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THE PARLIAMENT OF THE COMMONWEALTH.

PARLIAMENTARY STANDING COMMITTEE ON

PUBLIC WORKS.

R E P O R T

Relating to the proposed erection

of

CANBERRA COMMUNITY HOSPITAL.

at

CANBERRA, A.C.T.

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

CANBERRA COMMUNITY HOSPITAL

The Parliamentary Standing Committee on Public Works, to which the House of Representatives referred for investigation and report upon the need, suitability of the site, and proposed method of implementation, the question of the erection of a Community Hospital at Canberra, has the honour to report as follows:-

S E C T I O N 1 - I N T R O D U C T I O N .

Historical

1. Canberra's first hospital was inaugurated on the old hospital site at Aton in about 1910, with one unit of wooden construction acting merely as a casualty ward. Patients requiring serious attention had to go to Queanbeyan during this early period of the construction of Canberra. As activities in the new Capital began to grow, two large wooden wards were erected as a temporary measure. From time to time, as occasion demanded, additions were made, until a scheme for a permanent hospital was placed before the Parliamentary Standing Committee on Public Works in 1938.

2. The Committee, in its Report of 1938, recommended that a hospital should be constructed, but that fresh plans should be drawn up along the lines suggested in the Report. Some time elapsed before action was possible, and war conditions intervened, with the result that the basis of hospital demands was considerably altered.

3. In 1943, the existing hospital was designed by Messrs Leighton Irwin & Company Ltd., Architects, on behalf of the Commonwealth, and a building was constructed, on the present site, providing for 184 beds and six sick babies, at a time when the population of Canberra was 14,500. Increase in the population made growing demands upon hospital

facilities and subsequent additions were made to the hospital, increasing the initial bed strength of 184 to the present total of 253, without extending the ancillary services in proportion.

44. The projected transfer of further departmental staffs from Melbourne is expected to result in a doubling of Canberra's present population by about 1970, and it is considered essential to take immediate steps towards provision of adequate hospital facilities.

SECTION II - THE PRESENT PROPOSAL.

Terms of Reference.

5. The proposal submitted to the Committee did not present a planned building for investigation by the Committee, but the terms of the reference stipulated that, at this stage, the Committee should investigate the need, suitability of the site, and proposed method of implementation. With this object in view the Department of Works submitted to the Committee details of the site at present being used, and suggestions for development of projects upon it to give an ultimate establishment of 472 beds, with appropriate ancillary services. The proposal was illustrated by models, and the programme of development suggested the construction of a hospital unit with access to the present main building by a connecting link; a separate nurses' home; and a boiler house and laundry unit. The programme envisaged successive construction of six stages of the work, spread over the period extending until about 1970. Detailed plans of buildings will be prepared when the Committee has made decisions upon the extent of additions necessary, and the site to be adopted.

SECTION III - THE COMMITTEE'S ENQUIRIES.

General.

6. The 1954 Reference. - This Canberra Community Hospital reference was first made to the Committee by Executive Council on 15th December, 1954, but alterations in the basis of the proposal, as required by the Health Department, necessitated revision of the planning, and no evidence was submitted to the Committee until September, 1955.

7. The Committee took a considerable amount of evidence on the proposal from departmental officials, independent doctors, specialists, and persons concerned with the provision of hospital facilities, but it was not possible to conclude the evidence in time to submit the Committee's Report on the matter, before the dissolution of the House of Representatives. The reference thereupon lapsed for the time being.

8. The 1956 Reference.- On 13th March, 1956, the House of Representatives referred the proposal again to the Committee, so that its investigations could be completed. The Committee sought further evidence necessary to determine the points at issue, and made a complete study of all evidence taken in the earlier part of the inquiry.

Need for the Hospital Additions.

9. The whole of the proposal depends particularly upon establishing, not only the need for additions to the present hospital, but the specific amount of additions which should be provided to cover demands for the period under review. This is particularly important at this stage, because the site of the present hospital is limited in area, and it is necessary to determine at once whether the ultimate requirements can be fitted on to this site, or whether a start should be made now on the construction of a hospital of the required size on some other site.

