



Parliamentary Standing Committee on Public Works

REPORT

relating to the

REDEVELOPMENT OF THE ROYAL MILITARY COLLEGE, DUNTROON

Canberra, A.C.T.

(Third Report of 1984)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

1984

1 9 8 4

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

relating to the

REDEVELOPMENT OF THE
ROYAL MILITARY COLLEGE,
DUNTROON,

Canberra, A.C.T.

(Third Report of 1984)

Australian Government Publishing Service
1984

© Commonwealth of Australia 1984

Printed by C.J. THOMPSON, Commonwealth Government Printer, Canberra

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Twenty-Seventh Committee)

Senator Dominic John Foreman (Chairman)

The Honourable Wallace Clyde Fife, M.P. (Vice-Chairman)

Senate

House of Representatives

Senator Gerry Norman Jones

David Bruce Cowan, Esq., M.P.

Senator Bernard Francis

Peter Hertford Drummond, Esq., M.P.

Kilgariff

Leonard Joseph Keogh, Esq., M.P.

Eamon John Lindsay, Esq., M.P.

John Saunderson, Esq., M.P.

EXTRACT FROM

THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES

NO. 48 DATED 7 DECEMBER 1983

- 20 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - ROYAL MILITARY COLLEGE, DUNTROON, A.C.T. - REDEVELOPMENT: Mr Hurford (Minister for Housing and Construction), pursuant to notice, moved - That, in accordance with the provisions of the Public Works Committee Act 1969, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for reconsideration and report: Redevelopment of the Royal Military College, Duntroon, Canberra, A.C.T.

Mr Hurford presented plans in connection with the proposed work.

Question - put and passed.

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

1914

C O N T E N T S

Paragraph

THE REFERENCE	1
THE COMMITTEE'S INVESTIGATION	3
BACKGROUND	7
Committee's Report on ADFA	14
THE NEED	15
Centralised Training	17
Existing Facilities	21
Cadets' Mess	22
Living Accommodation	23
Gymnasium	25
Military Instruction Block	26
Medical and Dental Facilities	27
Committee's Conclusion	30
THE PROPOSAL	
Redevelopment Strategy	31
Cadets' Mess Extensions - Description	33
Construction Details	34
Ventilation	35
Physical Fitness Centre - Description	37
Construction	38
Heritage Considerations	39
Committee's Conclusion	45
Military Instruction Block	46
Ventilation	47
Committee's Conclusion	50
Cadet Accommodation - Anzac Block	51
Alternatives Considered	54
Committee Consideration	58
Committee's Conclusion	61

Paragraph

Cadet Accommodation - Chemistry Block	62
Committee's Conclusion	64
5th Camp Hospital - Description	65
Consideration	68
Hospital Functions	69
Utilisation	70
Alternative Defence Health Care Facilities	73
Interface with Local Health Services	76
Ventilation of the Proposed Hospital	80
Summary	85
Committee's Conclusion	86
Engineering Services and Landscaping	87
Mechanical Services	88
Civil Engineering Works	90
Site Electrical Works	91
Landscaping	93
Committee's Conclusion	94
ENVIRONMENTAL CONSIDERATIONS	95
CONSULTATION	97
ESTIMATED COST	99
PROGRAM	100
Committee's Recommendation	101
RECOMMENDATIONS AND CONCLUSIONS	102

APPENDICES

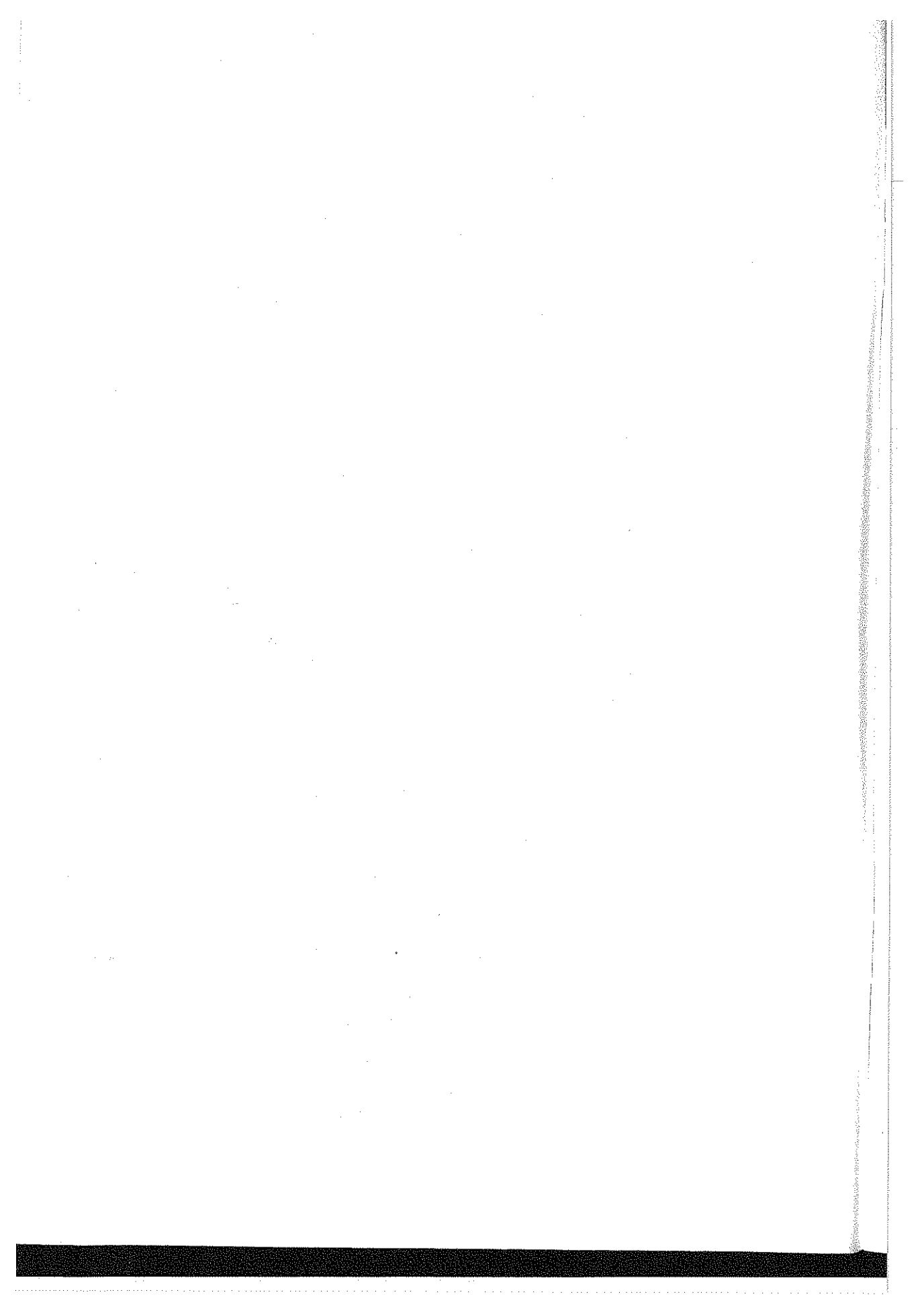
Page

APPENDIX A. - LIST OF WITNESSES

A-1

PLANS

Location Plan	B-1
Redevelopment Strategy	B-2
Site Plan	B-3
Cadets' Mess Extensions - Perspective	B-4
Physical Fitness Centre - Elevations	B-5
Refurbishment Military Instruction Block - Plan Level 1	B-6
Refurbishment Military Instruction Block - Plan Level 2	B-7
Refurbishment of Anzac Block - Plan Level 1	B-8
Refurbishment of Anzac Block - Plan Level 2	B-9
Refurbishment of A33 - Plans, Section and Elevations	B-10
5th Camp Hospital - Perspective	B-11
5th Camp Hospital - Elevations	B-12



PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REDEVELOPMENT OF THE ROYAL MILITARY COLLEGE,
DUNTROON, CANBERRA, A.C.T.

R E P O R T

By resolution on 7 December 1983 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report: Redevelopment of the Royal Military College, Duntroon, Canberra, A.C.T.

The Committee has the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee is for the Stage 1 elements of a long term plan to redevelop the living, working and training facilities at the Royal Military College (RMC) Duntroon. It covers those initial works necessary for the effective transition of the College to its new role in centralised officer training following the opening in 1986 of the Australian Defence Force Academy (ADFA). It will also provide for the medical care of military staff and cadets from ADFA and RMC.

2. The major elements of the proposed work are:

- a new 36-bed hospital;
- extensions to and renovation of the existing cadets mess;

- refurbishment of existing instruction blocks and conversion of buildings to cadet accommodation;
- a new physical fitness centre; and
- associated siteworks, demolition, engineering services and landscaping.

The estimated cost of the work when referred to the Committee was \$11.1 million at August 1983 prices.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions from the Department of Defence (Defence) and the Department of Housing and Construction (DHC), and took evidence from their representatives at a public hearing held in Canberra on 8 February 1984. The Committee inspected existing facilities and the proposed sites of new buildings prior to the public hearing.
4. Written submissions were also received from the Capital Territory Health Commission, the Australian Heritage Commission and the Department of Finance. On 2 March 1984 the Committee wrote to Defence requesting further information and clarification of a number of aspects relevant to the proposed hospital. The Defence response, received on 28 March, was accepted as evidence. Further written information was received from the Department of Finance on 12 April and from Defence on 26 April.
5. A list of witnesses and the organisations which they represented is at Appendix A.
6. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

7. Apart from a short period in the 1930s RMC has functioned at Duntroon since 1911 with a charter to produce commissioned officers for the Australian Regular Army. The College occupies approximately 150 hectares of land on the eastern slopes of Mount Pleasant about 4 kilometres east of Canberra City. It also controls and makes extensive use of the Majura Field Firing Range of some 4000 hectares located five kilometres east of Duntroon. (See Location Plan B-1)

8. RMC is at present affiliated with the University of New South Wales through the Faculty of Military Studies.

9. Under present arrangements Army Officer cadets undertake three or four year tertiary courses followed by one year of pre-commissioning (military) training at RMC. RMC will relinquish its tertiary training responsibilities in January 1986 when ADFA assumes responsibility for providing tertiary training of officer cadets of the three services.

