crosio MBE, MP

Members **House of Representatives**

Mr John Forrest MP

Mr Colin Hollis MP

Mr Peter Lindsay MP

Mr Bernie Ripoll MP

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Senator Alan Ferguson

Senator Shayne Murphy

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Extract from the Votes and Proceedings of the House of Representatives

No. 64 dated Thursday, 2 September 1999

22. PUBLIC WORKS—PARLIAMENTARY STANDING COMMITTEE— REFERENCE OF WORK—CSIRO/UNIVERSITY OF QUEENSLAND JOINT BUILDING PROJECT, ST LUCIA, QUEENSLAND

Mr Slipper (Parliamentary Secretary to the Minister for Finance and Administration), by leave 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: CSIRO/University of Queensland Joint Building Project, St Lucia, Queensland.

Question—put and passed.



1. On 2 September 1999, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the following proposed work – CSIRO/University of Queensland joint building project, St Lucia, Qld.

THE REFERENCE

2. The terms of reference were as follows:

CSIRO has entered into a joint venture agreement with the University of Queensland to provide a major new research facility on the site of the existing CSIRO Cunningham laboratory at St Lucia in Queensland. The complex will accommodate the University of Queensland's new Institute of Molecular Bioscience and the CSIRO's divisions of Tropical Agriculture, Health Sciences and Nutrition, and Plant Industry.

The new complex will provide research accommodation for approximately 285 CSIRO staff and visitors, together with accommodation for Institute of Molecular Bioscience researchers, students and visitors. It will comprise a new laboratory complex with a total gross floor area of approximately 36,000 square metres with the following components: CSIRO specialist laboratories, including for analytical chemistry, a greenhouse and a herbarium, University of Queensland specialist laboratories including for structural biology, synthetic chemistry and a vivarium, and shared facility support areas including a library, conferencing facilities, information technology support, administrative support, central wash-up, workshops, and delivery, waste and stores areas.

Associated site works include a two-to three-level car park with capacity for 295 cars, independent of the building, and site works, together with service infrastructure upgrades, roadworks and landscaping. Construction of the complex will enable CSIRO and the Institute of Molecular Bioscience to bring together, in one

structure, a large and critical mass of molecular biology skills, equipment and facilities, as well as a range of supportive and complementary activities, such as synthetic, inorganic and organic chemistry, biometrics and bioinformatics and microscopy. Co-location on the St Lucia site will provide opportunities for highly valuable interaction with the wider University of Queensland facilities. The Institute of Molecular Bioscience will add a further positive dimension to the capability of each of the CSIRO groups housed within the complex to fulfil their charter to deliver economic, social and environmental benefits to Australia.

3. When referred to the Committee, the project had a budget of \$106 million, of which the CSIRO component is \$50 million. Since referral, the total estimated cost of the proposed joint complex has been revised upwards to \$110 million to include costs associated with the construction of carparking facilities.¹ However out-turn costs of the CSIRO component of the project remain at \$50 million.²

THE COMMITTEE'S INVESTIGATION

4. The Committee received a written submission from the CSIRO/University of Queensland (UQ) and took evidence from CSIRO/UQ officials at public hearings held in Brisbane on 27 October and 16 November 1999.
5. The Committee also took evidence from:
 - Long Pocket Concerned Residents Group;
 - St Lucia Residents Against Intensive Development;
 - Mr Jock Douglas;
 - St Lucia Residents Association;
 - Biohazard Action Alliance;
 - Mrs Patricia Hart;
 - Queensland Department of Primary Industries; and
 - Daryl Jackson Pty Ltd, Architects.
6. In conjunction with the public hearing, the Committee was briefed by CSIRO and University of Queensland officials on the proposed works, and

1 CSIRO/UQ *Joint Building Project Confidential Cost Estimate*, August, 1999.

2 CSIRO/UQ, 'Statement of Evidence', *Transcript of Evidence*, p. 60.

undertook two extensive inspections of the development and surrounding residential area.

7. Written submissions were also received from the following organisations and were incorporated into the transcript:
 - Environment Australia;
 - Denver Beanland, MLA;
 - Australian Heritage Commission;
 - Queensland Government;
 - Genetic Manipulation Advisory Committee;
 - Wesley Research Institute Ltd;
 - Dr Marianne Hanson;
 - Councillor Judy Magub;
 - Mr and Mrs J. G. McLeod;
 - Heather Jensen/David Carrington;
 - Drs John Bingley and Elizabeth Dutney;
 - Professor P. Andrews, UQ; and
 - Public Transport Alliance.
8. Witnesses who appeared before the Committee at the public hearings are listed in Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

9. The CSIRO research facilities at St Lucia are predominantly occupied by CSIRO Tropical Agriculture, which was created in 1996 by the merger of the Divisions of Tropical Crops & Pastures and Tropical Animal Production. The Division, which has an annual budget of about \$33 million, provides options and solutions for northern Australian agriculture and related natural resource ecosystems. The Division also has a role as a coordinator of multi-disciplinary research directed at northern development and drawing on the resources of other CSIRO Divisions and appropriate external agencies.
10. CSIRO's Plant Industry Division has a Horticultural Crop Improvement Program which aims to improve the performance of horticultural crops using improved genetic material from molecular and conventional breeding and generating better plant management techniques. Program research in the

Brisbane laboratory at St Lucia is aimed at improving the productivity and competitiveness of tropical and subtropical horticultural crops through optimal orchard design and management practices and developing superior cultivars by conventional breeding procedures, while also using newly available smart molecular technologies.

11. CSIRO Health Sciences and Nutrition was formed in July 1999 from the combination of CSIRO Human Nutrition in Adelaide and groups from CSIRO, namely Molecular Science at Parkville Victoria, and the Molecular Science – Bioactive Molecules Initiative (BMI) at St Lucia. The BMI aims to discover, design and develop new biologically active compounds for the pharmaceutical, agrichemical, and food industries. The multidisciplinary project network is managed from Brisbane and links approximately 40 scientists from five CSIRO Divisions in six cities. The Initiative has external links to the Australian National University, the Australian Institute of Marine Science (AIMS) and, most importantly, components of the UQ Institute for Molecular Biosciences (IMB).
12. The UQ IMB, first proposed in 1993 by the Director of the UQ's Centre for Molecular and Cellular Biology, has been developed as an internationally competitive research institute to integrate research strengths in genomics, developmental biology, cellular biology, structural biology and medicinal chemistry on the St Lucia campus. The Queensland Cabinet agreed to contribute \$15 million towards the establishment of the IMB in November 1997 after representations from a Brisbane consulting firm drew attention to the extensive economic and social benefits which would flow to the State as a result of the establishment of such a research institute.³
13. In May 1999, the Queensland Premier announced that over the next ten years the State Government would contribute a total of \$77.5 million to the operating costs of the Institute as part of a major thrust to develop Queensland's biotechnology research base.⁴ Molecular biology is, in the words of one CSIRO representative:

...an area of science which is going to be central to Australia's future and particularly to international developments in science. If the last century was a century of chemistry and this century is a century of physics, then the next century is going to be a century of molecular biology of the sort described here.⁵

3 CSIRO/UQ, *Transcript of Evidence*, p. 103.

4 *Ibid.*, p. 104.

