Parliamentary Standing Committee on Public Works

REPORT

relating to the

REDEVELOPMENT OF SURGICAL AND DIAGNOSTIC FACILITIES

at

Repatriation General Hospital, Concord, N.S.W.

(Tenth Report of 1984)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA 1984

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(Twenty-Seventh Committee)

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EXTRACT FROM
THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES
NO. 57 DATED 8 MARCH 1984

15 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - REPATRIATION GENERAL HOSPITAL, CONCORD, NSW - REDEVELOPMENT OF FACILITIES: Mr. Hurford (Minister for Housing and Construction), 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: Redevelopment of surgical and diagnostic facilities at Repatriation General Hospital, Concord, NSW.

Mr. Hurford presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

CONTENTS

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REDEVELOPMENT OF SURGICAL AND DIAGNOSTIC FACILITIES AT REPATRIATION GENERAL HOSPITAL CONCORD, NEW SOUTH WALES

R E P O R T

By resolution on 8 March 1984 the House of Representatives referred to the Parliamentary Standing Committee on Public Works the proposal to redevelop surgical and diagnostic facilties and construct a central store at Repatriation General Hospital, Concord, New South Wales.

The Committee has the honour to report as follows.

THE REFERENCE

1. The proposed works comprise extensions and modifications to the existing Main Administration Building to provide a suite of six operating theatres and support facilities, a Central Sterilising and Supply Department and expansion and rearrangement of the Pathology and Organ Imaging Departments. The works proposed also include construction of a central store, and site works, roads, car parking and landscaping associated with the major works.

THE COMMITTEE'S INVESTIGATION

2. The Committee received written submissions and drawings from the Departments of Veterans' Affairs and Housing and Construction and took evidence from their representatives at a public hearing at the Hospital on 11 April 1984. Written

submissions and evidence were also received from Concord Municipal Council, the Australian Veterans and Defence Services Council and the Electrical Engineering Division of Email Limited. A list of witnesses is at Appendix A.

3. Prior to the public hearing the Committee inspected existing operating theatres which it is proposed to replace, and the accommodation for the Departments of Pathology and Organ Imaging. An existing store in a former kitchen, and the sites for the proposed extensions and main store were also inspected.

4. The Committee's proceedings will be printed as minutes of evidence.

BACKGROUND

5. The Department of Veterans' Affairs is responsible for administration of benefits available to eligible people under the Repatriation Act 1920 and associated legislation. These benefits include medical and hospital treatment for approved war service related disabilities and, for some veterans, all medical conditions. Serving members of the armed forces are admitted as required, while the Act also allows general community admissions if provision of treatment does not adversely affect medical treatment of otherwise entitled patients.

6. The Repatriation General Hospital, Concord, is located 10 kilometres west of Sydney on a 23 hectare site on the southern bank of the Parramatta River. It was originally constructed in 1941 as a Military Base Hospital and was known as the 113th Australian General Hospital. It is operated by the Repatriation Commission through the Department of Veterans' Affairs.

7. RGH Concord is a general hospital with some 725 beds and provides acute medical, surgical, rehabilitation and psychiactric services. The Hospital does not provide long term nursing care, and pediatric and post-natal patients are referred to other hospitals after initial examination.

8. RGH Concord is affiliated with the University of Sydney, and provided teaching facilities for 153 undergraduate students in 1983. The Hospital has extensive affiliations with learned Colleges and tertiary institutions for post graduate studies. The Hospital has provided training facilities for nurses but these responsibilities are to be transferred to Colleges of Advanced Education in the next 3 years.

9. The Department of Veterans' Affairs has fostered development of arrangements with State health authorities to avoid unnecessary duplication of facilities. Repatriation General Hospitals have developed special facilities and expertise for entitled beneficiaries, but some high cost facilities cannot be justified for the use of repatriation beneficiaries alone. Working arrangements have been developed to allow rationalisation of facilities, with repatriation patients being admitted to State hospitals for specialised treatment as required.

