Parliamentary Standing Committee on Public Works

REPORT

relating to the

REFURBISHMENT AND FITOUT OF JULIANA HOUSE, PHILLIP, ACT

(Fourth Report of 1992)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
1992

The Parliament of the Commonwealth of Australia

Parliamentary Standing Committee on Public Works

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TABLE OF CONTENTS

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Thirtieth Committee)

Mr Colin Hollis MP (Chairman)
Mr William Leonard Taylor MP (Vice-Chairman)

Senate	House of Representatives
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Senator Paul Henry Calvert*	Mr Lloyd Reginald O'Neil MP
Senator John Robert Devereux	Mr Russell Neville Gorman MP
	Mr Bruce Craig Scott MP

*Appointed on 24.8.90 following the retirement of Senator Dr Glenister Sheil

Committee Secretary:	Peter Roberts
Inquiry Secretary:	Marie Kawaja
Secretarial Support:	Sue Whalan

EXTRACT FROM THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES

No. 115 dated Wednesday, 25 March 1992

12 PUBLIC WORKS - PARLIAMENTARY STANDING COMMITTEE - REFERENCE OF WORK - REFURBISHMENT AND FITOUT OF JULIANA HOUSE, PHILLIP, ACT: Mr Beddall (Minister representing the Minister for Administrative Services), pursuant to notice, moved - That, in accordance with the provisions of the *Public Works Committee Act 1969,* the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Refurbishment and fitout of Juliana House, Phillip ACT.

Mr Beddall presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REFURBISHMENT AND FITOUT OF JULIANA HOUSE, PHILLIP, ACT

By resolution on 25 March 1992 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal for the refurbishment and fitout of Juliana House, Phillip, ACT.

THE REFERENCE

1. The proposal is for the refurbishment and fitout of Juliana House an existing Commonwealth-owned office building with frontage to Bowes Street, Phillip, ACT. The building is located in the Woden Town Centre, adjacent to a number of other Commonwealth owned office buildings.

2. The proposed scope of the work will include repairs to damaged ceilings, replacement of carpets, upgrading of electricity supply, all mechanical services, including lifts, and fire protection system, in order to meet relevant Australian building codes and standards.

3. The project is sponsored and will be managed by the Department of Administrative Services - Australian Estate Management (AEM). AEM is accountable to government for the effective asset management of the office estate of which Juliana House forms a part. The office estate is fully commercialised and tenants, principally government departments, pay market based rents.

4. The Department of Health, Housing and Community Services (DHHCS) will occupy the refurbished building.

5. The project is scheduled for completion by January 1994 at a limit of cost estimate of $8.78m.

THE COMMITTEE'S INVESTIGATION

6. The Committee received written submissions from AEM, and Australian Construction Services (ACS) and took evidence from their representatives at a public hearing which was held in Canberra on 27 April 1992.

7. The Committee also received submissions and took evidence from the following:

- Wagdy Hanna and Associates Pty Ltd - Architects
- Living Fabrics (Snowdark Pty Ltd)
- 3M Energy Control Products Australia Pty Ltd.

8. Other written submissions relating to the project are incorporated in the Minutes of Evidence.

9. Prior to the public hearing, the Committee inspected Juliana House and one floor of the adjacent Albemarle Building which has been refurbished in the style proposed for Juliana House.

10. A list of the witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be published as Minutes of Evidence.

BACKGROUND

Brief History of Juliana House

11. Juliana House was constructed as an office block by the National Capital Development Commission (NCDC) in 1969 for the Australian Government to accommodate approximately 380 people. The Department of Social Security was the original and the major tenants. The Department vacated Juliana House recently, when it moved its services to Tuggeranong, ACT.

12. The location of Juliana House in the Woden area was part of an NCDC strategy to develop the new Woden Town Centre. NCDC's planned development of Woden also coincided with the government's policy to

decentralise the location of its departments. The land is described as Part Section 8, Phillip. The locality maps are illustrated at Appendix B, Drawing B1 - B3.

13. A product of the basic office block structures of the 1960s, Juliana House has little aesthetic appeal, but stands in harmony with a cluster of adjacent buildings of that period in the Woden Town Centre. The building envelope consists of a reinforced concrete frame and precast concrete panels. Its final cost was approximately $2m. A photograph of the building appears at Appendix C.

14. Despite their uninspiring design, these buildings were named after some of the ships of the first, second and third fleets; Alexander, Albemarle, Lady Penrhyn, Fishburn, Scarborough and Lady Juliana. Tapestries by John Olsen, depicting the four seasons, were specifically commissioned by NCDC for display in each building. In 1973 'Harvest Time' was hung in the foyer of Juliana House. The tapestry was removed and professionally treated and cleaned when the Department of Social Security vacated Juliana House. It will be displayed in the refurbished foyer of the building.

THE NEED

15. Juliana House is over 20 years old and many of its services are reaching the end of their operational life. In some instances, these services do not comply with current building regulations and codes.

16. In the last 10 years, maintenance work costing approximately $604,000 has been carried out on Juliana House. This has included conversion of the boiler to natural gas, modification to lifts to include voice indicators, upgrading of the electrical systems, the toilets and stairwells and replacement of vinyl tiles with carpets. An additional chiller and a ramp for the disabled were installed and asbestos removed from the plant room.

17. The cost and extent of the maintenance work carried out in the recent past demonstrates that the condition of Juliana House has been consistently improved.

18. Since its creation in July 1987, the DHHCS has been pursuing an accommodation policy aimed at collocating, to the extent possible, departmental staff in central and state offices. In Canberra, the department is collocating in the Woden-Phillip area.

19. Other premises situated in the Woden-Phillip area which are currently occupied by DHHCS include the Alexander and Albemarle Buildings, and Penrhyn House. Another in the Woden precinct, Fishburn House, was recently refurbished in a style similar to that proposed for Juliana House and is also tenanted by DHHCS.

20. A move of approximately 350 staff into Juliana House would enable DHHCS to relinquish equivalent space in the Woden-Phillip/Weston Creek area, especially that furthermost from the core administrative buildings in Furzer Street, Phillip.

Options Considered by AEM

21. AEM considered a number of options for the future of Juliana House; these included sale or leasing without prior refurbishment.

22. AEM submitted that its investigations of the real estate market revealed that neither a 'fire sale', nor leasing are options given the building's present condition. AEM advised that it was quite likely that an unrefurbished empty building in the Phillip area would remain vacant. In this event, and to prevent serious loss of revenue to the Commonwealth, AEM considered that the appropriate strategy for Juliana House was to refurbish and lease the building to DHHCS. In any event, there is no government decision to liquidise the asset and realise the capital.