5 CSIRO, *Transcript of Evidence*, p. 71.

14. Three existing University of Queensland research centres form the core of the Institute for Molecular Bioscience. The Centres have developed close operational ties involving joint appointments and collaborative projects, and collectively represent the most contemporary fields in modern biology, ranging from genomics and gene mapping, through developmental, cellular and structural biology to medicinal chemistry and biological imaging.⁶
15. The three Centres which comprise the UQ IMB are:
 - the Centre for Molecular and Cellular Biology, which was established in 1999 to promote the development of molecular biology and its biotechnical application;
 - the Centre for Drug Design and Development, established at Bond University and moved to UQ in 1992, which researches biomolecular interactions and novel drug design; and
 - the Centre for Microscopy and Microanalysis, which undertakes imaging studies using both light and electron microscopes.
16. The profile and expertise in these Centres and the strategic importance of the grouping have resulted in other agencies (including the CSIRO) locating related research groups adjacent to these Centres.⁷ Organisations that will be, or are anticipated to be, housed in the new complex include the Australian Genome Research Facility, the Queensland Department of Primary Industry Agricultural Biotechnology Centre, and, subject to finalisation of agreements between the parties, the Wesley Research Institute.⁸

RATIONALE FOR DEVELOPMENT

17. CSIRO is progressively upgrading many old, sub-standard and inefficient laboratory buildings as funds become available, and constructing new facilities, as required, to meet changing research directions and priorities. The Committee has in recent years examined and reported favourably on CSIRO proposals for Black Mountain, ACT, Clayton, Victoria, Pinjarra Hills, Queensland, and Bentley in Western Australia. These developments are now proceeding or have been completed following Parliamentary approval.⁹
18. The CSIRO research facilities at St Lucia ('Cunningham Laboratory') now predominantly occupied by CSIRO Tropical Agriculture, were built 30–40 years ago. Since then, the ability of scientists to determine the information

6 CSIRO/UQ, *Transcript of Evidence*, p.104.

7 CSIRO/UQ, *Submission*, p. 4.

8 UQ Special Research Centre for Molecular and Cellular Biology, *Transcript of Evidence*, p 106.

9 UQ/CSIRO 'Summary Statement of Evidence', *Transcript of Evidence*, p. 59.

content of DNA and manipulate this information has led to an explosion of knowledge about genes and proteins underpinning biological function. This knowledge and its applications will transform all areas of existing economic activity relating to biological systems, and create entirely new industries.

19. Integral to most of these developments has been the introduction of new, sophisticated techniques and associated equipment. In addition, the information technology revolution has created opportunities to explore and exploit biological information and to generate and manage information for the development of sustainable resource use systems.
20. These developments, aligned with the obsolescence of the current facilities, have combined to make the current St Lucia buildings inadequate for CSIRO to continue to perform leading edge research for northern Australian agriculture and related natural resource systems.
21. Existing buildings on the St Lucia site (excepting the CSIRO Controlled Environment Facility) have problems with occupational health and safety, security and fire protection. At a public hearing into the proposed development in Brisbane, the Deputy CEO of the CSIRO said:

What we are proposing to do is consolidate existing research in a much improved facility to avoid difficulties in terms of an ageing infrastructure and some of the OH&S problems we have because of that ageing infrastructure.¹⁰
22. Infrastructure inadequacies include lack of proper ventilation and specialised fume cupboard facilities, poor air conditioning, substandard electrical and mechanical services, inappropriate space and conditions for highly sensitive equipment and inadequate fire safety measures along with inflexible spaces. In effect, the buildings have reached the replacement phase of their effective life cycle. The original design precludes refurbishment of these buildings to meet current laboratory accommodation standards.¹¹
23. The planned UQ/CSIRO research complex is a logical extension of the highly successful location of a significant proportion of the Tropical Agriculture staff within the UQ precinct since 1959. Seamless research associations have been established with agriculture, botany, biochemistry, microbiology, computer science, economics and social science teams within UQ.
24. These collocations have enabled both the CSIRO and UQ to maximise the opportunities for research interaction and collaboration, to integrate many research support facilities and to share equipment that underpins their

10 CSIRO, *Transcript of Evidence*, p. 72.

11 CSIRO/UQ, *Submission*, p. 2.

research activities. These opportunities for scientific synergies will be maintained and new opportunities will arise from the collocation of CSIRO Tropical Agriculture, the Bioactive Molecules Initiative and the group from CSIRO Plant Industry.

25. Much of the biological research performed by the groups in UQ IMB and CSIRO requires specialist equipment and instrumentation, sterile laboratory glassware and biological media preparation. Both CSIRO and UQ groups have a requirement for specialised analytical facilities requiring complex, costly instruments housed in purpose-built rooms. The proposed development will make possible considerable economies of scale and improved productivity through locating these support functions in the same building.
26. Consolidation of the proposed research facilities within generic laboratories and provision of common equipment and instrument rooms in an integrated complex of two linked buildings will maximise the flexibility of the accommodation. As well, it will enhance the opportunities for future changes within and between CSIRO and UQ research groups and programs.
27. CSIRO believes that the proposal will provide a world-class laboratory complex that will stimulate and promote research and development activities and further enhance its opportunities for conducting national and international research, consistent with its primary functions and long-term objectives. The collocation with the University of Queensland's Institute of Molecular Biosciences will provide a critical mass of molecular biology research expertise to focus on business development outcomes and provide significant cost savings through shared equipment and facilities.¹²

Committee's Conclusion

28. **The Committee accepts there are benefits to be gained by the construction of the proposed joint research complex, and that chief among these are the efficiencies and research synergies which will be facilitated by the collocation of the University's Institute of Molecular Biosciences and the CSIRO's Divisions of Tropical Agriculture, Plant Industry, Health Sciences and Nutrition.**

12 CSIRO, *Transcript of Evidence*, p. 61.

THE PROPOSAL

Overview¹³

29. The proposed UQ/CSIRO complex will comprise a new eight-level laboratory complex with a total gross floor area of approximately 35,000m² and incorporating the following CSIRO components:
 - biology laboratories;
 - shared chemistry laboratories;
 - information science laboratories;
 - specialist laboratories (analytical chemistry, greenhouse, herbarium); and
 - administrative support.
30. Associated site works will include a 2–3 level car park, independent of the building and site works, together with service infrastructure upgrades, road works and landscaping.
31. The building design will maximise opportunities for collaboration and interaction between resident and visiting scientists and provide flexibility in the use of space, whilst maintaining efficiency in area and operation.
32. The complex will provide amenity and support facilities to be shared with the UQ IMB. These facilities will include a café, reception, staff amenities, boardroom, centralised stores, wash up facilities, a conference facility, including seminar rooms and 300 seat auditorium, bulk chemical and gas stores and information technology support. Sharing these facilities will provide economies in capital and operating costs.

Site

33. The site is 1.6 hectares in area and located on the corner of Carmody Road and Chancellors Place, 6 kilometres southwest of the Brisbane Central Business District on the UQ St Lucia campus. It falls to the north-west by approximately 15 metres and has three road frontages with Carmody Road to the south, Chancellors Place and Michie Plaza to the east, and Services Lane to the north. This enables the differentiation of service vehicle access from the north, public vehicular access from the south, and pedestrian access from the east.

