



1968

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPORT

relating to the proposed construction of

PARA-MEDICAL BUILDING

and

OCCUPATIONAL THERAPY

DAY CENTRE

at

Hollywood Repatriation General Hospital, Western Australia

BY AUTHORITY

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C O N T E N T S

	<u>Paragraph</u>
The Committee's Investigation	1
The Reference	2
Repatriation Department	
Functions	4
Departmental Institutions	5
Hollywood Repatriation General Hospital	
Location and Functions	7
Accommodation Needs	10
Para-medical Building	
The Proposal	13
The Need	15
Committee's Conclusion	21
Occupational Therapy Day Centre	22
Chiller Plant	26
The Building Proposals	
Site	30
Planning	33
Structure	38
Finishes and Fittings	42
Engineering Services	
Mechanical	44
Electrical	48
Hydraulic	51
Roads	52
Fire Protection	53
Committee's Conclusion	54

	<u>Paragraph</u>
Programme	55
Estimate of Cost	56
Recommendations and Conclusions	57

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

PARA-MEDICAL BUILDING AND OCCUPATIONAL THERAPY DAY
CENTRE, HOLLYWOOD REPATRIATION GENERAL HOSPITAL,
WESTERN AUSTRALIA

R E P O R T

By resolution on 9 October 1968, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report a proposal for the construction of a para-medical building and an occupational therapy day centre at Hollywood Repatriation General Hospital, Western Australia.

The Committee have the honour to report as follows:

THE COMMITTEE'S INVESTIGATION

1. The Committee received written submissions and drawings from the Repatriation Department and the Department of Works. Evidence was taken at a public hearing in Canberra from representatives of these departments. The facilities of the hospital and the sites of the proposed buildings were inspected by the Committee in July 1968 when we were in Perth on other Committee business.

THE REFERENCE

2. The proposal referred to the Committee includes the erection of:
- a four-storey para-medical building;
 - a single-storey day centre for occupational therapy; and
 - a chiller plant building.

The cost of the work is estimated at \$950,000.

3. The Committee noted that while Cabinet is understood to have approved construction of the para-medical building and the occupational therapy day centre, a decision has been reserved on whether the chiller plant (and air conditioning to selected areas including the para-medical building) should be provided. We were told that this decision has not been taken because the capacity and purpose of the proposed plant was not clear and that the matter would be further considered when our report is presented.

REPATRIATION DEPARTMENT

4. Functions The Department is responsible for the administration of benefits available to those eligible under the Repatriation Act and associated legislation. This includes hospital treatment for disabilities attributable to war service and, subject to certain conditions, treatment and care are provided for disabilities not due to war service for:

- eligible members receiving war pensions at or exceeding the 100% general rate;
- service pensioners including those from the Boer War;
- widows and certain dependants of deceased ex-servicemen whose deaths are due to war service;
- members suffering from pulmonary tuberculosis;
- nurses who served in the 1914-1918 war; and
- serving members of the armed forces.

5. Departmental Institutions It is the Department's policy to provide in-patient treatment at its own institutions in each State, wherever practicable, so that the special responsibilities embracing both investigatory and treatment functions can be met effectively and without encroaching on general community facilities. Establishments provided for this purpose include a large general hospital in each capital city and a smaller auxiliary hospital in each State, except Tasmania. Limited use only is made of outside hospitals for in-patient treatment, mainly in country areas.

6. Out-patient treatment is provided by local medical officers, by specialists in various branches of medicine who have been appointed to departmental panels, at departmental out-patients' clinics and, in some cases, at general hospitals.

HOLLYWOOD REPATRIATION GENERAL HOSPITAL

7. Location and Functions This hospital is located 5 miles west of the Perth G.P.O.; on a site of 29 acres. It has a frontage to Monash Avenue and is bounded on the north by Verdun Street, on the east by the State's Sir Charles Gairdner Hospital and on the west by Hollywood Primary School. The hospital was erected in 1941-42 for military purposes and was taken over by the Repatriation Department progressively from early 1946.

8. It has a capacity of 510 patients in 17 wards and provides a full range of service in the fields of general medicine and surgery, treating acute as well as long-term patients. It also has facilities for psychiatric, tuberculosis and geriatric patients. It is recognised as a training hospital for physiotherapists, occupational therapists and medical laboratory technologists, and was recently accepted by the Royal Australian College of

Surgeons as a training hospital for medical graduates. A training school for nursing aides was established in 1960.