23. AEM was asked at the public inquiry to demonstrate the financial benefits for the proposed project and subsequently provided a comprehensive analysis (on a commercial-in-confidence basis) of the financial return on the proposal.

24. AEM also submitted an estimated sale price for the building, in its unrefurbished state and untenanted, as well as an estimated sale price for the refurbished building, with DHHCS as the long-term tenant. Although AEM claimed a sale price of approximately two and half times more for a refurbished and tenanted building, it did not provide a formula which indicated how these values were determined.

25. AEM concluded that the results from both AEM 'Investment' and 'Cost to Government' analyses, showed continued ownership of the building is the most cost effective option for the government.

Cost Benefit Analysis

26. The discounted cash flow model developed by AEM and approved by the Department of Finance was used to determine the financial viability of this project.

27. In its written submission to the Committee, AEM calculated that occupancy of Juliana House by DHHCS will allow the department to rationalise its current leasing arrangements by relinquishing comparable space in private leases in the Phillip-Weston Creek area. DHHCS currently occupies approximately 35100m^2 of office accommodation in the Phillip-Weston Creek area. This represents a total of 11 leases of which three leases (49% of space) are in Commonwealth-owned accommodation.

28. AEM further submitted that DHHCS will be able to reduce its rental bill by $0.142m per annum by occupying Juliana House (providing 6697m^2 of office accommodation) and the adjacent Commonwealth-owned Fishburn House. This will allow DHHCS to relinquish 6742m^2 of privately-leased accommodation in Phillip.

29. However, the representative from DHHCS informed the Committee during the public inquiry that, while a move to Juliana House would enable comparable space in private leases in the Woden-Phillip/Weston Creek area to be relinquished, the benefits which would accrue from a move to Juliana House were somewhat intangible. The importance was consolidation of the department's services, increased management flexibility, and other advantages in terms of departmental program administration.

30. In further replies to questions on the financial impact of the renegotiation of leases, the representatives from DHHCS and AEM informed the Committee that there will be no reduction in the property operating expenditure, but a small increase was likely. At best a cost neutral budget was likely.

31. The representative from DHHCS made the point that his department was simply looking at paying a lease, whether it be to the estate manager or to a private landlord.

32. In addition, DHHCS did not anticipate that a move to Juliana House would result in likely staff savings or a reduction in the number of vehicles used for courier services. DHHCS advised that in common with most

departments, it had slimmed down facilities such as courier and registry services. It was debatable whether any further reductions were likely, particularly as DHHCS anticipate remaining in a number of remote sites even after five out of the eight private leases it currently holds are relinquished.

Committee's Conclusion

33. The Committee agrees that a need exists to refurbish Juliana House to bring it up to modern office standards to allow for its leasing to the Department of Health, Housing and Community Services, which is proposing to consolidate its services in the Woden-Phillip area. However, the Committee has reservations relating to the cost benefits of this proposal.

THE PROPOSAL

Summary of Benefits

34. AEM believes the following benefits would accrue from the refurbishment proposal:

- protection for Commonwealth investment by maintaining its income-earning capacity
- the most efficient and effective use of Commonwealth-owned office accommodation
- budget benefits for the estate manager by achieving market rentals for a total outlay well below the cost of a new building
- capacity for DHHCS to collocate its services in the Woden-Phillip area with subsequent relinquishment of equivalent space in privately-leased accommodation
- more efficient program management which would in turn be reflected in improvements in policy decision making and program delivery
- easier access by clients and service providers

- flexibility to accommodate organisational change within DHHCS without the need to move organisational units from one building to another

- enhanced security of DHHCS premises and assets and the personal security of departmental personnel. Juliana House would become an integral part of the wider departmental electronic security access system - a system that cannot be applied to privately-leased premises.

Project Costs

35. In a submission to the Committee, Mr Hanna, the representative of Wagdy Hanna and Associates Pty Ltd, Architects, made the following points:

- the costs associated with the project appeared to be more than those for a new office building

- the suggested January 1994 completion date is excessively lengthy for what is a relatively small project. In the light of the spare capacity in the building industry, this project could be completed within six to nine months.

- a January 1994 completion date would increase costs because of the traditional Christmas period closure of the building industry.

36. Mr Hanna argued that AEM costs, of approximately $1234m^2 without lift upgrading and approximately $1311m^2 with lift upgrading (not including the basement storage zone) is excessive for the refurbishment and fitout work described. Mr Hanna claimed that new office buildings can be built for around $1200m^2.

37. In reply, the representative from ACS informed the Committee that the benchmark used by Mr Hanna for a new building construction rate of $1200m^2 contradicts the Rawlinson's cost guide, the standard accepted by industry. The Rawlinson's guide shows that construction of a new building including fit-out could range around $1800m^2 gross floor area.

38. Without going into the commercial-in-confidence figures, ACS noted that the prices are comparable with current standards in the building market

in the ACT and that the fitout and refurbishment rates are competitive and are budgeted to be competitive.

Extent of Refurbishment

39. The refurbishment, including engineering services and fitout for DHHCS, will contain the following features, illustrated at Appendix D, Drawings D1 - D5:

Basement

40. A workshop of 60m^2 will be provided and approximately 50m^2 of store-rooms will be available. The basement also accommodates an electrical substation and the main electrical switch room.

Ground Floor

41. Fitout will include the foyer, two conference rooms with associated facilities and change rooms with showers and lockers. A storage area will be retained off the loading dock. The remainder of the floor will comprise 300m^2 of office space.

42. In a written submission to the Committee and also during the public inquiry, Mr Hanna was critical of the layout proposed for the ground floor on two counts. First, the question of the provision of a kitchen for only the larger of the two conference rooms; secondly, the question of locating one block of unisex showers on the ground floor close to the proposed conference rooms.

43. On the question of the kitchen facilities, DHHCS advised that in its viewpoint, there is not a requirement to provide kitchen facilities in each conference room. The provision of kitchenette facilities to one of the conference rooms is consistent with the arrangements in other buildings occupied by the department. DHHCS further noted that the location of the kitchenette has been based on available plumbing and waste facilities associated with the shower block, making this option less expensive than the alternative suggested by Mr Hanna.