10. Army officer cadet training is not limited to RMC. The Officers Cadet School (OCS) at Portsea, Victoria, and the Women's Royal Australian Army Corps (WRAAC) School, Georges Heights, NSW, provide training for General Service Officers (GSO). Special Service Officers (SSO) such as doctors, dentists, nurses, and legal officers, who are recruited as commissioned officers, are given induction training at the Land Warfare Centre (LWC), Canungra, Queensland.

11. With the commencement of ADFA pre-commissioning training of Army ADFA cadets will be carried out at RMC. In order to maximise the use of existing RMC facilities and to provide a more uniform standard of pre-commissioning training, it is proposed to consolidate all such training at RMC. In other words the OCS, the WRAAC School and officer training carried out at Canungra will be relocated to RMC.

12. ADFA will have a military and civilian population exceeding 1600. Very few RMC facilities will be used by ADFA. If the present arrangement of dispersed pre-commissioning training were to continue only 100 ADFA Army officer cadets would require training at RMC. As a result existing RMC facilities and staff would be under-utilised. Furthermore, to retain the OCS at Portsea would mean that identical staff and facilities would be required. There are clearly savings to be achieved by centralised military training at RMC although Defence were unable to quantify the extent of the savings in terms of manpower and requisite recurrent expenditure. Other advantages of centralised training are as follows:

- consistency in the initial pre-commissioning process for all commissioning courses;
- women officers would be brought into the mainstream of officer development;
- achievement of a common standard of military competence on commissioning for all general service officers; and
- removal of perceptions of the importance of avenues of entry in relation to career development and prospects.

13. The Cadet population of RMC after 1986 will under these arrangements be about 430 - about the same as at present. However, commencing in 1986 all RMC cadets will receive pre-commissioning military training at the one time. At present only 25 per cent of the RMC cadets receive military training at a given time. The remaining 75 per cent receive academic training.

14. Committee's Report on ADFA The Committee's report on ADFA (Second Report of 1979, Parliamentary Paper 115/1979) recommended against the construction of facilities for ADFA and suggested a number of arrangements for officer training for consideration by the three Services. The Committee suggested that Army officer training be consolidated at RMC. In the event, the Committee's principal conclusion that the works for ADFA should not proceed were rejected by the Government. ADFA site works commenced in December 1980; contracts for the first building works were awarded in October 1981. The project was 40 per cent completed overall as at December 1983. When referred to the Committee in 1978 the estimated cost of the proposed work was \$52.8 million February 1978 prices. The current estimated cost is \$100.9 million. DHC advised that the cost increase is due solely to price indexation since February 1978.

THE NEED

15. The need for the redevelopment of a number of existing facilities and the provision of new facilities at RMC has arisen from the following factors:

- (a) the commencement of, and the transfer of tertiary training responsibilities to, ADFA;
- (b) the centralisation of all Army officer cadet training at RMC;
- (c) the scope for shared use of facilities by RMC and ADFA; and
- (d) the condition of facilities at RMC for pre-commissioning military training of significantly larger numbers of cadets and the capacity and condition of facilities which could be shared with ADFA.

16. In brief, there is a requirement for facilities to enable the effective transition of RMC as a tertiary/military training institution to a purely military training role to be achieved. Opportunities for the sharing of facilities between ADFA and RMC have also been identified and are considered below.

17. Centralised Training The mainstream of training at RMC will be of 18 months comprising three terms of six months. Courses will overlap with a direct entry intake every January and July. The July entry course will be joined after six months by army cadets graduating from ADFA and they will complete the remaining twelve months together.

18. The requirement for Australian Regular Army Officers from 1986 is assessed as being 300 per year. Of these about 224 GSOs will be required to meet the Army's manning needs. To achieve this output an annual input of 317 RMC cadets will be necessary. Planned 1986 intakes will comprise the following:

- Term 1 - 148 direct entry cadets (including 15 female and 14 foreign cadets);
- Term 2 - 160 comprising 101 post - ADFA Cadets and 59 direct entry cadets (including 17 female and 27 foreign cadets);
- Term 3 - 128 direct entry cadets remaining from January intake (including 15 female and 14 foreign cadets); and
- Total - 436 cadets.

19. SSOs who will normally be commissioned prior to arrival at RMC will undertake 12 weeks induction training prior to commencing service as a regular officers. Two courses per year will normally be required with up to 50 officers comprising each course. They will use facilities provided for cadets.

20. Taking into account the overlapping structure of courses and overseas cadets, the cadet population will exceed 430 for extended periods. During the shorter periods when SSO courses are being conducted the course population could exceed 480.

21. Existing Facilities The facilities at RMC Duntroon include some dating back prior to the acquisition of the property by the Commonwealth in 1910, with the remainder being constructed at various periods during the 73-year history of the College. Some of the older buildings have heritage value and are included or proposed for inclusion on the Register of the National Estate (RNE). Many buildings, initially constructed as temporary accommodation, have had to be retained beyond their economical life because of indecision on the future of the College, and the shortage of funds for replacement.

22. Cadets' Mess The existing messing facilities were originally designed for 100 cadets and despite expedient extensions over the years the facilities are inadequate to cater for the current cadet population (about 475) or the projected population of 436 cadets and up to 50 SSO. The present dining-room and kitchen in the cadets' mess are well below the prescribed scales and standards, and there is no room to provide for necessary mess staff amenities.

23. Living Accommodation Following the affiliation of RMC with the University of New South Wales in 1967, the need for substantially increased academic facilities resulted in the

proliferation of temporary buildings and relocation of about 100 cadets from permanent barracks into prefabricated living accommodation in order to provide permanent working accommodation for the academic staff. The relocation of academic staff to ADFA will allow these facilities problems to be rectified.

24. At present there are about 378 cadet bed spaces available in permanent living accommodation. At the commencement centralised military training in January 1986 there will be a requirement for 436 cadets and up to 50 SSO, a shortfall of about 108 spaces.

25. Gymnasium The present RMC gymnasium is a 70 year old, high maintenance structure which does not satisfactorily meet the present physical training requirements of RMC. The site occupied by this building is an impediment to any extensions to the cadets' mess.

26. Military Instruction Block This block will be inadequate to cope with the significant increase in military training following the centralisation of officer training. Use of the building in summer is restricted due to a lack of proper environmental control. The layout of the model room limits the effective use of training aids; the existing lecture rooms lack stage facilities and have poor acoustic properties. Adjoining rooms cannot be used concurrently due to poor sound proofing.

27. Medical and Dental Facilities ADFA and RMC will have facilities for their own living and working requirements. Recreational facilities such as playing fields will be shared, as will communal facilities such as the RMC hospital.

28. The existing RMC hospital has 28 bed spaces. Although extended, much of the building is 70 years old, requires a high level of maintenance and was described to the Committee as being inadequate for the present military population of 750 personnel. Specific deficiencies are as follows:

- a lack of reception space, which necessitates patients to await treatment in narrow hospital corridors;
- insufficient space for physiotherapy support;
- lack of proper facilities for radiology and pathology sections;
- dental support is restricted to two surgeries; and
- the hospital layout is not functional.

29. It was put to the Committee that these deficiencies would be compounded further with the commencement of ADFA. The continued military population of RMC and ADFA will be in excess of 3,000 personnel.

30. Committee's Conclusion Deficiencies in the cadets' mess, cadets' living accommodation, the gymnasium and the military instruction block require to be rectified by 1986 to enable the Royal Military College to carry out centralised military training of all Army officer cadets. The existing RMC hospital will be inadequate to cope with military patients from RMC and ADFA.

THE PROPOSAL

31. Redevelopment Strategy The proposed works, which are described below, have been planned in accordance with a development strategy which forms the basis of broad zone planning of functional areas including the road system, activity zones, future expansion areas and formal and ceremonial areas. (The broad redevelopment strategy is illustrated in at Plan B-2; the relative locations of the proposed work are shown in Plan B-3.)

No major work is envisaged in the next five years, although improvements to messes, correcting road alignments, car parking and a new eastern entrance, all described as being of a minor nature, were foreshadowed at the public hearing.

32. The Committee was concerned that the full scope of the redevelopment of Duntroon had not been identified more clearly at this stage. It was evident to the Committee during the inspection that other sub-standard buildings were still in use. The Committee recognised the complexity of planning for redevelopment in the Duntroon area. Therefore, detailed master planning should be carried out as a matter of priority to ensure that the need to compromise standards is minimised in future, and to provide for the orderly upgrading of Duntroon to a standard appropriate to its national significance.

33. Cadets' Mess Extensions - Description Proposed extensions to the cadets' mess will provide a new kitchen dining hall to current Defence Scales and Standards of Accommodation capable of accommodating the forecast cadet population. The present kitchen will be removed and the existing building will be renovated to provide staff facilities, toilets and additional ante rooms.

34. Construction Details The proposed construction will be of exterior brick walls with white stucco finish and red terra cotta tile roof to complement the adjacent parade ground buildings. The interior of the dining hall will be carpet floor, face brick walls, exposed timber roof trusses with plasterboard ceiling above. The kitchen will have an epoxy seamless floor, tiled walls with plasterboard ceiling. (See Plan B-4 for a perspective drawing of the extensions and the existing buildings around the parade ground.)

35. Ventilation The Committee noted inconsistencies in evidence presented at the public hearing relating to ventilation of the cadets' mess. The formal DHC submission stated that the dining room would be mechanically ventilated. In verbal evidence DHC witnesses advised that dining room and kitchen would be provided with evaporative cooling.

36. Following the public hearing the Committee sought an explanation of this inconsistency from Defence. The Committee was advised that DHC had been briefed to cool the dining room by means of mechanical ventilation and that this had been reflected in original sketch plans. During subsequent design development it was established that mechanical ventilation was not the most efficient solution when cooling of the dining room and kitchen were considered together. It became apparent that for a lower cost and less plant space the dining room can be provided with evaporative cooling. The Committee was advised that no firm decision has yet been made on the method of cooling to be adopted for the dining room.

37. Physical Fitness Centre - Description The proposed Physical Fitness Centre, to be located adjacent to the Military Instruction Block (see Site Plan B-1), will include an indoor sports hall to international standards which will allow a full range of comprehensive physical training and sporting activities. The Committee was advised that Defence had identified the possible future need for additional facilities and planning has provided for extending the building.