9. The following figures relating to in-patient treatment in 1967-68 indicate the present scale of activity at the hospital.

<u>Treatment Categories</u>	<u>Admissions</u>	<u>Discharges</u>	<u>Total Patients Treated</u>	<u>Daily Average Beds Occupied</u>	<u>Peak Occupancy</u>
General Medical	2,828	2,777	3,023	199	254
Surgical	2,465	2,457	2,581	113	155
Tuberculosis	48	59	68	16	22
Psychiatric	391	399	428	34	41

10. Accommodation Needs Repatriation hospitals were built under wartime conditions to meet the needs of wounded and sick servicemen in the younger age group. The requirement now is to treat an ageing group of men and women with a corresponding wider range of needs. The changes in medical techniques which have occurred since the war have also indicated changes in the range and type of facilities required.

11. The Government in 1965 considered a programme, limited to more urgently required projects, designed to raise the standard of facilities in hospitals so that the Repatriation Department could discharge its functions efficiently. The programme included the para-medical building and occupational therapy day centre at Hollywood in its latter stages. The first year of the overall programme was endorsed and it was agreed that the level of new works for subsequent years should be dealt with in the annual budget.

12. It was submitted to the Government that the projects listed should be adequate to meet the Department's requirements over a four year period and

that the expanded services should be adequate for future needs beyond that period. It was pointed out, however, that this could be conditioned by future changes such as increases in eligibility for treatment and any major changes in medical techniques or standards.

PARA-MEDICAL BUILDING

13. The Proposal The proposal to erect a para-medical building to accommodate the occupational therapy, x-ray and pathology departments has been precipitated by the need for improved and expanded accommodation for each of these groups. Whilst they are not necessarily related in a functional sense, each group performs a vital para-medical role and needs to be centrally located to efficiently carry out its task.

14. The Committee believe that it is a practical arrangement to relocate these three departments in the one building.

15. The Need Occupational therapy is at present undertaken in two substandard huts near the rear entrance to the hospital. Both buildings are in a poor state of repair and are due for demolition. They are a considerable distance from the wards, other para-medical services and the rehabilitation unit which necessitates the employment of special orderlies to move ward patients. Moreover, during the hot summer months, the buildings are extremely uncomfortable and toilet facilities are lacking. Apart from these factors, there is insufficient usable space for current requirements, for expansion or for facilities for group activities.

16. The inadequacies of the accommodation have been highlighted by a steady growth in the department's workload. Contributing to this trend is the ageing

of ex-servicemen with permanent disabilities, especially geriatric patients. This makes rehabilitation work more difficult and emphasises the importance of occupational therapy.

17. The X-ray department is located in a restricted area in the wing joining the administrative and theatre blocks. It is neither centrally nor conveniently located in relation to the wards, necessitating either patients or equipment being moved over long distances sometimes without cover. More space is required for an additional X-ray room, portable X-ray plant, a second radiologist, offices, patients' toilets and waiting and change rooms. Corridors and X-ray rooms are also too small to handle stretcher cases. Besides these shortcomings, relocation of the X-ray department is required to allow the pharmacy area to be extended.

18. It is relevant that in the X-ray department also, the work load has been on the increase, having grown some 44% in the past six years.

19. Consistent with the growing use being made of other para-medical services, the workload of the pathology department at the Hollywood Repatriation General Hospital has grown 59% over the last six years and concurrently it has been necessary to send work to outside laboratories due to the lack of staff and facilities locally. In the last 12 months the latter was equivalent to 14.5% of the total workload. The Committee noted, furthermore, that it is proposed to expand the department's staff from 19 to 30 to cope with the extra work.

20. Our inspection showed that although the pathology department is centrally placed and easily accessible to wards by verandahs and covered ways, the space occupied is very cramped and the confined space restricts the

expansion required to meet the needs of modern pathology. Research activity is also limited and we believe that lack of congenial conditions would tend to affect the skill of the staff. The Committee also noted that due to the lack of space, it has not been possible to develop some aspects of pathology and specialisation to the extent desired.

21. Committee's Conclusion The Committee agree that there is a need to provide new accommodation for the occupational therapy, X-ray and pathology departments at the Hollywood Repatriation General Hospital.