44. Mr Hanna questioned the rationale of placing one block of showers only on the ground floor. He pointed out that under the Building Code of Australia, only one female toilet, one male toilet and one urinal were

necessary on a given floor for about 44 people. The building has currently three female toilets, two male toilets and a urinal on each floor. This figure is greater than that laid down by the building code. Therefore, according to Mr Hanna, if the core is altered to provide a female and a male shower on each floor, the result would be 18 showers in the building instead of the eight proposed for the ground floor.

45. Mr Hanna also made the point that the entrances to the conference rooms could be in the path of the joggers entering and leaving the adjacent shower block.

46. ACS informed the Committee at the inquiry that it may not be feasible to relocate the showers to the basement as that area could be below sewerage waste level which may require pumping. If that were to be the case, maintenance problems would be an undesirable. ACS subsequently confirmed that it would be inappropriate and relatively expensive to locate the showers in the basement, as the basement is below sewerage level and would require the installation of a sump pump to discharge effluent at an additional budget estimate of $10,000.

47. ACS further noted that, the current number of toilet facilities per floor equate to the number required to meet Building Code of Australia standards for general office space, with no capacity to convert toilets to showers and still meet these requirements.

48. Although the written submission provided by AEM to the Committee did not specify that the showers on the ground floor were unisex showers, it transpired during the public inquiry that the shower arrangement would be unisex. On this point, Mr Hanna argued that unisex showers are preferred less by staff.

49. DHHCS agreed with Mr Hanna's conclusion that single sex showers are preferred by staff and that an arrangement of putting the showers on individual floors would achieve this.

50. However, DHHCS made the point that a block of showers together might be more efficient to prevent long queues forming outside the single shower arrangement, particularly if large numbers of joggers were to be on each floor.

51. In a subsequent written comment to the Committee, DHHCS said that it is proposing to conduct a survey of departmental staff to gauge staff preference. The results would be discussed with ACS.

Committee's Conclusion

52. The Committee does not accept the arguments put forward by Australian Construction Services regarding the location of the shower block on the ground floor. The Committee concludes that the proposal regarding the modification to the plumbing to allow for shower facilities in the male and female toilet area on each floor has merit and should be implemented.

Upper Floors

53. Floors 1 to 9 will provide approximately 6000m^2 of general office accommodation and associated staff amenities and training areas.

Disabled Access and Facilities

54. Access for disabled persons will be provided in accordance with the relevant codes. Ramp access is provided from Bowes Street to the main entrance to the building.

55. Facilities for the disabled, in line with the relevant standards, will be incorporated in the design. Lifts will include voice indicator facilities, lower controls access for wheelchair users and braille controls for the visually impaired. Toilet facilities will also be available on the ground and top floors.

56. In a submission to the Committee, ACROD Limited noted the stated objective by AEM to comply with the relevant Australian standards for access provisions for disabled people and was pleased with the disabled facilities provided in the project.

Public Amenities

57. Toilet facilities for visitors will be provided on the ground floor adjacent to the reception area.

Internal Materials and Finishes

Walls

58. Internal wall surfaces will be patched and painted. Wet area walls will be stripped, rendered and painted.

Floors

59. Floors and lobbies will be carpeted in the office areas. Non-slip ceramic tiles will be used in wet areas and the foyer.

Ceilings

60. The existing non-standard suspended ceiling will be replaced with a grid acoustic tile system similar to that installed in nearby Albemarle Building.

61. Mr Hanna noted in his submission that the type of acoustic ceilings is not defined. In his opinion, commercially available fibre acoustic ceiling tiles are susceptible to damage, but the Australian-made product is the more durable alternative and is available at little extra cost.

62. AEM subsequently submitted that mineral fibre tiles, referred to by Mr Hanna, are not manufactured in Australia; the majority of imports come from Japan and the United States of America. The support systems for the tiles, however, are Australian-made. An aluminium extruded system typically accounts for approximately 50% of the supply of the ceiling system.

Air-conditioning

63. Air-conditioning which is provided to all office space will be modified to meet current standards of fresh air, thermal comfort and operation under fire mode. The central air handling will be modified to a lower velocity system capable of reduced air flow operation to allow it to serve an individual floor after hours. Primary and secondary air distribution ducts will be retained with tertiary ducting replaced with flexible ducts to ensure flexibility and efficient air distribution. Current noise/vibration will be reduced to recommended levels. Fresh air supply for supplementary air conditioning to conference rooms will be available from a new vertical riser duct.

64. The existing water chilling and natural gas fired heating water systems will be retained.

65. The Committee questioned AEM on the cleaning and inspection of cooling towers. AEM informed the Committee that Juliana House is supplied with air circulation through the building cooled by two water-cooled chillers in the rooftop plant room.

66. In reply to a specific question of Commonwealth policy on checking the equipment for legionnaires disease, AEM noted that it follows Australian Standard AS 3666. The standard stipulates the design of the towers, the siting of the towers, how close to fresh air intakes they are permitted to be and how the towers are to be maintained.

67. AEM advised the Committee that by this standard, cooling towers are required to be inspected at least monthly and cleaned when necessary; the cleaning interval is not to exceed six months. ACS documentation recommends monthly inspections and quarterly maximum cleaning intervals for most sites but weekly and monthly, respectively, for sensitive sites.

Use of Australian Products

68. Mr R L Gibson of Living Fabrics (Snowdark Pty Ltd) expressed his concern to the Committee that many Australian Government offices do not use Australian products.

69. Mr Gibson informed the Committee that he represented a totally Australian-owned company which produced fine Australian wool for commercial use which would be suitable for the interior design of Juliana House. He asked the Committee to insist that the interior designers of Juliana House, if the project goes ahead, use Australian processed woollen fabrics for both the upholstery and window treatments in the refurbishment of Juliana House.

70. ACS noted comments submitted regarding the use of Australian products and informed the Committee that it is government policy to give preference to the use of goods, materials and associated services of Australian and New Zealand origin where they represent value for money. ACS also reminded the Committee that there are obligations to satisfy the purchasing guidelines.

Engineering

Structure

71. The structure of the building has been found to be sound with minor work associated with fire codes recommended. Floors for office loading have a 4.8 kPa rating with selected 7.2 kPa areas capable of taking compactus loads.

Smoke Exhaust Systems

72. The building's existing exhaust system will be retained with additional smoke exhaust systems and stairwell pressurisation installed to meet Building Code of Australia standards and AS1668.