13 CSIRO/UQ, *Submission*, pp. 15–16.

34. It is currently occupied by CSIRO Tropical Agriculture and CSIRO Plant Industry and also contains the Controlled Environment Facility (CEF), which is principally used by CSIRO Tropical Agriculture. It is proposed that the CEF be retained on site while older, dilapidated CSIRO structures are demolished; it is further proposed that the CEF be maintained as a working facility throughout the construction phases of the project. The CEF will be dedicated to CSIRO use and have fully integrated access from the new building.
35. The site has been leased from the UQ by CSIRO since 1961. Agreement has been reached with UQ that if the project is approved by Parliament, the existing lease on the site will be surrendered and a new 99-year lease will be issued to CSIRO for the new facility and common use areas.¹⁴ The CEF will be subject to a separate lease.
36. Some community groups are opposed to the choice of site for the development, and site selection as an issue is canvassed briefly on pages 19 and 20 of the report.

Design and Standards

37. The UQ Site Development Plan has determined that:
 - Chancellor's Place will be the public transport hub of the campus;
 - Michie Plaza will be the major pedestrian hub of the campus giving access to the Great Court; and
 - a green buffer zone to the western edge of the site will separate the academic core of the University from its residential colleges.¹⁵
38. The proposed development conforms to site planning strategies. The new building will link into the University campus with a deliberate reference to the University's key space, the Great Court, but will have an identifiable 'front door' to provide an independent identity. The design will also facilitate the restructuring of adjacent University open spaces as a pedestrian plaza with bus and taxi parking.
39. Design of facilities will be consistent with the general design philosophy for all CSIRO research accommodation, ie long term flexibility (multiple use of space), adaptability (easy conversion of layout), and simplicity of maintenance (with easily accessible services).
40. In the project-based research environment, interaction is vital to provide the stimulus and cooperation necessary for constructive thought. The design will

14 Ibid., p. 6.

15 Ibid., p. 16.

offer a working environment that functions as a whole, encouraging interaction and formal and informal communications between individuals and research teams.¹⁶

41. Large areas of glass between laboratories and circulation corridors, interaction areas clustered around nodes of movement or activity, open and light stairways and spaces for display will all promote the feeling of belonging to a collegiate community and encourage regular interaction and exchange of ideas.
 42. Within the building, a central public lobby on each floor will cluster lifts, meeting rooms, open stair, and toilets in a non-territorial zone. This will draw the laboratory, computing and administrative unit personnel out of their territorial domains into a public interaction zone. Centralising the meeting rooms will sponsor greater efficiency of use. An interaction space will be provided centrally within each laboratory unit adjacent utility spaces.
 43. The library and café will be at ground level, while a roof-top terrace will provide space for future expansion while providing a landscaped area for staff recreation.
 44. The majority of offices will be located on an external wall to offer natural light and outlook. The laboratories will be located centrally to optimise accessibility from offices and the support core. Profiled ceilings rising to outside walls and glazed internal laboratory walls will allow outlook from deep within the interior of the floor and maximise natural light within the buildings.¹⁷
 45. Extensive sun shading to laboratories will exclude direct sunlight and moderate glare. Internally glazed partitions will be used to enhance the sense of openness of the laboratories. Offices clustered along the northern edge of each laboratory unit will encourage interaction amongst staff.
 46. Laboratory units will offer flexibility, with modular benching and shelving provided to respond to organisations' or user group preferences. Service spines will be separated from furnishings to allow ease of re-configuration of benches or mobile equipment trolley location.
 47. The laboratory unit will be structured to allow the flexibility to accommodate various laboratory, support core and office configurations. Non-structural partitioning will allow ease of laboratory unit re-configuration. The design is approached as a series of clearly articulated structures, circulatory and servicing systems to accommodate future change.
-

16 Ibid., p. 17.

17 Ibid., p. 18.

48. Materials, finishes and fittings will be selected for their life cycle cost efficiency, durability and minimal maintenance requirements. The dominant material will be in-situ white cement, coloured to complement the sandstone tones of nearby University buildings. Smooth-faced proprietary metal cladding systems will be integrated into the facility.¹⁸
49. The building design will be articulated as a series of vertical laminations to reduce the apparent mass of the wide blocks and to sit comfortably with the predominant vertical expression and scale of neighbouring buildings. The use of extensive sun shading will offer a richly articulated building expressive of the sub-tropical Brisbane context.¹⁹
50. The major air handling plant elements will be located to the east-west perimeter, optimising north-south façade access for light and outlook, while service risers in the support core will facilitate future exhaust handling requirements. A southern support core of repetitive modules can be used for multiple functions.
51. A service floor will accommodate major plant, support facilities and a service corridor to carry the primary service distribution network to the vertical risers. All heavy vibrating and noisy plant will be located at this level for ease of vehicular access, acoustic/vibration isolation, and to minimise service staff access up through the building.
52. Vertical risers and floor-by-floor air handling plant will be a constant relative to the flexibility of internal partitioning systems in all occupied areas. Roof level plant will be restricted to extraction systems, smoke spill, and cooling towers. Extraction fans will be located internally with space provision for future fume cupboards. Ring main distribution systems above corridors to laboratory floors will facilitate ease of access and adaptability.²⁰
53. All buildings, services and external infrastructure will comply with all relevant town planning, Commonwealth and State building, health and safety regulations and Acts, the Building Code of Australia and all relevant Australian Standards.²¹
54. Drawings associated with the proposed development are at Appendix B.

18 Ibid., p. 19.

19 Ibid., p. 19.

20 Ibid., pp18–19.

21 Ibid., p. 16.

Services and Systems

Mechanical Services

55. Mechanical services will include:²²

- air conditioning for comfort conditions in laboratories, support spaces, offices, meeting rooms, library, cafeteria, auditorium and seminar rooms;
- air conditioning for specific conditions in controlled environment rooms, electron microscope, nuclear magnetic resonance and vivarium facilities;
- central chilled water plant;
- exhaust ventilation of toilets, cafeteria kitchen, laboratories, fume cupboards, hoods and specific equipment;
- sterilising equipment;
- laboratory gases, compressed air, vacuum and natural gas;
- laboratory cooling water systems;
- building management system incorporating automatic controls for the mechanical services systems; and
- electrical works associated with the mechanical services systems.

Building Management System

56. A proprietary building management system will control and/or monitor all building engineering services throughout the facility. The system will be fully programmable with graphics interface and will incorporate facilities for external monitoring and alarming and for energy conservation.

57. The system will control and monitor:²³

- chiller plant, cooling towers and pumps;
 - air handling plant and equipment;
 - cooling and heating equipment;
 - air flows;
 - filter performance;
-

22 Ibid., p. 20.

23 Ibid., p. 23.

- constant temperature rooms;
- fume and other exhaust systems;
- vacuum plants;
- hot water generation; and
- artificial lighting.

Electrical Services

58. The electrical services for the development will include the following:²⁴

- incoming HV supply cabling from the on-campus ENERGEX HV substation;
- University of Queensland HV system modifications;
- University of Queensland LV system modifications;
- indoor high voltage switchroom and reticulation;
- indoor high voltage substations;
- low voltage switchrooms;
- standby diesel generator;
- low voltage main switchboards;
- essential and non-essential submain distribution;
- essential and non-essential distribution boards;
- distributed Uninterruptible Power Supply (UPS);
- filtering and surge suppression;
- final subcircuits;
- lighting;
- voice/data communication system;
- audio visual systems;
- electronic security and access controlled systems;
- specialist lighting;
- emergency and exit lighting;

24 Ibid., p. 23.

- general power;
- earthing;
- lightning protection;
- electromagnetic interface;
- circuit referencing; and
- interface with the Building Management System (BMS).

