

*11*  
*11*  
*Tabled after*  
*13 Sep*

DEPARTMENT OF THE SENATE
PAPER NO. 1611
DATE PRESENTED 13 SEP 1977
<i>J. K. Odgers</i>
Clerk of the Senate

1977

Parliament of the Commonwealth of Australia

Joint Standing Committee on the New and Permanent  
Parliament House

Report  
relating to the proposed construction of an  
electrical substation  
at the rear of  
the provisional Parliament House

## Membership of the Committee

(30th Parliament)

### Joint Chairmen

Senator the Honourable C. L. Laucke,  
President of the Senate

The Right Honourable B. M. Snedden, Q. C. , M. P. ,  
Speaker of the House of Representatives

### Members

The Honourable A. A. Staley, M. P. ,  
Minister for the Capital Territory

Senator the Honourable T. C. Drake-Brockman, D. F. C. ,  
Chairman of Committees in the Senate

Senator G. D. McIntosh

Senator J. I. Melzer

Senator A. J. Missen

Senator J. O' Byrne

Senator H. W. Young

The Honourable K. M. Cairns, M. P.

Mr L. K. Johnson, M. P.

The Honourable P. J. Keating, M. P.

Mr B. Lloyd, M. P.

Mr G. G. D. Scholes, M. P.

Mr B. D. Simon, M. P.

Mr D. M. Piper,  
Clerk to the Committee

Construction of electrical substation at rear of  
provisional Parliament House

Under clause 3 of its resolution of appointment, the Joint Standing Committee on the New and Permanent Parliament House is authorised to consider and report on matters coming within the terms of section 5 of the Parliament Act 1974 as may be referred to it by the Minister responsible for administering the National Capital Development Commission Act 1957, or by resolution of either House of Parliament.

Section 5 of the Parliament Act 1974 gives Parliament control over the erection of buildings or other work within the Parliamentary zone which is defined in the Act. Sub-section 5(i) of the Act provides as follows -

"No building or other work is to be erected on land within the Parliamentary zone unless the Minister has caused a proposal for the erection of the building or work to be laid before each House of the Parliament and the proposal has been approved by resolution of each House of Parliament."

On 6 September 1977 the Minister for the Capital Territory, as the Minister responsible for administering the National Capital Development Commission Act 1957, referred to the committee a proposal to construct an electrical substation at the rear of the provisional Parliament House.

The committee has considered the proposal and reports as follows:

Background

Over the past four years the replacement of the present ageing oil fired boiler plant serving the provisional Parliament House has been under investigation by the Department of Construction. In 1976 the Department reported on the economic and environmental factors associated with oil and electric systems and the Joint House Committee resolved that an electric system should be installed. It is intended that the new electric boiler system be installed during the current financial year.

*Assessments of the demand for electrical power that this decision and proposed extensions of the air conditioning system would create indicated that a substantial increase in the consumption of power would occur. This demand would be beyond the capacity of the existing services.*

The A. C. T. Electricity Authority, in considering how best to service the new load from both technical and economic points of view, came to the conclusion that a new substation was necessary to replace the one presently located at the rear of the House within the building. The Authority has pointed out that associated with this new substation would be additional switch gear that would improve the reliability of the power supply to the House.

### The Proposal

The new substation will be of such a size that to make space available within the existing building would necessitate the surrender of areas now used for workshops and kitchen support facilities. Further, it would involve substantial internal building works and leave insufficient space for the accommodation of additional comfort cooling plant that will shortly need to be installed to cope with the extension of the air conditioning facility to a number of areas presently heated only.

Consequently, it is proposed that the substation be constructed in the bank at the rear of the House, directly opposite the boiler and chiller plant rooms, this being as close as practicable to the points of heavy power usage.

The building will be 17.26 metres long, 7.3 metres wide and 3.34 metres high.

### Site

The Committee accepts the need for a new substation and has considered whether there is any suitable alternative site to that proposed.

Siting of the new substation basically within the area occupied by the existing substation in the building would involve the take over of areas now used by workshops and for refreshment room purposes. Also there is a need to allow sufficient space within this area for an additional centrifugal chiller machine and associated equipment required for the extension of the air conditioning system. Installation of the chiller is programmed for the current financial year. The committee concluded that siting of the new substation within the building is not feasible.

