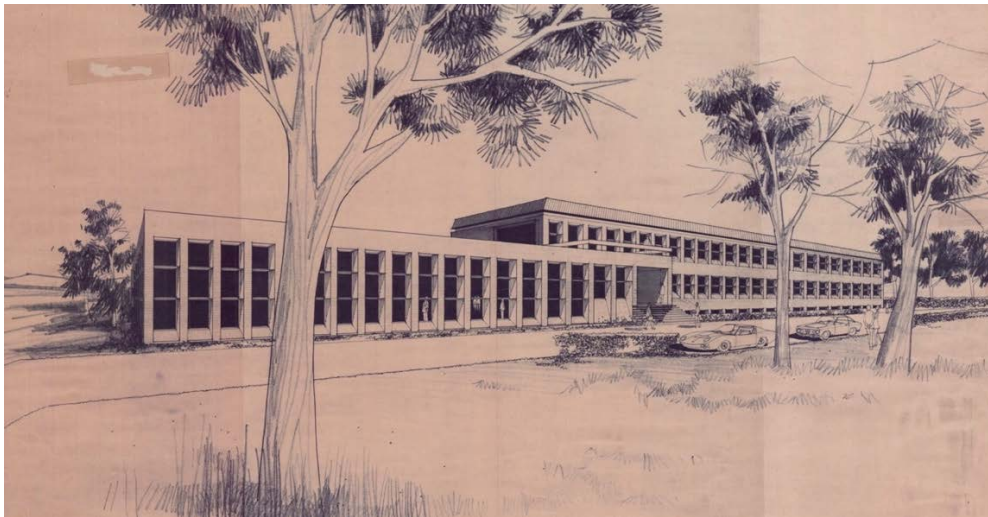


Former Australian Road Research Board

500 Burwood Highway, Vermont South



Conservation Management Plan

Revised February 2021

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CONSULTANTS

This Conservation Management Plan was undertaken by:

Bryce Raworth Pty Ltd
Conservation Consultants
Architectural Historians

Text and illustrations were prepared by Bryce Raworth and Martin Turnor.

CHAPTER 1.0

INTRODUCTION

1.1 Background and Brief

The following Conservation Management Plan (CMP) was commissioned by Tract Consultants Pty Ltd on behalf of the owner of the former Australian Road Research Board (ARRB) complex at 500 Burwood Highway, Vermont South. The CMP identifies the nature, extent and level of cultural significance of the ARRB site and the consequential conservation constraints that might apply in regard to any future development of the site.

The commissioning of this CMP has been prompted by a proposal for redevelopment of the site. The Heritage Advisor to the City of Whitehorse recommended that a CMP be prepared to inform both Council and the applicant of the significance of the place in general and the relative significance of its component parts. Regardless of the specifics of the proposed development, the policy guidance this CMP provides is intended to be equally relevant and applicable to any other future schemes or proposed works for the site or its environs.

1.2 Methodology

Assessment of the site and preparation of a policy for the protection of its cultural significance have been undertaken in accordance with the processes and criteria outlined in the Australia ICOMOS (Burra) Charter for the Conservation of Places of Cultural Significance (see Appendix B) and associated guidelines.

A detailed inspection of the external and internal fabric was undertaken to assist in the preparation of this document. This analysis has also been informed by research from various primary and secondary historical sources, which are listed in the bibliography.

1.3 Terminology

The terminology in this report relating to conservation actions and interventions is of a specific nature and is defined in the Burra Charter (see Appendix B for definitions of the relevant terms). All other terminology should be understood in the context of its plain English interpretation, unless otherwise stated.

CHAPTER 2.0 CURRENT LISTINGS AND CONTROLS

2.1 City of Whitehorse

The former ARRB complex is identified as on the Whitehorse Heritage Overlay schedule as ‘HO23, Australian Road Research Board 500 Burwood Highway, Vermont South (Heritage place is defined as the ARRB building and surrounds on Lot 1 on PS 518296N)’. There are no external paint controls, internal controls or tree controls under the overlay. The heritage overlay covers all of the property.