10. Community patients are essential to establish a range of clinical conditions which will attract and stimulate the highest quality staff to attend to the needs of veterans. In 1983 some 22% of bed-days were utilised by community patients, though this figure has been substantially higher in the past. The Repatriation Commission has decided that a limit of 20% community patients should provide an adequate mix to maintain treatment standards and professional interest.

THE NEED

11. The need for the proposed facilities arises primarily from the changing requirements of the Hospital since it was constructed in 1942. In essence the proposal is to modernise, rationalise and redevelop facilities in accordance with current demands and practices.

12. The Department of Veterans' Affairs presented evidence which shows that on best available estimates the number of entitled Repatriation treatment beneficiaries in NSW will decline from 124 071 in June 1983 through 116 485 in June 1990 to 75 142 in June 2000. However, because of the increasing need for treatment of individual beneficiaries as they grow older, the peak demand for hospital beds will occur in about 1990 and then decline steadily. The forecast acute surgical bed demand is for 289 beds in 1985, 296 in 1990, 261 in 1995 and 215 in 2000, for presently entitled treatment beneficiaries.

13. Two factors indicate that Concord RGH will not decline in importance as these figures would appear to show. First, there has been a trend over the years to expand the entitled population and the categories of treatment for which various veterans are entitled. While this is a matter for government determination from time to time, it is clear that pressure to increase the treatment entitlements of veterans and their relatives will continue.

14. Second, it is apparant that if high standards of staff and facilities are to continue to be available to veterans, it will be essential to maintain a dynamic hospital environment at Concord, if necessary by increasing the number of community patients to offset a decline in demand from entitled beneficiaries.

15. Against the background of a continuing demand for Concord from both veterans and community patients, the Department of Veterans' Affairs needs to, among other things:

- expand and rationalise diagnostic facilties;
- replace operating theatres constructed in 1942;
- expand and rationalise surgical facilities;
- create a burns unit;
- redevelop the Outpatients Department;
- upgrade laundry facilities, the medical gas system and Multistorey Building lift system;
- modernise and air condition Ramp Wards 1 and 3;
- develop a geriatric assessment and rehabilitation unit; and
- install a nuclear magnetic resonator.

16. The Department of Housing and Construction has developed a Master Development Plan to accommodate these and other notional developments on the Hospital site with maximum benefit and minimum long term cost.

17. The Department of Veterans' Affairs has concluded that of those proposals requiring reference to the Committee, the current proposals are those for which there is greatest immediate need. The total indicative cost of remaining projects is $35 million.

18. Operating Theatres Replacement of the three existing Suite 1 operating theatres is essential. The operating theatres were constructed in 1942. They are too small and cannot be redeveloped to take account of the requirements of modern surgical procedures and practices. The Committee accepts this assessment.

19. Expansion of the number of operating theatres is required to allow the hospital to meet current demands, including the necessity to keep one theatre available at all times for emergency procedures. The theatres will be used 8 hours per day, 5 days per week. Surgical waiting times have doubled in the past twelve months.

20. The hospital undertakes almost 9 000 surgical procedures each year in two operating suites, Suite 1 on the seventh floor of the Multistorey Block and Suite 3 on the second floor of the Administrative Building.

21. The three operating rooms in suite 1 are nearly 40 years old and do not have the capacity to undertake modern surgical procedures in a sterile environment. The operating theatres are restricted in size to 32 square metres, below accepted standards for modern teaching hospitals.

22. There are no anaesthetic induction rooms and inadequate post surgery recovery space. The Suite is incapable of being refurbished to meet these requirements.

23. Committee's Conclusion Three of the existing operating theatres at Repatriation General Hospital, Concord, are not suited to modern surgical practice requirements and should be replaced. The assessed requirement is for six new operating theatres. Together with the remaining four theatres these will provide one integrated suite of ten operating theatres, adequate and necessary for this hospital, and provide capacity to meet existing and future demand.

24. Diagnostic Facilities Expansion of space for diagnostic facilities in the areas of nuclear medicine, ultrasound, radiology, microbiology, immunology and pathology are required to allow for the increased demands and increased sophistication of these services. Evidence was provided that space for these services is inadequate and that some services have been curtailed while in nearly all cases working conditions are well below acceptable standards.

