

Parliamentary Standing Committee on Public Works

REPORT

relating to the proposed construction of

LAVARACK BARRACKS STAGE 2 DEVELOPMENT

Townsville,
Queensland

(Eleventh Report of 1980)

1980

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

R E P O R T

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LAVARACK BARRACKS
STAGE 2 DEVELOPMENT

Townsville,
Queensland

(Eleventh Report of 1980)

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS
(Twenty-fifth Committee)

Melville Harold Bungey, Esq., M.P. (Chairman)

Leonard Keith Johnson, Esq., M.P. (Vice-Chairman)

Senate

Senator Bernard Francis
Kilgariff
Senator Jean Isabel Melzer
Senator Harold William Young

House of Representatives

Stephen Edward Calder, Esq.,
D.F.C., M.P.
Benjamin Charles Humphreys, Esq.,
M.P.
Albert William James, Esq., M.P.
Murray Evan Sainsbury, Esq., M.P.

PUBLIC WORKS COMMITTEE ACT 1969
ORDER UNDER SUB-SECTION 18(4)

I, SIR ZELMAN COWEN, the Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, in pursuance of Sub-Section 18(4) of the Public Works Committee Act 1969, hereby, by this Order, declare that the public work described in the schedule be referred to the Parliamentary Standing Committee on Public Works for consideration and report.

SCHEDULE

CONSTRUCTION OF LAVARACK BARRACKS STAGE TWO DEVELOPMENT, TOWNSVILLE,
QUEENSLAND.

L.S.

Given under my Hand and the
Great Seal of Australia
on 30th June 1980

ZELMAN COWEN

Governor-General

By His Excellency's Command,
Signed) R.J. Groom
Minister of State for
Housing and Construction

WITNESSES

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

LAVARACK BARRACKS,
STAGE TWO DEVELOPMENT,
TOWNSVILLE, QUEENSLAND

REPORT

On 30 June 1980, His Excellency the Governor-General in Council referred to the Parliamentary Standing Committee on Public Works for investigation and report to Parliament the proposal to construct Stage Two Development at Lavarack Barracks, Townsville Queensland.

The Committee has the honour to report as follows:

THE REFERENCE

1. The proposal is for construction of buildings and engineering services within the military area comprising:

- working facilities for 102nd Field Workshop, North Queensland Workshop Company, 121st Supply Company; and
- miscellaneous works including roads, services, car parks and landscaping.

2. The estimated cost of the proposal when referred to the Committee was \$6 million at May 1980 prices. Due to the inclusion of additional Defence Department requirements which were unresolved at the date of referral the cost is now \$6.2 million at May 1980 prices.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions and drawings from the Department of Defence and the Department of Housing and Construction and took evidence from their representatives at a public hearing in Canberra on 25 August 1980. A letter was received from the Council of the City of Townsville setting out their comments on certain aspects of the proposal (see also paragraph 18 Appendix A).

4. The Committee inspected the existing facilities and the site for the proposed works on 3 June 1980.

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

BACKGROUND

6. In 1964 a Government decision was made to locate a task force base in Townsville and, as a result, Stage One of the Lavarack Barracks Development was constructed between 1965 and 1967 at a cost of \$19.7 million (1967 prices) to provide permanent working and living accommodation for three infantry battalions, supporting arms and services plus minor logistic support facilities. With changes in Army organization at Lavarack Barracks since 1967 a need has developed to increase the logistic elements supporting the forces in North Queensland.

7. As these changes were gradual working accommodation was provided to meet short term deficiencies by conversion of existing purpose-designed accommodation and use of temporary structures. With the raising of the task force to an Operational Deployment Force status, the resulting increase in manpower and the requirement for a high state of readiness for deployment the long term problems created by short term solutions have been exacerbated.

THE NEED

8. As a result of organisational changes since the present facilities were constructed various moves of units which were expedient at the time have lead to current problems of overcrowding, inefficient dispersion and safety problems in workshop areas.

