

COMMONWEALTH OF AUSTRALIA.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

REPORT

Relating to the Proposed

Erection of a

COMMONWEALTH ADMINISTRATION CENTRE

FIRST STAGE

' at

MELBOURNE, VICTORIA.

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For Senator O'Byrne,

I bring up the Report of the Parliamentary Standing Committee on Public Works, relating to the following work:-

Proposed erection of a Commonwealth Administration Centre (First Stage) at Melbourne, Victoria

and I move that the Report he printed.

Noth: No necessity to more for printing as Raps have

approved it. Only needs to be "brought my"

es shown above.

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

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COMMO. WEALTH OF AUSTRALIA

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

COMMONWEALTH ADMINISTRATION CENTRE, MELBOURNE.

REPORT.

The Parliamentary Standing Committee on Public Works, to which His Excellency the Governor-General in Council referred, for investigation and report thereon to the House of Representatives, the question of the proposed erection of the Commonwealth Administration Centre, Spring and Latrob: Streets, Melbourne, has the honour to report as follows:-

SECTION I.

INTRODUCTION.

Early History.

- 1. Until the project now under review was proposed, no orderly plan for the adequate and effective accommodation of Commonwealth administrative activities in Melbourne had been seriously considered. It is a surprising fact that only one Commonwealth administrative building the Commonwealth Offices, Treasury Gardens has been erected in Melbourne since the establishment of Federation in 1901. The Commonwealth has been content over the years to become the tenant of private landlords who have erected city buildings designed for professional or small commercial effices, and most of them are unsuitable for Commonwealth purposes.
- 2. With the outbreak of the war in 1939 there arose great demands for equitional encommodation to have staffs required through the increased responsibilities and activities of the Commonwealth as the war progressed. This increased demand by the Commonwealth coincided with a recession in activity in many commercial concerns which were only too happy at that time to rent the space not required by them. The whole Commonwealth need could not be met in that way, however, and large areas of accommodation had to be requisitioned compulsorily under wartime regulations.
- 3. The stage has now been reached when the Commonwealth, forced to accept many energency activities as part of the permanent Commonwealth administrative structure, still occupies many unsuitable premises built by industry for its own needs, and now required again for commercial purposes.

This unsatisfactory state of affairs can be corrected only by the erection of a Commonwealth administration centre, designed on modern lines to house large staffs under adequate supervision, and with suitable amenities for the welfare of the employees.

Site.

- 4. In 1944 the Victorian Branch of the Department of Works, in collaboration with the Surveyor and Property Officer, undertook a survey of Melbourne and inner suburban areas, and selected a number of sites for consideration. By elimination the list was reduced to four sites, on which sketch plans for development were tentatively prepared.
- 5. In 1946 a Cabinet Sub-Committee was formed to investigate the various alternative sites in Melbourne suitable for Commonwealth office purposes. As a result the site containing 9½ acres, bounded by Spring, Latrobe, Exhibition and Lonsdale Streets was recommended for adoption. The site was acquired in 1948 and the claims for compensation of more than half of the owners have now been settled.

Use of Premises.

- 6. A Committee consisting of the Property Officer and two members from outside the Public Service was appointed in 1950 to ascertain whether the accommodation held was being used to the best advantage. That Committee reported that the space was being reasonably utilised, and no appreciable areas could be released.
- 7. In 1951 an Inter-Departmental Committee recommended that the Commonwealth should retain ownership of the whole of the land acquired, and that the first building for Commonwealth Offices should be erected on the northern half of the site. That recommendation was endorsed by Cabinet. For some time there has been continuous pressure by owners of leased buildings requiring the Commonwealth to vacate the space in order to allow for expansion of the owner's business requirements.

Planning.

8. Subsequent to the acquisition in 1948, a considerable amount of planning and investigation had been done. Various schemes providing for the estimated number of officials and for various

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public utilities were considered and developed, until the proposal now submitted was put forward as requested by the Minister in 1953.

SECTION II.

THE PRESENT PROPOSAL.

The Complete Scheme.

9. The full project now envisaged comprises long term planning for buildings to cover the whole of the site of $9\frac{1}{2}$ acres of land, in order to establish an administration centre for the whole of the Victorian staffs of the various Commonwealth Departments in Melbourne, and to allow for expansion on a scale which has been carefully estimated for the next 40 years or so.

The Northern Section.

10. The site is divided into two by Lt. Lonsdale Street, and, when the proposal was referred to the Committee, the planning had been mainly confined to 5 buildings for the northern half of the site, no very definite ideas having been crystallised for the possible future use of the southern half. The five buildings were to provide 602,000 sq. ft. of first class office accommodation to house 7,500 officials, and it was proposed to proceed with the work in stages, in accordance with progress made possible by modern methods.

The First Stage .

11. The reference to the Committee deals specifically with the first stage of the project, comprising a building of limit height on the Spring Street frontage. The building is to be of 12 floors plus a wing designed to form a future connecting link to the Stage 2 building, and it is to provide 126,360 sq. ft. of first class office space for a peak load working population in the vicinity of 1,580 persons and 7,980 sq. ft. of file storage etc. The total cost of this first building, plus the assessed cost of the land and cafeteria, was set down as £1,282,500.

SECTION III.

THE COMMITTEE'S INVESTIGATIONS.

General.

12. The Committee considered the plans, and visited Melbourne

for the purpose of examining the site and the types of buildings at present existing on the properties acquired on the area. An inspection was also made of several other sites involved in the evidence, and various offices at present housing Commonwealth officials in various parts of Melbourne were examined. Evidence was taken from officials of the Departments of Works, Interior, Public Service Board, Postmaster-General, and Labour and Mational Service, as well as from the Town Clerk of Melbourne, Members of Parliament interested in the proposal, and representatives of the Chamber of Commerce, Real Estate and Stock Institute, and the Royal Australian Institute of Architects. The Committee also took evidence from a representative of persons directly interested in the area and affected by the resumption of the land, from independent town planning experts and architects, and other persons who were able to give the Committee information bearing upon the subject being dealt with.

