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*Mary Egan*

*Parliamentary Standing Committee on Public Works*

## REPORT

relating to the

# REDEVELOPMENT OF LAVARACK ARMY BARRACKS IN TOWNSVILLE, STAGE 1

(Sixteenth Report of 1992)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA  
1992

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



Report Relating

to the

Redevelopment of Lavarack Army  
Barracks  
in Townsville, stage 1

(Sixteenth Report of 1992)

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**MEMBERS OF THE PARLIAMENTARY STANDING  
COMMITTEE ON PUBLIC WORKS**

(Thirtieth Committee)

Mr Colin Hollis MP (Chairman)  
Mr William Leonard Taylor (Vice-Chairman)

Senate

Senator Bryant Burns  
Senator Paul Henry Calvert\*  
Senator John Roboert Devereux

House of Representatives

Mr Ewen Colin Cameron MP  
Mr Lloyd Reginald O'Neil MP  
Mr Russell Neville Gorman MP  
Mr Bruce Craig Scott MP

\* Appointed on 24.8.90 following the retirement of  
Senator Dr Glenister Sheil

**SECTIONAL COMMITTEE ON THE REDEVELOPMENT OF  
LAVARACK ARMY BARRACKS IN TOWNSVILLE, STAGE 1**

Mr Colin Hollis MP (Chairman)  
Mr William Leonard Taylor MP (Vice-Chairman)  
Mr Lloyd Reginald O'Neil MP

Committee Secretary: Peter Roberts  
Inquiry Secretary: Michael Fetter  
Secretarial Assistance: Sophia Konti

EXTRACT FROM THE  
VOTES AND PROCEEDINGS OF  
THE HOUSE OF REPRESENTATIVES

No. 152 dated Wednesday, 14 October 1992

- 14 PUBLIC WORKS - PARLIAMENTARY STANDING COMMITTEE - REFERENCE OF WORK - REDEVELOPMENT OF LAVARACK ARMY BARRACKS, TOWNSVILLE, STAGE 1: Mr Staples (Minister for Aged, Family and Health Services), for Mr Beddall (Minister representing the Minister for Administrative Services), pursuant to notice, moved - That, in accordance with the provisions of the *Public Works Committee Act*, the following proposed works be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Redevelopment of Lavarack Army Barracks in Townsville, stage 1.

Debate ensued

Question - put and passed.

## PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

### REDEVELOPMENT OF LAVARACK ARMY BARRACKS IN TOWNSVILLE, STAGE 1

By resolution on 14 October 1992 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposed redevelopment of Lavarack Army Barracks in Townsville, Stage 1.

#### THE REFERENCE

1. The reference is the first of a multistage project for the provision of modern working and training facilities at Lavarack Barracks. The proposal involves the provision of:

- permanent purpose-built accommodation for 162 Reconnaissance Squadron
- accommodation for elements of No 3. Brigade Administrative Support Battalion (BASB)
- Lavarack Barracks sick quarters
- a kerbside refuelling facility for Townsville logistics company.

2. The estimated cost of the proposal was \$20.96m at December 1991 prices.

#### THE COMMITTEE'S INVESTIGATION

3. The Committee received a submission and drawings from the Department of Defence (Defence) and took evidence from Defence at a public hearing held at Lavarack Barracks, Townsville, on 20 November 1992.

4. Written submissions and letters about the proposed works were also received from the following:

- . North Queensland Electricity Board
- . Public Sector Union
- . Commonwealth Fire Board
- . Australian Surveying and Land Information Group
- . Queensland Department of Environment and Heritage
- . Australian Heritage Commission
- . James Cook University
- . Amacon
- . Commonwealth Environment Protection Agency
- . Returned and Services League of Australia
- . Civil Aviation Authority.

5. Prior to the public hearing the Committee inspected a number of existing facilities including the medical centre, warehouses, fuel storage and distribution area and No. 162 Reconnaissance Squadron. A list of witnesses who gave evidence at the public hearing is at Appendix A.

6. The Committee's proceedings will be printed as Minutes of Evidence.

## **BACKGROUND**

### **Development of Lavarack Barracks**

7. Lavarack Barracks, located on the southern outskirts of Townsville, is the Army's major base in north Queensland. Lavarack Barracks is the home base for seven major units and 16 minor sub-units from the Army's Land, Training and Logistics Commands. The most significant of these is No. 3 Brigade, the major element of the Ready Deployment Force (RDF). This Brigade is at short notice to move to carry out any task allocated to it. As such, the Barracks must have the expansion capacity to administer the entire Brigade, including those personnel who normally live out.



8. Lavarack Barracks Development Stage 1 was undertaken in 1965-66 as a result of a Government decision to locate a task force base in Townsville. The development provided permanent living and working accommodation for a task force of three battalions and supporting arms and services, based on personnel and equipment establishments current at that time.

9. Lavarack Barracks Development Stage 2, commenced in 1980-81, provided working accommodation for the following additional units to support the RDF:

- . North Queensland Workshop Company
- . 102 Field Workshop
- . 121 Supply Company
- . Townsville Transport Unit.

#### **Other Development**

10. Various medium and minor works have also been undertaken at Lavarack Barracks during the past 25 years. The Committee was advised that these works were intended mainly to provide temporary accommodation for other units which were established and included:

- . 2 Field Ambulance (formerly 4 Camp Hospital)
- . 162 Reconnaissance Squadron
- . BASC
- . 3 Field Supply Company
- . 9 Transport Squadron.

11. Defence also advised that some permanent working accommodation was recently provided for 2 Field Supply Battalion which is responsible for providing logistic support to the RDF. In addition, minor units occupied areas formerly occupied by the third infantry battalion when two battalions were amalgamated to form the 2/4 Royal Australian Regiment.

### **Recent Reorganisation of Units**

12. In July 1991, No. 3 Brigade Administrative Support Battalion (3BASB) was formed by amalgamating the following units:

- . 9 Transport Squadron
- . 2 Field Ambulance
- . 3 Field Supply Company
- . 29 Combat Supply Platoon
- . 16 Field Dental Unit
- . 102 Field Workshop.

13. The restructuring of administrative and logistics units was undertaken on a trial basis and confirmed during Exercise Kangaroo 92.

14. Elements of 2 Field Ambulance provide the basis for a medical facility designated as the Lavarack Barracks Medical Centre (LBMC). This was previously referred to as a camp hospital.

### **Responsibilities of Units**

15. The roles of the units which are affected by this proposal are as follows:

- . 3BASB - provides second line administrative support to the RDF and allotted units
- . LBMC - provides medical support to the north Queensland area
- . 162 Reconnaissance Squadron - provides aircraft for reconnaissance and surveillance, observation of fire, and command and liaison duties.

## THE NEED

16. Defence submitted to the Committee that the development of Lavarack Barracks should be continued to provide permanent facilities for elements of 3BASB, LBMC and 162 Reconnaissance Squadron. The facilities occupied by these units are non-functional and are dispersed over a wide area.

### Existing Facilities - 3BASB

17. The location and condition of facilities occupied by 3BASB generally reflect ad hoc arrangements. Only two sub-units (Field Dental Unit and 102 Field Workshop) occupy purpose-designed facilities. The remainder occupy facilities which are not functional, having been originally designed for other purposes or provided as stopgap measures pending the provision of purpose-designed facilities. The following paragraphs describe the deficiencies:

- the headquarters of 3BASB occupies a building originally designed as an infantry battalion headquarters
- the Medical Company occupies a number of buildings originally designed for an infantry company. These buildings provide office accommodation for the headquarters of the Medical Company, three treatment sections and an evacuation section. Defence submitted that the present situation is unsatisfactory because the accommodation is non-functional and does not meet requirements for working space. The unit's quartermaster store and transport store are compressed into the buildings in an ad hoc manner
- the quartermaster store shares a building with the Medical Company quartermaster store where space is at a premium. This situation can be regarded as temporary due to insufficient suitable storage space
- the Supply Company is responsible for receiving, holding and issuing general stores, defence stores, medical and dental stores and technical stores to the RDF. It occupies a number of buildings which are dispersed. Following the establishment of

3BASB a demountable building has been provided and two transportable buildings were hired to provide additional office space for the Supply Company headquarters. Defence submitted that all facilities are temporary, are not purpose-designed and do not meet the requirements for the unit's working accommodation. The Supply Company has several galvanised metal warehouses which are considered to be inadequate because:

- they do not provide the temperature-controlled environment required for the warehousing of medical and dental stores
- they lack a secure area in which to store dangerous and restricted drugs - these are presently stored in an office building shared with another unit
- they lack safety deluge showers in areas where dangerous goods such as acids, corrosives and preservatives are used and stored
- they are not functionally laid out and it is therefore not possible for them to be operated in accordance with modern warehousing principles and practices
- they do not provide for the segregation of stores by supply class, or by hazard category

the Combat Supplies Platoon occupies buildings which were originally designed as a freight terminal. Defence stated that although there is adequate space for the platoon to operate from, the rationalisation of functions with the Supply Company and within 3BASB necessitates the collocation of this sub-unit with the Supply Company.

#### **Committee's Conclusion**

**18. Facilities occupied by No. 3 Brigade Administrative Support Battalion are inadequate and should be replaced with modern purpose-designed facilities.**

## Existing Facilities - Lavarack Barracks Medical Centre

19. The LBMC is an element of 2 Field Ambulance and has been occupying two converted rank and file accommodation blocks since 1974. These barracks blocks were not designed as medical facilities and are now needed to satisfy the shortage of rank and file accommodation at Lavarack Barracks. The shortage has arisen due to a reduction in the number of living-in bed spaces available as a result of the Army's accommodation upgrade program, and the consequential increase in the number of soldiers choosing to live in.

20. The LBMC provides a full range of outpatient and low dependency inpatient services including casualty, pathology, radiography and physiotherapy on a 24 hour basis.

21. The military population based at Lavarack Barracks which is dependent on the LBMC has increased from 2791 in 1976 to 3876 in 1991. Defence submitted that in addition, RAAF Base Townsville contributes to the level of dependency for in-patient care. Army Reserve courses also increase the dependency when reservists are in barracks. In short, the military population in the Townsville area which is currently dependent on the LBMC is in excess of 5000 personnel.

22. The existing in-patient facility has a capacity of 18 beds for patients and four beds for staff. Defence advised that this number has proved to be inadequate during peak periods of activity. Defence submitted that there is a need for a ward capacity of 26 beds plus an additional four-bed observation ward for overnight assessments.