38. Construction Construction will be of brick and light-weight pre-finished insulated metal walls and roofing on steel open web roof trusses. The building will be naturally ventilated and electrically heated. (See Plan B-5 - Physical Fitness Centre - Elevations.)

39. Heritage Considerations The Cadets' Mess is one of seven buildings of heritage significance grouped around the parade ground. The extensions to the mess and internal renovations will not alter the facade and will maintain the character of buildings around the parade ground. The site for the extensions is presently occupied by the old gymnasium which will require demolition or removal. The Heritage Commission advised that the old gymnasium is not worthy of an entry in the Interim List of the Register of the National Estate, but has sufficient interest to warrant relocation on another site if a use could be found for it. The Committee was advised that relocation of the gymnasium could only be achieved by disassembly and reconstruction.

40. The siting of the new gymnasium near the Military Instruction block will require the demolition of a number of houses built in 1911. The Heritage Commission advised that although the houses are of some interest in the history of RMC they are not worthy of inclusion in the Register of the National Estate. The Commission requested that any such houses planned for demolition be recorded by measured drawing and photographic survey, and recommended the relocation of representative examples if a use can be found for them. The Committee was advised that there are no plans to relocate the houses and that relocation costs would be about \$15,000 per house.

41. Following the public hearing the National Trust of Australia (ACT) advised the Committee of its support for the preservation of examples of the married quarters, and the old gymnasium, which were classified by the Trust in 1981. The Trust advised that the design of the old gymnasium helped to introduce a concept which at the time (1911) was most innovative.

42. The houses to be demolished, in conjunction with other historic buildings at RMC, identify historically interesting aspects of social and cultural attitudes.

43. The Committee is mindful of the heritage significance of RMC as a whole and of the significance of individual buildings outside the RMC conservation area. However, the Committee believes the disassembly or demolition of the old gymnasium is unavoidable due to site constraints around cadets' mess. Nevertheless before demolition action proceeds every effort should be made to offer the building for disassembly and re-erection elsewhere to community organisations or entrepreneurs.

44. The rationale for locating the new gymnasium on the site occupied by a number of houses was not clearly established. Accordingly, the Committee suggests that alternative location of the new gymnasium be investigated with a view to retaining at least one house. Before any houses are demolished they should be offered to community groups or entrepreneurs for re-erection elsewhere.

45. Committee's Conclusion The proposed cadets' mess extensions appear satisfactory and are supported. The mess should be provided with evaporative cooling. The design of the physical fitness facility appears consistent with requirements, but its location should be re-examined with a view to preserving at least one of the houses which under proposed arrangements require demolition.

46. Military Instruction Block The existing 3 storey building, built in 1960, will be renovated to provide military instruction facilities including model rooms, syndicate rooms, lecture theatres, classrooms and space for ancillary services such as printing and drafting. DHC advised that cognizance has been taken of a possible future requirement for two additional model rooms. (See Plans B-6 and B-7 which illustrate the extent of the refurbishment.)

47. Ventilation Model rooms, three lecture theatres and the computer and word processing areas will be air conditioned with the balance being mechanically ventilated. Heating will be provided by hot water from new natural gas fired boilers.
48. The Committee was advised that the present building has experienced considerable environmental problems, particularly on the upper level, a high occupancy area, which is used as classrooms. Renovation will enable a significant proportion of this activity to be transferred to lecture theatres and model rooms on lower levels which will be air conditioned. Ventilation of the upper floor will be provided in the proposed work together with additional roof insulation and window shades.
49. The Committee was advised that improvements to ventilation in the administrative wing of the building are not included in the proposed work. The orientation of this wing reduces heat loads, and windows can be opened to most offices to improve ventilation.
50. Committee's Conclusion The proposed renovations to the Military Instruction Block are satisfactory.
51. Cadet Accommodation - Anzac Block It is proposed to refurbish Anzac Block and Building A33 (Chemistry Block) to provide additional cadet living accommodation.
52. Anzac block was originally designed to accommodate 100 cadets, was converted to offices for academic staff and will be vacated when ADFA commences tertiary training.
53. Conversions to Anzac Block will provide accommodation for 100 cadets. The Committee was advised that due to constraints imposed by the building envelope the level of accommodation provided as a result of the refurbishment will be below present Scales and Standards of Accommodation. Room sizes will be 9.7

square metres against the Standard of 11.1 square metres. (Plans B-8 and B-9 illustrate the proposed configuration of rooms and support areas.)

54. Alternatives Considered The following alternative means of providing additional accommodation were considered by Defence:

- (a) new buildings to current Scales and Standards of accommodation, or
- (b) modifications to existing buildings vacated when tertiary training functions are transferred to ADFA at:
 - either current Scales and Standards, or
 - previous Scales and Standards applicable to the bulk of existing RMC accommodation.

55. A new building, whilst providing accommodation at current Scales and Standards, would cost about \$1.5 million more than the cost of refurbishing Anzac Block (i.e. about \$5,200 per cadet for refurbishing Anzac Block as proposed compared to about \$22,000 per cadet for new accommodation, built to compatible architecture in the vicinity of the parade ground).

56. The construction of Anzac Block, with alternate walls of masonry and timber, is such that the only viable alternative would be to provide 50 rooms, which would be significantly in excess of current Scales and Standards, and which would require the provision of a further 50 rooms by new construction.

57. Defence advised if 100 rooms were provided in Anzac Block, as proposed, they would be of similar Scales and Standards to the remainder of existing accommodation and no new construction would be required.

58. Committee Consideration The Committee regards the proposed refurbishment of Anzac Block as tending to perpetuate for some time continued use of accommodation that is below current Scales and Standards. The Committee sought the views of the Department of Finance in this regard and was advised as follows:

- with the introduction of new accommodation Scales and Standards all existing barrack accommodation becomes sub-standard to a certain degree, depending on age;
- new Scales and Standards are introduced specifically for new construction, but are used as a guide for refurbishing;
- it is not practical nor cost effective to immediately replace existing structurally sound barracks accommodation on the introduction of new Scales and Standards;
- refurbishment of bedroom space results in increased comfort close to that provided by new construction e.g. carpet, new modular furniture, lighting and heating; and
- new barrack blocks should normally be constructed where there is the greatest accommodation shortage, e.g. where there is a new defence presence such as the new Navy patrol boat base at Cairns.

59. The Committee accepts the proposal for the refurbishment appears to be based on sound cost-conscious grounds. Whilst being cost effective, this approach does not address the wider problem, not limited to RMC, of existing accommodation which is generally below Scales and Standards. The

Committee is mindful that such accommodation is a major cause of dissatisfaction amongst Defence personnel and their families. In the case of RMC and ADFA it should be noted that ADFA accommodation will be to Scales and Standards; this factor could lead to dissatisfaction amongst RMC cadets and staff.

60. In summary the proposed refurbishment of Anzac Block to provide 100 rooms has cost advantages over other options examined. The level of accommodation to be provided will be below current Scales and Standards of Accommodation.

61. Committee's Conclusion Whilst the Committee reluctantly accepts the proposal to refurbish Anzac Block, Defence should provide the Committee with an Australia-wide program of intentions, including costs, aimed at bringing existing accommodation to current and future Scale and Standards of Accommodation.

62. Cadet Accommodation - Chemistry Block The Chemistry Block, one of the parade ground group of buildings, will be modified internally to provide accommodation for 34 cadets to current Scales and Standards at a cost of \$13,400 per cadet. Some changes to windows in the historic facade are required but they will not change the character of the building's appearance and have been cleared by the Heritage Commission. (Plan B-10 shows elevations and plans of the proposed modifications.)

63. The provision of cadet accommodation by refurbishing Anzac Block and modifying the Chemistry Block will permit the removal of sub-standard accommodation and classrooms in temporary buildings adjacent to Anzac Block.

64. Committee's Conclusion Modifications to the Chemistry Block to provide cadet accommodation are satisfactory.

65. 5th Camp Hospital - Description It is proposed to construct a new 36-bed Camp Hospital at RMC to cater for the military populations of RMC and ADFA. The hospital, to be located adjacent to General Bridges Drive near the northern entrance to RMC, will be of single and two storey brick and steel framed construction, designed to complement the historic character of RMC.

66. Exterior finishes will be predominatly white stucco walls, with red brick foundation walls and prefinished metal roofing. Interior finishes will comprise painted concrete block walls, carpeted floors and painted plasterboard ceilings, except for limited areas of tiling and special finishes specifically required for medical or hygiene reasons.

67. The building will be naturally ventilated except in medical, laboratory and store areas specifically requiring air conditioning. Internal service areas will be mechanically exhausted and the kitchen will be provided with evaporative cooling and mechanical exhausts. (See perspectives and elevations at Plans B-11 and B-12 respectively.)

68. Consideration The Committee has concluded that the present RMC hospital will be inadequate to cope with the combined military populations of RMC and ADFA. Nevertheless, the Committee considers it necessary to establish the justification and need for the proposed new hospital in the context of the following factors:

- (a) the stated functions and forecast utilisation of the hospital;

- (b) the existence of other Defence-operated health care facilities in the ACT which may also require upgrading; instead of proceeding to rectify deficiencies in a piecemeal or ad hoc fashion there may be advantages in rationalising all Defence health care facilities in Canberra; and
- (c) the existence of alternative medical/hospital facilities in the Canberra area which could satisfactorily carry out the same functions as a Camp Hospital and accommodate the anticipated utilisation without requiring capital expenditure.

69. Hospital Functions The functions to be carried out by the new hospital will be basically the same as those performed by the existing hospital. Camp hospitals deal with the day-to-day care of soldiers at a particular location so that with treatment over a few days the patient could be returned to a fit state and is able to return to his or her unit. Camp hospitals do not deal with cases of injury or illness requiring lengthy stay or sophisticated management. The facilities to be provided by the proposed hospital include wards, pathology, radiology and X-ray and outpatients; a small sterile operating theatre capable of doing minor surgery; a centralised sterilising department for the sterilising of dressings and equipment; and a day-to-day general practitioner service. These elements would give the Camp Hospital a range of abilities to meet the day-to-day running of a large military unit - in this case RMC and ADFA. For example, an X-ray capability is necessary for standard chest X-rays, and for diagnosing fractures and dislocations. The operating theatre would provide a capability for surgery required as a result of for example sporting or training injuries and the treatment of impacted teeth. The provision of hospital wards, staffed by appropriate personnel, isolates patients with infectious diseases and enables recovering patients to have convenient access to lecturers, counsellors, and company commanders.

