Australian Institute of Architects ACT Chapter

Register of Significant Architecture

RSA No: **R142**

Name of Place: CSIRO F.C. Pye Laboratory

Other/Former Names: F.C. Pye Field Environmental Laboratory Stage 1, F.C. Pye Laboratory, Asset 19.

Address/Location: Dickson Way ACTON ACT 2601
Section 2 of Acton

Listing Status:	Listed	Other Heritage Listings:	None
Date of Listing:	June 2021	Level of Significance:	Territory
Date of Citation	June 2021	Category:	Scientific
Citation Revision No:			
Citation Revision Date:		Style:	Late 20th C International

Date of Stage 1 Design:	1965	Designer:	Ken Woolley of Ancher Mortlock, Murray & Woolley
Stage 1 Construction	1966	Client/Owner/Lessee:	CSIRO Division of Plant Industry
		Builder:	George Wimpey & Co

Statement of Significance

The CSIRO F.C. Pye Laboratory, Stage 1 is a remarkable building derived from an unusual set of technical requirements and three distinct orders or use: workshops, laboratories and research offices. It reflects the generosity of its benefactor and possesses a certain architectural elegance appropriate to its setting. The initial solution to the client's requirements in 1966 recognised the introspective nature of the laboratories, embodying the necessary controlled environment and a sense of of a working 'community' provided by having a central courtyard with most offices and labs around the perimeter in visual contact with each other. This provides an impressive element in the design of building, which has a special association with the life or works of its architect Ken Woolley. It is a particularly significant building in his distinguished career, which culminated in him being awarded the Gold Medal of the RAIA.

Description

CSIRO F.C. Pye Laboratory Stage 1, Asset 19 is a three-level building with its entrance on Level Two, containing the laboratories which are windowless except for the central courtyard. Below is Level One, a concrete basement originally containing "rough" spaces, a workshop, wind tunnel and mobile laboratories. Level Three, approached by a gallery around the court, contains research offices which have continuous windows and a wide eaves overhang. A secondary use for the courtyard has evolved – it has been planted with trees and gardens used by the adjacent laboratories for instrumentation and demonstration, so this decorative planting is well related to the use of the building.[1]

The construction system is mainly load bearing concrete block with reinforced concrete floors. The central court, gallery and rooflight are steel framed. Roofing is galvanised steel decking. Ceilings of the top floor are simply and directly treated, generally being the structural elements themselves. Excessive paintwork and elaborate detail has been avoided. Originally, floors were concrete in the basement, terrazzo tile on the entrance level, linoleum in laboratories and carpet in the offices. Mechanical services originally consisted of the required compressed air system, air conditioning to the constant temperature room, a heated ventilation system to the laboratories on Level 2 and hot water radiators on Level 3.[2]

The use of a glass roof is offset by the reduced amount of external walling, resulting in the compact square plan of the first stage. The laboratory's facade incorporates deeply recessed precast sills below full length

ribbon, semi-frameless glazing at desk height to the upper level, and ribbon glazing at a high level to the basement resulting in a form where the concrete block walls and roof appear to float.[3]

The building is in the Late Twentieth-Century International Style, due to its cubiform overall shape, plain smooth wall surfaces, overhanging roof with an assertive cantilever for shade and large areas of glass with the structural frame expressed in the courtyard.

Stage 2 of the F.C. Pye Laboratory, Asset 19A, a 1986 extension, is not part of this registration.

Background/History

The CSIRO Division of Plant Industry has its origin in the Division of Economic Botany, within the Division of Scientific and Industrial Research (CSIR) established in Canberra in 1926. In 1949 the CSIRO was created to succeed the CSIR. In 1962 Frederick Charles Pye, a prosperous farmer, offered his property Gerald Station to the CSIRO for the further development of agricultural research. At the time, this was the largest private gift ever made to CSIRO. It was decided to apply a substantial portion of the money realised from the gift to the construction of the F.C. Pye Field Environment Laboratory, a then 'unique concept in field research'.[4]

In 1965 the architects Ancher Mortlock Murray & Woolley, with Ken Woolley director in charge, were appointed to design the F.C. Pye Field Environment Laboratory, to house laboratories, research offices and workshops for the Division of Plant Industry of the CSIRO. This laboratory, the first of its type, was to be concerned with the physics of the field environments in which plants grow, the interaction between the plants and its physical environment, and the problems of making appropriate physical measurements in the field and of processing the large quantities of data involved.[5]

