1914 - 15 - 16.

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

REPORT

from the

JOINT COMMITTEE OF PUBLIC ACCOUNTS

UPON ESTABLISHING

" COMMONWEALTH PUBLIC WORKS DEPARTMENT."

MEMBERS OF THE COMMONWEALTH PARLIAMENTARY JOINT COMMITTEE OF PUBLIC ACCOUNTS.

FIRST COMMITTEE.

MATTHEW CHARLTON, ESQUIRE, M.P., Chairman JOHN THOMSON, ESQUIRE, M.P., Vice-Chairman.

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The Honorable James Mackinnon
Fowler, M.P.

Dr. William Maloney, M.P.

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PROCEEDINGS OF THE COMMITTEE.

The taking of evidence in the Inquiry upon establishing a "Commonwealth Public Works Department", was commenced on the 24th May 1916, and terminated on 5th December, 1916.

Altogether 23 meetings have been held in Melbourne, Sydney, and Brisbane, and the following witnesses have been examined :-

Bell, Norris Carrett. Engineer-in-Chief, Commonwealth Railways.

Binglo, Walter David. Acting Secretary, Home Affairs Dept. Helbourne.

Board, George Leonard. Assistant Under Secretary for Public Lands,

Queensland.

Brady, Alfred Barton, Under Secretary Dept: of Public Works, Queensland. Brittingham, Samuel Charles, Chief Architect, Public Works Dept. Victoria.

Transcon Maria William Davidson des Mantana de Maria de Maria

Burrows, Thomas Edward, Engineer for Harbors & Drainage, Public Works Department, Sydney.

Catani, Carlo, Chief Engineer, Public Works Dept: Victoria.

Cutler, Arthur Edward, Chief Engineer, Public Works Dept: Sydney.

Drake, Edwin Figtree. Secretary, Public Works Dept: Victoria.

Goodwin, John Thomas Hill. Chief Surveyor & Estate Office, Home Affairs
Department, Melbourne.

Griffin, Walter Burley, Federal Capital Director of Design & Construction.
Henderson, Anketell Matthew, Past President, Victorian Institute of

Architects.

Hesketh, John Chief Electrical Engineer, P.M.G. Dept: Melbourne.

Hill. Thomas Engineer, Home Affairs Department, Melbourne.

Hunt, Henry Ambrose, Commonwealth Meteorologist, Melbourne.

Hutchinson, William Engineer for Railway & Tramway Construction, Public Works Dept: Sydney.

Kennedy, Thomas Engineer for Railway & Tramway Surveys, Public Works Dept: Sydney.

Kirkpatrick, Herwald Gordon, Architect, Sydney.

Knibbs, George Handley, Commonwealth Statistician, Melbourne.

Mackennal, Horace John, Works Director, Home Affairs Department, Melbourne

Midson, Arthur, Master Builder, Brisbane.

Murdoch, Thomas. Director of Works, Department of Defence, Melbourne

Mirdooh, John Smith, Architect, Home Affairs Dept: Melbourne.

Oakeshott, George John, Works Director, Home Affairs Dept: Sydney.

Oldham, Ryton Campbell, Commonwealth Chief Electoral Officer, Melbourne.

Owen, Percy Thomas. Director General of Works, Home Affairs Dept: Melbourne.

Pritchard, Ağthur Frederick, President, Institute of Architects of N.S.W. Sexton, Richard Ernest, Chief Engineer, Queensland Railways.

Sievers, Edward Johnston, Govt. Land Valuer, Public Works Dept: Sydney.

Stewart, Daniel, Master Builder, Sydney.

Sutton, George Henry, Secretary, Victorian Railways.

Swan, William Robert, Acting Director of Maval Works, Melbourne.

Swanson, John Warren, Master Builder, Melbourne. Templeton, Henry Barkley, Deputy P.M.G. Brisbane.

Todd, Charles Herbert Uttley, Works Director, Home Affairs Dept: Brisbane.

Vicars, James, Engineers Association of New South Wales.

Walters, Henry Latimer. Accountant, Home Affairs Department, Melbourne.