Necessity for the Building.

- 13. <u>Present Premises</u>. During the inquiry the Committee sought evidence to establish the necessity for erecting buildings to house Commonwealth public servants in Melbourne, and in particular for this building which is the immediate subject of reference.
- 14. There is no lack of evidence that the premises at present occupied by Commonwealth officials in Melbourne are largely of unsuitable character for the work carried on in them, and space which is urgently required for commercial purposes in the busy sections of the city is being taken up by the governmental activities.
- 15. It was pointed out that the Commonwealth Government has erected only one office building in Melbourne since Federation, and the evidence shows that Commonwealth offices are located at 75 points throughout the city, causing considerable difficulty in efficient administration and much inconvenience to members of the public who have to visit various departments. Overcrowding and poor working conditions are said to have reduced efficiency and affected staff morals.

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Concentration of Steffs. For a number of years there has been a strong and growing conviction that Commonwealth administrative activities should be properly housed and grouped together in a suitable locality, and successive governments have taken steps to push forward the planning of a suitable project to the stage of practical reality. The view was held that it is important, and an advantage psychologically, to concentrate all the in Victoria Commonwealth activities in one centre, in a structure which will adequately express the importance of the functions of the Commonwealth Government in Victoria, which has been the centre of Commonwealth Government activities since federation. One of the reasons for its development is said to be that, until 1870 Victoria had more people than New South Wales, and up to 1910 Melbourne was a bigger city than Sydney. The view was expressed that the structure should also be in a centre where the people can go and transact their business, recognising the significance of the centre in the governmental life of Australia. In fact, it has become accepted that somewhat similar centres are necessary in the other States. Staffs to be accommodated.

17. From the point of view of the physical necessity to have sufficient suitable buildings in which to house the officials carrying out the functions of the government, the departmental witnesses submitted to the Committee an impressive array of carefully compiled figures in schedules to illustrate the disposition of all the various Commonwealth activities in the city and suburbs of Melbourne, with full details of the premises occupied and the cost of such occupation. The evidence in this regard was presented in a way which clearly differentiates between the officials connected with the central staffs of the various departments and those connected with the Victorian branches of the departments. was emphasized that the buildings were planned to house the Victorian staffs necessary to deal with the particular problems of the

ultimate transfer to Camberra when conditions made that possible.

18. Present and Future Needs. In order to cover the

people in that State, while those on the central staffs were assumed to be only temporarily housed in Melbourne awaiting their

possibility of future needs for office space in Melbourne for some years to come, the Committee took evidence regarding the likely growth of the public service in relation to the complete scheme of buildings planned for this purpose.

- 19. In addition to the comprehensive schedules provided by the representatives of the Public Service Board and the Department of the Interior, showing the number of officials stationed in Melbourne in the various departments at the present time, an estimate was also made of likely requirements through normal growth of staffs in the future.
- 20. In the complete schedules there are certain small groups of officials connected with boards and activities whose future is somewhat uncertain, as well as a large group of technical staff, the inclusion of whom in the total figures give a somewhat inflated result so far as actual office accommodation is concerned, and the totals are therefore approximate. However, it is interesting to note the number of officials using accommodation in the city and suburbs as presented by a summary of the schedules 1 to 4 given in evidence. Overall total of officers to stay in Melbourne, exclusive of short term activities and T.A.A., adds up to 11,780, while the number who should ultimately be transferred to Canberra is 7,970, making a grand total of 19,750 officials in Melbourne at the present time.
- 21. Quite a number of the officials housed in Melbourne,
 Postmaster-General's Department, Defence, Repatriation, etc., are in
 their own buildings end are not to be provided for in the proposed
 centre at Spring Street. The total number shown requiring accommodation in the new buildings is 5,478, with a possibility of an
 additional 1600 clerical staff of the Postmaster-General's Department
 7,078 in all.
- 22. Need for Whole Site. It was originally thought that the projected 5 buildings on the northern half of the site would accommodate all of those requiring accommodation now, and the southern half of the site would be reserved for use in future years, as the anticipated growth of the city population made it necessary to employ

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additional staffs to serve them. However, the Committee was anxious to have a more precise view concerning the future use of the southern half of the site. It was felt that if a large area of the southern half were not to be required, or to be left undeveloped for 40 or 50 years, it would be preferable to sell that portion for development by commercial enterprises.

- The Committee therefore called for a more detailed estimate of future requirements, and a more mature conception of the way in which the southern half of the site could be developed in the years to come, The Committee was informed that, in 1951, a committee considering this matter suggested that the increase in staffs would be at the rate of 5% per annum. Statistics over a number of years show that the total Victorian staffs for the years prior to 1951 indicate an increase of at least 5% per annum. However, statistics reflecting the special cut in the Public Service in 1951-52 indicate a decrease of 4% in 1952, while the figure as at 30th May, 1953 indicates relative stability with an increase of only 0.2% in the eleven months. The staffing of all departments obviously depends, to a great extent, on Government policy, but it is estimated that staffs will need to be increased in the near future. ments of Health, Immigration, and Supply seem most likely to be affected, while the Department of Social Services would have to increase staff by 50% if the means test were abolished. It is therefore felt that an estimate at the rate of 2% per annum increase for the future years would be conservative. If 2% growth rate is applied to the above staff figure of 7078, the entire site would be needed for office accommodation in only 31 years.
 - 24. Inquiry from the officials of the Postmaster-General's Department elicited the information that the new "Civic" exchange would need to be provided on the southern helf of the site within 8 to 10 years, and a branch post office will also be necessary there.
- 25. In accordance with the Committee's request the Director: of Architecture, Department of Works, submitted sketch plans and models of the area to illustrate a possible development of the southern section to provide for the facilities which might be required in the future. An important matter which needed attention

was the provision of car parking space when the northern half of the site was occupied by the proposed 5 buildings, and a suggesting was included to use a portion of the southern half for demountable parking facilities which could be superseded, when required, with more permanent buildings to suit the circumstances.