Dr John Philip, the division Chief, and his wife Frances were closely involved in the design philosophy and the choice of materials for the first stage of the building. The Philips had a desire for symmetry; inward looking laboratories closed off from external distractions; upper level research offices with views to the surrounding landscape, and an exterior incorporating concrete blockwork. Internally the Philips' esteem for Mies van der Rohe's architecture is reflected in the incorporation of an exposed steel frame structure, steel stairs and open planned communal spaces.[6]

In his design for the1966 building, Woolley paid particular attention to the idea of a working 'community'. He did this by planning the glass roofed courtyard to have most offices and labs around the perimeter in visual contact with each other. He arranged the building entry to lead directly into the courtyard and then upstairs to circulation galleries, executive offices and a conference room.[7] The second stage, Asset 19A, was constructed in 1986 as an extension with a central courtyard which mirrored the original. It was designed and documented by Ancher Mortlock Murray & Woolley and facilitated by the Australian Department of Works.[8]

The CSIRO F.C. Pye Laboratory Stage 1 was given the 25 Year Award for enduring architecture by the ACT Chapter of the Australian Institute of Architects in its 2009 ACT Architecture Awards. This was a recognition that the building had outstanding merit and that, considered in the contemporary context, it remained important as a high quality work of architecture.

In 2017 Stage 1 of the building, Asset 19, was given a High significance ranking in the CSIRO Black Mountain Heritage Management Plan, and Stage 2, Asset 19A was given a Low significance ranking.[9]

The Architect

Ken Woolley (1933-2015) was a leading Sydney architect of major public buildings and innovative residences. He graduated from Sydney University with first class honours and the University Medal in 1955, then travelled to the United States and Europe on a NSW RAIA Byera Hadley Travelling Scholarship. He worked for the Government Architect's Branch of the NSW Public Works Department from the early 1950s to early 1960s. His own house at Mosman (1962) won the NSW RAIA Wilkinson Award and paved the way for a private practice designing project homes for Pettit and Sevitt. In 1964 he became a partner of Ancher Mortlock Murray and Woolley.[10] He continued his distinguished career, with his buildings receiving numerous awards, and in 1993 he was awarded the RAIA's Gold Medal, the highest honour the RAIA could bestow, for a lifetime's work as one of Australia's great designers. The CSIRO F.C. Pye Laboratory was illustrated in the institute's journal *Architecture Australia* among a selection of 30 significant buildings he had designed.[11]

Condition and Integrity

Extensive structural modifications were undertaken circa 2000-02 including an upgrade of the entrance, in a reasonably sympathetic manner, to improve accessibility by means of a ramp. The building has been vacant since 2014.[12]

Values which meet the Commonwealth Heritage List Criteria

The CSIRO F.C. Pye Laboratory Stage 1 has high heritage significance value because of its importance in demonstrating a high degree of technical and creative achievement in the 1960s. The technical achievement was to provide a building meeting the client's requirement of three distinct orders or use: workshops, laboratories and research offices. The creative achievement demonstrated was the way a sense of a working 'community' was provided by having a central courtyard with most offices and labs around the perimeter in visual contact with each other. The building was recognised in 2009, mainly for these achievements, by it receiving a 25 Year Award for enduring architecture with outstanding merit. (Criterion 6)

The CSIRO F.C. Pye Laboratory Stage 1 has significant heritage value derived from its special association with the works of the CSIRO, which is of importance in Australia's cultural history. It is the embodiment of the largest private gift made to the CSIRO from its beginnings in 1926 to 1962, when the gift was offered. Further significant heritage value is derived from this laboratory being the first of its type. It was concerned with the physics of the field environments in which plants grow, the interaction between the plants and its physical environment, and the problems of making appropriate physical measurements in the field and of processing the large quantities of data involved. (Criterion 8)