70. Utilisation The proposed camp hospital will be a 36-bed facility; the existing RMC hospital has 28 bed spaces. The Committee sought information from Defence on use of the existing hospital bed spaces and the basis of the proposed increase to 36-bed spaces.

71. Bed occupancy for 1982-83 show peaks ranging from 18-25 per quarter, and daily averages ranging from about 8-14. Patients included in these statistics include RMC staff and cadets and a third category of "other", which comprised a significant proportion of the total. "Others" were described as patients admitted on a bed availability basis from HMAS Harman and Service personnel from Defence, Navy or Army and Air Force offices. Defence advised that the higher number of "other" admissions had been made possible because the existing RMC hospital provides for a cadet and staff population of about 750. A small increase in the number of beds to be provided in the new hospital (eight) and a large increase in the number of staff and cadets will reduce the availability of beds for "others".

72. Defence advised that the 36-bed capacity was determined by multiplying the daily bed requirement (which for 1977-81 averaged 4.36 and 2.75 respectively for cadets and staff) by a dispersion factor and the proposed military population divided by the current RMC cadet and staff population.

73. Alternative Defence Health Care Facilities Medical facilities currently exist at RAAF Base Fairbairn, HMAS Harman, and at Russell Hill. Each establishment provides for the day-to-day medical and dental treatment of military personnel at each location. They also provide for periodic medical examinations required by the Services and maintain medical and dental records. RAAF Base Fairbairn and HMAS Harman have a small number of beds mainly for personnel living there to cater for less serious injuries and illnesses requiring short periods of hospitalisation. The level of service provided is similar to that provided at RMC but they are smaller.

74. The Committee was advised that there are no plans to extend the Harman and Fairbairn facilities.

75. The rationalisation of Defence health care facilities in the ACT was examined by a Defence committee in the 1970s which recommended that a defence force hospital be developed for the area. This recommendation was not proceeded with.

76. Interface with Local Health Services The Committee was concerned to ensure that the possibility of making increased use of ACT health care facilities had been given consideration by Defence in developing the 5th Camp Hospital proposal. The Committee therefore sought to establish the reasons why increased reliance on ACT health care facilities, and as a result the need for a 36-bed Camp Hospital, was considered to be inappropriate.

77. The Capital Territory Health Commission advised the Committee that in its view the present RMC hospital is a sick bay, post operative care and outpatients facility and that most patients requiring surgery are referred to another hospital in the ACT for treatment. The Commission stated that from 1 February 1984 Service personnel would be admitted to its recognised hospitals as private patients. The Commission would also provide pathology services without charge to Defence. The Commission indicated that unless the present RMC hospital facilities were augmented the increase in personnel when ADFA is established would bring about an increased demand on ACT hospitals.

78. The Committee sought the views of Defence of the practicalities of leasing an appropriate sized wing of an existing hospital. Defence advised that although some spare space existed in the short term, it was not manned, equipped or geographically acceptable for the hospitalisation of ADFA/RMC patients. Defence had therefore rejected the leasing option due to distance from RMC, the type of care required, time loss due to travel and the proximity to study resources.

79. Based on this assessment the Committee agrees that the level of health services to be provided by the Camp hospital will be appropriate to the needs of RMC and ADFA. Arrangements for the use of ACT health care facilities are satisfactory.

80. Ventilation of the Proposed Hospital As mentioned above, the new hospital will be naturally ventilated except in medical, laboratory and store areas specifically required for air conditioning.

81. The Committee was concerned that adequate consideration had been given to patient comfort, especially during the summer months, in the development of the proposed ventilation system.

82. Defence advised that present policy dictates that air conditioning should only be provided where:

- (a) the comfort of patients and staff is a contributing factor to the success of critical and intensive medical procedures and treatment; and/or
- (b) relief from extreme conditions is warranted; or
- (c) design of building precludes natural ventilation.

83. The areas to be air conditioned in the new hospital - X-ray, pathology, theatre and pharmacy are consistent with this policy.

84. The Committee was advised that DHC had carried out computer simulations to check the thermal performance and internal room temperatures of the proposed hospital. Based on a "design day" maximum of 34°C it was predicted that peak day temperature of 29°C - 30°C for both internal and external spaces on the north-west facing wards would normally occur in the

late afternoon for an average of 16 hours per year. This condition would occur over about twelve days over the summer period. DHC pointed out that the simulation disregarded the effects of landscaping and air movement and overstated the severity of the worst case. Ceiling fans will be installed in the wards which would reduce temperatures. The Committee was advised that the resultant maximum ward temperatures are acceptable to Defence.

85. Summary The Committee is satisfied with the concept of a shared Camp hospital to serve RMC and ADFA military populations; increased use of ACT hospitals has operational limitations; the proposed 36-bed capacity appears to be adequate to meet expected demands.

86. Committee's Conclusion The proposed design of a new Camp hospital for RMC and ADFA is satisfactory.

87. Engineering Services and Landscaping These are summarised as follows:

88. Mechanical Services The existing central reticulated hot water system will be utilised as far as possible to supply hot water for heating to new or refurbished buildings but where necessary extra gas fired boilers will be installed in individual buildings to provide the required heating capacity.

89. All new buildings as well as renovations and additions to existing buildings will be protected and equipped with fire detection and fire fighting equipment in accordance with existing regulations.

90. Civil Engineering Works The road works will comprise access to new buildings, the regrading of part of Finlay Street behind the Mess to provide a safer gradient, adjustments to

intersections around the Hospital site and the provision of 188 carparking spaces. The existing hydraulic services will be extended and adjusted to accommodate the proposed buildings, roads and carparking.

91. Site Electrical Works Provision has been made for works and equipment required to connect all new and renovated buildings to the ACT Electrical Authority supply system and to disconnect the existing services to buildings which are to be demolished.

92. New street lighting will be installed around the new Hospital, Physical Fitness Centre and new parking areas.

93. Landscaping Landscaping will be carried out in the vicinity of new work to complement the existing landscaping and site vegetation.

94. Committee's Conclusion The proposed engineering services and landscaping appear adequate and are supported.

ENVIRONMENTAL CONSIDERATIONS

95. Details of the proposal were submitted to the Australian Heritage Commission and the National Trust of Australia, (ACT).

96. The proposal was assessed in accordance with the Administrative Procedures of the Environmental Protection (Impact of Proposals) Act 1975.

CONSULTATION

97. DHC has briefed the Department of Territories and Local Government and the National Capital Development Commission on the proposal.

98. Liaison with local authorities will be maintained throughout design and construction.

ESTIMATED COST

99. The estimated cost of the proposed works is \$11.1 million at August 1983 prices, made up as follows:

<u>New Facilities</u>	\$6,450,000
- 5th Camp Hospital	
- Cadets Mess Extension	
- Physical Fitness Centre	
 <u>Refurbished Facilities</u>	 \$3,210,000
- Cadets Mess	
- Refurbish Chemical Instruction Building	
- Refurbish Anzac Block	
- Refurbish Military Instruction Block	
 <u>External Works</u>	 \$1,440,000
 TOTAL	 \$11,100,000

PROGRAM

100. To comply with the Department of Defence requirement to commence ADFA operations in 1986 and to transfer officer training to RMC, the 5th Camp Hospital is to be completed by the end of 1985 and all other work completed by mid-1986.

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

RECOMMENDATIONS AND CONCLUSIONS

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

Paragraph

1. DEFICIENCIES IN THE CADETS' MESS, CADETS' LIVING ACCOMMODATION, THE GYMNASIUM AND THE MILITARY INSTRUCTION BLOCK REQUIRE TO BE RECTIFIED BY 1986 TO ENABLE THE ROYAL MILITARY COLLEGE TO CARRY OUT CENTRALISED MILITARY TRAINING OF ALL ARMY OFFICER CADETS. THE EXISTING RMC HOSPITAL WILL BE INADEQUATE TO COPE WITH MILITARY PATIENTS FROM RMC AND ADFA. 30

2. THE PROPOSED CADETS' MESS EXTENSIONS APPEAR SATISFACTORY AND ARE SUPPORTED. THE MESS SHOULD BE PROVIDED WITH EVAPORATIVE COOLING. THE DESIGN OF THE PHYSICAL FITNESS FACILITY APPEARS CONSISTENT WITH REQUIREMENTS, BUT ITS LOCATION SHOULD BE RE-EXAMINED WITH A VIEW TO PRESERVING AT LEAST ONE OF THE HOUSES WHICH UNDER PROPOSED ARRANGEMENTS REQUIRE DEMOLITION. 45

3. THE PROPOSED RENOVATIONS TO THE MILITARY INSTRUCTION BLOCK ARE SATISFACTORY. 50

- | | | |
|----|---|-----|
| 4. | WHILST THE COMMITTEE RELUCTANTLY ACCEPTS THE PROPOSAL TO REFURBISH ANZAC BLOCK, DEFENCE SHOULD PROVIDE THE COMMITTEE WITH AN AUSTRALIA-WIDE PROGRAM OF INTENTIONS, INCLUDING COSTS, AIMED AT BRINGING EXISTING ACCOMMODATION TO CURRENT AND FUTURE SCALES AND STANDARDS OF ACCOMMODATION. | 61 |
| 5. | MODIFICATIONS TO THE CHEMISTRY BLOCK TO PROVIDE CADET ACCOMMODATION ARE SATISFACTROY. | 64 |
| 6. | THE PROPOSED DESIGN OF A NEW CAMP HOSPITAL FOR RMC AND ADFA IS SATISFACTORY. | 86 |
| 7. | THE ESTIMATED COST OF THE PROPOSED WORK IS \$11.1 MILLION AT AUGUST 1983 PRICES. | 99 |
| 8. | THE COMMITTEE RECOMMENDS CONSTRUCTION OF THE WORK IN THIS REFERENCE. | 101 |

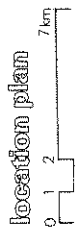
(D.J. FOREMAN)
Chairman

Parliamentary Standing Committee
on Public Works
Parliament House
CANBERRA A.C.T. 2600