23. The Committee questioned Defence about the need for a facility for in-patient care. Defence advised the Committee that the medical centre does not duplicate facilities which are provided for the civilian community. The facilities to be provided will be for minor and limited emergency treatment. The Army's requirement for medical facilities is somewhat different from those required by the civilian community. A large number of single or unaccompanied soldiers live at the Barracks and they would not normally be admitted to hospitals for minor illnesses or contagious diseases. Both for their own care and for the prevention of the spread of contagious diseases within barracks environments, it is highly desirable for a medical centre be provided.

24. The Committee also questioned Defence about the number of bed spaces which would be required. Defence believes the current number available is inadequate to cater for peak loadings and as a result patients need to be discharged prematurely. The difficulties being experienced by medical staff in providing treatment for patients with differing requirements were pointed out during the Committee's inspection - these difficulties generally relate to the limited number of beds; for example, is not possible for patients requiring closer supervision to be housed in single rooms.

#### **Committee's Conclusions**

25. The Lavarack Barracks Medical Centre occupies facilities which are inadequate in scope and unsuitable in design for the effective and efficient delivery of medical services for Army personnel at Lavarack Barracks.

26. There is a need for the provision of a modern purpose-designed medical centre with adequate facilities and capacity required to provide appropriate treatment and medical care.

#### **Existing Facilities - 162 Reconnaissance Squadron**

27. The Reconnaissance Squadron moved to Townsville in the late 1960s and occupied a variety of buildings which included purpose-built facilities for the unit's administrative elements and temporary prefabricated buildings for aircraft storage and workshops.

28. The present working accommodation comprises temporary buildings which, Defence submitted, are substandard, non-functional and in a poor state of repair. The buildings leak and are not dust-proofed which causes stores and equipment to deteriorate. The buildings have no sound attenuation; personnel are subjected to excessive aircraft noise. Defence advised the Committee that a survey, conducted in 1987, showed that personnel inside buildings adjacent to the aircraft apron are subjected to noise in the range 91-102dBA. Noise levels inside the unit buildings reach 88dBA. The Committee was advised that these levels exceed those recommended by Australian Standard 2107 of 40dBA for ambient sound level with a maximum of 45dBA for office environments. Defence advised the Committee that the current situation has a detrimental effect on the morale and hearing acuity of personnel.

29. Defence submitted that there is a requirement for a new headquarters building, hangar and repair facilities for the squadron. The following paragraphs describe existing buildings and their deficiencies:

- the existing headquarters building is affected by aircraft noise and cannot be sound attenuated economically. The Committee inspected the facility currently used as an operations room. It comprises a pre-fabricated building relocated from Brisbane. It is in poor condition, cramped and not functional. Furthermore, the building is inappropriately located adjacent to the aircraft apron

- the hangar complex was built to accommodate two light observation helicopters undergoing repairs. Since then the number of aircraft operated by the unit has increased to nine. Defence submitted that there is a need for a workshop hangar to maintain at least three aircraft concurrently. The existing hangar is inadequate, having only one door. This impedes job efficiency, creates a serious fire hazard and places excessive pressure on tradesmen. Defence advised the Committee that there is a requirement for a hangar to house four aircraft with direct, unrestricted access for each

- the hangar is also used as a servicing area for engine, transmission and module overhaul. Defence advised that this arrangement has created problems within the workshop area which is cramped. A separate area within the hangar complex is required as an engine service bay. The avionics workshop is located in a demountable building, provided in 1983, to overcome the shortfall in accommodation. Defence submitted that there is a need for the provision of a purpose-built facility to provide an environment-controlled avionics workshop.

30. The Committee questioned Defence about the need to locate 162 Reconnaissance Squadron at Lavarack Barracks and whether it would not be more prudent to locate the squadron in facilities at RAAF Base Townsville where 5 Aviation Regiment, which is equipped with Blackhawk helicopters, is located. Defence advised the Committee that 5 Aviation Regiment is primarily a lift unit; it is part of Land Command and is not dedicated solely to support the Brigade based at Townsville. The type of operations carried out by 162 Reconnaissance Squadron involve supporting

the Brigade in different areas of operations, primarily in the field reconnaissance role. Furthermore, both aircrew and tradesmen are specialists in their own field; they are not cross-trained.

#### **Committee's Conclusion**

31. Facilities occupied by 162 Reconnaissance Squadron at Lavarack Barracks are substandard and should be replaced with modern purpose-designed facilities.

#### **Area Kerbside Refuelling Facility**

32. Lavarack Barracks does not have a central refuelling facility. Instead, fuel is provided from the 2 Field Supply Battalion facility or from nine unit facilities. Currently, bulk petrol, oil and lubricants are stored in an open area without adequate security nor in compliance with occupational health and safety requirements. The existing 2 Field Supply Battalion facility is located within the Battalion's compound and lacks access suitable for vehicle convoys. The underground tanks are nearing the end of their lives; one has already been decommissioned. Defence submitted to the Committee that a new refuelling facility for use by all unit vehicles at Lavarack Barracks is required.

#### **Committee's Conclusions**

33. There is a need to replace existing fuel storage and refuelling facilities at Lavarack Barracks which are substandard and lack adequate security.

34. The provision of a kerbside refuelling facility would satisfy occupational health and safety requirements as well as provide operational advantages and improved security.

#### **THE PROPOSAL**

35. The scope of the proposed work is as follows:

3BASB - the construction of purpose-designed office/store and warehousing facilities for:

- headquarters 3BASB



- medical company
- 3BASB quartermaster store
- supply company
- LBMC - construction of a base medical centre
- 162 Reconnaissance Squadron - the construction of permanent working accommodation comprising the following elements:
  - .. headquarters/operations complex
  - .. main hangar and workshop
  - .. aircraft apron
  - .. aircraft storm protection shelter
  - .. quartermaster's store and transport compound
- Townsville logistics company - construction of an area kerbside refuelling facility.

### **Location of Facilities**

36. The sites selected for the facilities proposed in this reference are shown on the Site Plan (Appendix B, Plan B - 2). Defence advised the Committee that a draft Master Plan for Lavarack Barracks was completed in August 1990 and the siting of each facility is in accordance with the Master Plan.

### **Aircraft Noise**

37. Defence advised that an Australian Noise Exposure Forecast (ANEF) has been prepared for the site proposed for 162 Reconnaissance Squadron. This forecast indicates that the anticipated noise levels at adjoining facilities will meet the requirements of the relevant Australian Standard. Furthermore, the functional layout of the proposed 162

Reconnaissance Squadron facilities incorporates measures to reduce the effects of both wind-driven debris and noise within them, particularly the hangar and aircraft shelter areas.

#### **Committee's Conclusions**

38. The locations of the Stage 1 facilities are in accordance with the draft Master Plan.

39. The Australian Noise Exposure Forecasts for the location of facilities for 162 Reconnaissance Squadron indicate that noise intrusions to adjacent areas from the use of helicopters will not be significant.

#### **Design Philosophy**

40. Defence advised that the design philosophy to be adopted for the overall redevelopment is that facilities are to be efficient and functional and suitable for their intended use with due regard being given to climatic conditions, including cyclone protection. Materials with minimum maintenance requirements will be specified. Designs will conform with the following standards and codes:

- Australian Codes and Standards, including the Building Code of Australia
- codes and regulations of relevant statutory authorities
- service scales and standards of accommodation
- Defence Fire Protection Engineering Manual (FACMAN 2).

41. Relevant Australian Standards will be applicable to the design of facilities and the selection of materials used for acoustic protection. This is particularly important in the design of facilities for 162 Reconnaissance Squadron.

#### **Fire Protection Measures**

42. The Commonwealth Fire Board (CFB) noted that the Defence submission to the Committee does not mention project-specific information on fire protection measures to be provided. The Defence submission

mentions the provision of 'special risk' facilities including the kerbside refuelling facility, a flammable goods room, a battery charging room and a dangerous goods store.

43. In response Defence advised the Committee that tenders are yet to be called to address specific design requirements in relation to the project and therefore project-specific information on fire protection is yet to be determined. Nevertheless, the standard forms of contract now utilised by Defence clearly require the contractor to:

- . comply with statutory requirements
- . give all notices necessary to comply with this requirement
- . surrender all documents evidencing approval of authorities.

44. Specific fire protection requirements will be incorporated at the design brief stage and Defence advised the Committee should it wish to view specific details, these can be made available to it or to the CFB at that time. Aircraft hangars will have infra-red heat detectors. Other facilities will have detectors and/or sprinklers provided as appropriate.

#### **Committee's Recommendation**

45. When the design brief for the Stage 1 works has been completed, a copy of it should be provided to the Commonwealth Fire Board for comment.

#### **Energy Management and Conservation**

46. Defence advised the Committee that particular attention is to be given to energy management and conservation in the design of the facilities. A consultancy for an energy audit of Lavarack Barracks had been commissioned and Defence intends to extend this consultancy to include the proposed facilities.

47. The Committee notes with some satisfaction that Defence acknowledged in its submission that:

The technology utilised for domestic solar hot water systems is well advanced with potentially economical units commercially manufactured.

48. As the project is located in Townsville, Defence expects that approximately 70% of the energy required for hot water heating could be provided by solar collection. Defence believes that the use of solar hot water systems will be a cost-effective method of providing domestic hot water.

#### **Electrical and Mechanical Services**

49. External electrical engineering services to be provided will consist of:

- extension of high voltage and low voltage power reticulation
- provision of communications cables and associated equipment
- extension of street lighting.

50. The existing high voltage electrical system requires extension to allow connection of new substations for the proposed facilities. The extensions will involve the continuing development of the high voltage system already established on the base. Power to each new facility will be provided by low voltage cables from the new substations.

51. The communications facilities involve the installation of telephone cables from the main distribution frame to an area distribution network. Installation of the new cable network will utilise existing cable ducts where possible together with the installation and extension of the base conduit network.

52. Street lighting will be installed on new roads to match the existing street lighting system.

53. Emergency power, provided by diesel generators, and an uninterruptible power supply will be provided to the LBMC for essential and critical equipment.

## Airconditioning

54. Airconditioning will be provided to specific areas of the facilities where required by the nature of usage. These include:

- . LBMC
- . briefing/conference rooms
- . medical/dental storage
- . the avionics workshop at 162 Reconnaissance Squadron.

55. The Public Sector Union (PSU) submitted that all new office accommodation, including amenities areas, at Lavarack Barracks should be airconditioned.

56. Defence advised the Committee in response that it is not intended to provide airconditioning for the Army Land Command units of No. 3 Brigade - this includes 3BASB and 162 Reconnaissance Squadron. The units are manned by military personnel only and the primary aim of not providing airconditioning is to ensure that the Brigade is fully acclimatised, ready to deploy at all times. No member of the PSU is affected in these units.