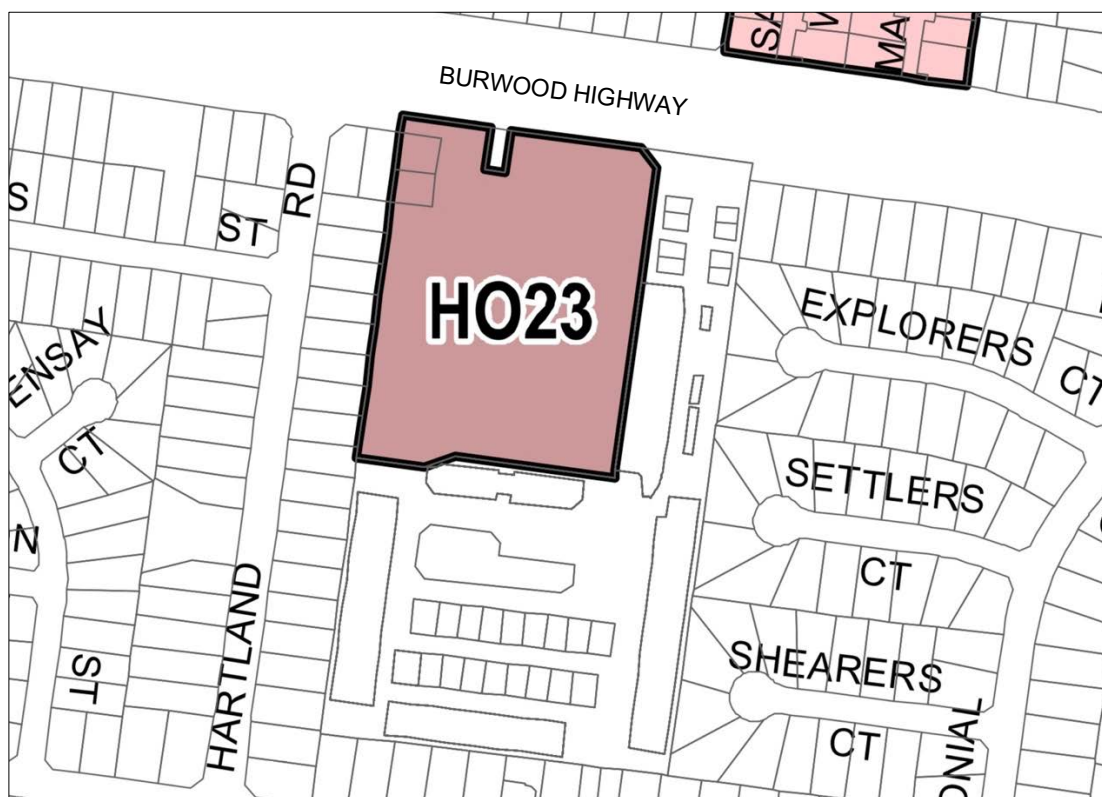


Figure 1 Heritage Overlay map showing HO23 applying to the former ARRB site.

2.2 Heritage Victoria

The former ARRB complex is not listed on the Victorian Heritage Register.

2.3 National Trust of Australia (Victoria)

The former ARRB complex is not listed on the National Trust’s Heritage Register.

CHAPTER 3.0

HISTORY

3.1 Australian Road Research Board

The Country Roads Board (CRB) was established in 1913 with responsibility for construction of main roads in Victoria. By the mid 1920s, the CRB had entered into a joint program with the engineering school at the University of Melbourne for the testing of road construction materials. The CRB's first Chairman, William Calder, recognised the usefulness of materials testing after an overseas study tour and, in 1924, he proposed that there be a national road research program.¹ The need for road research became more pressing in the post-war period when increased traffic volumes and greater reliance of trucks for the transport of goods placed pressure on the serviceability of roads.