REPORT OF THE JOINT COMMITTEE OF PUBLIC ACCOUNTS UNDER THE "COMMITTEE OF PUBLIC ACCOUNTS ACT 1912" UPON ESTABLISHING A "COMMONWEALTH PUBLIC TORKS DEPARTMENT."

INTRODUCTORY.

The Acting Prime Minister, (Senator the Honorable G. F. Ponroe:) forwarded a Communication to the Joint Committee of Public Accounts, to the effect :-

"That it is the desire of the Commonwealth "Government that the Committee investigate," and report upon, the question of whether "there should be one Works Department for "the Commonwealth, and if so, what its "scope should be."

The Committee have therefore the honor to submit the following, report :-

The Department of Home Affairs, by whom the major portion of Commonwealth Works have been constructed, came into existence in 1901. A Public Works Department was not formed at the inception of Federation, as Commonwealth Works activities were not sufficiently large to engage one Minister's attention.

Towards the end of 1903 the Works policy of the Commonwealth began to be formulated, and a Director-General of Works was appointed.

Growth has been exceptionally rapid, and expenditure on New Works Buildings and additions increased from £325,379. in 1903/4 to £4,049,255 in 1913/14.

MXECUTION OF WORKS - PRESENT SYSTEM.

The procedure hitherto followed by the Home Affairs Department in the execution of Works, is, that under the Public Works Regulations, Departments submit proposals of their requirements for all works, to the Works Director in the State, Herwill prepared sketch plans and supple supplementary information for the consideration of the requisitioning Department. When the sketch plans are finally concurred in by both Departments concerned, the papers go to the Minister requiring the services for provisional approval. If approval is given the amount is placed on the Estimates by the Minister of Home Affairs. The Director General of Works then propars working plans. The Home Affairs Department has no statutory power to enforce the regulations. Departments prepare proposals in anticipation of the Estimates, but many works are put on at the last moment as a schedule.

It has not been the custom of the Departments to consult outside expert opinion regarding important works.

Accounts for Works.

Accounts of Expenditure on works are recorded in a Branch apart from the control of the Director General of Works.

The Director General is primarily responsible in regard to the "estimated" cost of works, and the details kept by the local works officer, enable the former to keep in close touch with the cost of works in progress.

After an amount has been authorised it is the Accountant's responsibility to see that the "actual" expenditure does not exceed that amount, but, it is not part of his duty to check the cost of a work with its estimate. This rests with the Director General.

Control of Works for Departments.

Up to the present the Department of Home Affairs has carried out all works for the Prime Ministers', Treasury and Attorney-General Departments, and for the Trade & Gustoms Department with

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the exception of small maintenance repairs.

Northern Territory: The Northern Territory has a Works Branch at Port
Darwin to carry out small works.

In the event of a large or special undertaking, Home Affairs supply to the Officers stationed in the Territory the necessary drawings for their suidance.

drawings for their guidance.
Where Post Office building or quarantine work has been required the local works branch carrying out the work on behalf of Home Affairs.

Commonwealth Reilways: Construction of the fire Cake Court for and the Port

Augusta Kalgoorlic Railways to and the the Charge of an Enginee

in Chief who is also acting Commissioner of Railways directly

responsible to the Minister for Home Affairs.

Department of Postmaster General. The work done by Home Affairs for this Department is confined to the erection, maintenance and repair of buildings.

Other Works such as the laying of conduits for telephone wires, and submarine cables, the installation of telephone services the erection of telegraph and telephone wires, and the maintenance of these are carried out by the Postmaster General's Department.

Military. Military Works including the erection of Drill Halls, Stores, and other buildings of a permanent character are carried out by Home Affairs Department.

The Military Department undertakes the construction of temporary buildings, camps, rifle ranges, etc.

The Defence authorities have utilized the services of the Home Affairs' Officials during the War, in connection with major works such as building Hospitels, and portion of the work in connection with camps, although the charges are covered by military and not Home Affairs votes.

The erection of fortifications and similar works are carried out by the Department of Home Affairs.