10. The Site. - The Committee therefore gave special attention to the possibilities presented by the present site, and studied models of alternative designs for appropriate buildings which could be suitably placed on the area available. The site, which comprises an area of 27 acres, is bounded on the northern side by the line of the eventual lake, and on the southern side by the proposed new roadway. The site consists of a peninsula jutting out into the lake projected in the Griffin Plan for this part of the city.

11. Flood level.- Some little time ago, after a considerable amount of study of the maximum flood levels which would have to be allowed for in Canberra buildings, it was decided that major buildings should not be constructed below the 1835 feet contour. This determination was made after consideration of details submitted in connection with the Lakes Scheme by the Wilson Report, which set out the maximum flood levels reached in past experience, and the calculated maximum likely

to be possible in the future.

Recognising that the Molonglo valley would always be subject to flooding, the Lakescheme was designed to make use of the areas up to the 1825 feet level. Another 10 feet was calculated to be sufficient to place buildings above extreme floods in the future, and the 1835 feet contour was therefore fixed for this purpose.

12. In the case of the Hospital site it was realised that the 1835 contour line would restrict the area available on the peninsula. It was therefore decided that, as extreme floods of the order required to raise the water to this level would be very infrequent, some of the buildings should be placed outside that level. The new nurses' building is the one most affected, and, as a precaution against a possible maximum flood, the building is stilted, the lower floor being left open. The Committee made inquiries on this aspect of the site, and is satisfied that the precautions taken are reasonable for the purpose.

13. Alternative Sites.— Alternative sites, which could be utilized if the present site is considered inadequate, were discussed and inspected by the Committee. Much consideration was given to the question of the site, and evidence was taken on a variety of points, all involved in the question of the suitability of the present site for complete future needs. The main points concerned in the ultimate needs of the city will be discussed later in this Report, but, so far as the site is concerned the following decision was arrived at by the Committee. The site is adequate for hospital facilities for some years ahead, but the buildings to be planned now will make the maximum use desirable for this area.

14. The present site is an exceedingly good one, having been chosen for the purpose in the original Griffin plan, with splendid views over the lakes, and in a situation which will be conducive to suitable treatment, establishing a quiet environment and sufficient

isolation from major traffic. It is considered the best site available by the planners, by those in authority, and by most of those interested in the establishment. Although an opinion was expressed that the site was too distant from some of the suburbs, necessitating small hospitals on other sites, it is demonstrated in the evidence that the hospital can be reached in reasonable time by bus from all parts of the city,

being approximately in the centre. The Committee considers that the site adjoining the present hospital is the best for the proposed additions.

15. The estimates of Canberra's likely population in later years are given to the Committee now in difficult times, when the main factors in the development of the city are changing from day to day, making the result open to doubt. If, and when, the growth of the population substantiates the estimates, and further hospital buildings become essential, they ^{probably} will have to be constructed on another site.

16. The Committee does not recommend a definite site to be reserved for possible use in the distant future, owing to the fact that the character of the hospital requirements could conceivably change, according to development of Canberra itself and also the surrounding districts. It is recommended, however, that the planning authorities keep well in mind the fact that further land is likely to be required, and should be allowed for. Whether it will be a site for a large hospital, or sites for some smaller hospitals, subsidiary to the present one, can not be decided on evidence available at the present time.

17. Present need. - The evidence shows that, at the moment, the number of beds in the Canberra Hospital is adequate, but in ten or fifteen years it will be totally inadequate. The Table of occupancy for the year ended 30th June, 1955, shows the daily average as 140, with the number of beds furnished as 224, those not in use 29 - a total of 253. The daily average occupancy of beds for the year per 1,000 population was 4.6. The comparatively low proportion of occupied beds to total beds available is due to the isolation and tuberculosis wards, and to the newly opened chronic ward. There is also a 50 bed temporary ward at the back of the hospital which has been pressed into service for physiotherapy and various other purposes, and is not included in the calculation of beds available.