Lift Services

59. The lift services solution has been optimised against the floor plate size, building height and functional traffic flows. The building configuration of two large laboratory wings, communicating with a central administration wing is ideally planned for three central passenger lifts at the pivot point of traffic flow. A public lift will also service level 1 by security card control to facilitate use of the goods lift by remote operation.
60. The separation of goods traffic from passenger traffic is a major feature of the lift solution. Two goods lifts service the laboratory wings, connecting level 1 through to roof level.

Hydraulic Services

61. Hydraulic services works will include:²⁵
- house drainage and sanitary plumbing;
 - chemical waste drainage and chemical sanitary plumbing;
 - isotope waste drainage and isotope sanitary plumbing;
 - stormwater drainage from base of downpipes connecting to the civil trunk mains;
 - cold water service reticulation including potable and non-potable water supplies;
 - hot water service including potable and non-potable supplies; and
 - reverse osmosis water reticulation.
62. The hydraulic services documentation will be designed and constructed in accordance with the relevant Australian Standards, in particular AS 3500, the Brisbane City Council's Water Supply and Sewerage Department's requirements, the Water Supply and Sewerage Act, and the University of

25 CSIRO/UQ, *Submission*, pp. 26–7.

Queensland Design Standards for Construction Projects. The sanitary plumbing and house drainage system will be designed to meet the requirements of AS 3500 and the Water Supply and Sewerage Act.²⁶

63. Chemical drainage and plumbing will discharge via a stack system and an inground pipework system will be installed in a suitable material to handle any projected liquid waste. The system will in turn be treated via a neutralising trap located externally to allow for future maintenance and cleaning.
64. Isotope wastes will discharge through designated stacks which in turn connect via designated inground drainage to the legal point of discharge at the Brisbane City Council's sewer connection. This will be installed in accordance with the Queensland Radiation Safety Act of 1999 and AS 2243.
65. Stormwater drainage from the building will discharge via external downpipes to open grated gully pits, which in turn connect inground to the trunk civil stormwater mains. The size of the eaves, gutters, and downpipes will be designed in accordance with the Australian Rainfall and Runoff and AS 2180.
66. The inground stormwater drainage system will be designed to meet both the requirements of the Brisbane City Council and the University of Queensland. The piped system will be designed to a minimum 1 in 50-year storm recurrence, however investigations are in progress to ascertain if a higher recurrence interval is warranted due to the location of the proposed building with regard to the overland flow path.

Fire Services

67. Fire services for the redevelopment will include:²⁷
 - fire services water supply to the site;
 - connection to site fire alarm monitoring system;
 - automatic fire sprinkler system;
 - fire detection system;
 - emergency warning and intercommunication system;
 - fire hydrant and hose reel system;
 - portable fire extinguishers; and

²⁶ Ibid., p. 27.

²⁷ Ibid., pp 28-29.

- window-wetting sprinklers.

Communications and Security²⁸

68. The joint building project development will be provided with communications infrastructure to facilitate the information technology and functional needs of the project.
69. To cater for communications developments through the life of the building, a backbone cabling strategy of common cabling infrastructure (CCI) is proposed. This will enable a range of telecommunication systems to be interconnected using the structured cabling approach, to minimise disruption and rewiring in the building as user and equipment needs develop over time.
70. The cabling infrastructure will link voice (PABX) and data (Computer) services. Generally from the new computer/PABX rooms, multicore optic fibre (computer) and copper unshielded twisted pair back bone cabling will connect the computer/PABX rooms to floor distribution frames and fibre optic patch panels within communication rooms on each level. Horizontal cabling will link from floor distribution frames to user outlets.
71. An access control system will be provided comprising the following:²⁹
 - a centralised control and monitoring station;
 - a card based door entry system;
 - access readers at strategic locations for specific restricted areas and after hours security;
 - expansion capability to cater for increased field panels, readers, access cards and monitored points;
 - electromagnetic door locking, electric strikes, electric locks, magnetic reed switching for door monitoring as required for a complete system; and;
 - suitable technologies for card access will be utilised to coordinate with existing systems at the UQ and CSIRO sites and to suit the electromagnetic environment, in particular in areas of substantial magnetic fields.

28 Ibid., pp. 31–33.

29 Ibid., p. 33.

Roadworks and Carparking³⁰

72. Access to the multi-level carpark and porte cochere will be via Carmody Road and will be designed in accordance with Australian standards.
73. Proposed road improvements will include:
 - carparks to accommodate approximately 215 carparking spaces, including three disabled carparking bays;
 - access from Carmody Road for cars;
 - manoeuvring area and loading docks for service and delivery vehicles; and
 - pedestrian footpaths.
74. Other minor improvements to area roads have been recommended after a traffic study was undertaken as part of a project-related environmental assessment report prepared by Dames & Moore. Suggested improvements are described in the 'Issues' section on page 28 of this report.

Landscaping³¹

75. Landscaping will be provided to diminish the apparent height of the carparking structure and provide a green buffer to the building. Shade trees to the access courtyard will encourage year-round use of this public space.
76. The associated UQ campus enhancement works will create a new gateway entry to the campus and the new building facilitating pedestrian safety, public transportation, access for persons with disabilities, shade and extensive planting.
77. Hard landscaping will be integrated with paving works to enhance the urban design concept, which will be further expanded with associated works by the UQ.

Special Features

Energy Conservation³²

78. The building concept supports ecologically sustainable design, based on a combination of passive and active design strategies.

30 Ibid., p. 33.

31 Ibid., p. 33.

32 Ibid., p. 34.

79. The building's passive design initiatives will be coordinated to minimise the quantum of energy that the building absorbs from the environment, and thereby the utilisation of electricity in removing that energy.
80. Primary passive solutions will be encompassed in the building form and orientation. The proposed major east-west axis will minimise major solar exposure. Large shaded glazed wall areas to the north and south will optimise outlook and the use of natural daylight for lighting in lieu of artificial light sources.
81. Façade construction will observe principles of high thermal resistance through concrete mass, or by using insulated lighter weight construction materials with insulation of air spaces. The façade will be a reactive device providing not only solar control and high thermal resistance, but also a well-sealed system so as to avoid any pressurisation levels in laboratories.
82. The design of plant will be based on optimum efficiency, sized and stepped in size to closely match the thermal response characteristics of the building, thereby allowing plant to operate at its most efficient operational positions.
83. The range of active engineering devices proposed includes:
 - high efficiency central chiller plant, located at the geographic load centre of the building;
 - low velocity constant volume multi-zone air handling systems;
 - direct digital building management system;
 - highly zoned plant to allow switching off of unoccupied spaces as well as localised temperature setback zones;
 - daylight compensation lighting control systems around the perimeter of the building to reduce the reliance on artificial lighting systems;
 - variable speed drives of fluid handling plant, such as fume cupboards, cooling towers, etc;
 - inherent flexibility and adaptability of building systems including logical and accessible servicing strategies will be balanced against the objective of minimising capital cost; and
 - life cycle cost and flexibility cost benefit evaluations will be undertaken on detailed elements through the design process.