Refrigerated Drinking Water

73. The central refrigerated drinking water system will be renovated and retained.

Lifts

74. The building is served by three lifts, one of which will service the basement. Lift car refurbishment will include new landings and car interiors replacement of all control gear to enable speed to be increased according to the relevant codes. One lift will be fitted with a stretcher boot. All lifts will be able to serve as fire lifts with the installation of a fire well between lifts 2 and 3. Lift controls for the disabled will be installed.

Electrical

75. Power will be supplied from the existing substation located in the basement. A new main switchboard will be installed with provisions to enable the building to take advantage of the most economic tariff. Lighting through the building will be designed in accordance with AS1680 - interior lighting. Upgrading of the emergency evacuation lighting, emergency warning and intercommunication system and the fire indicator panel will be made to provide systems which comply with the relevant Australian Standards.

Fire Services

76. The existing hydrant mains and hose reels satisfy code requirements. An automatic sprinkler system will be installed which will meet the requirements of the Building Code of Australia.

77. In reply to a question from the Committee, AEM provided on a commercial-in-confidence basis costs associated with the work on the sprinkler system. These costs also included electrical fire protection services and emergency warning evacuation system upgrade. Additional fire protection services integral to the mechanical and electrical components of the project include:

- stairwell pressurisation
- smoke exhaust system
- emergency lighting
- replacement of asbestos core fire doors.

Hydraulics

78. The hydraulic systems are adequate and minor replacement of galvanised fitments with copper is included. Handbasins, cisterns and kitchenette sinks will be replaced.

Security System

79. The building will be connected to the DHHCS central security system serving the department's occupied space in the Woden area.

Proposed Floor Layout

80. At the public inquiry, Mr Hanna was critical of the proposed floor layout, and suggested that the proposal could be further rationalised and made more economical.

81. Mr Hanna demonstrated his point in a presentation to the Committee of an alternative layout, shown at Appendix E, for general office accommodation. His floor layout proposes smaller teams of staff occupying separate areas on a floor. This differed from the AEM proposal of one large area with separate work stations for each staff member. Mr Hanna

suggested to the Committee that his proposal would promote the development of teamwork, a happier environment and allow for greater concentration by the staff. Such a proposition, he believed, would result in cost savings.

82. DHHCS subsequently re-examined Mr Hanna's floor layout and submitted that the department is a dynamic organisation which has undergone, and continues to be subject to, organisational and structural changes. As a result, the department has developed a generic style floor layout and design which can be readily adapted to suit the changing requirements of most of its areas. A feature of this generic fitout style is the location of enclosed offices along one external wall to provide maximum use of open space in terms of general office accommodation, primary and secondary circulation and lighting. (See Appendix F, Drawing F1 - F3).

83. DHHCS further claimed that the compartmentalised layout style proposed by Mr Hanna is similar to that used in the Department prior to its moving to the current generic style layout. The concept was found unsuitable to the department's needs because of its inherent inflexibility to meet its changing structural and organisational requirements.

Committee's Conclusion and Recommendation

84. The Committee notes that the building was presented as a structurally sound building, requiring no major internal structural changes. Therefore, the Committee is of the opinion that this fact, together with the evidence submitted to it by Australian Estate Management of costs on work done on Juliana House during the previous ten years, over and above routine repairs and maintenance, substantiates its view that the cost of this project is excessive.

85. The Committee recommends that the project should be thoroughly re-examined with the aim of reducing the estimated cost of $8.78m. This examination should include alternative floor layouts.

ENERGY MANAGEMENT

Energy Targets

86. An energy consumption target of 750 MJm^2 per annum has been set and preliminary computer based energy consumption modelling indicates

that the target will be achieved as a result of the following measures.

Air-conditioning System

- conversion of existing central high velocity dual duct mixing box air-conditioning system to a medium velocity variable volume system in order to reduce fan energy consumption and minimise mixing of hot and cold air streams

- re-configuration of air-conditioning to allow for controlled servicing to occupied areas, particularly after hours

- a comprehensive energy management strategy will be implemented during the building refurbishment. The strategy will involve economy cycle operation (use of 100% outside air when this provides free cooling), variable fan speed operation, comprehensive modern control systems and the installation of a computerised building management system.

Water Heating

87. ACS submitted to the Committee that the existing domestic hot water storage calorifier is in good condition, has sufficient capacity and is in close proximity to the roof where solar collectors could be located, so it does provide a physical advantage in favour of solar heating. ACS claimed that a detailed costing analysis has shown, however, that retaining the existing natural gas/electricity system will be more cost effective than converting it to a solar heated system. The following analysis showed that the capital cost of the collectors, their supporting structure and the additional piping, when converted to an annual charge, exceeded the potential saving in annual energy costs by more than the 20% bias:

Item	Existing System p.a.	Solar System p.a.
Capital	-	$1990
Maintenance	$500	$1000
Energy	$2110	$800

Subtotal	$2610	$3790
20% Loading	$522	-
TOTAL	$3132	$3790

Lighting

88. New light fittings and controls will be installed on each floor throughout the building; these will be of the energy conserving low loss ballast high efficiency fluorescent type. The use of incandescent light fixtures will be minimised.

89. An automatic electronic lighting control system will be installed. It will take account of daylight and building occupancy patterns to minimise lighting energy use.

90. Representatives of 3M Australia Pty Ltd, proposed to the Committee that all fluorescent lighting in the building be retrofitted with high efficiency reflectors. This can be done into existing luminaires or incorporated into new fittings. The reflectors can be used to enhance current lighting levels within the building to the requirements of AS1680 or delamping can proceed to allow significant energy savings within the building.

91. AEM commented that the existing luminaires at Juliana House are over 20 years old and in need of new diffusers, ballasts and starters as well as reflectors. A retrofit of reflectors may result in a lower performance than that which could be achieved with a new unit because of the need to fit the components into the existing casing; a manufacturer of a new luminaire would have tested and optimised the design. Any cost saving by retrofitting would be marginal at best and because of the potential compromise to performance, not recommended.

92. New luminaires will be specified in terms of performance requiring high efficiency and low energy usage. Manufacturers will be free to use any supplier's reflector provided it meets the specified performance criteria. Test results will be required to have been certified by the National Association of Testing Authorities.

Energy Monitoring

93. A monitoring system will be installed to provide data on base building and tenant power usage; this facility will permit:

- continuous monitoring of building power consumption level and appropriateness of tariff selection

- provision of energy consumption data to tenants to assist their energy management efforts.