18. The immediate future. - At present the 224 staffed beds referred to above represent 7.2 per 1,000 of the population, which is very close to the generally accepted figure of 8 per 1,000, used as the basis for calculation in the proposal referred to the Committee.

Under the conditions projected at the time evidence was given, it was estimated that the population of Canberra would rise to 59,000 by 1970, so that, at 8 per 1,000 the number of beds required would be 472, and the present proposal was therefore drawn up on this basis. Owing to an indication that the population might rise more rapidly, provision has been made for the construction schedule to be completed by 1967, if required.

19. Later development. - It was stated that an estimate of the population of Canberra, that could be located within the northern southern and western areas, is 100,000. It is therefore necessary to think in terms of the years after 1970, when Canberra might gradually grow to the maximum, requiring 800 hospital beds. With this in mind, the Committee sought evidence regarding the desirable maximum provision which could be located on the present site. This was also intimately connected with the optimum sized of the hospital for efficient management, and it was finally decided that a hospital of approximately 600 beds, while being the generally accepted optimum from a management point of view, would also demand buildings to the maximum advisable on the site. If this maximum development of the site were accepted it would provide for hospital requirements, on the basis of population growth adopted for this proposal, up to approximately 1985.

20. It is recognised that the figures calculated for the estimate of population growth in the future are subject to the possibility of considerable progress of the remaining stages of the Administrative Building construction; more rapid erection of housing units; natural increase in the population; increase by immigration, and other matters, would result in a variation of the hospital requirements of the future. Uncertain as the future is, however, it is necessary to work on the best estimates which can be calculated with the assistance of the knowledge available at the moment. This has been done, and the Committee therefore puts forward its recommendations with the full

knowledge that actual events may demand some alteration with the full knowledge that actual events may demand some alteration of its recommendations, so far as the future is concerned.

21. The Committee feels that there is a need for immediate action and it is reasonable to provide for a population of 59,000, with 472 beds by 1970. It also recommends development of the site to the calculated maximum of 600 beds for a population of 75,000, which might be expected to satisfy the increasing demands until about 1985. If the population increases after that time, to the possible 100,000 mentioned, other buildings will have to be considered for construction on some different site, when more definite indications are available.

22. The Base Hospital.- A factor of very considerable importance was the possibility of a demand for the Canberra Hospital to be converted to a Base Hospital, catering for the districts near the Federal Capital in the years to come. The question has been arisen and has been given attention in the past, and the evidence given in this inquiry shows that there is quite a strong feeling in favour of making a base hospital here. There are apparently serious problems associated with the proposal, however, and there does not seem any immediate prospect of changing the status of the present establishment. The possibility of a change in this regard in the future cannot be overlooked, and the Committee pursued its investigation on this aspect of the matter with some of the witnesses.

23. In consideration of the present position the Committee is convinced that the additional buildings recommended in this Report will suffice for the present, and, if required in the future, the Canberra Hospital could be used as a main base hospital while additional associated hospitals could be erected on suitable sites in Canberra's suburbs.

Method of Implementation.

24. To some extent the foregoing determinations, regarding the need for hospital facilities and the suitability of the site, have served to formulate some of the factors in the method of implementation. It has been established that 472 beds will be required by 1970, and the

maximum on the site should be approximately 600. This number will have to be provided by using the present buildings, with suitable additions and alterations.

25. The suggested Methods.- The proposal put forward as a suitable method for development of the project was demonstrated to the Committee by models of the site, with existing buildings and possible new buildings in place. Two alternatives were presented, one showing a long horizontal building, and the other with a vertical treatment but less width. It was intended that each alternative should be connected with the existing building by a link to house theatres and other facilities. It was also indicated that a new building for a Nurses' home as well as ancillary buildings, would be required.

26. The Horizontal Building.- To bring the existing bed strength of 253 to that required in this proposal, 472, it will be necessary to provide 219 beds. The suggestion was to erect a new hospital unit of 192 beds, with connecting link and subsequent alteration of the old building. The horizontal type of building would have hospital units of 32 beds on each side of the link connecting with the existing building, and would keep costs of lifts and other building costs to a minimum. On this basis of 32 beds per ward, the horizontal building would require 3 floors for the 192 beds. Some evidence was opposed to this type of construction, providing 64 beds per floor, owing to the length to be traversed from one end of a floor to the other.