In 1947, the CRB's chief engineer Caleb Roberts was sent on six-month study tour of America and Britain. On his return, Roberts tabled a report strongly advocating for the establishment of a permanent national body to coordinate road research for the 'common interest'.² It was not until 1958 when the Conference of State Road Authorities decided to establish an Australian Road Research Board (ARRB), modelled on the US Highway Research Board. The ARRB's prime purpose was to co-ordinate, publish and promote the results of road research, including research into road planning, design, safety, materials, construction, maintenance and financing. The ARRB was also tasked with distributing grants for research and organising conferences and symposiums to provide opportunities for the presentation and discussion of the results of road research. The first meeting of the ARRB was held in Sydney in March 1960. ARRB staff were initially housed in the CRB headquarters in Kew but as the organisation grew additional laboratory spaces for testing solids and bitumen were set up in a tram depot in Hawthorn.³

3.2 The ARRB at Vermont South

By the mid 1960s it had become evident that the ARRB was in need of a permanent headquarters with office, laboratory and library facilities.⁴ Melbourne was chosen as the location of the new Australian Road Research Centre as the ARRB did not wish to appear as though they were setting up in competition with the Institute for Highway and Traffic Engineering Research, then operating from the University of NSW.⁵ A former apple orchard of 6.5 hectares on Burwood Highway, Vermont South was acquired for the ARRB and architects Mockridge Stahle & Mitchell were commissioned to design the new complex. They proposed a building of '*simplicity and dignity*' to attract new staff whilst also providing a '*good background for public relations to visitors and representatives of other interested bodies who in turn attract money to the cost of the functions of the Board*'.⁶

¹ Australian Road Research Board *The First 50 Years' Report on Activities from Foundation*, p.4.

² Australian Road Research Board *The First 50 Years' Report on Activities from Foundation*, p.5.

³ Australian Road Research Board *The First 50 Years' Report on Activities from Foundation*, p.14.

⁴ Australian Road Research Board *The First 50 Years' Report on Activities from Foundation*, p.6.

⁵ Australian Road Research Board *The First 50 Years' Report on Activities from Foundation*, p.6.

⁶ Australian Road Research Board, *Head Office and Research Centre, Burwood Highway, Nunawading Melbourne. Narrative Brief*. Mockridge Stahle & Mitchell Architects. p. 16.