94. 3M representatives submitted to the Committee that the use of window tinting films on the facade glass will add energy savings to the air-conditioning systems. The Committee also heard that 3M had some films which are particularly applicable for colder areas such as Canberra and which significantly reduce the outward flow of energy through the glass during very cold weather.

95. AEM advised the Committee that the use of window tinting films has been assessed. However, as the building is fairly well served with external shading on both the east and west facades, the sun only strikes the windows at the peak of summer before 9 a.m. and on the west facade comes onto the window about 4 p.m. The solar gain into the building is therefore minimal and the 3M proposal, while suitable for other applications, is not considered suitable for Juliana House. In a further comment AEM advised that the ground floor windows are already tinted and all others are well shaded with large fixed awnings. Consequently, the cost benefit of a tinted film is doubtful. AEM noted that the option will be analysed during the contract documentation stage.

96. With regard to the cold weather benefits of window tinting, ACS informed the Committee that analysis of the energy reduction performance has been considered for winter as well as for summer months. Analysis indicated that the film did not have economic benefit for winter conditions. In fact, the insulating properties of the film reduce the warming benefit of low angle sun conditions in winter.

97. The Committee notes the measures incorporated in the design to improve energy efficiency, but believes that the building performance should be audited to ensure that energy targets are met. AEM should carry out such an audit after the first 12 months' operation of the refurbished building.

Committee's Recommendation

98. **The Committee recommends that Australian Estate Management report back to it following an energy efficiency audit of the refurbished building after 12 months of occupation.**

ASBESTOS REMOVAL

99. Provision is being made to remove the small amount of asbestos from the original fire doors and cisterns. Should unexpected asbestos based pipe lagging become evident in plant areas this material will be removed when plant items are replaced at the end of their life cycles.

CHILD CARE FACILITIES

100. Childcare At Work submitted to the Committee that a national survey by the DHHCS to determine the level of need for child care facilities showed that there was a need for child care assistance throughout the department, including its Canberra offices.

101. Childcare At Work recommended, therefore, that it would be in the interest of the Department of Administrative Services to consider constructing a long-day care centre for children aged 0-5 years in conjunction with the refurbishment of Juliana House. The centre could be for the exclusive use of tenants of the building or, alternatively, as a joint venture with other employers.

102. DHHCS assessed that Juliana House was not particularly suitable for the provision of child care facilities and informed the Committee that a range of child care facilities was available in the Woden-Phillip area for use by its staff.

CAR PARKING FACILITIES

103. Restricted parking for Commonwealth-owned vehicles is available in the car park at the front of the building. Public car parking areas are available opposite to and nearby Juliana House for use by staff.

CONSULTATIONS

104. AEM consulted and liaised with the following organisations in relation to the project:

Commonwealth Government

Department of the Prime Minister and Cabinet
The Treasury
Department of Finance

Planning Authorities

National Capital Planning Authority

Local Government

ACT Planning Authority
ACT Electricity and Water
ACT Fire Brigade

Staff Associations

Public Service Union

Other Organisations

ACROD Ltd

AEM advised the Committee that these organisations support the proposed project.

PROGRAM

105. The overall construction period for the project is 15 months. AEM envisages a completion date of January 1994.

106. ACS assured the Committee that every endeavour would be made to reduce that time, noting that there is comparable evidence that 12 months is a realistic time to complete the works on site, provided all the necessary decisions are made.

COST ESTIMATE

107. The estimated total cost for the project is $8.78m with expenditure of $0.46m in 1991/92. In 1991-92 the Government gave approval to the design and commencement of refurbishment at a total cost of $8.27m, with expenditure of $0.46m in 1991-92. AEM sought additional funds of $0.51m from the Department of Finance to increase the scope of works to carry out a major upgrade of the lift services which were considered well below normal requirements of modern office accommodation.

Committee's Recommendation

108. While the Committee recommends that the proposal should proceed, it believes that the cost estimate of $8.78m for refurbishment and fitout is excessive for the nature of work proposed, particularly as no major structural changes are planned for either the interior or the exterior of the building.

CONCLUSIONS AND RECOMMENDATIONS

109. The conclusions and recommendations of the Committee and the page in the report to which each refers are set out below:

		Page
1.	The Committee agrees that a need exists to refurbish Juliana House to bring it up to modern office standards to allow for its leasing to the Department of Health, Housing and Community Services, which is proposing to consolidate its services in the Woden-Phillip area. However, the Committee has reservations relating to the cost benefits of this proposal.	6
2.	The Committee does not accept the arguments put forward by Australian Construction Services regarding the location of the shower block on the ground floor. The Committee concludes that the proposal regarding the modification to the plumbing to allow for shower facilities in the male and female toilet area on each floor has merit and should be implemented.	10
3.	The Committee notes that the building was presented as a structurally sound building, requiring no major internal structural changes. Therefore, the Committee is of the opinion that this fact, together with the evidence submitted to it by Australian Estate Management of costs on work done on Juliana House during the previous ten years, over and above routine repairs and maintenance, substantiates its view that the cost of this project is excessive.	15
4.	The Committee recommends that the project should be thoroughly re-examined with the aim of reducing the estimated cost of $8.78m. This examination should include alternative floor layouts.	15
5.	The Committee recommends that Australian Estate Management report back to it following an energy efficiency audit of the refurbished building after 12 months of occupation.	19

6. While the Committee recommends that the proposal should proceed, it believes that the cost estimate of $8.78m for refurbishment and fitout is excessive for the nature of work proposed, particularly as no major structural changes are planned for either the interior or the exterior of the building.

21

Colin Hollis
Chairman

28 May 1992

WITNESSES

GIBSON, Mr Ross Langford, Director, Living Fabrics (Snowdark Pty Ltd), 42 Egerton Street, Silverwater, New South Wales, 2141

HANNA, Mr Wagdy Issa, Director, Wagdy Hanna and Associates Pty Ltd, Architects, 34 Roseworthy Crescent, Farrer, Australian Capital Territory, 2607

KENNEDY, Mr John Jeffrey, Engineering Services Manager, Projects, Australian Construction Services, Furzer Street, Phillip, Australian Capital Territory, 2606

LAFFAN, Mr Gerard Laurence, Distributor, Australian Capital Territory and District, 3M Australia Pty Ltd, 59 Oatley Court, Belconnen, Australian Capital Territory, 2617