2 May 1984

WITNESSES

- Beynon, Colonel R.W.R., QHDS, Director of Dental Services, Army, Department of Defence, Canberra, Australian Capital Territory
- Bowden, B. Esq., Director of Architecture, Department of Housing and Construction, Canberra, Australian Capital Territory
- Cross, Brigadier J.F., Director-General, Accommodation and Works, Army, Department of Defence, Canberra, Australian Capital Territory
- Gration, Major-General P.C., OBE, Deputy Chief of the General Staff, Department of Defence, Canberra, Australian Capital Territory
- James, Major-General W.B., MBE, MC, SBStJ, QHP, Director-General, Army Health Services, Department of Defence, Canberra, Australian Capital Territory
- Jones, Colonel P.C., Team Leader, Royal Military College/Australian Defence Force Academy Project Team, Department of Defence, Canberra, Australian Capital Territory
- Horne, W.J., Esq., Project Manager, Department of Housing and Construction, Canberra, Australian Capital Territory
- Scanlan, M.A., Esq., Assistant Secretary, Health and Communications, Department of Housing and Construction, Canberra, Australian Capital Territory
- Williams, M.B., Esq., Assistant Secretary, Defence and Defence Support, Department of Housing and Construction, Canberra, Australian Capital Territory

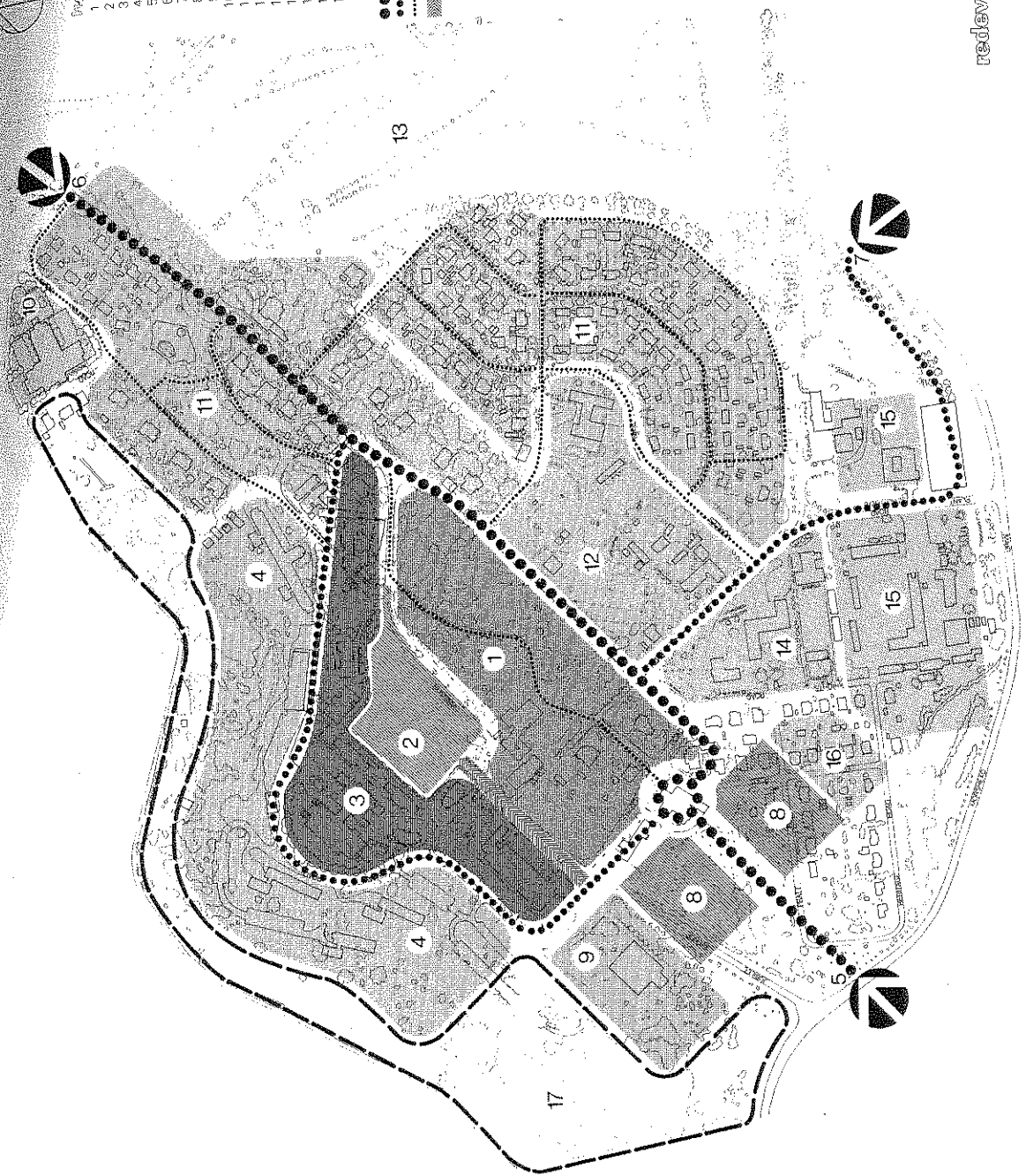




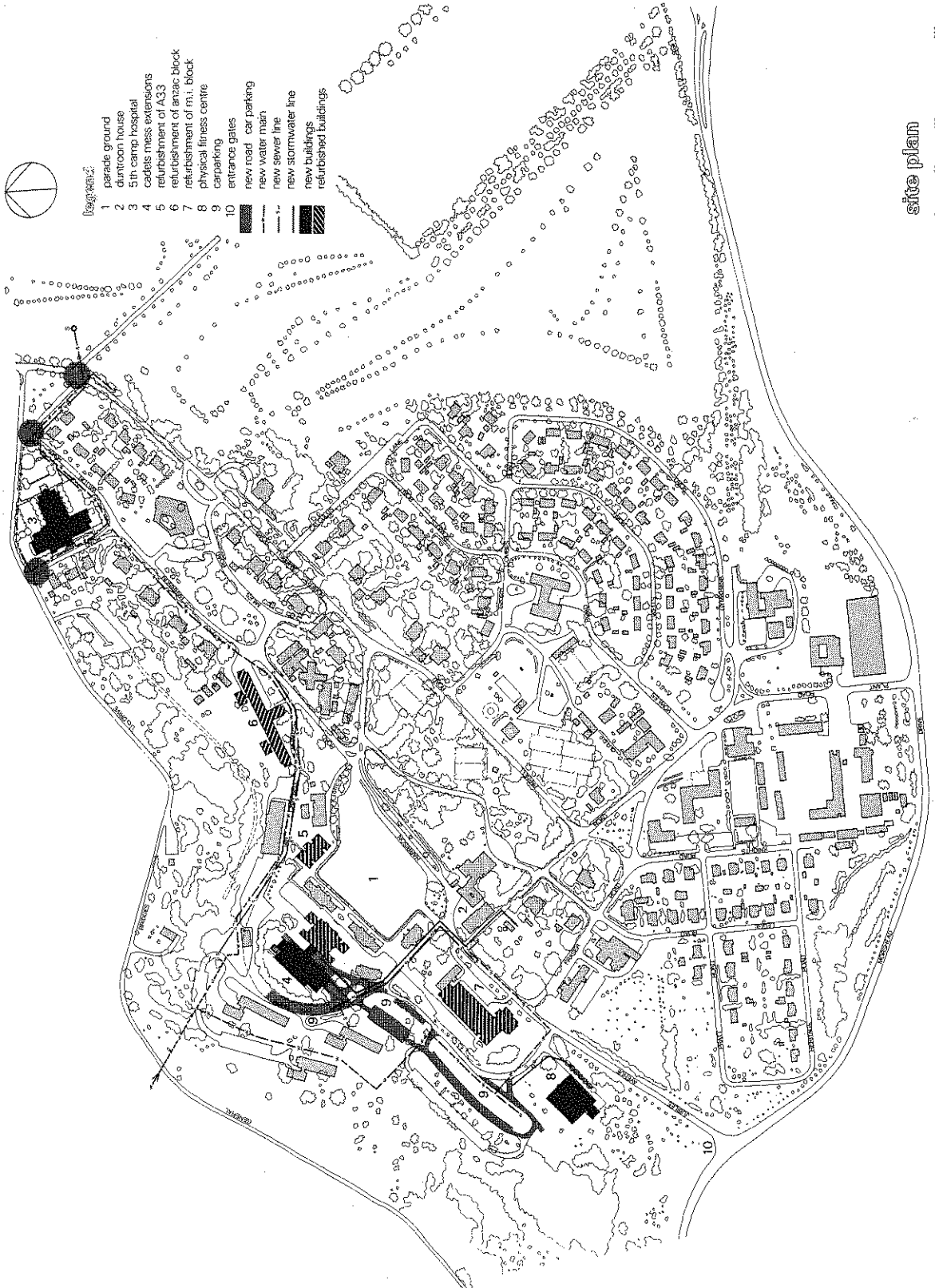
Proposed

- 1. auditorium gardens
- 2. central parade ground
- 3. parade ground garden zone
- 4. parade zone
- 5. cable zone
- 6. new main entrance
- 7. gun gate entrance
- 8. entrance parade ground zone
- 9. physical fitness centre zone
- 10. hospital zone
- 11. residential zone
- 12. community facilities zone
- 13. golf course/sports field zone
- 14. G.I. zone
- 15. services zone
- 16. sergeant's mess zone
- 17. landscape buffer zone