25. Further, these functions have been placed in various buildings around the site, which has lead to inefficient and sometimes dangerous moving of patients and has markedly reduced consultation between specialists in closely related disciplines.

26. Committee's Conclusion There is a need to expand and rationalise accommodation for the Pathology and Organ Imaging Departments. Existing facilities are overcrowded and their decentralised locations lead to inefficiency in patient treatment.

27. Store It was stated in evidence that the existing store system is inefficient, and that a purpose built central store would allow an improved service for the same operating cost. The new store would be one element of a major revision of stores procedures, which are currently undergoing internal management review.

28. Committee's Conclusion There would be advantages to the Hospital in constructing a central store.

THE PROPOSAL

29. Surgical and Diagnostic Facilities It has been proposed to meet the identified medical needs by concentrating surgical and diagnostic facilities in an extended Main Administration Building and the immediately adjacent floors of the adjoining Multipurpose Building.

30. Certain functions, including administration, would be displaced from their current locations to allow the most rational use of space.

31. The size of the proposed extensions is determined by the desirability of locating all 10 operating theatres (4 existing and 6 new) on one floor level and adjacent to the existing Intensive Care Unit in the Multipurpose Building. The theatres will occupy the second floor of the extended Main Administrative Building. The gross floor area of the extensions proposed is 6,760 square metres.

32. The third floor will be occupied by a relocated Central Sterilizing and Supply Department which will provide all theatre needs.

33. The first floor will be occupied by the Organ Imaging Department and some of the displaced administration functions.

34. The ground floor will be largely occupied by the Pathology Department and the remaining administration functions, with some 300 square metres made available for a formal entrance area.

35. The proposed extensions have been designed externally to match the existing buildings.

36. Plans of the proposed work are at Appendix B.

37. Internal materials and finishes and provision of mechanical services will be appropriate to the requirements of the proposed facilities in a modern public hospital.

38. The proposal includes provision of engineering services including cold water supply, sewer and stormwater drainage, light and power, and hot water. The Surgical and Diagnostic extensions will have additional services and equipment including air conditioning, emergency power supply, sterilising plant and fume cupboards.

39. Central Store The proposed central store is a purpose designed industrial building of some 1,260 square metres located close to a suitable entrance to the Hospital site and adjacent to major present and proposed store users. It would take advantage of existing underground access to the Multipurpose and Main Adminstrative buildings.

40. Site Works It is also proposed to undertake various site works associated with the main proposals. These include revisions to the road system to improve access for emergency vehicles and vehicle deliveries to the new store; construction of a car park to replace spaces lost on the site of the proposed surgical and diagnostic facilities and to accommodate vehicles of additional staff associated with expansion of these functions; and upgrading of hydraulic and electrical services where necessary. The areas directly affected by the proposals will be relandscaped in keeping with the character of the site.

41. Committee's Conclusions The proposed work meets the need for replacement, expansion and rationalisation of accommodation for surgical and diagnostic facilities at Concord Hospital. The work is functional, cost effective and in keeping with the existing environment of the site.

42. The proposed central store building is an appropriate response to the requirement.

43. The proposed site works are necessary and should satisfy requirements of users of the hospital site and adjacent residents.

OTHER OBSERVATIONS

44. Support The proposals have the support of ex-service organisations and the NSW Department of Health. There appears to have been extensive and useful consultation with professional staff in the hospital departments directly affected.

45. Outpatients Department The Outpatients Department, which handles in excess of 200 000 attendances each year, is rather remote from both present and proposed diagnostic facilities. Records for outpatients are apparently stored in several buildings on-site and some are stored off site, which causes significant inconvenience. Vehicluar access to the outpatients area is not adequately catered for. The Committee notes that redevelopment of Outpatients is listed on the Hospital's priority projects.

46. While the Committee has recommended construction of a central store it is not convinced that provision of accommodation for centralised housing of Outpatients Department records should not have been accorded equal or higher priority. Early consideration should be given to a firm proposal for redevelopment of Outpatients.

47. Operating Theatre Design At the public hearing, the Committee received evidence from Mr G A J Gibbs, Engineering Manager, Email Limited - Electrical Engineering Division, concerning a new concept in operating theatre design.