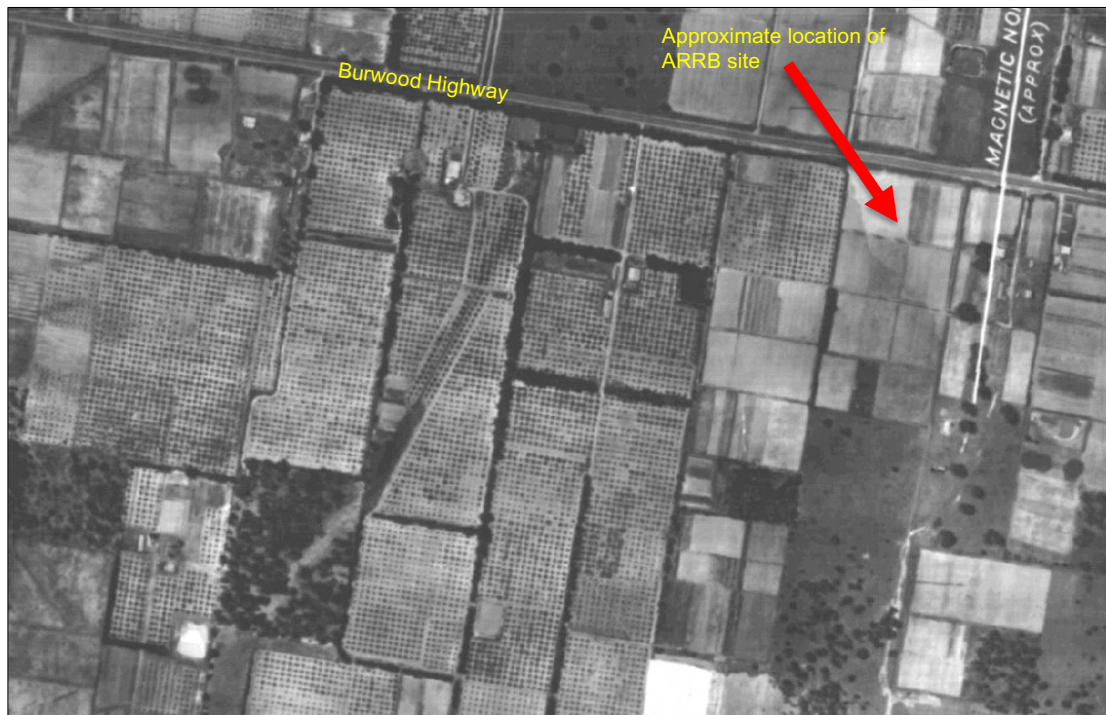


Figure 2 1945 aerial showing the future ARRBB site as undeveloped farmland with orchards being the predominate use of surrounding land. Source: University of Melbourne Library.

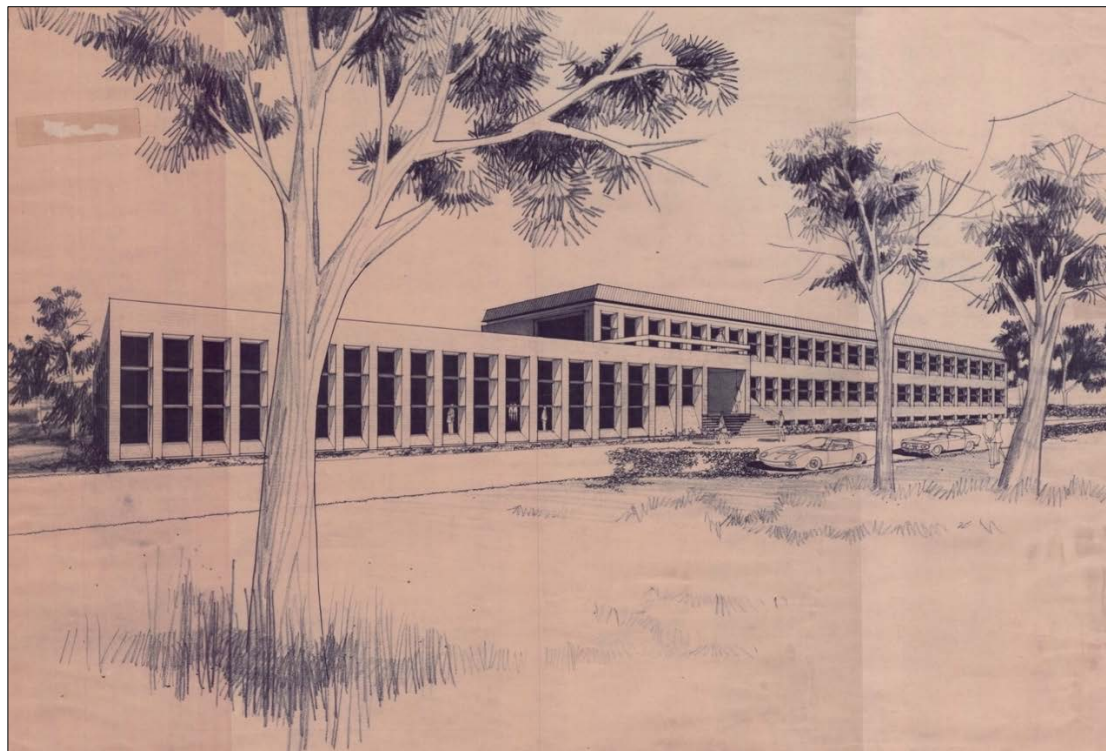


Figure 3 Perspective drawing of the ARRBB administration building by Mockridge Stable & Mitchell architects, c1970. Note the facia detail to the three storey wing is not 'as built'. Source: ARRBB.