57. Defence also recognise the needs of civilians employed at Lavarack Barracks. The proposed BASC will be manned by a significant proportion of civilian staff and will be airconditioned.

58. Defence advised that no special precautions to avoid legionella are required as airconditioning cooling towers will not be used.

59. Non-airconditioned areas will be ventilated by natural ventilation for general areas and mechanical ventilation for amenity areas.

## Civil Engineering

60. Defence advised the Committee that preliminary site investigations and survey work have been undertaken to verify the correctness of initial

design assumptions. The design of the road systems, pavements and car park will incorporate asphalt surfacing and will be capable of accepting movements of the critical design vehicles.

61. The aircraft apron at the proposed facility for 162 Reconnaissance Squadron will be asphaltic surfaced except at the helicopter parking positions where concrete will be utilised. Aircraft earthing and tie-down points will be provided at each helicopter pad.

62. Oil fuel interceptor structures will be installed at the aircraft wash point and at the vehicle refuelling and wash point.

63. Stormwater runoff will be directed away from new facilities and will be connected to the existing stormwater drainage system. Finished earthwork batters and non-paved areas around the facilities will be grassed to resist soil erosion.

#### **Hydraulic Services**

64. Defence advised that preliminary investigations indicate that the existing trunk water and sewer mains have sufficient capacity to service the new facilities.

#### **Physical Security**

65. Physical security in the form of security fencing will be provided around facilities and compounds as required. The Committee questioned Defence about the security of existing facilities at Lavarack Barracks. Defence advised the Committee that military police patrol the Barracks and each major unit also has its own duty staff at night and has roving patrols in its area of responsibility. Defence assured the Committee that the combination of roving patrols and military police patrols ensure that the security of Lavarack Barracks is well covered at night and on public holidays.

#### **Protection against Cyclones**

66. The Committee questioned Defence about the ability of the proposed buildings, and especially the proposed hangar, to withstand the effects of cyclones. Defence advised that all buildings will be built in accordance with

the standards which are required in the Townsville area. They will be designed to withstand cyclones but not as cyclone shelters. The hangar will be designed to safely house helicopters during a cyclone.

## **OTHER WORKS AT TOWNSVILLE**

### **Rank and File Living-in Accommodation**

67. The rank and file living-in accommodation upgrade program, involving the provision of ungraded bedroom accommodation throughout Australia, was considered and reported on by the Committee in February 1988. The Townsville element, consisting of 1560 bedrooms, is scheduled for completion in late 1992. The scope of this proposal is limited to the refurbishment of existing living-in accommodation and does not include any other requirements for facilities at Townsville.

### **Lavarack Barracks Administration Support Centre**

68. As part of the Defence Regional Support Review, Lavarack Barracks Administration Support Centre has been formed. This is a project to provide a centralised office area, estimated to cost \$2.7m, which is planned to be constructed in 1993. This building was not included in the Stage 1 works because it had been approved as a medium work which arose from the Defence Regional Support Review; a number of similar works are being carried out at Army bases around Australia, including Oakey (Qld), to allow for the disbandment of military district headquarters and the transfer of various functions to the bases themselves.

### **Use of Buildings to be Vacated**

69. The Committee questioned Defence about the uses to which the buildings which will become vacant on completion of the Stage 1 works. Defence advised that the galvanised metal warehouses will be used as a concentration area for units going on exercises or deploying for other reasons. The facilities housing 162 Reconnaissance Squadron will be used by 2 Field Supply Battalion which at present has a number of elements at various locations. The medical centre was originally used for soldiers' accommodation and it is planned to refurbish it into living-in accommodation.

## Future Works

70. The Committee questioned Defence about the components of the Stage 1 works, particularly if there were other urgent works at Lavarack Barracks. Defence advised that the Stage 1 works were included on the basis of their urgency for efficiency and for occupational health and safety reasons.

71. Defence advised that subsequent stages of the redevelopment project, which are outside the current Five Year Defence Program, will consist of the following:

- . construction of working accommodation for 9 Transport Squadron
- . completion of works for 2 Field Supply Battalion
- . refurbishment of messes and kitchens
- . upgrading of the range complex
- . additional facilities for Townsville Logistics Company
- . construction of sporting facilities
- . provision of the following area facilities:
  - an area vehicle wash point
  - car parks
  - hardening of an existing other ranks mess structure to meet cyclone requirements
  - water storage and reticulation
  - refurbishment of parade grounds and landscaping
  - upgrading of engineering services.

## ENVIRONMENTAL CONSIDERATIONS

### Environmental Clearances

72. The Commonwealth Environment Protection Agency (CEPA) advised the Committee that the proposal had not been referred to it for



assessment under the *Environment Protection (Impact of Proposals) Act 1974* (the Act) as Defence had determined that the proposal is not likely to affect the environment to a significant extent.

73. Defence advised that the proposal has been assessed within the department in accordance with the Ministerial understanding between the Minister for the Arts, Sport, the Environment and Territories and the Minister for Defence. A Certificate of Compliance has been issued under the ambit of the Act.

#### **Disposal of Medical/Pathological Wastes**

74. The Queensland Department of Environment and Heritage expressed satisfaction that all issues of interest, with the exception of the disposal of medical/pathological waste, had been addressed in the Defence submission to the Committee.

75. Defence advised in response that currently all medical/pathological wastes from the LBMC are delivered to the Mater Hospital, Townsville, where they are incinerated. There is no intention to depart from this arrangement upon occupation of the new medical centre.

#### **ESTIMATES AND TIMINGS**

##### **Cost**

76. The preliminary estimate for the proposed works is \$20.96m at December 1991 prices and the out-turn cost is \$23.433m. These estimates do not include the cost of furniture and fittings, equipment, consultant fees for design work and project management no construction contingencies.

##### **Timing**

77. It is proposed that the works will be constructed with separate contract packages for the various elements. Defence advised that planning is proceeding on the basis that the work can go to tender in January 1992 with the completion planned for June 1995.

### **Committee's Recommendation**

**78. The Committee recommends the construction of works for the redevelopment of Lavarack Army Barracks in Townsville, stage 1 at an estimated out-turn cost of \$23.433m.**

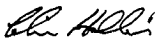
## CONCLUSIONS AND RECOMMENDATIONS

79. The Committee's conclusions and recommendations and the paragraph in the report to which each refers are set out below:

	Paragraph
1. Facilities occupied by No. 3 Brigade Administrative Support Battalion are inadequate and should be replaced with modern purpose-designed facilities.	18
2. The Lavarack Barracks Medical Centre occupies facilities which are inadequate in scope and unsuitable in design for the effective and efficient delivery of medical services for Army personnel at Lavarack Barracks.	25
3. There is a need for the provision of a modern purpose-designed medical centre with adequate facilities and capacity required to provide appropriate treatment and medical care.	26
4. Facilities occupied by 162 Reconnaissance Squadron at Lavarack Barracks are substandard and should be replaced with modern purpose-designed facilities.	31
5. There is a need to replace existing fuel storage and refuelling facilities at Lavarack Barracks which are substandard and lack adequate security.	33
6. The provision of a kerbside refuelling facility would satisfy occupational health and safety requirements as well as provide operational advantages and improved security.	34
7. The locations of the Stage 1 facilities are in accordance with the draft Master Plan.	38

Paragraph

8. The Australian Noise Exposure Forecasts for the location of facilities for 162 Reconnaissance Squadron indicate that noise intrusions to adjacent areas from the use of helicopters will not be significant. 39
9. When the design brief for the Stage 1 works has been completed, a copy of it should be provided to the Commonwealth Fire Board for comment. 45
10. The Committee recommends the construction of works for the redevelopment of Lavarack Army Barracks in Townsville, stage 1 at an estimated out-turn cost of \$23.433m. 78



Colin Hollis  
Chairman

7 December 1992

WITNESSES

HELLYER, Brigadier Grahame Leslie, Director General Accommodation and Works, Army, Department of Defence, Building K, Russell Offices, Canberra, Australian Capital Territory 2600.

SELTH, Major David Ian, Project Manager, Directorate General Accommodation and Works, Army, Department of Defence, Building K, Russell Offices, Canberra, Australian Capital Territory 2600.

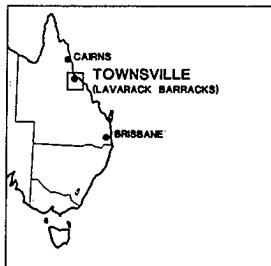
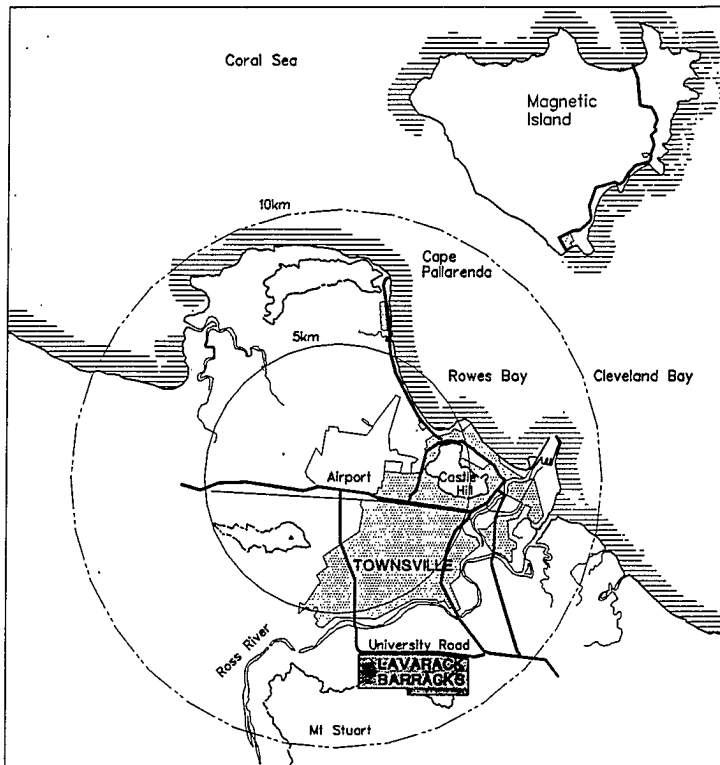
WEEKES, Colonel Neil Harvey, Commander, Base Administrative Support Centre, Lavarack Barracks, Department of Defence, Townsville, Queensland 4813.

PAULSEN, Mr Gregory Robin, Project Manager, Australian Construction Services, Queensland Region, GPO Box 1381, Brisbane, Queensland 4001.