48. The concept is essentially for an open plan operating theatre and attendant areas, incorporating laminar flow air circulation and clean room techniques. Mr Gibbs presented two examples of possible theatre layouts applying the new concept, that he developed (as a consulting engineer) in conjunction with a firm of architects in 1976.

49. Mr Gibbs stated that the concept was based on proven clean room techniques used in pharmaceutical manufacturing, avionics and microelectronics, and it should be readily adaptable to operating theatres. Nevertheless, to achieve maximum benefit from its implementation, a total rethink of operating theatre design would be necessary, from each of the architectural, engineering and medical points of view.

50. Mr Gibbs pointed out that the system of laminar flow enclosures and clean room techniques has been included in five major hospitals in Australia during the past 10 years. However, most have been additions to conventionally designed operating theatres and some have been a late inclusion in the planning and design stage. A system has not yet been planned and installed in conjunction with operating theatres of totally new design.

51. Due to the technical nature of the scheme the Committee is unable to assess it fully and recommends that a team of architectural, engineering, biological and medical experts be set up to evaluate the proposal. The team should also include representatives of the Departments of Health and Veterans' Affairs and should report to the Minister for Housing and Construction.

52. Committee's Conclusion The Committee recommends that a multi-disciplinary study team be established to evaluate the operating theatre concept put forward by Email Limited.

53. Long Term Development Planning The Committee notes a Master Development Plan was developed concurrently with the proposed work. The Committee believes such a plan is indispensible in assessing capital works proposals of this nature and recommends continuing efforts be made in critically evaluating, refining and developing the Master Plan as a basis for assessing Hospital development options.

54. Committee's Recommendation The Committee recommends that a Standing Committee consisting of senior Commonwealth and State officials, and others co-opted as necessary, be established in each State, charged with the responsibility to recommend long term policy and planning for the Repatriation General Hospital in each State towards and beyond the year 2000. It is suggested that consideration be given to such Committees in the context of the present inquiry into the future of Repatriation General Hospitals announced recently by the Minister for Veterans' Affairs.

55. Use of Vacated Space There were no references to future use of vacated space in the submissions placed before the Committee though the matter was covered in evidence. It appears that little formal consideration has been given to this matter. Costs of redevelopment of vacated space have not been included in the limit of cost.

LIMIT OF COST

56. The limit of cost of the work when referred to the Committee was $12.1 million at December 1983 prices. The limit of cost comprises the following:

Surgical and Diagnostic Development	$ m
Building Works	5.56
Mechanical and Electrical	3.86
Fire Protection, Hydraulics, Emergency Power and Equipment	1.08
Stores Building	0.80
External Works	0.80
TOTAL	12.1m

57. In addition, it is estimated that some $4.5 million will be required for purchase of specialised equipment and surgical instruments to be accommodated and used in the proposed development.

PROGRAM

58. It is estimated that preparation of main contract documents, invitations and analysis of tenders will require 12 months after Parliamentary approval. Construction time following acceptance of the main contract is estimated to be 27 months.

59. Committee's Recommendation The Committee recommends construction of work in this reference.

RECOMMENDATIONS AND CONCLUSIONS

60. A summary of the recommendations and conclusions of the Committee is set out below. Alongside each is shown the paragraph in the report to which it refers.

		Paragraph
1.	THREE OF THE EXISTING OPERATING THEATRES AT REPATRIATION GENERAL HOSPITAL, CONCORD, ARE NOT SUITED TO MODERN SURGICAL PRACTICE AND REQUIREMENTS AND SHOULD BE REPLACED.	23
2.	THE ASSESSED REQUIREMENT IS FOR SIX NEW OPERATING THEATRES. TOGETHER WITH THE REMAINING FOUR THEATRES THESE WILL PROVIDE ONE INTEGRATED SUITE OF TEN OPERATING THEATRES, ADEQUATE AND NECESSARY FOR THIS HOSPITAL, AND PROVIDE CAPACITY TO MEET EXISTING AND FUTURE DEMANDS.	23