9. 102nd Field Workshop The 102nd Field Workshop was raised on 31 March 1977 at Lavarack Barracks to provide second line repair and recovery support for task force units. Due to accommodation shortfalls this unit is being held at less than full establishment with present staffing being 84 as opposed to the approved level of 134 personnel. At present the unit is not independent relying for both its command and accommodation on the overcrowded North Queensland Workshop Company. The main need is for the unit to expand and be self supporting to properly fulfil its stated role in safe working conditions.

10. North Queensland Workshop Company The role of this company is to provide first and second line repair and recovery support for other than task force units and third line support, including trade repair, for all units in North Queensland. The unit has operated for thirteen years partly in buildings purpose-designed for a transport squadron, partly in an isolated hangar 11km distant at Kissing Point and with some elements housed for a time in tents as well as in temporary prefabricated steel sheds. The space allocated to this unit at Lavarack Barracks is inadequate and resultant overcrowding creates unnecessary safety hazards. Dispersion of sub-units has created administrative and technical inefficiencies.

11. 121st Supply Company The Headquarters of this unit, the control office, main stores building, foodstuffs and POL facilities are located at Lavarack Barracks. However, the unit holdings of vehicles and stores are located at Macrossan, 100km south-west and this has resulted in expensive administrative operating costs. The Army Warehousing and Related Facilities Study Committee concluded in 1979 that the depot at Macrossan should be closed for all but slow moving items and that the stores and vehicles currently held there should be transferred to Lavarack Barracks. This move is expected to save of the order of \$300,000 per annum in operating costs.

12. Townsville Transport Unit This unit together with the two workshops shares accommodation purpose-designed for a field force transport company. The resultant overcrowding detracts from the efficient operation of the unit. New facilities will be required when all the units previously mentioned revert to their appropriate purpose-designed facilities.

13. Committee's Conclusion The existing facilities for workshop and stores accommodation at Lavarack Barracks are inadequate for the stated requirements of both the Operational Deployment Force concept and the task force generally.

THE PROPOSED WORKS

14. Planning and Design The proposals have been developed to achieve maximum rationalisation of shared facilities and collocation of functions whenever possible. The proposals conform to the zone plan for the Mt. Stuart Training Area and will comply with the appropriate Queensland Acts and Regulations governing this type of construction.

15. The proposed buildings are of three basic types:

- workshops, warehouses and storage facilities;
- command and administration; and
- amenities.

All buildings will be coherent and simple in design as well as integrated with the appearance of construction undertaken in Stage One of the Lavarack Barracks Development. Siting has been planned to take advantage of cross ventilation, minimise sun penetration and thereby reducing the energy requirements of the buildings through removal of the need for air conditioning. All facilities will be capable of expansion in the future should there be a change in the size or number of units stationed in Townsville. Construction details are set out in Appendix A.

16. Solar Water Heating The Committee was informed that a study into the feasibility of using solar heating had not supported its use in this project. The Committee is concerned that a full long term evaluation of the usefulness of solar heating has not been undertaken. As the Committee feels the Commonwealth should give the lead in energy saving, it is recommended that an in-depth examination for the use of solar energy be carried out.

17. Committee's Conclusion The design of the proposed buildings is satisfactory. It is recommended that an in-depth examination of the use of solar water heating be carried out.

SITE

18. Lavarack Barracks is situated in the Mt. Stuart Training Area approximately 10 kilometres south of the Townsville city centre on University Road. The proposed works are to be located in the north eastern sector of the training area adjacent to the existing 121st Supply Company accommodation.

19. The site is relatively flat, covered with light scrub and draining generally towards the north with clay surface soil and some rocky outcrops. Site investigations for buildings in the area have revealed that the bearing capacity of the ground will not present foundation problems. Some minor filling works are required in part of the creek line to the south of the area and sufficient good quality fill is available within the training area.