- primary road
- secondary road
- minor road
- ▨ ceremonial avenue



B-2

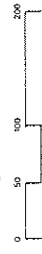


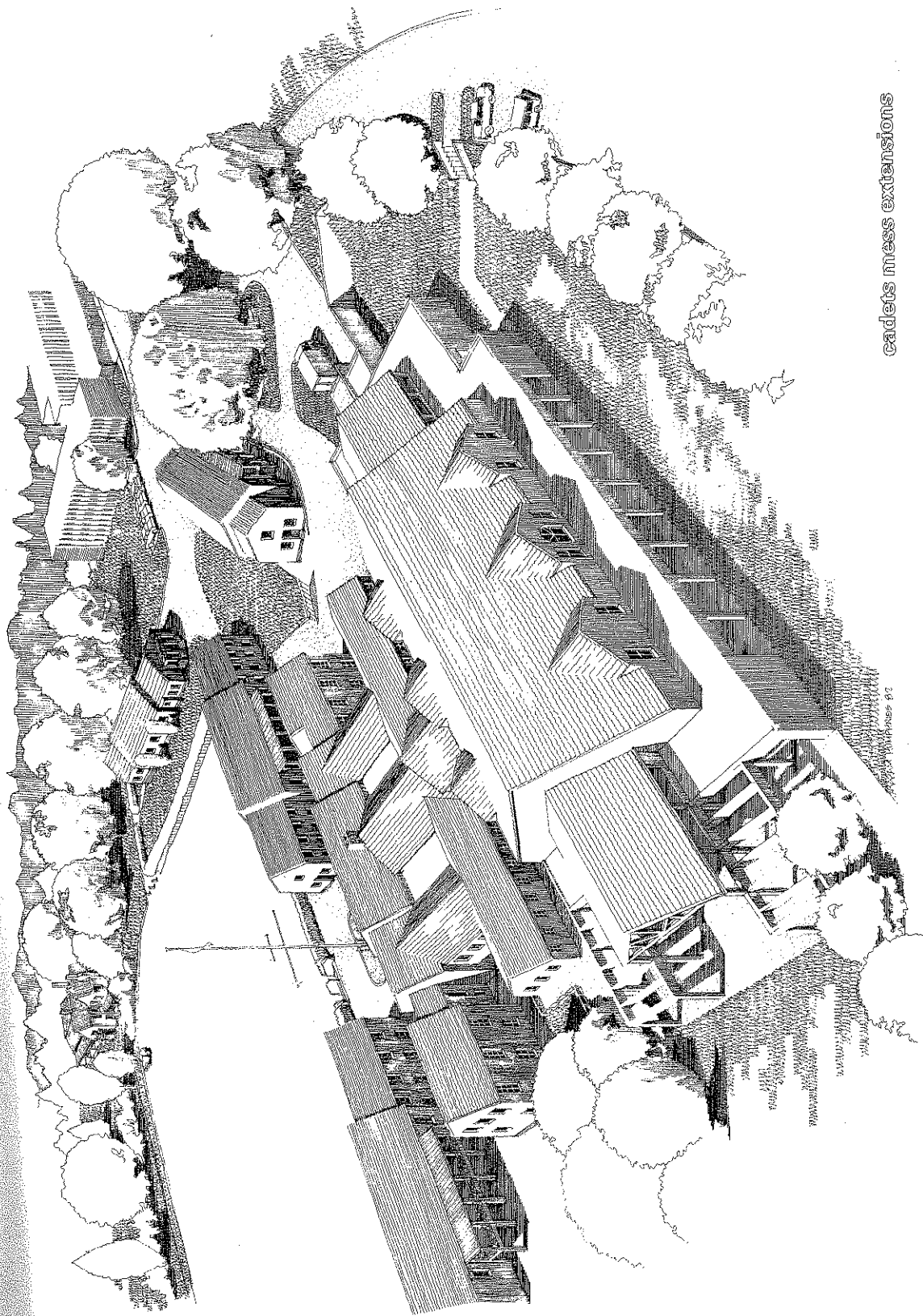
Legend:

- 1 parade ground
 - 2 dining room
 - 3 5th camp hospital
 - 4 mess hall extensions
 - 5 refurbishment of A33
 - 6 refurbishment of arctic block
 - 7 refurbishment of m.1. block
 - 8 physical fitness centre
 - 9 parking
 - 10 entrance gates
- - - - - new road car parking
 - - - - - new water main
 - - - - - new sewer line
 - - - - - new stormwater line
 ▨ new buildings
 ▩ refurbished buildings



site plan



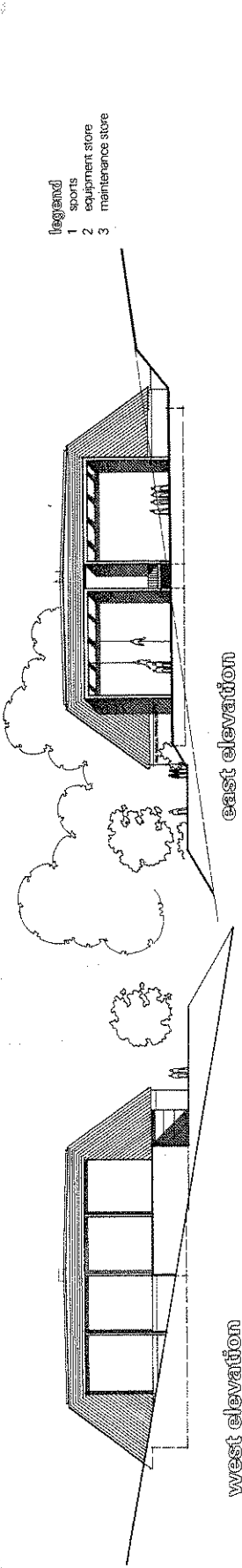


cadets mess extensions

B-4

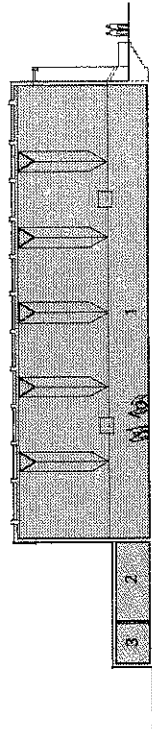
legend

- 1 sports
- 2 equipment store
- 3 maintenance store

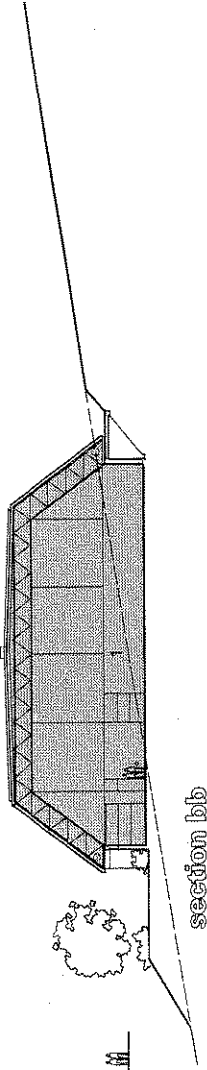


west elevation

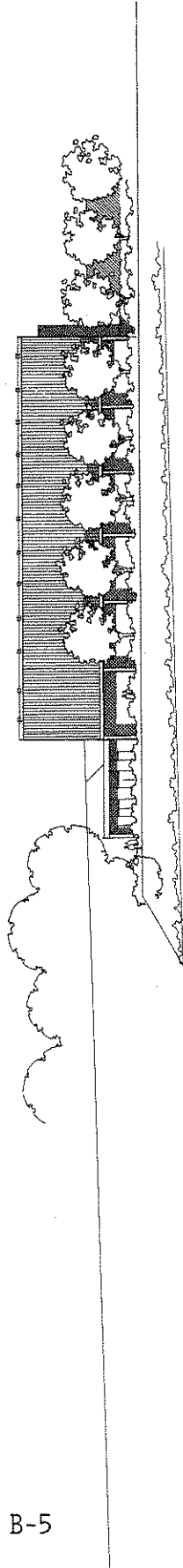
east elevation



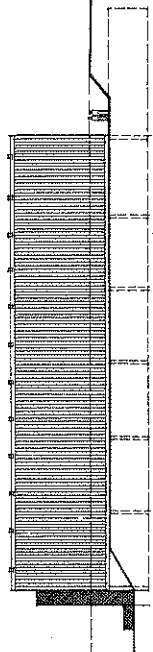
section aa



section bb

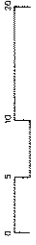


south elevation



north elevation

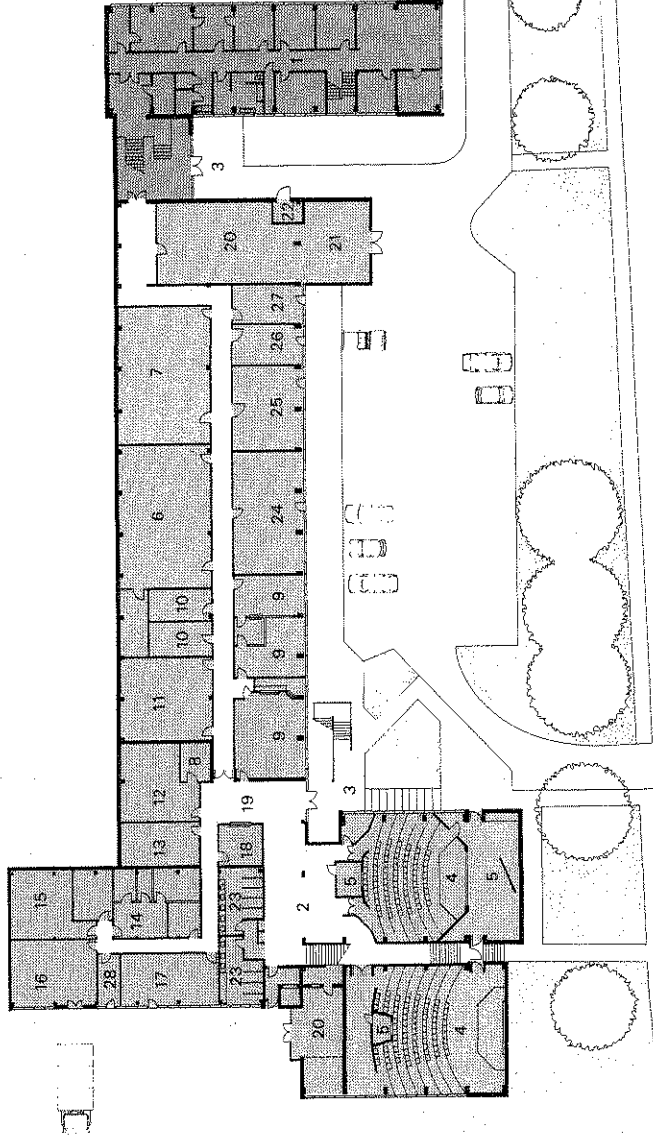
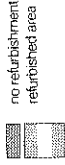
physical fitness centre