(D.J. FOREMAN)
Chairman

Parliamentary Standing Committee
on Public Works
Parliament House
CANBERRA

3 May 1984

WITNESSES

Alexander, P. C., Esq., Honorary Secretary, The Australian Veterans and Defence Services Council, and Federal Secretary, RAAF Association, PO Box C83, Clarence Street, Sydney, New South Wales

Colombo, D. W., Esq., Project Manager, Department of Housing and Construction, New South Wales Regional Office, Sydney, New South Wales

Emerton, I. D., Esq., First Assistant Secretary, Management Services, Department of Veterans' Affairs, Canberra, Australian Capital Territory

Gibbs, G. A., Esq., Engineering Manager, Air Handling Products, Electrical Engineering Division, Email Ltd, 30 Auburn Road, Regents Park, New South Wales

Mead, L. H., Esq., Deputy Commissioner, New South Wales Branch, Department of Veterans' Affairs, Sydney, New South Wales

Mould, Dr J. W., Deputy Chief Director, Medical Services, Department of Veterans' Affairs, Canberra, Australian Capital Territory

Roxburgh, R. D., Esq., Associate Director, Projects, Department of Housing and Construction, New South Wales Regional Office, Sydney, New South Wales

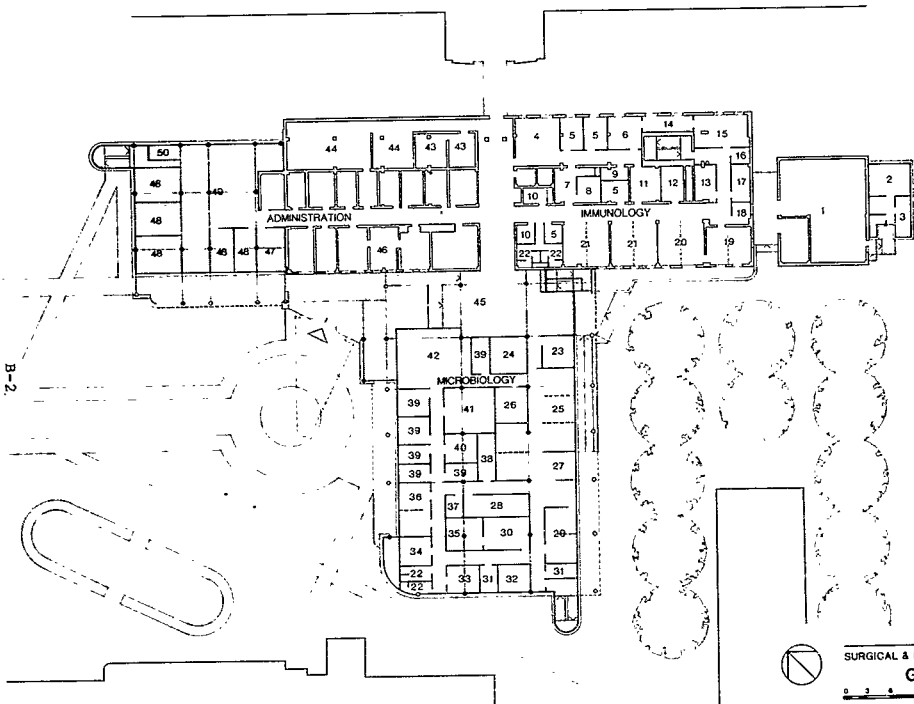
Scanlan, M. A., Esq., Assistant Secretary, Health and Communications, Department of Housing and Construction, Canberra, Australian Capital Territory

Trabinger, N. T., Esq., First Assistant Secretary, Treatment Services, Department of Veterans' Affairs, Canberra, Australian Capital Territory

Williams, R. J., Esq., Municipal Health Surveyor, Principal Building Inspector and Town Planner, Concord Municipal Council, PO Box 28, Concord, New South Wales

APPENDIX B

LEGEND
1 Main Entrance
2 Building 69 'Mutekuding'
3 Nurses Home
4 Laundry
5 Ramp Wards
6 New Link Road
7 Mod. Rooms to Building
8 Mod. Rooms to Building
Building 71
9 New Surgical & Diagnostic Block
10 New Accident & Emergency
Vehicular Access
11 Existing Car Park
SITE PLAN
YARALLA BAY
BRAYS BAY
HOSPITAL ROAD
FREMONT STREET
CUMMAVANG STREET
BULLIMBIRRA AVENUE