26. After full consideration of present needs and reasonable estimates for the future the Committee is satisfied that there is an immediate necessity for the first building proposed, and it is reasonably clear that there will be demands for the entire site in the relatively near future. It is therefore recommended that the whole site as resumed in 1948 should be retained for this administration centre.

The Site.

- 27. <u>Description</u>. The site comprises approximately 9.9 acros of land, forming a complete city block bounded by Spring, Lonsdale, Exhibition and Latrobe Streets. It is divided in two by Little Lonsdale Street, the northern portion, containing 4.56 acres, having been selected for the first stages of the development programme. In 1949, at the request of the Melbourne City Council, the north-east corner of the land was re-aligned to allow for new tram lines in Latrobe Street.
- 28. There is a considerable fall in the level of the land from Spring Street to Exhibition Street and, in the case of the Lonsdale Street alignment it reaches 33 feet.
- Existing Buildings. The existing buildings on the site are in the main small factories, many of which are merely converted from sub-standard residential buildings. The best of the buildings appear to be on the Lonsdale Street frontage, with one or two comparatively recent ones on the northern half of the area. The site has been described in evidence as one of the least valuable areas for normal commercial purposes, and the best spot in Melbourne for use as an administration centre. The whole area is badly divided with a labrynth of small streets, and, even the representative of those opposing the scheme stated that, even if the Commonwealth did not proceed with its plans the block could only be adequately devel-

oped by big industrial enterprises, and the small businesses at present in occupation would have to be resumed, some degree of acquisition being essential.

- Town Planning Effect. In order to ascertain the effect of this important proposal on the general planning of the city of Melbourne the Committee sought evidence from leading town planning experts, both official and private, and studied the evidence of the departmental planners in this regard. Even at this late stage, some years after the land had been resumed, it was regarded as important that the Committee should be in a position to assure the Parliament of the complete suitability of the site for the purpose, and of any effect the project might have on the city or State activities, more particularly as a great deal of criticism was levelled at the Commonwealth Government when the site was acquired in 1948. It was essential to determine this matter before the first buildings were started.
- Opposition to the Site. It is very clear in the evidence that the strong opposition to the use of this site which existed some years ago has largely died down now, and any criticism of the site now comes mainly from those pensonally interested in the area. The Committee gave an opportunity to a representative of those opposing the scheme to express their views, and they were ably put forward by Mr. L.M. Perrott, who stated that there were many other sites far more preferable to the one proposed. He submitted many interesting alternative schemes on and informative plans for other sites, and the Committee, impressed with his enthusiastic presentation of the case, gave it full consider ation before making the final decision.
- 32. Other Sites. The evidence shows that a good deel of consideration has been given to the selection of the best site, and many alternatives within a three mile radius of the G.P.O. were studied. The Committee was somewhat concerned that, in the initial stages, no other authorities whatever were approached, and it is disturbing that such an important section of the city should have been selected without consulting the other planning authorities concerned with city development. In this case the selection appears to be a happy one, and there is no objection from the town planning

point of view from the city planning authorities, in fact the recent city planning was stated to have been influenced to some extent by the announcement of the Commonwealth's decision to use this site. However, the Committee advises full co-ordination of planning authorities in future projects.

- 33. The Western Market Site. Of the many other sites discussed the one which is most important at the moment is the Western Market site. As the City Council has recently approved development of the Collins Street frontage of this proposal, and a large block of office buildings is projected for this area, the suggestion to use that portion of the city for the administration centre merited consideration.
- 34. Mr. Perrott put forward an ambitious plan for very extensive development of the Western Market site, by a combination of the efforts of the City Council and the Commonwealth to create a large block of administrative buildings reaching from Collins Street to Flinders Street. It was also suggested that this could be extended over Flinders Street to use the large area of land along the river for office accommodation and space for 5,000 cars, and he submitted diagrams to illustrate different aspects of this huge proposal. The Committee visited this site and considered the possibilities it provided as an alternative to the one under review. decided that there were too many obstacles and difficulties connected with this grandiose scheme to make it a practical reality, at least for a great many years to come, and it is not desirable to regard the Western Market site as a suitable alternative to the Spring Street site.
- 35. <u>City Expansion</u>. Another important factor in favour of the Spring Street site was the fact that it is so situated in the north-east corner of the city, with parks and public buildings to the east and north of it, that it is virtually in a pocket so far as city development is concerned. The evidence shows that the opinion is generally held that the city is developing to the north and west, missing this corner where the parks and gardens are natural delimiting factors, and this building would not interfere with normal city

expansion.

36. The Committee is therefore of opinion that the site proposed is the best for the purpose and will enable development of a neglected area, while at the same time placing the administrative buildings in proximity to other important State and City activities.

Stages of Construction.

- 37. The proposal as submitted assumes erection of the buildings on the northern half of the site in three or four stages, commencing at the Spring Street end of the site and proceeding in a westerly direction towards Exhibition Street. Stage 1 provides for the construction of the first block and connecting link, situated on the higher ground at the Spring Street frontage. The slope of the land, sewerage and water services, and demolition of the least important buildings first; are some of the factors making it desirable to commence at this point.
- 38. Block 2 would be the second stage of the construction. It will be linked to Building No. 1 by a basement which houses the mechanical equipment for the pair of buildings, and by an overhead link at first floor level with a clear vehicular road-way through the link on the ground floor level. Blocks 3 and 4 are to be similarly connected. Block 5 is an isolated unit and would be built as the ultimate stage, and its final form will be decided after later analysis.