## APPENDIX B

### PROJECT PLANS

	Page
Locality plan	B - 1
Site plan	B - 2
<b>Facilities for 3BASB</b>	
Site plan	B - 3
Floor plan - headquarters	B - 4
Floor plans - west	B - 5
Floor plans - east	B - 6
Floor plan - medical company headquarters	B - 7
Floor plan - field supply company	B - 8
Floor plan - field supply company	B - 9
<b>Lavarack Barracks Medical Centre</b>	
Site plan	B - 10
Floor plan - west	B - 11
Floor plan - east	B - 12
<b>162 Reconnaissance Squadron</b>	
Site plan	B - 13
Floor plan - west	B - 14
Floor plan - east	B - 15
Floor plan - south	B - 16
ANEF plan	B - 17
<b>Kerbside refuelling facility</b>	
Site plan	B - 18
Floor plan	B - 19



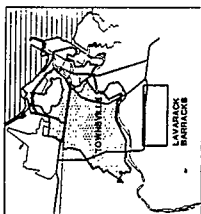
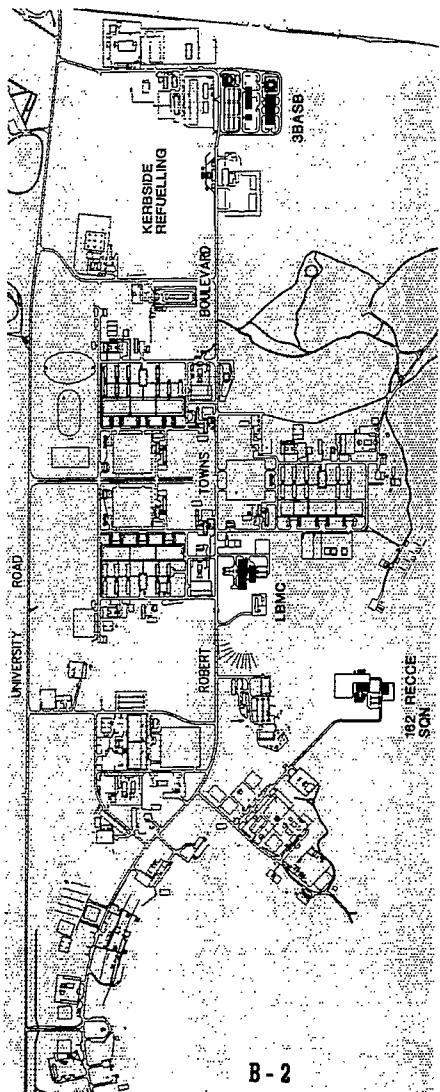
LOCALITY  
PLAN



0 0.75KM 3.75KM

ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

B - 1



SITE  
PLAN

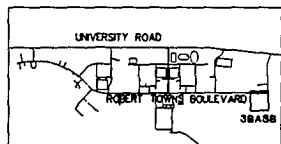
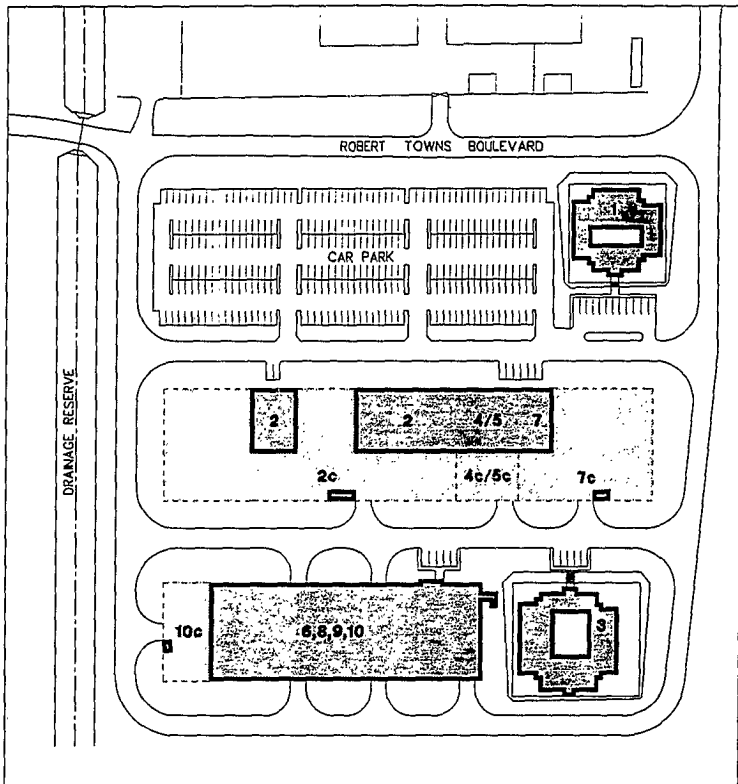
N

0 100M 500M

ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

B - 2





LEGEND

- 1 BASB HEADQUARTERS
- 2 BASB MAIN Q/TRANSPORT
- 2c
- 3 MEDICAL COMPANY HQ COMPOUND
- 4 MEDICAL COMPANY Q STORE
- 4c
- 4c MEDICAL COMPANY TRANSPORT COMPOUND
- 5
- 5c MEDICAL COMPANY TRANSPORT COMPOUND
- 6
- 6c FIELD SUPPLY COMPANY HQ
- 7
- 7c FIELD SUPPLY COMPANY Q STORE/TRANSPORT COMPOUND
- 8
- 8 FIELD SUPPLY COMPANY CONTROL OFFICE
- 9
- 9c FIELD SUPPLY COMPANY STORES PL
- 10
- 10c FIELD SUPPLY COMPANY COMBAT SUPPLY COMPOUND

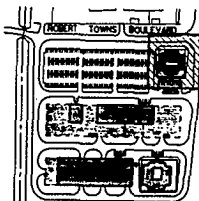
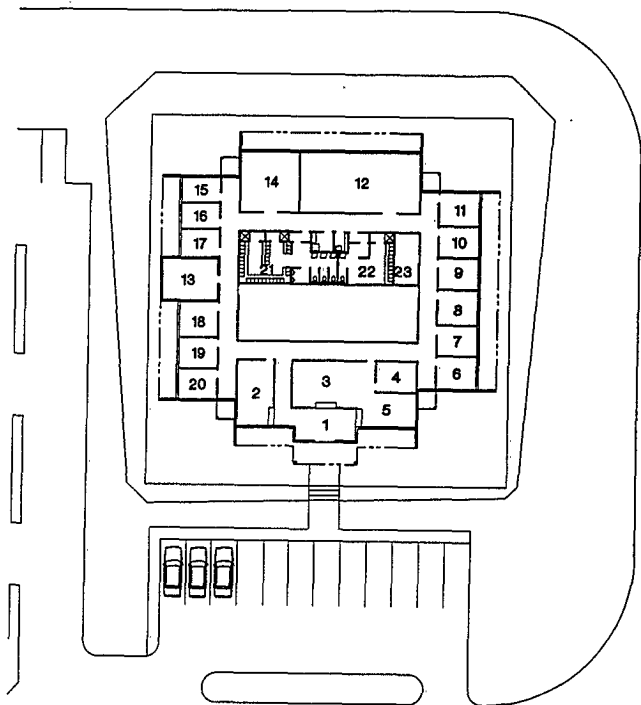
3BASB  
SITE  
PLAN



0 7.5M 37.5M

ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

ROBERT TOWNS BOULEVARD



Legend

- |    |                     |    |                        |
|----|---------------------|----|------------------------|
| 1  | ENTRANCE/TOYER      | 17 | ACCOM DUTY SGT         |
| 2  | PAY                 | 18 | ACCOM DUTY OFFICER     |
| 3  | REGISTRY ROOM       | 19 | DUTY ROOM              |
| 4  | CHEF CLEVER         | 20 | ASST ADJUTANT          |
| 5  | MOVEMENTS ROOM      | 21 | MALE TOILET & CHANGE   |
| 6  | ADJUTANT            | 22 | FEMALE TOILET & CHANGE |
| 7  | ROM                 | 23 | STORE                  |
| 8  | CO                  |    |                        |
| 9  | ZIC                 |    |                        |
| 10 | ADMIN OFFICER       |    |                        |
| 11 | OPSO                |    |                        |
| 12 | OPS ROOM            |    |                        |
| 13 | A/C PLANT ROOM      |    |                        |
| 14 | BRIEFING/CONFERENCE |    |                        |
| 15 | ACCOM DUTY DRIVER   |    |                        |
| 16 | ACCOM POINT         |    |                        |

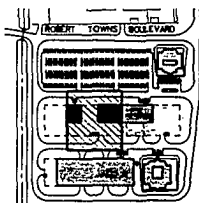
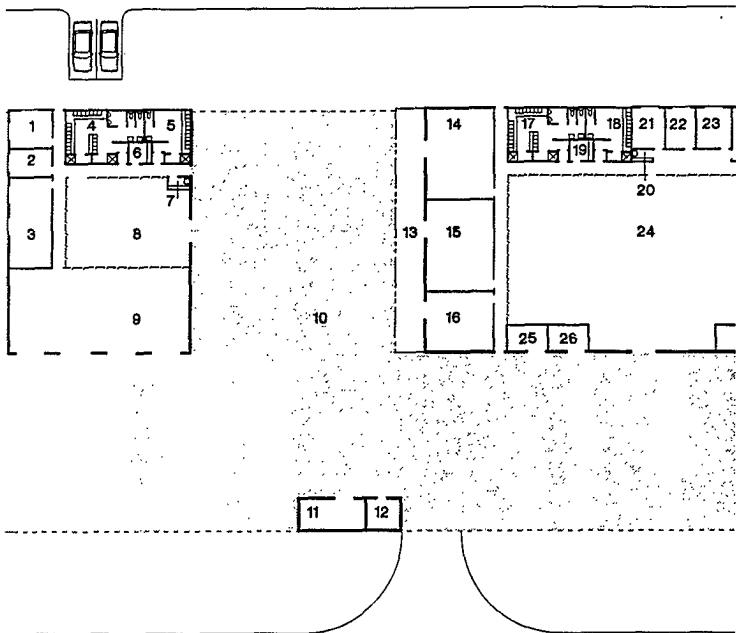
3BASB FLOOR PLAN