Noise Control

84. The following complex design features will minimise noise: ³³
- plant rooms will be attenuated to treat noise transfer;
 - flexible connections to air handling equipment will be used; and
 - roof top plant will be enclosed to control noise emanating from the site.
85. Noise control as an issue, in particular mitigation strategies to minimise noise during construction, is discussed later in this report on pages 26–27.

Childcare Provisions

86. A UQ childcare centre, located within the St Lucia campus, provides childcare facilities for staff from UQ and organisations, including CSIRO, located on the UQ campus. A parenting room will be provided in the proposed complex, adjacent to the reception area.

Occupational Health and Safety

87. CSIRO pursues an active Occupational Health and Safety Policy in the workplace and this will be extended to include all new facilities. Strict compliance with these requirements will be adhered to in all construction work.

Disabled Access

88. The building will be designed to ensure access for persons with disabilities to meet the requirements of the relevant Australian Standards and the Building Code of Australia.
89. A total of five lifts will provide access to all floors of the new facility.

Cost and Timetable

90. Total project cost at August 1999 prices is \$110 million. The estimated cost for the CSIRO component of the proposal is \$50 million, inclusive of escalation costs, contingencies, all professional fees and authorities charges. This estimate does not include the cost of relocating staff and equipment from existing facilities and loose furniture and fittings.³⁴
91. Subject to Parliamentary approval after examination of the proposal by the Public Works Committee, it is proposed that early works packages be

33 Ibid., p. 35.

34 Ibid., p. 35.

implemented to allow site establishment works to begin in December 1999. Construction is expected to be complete in 2002.

ISSUES

Planning

Site Selection

92. The site sits within the University of Queensland St Lucia Campus and development is controlled by the University's 1996 Site Development Plan. At public hearings on the proposed development and subsequently in a letter to the Committee, the University said the proposed development site conforms with the principles of the Site Development Plan and was preferred to other potential development sites on the St Lucia campus because:

- it is the only site identified as large enough to accommodate the proposed development; and
- it is located in the relevant precinct close to the buildings accommodating the Faculty of Biological and Chemical Sciences.³⁵

93. Some community representatives have argued it is inappropriate to build such a facility so close to a residential community, and in a highly built-up area within the University of Queensland; they have suggested that other sites on UQ land, for example at Pinjarra Hills, or on other UQ campuses (at Gatton or Ipswich) would be more suitable.³⁶

94. Project proponents were asked whether they had considered other possible development sites, and they defended the proposal to build the new complex on the St Lucia site by arguing that St Lucia is where the vital infrastructure of researchers and students is³⁷, and furthermore that the capital cost of establishing the proposed complex on an alternative greenfield site would exceed the cost of the current proposal.³⁸ In the words of the UQ's Deputy Vice-Chancellor (Research):

Location of the Joint Building Project at St Lucia is ... a critical success factor in its own right by the unique blend of expertise and infrastructure that it provides. It would be impossible to relocate all of the facilities, equipment and expertise that will be vital to the

35 CSIRO, *Transcript of Evidence*, p. 289.

36 RAID, *Transcript of Evidence*, p. 131.

37 CSIRO, *Transcript of Evidence*, p. 72.

38 *Ibid.*, p. 289.

JBP and its researchers. Moreover, it would be unrealistic to remove the researchers from such infrastructure and support.³⁹

Committee's Conclusion

95. **The Committee is satisfied there are sound reasons for building the joint CSIRO/University of Queensland molecular biology research complex on the site proposed by developers, and that it is neither practical nor efficient to insist that the facility be located on another University of Queensland campus or site.**

Approval Exemption

96. Residents of St Lucia unhappy about the size and siting of the proposed new building, which will lie on the boundary of the UQ campus and a residential area, have noted that developers have not sought planning approval for the proposed development under the Integrated Planning Act 1997⁴⁰.
97. The University has pointed out that it has internal planning processes for the detailed consideration of development proposals, and furthermore that it is legally exempt as a 'public sector entity' from the requirement to seek development approval from the Brisbane City Council.⁴¹ The St Lucia Residents Against Intensive Development (RAID) questioned the legality of the University's claim of exemption from formal planning approval processes, and asserted that the BCC town planning group supports their view that the UQ is obliged to obtain BCC approval for the proposed development.⁴² The Committee received a submission from a Brisbane City Councillor arguing that, in her view, public sector entity status does not exempt the University from needing BCC approval for development proposals.⁴³
98. The issue of the University's planning approval exemption, in particular whether this has enabled project proponents to ignore Brisbane City Council planning guidelines in the design of the facility, was canvassed at public hearings in Brisbane. While the University and the CSIRO defended the merits of the design of the proposed new building in terms of BCC

39 UQ, *Transcript of Evidence*, p. 210.

40 RAID, *Transcript of Evidence*, p. 125.

41 CSIRO, *Transcript of Evidence*, p. 203.

42 RAID, *Transcript of Evidence*, p. 132.

43 BCC, *Transcript of Evidence*, p. 202.

guidelines, they did acknowledge that '...the zoning which we presently enjoy permits special purposes, special uses, and this is one of them'.⁴⁴

99. The University insists that its planning approval exemption status is both legal and appropriate; furthermore, it has advised that it is endeavouring to have the St Lucia Campus designated as 'community infrastructure' to enable a continuation of its planning approval exemption status beyond the current expiry date of 30 March 2000. Despite this, project proponents have said that, because of the significance of the proposed Joint Building Project, they intend to submit a development application to the Brisbane City Council to seek its endorsement of the proposed development.⁴⁵
100. The Committee notes the difference of legal opinion on the matter of proponents' entitlement to planning approval exemption, and suspects that some confusion about entitlements has resulted from the introduction of new State legislation and changed local government planning requirements. In this context, the Committee is satisfied that project proponents have attempted to comply with what they have understood to be the requirements of government. The Committee is satisfied that good faith has been demonstrated by the proponents' preparedness to submit a development application to the BCC for its endorsement. The Committee assumes that project proponents will continue to demonstrate this good faith by agreeing to make any building adjustments recommended by the BCC after its scrutiny of the Joint Building Project proposal.

Committee's Recommendation

101. **The Committee commends project proponents' decision to seek the endorsement of the Brisbane City Council for the proposed Joint Building Project at St Lucia, and recommends that the University of Queensland and CSIRO demonstrate their good faith by agreeing to make any adjustments to building plans which may be suggested by the Brisbane City Council.**

Community Consultation

102. The CSIRO/UQ submission for the proposed Joint Building Project lists the names of agencies contacted and/or consulted during the preparation of the submission. The list includes a number of Commonwealth, State and local

44 UQ, *Transcript of Evidence*, p. 303.

45 CSIRO, *Transcript of Evidence*, p. 290.

government agencies, a federal MP, a local MLA, a Councillor, a union representative, and representatives of five other organisations (eg, Telstra).⁴⁶