The Building.

Stage No.1 of the Construction Programme. The first stage of construction, Block No.1, comprises a "slab" type structure of basement, ground floor and eleven upper floors, plus a wing designed to form a future connecting link to Stage No.2. This building is regarded as a basic prototype for the future development of the site and for this reason the Committee attached a good deal of importance to its planning. It is designed on a regular grid of 20 ft. x 24 ft based on a 4 ft. module. Its length is 196 ft. to Spring Street and width 66 ft. to Latrobe Street. It will be set back 40 ft. from Spring Street, and will contain a small subsidiary basement, for mechanical services, as well as the basement.

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- 40. The basement will provide accommodation for cleaning staff and electrical equipment, and storage space.
- The main entrance to Block 1 has been planned to face
 Spring Street, and a concourse leads to the lift lobby and main stair.
 A secondary exit leads from the escape staircase to the open area
 between Blocks 1 and 2. The sketch plans show the remainder of this
 floor as open space to be sub-divided as required at a later date.
- 42. The plan for the typical upper floors allows for big office areas where desired, and enables an economic balance of natural and artificial conditions regarding light and ventilation. The typical upper floors have each approximately 13,480 sq. ft. of gross area, providing 10,530 sq. ft. or 78.1% of usable office space. Tanks, Fan Room, and Lift machinery are shown on the Roof plan.

Construction.

- The building is to be erected in accordance with recent methods of construction, in use overseas, which will effect improvements in regard to economy of steel, floor loads, speed of erection, and maximum use of factory produced units for external walls, floor slabs, partitions etc. The rigid steel frame will consist of open web joists supporting precast concrete slabs and a suspended ceiling. Light weight aggregates will be used for the continuous ceiling membrane to ensure adequate fire protection, together with acoustic insulation. It is intended to reduce "on site" construction to a minimum, with the object of providing for speedier construction than would be possible under conventional methods.
- 44. Safety of the Building. As the methods to be used are to some extent different from those generally in use in Australia, and from the building regulations operating in Melbourne, the Committee examined the witnesses with a view to ensuring that, in the efforts to achieve desirable economy and rapidity of construction, every car would be taken to preserve safety precautions and sound building methods.
- 45. It was explained in evidence that, although some of the methods to be adopted have not been used extensively in Australia, they have been well proved overseas. It is proposed to use a

partially-rigid type of joint between the main beams and columns of the frame in order to provide a structure which possesses a greater resistance to horizontal forces than with normal construction methods. Secondary beams of open-web type will help to obviate a number of the usual obstacles to efficient lighting and servicing of the building. It was pointed out that the new "dry" construction method, in saving time of construction, would not only make the building available more quickly, but would also save approximately £25,000 in interest alone.

- The Load-Factor Methods. Some misgivings were felt at the proposal to adopt load-factor methods rather than the conventional fixed permissable stress methods. The Committee therefore questioned witnesses on the matter. It was explained that it is illogical to apply the same safety factor to dead and live loads, though this has been the practice in the past. The modern trend is to apply a load factor which varies with the nature of the loading, and it is proposed to follow this method in the design of the present structure. The Committee was assured that a suitable safety factor is always used, and the safety of the structure would be maintained.
- 47. The Committee is anxious that all satisfactory modern methods should be used to provide a building as efficiently and economically as possible, but it is particularly concerned that every precaution should be taken when substituting new methods for old and locally tried ones. It is therefore recommended that some special measures be taken to check the methods to be used, and to observe their effect during the progress of construction of this building.

The Architecture.

48. Open Planning. The design of the buildings projected for the first half of the site has been adopted with special care with a view to preserving a high efficiency ratio of usable areas in comparison with the gross area of building; the maximum of day-light and natural ventilation to office areas; and large uninterrupted areas of office space. These essentials are met by the development of multi-storeyed "slab" type buildings of comparatively narrow width in relation to length, and having a central service core which contains all services and vertical transport facilities. The effect of

this design is to provide open planning on the site, and allows for suitable exterior treatment of the grounds to give an attractive appearance to the whole centre.

- The Floor Space Index. The first impression of a scheme 49. developed with open planning and slab type buildings is that a great deal of very valuable city land is being wasted, and it could be put to better use by buildings covering more of the site. This matter was studied, and evidence was taken regarding the population density proposed, and comparisons with modern development in many other places. It was explained to the Committee that the erection of buildings with usable floor space having a definite relation to the area of the site is now the law in many cities, particularly in order to limit street traffic, and to prevent undesirable concentrations of population. The "Floor space index", a measure of the relationship between the total floor space provided in a building and the area of the allotment on which it is built, together with half the area of the surrounding streets, is recognised as a regulator of population density. London planners recommend that in no case should the floor space provided in a city building exceed 5 times the area of its allotment. The Sydney proposals would allow more than this figure in the centre of the city, and less on its fringes.
- present, it has been considered desirable to make careful comparisons for the building in question to guard against excessive density on the one hand and extravagant land usage on the other. The arrange ment: of vertical units proposed has made it possible to combine relatively high density with relatively low site coverage. The density of 3.5 was considered to be the appropriate density development of the site in relation to the floor space index, and the Committee agrees that it is desirable to adopt it in this project.
- on this site, but the details show that the many factors to be considered in relation to the site have been carefully studied and weighed. The helidon tests on the models show

that the orientation selected for the first building, with the axis of the building 28 degrees west of north, will make it possible for the succeeding buildings to be favourably placed in relation to each other, in the use of natural lighting and shadows. The Committee is prepared to accept the departmental statement that, after due research this orientation is considered particularly suitable for these buildings.