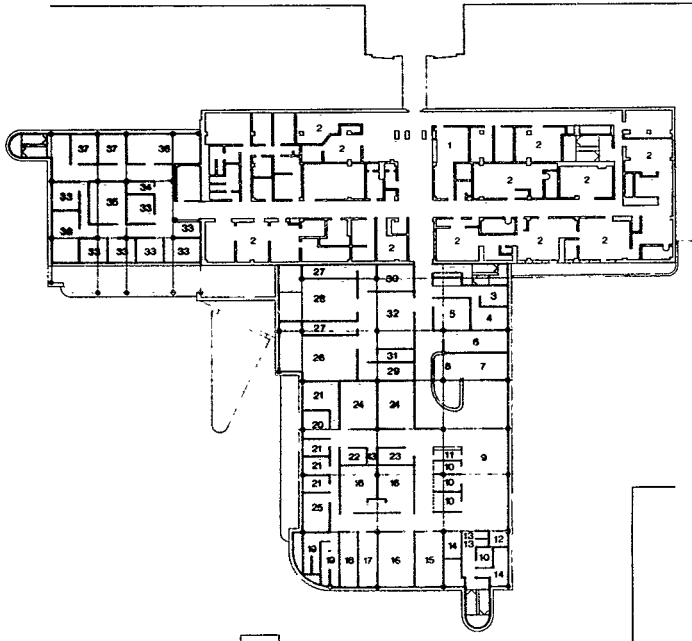
LEGEND

PABX
1 Existing PABX Equipment
2 PABX Operators
3 PABX Rest Room
IMMUNOLOGY
4 Reception and General Office
5 Office
6 Utility Room
7 Specimen Reception
8 Patient Procedures
9 Records
10 Store
11 Instrument Room
12 Cold Room
13 Media Preparation
14 Animals
15 Research & Development Lab.
16 Dark Room
17 Microscopy Laboratory
18 Balance Room
19 Sterile Laboratory
20 Radioisotope Laboratory
21 Immuno-Chemistry Laboratory
SHARED
22 Changerooms/Toilets
23 Lounge/Tea Room
24 Library/Seminar Room
MICROBIOLOGY
25 Main Diagnostic Laboratory
26 Computer
27 Antibiotics Laboratory
28 Media Prep. & Plate Pouring
29 Dangerous Pathogens Lab
30 Glassware Prep. & Washup
31 Store
32 Virology Laboratory
33 Mycology Laboratory
34 Tissue Culture Laboratory
35 Glass and Media Sterilisation
36 Hepatitis B & Serology Lab.
37 Hot Room
38 Cold Room
39 Office
40 Special Function Laboratory
41 Specialist Laboratory
42 Reception and General Office
43 Museum Preparation
44 Endocrinology Laboratory
ADMINISTRATION
45 Entrance Lobby
46 Existing Offices
47 VMO Lounge
48 Office
49 General Office
50 Toilet