The committee also considered the possibility of accommodating the substation in the service block at the rear of the building. This block currently houses a number of services including the LP gas tank which supplies the kitchen, kitchen refuse disposal, a room for the gardening staff, and public toilets. These service areas are in continual use and no alternative location is available. The committee accepts that it is not possible to accommodate the new substation in the existing service block.

#### Conclusion

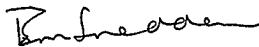
The committee agrees that the only practicable alternative available in the circumstances is to accommodate the substation in an extension of the existing service block. The space requirement for the substation is approximately 126 sq. metres which can be obtained by constructing in this area an extension 17.26 metres long and 7.3 metres wide. Siting of the block will allow the existing bank of

shrubbery to conceal it as far as is practicable. The fact that there is a need to have the substation as near as possible to the point of heavy usage pointed to the extension being located in the area on the western end of the existing block. The committee supports the proposal and recommends construction of the work referred to it.

A plan of the building showing its proposed location and also three elevation views is attached.



C. L. LAUCKE  
President of the Senate  
Joint Chairman



B. M. SNEDDEN  
Speaker of the House of  
Representatives  
Joint Chairman

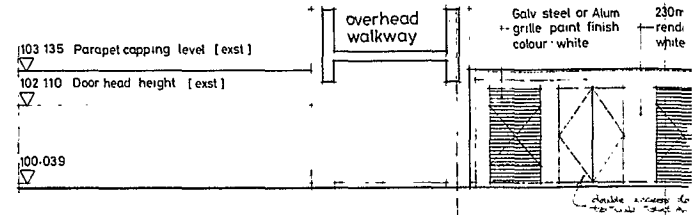
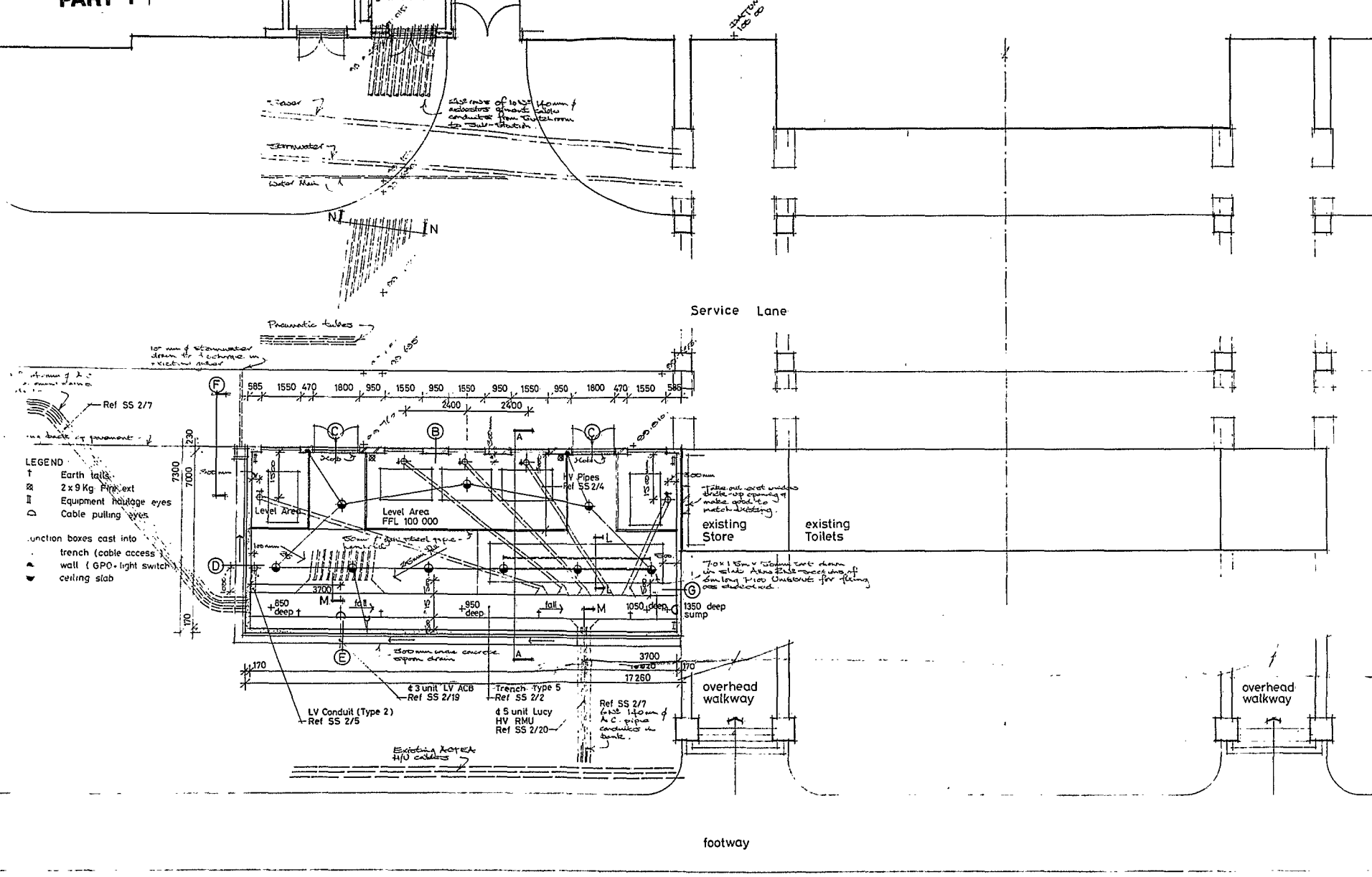
13 September 1977