Naval. There is an agreement between the Home Affairs and Navy

Departments that works on land, buildings, etc. shall be carried out by Home Affairs, while the Navy undertake all marine works, such as breakwaters, jetties, dredging etc. Ship-building and dockyard works are controlled by the Naval Department, as-as-

sice certain sther works.

Works Branches in States.

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The Department of Rome Affairs has established branches in the States of Victoria, New South Wales and Queensland for the carrying out and supervising of Yorks undertaken by the Department in these States.

These branches are in charge of Officers designated "Works Directors" who are responsible under certain regulations to the Director General of Works. There is a staff attached to each branch for the preparation of drawings etc. and Inspection of Works in progress.

Works Directors have power to expend an amount up to £50 at their own discretion, upon the request of another department, and subsequent Ministerial approval.

In the remaining States; South Australia, West Australia and Tasmania officers known as "Works Registrars" act as a channel of communication between the Home Affairs Department and the Public Works Department of the State Government for the purpose of carrying out Commonwealth Works required in those States.

The method usually followed, is, that, after sketch plans etc. are set out by the Central office of the Home Affairs Department the State Department is requested to supply estimates of cost.

These estimates after approval by the Minister for Home Affairs are returned to the State with instructions to proceed with the work. For such services the Commonwealth pay the State on a percentage basis on the architectural work (usually 6%) but the payments to clerks of works, and Foremen are charged to the job.

In New South Wales where work is carried out directly by a Branch of Home Affairs Department, the cost works out at 5.53% for the year 1915-'16.

Criticism of Existing Bystem.

Advantages.

A witness told the Committee that the consolidation of constructional staffs would mean the building up of a huge machine which would prove more cumbersome than the

various departmental works branches at present in existence. a big organisation more checks and counter-checks are required than in a small department.

Another witness was of opinion that in carrying out works of a highly technical character, especially those regarded as confidential works, it was desirable that the Department for whose use the works were being built, should have control of their execution in a separate branch, as at present.

(Lastaget!) - He was further of opinion that a co-ordination of staffs providing for their inter-changeability would be preferable to combining the separate branches.

Some disadvantages.

The concensus of opinion was that the objections to the present system greatly outweighed any advantages it possessed. The main objections may be epitomized as follows :-

Staffs.

"The amalgamation of all the different departmental staffs under one control would allow of a reduction as compared with the total number of people employed on the separate staffs of the various Departments."

The continuance of the existing works branches in several Departments means the growth, of so many disconnected and to some extent antagonistic organisations. Greater efficiency and economy would be secured by consolidation.

Plant.

In the carrying out of works the Commonwealth usually undertakes the functions of a builder and contractor in addition to that of architect. This means the purchase of plant necessary to execute the works. Such plant in time becomes a considerable asset, and it should be kept thoroughly organized, so that the fullest use of it may be made.

At prepent one Department may have plant lying idle while another department is buying similar plant to carry on their works.

Labor.

Difficulty has been experienced in the employment of workmen.

"Two employers are likely to bring about different conditions, and to place a different interpretation upon awards of the Arbitration Court, thereby engendering bad feeling on the part of the workmen, which ought to be avoided."

Under one Department the Inbor market could be better equalised and the men would be likely to enjoy greater continuity of employment through the opportunities of utilizing their services on different works.

Supervision.

Mumerous instances have arisen where two men have been employed by different departments where one could quite easily have carried on the work. To have inspections carried out by two or three departments in one district is a wrong principle.

EXPENSE:

Various witnesses were of opinion that "it would tend to economy and efficiency to have one Works Department carry out all Comnonwealth Works."

State Government Systems in carrying out Works: ----

In the six States of the Commonwealth there exists a Department of Public Works.

More or less the functions of these Departments are, the erection, maintenance, and repair of public buildings and works; construction of harbor works, water supply and sewerage "National" roads and bridges. Surveys and valuations.

In New South Wales and Victoria the building etc. of docks is under the care of the Public Works Department.

The construction of railways is under the control of the Public Works Department in New South Wales; West Australia; and Tasmania, although the New South Wales Government at present are proposing to place construction of lines as well as their running under the Commissioners. In Victoria new lines are constructed by the Railways Construction branch of the Board of Lands and Works, and handed over to the Railway Commissioners on completion.