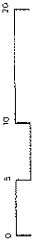
Legend

- 1 existing offices/facilities
- 2 foyer
- 3 entrance
- 4 lecture theatre
- 5 projection booth/rear projection room
- 6 signals training room
- 7 indirect fire observation room
- 8 proof reader
- 9 audio visual suite
- 10 map room
- 11 computer suite
- 12 typing/word processing room
- 13 draughting
- 14 photographic suite
- 15 silk screen print room
- 16 bulk storage (stationery)
- 17 printing/collation area
- 18 office supervisor instructional support
- 19 information distribution area
- 20 existing plant room
- 21 new plant room
- 22 existing sprinkler valve room
- 23 toilets
- 24 store room (signals)
- 25 support platform room
- 26 store room (training aids)
- 27 store (field veng)
- 28 chemical store



plan level 1

refurbishment of m.l. block



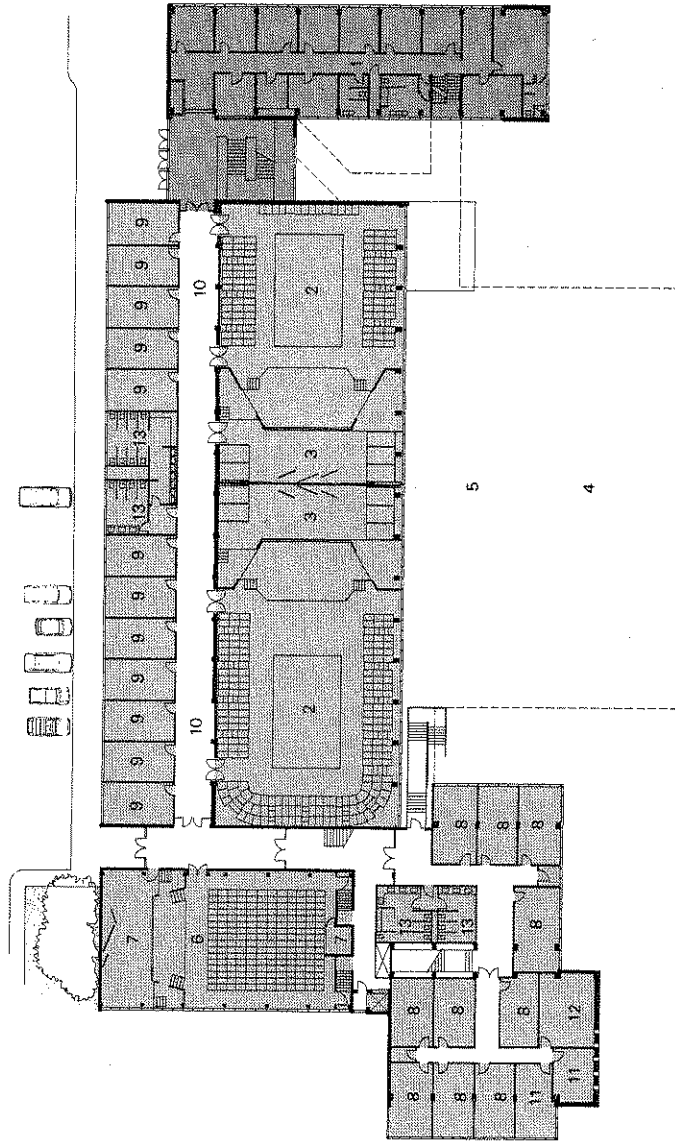


Legend

- 1 existing offices/facilities
- 2 model room
- 3 model store room
- 4 future model rooms
- 5 future model store room
- 6 lecture theatre
- 7 projection booth/rear projection room
- 8 synchate room
- 9 existing synchate room
- 10 information distribution area
- 11 office
- 12 conference planning room
- 13 toilets



- no refurbishment
- refurbished area



plan level 2

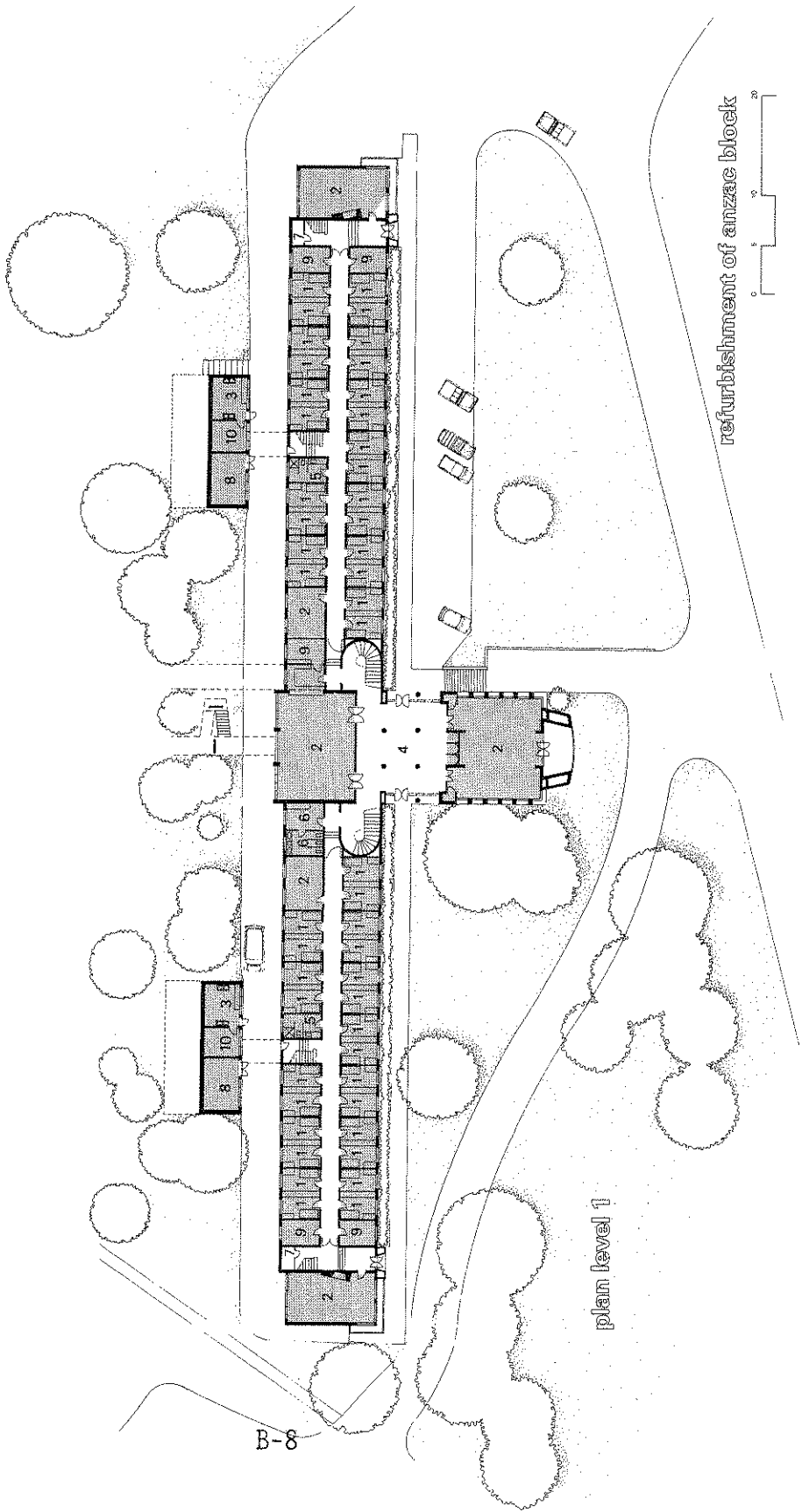
refurbishment of m.i. block





Legend

- 1 bedroom
- 2 recreation room
- 3 laundry
- 4 entrance foyer
- 5 shower unit
- 6 toilet
- 7 cleaner
- 8 plant
- 9 storage box room
- 10 caddis cleaning area



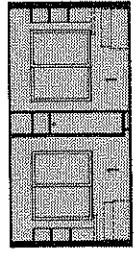
plan level 1

refurbishment of anzac block

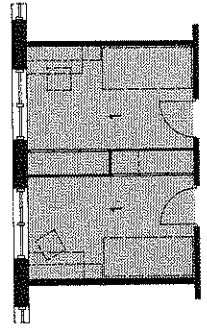
B-8



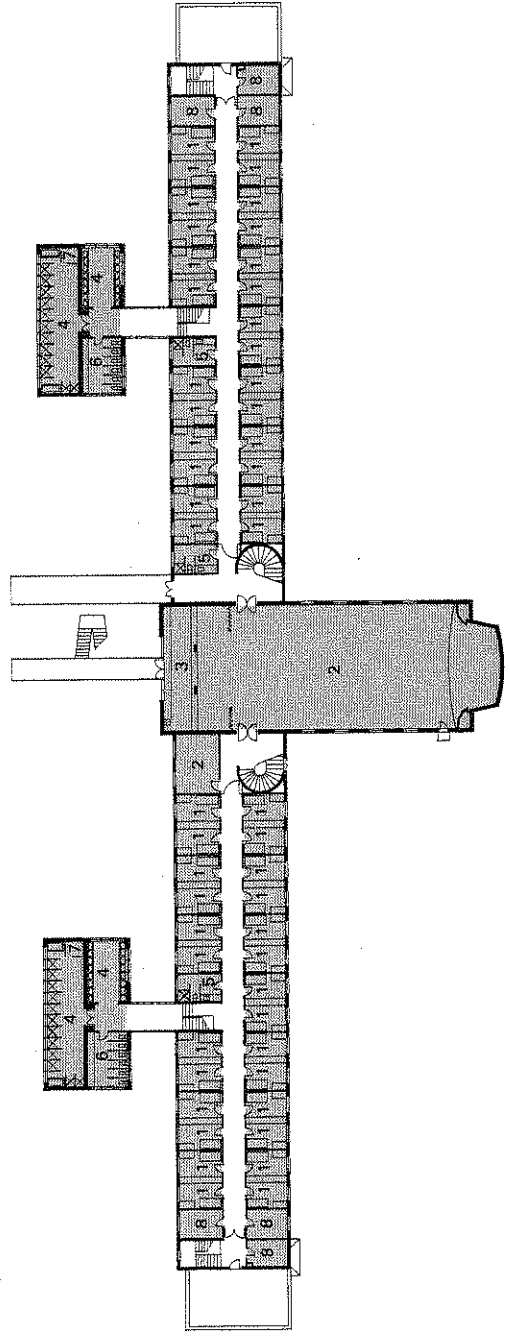
- Legend**
- 1 bedroom
 - 2 recreation room
 - 3 bar
 - 4 ablution unit
 - 5 shower unit
 - 6 toilet
 - 7 cleaners room
 - 8 storage/box room