The plans for the new ARRB headquarters were approved in 1970 and Leighton were awarded the \$1 million construction contract in May 1971.⁷ The complex was officially opened on 27 November 1972 by the Governor General of Victoria Sir Rohan Delacombe. As initially constructed, the ARRB complex had a three and two level Administration Building fronting Burwood Highway, providing executive offices, a board room, a technical library (located in the sub-basement), a double-height lecture room and adjoining dining area with kitchen facilities. To the rear of the Administration Building there was a single-storey publications room and two research wings connected by covered walkways. The caretaker was accommodated in an existing residence in the north-west corner of the property (later demolished and replaced by two units).⁸

The ARRB buildings were designed with the flexibility to allow for future expansion. The administration building is shown with a theatre addition to its south west corner on a 1970 site plan. It was also engineered with the capacity to support an additional storey.⁹ The floor plan was laid out on a 15 foot (4.57 metre) module with external walls in the form of non-structural brick panels so that new door openings could be created as required. The architect's brief also anticipated that the courtyards could be enclosed if additional space was needed.¹⁰

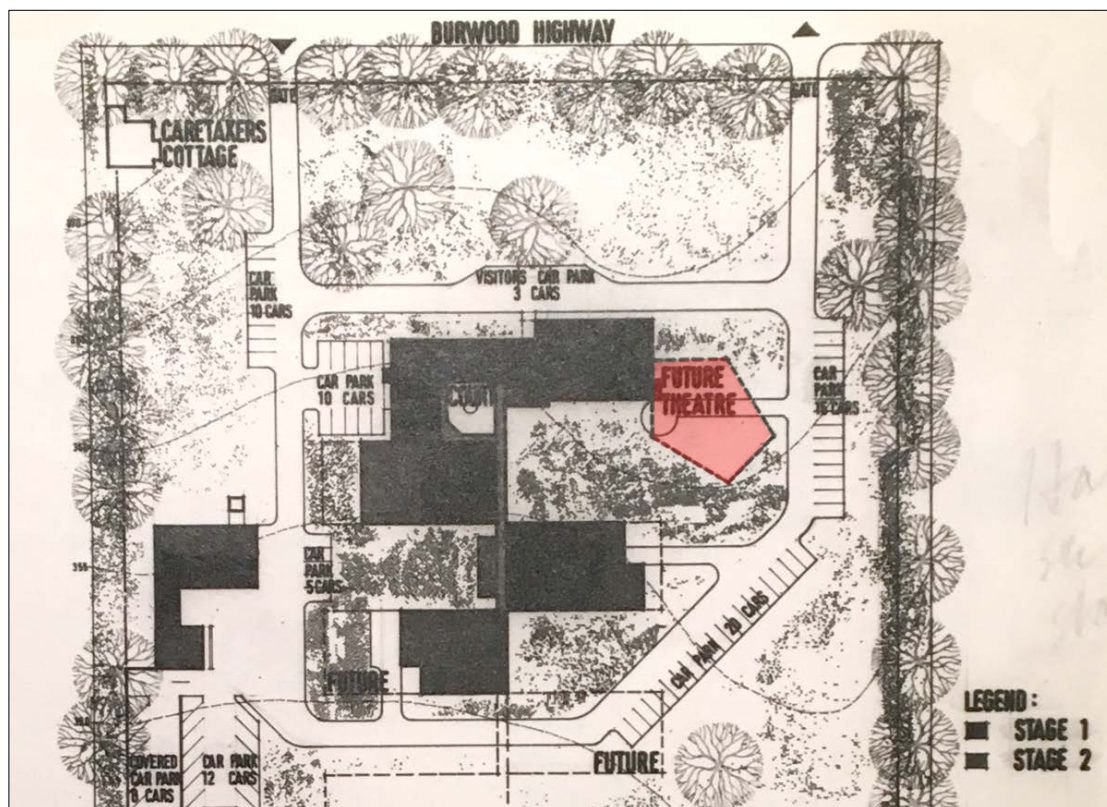


Figure 4 A 1970 site plan for the ARRB complex showing a future stages of development, including a theatre addition abutting the south-west corner of the Administration Building. Source: State Library of Victoria Manuscripts Collection.

⁷ ARRB Report of Activities 1971.

⁸ Australian Road Research Board 'The First 50 Years' Report on Activities from Foundation, p.35.

⁹ The exact nature of the proposed additional level is not made clear in available documentary sources, but was possibly to be built over part of the double-storey dining/lecture wing).

¹⁰ Australian Road Research Board, Head Office and Research Centre, Burwood Highway, Nunawading Melbourne. Narrative Brief. Mockridge Stahl & Mitchell Architects. p. 17.

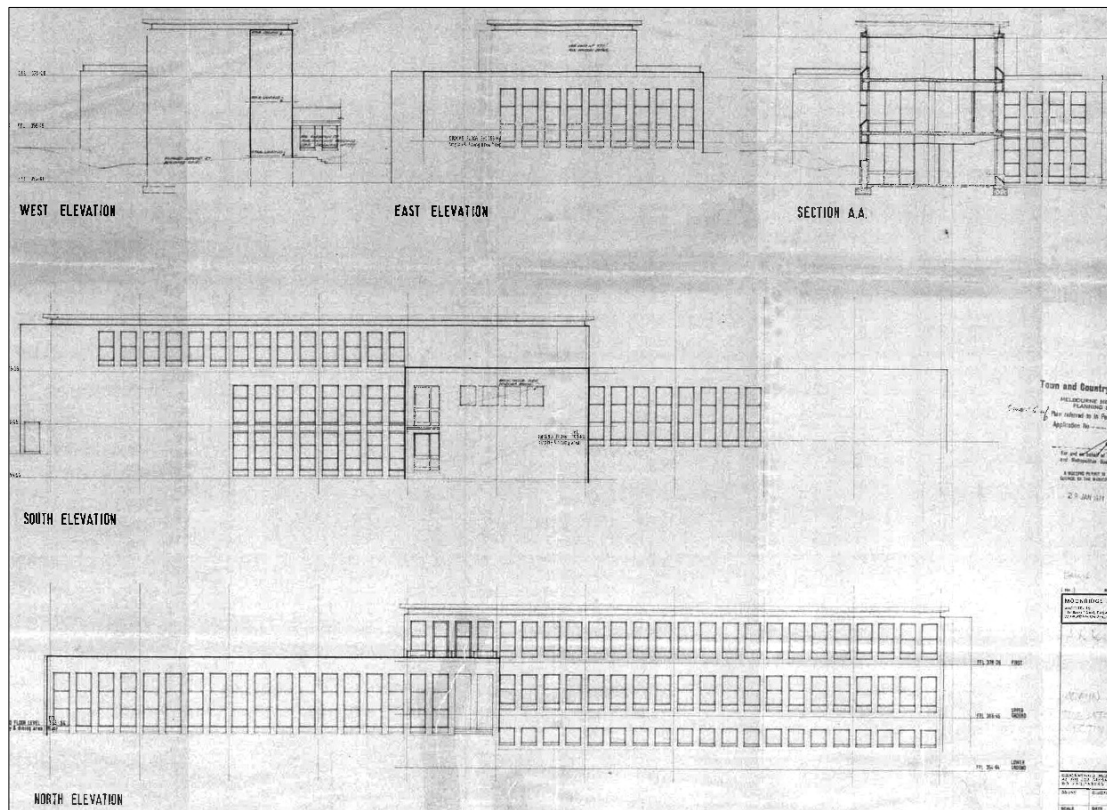


Figure 5 The Administration Building elevations, Mockridge Stable & Mitchell, 1971. Source: ARRB.