20. Private land adjoins part of the proposed development east of the proposed extension of 121st Supply Company area but an existing open unlined drain as well as a buffer zone will be retained between the army development and the civilian area. It has been necessary to design the buildings in such a way as not to interfere with the existing light aircraft landing strip which parallels University Road and forms another buffer zone between the army development and the civilian area.

21. Committee's Conclusion The site selected is suitable.

ESTIMATE OF COST

22. The estimated cost of the work when referred to the Committee was \$6.0 million at May 1980 prices. The Committee was informed that in the period between reference of this work and the public hearing the estimated cost of the proposal increased by \$200,000 at May 1980 prices resulting from inclusion of the following additional client requirements:

- workshop travelling cranes;
- external telephone block cabling; and
- public address systems.

These were unresolved as at the date of reference of the original proposal and consequently the estimated cost of the project is \$6.2 million made up as follows:

	\$
Building works	3 425 000
Mechanical	400 000
Electrical	650 000
Civil	1 200 000
Hydraulics	500 000
Landscaping	25 000
	<hr/>
	6 200 000
	<hr/>

PROGRAM


23. Planning calls for the execution of this project on the basis of three main contracts, with the first tenders scheduled to be called in March 1981. Subject to approval of the project its target completion date is late 1982.

24. Committee's Conclusion The Committee recommends the construction of the work in this reference.

RECOMMENDATIONS AND CONCLUSIONS

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

1. THE EXISTING FACILITIES FOR WORKSHOP AND STORES ACCOMMODATION AT LAVARACK BARRACKS ARE INADEQUATE FOR THE STATED REQUIREMENTS OF THE OPERATIONAL DEPLOYMENT FORCE CONCEPT AND THE TASK FORCE GENERALLY. 13
2. THE DESIGN OF THE PROPOSED BUILDINGS IS SATISFACTORY. 17
3. IT IS RECOMMENDED THAT AN IN-DEPTH EXAMINATION OF THE USE OF SOLAR WATER HEATING BE CARRIED OUT. 17
4. THE SITE SELECTED IS SUITABLE. 21
5. THE ESTIMATED COST OF THE WORK AT THE DATE OF THE PUBLIC HEARING WAS \$6.2 MILLION AT MAY 1980 PRICES. 22
6. THE COMMITTEE RECOMMENDS THE CONSTRUCTION OF THE WORK IN THIS REFERENCE. 24


(M. H. BUNGEY)
Chairman

Parliamentary Standing Committee
on Public Works,
Parliament House,
CANBERRA. A.C.T. 2600.
11 September 1980.

CONSTRUCTION

1. Structure All buildings will be constructed with structural steel frames, concrete pad footings and concrete floor slabs. Insulated galvanised steel roof sheeting will be used with pre-finished guttering and downpipes.

2. Workshops, warehouses and storage facilities will be clad with pre-finished galvanised steel sheeting insulated as required. The command and administration and amenities buildings will have masonry end walls with other walls being louvred to provide cross ventilation.

3. Electrical Services The existing high voltage reticulation system and street lighting will be extended, with the extension to the former completing the Lavarack Barracks ring main. Car park and security lighting will be installed.

4. Light, power and telephone block cabling will be provided to all new buildings and extensions, with ceiling fans being installed in offices. Security will be maintained by use of roving piquets with intruder alarms being installed in sensitive areas.

5. Mechanical Services Compressed air will be reticulated to workshop and service areas in accordance with Department of Defence requirements. A steam/cleaning/high pressure water plant will be installed in the common steam cleaning facility only, with high pressure water being provided to the four common wash bays.

6. Refrigerated drinking water units will be installed in workplaces and the amenities building. Hot water will be provided to all wash basins, sinks and showers.

7. Mechanical ventilation will be installed in duplicating rooms, battery rooms and internal toilets while fume extraction will be provided in vehicle service and repair areas, fitting, machining and welding areas. Sawdust extraction equipment will be fitted in the carpenter's shop.