Serial 1

0 2M 10M



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1



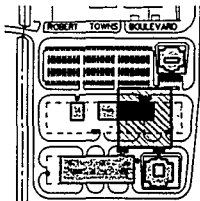
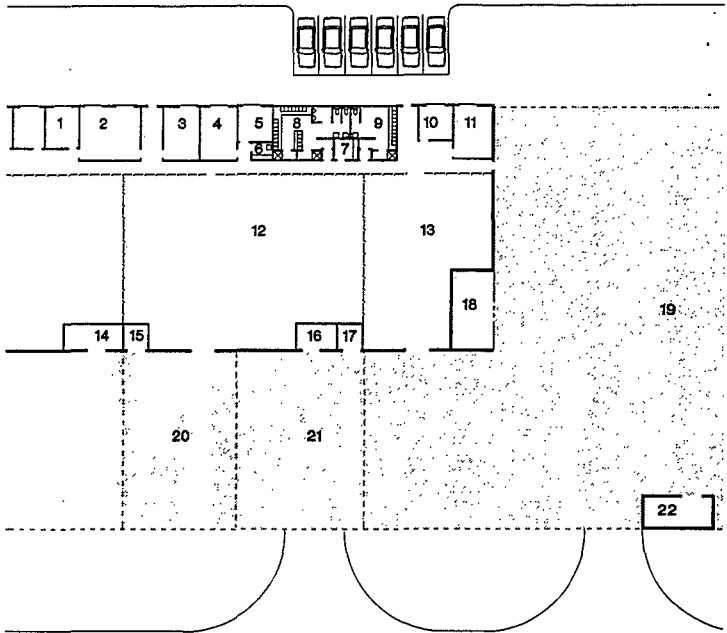
Legend

- |    |                        |    |                        |
|----|------------------------|----|------------------------|
| 1  | TRANSPORT OFFICE       | 15 | ELECTRICAL SHOP        |
| 2  | TRANSPORT SPV          | 16 | ARMOURY                |
| 3  | DRIVERS ROOM           | 17 | MALE TOILET & CHANGE   |
| 4  | MALE TOILET & CHANGE   | 18 | FEMALE TOILET & CHANGE |
| 5  | FEMALE TOILET & CHANGE | 19 | TEA ROOM               |
| 6  | TEA ROOM               | 20 | CLEANER                |
| 7  | CLEANER                | 21 | OMS                    |
| 8  | TRANSPORT STORE        | 22 | OM                     |
| 9  | VEHICLE MAINTNCE       | 23 | ROWS                   |
| 10 | VEHICLE COMPOUND       | 24 | O STORE                |
| 11 | POL STORE              | 25 | FLAMMABLE GOODS        |
| 12 | POL STORE              | 26 | GAS STORE              |
| 13 | COVERED AREA           |    |                        |
| 14 | CARPENTERS SHOP        |    |                        |

**3BASB FLOOR PLAN WEST**  
Serial 2,4,5,7

0 2M 10M

ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

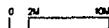


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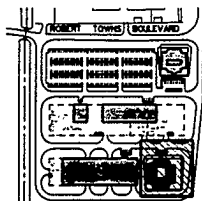
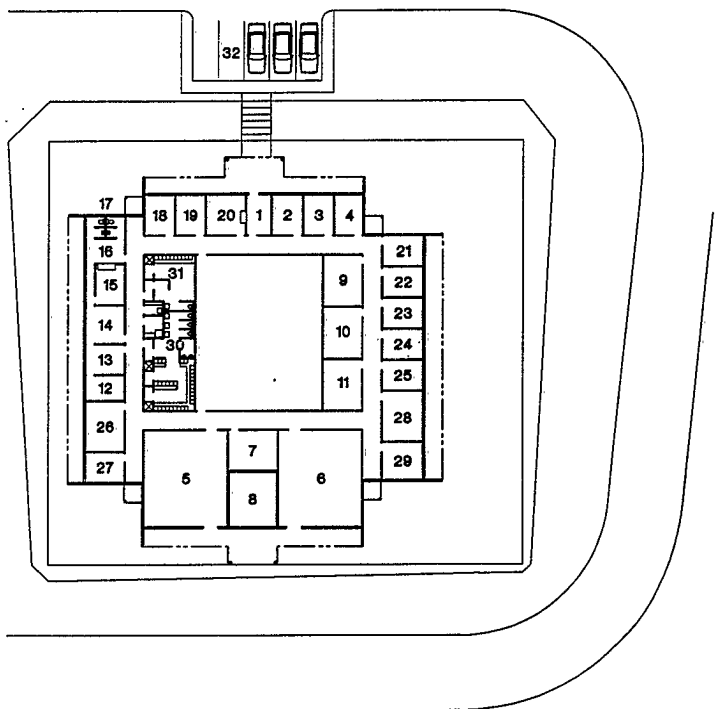
- |    |                        |    |                   |
|----|------------------------|----|-------------------|
| 1  | ROOMS                  | 11 | O OFFICE          |
| 2  | O OFFICE               | 12 | O STORE           |
| 3  | TPT OFFICE             | 13 | O STORE           |
| 4  | O OFFICE               | 14 | BATTERY STORE     |
| 5  | COIN                   | 15 | MED AIR GAS STORE |
| 6  | CLEANER                | 16 | BATTERY STORE     |
| 7  | TEA ROOM               | 17 | BATTERY CHARGING  |
| 8  | MALE TOILET & CHANGE   | 18 | CRP STORAGE       |
| 9  | FEMALE TOILET & CHANGE | 19 | VEHICLE COMPOUND  |
| 10 | TPT OFFICE             | 20 | O COMPOUND        |
|    |                        | 21 | CHANGE            |
|    |                        | 22 | POL. STORE        |

3BASS  
FLOOR  
PLAN  
EAST

Serial 2,4,5,7



ARMY - TOWNVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

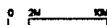


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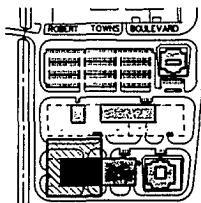
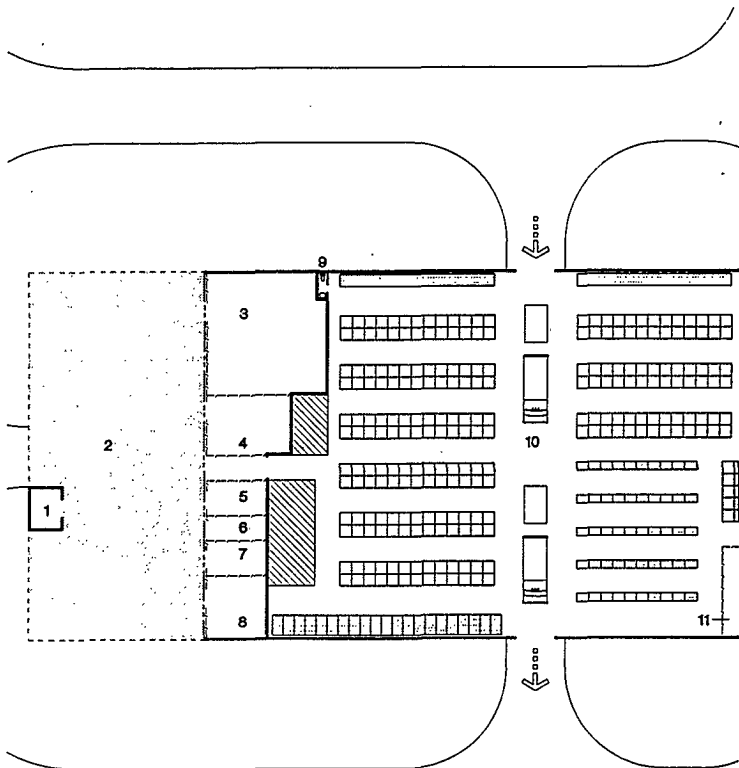
- |    |                     |    |                        |
|----|---------------------|----|------------------------|
| 1  | ENTRY               | 18 | MO                     |
| 2  | MO                  | 19 | MO                     |
| 3  | OC                  | 20 | ORDDLEY ROOM           |
| 4  | CSM                 | 21 | NO                     |
| 5  | CLASSROOM           | 22 | NO                     |
| 6  | CLASSROOM           | 23 | NO                     |
| 7  | TRAINING WARD       | 24 | OC XRAY                |
| 8  | AC PLANT ROOM       | 25 | OC PATHOLOGY           |
| 9  | SECTION OFFICER     | 26 | HEALTH OFFICER         |
| 10 | SECTION OFFICER     | 27 | HEALTH SECTION         |
| 11 | SECTION OFFICER     | 28 | TRAINING OFFICE        |
| 12 | RAP MEDICAL STORE   | 29 | TRAIN/LB/RAP STORE     |
| 13 | RAP TREATMENT ROOM  | 30 | MALE TOILET & CHANGE   |
| 14 | RAP MO CONSULT ROOM | 31 | FEMALE TOILET & CHANGE |
| 15 | RAP RECEIPT/ADMIN   | 32 | CAMPING                |
| 16 | RAP WAITING AREA    |    |                        |
| 17 | RAP TOILETS         |    |                        |

3BASS  
FLOOR  
PLAN

Serial: 3



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1



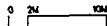
Legend

- 1 DANGEROUS GOODS STORE
- 2 COMPOUND
- 3 TECH & GENERAL STORES
- 4 DEFENCE PACKS
- 5 HQ ADMIN & ODS ROOMS
- 6 MEDICAL & DENTAL
- 7 APC TRACKS
- 8 CONTROL OFFICE
- 9 TOILET
- 10 WAREHOUSE STORAGE
- 11 BN PACKS/MARITCE

3BASS  
FLOOR  
PLAN

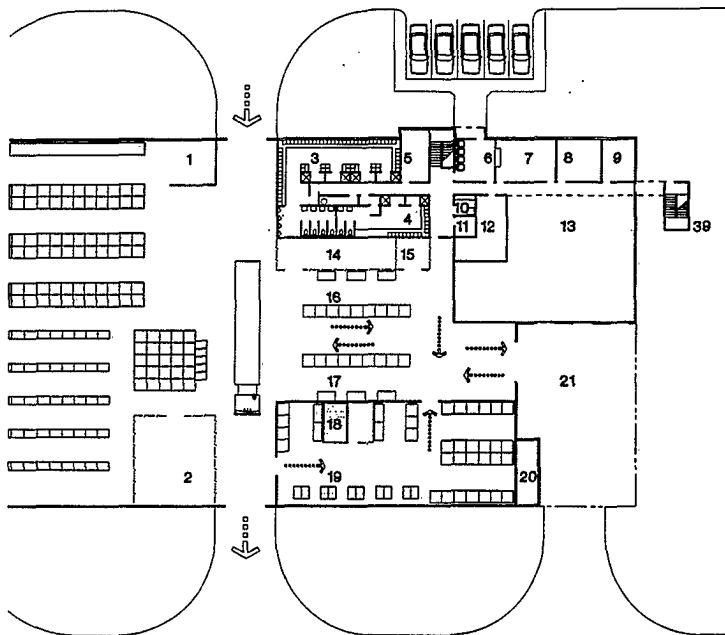
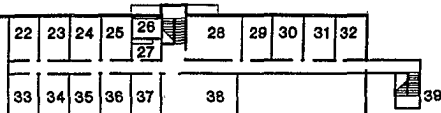