103. In addition to this, CSIRO and the UQ claim to have conducted initial community consultation and information sessions through a series of meetings with community group representatives and media announcements dating from December 1996. Over a period of several years, the Vice-Chancellor of the University of Queensland has appeared in numerous radio and television interviews, at public fora and meetings of community services groups, where he has outlined future plans for the University and spoken, in particular, of the importance of this project.⁴⁷
104. Despite the efforts of the University to advertise intentions with regard to the proposed Joint Building Project, the Committee has received a large amount of oral and written evidence challenging the quality, sincerity and adequacy of the consultation processes engaged in by project proponents.
105. While the University maintains that community groups have had adequate opportunity for input about the project since the site for the complex was announced in August, 1998, concerned residents feel that consultation did not begin in earnest until late August 1999, when the building project was already, in their view, a *fait accompli*.
106. Oral evidence taken at a public hearing in Brisbane in October 1999 from one of the project proponents appears to confirm residents' suspicion that the preferred approach of the CSIRO and UQ was indeed to plan first, and inform the community afterwards:
- We have only had one public consultation meeting, which was an information session as much as anything else because that was the only stage where we had plans in a suitable state to demonstrate to the community what we were proposing to do. As a result, the community is now fully aware of the building and what it is going to look like. Our intention is to provide more information progressively so they can get a better understanding of what both the University and CSIRO are doing in the design and construction of this building.⁴⁸
107. The Committee is aware that, since a public meeting on the Joint Building Project was convened by the Hon Denver Beanland, MP, on 6 October, 1999, project proposers have stepped up their efforts to communicate their plans with local residents and community groups. Furthermore, the Committee has

46 CSIRO/UQ, *Transcript of Evidence*, pp 18–19.

47 CSIRO, *Transcript of Evidence*, p. 294.

48 *Ibid.*, p. 67.

received assurances from the CSIRO and UQ that a Community Liaison Committee will be established to provide a forum for the exchange of information as well as the opportunity for concerns raised to be addressed by the project team.⁴⁹

108. In the view of the Committee, the establishment of the Community Liaison Committee is a welcome development, especially if it provides residents with scope to influence the course of events throughout the construction period. As the Committee pointed out to project proposers at public hearings in Brisbane, public consultation is supposed to be a two-way process where the community's concerns are heard, and appropriate adjustments are made.⁵⁰
109. However, it would have been preferable for the UQ and the CSIRO to have established such a liaison committee before plans were well advanced, and the views of residents had a better chance of impacting on planning outcomes. The Committee notes that the CSIRO is at present making what appear to be genuine attempts at community consultation with regard to a proposed research facility at Indooroopilly. A similar engagement of St Lucia community groups at an earlier stage might have enabled an avoidance of the kind of opposition to the project the Committee has witnessed, and which it believes to have been in large part avoidable.

Committee's Recommendations

110. **The Committee recommends that project proponents honour their commitment to hold regular meetings of the Community Liaison Committee to facilitate project implementation and minimise community disturbance levels during the construction phase of the St Lucia Joint Building Project.**
111. **The Committee further recommends that in future, when projects of this kind are conceived and community concerns can be anticipated, project proponents establish a community consultative committee in the early stages of planning to facilitate community input and the resolution of conflict.**

49 Ibid., p. 304. Also, *CSIRO Letter to Committee Chair*, 23 November, 1999.

50 PWC, *Transcript of Evidence*, p. 314.

Environmental Impacts

Visual

112. Residents in surrounding areas have objected to the height, bulk, and shape of the proposed complex, which has been variously described as 'giant', a 'seven-storey Godzilla', and 'a complex about the size of the Myer Centre ... which will rise like a cliff face over Carmody Road'.⁵¹
113. In fact, the proposed complex is of a significant size, comprising three, eight-storey buildings and a multi-level carpark. At public hearings, project proponents and the architect responsible for the design of the complex were invited to explain the design to the Committee and the public. In particular, the Committee was interested to hear why the proposed building did not assume a more efficient, singular, form, and whether a lower (less obtrusive) building design had been considered.
114. The principal architect on the project said:

A building of this size, as everyone acknowledges, is rather large. We sought to build it as close as we could to the footprint of the existing building site. We did some studies, for instance, of a five-storey building which occupied the whole of the land space. We did this study which pushed the components of the building into three elements – mainly to maintain a sense of scale for such a building with other associated buildings already on the university site. It creates good efficiencies in terms of the operation of the units. It provides good natural light to the building envelope within, and it provides essential connected services from the service road to both those elements.

Scientists working in these buildings require good natural light as well as a very flexible floor plate. These are large floor plates, as everyone acknowledges. Had we made it just one building, it would have been even larger. The mass of the building would have occupied a greater site area. What might appear to you to be an arrangement which is not efficient is indeed efficient from the point of view of the operation of the building itself.⁵²

115. The Committee is aware that the building proposal already contains features designed to minimise the problems of building height: underground levels, blocks which are tapered and stepped to minimise apparent size, and

51 RAID, *Transcript of Evidence*, p. 135.

52 Daryl Jackson Pty Ltd., *Transcript of Evidence*, p. 306.

landscaping to 'enhance and complement the massing of the building'.⁵³

Nevertheless the Committee was keen to ascertain whether in fact there was any more scope for altering the design of the complex to accommodate the concerns of Carmody Road residents about building bulk and height.

Unfortunately, the Committee does not see how existing and new structures on the St Lucia Campus can be reconfigured in a way that results in a size reduction.

116. Residents living close to the proposed new complex have expressed concern about the possibility of being 'over-shadowed' by the big buildings⁵⁴, and asserted that they will be inconvenienced by shadows cast at certain times of the day and year.⁵⁵ Initial shadow studies carried out in accordance with Brisbane City Council guidelines indicate that there will be minimal overshadowing of residences adjacent to the site.⁵⁶ Two residences directly across Carmody Road will be partially covered by shadow between 10 and 11 am on winter mornings. However, the extent of overshadowing complies with BCC requirements, and no other residences will be affected by shadows.⁵⁷

117. Another matter related to building height, which is of great concern to some residents, is an anticipated lack of privacy. As one resident explained:

...none of us want to be watched. We do not want strangers having an opportunity to observe all our movements.⁵⁸

118. CSIRO has told the Committee it is aware of local residents' concerns regarding loss of privacy, and project proponents have assured the Committee they are prepared to address the issue as part of 'ongoing development of the design' expected to continue through June 2000.⁵⁹ The Committee thinks that this matter is eminently suitable for consultation and resolution through the recently established Community Liaison Committee.

53 CSIRO, *Transcript of Evidence*, p. 290.

54 RAID, *Transcript of Evidence*, p. 133.

55 St Lucia Residents Association, *Transcript of Evidence*, p. 169.

56 CSIRO, *Transcript of Evidence*, p. 291.

57 Dames & Moore, *Environmental Assessment Report: UQ/CSIRO Joint Building Project*, p. 43.

58 RAID, *Transcript of Evidence*, p. 143.

59 CSIRO, *Transcript of Evidence*, p. 292.

Committee's Recommendation

119. **The Committee recommends that project proponents use the Community Liaison Committee to address and resolve, as much as is practicable, resident concerns associated with building height, such as the potential loss of privacy.**

Noise and Congestion

120. The Committee received a number of submissions from community groups and private citizens concerned about increased levels of noise and congestion expected to result from construction activities and the traffic and parking pressures likely to be associated with project implementation.
121. Joint Building Project proponents have acknowledged that construction activities will generate some noise but argued that this will be limited by statutory requirements at various stages, for example when earthmoving plant is involved. In addition to this, preliminary noise mitigation strategies have been developed⁶⁰ which contractors will be expected to implement during the construction phase of the project. Hours of construction activity are to be controlled, and limitations placed on haul routes.⁶¹ Plant used during construction is expected to be well maintained with high efficiency mufflers and attenuators, and noise and vibration will be monitored by a specialist acoustic engineer during critical operations. Project proponents are aware that noise mitigation strategies may need to be refined as project implementation proceeds, and the UQ's intention to establish a 24-hour hotline for residents during construction⁶² should facilitate this, and effectively minimise the detrimental impacts of construction activities.
122. Residents opposed to the project argue that the development, described by them as being of 'vast proportions', threatens to increase the already large St Lucia campus population and '...smother the surrounding residential suburbs'.⁶³ Associated with increased population density, these residents expect to see an intensification of carparking and traffic flow problems which they argue already adversely affect the area.⁶⁴

60 By Ron Rumble Pty Ltd, referred to in Dames & Moore's *Environmental Assessment Report: UQ/CSIRO Joint Building Project*, 22 November, 1999, p. II.