8. Lubricant dispensing equipment will be installed to vehicle service facilities in the 121st Supply Company, Townsville Transport Unit and the combined North Queensland/102 Field Workshop building.

9. Civil Engineering The proposal is to include construction of compounds roads and siteworks for the buildings. Compounds and roads will be constructed in flexible pavement with bituminous concrete or sprayed bituminous surfaces. Areas used consistently by tracked vehicles will be constructed in concrete.

10. The access road from University Road will be extended to join up with the Lavarack Barracks main road system and will include two large culverts, one near the workshops and the other replacing the existing Bailey bridge.

11. Hydraulic Services The existing water supply system will be extended to provide the required service to new facilities. Sewerage reticulation for the new area will connect to an existing Townsville City Council sewer main.

12. Silt traps, oil separators and collectors will be provided on the discharge lines from vehicle washdown and

steamcleaning bays to prevent contamination of the stormwater drainage system. Stormwater will be collected and piped from large roof areas into natural watercourses and, wherever practicable, stormwater runoff will be disposed of by surface drains.

13. Air Conditioning Only special facilities requiring temperature and humidity controls will be air conditioned. These include the telex room, armoury, conference rooms and electronic workshops.

14. Fire Protection An automatic fire sprinkler system will be provided in the following buildings:

- North Queensland/102nd Field Workshop Company - workshop and annexe;
- Paint shop;
- 121st Supply Company - vehicle warehouse; and
- Townsville Transport Unit - cargo terminal service building.

Automatic fire detection systems will be provided in those buildings not fitted with an automatic fire sprinkler system. Manual fire alarm call points will be installed in or near all buildings with each system being connected to and monitored at the main fire board in the Barracks fire station.

15. Fire hydrants will be provided throughout the area, with hose reels and appropriate types of fire extinguishers being installed in buildings and compounds.

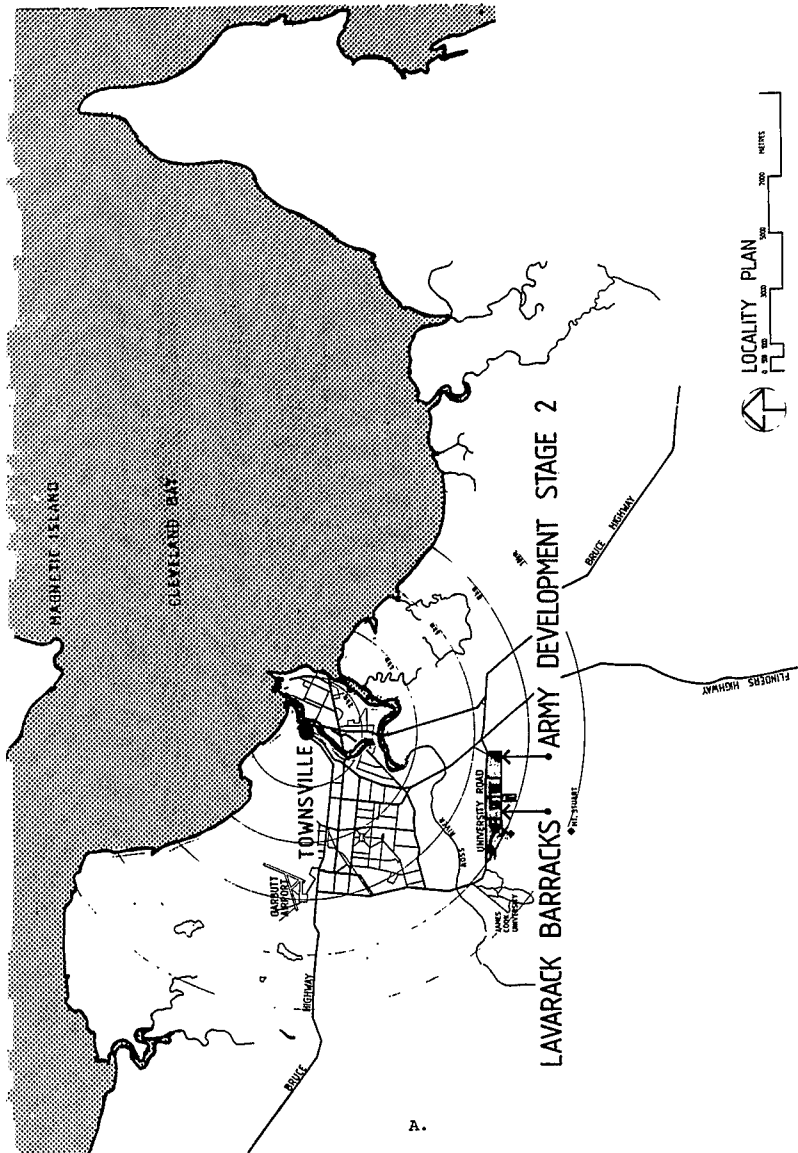
16. Carparking Six official carparking spaces will be provided to each command and administration facility. Unsealed gravel carparks sufficient for 240 private vehicles will be