Serial 6,8,9,10



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1

FIRST FLOOR PLAN

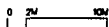


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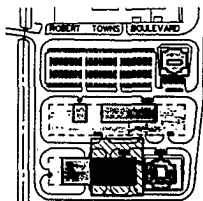
- |                          |                                 |
|--------------------------|---------------------------------|
| 1 TREATMENT PACKING      | 20 PLANT ROOM                   |
| 2 BIN PACKING/WAREHOUSE  | 21 BELK BREAK-UP & DISTRIBUTION |
| 3 MALE TOILET & CHANGE   | 22 SUPPLY OFFICER               |
| 4 FEMALE TOILET & CHANGE | 23 SECTION SUPER                |
| 5 PLANT ROOM             | 24 SECTION SUPER                |
| 6 ENTRANCE /TOYER        | 25 SECTION SUPER                |
| 7 WO CONTROLLER          | 26 AC DUCT FROSER               |
| 8 LPO OFFICE             | 27 TEA ROOM                     |
| 9 RES OFFICE             | 28 ORDERLY ROOM                 |
| 10 TEA ROOM              | 29 DC                           |
| 11 CLEANER               | 30 2IC                          |
| 12 FILING/ARCHIVES       | 31 CSM                          |
| 13 CONTROL OFFICE        | 32 LIBRARY/STORE                |
| 14 ATTRACTIVE STORES     | 33 WAREHOUSE SUPER              |
| 15 SUSPENSE BAY          | 34 WAREHOUSE SUPER              |
| 16 RECEIPT AREA          | 35 WAREHOUSE SUPER              |
| 17 ISSUE AREA            | 36 PHARMACIST                   |
| 18 COOK ROOM             | 37 SUP OFFICER                  |
| 19 MED/DENTAL STORE      | 38 CONFERENCE ROOM              |
|                          | 39 FIRE ESCAPE                  |

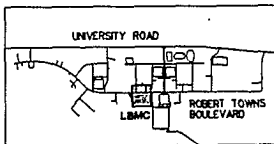
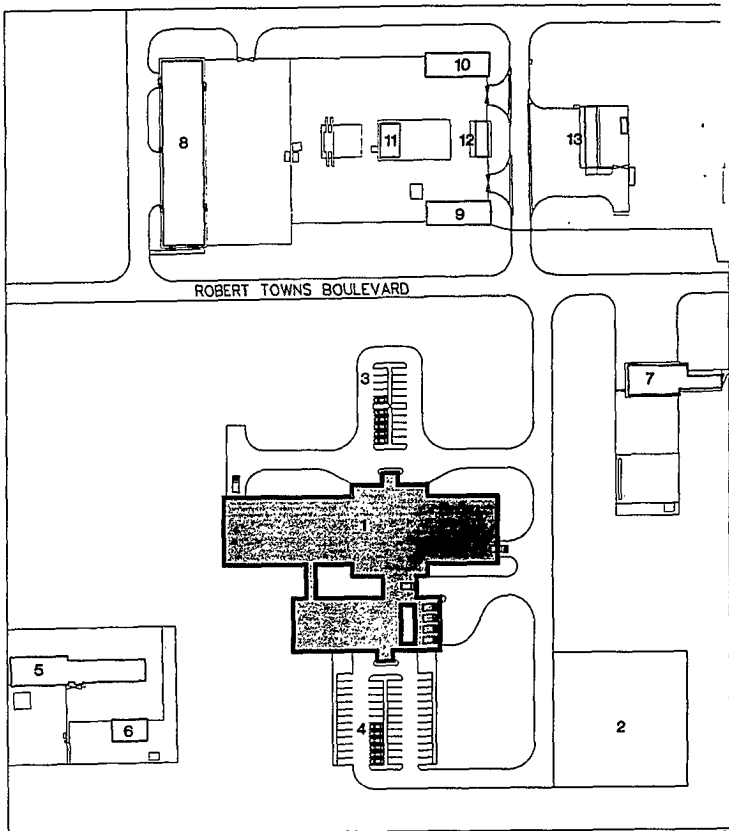
3BASB FLOOR PLAN

Serial 6,8,9,10



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1





**Legend**

- 1 LBMC
  - 2 HELPAD
  - 3 VISITORS CARPARK
  - 4 STAFF CARPARK
- EXISTING BUILDING
- 5 DET & SQ ROOM
  - 6 GEN/BATTERY B.G
  - 7 FIRE STATION
  - 8 IN ON STORE
  - 9 PT 1 TET STORE
  - 10 PT 1 TET STORE
  - 11 TPE OFFICE
  - 12 STORE/MAINTENANCE
  - 13 ASLT PRR & A-TK PL STORE

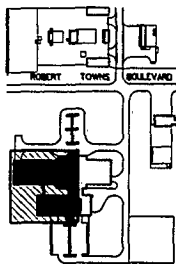
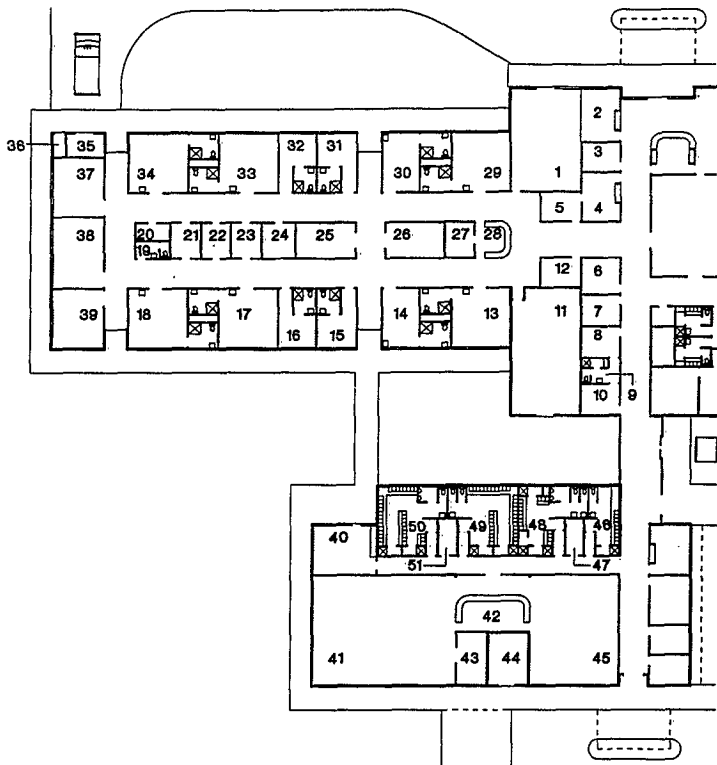
**LBMC  
SITE  
PLAN**



0 7.5M 37.5M

**ARMY - TOWNVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**





Legend

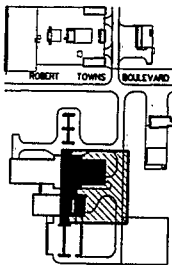
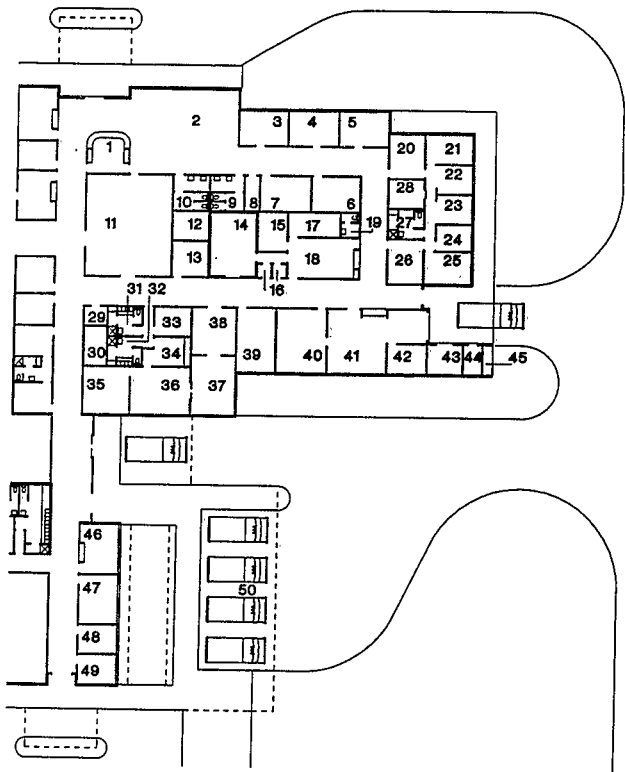
- |                         |                                  |
|-------------------------|----------------------------------|
| 1 PHARMACY BULKSTORE    | 27 MEDICATION ROOM               |
| 2 DISPENSARY            | 28 NURSES STATION                |
| 3 OFFICE                | 29 OBSERVATION WARD              |
| 4 ADMISSION/DISCHARGE   | 30 2 BED WARD                    |
| 5 WARD MASTER           | 31 1 BED WARD                    |
| 6 OFFICE                | 32 1 BED WARD                    |
| 7 SMO OFFICE            | 33 4 BED WARD                    |
| 8 DUTY PERSONNEL        | 34 4 BED WARD                    |
| 9 ENSUITE               | 35 BIR ROOM                      |
| 10 DUTY PERSONNEL       | 36 MEDICAL GAS                   |
| 11 PLANT ROOM           | 37 KITCHEN/PANTRY                |
| 12 PATIENT COUNSELLING  | 38 DINING PATIENT/STAFF          |
| 13 4 BED WARD           | 39 RECREATION                    |
| 14 2 BED WARD           | 40 STAFF REST ROOM               |
| 15 MO BED/ENSUITE       | 41 PHYSIOTHERAPY 1               |
| 16 D/SISTER BED/ENSUITE | 42 PTI/OFFICE                    |
| 17 4 BED WARD           | 43 STORE                         |
| 18 4 BED WARD           | 44 PLANT ROOM                    |
| 19 STAFF TOILET         | 45 PHYSIOTHERAPY 2               |
| 20 CLEANER              | 46 FEMALE PHYSIO TOILET & CHANGE |
| 21 WARD STORE           | 47 DISABLED TOILET               |
| 22 LINEN STORE          | 48 MALE PHYSIO TOILET & CHANGE   |
| 23 PACK STORE           | 49 FEMALE TOILET & CHANGE        |
| 24 ASSISTED BATHROOM    | 50 MALE TOILET & CHANGE          |
| 25 DIRTY UTILITIES      | 51 CLEANER                       |
| 26 TREATMENT/PPATENTS   |                                  |