Seneral Appearance. The general appearance of the buildings when the whole five have been erected on the first half of the site, should present a complete group forming a dignified and satisfactory administration centre of great importance to the architecture of Melbourne, and an enormous improvement to the present dilapidated section so close to the prominent State administrative buildings. When the first building is completed it may be necessary to consider it in relation to the later stages of the plan, but it is regarded by eminent architects and other witnesses as a competent proposal, interesting in design, and a welcome addition to the city structures.

53. The Committee regards the plans and models as impressive and interesting, and feels that the whole project, which has been the

and interesting, and feels that the whole project, which has been the subject of much thought and research over a number of years, is now thoroughly suitable for the purpose, and a credit to all those concerned with the evolution of this immense scheme. It recommends that the first building be constructed as planned.

Time for Completion.

Progress charts. The Committee, and the various witnesses noted with keen interest the thorough preparations which had been made, and the efforts which had been put forward to illustrate the comprehensive planning which has been carried out in connection with the project. A design Production Chart was submitted to indicate the various activities and sections involved, and the time factors necessary in the preparation of the working drawings and contract documents. The chart shows that $7\frac{1}{2}$ months is the total time involved from the commencement of working drawings to advertising of the contract. A progress chart shows that careful consideration has been given to the times required for the operation of each trade, with the

time of construction estimated at 16 to 18 months.

55. Other charts were submitted in relation to the progress of expenditure, and the variation in cost of labour and materials since 1946. This type of planning was favourably viewed by the witnesses, and the Committee compliments the departmental officials on their efforts which should result in the maximum economy in time and money, and an efficient control over every section of the programme. It was stated that the planning time schedule is considered tight, but reasonable, having regard to the class and volume of work involved, and will necessitate cereful timing and co-ordination of all trades. It will be interesting to see how accurate the planning is in practice when this programme is put into operation. The Committee appreciates the efforts put forward to show what can be done by departmental organisation, and it is most refreshing to encounter a keenness for efficient results, after the experiences of the post-war years, when lack of men and materials made estimates little better than guesses, and fast planning and construction almost impossible. Practically all recent building operations have been painfully protracted, but it is hoped that, with the approach of more normal times, the complete realisation of the time schedules and estimates illustrated on these charts will be possible.

Cafeteria.

- 56. The original estimate of cost of the building did not include the expenditure necessary for a cafeteria, but cost and details of possible requirements for a suitable cafeteria were indicated. The Committee therefore made inquiries regarding the necessity for a cafeteria in this building, particularly in view of its location in the city.
- The cost of a cafeteria was stated to be £4,000 if planned to cater for light meals and refreshments only. The extent and type of equipment proposed was arrived at after consultation with the Department of Labour and National Service. It is proposed to provide space for 200 light meals and between 200 to 400 refreshments, and it is planned for inclusion in the link, at first floor level, between this first building and the second one. It is generally

recognised that a cafeteria, offering limited facilities is desirable in a building housing the number of persons proposed, especially in this section of the city, and the Committee recommends that it be included in the link at first floor level as suggested.

Financial Aspect.

- 58. Estimates of Cost. When the matter was referred to the Committee the estimated cost, quoted by the Minister, was shown as £1,161,500 as at June, 1953, excluding the cost of land, professional fees and cafeteria.
- 59. It was subsequently considered necessary to increase the original estimated cost submitted to the Minister by 2.95%, owing to certain adjustments necessary after further investigations. The estimated cost of Block 1 when the evidence was given was:-

Land	85,200	
Demolition and clearing site	12,000	
Building (excluding subdivisional partitions and amenities)	956,200	
Civil engineering services	19,000	
Mechanical engineering services	60,000	
Electrical services	146,100	1,278,500
Cafeteria (if authorised)		$\frac{4,000}{1,282,500}$
Less cost of land assessed at		85,200
		£1,197,300

- 60. The Committee was informed that these estimates have been carefully calculated taking into consideration all known factors peculiar to the site and proposed methods of construction.
- figures were submitted showing the estimated return on the building if it were considered as a commercial undertaking. Taking into account the estimated annual outgoing and running expenditure after completion and occupation, and gross return based on 8% on the capital outlay allowed by rent control, the nett income was reckoned to be £45,036. This gross return would necessitate a rental rate, for first class office accommodation, of 17/8 per sq. ft., though there are no recent commercial buildings for actual comparison.

It was estimated that the nett return would amortise the whole proposal in about 28 years.

- 62. In addition heavy maintenance charges on old buildings must be considered, as this would shorten the period of amortisation, while a further factor would be the capital appreciation that may be recovered by the sale and return of Commonwealth-owned buildings to commercial usage. Rentals for Victorian administrations were stated to total £108,000 per annum, which, if capitalized at 5%, would produce approximately £2,000,000.
- 63. It was stated that the cost of the building has been principally determined by the cubic foot estimate and confirmed by square foot area calculations. Costs of components and materials have been carefully exemined in order to establish as accurately as possible the cost of the building. The rate for Block 1 plus the connecting wing is calculated at approximately 10/- per cubic foot.
- Gity Council Rates. The fact was emphasized by some witnesses that the resumption of this large area of city property and use for Commonwealth buildings would deprive the City Council of rates normally payable by the land owners, and it was strongly urged that some payment in lieu of rates should be made by the Commonwealth Government. The Town Clerk stated that the rates that would be payable at present from the area would amount to approximately £4,200 per annum, and this would increase as development progressed until, at full development, it would produce to the City rates amounting to about £29,000 per annum. It was pointed out that the services rendered by the City covered a good deal more than the physical removal of refuse or similar services, a nd the principle of payment by the Government has been recognised for many years in Great Britain and other countries.
- This question is an important one and has been brought to the Committee's notice in all parts of the Commonwealth during the inquiries undertaken in past years. In the case of such a large area of city property the loss to the City Council is substantial, and the Committee recommends that further consideration be given to this question as soon as possible.