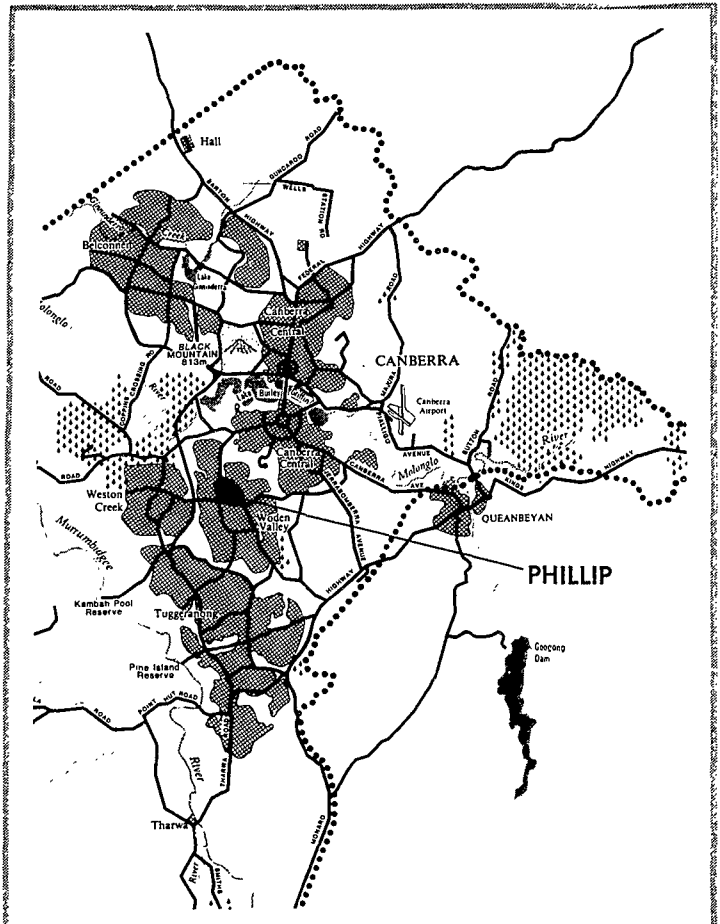
McPHAIL, Mr Ian, National Sales Development Manager, Energy Control Products, 3M Australia Pty Ltd, 950 Pacific Highway, Pymble, New South Wales, 2073

ROCHE, Mr Michael John, Deputy Secretary, Department of Health, Housing and Community Services, Furzer Street, Phillip, Australian Capital Territory, 2606

WAITE, Mr Philip Anthony, Senior Project Manager, Projects, Australian Construction Services, Furzer Street, Phillip, Australian Capital Territory, 2606

WILLIAMS, Mr Richard John, General Manager, Australian Estate Management, Department of Administrative Services, PO Box 1920, Canberra City, Australian Capital Territory, 2601

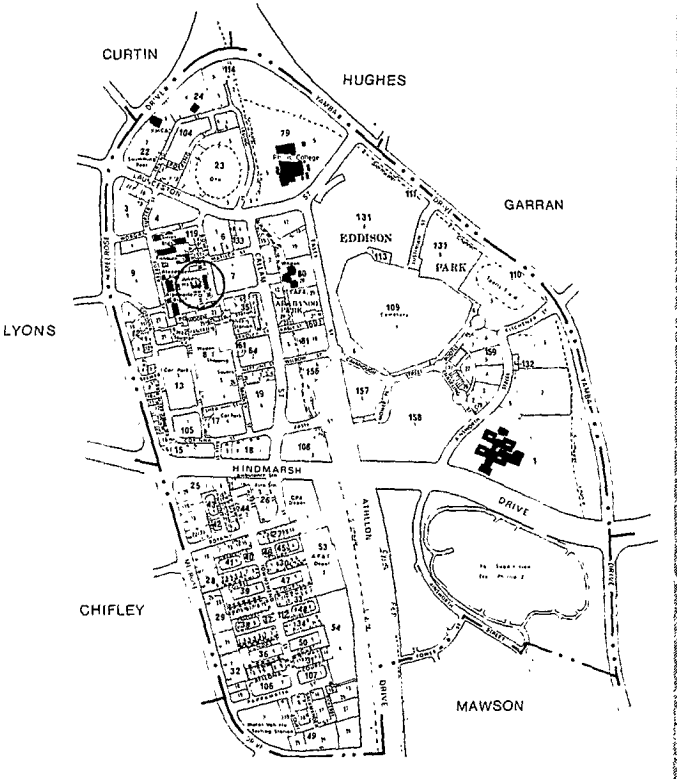
WOTTON, Mr Peter, Product Manager, Energy Control Products, 3M Australia Pty Ltd, 950 Pacific Highway, Pymble, New South Wales, 2073



JULIANA HOUSE

LOCATION PLANS:

■ *Phillip within Canberra*

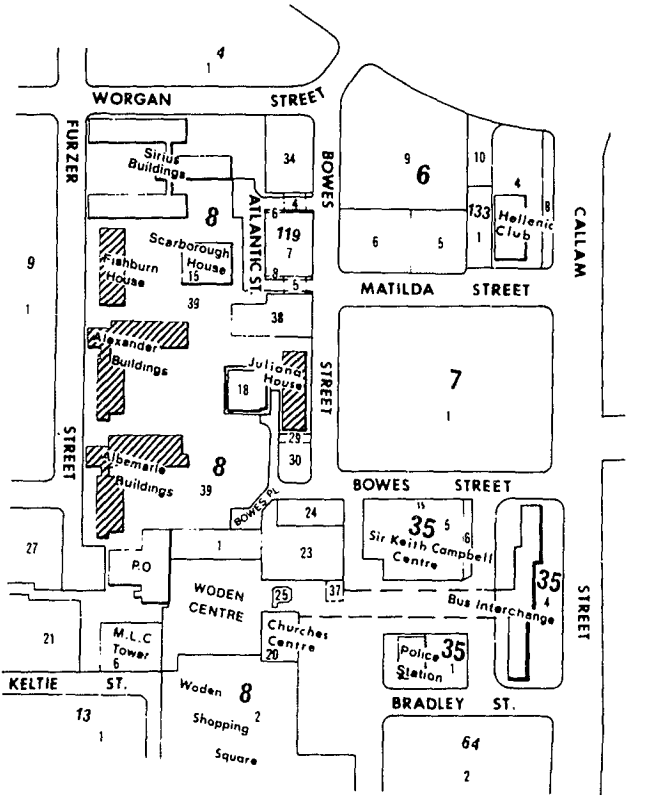


B

JULIANA HOUSE

LOCATION PLANS:

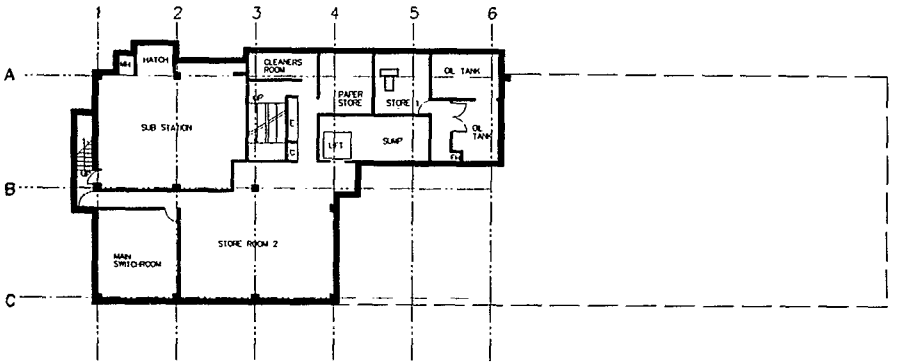
■ Juliana House within Phillip



JULIANA HOUSE

LOCATION PLANS:

- Department of Health, Housing and Community Services' occupied buildings, Phillip



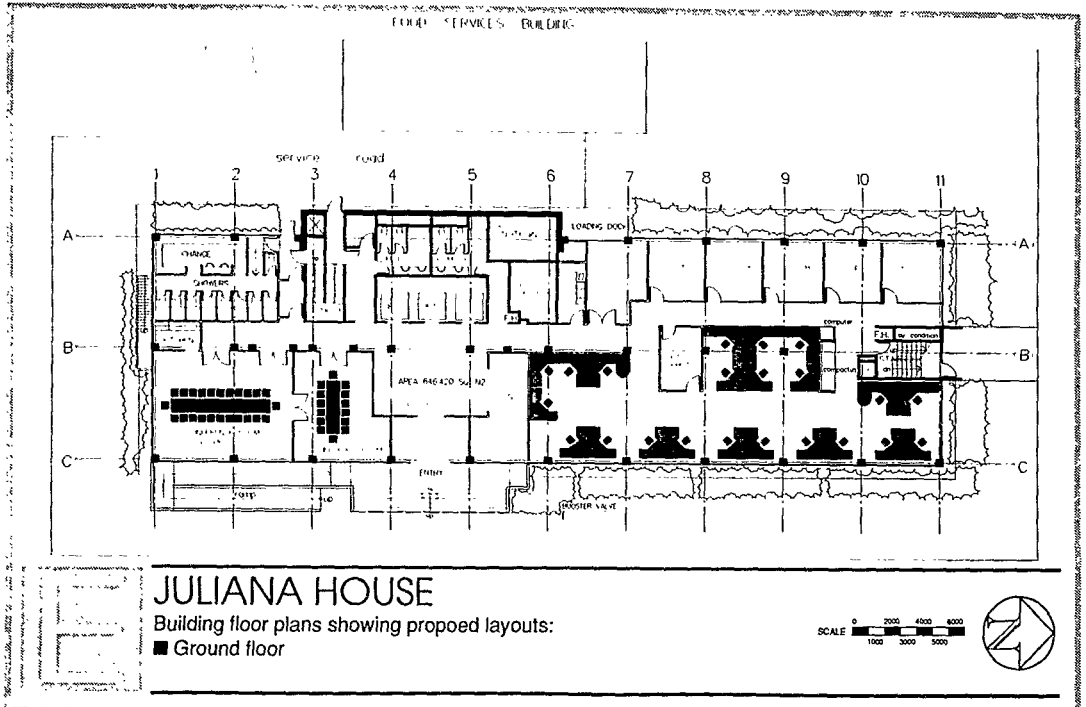
JULIANA HOUSE

Building floor plans showing propoed layouts:

■ Basements

SCALE 0 1000 2000 3000 4000 5000 8000

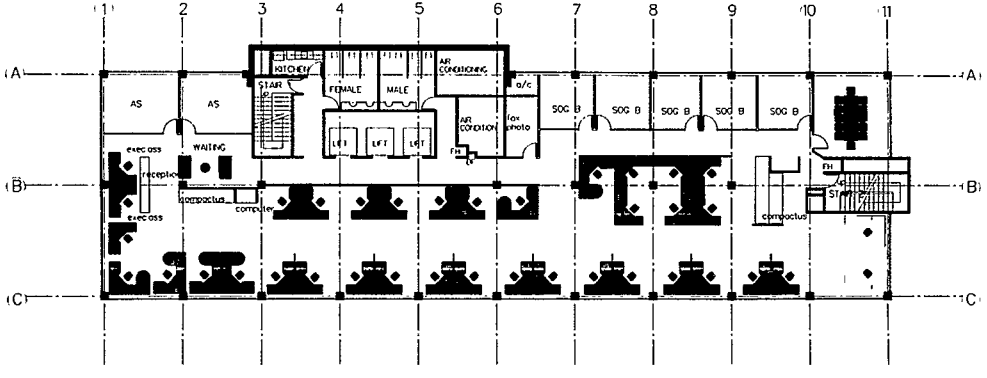
D1



JULIANA HOUSE

Building floor plans showing propoed layouts:

■ Ground floor



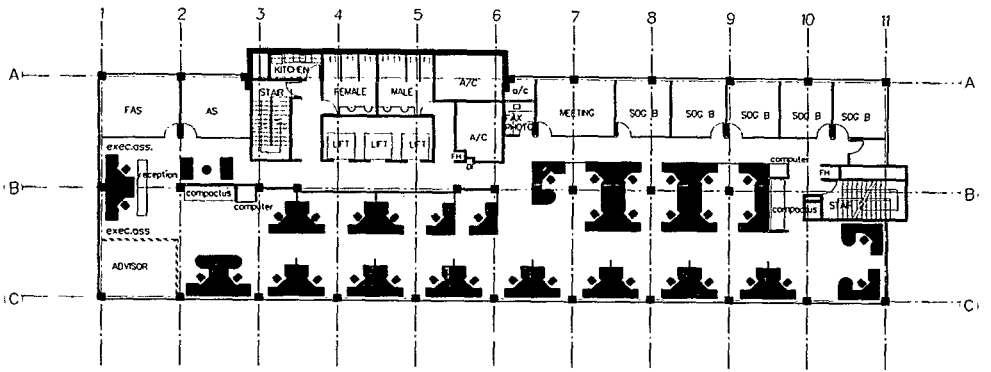
JULIANA HOUSE

Building floor plans showing propoed layouts:

■ 1st floor

SCALE 0 1000 2000 3000 4000 5000

D3

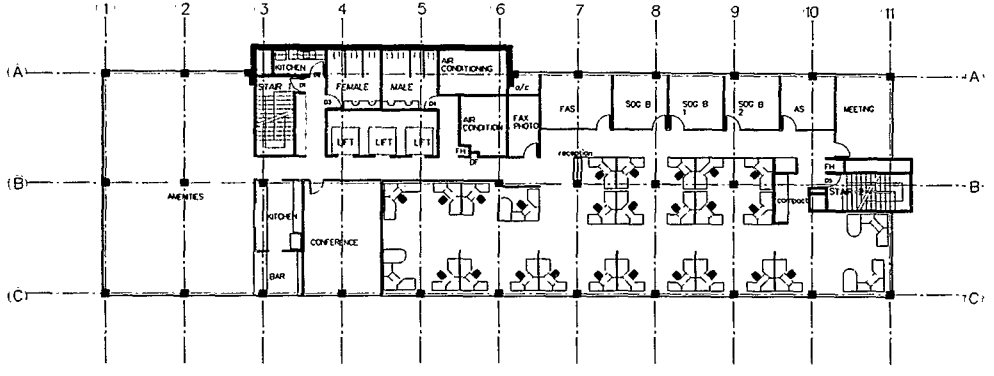


JULIANA HOUSE

Building floor plans showing propoed layouts:

- 2nd floor (typical layout)

SCALE 0 2000 4000 6000 1000 3000 5000



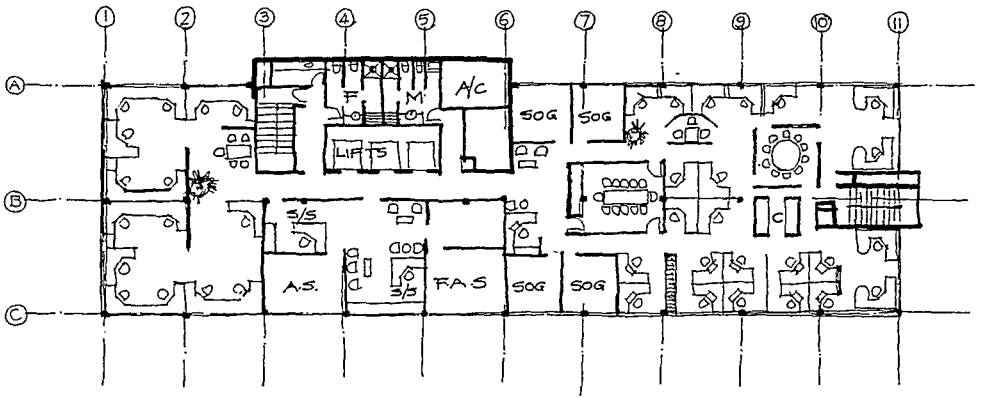
JULIANA HOUSE

Building floor plans showing propoed layouts:

■ 9th floor

SCALE 0 2000 4000 8000
1000 3000 5000

D5



JULIANA HOUSE

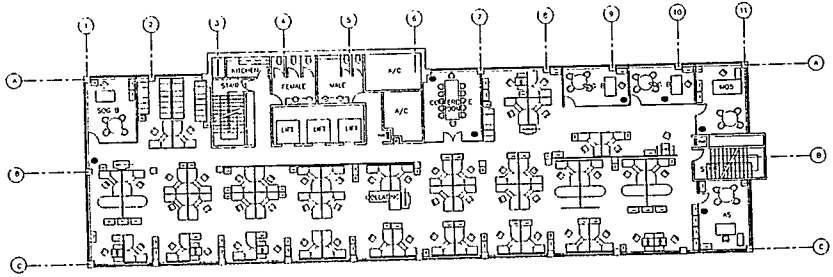
Building floor plans showing propoed layouts:

- 2nd floor (typical layout)

WAGDY HANNA
& ASSOCIATES
PTY LTD

ARCHITECTS

SCALE 0 2000 4000 6000
1000 3000 5000

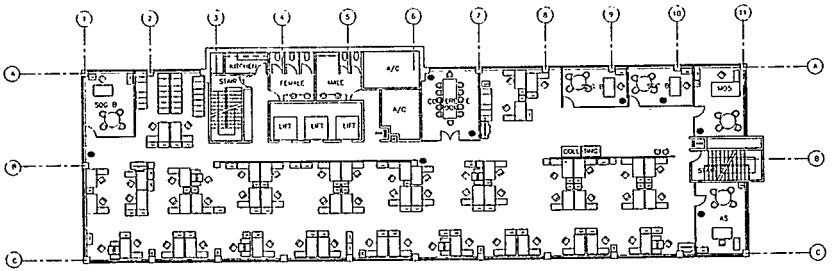


TYPE - A
TYPICAL FLOOR LAYOUT STUDY
PROPOSED REFURBISHMENT & FITOUT
JULIANA HOUSE Woden A.C.T.

DEPARTMENT OF HEALTH HOUSING AND COMMUNITY SERVICES

F1

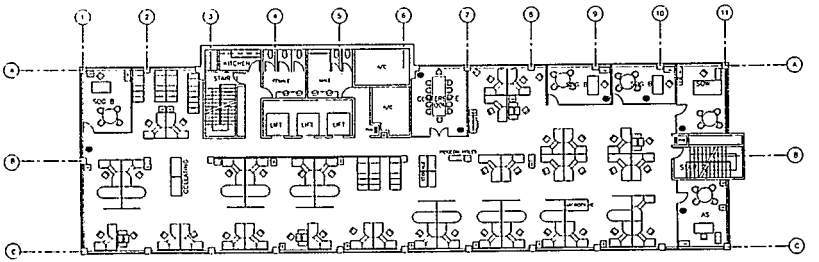
F2



TYPE - B
TYPICAL FLOOR LAYOUT STUDY
PROPOSED REFURBISHMENT & FITOUT
JULIANA HOUSE Woden A.C.T.

DEPARTMENT OF HEALTH HOUSING AND COMMUNITY SERVICES

F3



TYPE - C
TYPICAL FLOOR LAYOUT STUDY
PROPOSED REFURBISHMENT & FITOUT
JULIANA HOUSE Woden A.C.T.

DEPARTMENT OF HEALTH HOUSING AND COMMUNITY SERVICES