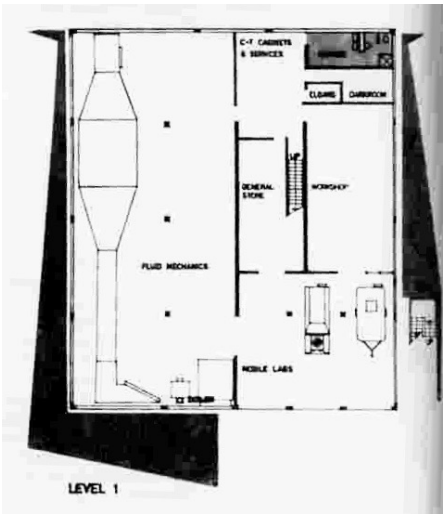
The CSIRO F.C. Pye Laboratory Stage 1 has significant heritage value because of it's special association with the life or works of its architect Ken Woolley. It is a particularly significant building in his distinguished career, which culminated in him being awarded the Gold Medal of the RAIA. (Criterion 8)

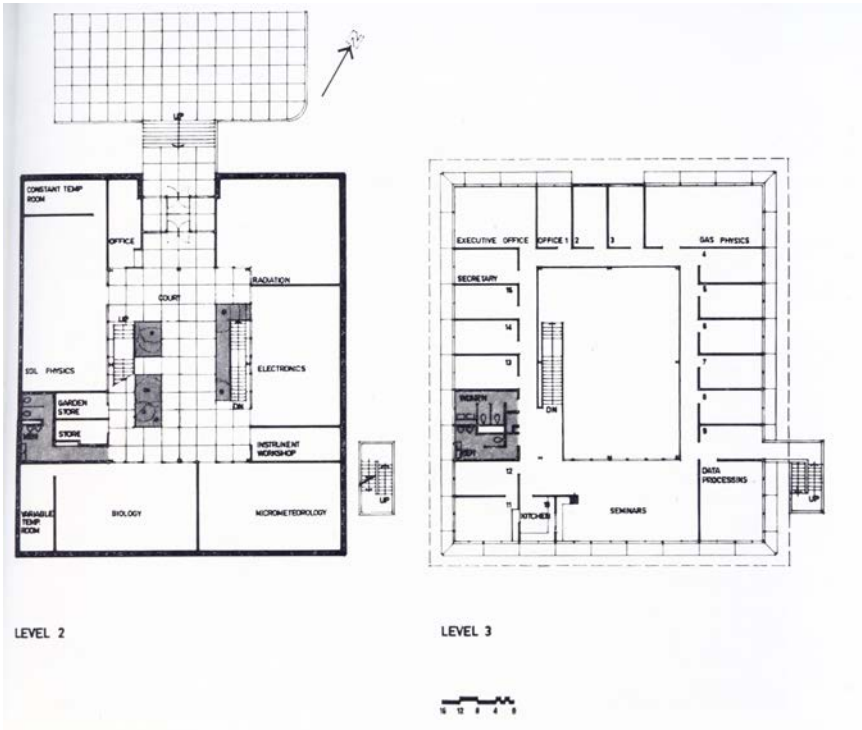
The CSIRO F.C. Pye Laboratory Stage 1 in March 2021 Photo: Ken Charlton

The courtyard of the CSIRO F.C. Pye Laboratory Stage 1, c1970s.
Photo: AIA ACT collection.

The CSIRO F.C. Pye Laboratory Stages 1 & 2 in March 2021.
Photo: Ken Charlton

The CSIRO F.C. Pye Laboratory Stages 1 & 2 in 2020
Photo: ACTPLA





Plans of the CSIRO F.C. Pye Laboratory, Stage 1. Source: *Architecture in Australia* June 1969 p 498.

ENDNOTES

[1] ‘Laboratory’ in A*rchitecture in Australia* June 1969, p 497

[2] ibid

[3] ibid

[4] ‘A Benefactor to Science’ in *The Canberra Times* 30 August 1966 p13

[5] ‘Laboratory’ in *Architecture in Australia* June 1969 p497

[6] ’25 Year Award for enduring architecture CSIRO FC Pye Laboratory…’ *2009 ACT Architecture Awards* booklet, p11

[7] Andrew Metcalf, *Canberra Architecture*, Watermark Architectural Guides, 2003, p68

[8] 25 Year Award… op cit

[9] Environmental Resources Management Australia Pty Ltd, CSIRO Black Mountain Heritage Management Plan, 2017 p60

[10] Davina Jackson, Ken Woolley biography, *Design and Art Online*, 2015

[11] ‘Ken Woolley’s Distinguished Career’ in *Architecture Australia*, August/September, 1993, p34

[12] Observations by a member of the public received, February 2021