- 66. Costs of Materials. Past information is that costs have not been stable in any six-monthly period since 1939, but the indications from departmental sources are that costs have fallen fairly considerably, and they appear to be reasonably stable over the last three-monthly period somewhere between 15% and 18% average less than they were twelve months ago.
- All materials except cement, perlite, aluminium panels, and glass are in reasonable supply. Cement can be obtained locally in small quantities but stocks will be imported for this work if it is necessary to do so.
- cost of accommodation. In consequence of the high cost of building, which has been constantly rising till recent months, the question of the value of the space provided becomes more and more important, and the Committee has felt the necessity to study this matter carefully during the course of its inquiries in recent years. Whatever might be the reasons for high costs in building and equipping office accommodation, and however essential it is to provide for governmental activities, the cold fact has to be faced that the final total is a huge figure, and each square foot of space occupied in a building is now costing a great deal more to construct than was the case in the past.
- 69. The evidence shows that the first block to be constructed is planned to provide 184,360 square feet of gross area, resulting in 134,340 sq. ft. of usable space. With the total cost of the building at £1,278,500, each sq. ft. of gross area will cost £6.9, and each sq. ft. of usable space will be worth £9.5, while the actual first class office space will cost over £10 per sq. ft.

Accommodation.

70. <u>Planning for Use</u>. The Committee is very concerned that, at £10 per sq. ft., it is essential to put every part of the building to maximum efficient use, and no stone should be left unturned to ensure that, from the very beginning, this point should be borne in mind and the building planned in every detail to extract the best use out of it, consistent with full efficiency of the work and maximum comfort of the staff.

- It has already been said that the Committee is very favour-71. ably impressed with the thorough and careful manner in which this project has been prepared and planned by the officials concerned. However, the Committee is convinced that some further co-ordination between officers of different departments is essential in a specialised way if mistakes of the past are to be avoided, and satisfactory final results achieved in the actual occupation of the building. It appears that a certain amount of difficulty is being experienced in arranging for the required number of officers to be accommodated in the partly completed Administrative block at Canberra. This concerns the Committee because, in evidence given in 1947 regarding that project, the Committee was informed that the building was planned practically as an outside shell with internal passages, so that it would specially provide the utmost flexibility for internal subdivision when the time came for allocation of space. In view of the present difficulties in this respect, it is therefore apparent that the mere provision of a building by the architects with flexibility for future planning is not in itself an adequate method of designing for the ultimate objective of ideal accommodation.
- 72. Floor Space per Person. A great deal of time and consideration were given to the amount of space required for office purposes which could be considered ideal from the balanced points of view of comfort, efficiency and economy. Owing to the importance of this matter for buildings in Australia this question had been studied in detail by the Committee during investigation of earlier references, and the research work on this subject by the Department of Labour and National Service had been examined. In an effort to find whether that Department's publication entitled "Recommendations on Working Conditions in Office Buildings" could be satisfactorily used as a basis for this inquiry a good deal more evidence was taken on this matter.
- 73. The Committee is well aware of the difficulties and pitfalls which tend to affect the reliability of a fixed average in relation to space occupied by a department in any given building.

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It is also obvious that some departments contain more than the average number of administrative officials needing space above the average, and, indeed the evidence shows the wide variation which exists in the space occupied in different buildings. Nevertheless, when dealing with large numbers of officials together, particularly those not attached to head office staffs, it should be possible to keep the final overall result near the average figure. The evidence states that it is possible to keep fairly close to averages in various classes of employees, such as a general office area in which there are no other activities than ordinary clerical work, where between 50 and 60 sq. ft. per person is allowed. For typing pools about 50 sq. ft. would be adequate, while the special functions of a drawing office would require 80 sq. ft. per person or more; and executives in privately enclosed offices would need about 120 sq. ft.

- 74. The Department of the Interior for some time has operated on an overall basis of 80 sq. ft. per person, and it is regarded as reasonable to allow that average for large departments like the Department of Commerce and Agriculture and the Department of the Interior.
- 75. The evidence shows that there will be 134,340 sq. ft. of usable space in the first block proposed, and the number of persons expected to occupy it is referred to as 1500 or 1580. From this it can be calculated that the 1580 persons would occupy an average of 85 sq. ft. per person, while, if the average per person could be satisfactorily kept down to 80 without impairing comfort of efficiency, it would be possible to fit into the building comfortably 1679 persons, provided that their natural tendency to expand in new premises could be curbed.
- 76. It will therefore be seen that the Committee's concern for the ultimate in planning and co-ordination is well founded, and further consideration was given to possible methods of achieving the best results.
- 77. During the inquiry it was pointed out that much of the difficulty in making the best use of space in the old buildings

now in use is caused by poor planning and unsuitable furniture. It therefore follows that, if optimum use is to be made of the proposed new building it should be specifically planned from the very beginning for office use, and only modern furniture of proper size and design should be used. The Committee therefore recommends that these two points should receive particular attention.

- 78. Co-ordination of effort. As every square foot of office space is to cost £10. and it is accordingly necessary to use every square foot evailable, the ideal method would be to plan the building with the full knowledge of who the occupants would be. In the past buildings have been planned without such knowledge, but the Committee considers that, with faster building schedules in sight, it should be possible for the Public Service Board and the Department of the Interior to decide which departments should be the first to be transferred to the new location, and the planners would have the benefit of such information in construction, as well as in sub-dividing the building. The placing of windows, columns, service areas and other items in the building itself affect the ultimate use of the space, and all possible details should be decided upon before the plans are completed, so that extensive alterations, which are all too frequent during planning and construction, will be avoided.
- 79. It was thought that officers of the Department of Labour and National Service, with special knowledge of office requirements based upon their extensive research, might be able to make a significant contribution to the planning if used for this purpose. The Committee is informed, however, that the functions of the Department of Labour and National Service are restricted to the dissemination of information in principle rather than in matters of detail, and it is therefore urged that the principles derived from past and future surveys carried out in this field should be applied as carefully as possible.
- 80. As it is essential to make the best use of space, it is not considered sufficient for a department to be allocated a large area and given unlimited authority to spread over all of it without

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special study of the area by officials trained in disposing furniture and fittings to best advantage for all departmental purposes.