SURGICAL & DIAGNOSTIC BUILDING

GROUND FLOOR

0 3 6 12 18 24m



LEGEND

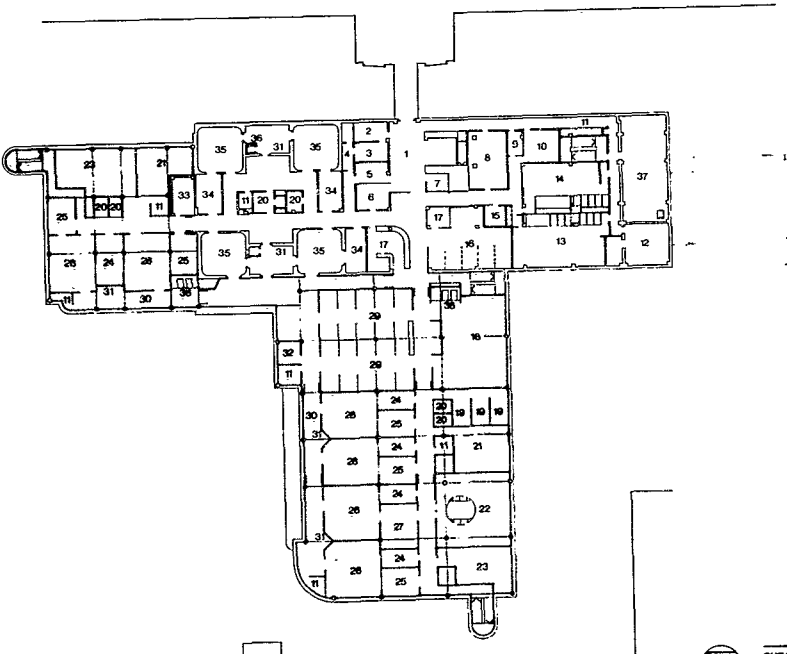
ORGAN IMAGING

1 Existing Radiology Reception/ General Office
2 Existing Radiology Diagnostic and Support Rooms
3 Technicians Work Room
4 Office
5 Linen
6 Store
7 Scans/Records Store
8 Reception/General Office
9 Patients Waiting
10 Examination/Therapy
11 Sisters' Station
12 Pan Room
13 Patient WC
14 Hot Room
15 Laboratory (Radioisotope Labelling)
16 Gamma Camera
17 Computer
18 Scan Library
19 Lockers, Toilets & Showers
20 Reporting
21 Office
22 Sterile Preparation
23 Dark Room
24 Ultrasound
25 Common Room
26 Cardiac Catheterisation
27 Control Room
28 Digital Angiography
29 Computer
30 Sterile Store and Prep.
31 Dark Room
32 Patient Holding
33 Office
34 Store
35 Conference
36 Library
37 Lockers, Toilets & Showers
38 Common Room