27. The Vertical Type.- If the required number of units, of 32 beds each were to be constructed vertically it would provide a tall, prominent structure which many of the witnesses preferred from the aesthetic point of view. It would need to be 6 floors high to contain the required 192 beds. It was pointed out, however, that construction costs per floor would rise, particularly above the seventh floor level.

28. Choice of Type.- A considerable amount of study was given to the various points involved in deciding upon the most appropriate type of building from all aspects. Apart from the considerable variation in opinions expressed by witnesses familiar with the different sections of work in hospital establishments, the problem became more complicated

for the Committee when it grew apparent that provision would have to be made for a total of approximately 600 beds, as against the 472 proposed in the original submission, and indicated on the models.

29. An addition was made to the model to demonstrate a method of adding the required accommodation to the side of the vertical type building. It appeared to the Committee that the resulting structure would be an imposing edifice in this part of the city, but the internal distances to be traversed would be little different from that which would obtain in the horizontal ^{types}, while the extra floors added to the horizontal type could provide the necessary beds without having to construct the higher and more expensive floors.

30. The 32 Bed Unit.- The proposals submitted to the Committee were presented as suggested methods of implementation, rather than fixed plans for development, owing to the fact that the final buildings to be planned would depend upon the Committee's decision regarding site, type of building, as well as other suggestions concerning the number of beds to be taken as the ward unit for the hospital. There were differences of opinion amongst the experts on this point, but it seems to be fairly generally accepted that a ward unit of 32 beds, and probably subdivided into 2 sections of 16 beds each, would be most satisfactory. This was the unit used by the Department in submitting the 192 bed structures for investigation, and the Committee recommends that the plans for the ultimate building should be developed on the basis of 32 beds per ward. The 192 additional beds in the original submission comprised 6 ward units of 32 beds, and an additional 4 units (10 in all) would be required to bring the ultimate hospital near the 600 bed optimum.

31. Considering the matter in terms of an ultimate 10 ward extension, to add 320 beds to the existing 253- a total of 589, the Committee feels that a horizontal building of 5 floors would be preferable to a vertical of ten floors in height.

32. The possibility was also studied of adding at a later stage, a 16 bed section to each floor of the vertical building, and raising it to a 7 floor building of 48 ^{bed} beds, three 16/units per floor, to achieve the required accommodation - 336 plus the existing 253, making 589 in all.

Although the resulting building would not be symmetrical, it was stated that satisfactory planning could be arranged to achieve the desired result. This solution of the problem was studied because it appeared to offer a more satisfactory method of adding the final portion, in a schedule involving stages of construction.

33. The Committee feels that its recommendations on this matter, at this stage, should not be so definite as to prevent the flexibility which is essential in planning the main proposal, particularly as comparatively little thought has been given yet to the finer details concerning internal arrangements, or the actual views of the Medical Superintendent and nursing staff. It is therefore recommended that, while it appears most satisfactory, from the factors now evident, that the compromise suggestion of 7 floors of 48 beds each should be adopted, this should be subject to close examination and consultation with the Medical Superintendent, and all others concerned with the planning and future use of the establishment.

34. Stages of Ward Construction.- The original scheme proposed construction of the hospital additions in several stages, but the building containing the hospital units was to be erected complete as one of the stages of the whole project. Very definite evidence was advanced by the Department, advocating the desirability of constructing the building complete, without the encumbrance of the need for future additions. It was also pointed out that separate buildings, built in stages, would not represent a satisfactory solution on this site, and would probably not be acceptable for nursing and management reasons. It was therefore urged that it is desirable to face now the problem of whether to limit the beddage at this stage, and, if it is decided to have 600 beds, the Department should be permitted to plan and construct the hospital, and not be asked to design now a building for 472 beds, and later to alter it to increase the beddage.