provided at strategic locations throughout the area.

17. Landscaping Landscaping will be provided in new areas and existing areas disturbed by construction. Suitably placed existing trees will be retained and new plantings will be chosen from shrubs known to flourish under the site conditions to keep maintenance to a minimum. Screening by means of planting will be provided to service areas and carpark.

18. Liaison with Authorities

The project has been discussed with the Town Planning Department of the Townsville City Council and, while no objections have been raised to the proposal, the Council did outline some points of concern in their letter of 12 August 1980. The Committee was advised these will be taken into account during the final design stage.



A.

UNIVERSITY ROAD

ARMY DEVELOPMENT STAGE 2

NO/102 FD WORKSHOP COY.

- a STORES BUILDING
- b RECEIPTS AND ISSUE
- c WORKSHOP ANNEXE
- d WORKSHOP
- e PAINT SHOP

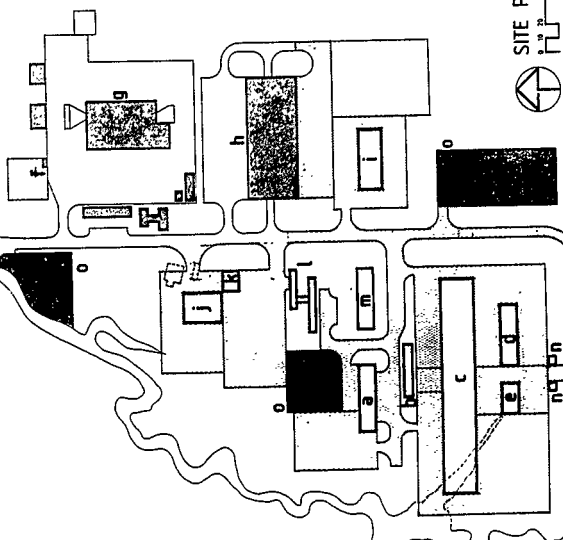
- f 121 SUPPLY COY.
- g TRANSPORT (EXISTING)
- h STORE (EXISTING)
- i STORE (EXISTING)
- j VEHICLE WAREHOUSE

TOWNSVILLE TRANSPORT UNIT.

- k CARGO TERMINAL
- l SERVICE BUILDING
- m COMMAND AND ADMINISTRATION BUILDING
- n 9.830

- o ALL UNITS.
- p WASH DOWN BAYS
- q PRIVATE CARPARKING

- SEALED AREAS
- UNSEALED PARKING
- EXISTING BUILDINGS



SITE PLAN



0 50 100 METRES

B.

ROAD EXTENDS 525 m
TO BAILEY BRIDGE