61 CSIRO, *Transcript of Evidence*, p. 294.

62 UQ, *Transcript of Evidence*, p. 75.

63 St Lucia Residents' Association, *Transcript of Evidence*, p. 149.

64 RAID, *Transcript of Evidence*, p. 135.

123. While the proposed new complex is expected to accommodate 750 University and CSIRO staff, project proponents point out that the majority of these staff are already in place. According to them, the net increase in population at St Lucia generated by the project is in the order of 330 people, an insignificant number '...when compared to the current population of approximately 30,000'.⁶⁵
124. It is proposed to construct a parking structure to accommodate 220 cars on the Carmody Road site, primarily for CSIRO use. Carparking for University staff is already provided in centralised University carparking facilities around the academic core and away from Carmody Road.⁶⁶
125. Project proponents advise there is likely to be a net decrease in the population at the St Lucia Campus by the time the project is completed as students and staff progressively move to the University's Ipswich Campus. The University has told the Committee it expects the relocation to the new campus to reduce overall numbers on the St Lucia Campus by 1000–1200 in the next two years.⁶⁷
126. The CSIRO and UQ are satisfied that the projected reduction in the St Lucia Campus population will alleviate area traffic and parking congestion and that the new development will cause only a minimal traffic increase on Carmody Road. However in response to community concerns about traffic congestion and public safety in what has been described as a 'very difficult street environment'⁶⁸, project proponents commissioned Connell Wagner to undertake a traffic study to investigate proposed project impacts on traffic flows on Carmody Road.
127. A seven-day traffic survey of the local road network conducted by Connell Wagner in October 1999 indicated that during the demolition and construction phase of the proposed project, heavy vehicle traffic along Carmody Road would increase by 40–80 per cent, but that afterwards there would be no net increase in traffic to the site as a result of the operation of the new laboratory complex.⁶⁹
128. However, the study recommended that the geometry of Carmody Road be slightly altered to accommodate anticipated traffic needs; specifically, Connell Wagner have proposed that the road on the northern side of Carmody Road be widened to accommodate a painted median.⁷⁰
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65 CSIRO, *Transcript of Evidence*, p. 298.

66 *Ibid.*, p. 298.

67 CSIRO, *Letter to Chair*, 23 November, 1999.

68 Public Transport Alliance, *Transcript of Evidence*, p. 227.

69 Dames & Moore, *Environmental Assessment Report: UQ/CSIRO Joint Building Project*, 22 November, 1999, p28.

70 *Ibid.*, p. 27.

Furthermore, they have recommended that to improve what they describe as an 'undesirable arrangement' at the intersection of Dell Road and Carmody Road, a median island be provided at Dell Road to inhibit unwanted U-turn movements and provide protection for pedestrians.⁷¹

129. The Committee has some sympathy for residents concerned about possible noise and congestion impacts in the vicinity of their residences, but is of the view that the problems identified by residents are not insurmountable. Indeed, the Committee is satisfied that project proponents have addressed the concerns expressed, and that suitable strategies and measures have been developed to adequately address the noise and congestion expected to result from project implementation.

Committee's Recommendation

130. **The Committee recommends that the University of Queensland/CSIRO implement all the noise mitigation strategies and road geometry alteration measures outlined in the Environmental Assessment Report prepared by Dames & Moore for this project.**

Biohazard Potential

131. At public hearings into the proposed new research facility, the head of CSIRO's Agriculture Division outlined the nature of the work to be undertaken in the proposed new facility. The type of research to be conducted was described as basic and applied biological science for both plant and animal sciences and also for nature resource management. Biotechnology would be employed, although only a very small part of this would be related to the creation of genetically modified organisms (GMOs). Scientists would work with some types of bacteria under conditions requiring biological containment, but '... mostly for the integrity of the science'.⁷²
132. Research in the proposed new complex will involve the use of organisms requiring either the PC2 or PC 3 level of biological containment. The vast majority of laboratory area will require only the base level (PC2) of containment, involving the adoption of good work practices (eg wearing lab coats) for the protection of research workers. Two areas within the proposed complex will require a higher level (PC3) of containment because scientists there plan to work with infectious organisms which could present a serious hazard to laboratory workers and a limited risk to the community. However

71 Ibid., p. 28.

72 CSIRO, *Transcript of Evidence*, p. 75.

project proponents have emphasised that the sum total of laboratory area requiring the PC3 level of biological containment is very small, comprising 60 square metres of a total area of 35,000 square metres (or, 0.17 per cent).⁷³

133. The Genetic Manipulation Advisory Committee (GMAC), a federal government committee responsible for monitoring all recombinant DNA research, is required to certify large PC2 facilities and PC3 laboratories. Project proponents have advised the Committee they have discussed with GMAC the aspects of project design which are relevant to biocontainment for genetically manipulated organisms; GMAC is satisfied with facility planning thus far and project proponents will continue to liaise with GMAC to ensure that biocontainment facilities are designed and constructed to comply with relevant guidelines.⁷⁴
134. While residents have been assured no very high-level containment laboratories (PC4) would be present in the proposed complex at St Lucia⁷⁵, some strongly oppose the presence of PC3 facilities in residential suburbs⁷⁶ and have concerns about the transfer⁷⁷ and disposal of hazardous material⁷⁸, as well as general '...alarm that escape of genetically modified organisms and contamination of the natural environment will have irreversible consequences and a profound effect upon biodiversity'.⁷⁹
135. CSIRO have advised the Committee that, with regard to waste management, its practices are governed by a number of national standards and guidelines⁸⁰ as well as the University's own (accredited) environmental management system. Waste from the new building will be segregated to separate infectious or potentially infectious from other waste streams. All infectious or potential infectious waste will be steam sterilised (autoclaved) before it is discarded into pathology waste bins. These will then be collected by a licensed waste contractor and incinerated in a high temperature incinerator.⁸¹
136. The Committee asked the CSIRO about the possible transfer of biohazardous material from the proposed St Lucia facility to another (the National Science Precinct) which is planned for Indooroopilly, and expected to have PC4 level biocontainment facilities. The CSIRO said that:

73 Ibid., p. 293.

74 Ibid., pages 154 and 292.

75 Ibid., p. 293.

76 St Lucia Residents Association, *Transcript of Evidence*, p. 171.

77 St Lucia Residents Association, *Transcript of Evidence*, p. 151.

78 RAID, *Transcript of Evidence*, p. 124.

79 St Lucia Residents Association, *Transcript of Evidence*, p. 150.

80 CSIRO, *Transcript of Evidence*, p. 292.

81 Ibid., p. 293.

We would not expect significant transport of materials between the two, certainly not of anything sensitive or dangerous.⁸²