**PART 1**

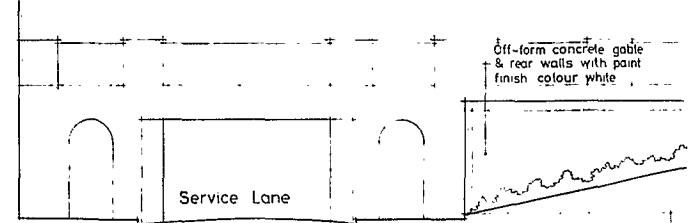
Machine Room  
New Switch Room  
For details see drawing no CA 77/547

SECTION 100 00

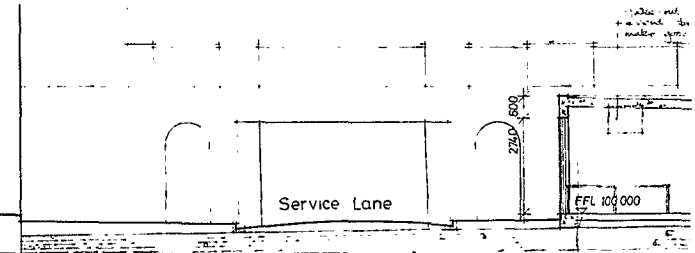
Proposed 6m structural grid for future building



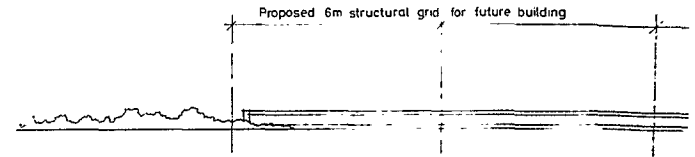
Elevation from Service Lane 1100



Gable Elevation of Sub-Station 1100



Section A-A 1100



Elevation from Queen Victoria Terrace 1100

- LEGEND**
- T Earth falls
  - 2x9 Kg Pipe ext
  - II Equipment hoistage eyes
  - D Cable pulling eyes
- junction boxes cast into trench (cable access) wall (GPO-light switch ceiling slab)

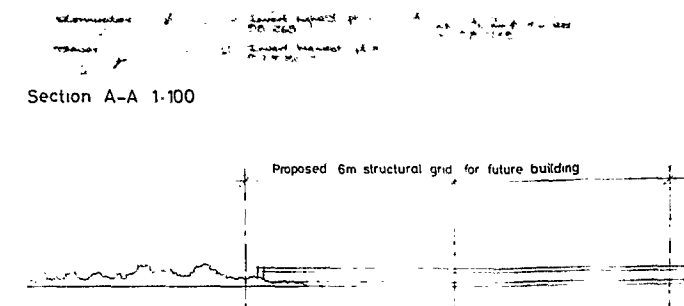
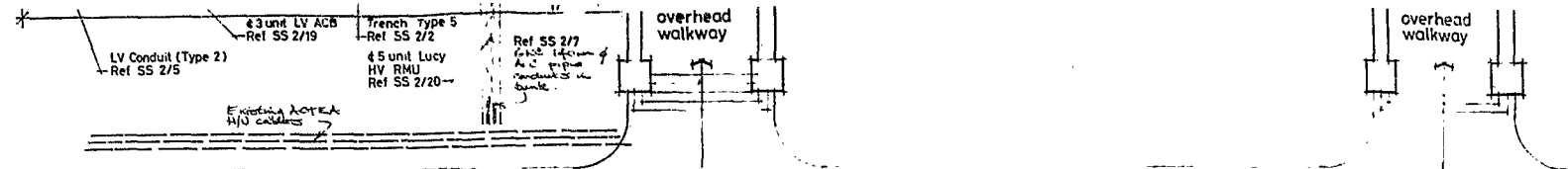
Plan of Proposed Sub-Station 1100