In Queensland Railway Construction is carried out by the

Commissioners. In South Australia, the Railway Department is a Separate branch of the Public Works Department.

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As previously stated the Departments in South Australia, West Australia and Tasmania also carry out necessary works on behalf of the Commonwealth.

Prior to Federation the Public Works Department in Victoria "carried out all the defence work (Maval and Military), Schools, Police and Postal buildings and a great deal of harbor and river work, including lighthouses, but excepting railway works."

Witnesses from State Government Departments after taking into consideration the experience gained in their own work were of opinion that the present State systems of having one Department controlling all architectural and civil Engineering construction was the most advantageous and tended to economy.

SUGGESTIONS FOR ORGANIZATION OF PROPOSED DEPARTMENT.

Regarding the organisation of such a Department an experienced officer said "There should be a technically qualified officer of wide experience as Administrative Head. Under him would be the sectional heads. Dividing the work of the Department into three construction divisions. I would suggest that these divisions should consist of the architectural, the civil and mechanical engineering, and the electrical engineering. I bracket civil and mechanical engineering, because they would come into touch so constantly much more so, than would mechanical with electrical engineering. Then there should be a head of stores and materials, and the usual accountancy and clerical divisions. The head of the architectural division would be charged with drafting, supervising, quantity surveying and the costing section, but so many technical questions ... arise in respect of costing that it is a mistake to put it under the accountancy branch. The head of the civil and mechanical engineering division should, according to the scope of the Department, have his sub-divisional heads for ordinary civil engineering construction on land, (including steel frame structures, water supply, and sewerage). If there were harbor works there should bealso a sub-divisional head for them. The electrical engineering

would be one clean-cut division. Under the stores branch there would be a comptroller of stores in departmental charge subject to such provisions as to a general stores organisation as the Commonwealth might have, and under him there would be the ordering and accounting of all stores received. The accountancy should in my opinion, come directly under the works organization, and be subject to the instructions of the Administrative Head".

Ransfer of Snaredes. The formation of a Public Works Department with functions appertaining solely to works would mean the transfer of such branches as the electoral, statistical and meteorological, to other Departments.

Evidence was taken as to the most suitable Department to which these branches should be attached, in view of their individual functions and convenience of working.

Electoral.

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Electoral Administration is independent of and apart from, ordinary administration. The responsibilities of the Head of this branch being largely in the administration of cortain note relating to the electoral law, it would appear therefore to be more suitably placed if under the control of the Attorney-General.

Statistical.

The work of taking a census, compiling statistics, determining price and wage indexes, and analysing data of all the activities of the entire continent, population, finance, etc; would appear to have more in common with, and should be placed under the control of the Treasurer.

Meteorological.

To a large extent the Meteorological Branch is dependent for reports upon information supplied through the Post Office and utilizes that Department in other respects also. Secause of the facilities which are offered, and the corelation now existing between the Postal Department and the Meteorological branch, the latter should be under the control of the Post Master General.

Objections to

Objections were offered to the centralization of all work in one Department.

Maval.

be less secrecy observed if the work were carried out away from the control of the Naval Department. That where alterations became needful during the course of the work, time would be wasted in referring the matter to a Works Department. The world also be lack of opportunity in "experimental" work.

Defence.

The Defence Department (Military) contend that the training received by works officers in the execution of their duty in peace time, is essential, if they are to successfully carry out these works at distant parts in time of war.

Postal.

Buildings etc. are at the present time carried out by Home Affairs for the Postal Authorities but works in connection with the construction of lines and the provision of telegraph and telephone equipment is peculiar to the Postmaster General's Department and is carried out by that Department.

The Committee have not received conclusive evidence to show that work, other than that which is purely technical could not be satisfactorily carried out by a Public Works Department.

RECOMMENDATIONS.

COMMONWEALTH PUBLIC WORKS DEPARTMENT.