35. The Committee studied this aspect of the matter very carefully, and realises that many benefits will accrue from constructing the complete hospital building in one stage. However, it is also recognised that the present hospital is reasonably adequate now, and the proposed increase to 472 beds (at a roughly estimated cost of £2,500,000) will

probably be sufficient until 1970 - if times do not improve it might be even longer than that. The addition of a further 4 wards, to bring the total to approximately 600 beds, would cost something over a further million and a half pounds, though much of the accommodation will not be required for years to come.

36. The Committee does not feel justified in recommending the construction of such an expensive building now, when so much of it would not be required until future years. It is also felt that, despite difficulties of planning and construction, as well as a certain amount of inconvenience during the building operations, it is desirable to provide for the future in stages which will entail less amounts of capital expenditure in the earlier years.

37. It is therefore recommended that plans be drawn up for a hospital building with an ultimate accommodation of approximately 600 beds, but that the first stage should be limited to the 472 originally proposed.

38. The Design.- Although models and photographs were submitted to the Committee to indicate possible methods of approach to this problem, no attempt was made to produce actual plans and fixed designs for the structures concerned. The matter is therefore at a stage where considerable latitude exists for the exercise of the architect's ability and imagination, and the Committee feels confident that the departmental officials can produce for final approval plans for a structure to provide a stage for approximately 472 beds with future additions to 600 bed capacity, with a minimum of inconvenience and additional expenditure.

39. Some attention was directed to the problem which would be posed by the necessity to design a connecting link joining the existing building with a new structure of different design. The Committee was assured that this could be done with a satisfactory aesthetic effect, and it is recommended that attention be given to this aspect.

Phases of Construction Programme.

40. The proposal presented to the Committee contained, not only the construction of the new hospital building discussed in the foregoing paragraphs, but also a complete construction programme consisting of six stages, spread over the period 1956 to 1963.

The six stages of the complete programme were as follows:-

1. Boiler, Steam Plant and Laundry, to commence	1956
2. Hospital unit of 192 beds, kitchen etc. "	1957
3. Nurses home "	1959
4. Administration, Outpatients Depts., Diagnostic Clinics, etc. "	1959
5. Garage, Workshop and Stores "	1960
6. Alterations to existing hospital "	1963

41. Developments in the progress of Canberra may require some alteration of this proposed schedule by the time it comes into operation, but the Committee agrees that the stages shown are appropriate, if a further stage is added to provide for the future augmentation of the hospital building to provide for approximately 600 beds. It is also emphasized that the Nurses' Home should be completed at the same time as the Hospital building to avoid possible staffing problems.

The Boiler House and Ancillaries

42. The first stage of the proposal comprised the construction of the Boiler House, Steam Plant and Laundry, and the Committee was informed that it is proposed to commence the work on this stage as soon as the Committee's recommendations concerning it are approved. No detailed plans of this stage were produced, and as it was not proposed to bring this matter before the Committee again, further details were sought regarding the provisions to be made for the suggested hospital and for the future.

43. As a result, the Committee recommends that attention be given to the evidence regarding the situation of the Boiler House, the possibility of smoke nuisance, and the necessity to provide space for the ultimate requirements of a 600 bed establishment.

The later construction stages.

44. The main hospital units and details of the later stages of the programme will now have to be planned, and it is recommended that the valuable evidence submitted by the witnesses specialising in the different aspects of the hospital requirements be studied, suitable plans drawn up, and a proposal submitted to Parliament for reference to this Committee in due course.

Cost.

45. No attempt was made to supply any detail of cost of construction but the Committee was informed that additions of the types suggested in the proposal would cost in the order of £2,500,000, from which it is assumed

that the completed 600 bed hospital would involve construction of 10 units instead of 6, at a cost of approximately £4,000,000.

Civil Defence.