Queen Victoria Terrace





**PART 3**



Plan of Proposed Sub-Station 1100

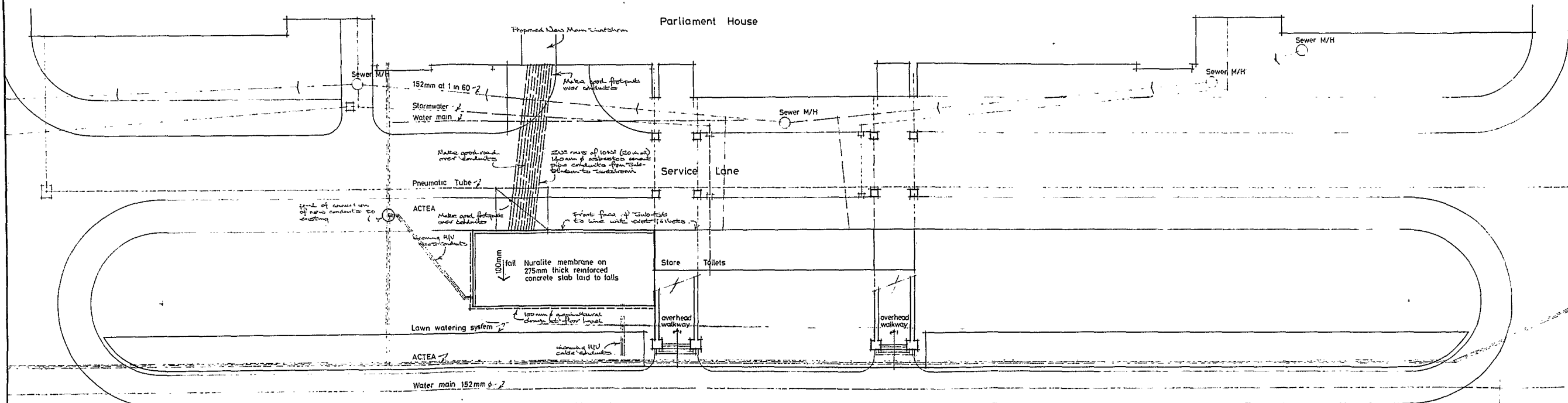
Elevation from Queen Victoria Terrace 1:100

Queen Victoria Terrace

Parliament House

Service Lane

Queen Victoria Terrace



Layout Plan showing Existing Services 1:200

Engineers in Association :  
W E Bassett & Partners Pty Ltd.

*Tom D Wilson*  
27 April 1977

Architects in Association :  
Eggleston Macdonald & Secomb

*George Holland*  
27 April 1977

AMEND. No.	AMENDMENTS	DATE	INITL.	DRAWING No.	ASSOCIATED DRAWINGS

All dimensions must be verified on the job before commencing any work or making any shop drawings.  
This drawing to be read in conjunction with the specification.  
This drawing is copyright and the property of the Commonwealth of Australia (Department of Works) Copyright Act 1969 and must not be retained, copied or used without the authority of the Commonwealth.

DESIGNED by Eggleston, Macdonald & Secomb  
DRAWN *S. H. H. S.*  
CHECKED *GH*  
DES. PROJ. OFFICER  
DPL *Raymond 28/4*  
P.M. *M. M. M. M.*  
DIRECTOR OF CONST.

COMMONWEALTH OF AUSTRALIA  
DEPARTMENT OF CONSTRUCTION  
CANBERRA A.C.T.