OCCUPATIONAL THERAPY DAY CENTRE

22. The minimal facilities for occupational therapy out-patients are at present housed with the in-patient activities in substandard buildings which are to be demolished.

23. With the relocation of the main occupational therapy department in the para-medical building, it is proposed to establish a day centre in a separate single storey building because the functions of the two areas are different. The main department provides intensive therapy mainly on an in-patient basis aimed at restoring and rehabilitating the patient before discharge. The day centre, on the other hand, will deal with out-patients and will aim at maintaining or improving the degree of functional ability that has been gained at the time of discharge. Patients referred by local medical officers or the department's rehabilitation staff will also be treated.

24. The work of the day centre has proved most important as, in many cases, patients discharged with a high degree of functional ability have tended to deteriorate through lack of knowledge or encouragement by those in their outside

environment. It has been found that by bringing these people to day centres on a regular out-patient basis, deterioration can be noted and treated.

25. The Committee agree that there is a need for an occupational therapy day centre in a separate building.

CHILLER PLANT

26. The proposal submitted to the Committee envisages the installation of chiller plant in a building to be erected near the main boiler house. The purpose of the plant is to enable the new para-medical building to be air conditioned and to facilitate the replacement progressively, as they become obsolescent, of some 31 unit air conditioners of various types scattered through the hospital. The proposed plant would also have capacity to produce the chilled water needs of planned future buildings such as the central sterilizing department and an intensive care ward.

27. The hospital is provided with heating and is naturally ventilated. Those areas which have a particular requirement for treated air, such as the operating theatres, have in the past been provided with unit air conditioners. A good many of these units are now reaching the end of their useful life and need replacement, while three or four in better condition could probably continue for varying periods up to 15 years.

28. We concurred in the submission that all the accommodation in the para-medical building should be air conditioned.

29. The Committee considered the alternative means of providing chilled water for air conditioning the existing air conditioned accommodation and the para-medical building and from the evidence received believe that the proposal

to provide a new chiller plant is the most satisfactory and economic alternative. We agree that the plant should have some reserve capacity for future needs.

THE BUILDING PROPOSALS

30. Site The site for the para-medical building is centrally located between wards 1 and 3. It is readily accessible from the wards, operating theatres, the administration building and rehabilitation section. The occupational therapy day centre can be built nearby so centralising occupational therapy activities. An access road for the transport of patients and equipment adjoins the area.

31. The site for the chiller plant building is adjacent to the boiler house and is strategically placed for the reticulation of its output.

32. The Committee agree that the sites selected for all buildings are suitable.

33. Planning The para-medical building will be a four-storey structure 150 ft by 40 ft. The ground floor will house the occupational therapy department in order to facilitate access by patients. A large open area will be provided to permit flexibility of use by activities such as woodwork and printing. There will also be individual areas for speech therapy, art and pottery. An area will be fitted up to represent a flat or house in which patients with restricted mobility can be re-trained in the activities of daily living.

34. The X-ray department on the first floor will have four large X-ray rooms, sorting and drying rooms, a barium room, a superficial X-ray room, offices, a waiting room and toilets.

35. The pathology department will be located on the second and third floors. Two large laboratory areas occupying half of each floor will be on the southern side of the building. On the northern side, space for offices, waiting rooms, stores, specimens, media, sterilizing, washing, lecture and library rooms, lockers and toilets will be provided.

36. The single-storey day centre, 85 ft by 36 ft, has been designed to allow direct vehicular access to enable patients to disembark under cover. Most of the area will be devoted to a workshop but there will also be space for a cafeteria, store, office, waiting room and toilets. The building will be linked to the para-medical centre by a covered way.

37. The single-storey chiller plant building, 38 ft by 45 ft, will house the chiller plant, an electrical switchboard and a small office. It will be capable of extension in the future if needed.

38. Structure Foundations for the para-medical building and occupational therapy day centre will be reinforced concrete strip footings with spread reinforced concrete footings under columns or concrete strip footings.

39. The para-medical building will be of reinforced concrete construction. The roof will be insulated ribbed metal decking on timber purlins supported off the reinforced concrete roof slab. New covered ways will be constructed to match those existing at the hospital.

40. The occupational therapy day centre will have 11 in. cavity brickwork external walls and a concrete floor slab on a waterproof membrane. The low pitched roof will be ribbed metal decking carried on steel purlins and beams, which will also support the suspended insulated ceiling.