137. The CSIRO further advised the Committee there are a number of guides, guidelines, codes and regulations governing the transportation of hazardous material. While emphasising it does not expect there will be a large volume of outgoing material from the St Lucia facility, CSIRO maintain that adherence to pertinent regulations will be the responsibility of the manager of the new laboratory complex.⁸³
138. The Committee is satisfied with the assurances provided by project proponents that the nature of the research to be conducted in the new facility poses no threat to community safety, and furthermore that this is fundamentally no different in kind from that which has been undertaken over the past 25 years.⁸⁴ It is reassured by the observation about biotechnology made by the Director of the UQ's Research Centre for Molecular and Cellular Biology that '... to the best of my knowledge...there has been no example of a serious problem arising from this technology in 25 years of research...'⁸⁵

Committee's Conclusion

139. **Evidence received by the Committee about the research to be undertaken at the proposed facility and the regulations and procedures established to manage any associated biological hazards has satisfied the Committee that the proposed facility does not pose any threat to the safety of the community.**
140. The Committee appreciates that not everyone shares the sanguine outlook on biotechnology expressed by research scientists, obviously keen to see the proposed research complex built. Some residents remain strenuously opposed to the construction of the research facility and, while the Committee does not share their alarmist views about microbiological research, it has endeavoured to allay their anxieties by eliciting information from project proponents and helping residents to obtain answers to questions they have about the facility.
141. The Committee believes that community anxiety about the proposed development might not have escalated in the way it has if residents had earlier access to appropriately detailed information about what was

82 Ibid., p. 70.

83 Ibid., p. 294.

84 PWC, *Transcript of Evidence*, p. 138.

85 UQ, *Transcript of Evidence*, p. 107.

proposed. The Committee has taken evidence from witnesses who claim that University authorities have ignored their questions, and treated them with arrogance and hostility.⁸⁶ An obligation now exists for the project proponents to improve their information dissemination and public consultation processes to alleviate community concerns and to encourage greater support for the proposal.

Committee's Recommendation

142. **The Committee recommends that, in future, there must be adequate public consultation processes for projects of this nature. These processes must embrace a greater degree of transparency and openness, and encourage a greater spirit of collaboration with the local community.**

Committee's Final Recommendation

143. **The Committee recommends the construction of the CSIRO/University of Queensland Joint Building Project at St Lucia, Queensland, at a total cost of \$110 million, of which the CSIRO component is \$50 million.**

CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations of the Committee and the paragraphs in the report to which they refer are set out below:

- 1. The Committee accepts there are benefits to be gained by the construction of the proposed joint research complex, and that chief among these are the efficiencies and research synergies which will be facilitated by the collocation of the University's Institute of Molecular Biosciences and the CSIRO's Divisions of Tropical Agriculture, Plant Industry, Health Sciences and Nutrition. (Paragraph 28)**
- 2. The Committee is satisfied there are sound reasons for building the joint CSIRO/University of Queensland molecular biology research complex on the site proposed by developers, and that it is neither practical nor efficient to insist that the facility be located on another University of Queensland campus or site. (Paragraph 95)**

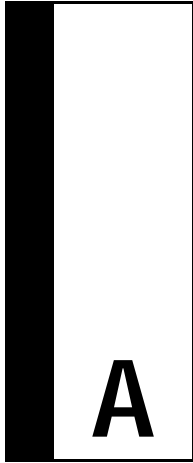
⁸⁶ St Lucia RAID, *Transcript of Evidence*, p. 128.

- 3. The Committee commends project proponents' decision to seek the endorsement of the Brisbane City Council for the proposed Joint Building Project at St Lucia, and recommends that the University of Queensland and CSIRO demonstrate their good faith by agreeing to make any adjustments to building plans which may be suggested by the Brisbane City Council. (Paragraph 101)**
- 4. The Committee recommends that project proponents honour their commitment to hold regular meetings of the Community Liaison Committee to facilitate project implementation and minimise community disturbance levels during the construction phase of the St Lucia Joint Building Project. (Paragraph 110)**
- 5. The Committee further recommends that in future, when projects of this kind are conceived and community concerns can be anticipated, project proponents establish a community consultative committee in the early stages of planning to facilitate community input and the resolution of conflict. (Paragraph 111)**
- 6. The Committee recommends that project proponents use the Community Liaison Committee to address and resolve, as much as is practicable, resident concerns associated with building height, such as the potential loss of privacy. (Paragraph 119)**
- 7. The Committee recommends that the University of Queensland/CSIRO implement all the noise mitigation strategies and road geometry alteration measures outlined in the Environmental Assessment Report prepared by Dames & Moore for this project. (Paragraph 130)**
- 8. Evidence received by the Committee about the research to be undertaken at the proposed facility and the regulations and procedures established to manage any associated biological hazards has satisfied the Committee that the proposed facility does not pose any threat to the safety of the community. (Paragraph 139)**
- 9. The Committee recommends that, in future, there must be adequate public consultation processes for projects of this nature. These processes must embrace a greater degree of transparency and openness, and encourage a greater spirit of collaboration with the local community. (Paragraph 142)**
- 10. The Committee recommends the construction of the CSIRO/University of Queensland Joint Building Project at St Lucia, Queensland, at a total cost of \$110 million, of which the CSIRO component is \$50 million. (Paragraph 143)**

Hon. Judi Moylan MP

Chair

3 February 2000



Appendix A—Witnesses

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Dr Elizabeth Gordon Heij, Chief of Division, Tropical Agriculture

Dr Christopher Patrick Mallett, Deputy Chief Executive

Mr Trevor Laurence Moody, Asst General Mgr, Corporate Property

Mr John Takats, Project Manager, Corporate Property

Dr William Henry Winter, Mgr, Infrastructure and Services, Tropical Agriculture

Daryl Jackson Pty Ltd, Architects

Mr Mark Roehrs, Associate Director

Long Pocket Concerned Residents Group

Dr Andrew Lindsay Byth

Mr Allan Bruce Wilson

Private Individuals

Mr Jock Douglas, AO

Mrs Patricia Hart

St Lucia Residents Against Intensive Development

Mrs Mary Julia Cavanagh, Committee Member

Mrs Robyn Emerson, Coordinator

Mr Scott Emerson

Ms Poh-Ling Tan, Vice-President

St Lucia Residents Association

Mr James Elliott, Member

Mr John Massey, Chairman

Dr Peter Ridley, Member

Queensland Department of Primary Industry

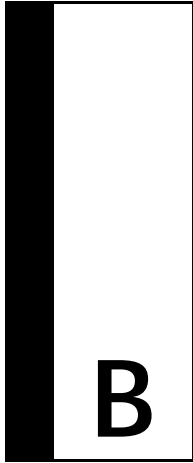
Mr John Pollock, Executive Director, Fisheries

Dr Ken Reed, Director, Queensland Agricultural Biotechnology Centre

University of Queensland

Professor John Mattick, Director, Special Research Centre for Molecular and Cellular Biology

Mr Alasdair McClintock, Director, Property and Facilities Division



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