- A good start has been made by the use of tentative experimental layouts, stated to have been used during planning in conjunction with the Departments of Interior and Public Service Board after reference to the Labour and National Service standards. However, the function of the Department of Works is generally to provide the domands of the client department, and the Committee feels that the very best in achievement will be most likely if some authority for the final disposition of space is given to the exports of the Departments of Interior and Public Service Board responsible for housing the departments, working in close consultation with the client depertments. In this way the requirements of each depertment could be adequately satisfied, but at the same time co-ordinated with the needs of the others, so that the building would house comfortably the maximum number of officials. Such organisation would be possible if every effort were made by the individuals concerned to work together with a common aim and obviate any suggestion of departmental insularity or self-sufficiency, a most desirable result which would be acclaimed by everyone.
 - Central Staffs. The whole of this project was planned particularly to house staffs of the Commonwealth Victorian administration though some slight mention was made during the inquiry that some central office staffs now located in Melbourne might need to be housed in this centre pending transfer to Canberra. A great body of opinion in evidence spoke against any use of these buildings whatever by central staffs. The view is strongly held that the administration centre is essential to house the Victorian administration so that the premises they occupy at present in city buildings will be vacated as soon as possible, and that Central staffs be transferred to Canberra as planned. The Committee is in agreement with this view and recommends that the necessity for the building is urgent, but approval should be conditional on its use by Victorian staffs, and the vacation of leased and other city premises at the earliest possible opportunity.

Parking.

- A great deal of importance was attached to the provision of adequate parking facilities to cope with the additional traffic which will result from the occupation of the first five blocks by approximately 7,500 persons, together with the large number of the public who will have to visit the centre. The great difficulty experienced in other cities of Australia and other parts of the world was stressed, and it is regarded as essential by all the witnesses that special attention should be paid to this matter. The Committee took extensive evidence on the amount of parking proposed and the possibility of providing enough for the purpose on the site. In addition to the various factors affecting the necessity for parking facilities, referred to by the many witnesses who were 84. seriously concerned over this matter, an important question appeared to be the extent to which the necessity for parking would be reduced by adequate public transport facilities. The construction of the proposed underground railway, with a station at the corner of Spring and Lonsdale Streets would encourage persons to use the . public transport instead of private cars, though the indications were that the railway construction would not be undertaken for some years. On the other hand the new Johnston Street bridge would bring people into the city near the Commonwealth Centre, while more bridges across the river would encourage a movement of the more industrialised kinds of commercial activity to the south of the
 - At the outset the amount of parking envisaged was for 128 river. cars at the first stage, reduced to 4? when the second building took 85. up part of the space, and increased to 114 when additional demolitions on the area were undertaken. At stage 4 there would be total parking facilities for 130 cars. During the inquiry, when this question had been given some thought, and the department had been asked to submit more matured possibilities for the second half of the site, a plan was produced, and models were shown to demonstrate that any amount of parking necessary could be designed on the second half. The evidence included many aspects of parking problems.

It was stated that, until the plans for the city's general development were crystallised sufficiently to forecast future parking needs, parking proposals for the final stages of construction could only be regarded as indications of possible alternatives.

- 86. The various types of parking provision were illustrated with an astimate of the amount required in relation to the office space planned. It was calculated that 600 cars would have to be provided for in respect of the occupation of the northern half of the site, and open-deck parking was illustrated as suitable for this purpose on the centre of the southern half of the site.
- 87. The Committee recommends that the parking suggested for the first stage should be approved, but the question should be pursued further along the lines suggested, and, as construction progresses adequate and appropriate facilities should be provided.

Zoning the City.

88. The proposal to build large blocks of government offices in this section of the city focussed attention on the effect such buildings might be expected to have on the surrounding properties, and it was stated that, with the exception of certain types of businesses, commercial development of areas facing the blocks of buildings is generally considerably hindered. A number of cases where this has happened in the city were cited as examples. At the same time it was recognised that some types of smaller businesses, and particularly office accommodation would be more in demand as a consequence of the establishment of an important administration centre. In this connection it was stated that, under the Town and Country Planning Act, a plan was being completed for the metropolitan area of Melbourne, and it would be competent for the City Council to plan the zoning of areas for commercial purposes. The opinion was expressed that zoning should be so introduced for commercial and administrative purposes in respect of the frontages opposite the Commonwealth block.

Areas held by Government.

89. As the northern half of the site is to be developed first, leaving the southern half for future use according to circumstances

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dictated by the progress of the whole project, it is anticipated that a considerable portion of the southern half of the site will not be required for a number of years, while even some of the northern section may remain untouched for some time. It was stated that the present tenents should be given security of tenure in cases where the land would not be developed for a long period, and that leases could be made available for fixed terms to eliminate the feeling of uncertainty which exists among the tenants to-day. In such cases due regard would be given to determination of times suited to the progressive development of the site. The Committee feels that an early announcement should be made of the Government's intentions regarding the development of the site, and fixed term leases arranged for the tenants on the undeveloped areas.

Melbourne Chamber of Commerce regarding the manner in which land already owned by the Commonwealth is being used. It was considered that it is not good business for the Commonwealth to leave land idle or inadequately used, but it is the duty of the government to use to the maximum extent possible all sites that are acquired. The Postmaster-General's Department was stated to have acquired land all and over the place,/to have used only the ground floor or up to the first floor. Mention was also made of the present Repatriation building, which occupies a large area uneconomically.