41. The chiller plant building will have cavity brickwork external walls and concrete floor and roof slabs.

42. Finishes and Fittings The exposed column facings of the para-medical building will have an off-form concrete finish and the precast reinforced concrete sun hoods on the north side will have a fine aggregate finish. External walls will be of dark coloured face bricks. The day centre and the chiller plant building will also have external walls of face bricks. The windows of all three buildings will have anodised aluminium frames.

43. Internal finishes will be selected to minimise maintenance and to meet the particular requirements of each area.

ENGINEERING SERVICES

44. Mechanical The para-medical building will be air conditioned from air handling plants on the ground floor and on the roof. They will be connected to the proposed chilled water plant and to an existing steam boiler by means of insulated piping.

45. The chiller plant will be of the absorption type using as an energy medium steam from the main boiler. The plant will comprise two identical units.

46. A general fume exhaust system and conventional fume cupboard exhausts will be provided in laboratories. Toilets will be mechanically ventilated.

47. In the para-medical building, steam, compressed air and medical gases will be reticulated as required and hot water will be piped to basins and sinks in insulated copper piping connected to a calorifier in the ground floor plant room. For the day centre, hot water will be supplied from an electric unit. Miscellaneous equipment will consist of autoclaves, stills, a pressure water

sterilizer, refrigerated developer units, a cassette conveyor for the dark room and drinking water coolers.

48. Electrical Electricity is supplied by the State Electricity Commission of Western Australia which will provide additional transformer capacity as necessary. The existing hospital main switchboard can accommodate the loadings of the proposed new buildings.

49. Lighting throughout will be generally fluorescent with emergency battery operated lighting to exits and stairways. General purpose power outlets will be provided throughout for portable equipment, whilst fixed equipment will be directly connected.

50. A fully automatic bed/passenger lift will be provided in the para-medical building.

51. Hydraulic The existing water supply main and sewer will be diverted to clear the sites and branches extended to provide services for the new buildings. Wastes from fixtures receiving acid will pass through a neutraliser before discharge to the drain.

52. Roads A new service road will be constructed on the eastern side of the day centre terminating in a turning circle near the para-medical building. The road will be sealed gravel with concrete kerbing. Concrete footpaths will also be constructed along the northern and southern sides of the para-medical building.

53. Fire Protection A thermal fire detection system will be installed and connected to the local fire station through the hospital's central fire alarm indicator panel. Hose reels, fire hydrants and hand extinguishers will be installed at appropriate points.

54. Committee's Conclusion The Committee recommend the construction of the work in this reference.

PROGRAMME

55. It is expected that after an approval to proceed is given, the preparation of final drawings and tender documents will take about 10 months. Construction time is estimated at 12 months after the contract is let.

ESTIMATE OF COST

56. The estimated cost of the proposed work when referred to the Committee was \$950,000 as follows:

	\$
Building work	485,000
Engineering services	465,000
	950,000

RECOMMENDATIONS AND CONCLUSIONS

57. 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.

Paragraph

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|----|---|----|
| 1. | IT IS A PRACTICAL ARRANGEMENT TO RELOCATE THE OCCUPATIONAL THERAPY, X-RAY AND PATHOLOGY DEPARTMENTS IN THE PARA-MEDICAL BUILDING. | 14 |
| 2. | THERE IS A NEED TO PROVIDE NEW ACCOMMODATION FOR THE OCCUPATIONAL THERAPY, X-RAY AND PATHOLOGY DEPARTMENTS. | 21 |

	<u>Paragraph</u>
3. THERE IS A NEED FOR AN OCCUPATIONAL THERAPY DAY CENTRE.	25
4. THE PARA-MEDICAL BUILDING SHOULD BE AIR CONDITIONED.	28
5. THE PROPOSAL TO PROVIDE A NEW CHILLER PLANT IS THE MOST SATISFACTORY AND ECONOMIC MEANS OF PROVIDING CHILLED WATER FOR AIR CONDITIONING.	29
6. THE SITES SELECTED FOR ALL BUILDINGS ARE SUITABLE.	32
7. THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.	54
8. THE ESTIMATED COST OF THE PROPOSED WORK WHEN REFERRED TO THE COMMITTEE WAS \$950,000.	56

F. C. Chaney

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Chairman

Parliamentary Standing Committee on Public Works,
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14 November 1968.