section



plan typical room

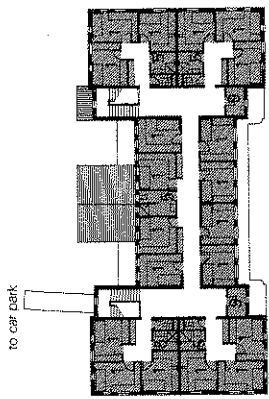


plan level 2

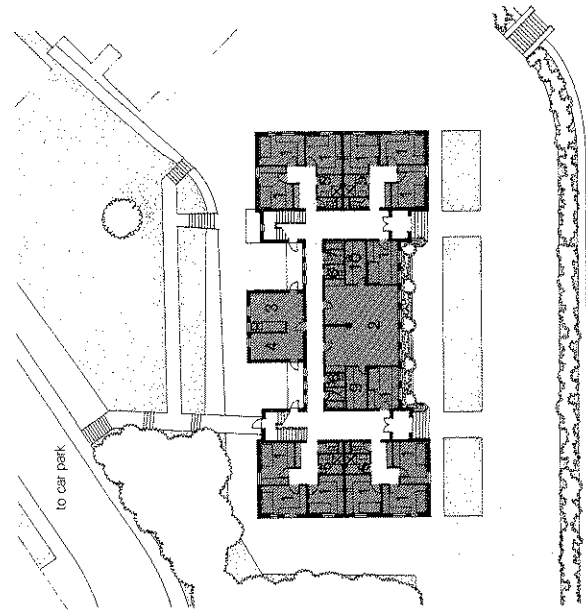
refurbishment of anzac block



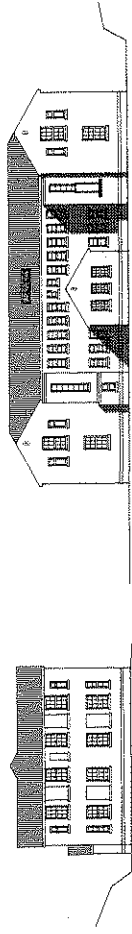
- Legend
- 1 bedroom
 - 2 common room
 - 3 laundry
 - 4 carpets cleaning room
 - 5 shower unit
 - 6 toilet
 - 7 bathroom
 - 8 plant
 - 9 storage/box room
 - 10 kitchenette



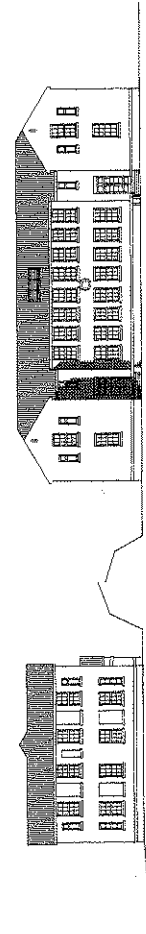
plan level 2



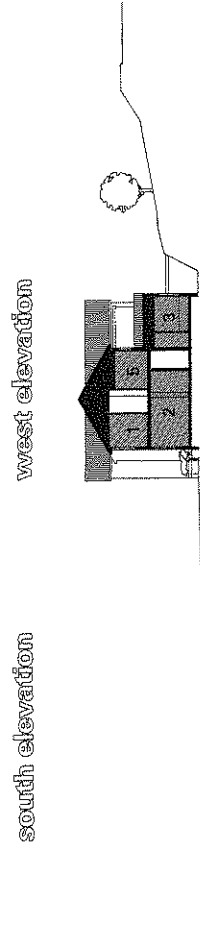
plan level 1



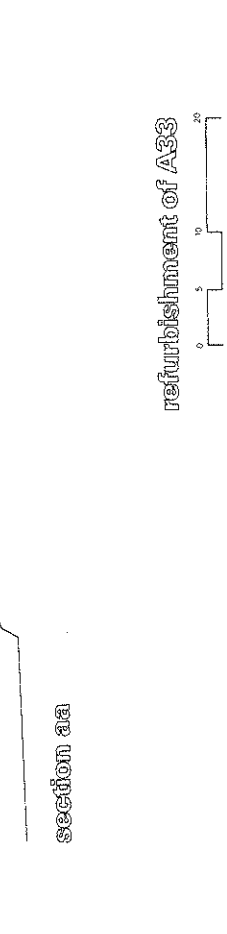
north elevation



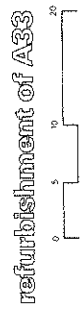
east elevation



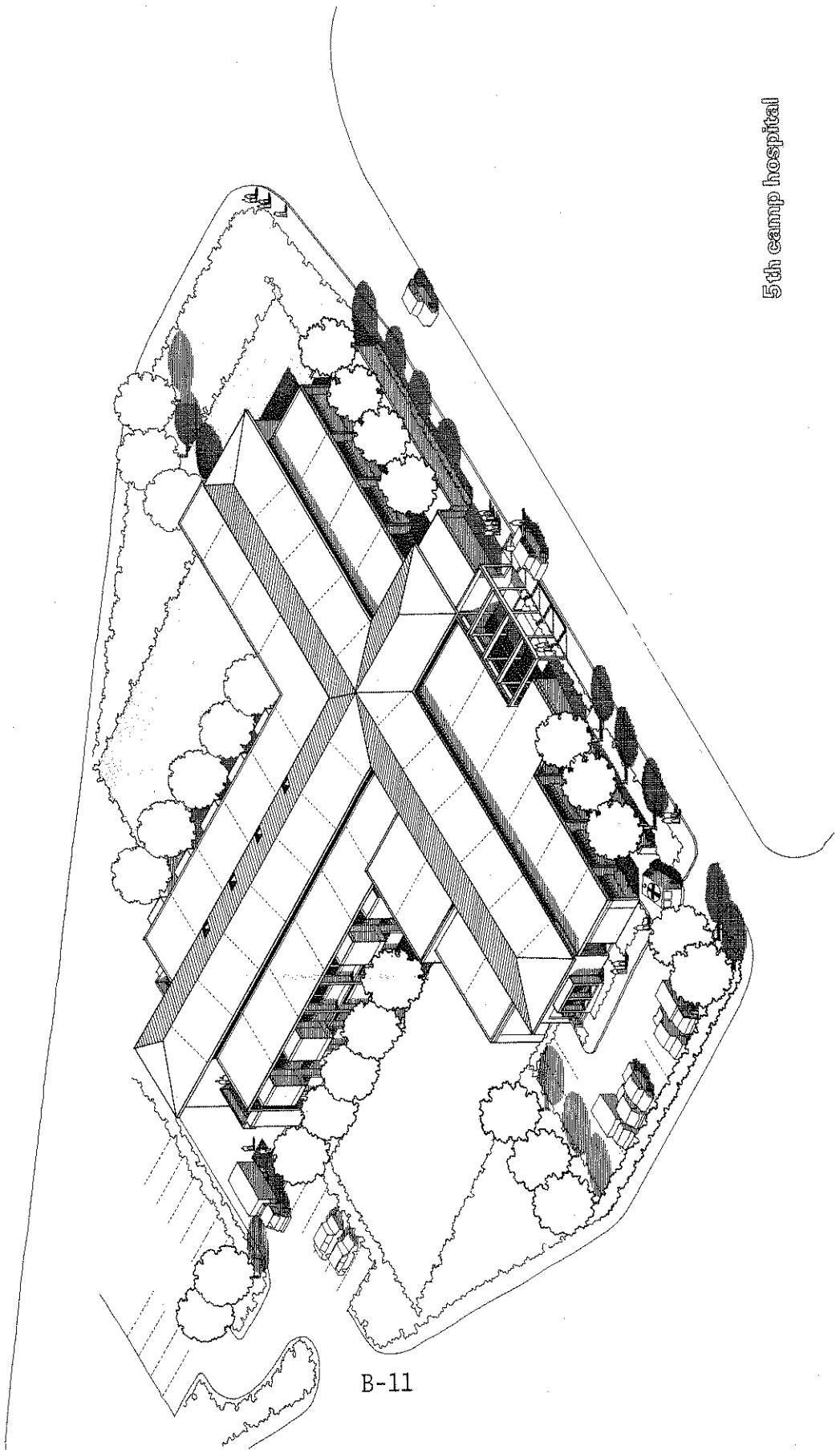
west elevation



section aa

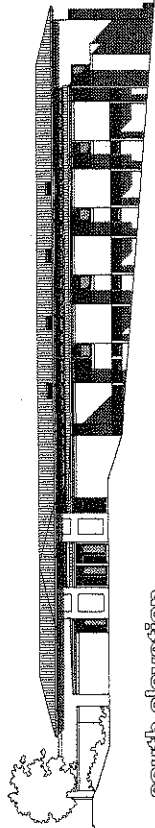


refurbishment of A33

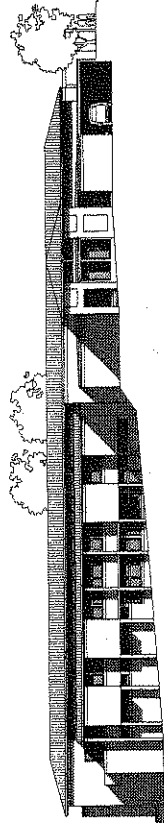


5th camp hospital

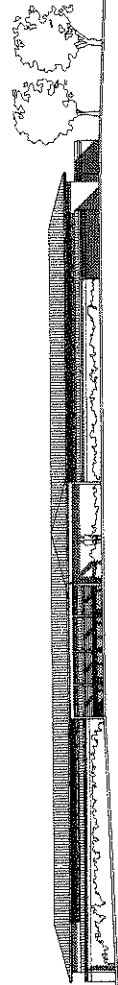
B-11



south elevation



north elevation



west elevation

5th camp hospital