The Committee recommend that there should be one Works
Department for the Commonwealth, including the Northern Territory,
and the Federal Capital Territory. This could best be accomplished
by converting Home Affairs into a Public Works Department with more
accomplished by converting Home Affairs into a Public Works Department with more
decided responsibilities, and transferring portion of its present
activities to other Departments more closely related to these

SCOPE OF PUBLIC WORKS DEPARTMENT.

The Department to carry out all Works excepting the following:-

<u>EAVAL</u>. The Construction, equipment and maintenance of all vessels, the fitting of transports and Wireless Installation.

<u>DEFENCE</u>. Camp Equipment, placing of and maintenance of warlike armament, equipment and technical stores; control and management of Cordite, Clothing, Harness, Arms and other factories manufacturing Defence requirements.

<u>POSTAL</u>. All works in connection with the undergrounding or overhead erection of telegraph and telephone wires. Submarine cables; the fitting up of switchboards, instruments and appliances in connection with telegraph and telephone services.

TRADE & CUSTOMS. Erection and maintenance of lights, beacons and lightships.

PERMANENT HEAD.

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The Department should have a Permanent Head who shall advise the Minister. He must be a man with professional skill, qualified by training and experience and possessing administrative ability.

ORGANIZATION.

The consolidation of all public works under one Department will require the classification of its operations into several branches. The Committee recommends that the Officer in charge of each of these branches shall be a man of recognised technical skill and experience, and he shall be held responsible to the Permanent Head for the efficiency of his branch.

BRANCHES IN STATES.

In regard to the actual operations of the Department in the various States, the Committee recognises that in the larger States where the volume of work is considerable. Commonwealth Torks branches should be maintained.

In the smaller States the system of having works carried out by the State Departments under Commonwealth supervision should not be altered for the present.

The advantage of either system is entirely determined by the volume of work, and it appears to us that the present arrangements are satisfactory.

AVOIDERCE

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CIRCUMLORUTIOM.

It would save time, expense and friction if a greater degree of decentralisation and of local responsibility were instituted in the relations of the Public Works

Department with other Departments.

There is no reason why a demand for work or material costing a few pounds should not be arranged by local officers.

RAILWAYS,

In the opinion of the Committee the construction of Railways, should not be separated from their running and maintenance.

Regrading, deviations and repairing the permanent way, entails a plant, staff and operations to a large extent similar to those employed on original construction.

The arbitrary division of this work and responsibility in some of the States has not been advantageous, and as regards the Commonwealth, whose railway development is strictly limited, such a separation has even less to recommend it. The Officer in charge should be directly responsible to the Minister.

LANDS AND SURVEYS BRANCH.

As the responsibilities of the Land and Survey Branch of Home Affairs Department have been associated with Public Works the Committee are of opinion that this branch should become attached to a Public Works Department.

COMPETITIVE DESIGNS.

The Committee recommend that for the erection of buildings of the value of £20,000 and over, competitive designs should be invited. The successful competitor to carry out the work under the supervision of the Government Architect.

ADVICE ON LARGE WORKS.

With reference to Engineering Works of magnitude, such as Mayal Bases or Marbour Works, the Committee recommend that in each case the advice of an expert of high standing be obtained under whose supervision full details and plans should be prepared and approved before the work is commenced.

ESTIMATES AND COSTS.

When plans and specifications of any Public Works are submitted for approval, they should be accompanied by an estimate of cost. During the progress of the Work careful records should be kept of all costs and a Statement shewing the total actual cost should accompany the certificate on completion of work.

PROVISION FOR FUTURE REQUIREMENTS.

The Committee find that owing to lack of co-ordination between different branches of the various Departments, considerable effort is wasted and loss occurs by the carrying out of work without anticipating possible and probable requirements of other branches of the service.

We therefore recommend that Officers who are responsible and buildings for the laying out of work, should as far as practicable make provision for future requirements.

DESIGNATION OF MINISTER.

The Committee recommends that, this Department should be under the centrel of the Minister whose designation should be "Minister for Public Works and Railways."

In conclusion, the Committee desire to express their appreciation of the information and assistance rendered by witnesses examined.

Mohauton Chairman.

7th December 1916.