Civil Defence.

91. In the case of other buildings investigated by the Committee in recent years special provision has been made for the inclusion, at considerable expense, of basements for civil defence purposes, and such provision was made by direction following research on the effects of atomic weapons. No such provision is made in the present building, and the Committee investigated the reason for deletion of that form of protection, particularly in view of the large number of officials who will be concentrated in this area. The wisdom of placing so many people in one place at all was queried, and the alternative of decentralising the staffs by using suitable sites in the near suburbs was considered from various angles.

- 92. The Committee was assured that the measures to be taken were in accordance with the latest reports on structural defence and recommendations issued by the British Ministry of Works. The intention is to provide a structure having increased resistance against complete collapse under destructive forces so that the lower storeys will be more suitable for conversion into protected areas in the event of war. Underground shelters can be provided at a later date if required by locating them between the various blocks of the ultimate development.
 - 93. The floor slabs immediately above the ground and first floors are to be specially strengthened and will be capable of resisting both upward and downward loading, increasing the cost by about 2% of the total. It was stated that the matter had been discussed with the defence authorities and that the proposals were acceptable to the Chief Officer in civil defence arrangements.
 - The weight of evidence was overwhelmingly against the decentralisation of the staffs, and the Committee is satisfied that it is advisable to proceed with the buildings on this area. However, it was interested in the establishment of the central staff of the Department of Works in their most attractive offices at Hawthorn, and it will be interesting to observe the effect on that department of having its central administration outside the city area pending transfer to Canberra.

The Later Stages.

95. The Committee has paid particular attention to the many factors involved in the first stage of construction, and particularly studied its effect upon the whole scheme, as the determination to proceed with this building sets the standard for the future work on the area. Some of the methods to be used are comparatively new to Australia and are claimed to be improvements on past normal practice, while the planning and design, as well as many other items, will be subject to close scrutiny and possible amendment during the course of construction. The Committee recommends that the building be given a high priority and proceeded with as soon as possible, but that the second and later stages of the programme

should not be approved until they have been the subject of further references to the Committee and investigated in the light of experience gained in the first stage.

State Evidence.

Considerable disappointment is expressed by the Committee 96. at the action taken at the highest governmental level to prevent a Victorian State Government official from giving evidence before the Committee. In an endeavour to co-operate with the State and to ensure that the Commonwealth proposals were in every way desirable, and also in order to secure technical advice from a State expert, an opportunity was presented to a State official to give evidence. It is regretted that, although the official concerned was willing to appear, his superiors were of opinion that it was not necessary for him to appear, and refused permission for him to do so. This is surprising as it has been the custom for the State Public Works Committee to call Commonwealth officials in its inquiries. Committee considered it undesirable to magnify the incident into a matter of major importance, and decided not to use the legal authority in its Act, but it feels that the State has lost an opportunity of assisting in a scheme which is of the greatest importance to its citizens in the future.

SECTION IV.

THE COMMITTEE'S CONCLUSIONS

Summary of Recommendations.

- 97. The following is a summary of the decisions made by the Committee after consideration of all the evidence:-
 - (1.) There is an immediate necessity for the first building.

 (paragraph 26)
 - (2.) The whole site as resumed should be retained.

(paragraph 26)

- (3.) Full co-ordination with city planning authorities should be practised in future projects. (paragraph 32)
- (4.) It is not desirable to regard the Western Market site as an alternative to the Spring Street site.

 (paragraph 34)
- (5.) The site proposed is the best for the purpose. (paragraph 36)

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- (6.) Special measures should be taken to check the new methods being used, and to observe their effect during the progress (paragraph 47) of construction.
- (7.) Population density of 3.5 proposed is desirable for this (paragraph 50) proposal.
- (8.) The departmental view that orientation is satisfactory is (paragraph 51) accepted.
- (9.) The first building should be constructed as planned. (paragraph 53)
- (10.) Departmental officials should be complimented upon the thorough character of the planning and the vision of more rapid (paragraph 55) planning and construction.
- (11.) The limited cafeteria suggested should be included in the (paragraph 57) link at first floor level.
- (12.) Consideration of payment to City Council in lieu of rates (paragraph 65) is suggested.
- (13.) Planning the building with large open floor spaces for flexibility in future use is not in itself an ad quate method of designing for maximum ultimate space allocation. (paragraph 71)
- (14.) Specialised planning and use of modern furniture are essen-(paragraph 77) tial for optimum use of the space.
- (15.) It should be possible to determine the departments to use the building and plan for best use of areas allotted. (paragraph 78)
- (16.) Results of surveys by Department of Labour and National (paragraph 79) Service should be carefully applied.
- (17.) Authority for final disposition of space should be given to experts responsible for housing departments, in collaboration (paragraph 81) with the client departments.
 - (18. Necessity for the building is urgent, but approval should be conditional on use exclusively by Victorian administrations, with vacation of present city premises as soon as possible. (paragraph 82)
- (19) Suggested parking for first stage should be provided, but edequate future provision should be determined by special

- consideration during the progress of the construction programme. (paragraph 87)
- (20) Early announcement should be made of the Government's intentions regarding use of the site, and fixed term leases arranged for tenants on portions of site to remain undeveloped.

 (paragraph 89)
- (21.) Civil defence precautions have been reasonably considered, and concentration of staffs in this area of the city is agreed to. (peragraph 94)
- (22.) Stage 1 should be given a high priority, but future stages of the construction programme should be subject to further references to the Committee. (paragraph 95)
- (23.) Refusal of State to give evidence is regretted by the

 Committee. (peragraph 96)
- (24.) Land acquired by the Commonwealth should be fully utilised, having regard to the value of the land and the importance of the sites. (paragraph 90)

D. WATKINS

Vice-Chairman.

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