**L BMC  
FLOOR  
PLAN  
WEST**



0 2M 10M

**ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**



**Legend**

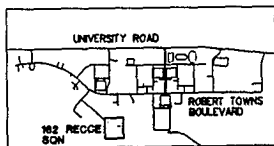
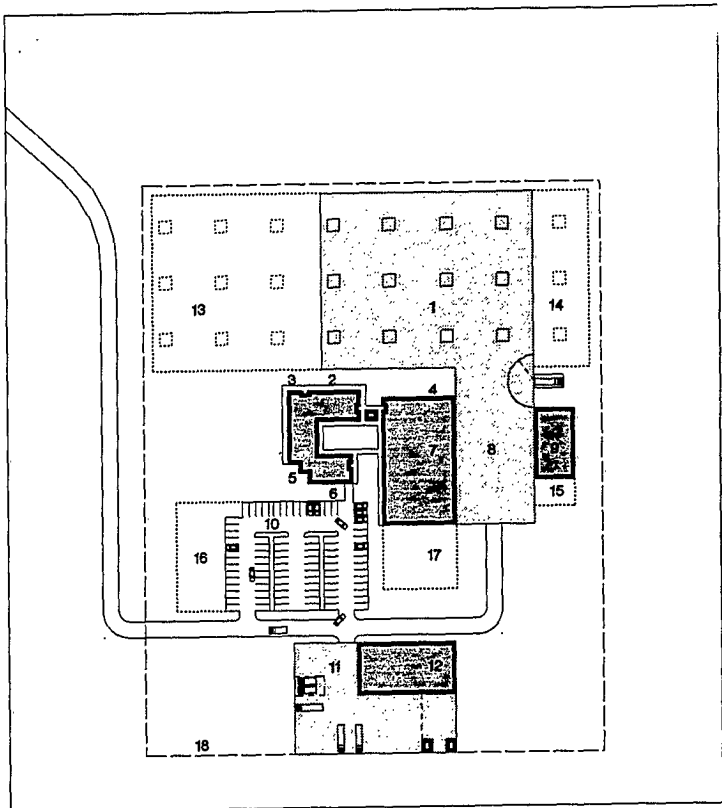
- |    |                         |    |                          |
|----|-------------------------|----|--------------------------|
| 1  | RECEPTION WAITING       | 26 | LABORATORY OFFICE        |
| 2  | PATIENT WAITING         | 27 | TOILET & CHANGE          |
| 3  | CONSULTING              | 28 | AUTOCLAVE                |
| 4  | CONSULTING              | 29 | CLEANER                  |
| 5  | CONSULTING              | 30 | TROLLEY EXCHANGE         |
| 6  | CONSULTING              | 31 | MALE TOILET & CHANGE     |
| 7  | ALDO/SPIRIT TESTING     | 32 | FEMALE TOILET & CHANGE   |
| 8  | SPECIMEN TESTING        | 33 | SISTERS OFFICE           |
| 9  | MALE TOILET             | 34 | SCURRI UP                |
| 10 | FEMALE TOILET           | 35 | CLEAN INSTRUMENTS        |
| 11 | TREATMENT (OUTPATIENTS) | 36 | THEATRE                  |
| 12 | MEDICAL STORE           | 37 | RECOVERY                 |
| 13 | PLASTER ROOM            | 38 | TROLLEY EXCHANGE         |
| 14 | X-RAY                   | 39 | STERILISING & SUPPLY     |
| 15 | DEVELOPING              | 40 | LINEN STORE              |
| 16 | CHANGE ROOMS            | 41 | O STORE                  |
| 17 | RADIOLOGIST             | 42 | O STORE OFFICE           |
| 18 | RADIOLOGY               | 43 | SOLID LINEN              |
| 19 | STAFF TOILET            | 44 | MEDICAL WASTE            |
| 20 | SAMPLE COLLECTION       | 45 | GAS BOTTLE               |
| 21 | MICROBIOLOGY            | 46 | ADMIN OFFICE             |
| 22 | BIOCHEMISTRY            | 47 | SQS MEDICAL ADMIN OFFICE |
| 23 | HISTOLOGY               | 48 | TRANSPORT OFFICE         |
| 24 | OFFICE                  | 49 | HEALTH INSPECTOR         |
| 25 | LABORATORY STORE        | 50 | AMBULANCE SHELTER        |

**LBMC  
FLOOR  
PLAN  
EAST**



0 2M 10M

**ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**



Legend

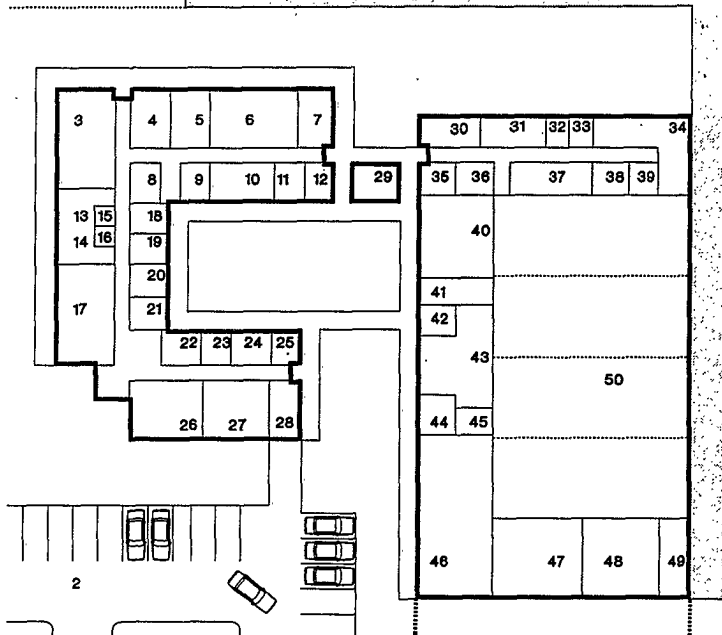
- 1 TARMAC
- 2 OPERATIONS
- 3 TROOPS
- 4 FLIGHT LINE
- 5 MAIN ENTRY
- 6 HEADQUARTERS
- 7 TECHNICAL SUPPORT
- 8 TAXWAY
- 9 AIRCRAFT SHELTERS
- 10 CARPARK
- 11 TRANSPORT
- 12 LOGISTICS
- 13 25% EXPANSION
- 14 25% EXPANSION
- 15 FUTURE EXPANSION
- 16 . . . . .
- 17 . . . . .
- 18 (TECHNICAL SUPPORT)
- N SECURITY FENCE

162 RECCE  
SQN  
SITE  
PLAN



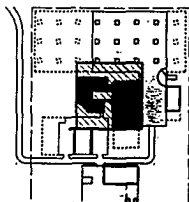
0 7.5M 37.5M

ARMY - TOWNVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1



**Legend**

- |    |                        |    |                           |
|----|------------------------|----|---------------------------|
| 1  | TARPAIC                | 27 | RAP                       |
| 2  | CARPARK                | 28 | AMBULANCE BAY             |
| 3  | CREW ROOM              | 29 | TOILETS                   |
| 4  | TP OFFICE              | 30 | FLIGHT LINE OFFICE        |
| 5  | TP OFFICE              | 31 | FLYING EQUIP STORE        |
| 6  | AIRCRAFT HANDLERS      | 32 | SEW STORE                 |
| 7  | OPERATIONS ROOM        | 33 | SEW AIR CREW              |
| 8  | LO OR                  | 34 | SEW MANTICE AREA          |
| 9  | OP OFFICER             | 35 | OC                        |
| 10 | MAP STORE              | 36 | ASH                       |
| 11 | DUTY PERSONNEL         | 37 | MCS/PRODUCTION            |
| 12 | DUTY PERSONNEL         | 38 | HANGAR AIRFIELD           |
| 13 | MALE TOILET & CHANGE   | 39 | TECH LIBRARY              |
| 14 | FEMALE TOILET & CHANGE | 40 | BAY SERVICE (CLEAN)       |
| 15 | CLEANER                | 41 | ENGINE MODULE             |
| 16 | TEA ROOM               | 42 | STORE                     |
| 17 | BREKING ROOM           | 43 | EDR AREA                  |
| 18 | TP COMD                | 44 | BATTERY SHOP              |
| 19 | TP COMD                | 45 | TOILET/SHOWER             |
| 20 | OBSERVERS ROOM         | 46 | B2 STORE                  |
| 21 | OBSERVERS ROOM         | 47 | B1 & B2 OFFICE AREA       |
| 22 | CC                     | 48 | BN STORE                  |
| 23 | 2C                     | 49 | GSE STORE                 |
| 24 | AD                     | 50 | AIRCRAFT MANTICE & REPAIR |
| 25 | SSN                    |    |                           |
| 26 | ORDDLEY ROOM           |    |                           |

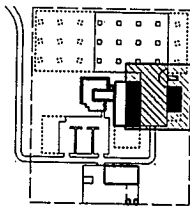
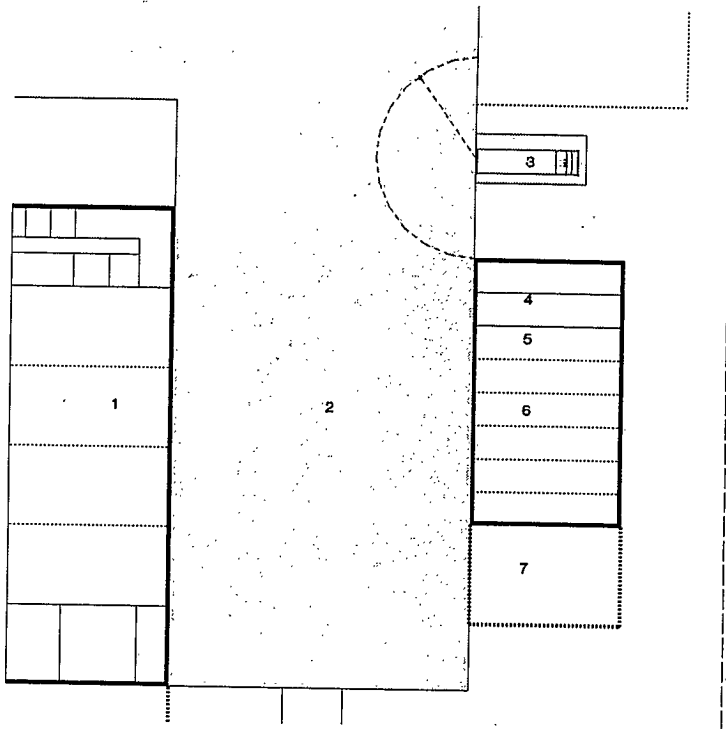