46. The question of civil defence in relation to the hospital buildings came up for consideration of the proposal, and the Committee was informed that a great deal of thought had been given to the matter. The Director of Civil Defence had expressed the opinion that the site for the Hospital was within a potential target area, and further development should take place at another site. However, the Director-General of Health and the Department of Works had studied the matter, and had concluded that although Canberra is the National Capital, it does not present the usual features of a target area, as there are no heavy industries. The population is scattered, the nearest residential area to the centre of the city being three-quarters of a mile away. The Committee took evidence on the question and was informed that it would be impractical to establish the hospital some miles away. It was pointed out that the hospital must not be isolated from the community. That is important from the mental aspect of the patients, but it also makes recruitment of staff much easier, provides ready access for visitors, saves time of the busy visiting medical staff, and is in a convenient position in cases of emergency.

47. The Committee therefore agrees with the submission that, although the site is not entirely satisfactory from the civil defence point of view, it is the most appropriate for the purpose.

Pay Beds.

48. During the inquiry evidence was given that, since the introduction of the hospital insurance scheme, a greater proportion of patients are demanding admission to pay beds rather than the public wards. It has not been possible to study the full effect of the scheme but, as it is tending to alter the internal arrangements of the hospitals and the total demand for beds, it is recommended that particular study of the impact of the insurance scheme upon the demands for the various types of hospital accommodation should be made before the architects decide on the plans to be suggested for the future.

SECTION IV. - THE COMMITTEE'S CONCLUSIONS.

Summary of Recommendations.

49. The following is a list of the Committee's conclusions, in summary form only, arrived at after study of the proposal, models, evidence and the questions involved. The full recommendations are contained in the paragraphs of the Report referred to at the close of each of the following summarised recommendations:-

1. The site is adequate for some time to come, and the buildings recommended should provide for the maximum establishment desirable on the area. (Paragraph 13.)
2. The site is an excellent one and the best for the proposed additions. (Paragraph 14.)
3. If in the distant future, development of Canberra demands further hospital facilities, they probably will have to be placed on some other site. (Paragraphs 15 & 21.)
4. It is not possible to decide now on the nature of future requirements, but alternative sites should be allowed for in the City plan. (Paragraph 16.)
5. Precautions against extreme floods are reasonable. (Paragraph 17.)
6. There is a need for immediate action towards the provision of 472 beds by 1970, and the site should be developed to the maximum of 600 beds, calculated to be required by a population of 75,000 by about 1985, with consideration beyond that time being given when more definite indications are available. (Paragraph 21.)
7. If Canberra Hospital is changed to a Base Hospital in the future additional associated hospitals could be erected in the suburbs. (Paragraph 23.)
8. The basis of 32 beds per ward, as proposed, should be adopted in planning. (Paragraph 30.)
9. In terms of an ultimate 10 ward addition, (Total approx. 600 beds) a horizontal building of 5 floors would be preferable to a vertical one of 10 floors. However, the compromise suggestion of a 7 floor building of 48 beds per floor, appears to be more satisfactory, if the building is to be erected in stages, but it should be subject to close examination, and consultation with the Medical Superintendent and others concerned with use of the building. (Paragraphs 31 & 33.)
10. Construction of a complete 600 bed hospital now is not justified under present circumstances. (Paragraph 36.)
11. Plans for a 600 bed hospital should be prepared with a view to constructing only a first stage to 472 beds at present.
(Paragraph 37.)

12. The proposed connecting link should be planned to ensure that it will maintain an aesthetic balance between the old and the new buildings. (Paragraph 39.)
13. The Committee agrees that the construction schedule should be phased as proposed, but emphasis should be placed upon the necessity to complete the nurses' home and the hospital building at the same time. (Paragraph 41.)
14. The ancillary buildings should be planned to allow for future additions when the final stages of the 600 bed hospital are being constructed. (Paragraph 43.)
15. The building plans should be drawn up as soon as possible, and a fresh reference made to the Committee. (Paragraph 44.)
16. Although not entirely suitable, from the Civil Defence point of view, the site is the most appropriate for the purpose. (Paragraph 47.)
17. The impact of the hospital insurance scheme on demand for hospital accommodation should be studied before the plans are drawn up. (Paragraph 48.)

DENHAM HENTY.
Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Parliament House,
Canberra, A.C.T.

17 MAY 1956