SURGICAL & DIAGNOSTIC BUILDING

FIRST FLOOR

0 3 6 12 18 24m



B-4

LEGEND

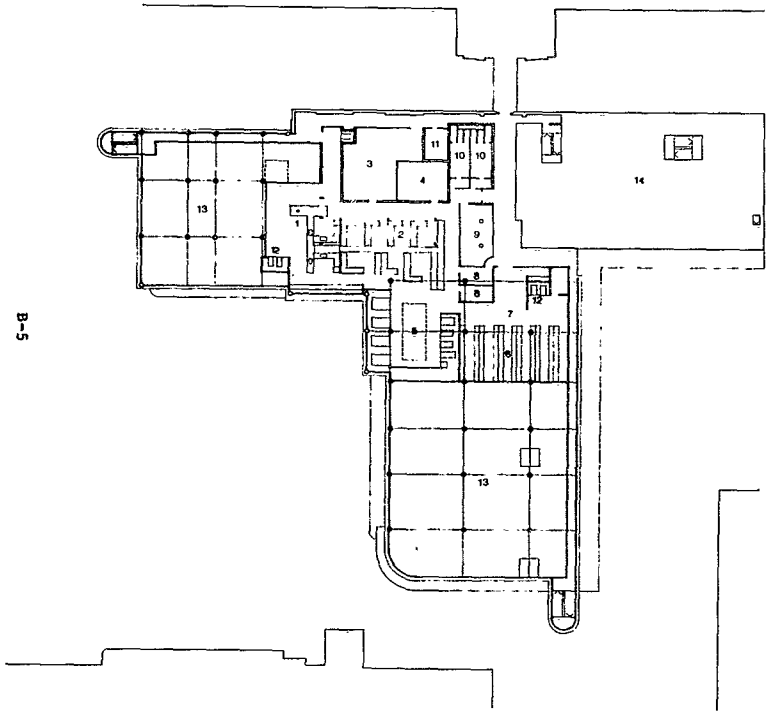
OPERATING SUITE

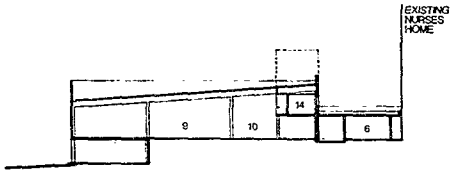
1 Entrance and Transfer
2 Reception/Control
3 ADN Office
4 Records
5 Office, Director of Anaesthesia
6 Office, Clinical Instructor
7 Porters Base
8 Conf/Seminar Room
9 Sterile Stock Holding
10 Bio-Med Engineer
11 Cleaners'
12 Orderlies Lounge
13 Female Change
14 Male Change
15 Office, Visiting surgeons
16 Patient Waiting Area
17 Staff Base
18 Sterile Store
19 Office, Anaesthetist
20 Write up Booth
21 Anaesthetic Store and Cleaning
22 Staff Lounge and Kitchen
23 Equipment Store
24 Scrub up and Gowning
25 Anaesthetic Room
26 Major Op/Theatre
27 Anaesthetic Room and Plaster Store
28 Op Theatre
29 Recovery
30 Exit Corridor
31 Flash Steriliser
32 Dirty Utility
33 Dark Room
34 Existing Anaesthetic Room
35 Existing Op/Theatre
36 Service Lifts Op/CSSD
37 Existing Plant Room

SURGICAL & DIAGNOSTIC BUILDING

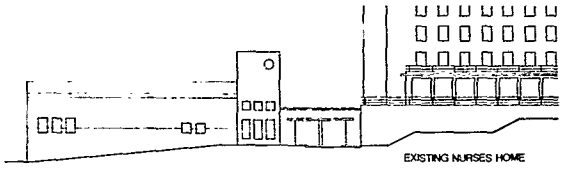
SECOND FLOOR

0 2 5 10 15 20m

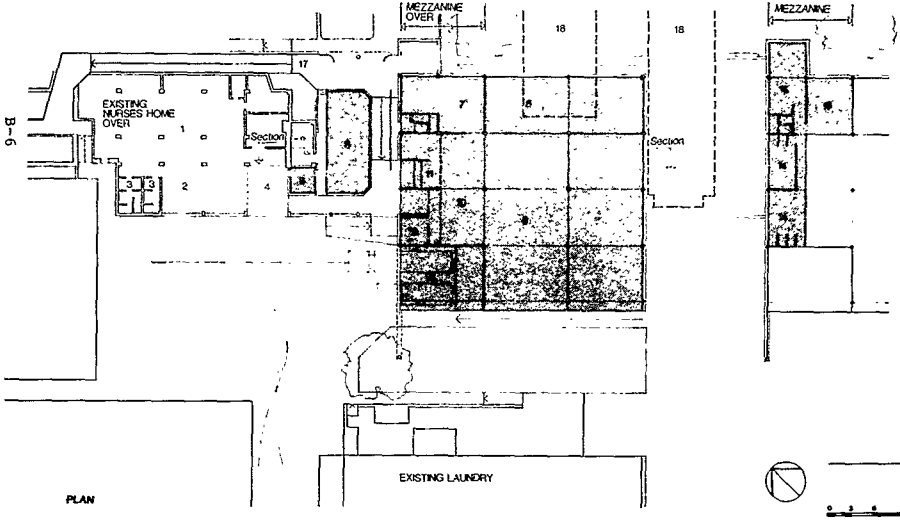

B-5
LEGEND
CSSD
1 Clean Up Room
2 Preparation and Packaging Area
3 Unsterile Stock Store
4 Holding Store
5 Sterilising Area
6 Sterile Store
7 Despatch Area
8 Office
9 Staff Lounge
10 Staff Change
11 Cleaner's Base
12 Service Lifts
13 Plant Room
14 Existing Plant Room
SURGICAL & DIAGNOSTIC BUILDING
THIRD FLOOR



SECTION



NORTH/EAST ELEVATION



PLAN

LEGEND

1 Existing Drug Store
2 New Drug Store
3 Existing Toilets
4 Existing Loading Dock
5 Pharmacist's Office
6 Administration
7 Surgical Aids Store
8 I.V. Fluids Store
9 Medical Store
10 Preparation and Issue
11 Counter
12 Office
13 Loading Dock
14 Staff Change
15 Staff Lounge
16 Plant Room
17 Tow Motor Access
18 Buildings demolished