**162 RECCE  
SQN  
FLOOR  
PLAN  
WEST**



0 2M 10M

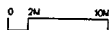
**ARMY - TOWNVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**



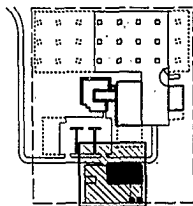
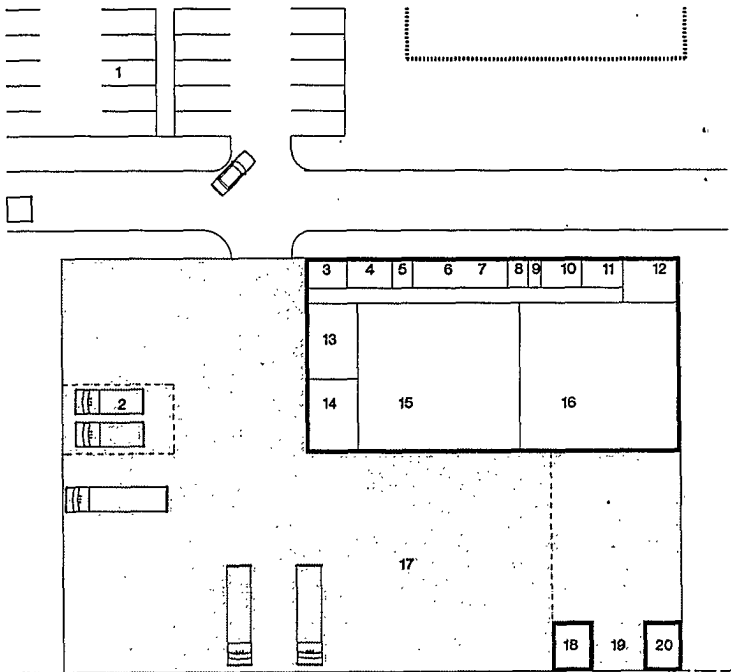
Legend

- 1 TECHNICAL SUPPORT BUILDING
- 2 TARWAY
- 3 COVERED HARVESTAND
- 4 AIRCRAFT WASH/
- 5 DEFUELLING POINT
- 6 PAINT BOOTH
- 7 AIRCRAFT SHELTER
- 8 FUTURE EXPANSION

162 RECCE  
SQN  
FLOOR  
PLAN  
EAST



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1



**Legend**

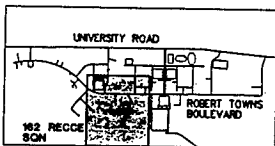
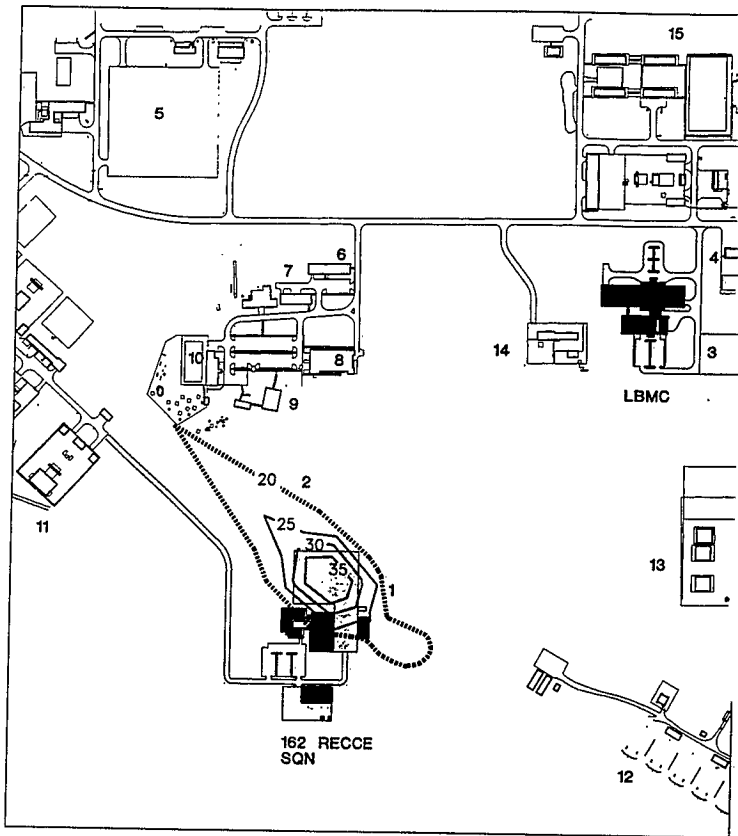
- 1 CARPARK - FUEL TANKERS
- 2 CARPORT
- 3 TPT OFFICE
- 4 VAI OFFICE
- 5 BATTERY
- 6 MALE TOILET & CHANGE
- 7 FEMALE TOILET & CHANGE
- 8 TEA ROOM
- 9 CLEANER
- 10 SQMS
- 11 ARMOURY
- 12 O OFFICE
- 13 TPT STORE
- 14 VE WORK BAY
- 15 VEHICLE MAINT'CE/SERVICE FACILITY
- 16 O STORE
- 17 TRANSPORT COMPOUND
- 18 POL STORE
- 19 PACKAGES FUEL AREA
- 20 FLAMMABLE GOODS STORE

**162 RECCE  
SQN  
FLOOR  
PLAN  
SOUTH**



0 2M 10M

**ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**



**Legend**

- 1 162 RECCE SQN HELPAD
- 2 CONTOURS INTERVALS AT 5 ANEC
- 3 LBMC HELPAD
- EXISTING
- 4 FIRE STATION
- 5 4 FD REGT
- 6 16 FD COB
- 7 1 DIV POST UNIT
- 8 ASSEMBLY/THEATRE
- 9 CHAPEL
- 10 SWIMMING POOL
- 11 9 TPT SQN AND 18 FD SFD SQN
- 12 RANGE CONTROL FACILITIES
- 13 3 FD SUP COY
- 14 COMMS CENTRE 4 SIGS REGT
- 15 1 RAR

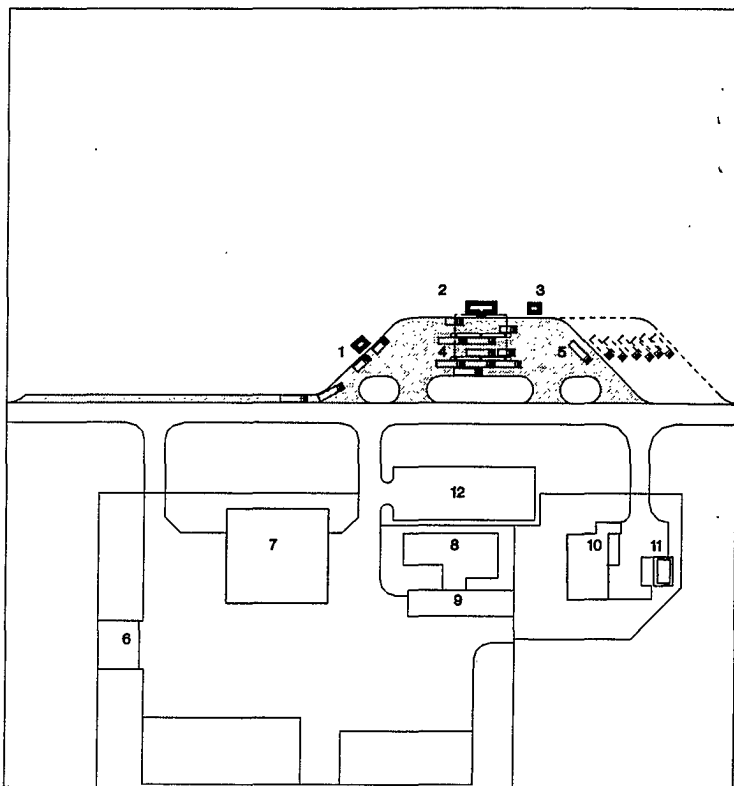
**162 RECCE SQN**

**ANEF PLAN**



0 25M 125M

**ARMY - TOWNVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**

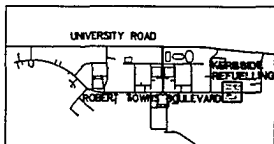


**Legend**

- 1 BATTERY EXCHANGE
- 2 POL. OFFICE / TOILETS
- 3 PLANT ROOM
- 4 VEHICLE REFUELLING POINT
- 5 VEHICLE WASH POINT

**Existing Buildings**

- 6 WORKSHOP
- 7 COVERED STORAGE
- 8 ADMIN/ACTIVITIES
- 9 CARPORTS
- 10 FLAMMABLE/DANGEROUS GOODS STORE
- 11 GAS STORE
- 12 CARPARK



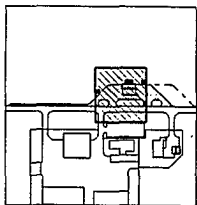
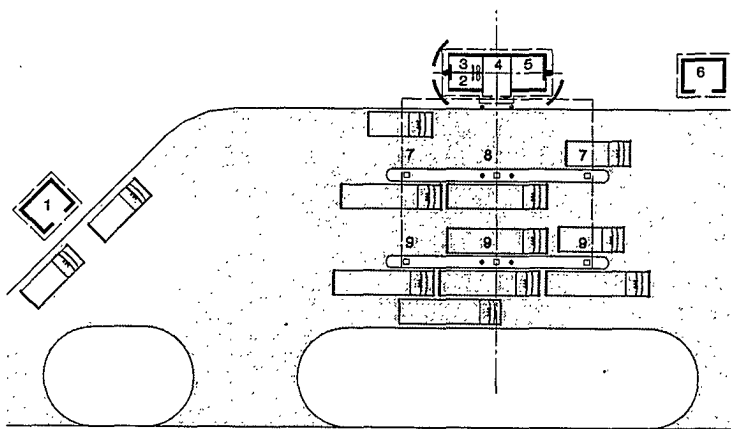
**KERBSIDE  
REFUELLING  
SITE  
PLAN**



0 7.5M 37.5M

**ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1**

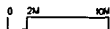




Legend

- 1 BATTERY STORE
- 2 FEMALE TOILET
- 3 MALE TOILET
- 4 PCL OFFICE
- 5 CLEANER/STORE
- 6 PLANT ROOM
- 7 W/P DOUBLE BOWSER
- 8 M/P DOUBLE BOWSER
- 9 DESO DOUBLE BOWSER

KERBSIDE  
REFUELLING  
FLOOR  
PLAN



ARMY - TOWNSVILLE  
LAVARACK BARRACKS  
REDEVELOPMENT STAGE 1