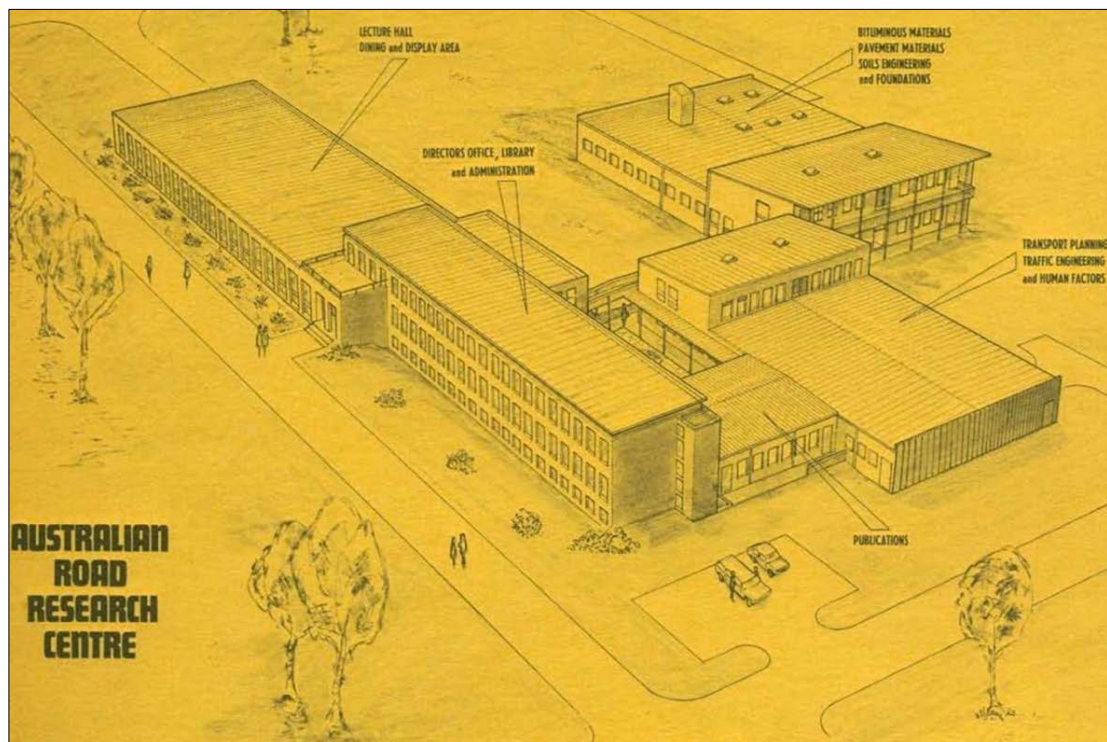


Figure 6 A 1972 illustration of the ARRB complex. Source: 'Next Five Years: Australian Road Research Board'.

The complex was designed for future expansion, but with the aim of retaining generous landscaped grounds:

*Set 200 yards back from the road, the new centre will be surrounded by attractive trees, shrubs and lawn to harmonise with the environment. Although the building has been designed to allow for future expansion, at no stage will it ever occupy more than two-thirds of the section. This means that at least 5 acres of land will always be landscaped to blend in with the surrounding areas.*¹¹

The landscape design by Beryl Mann involved dense planting of native trees on the site boundaries to act as wind breaks and to screen the ARRB buildings from anticipated future residential development. Mann also recognised that the landscaping provided opportunities for the testing and display of plants suitable for roadside or road median planting. The Burwood Highway frontage was to have a ‘*more carefully developed main entrance treatment*’ while the internal landscaping was generally to maintain an ‘*open character*’ with lawns and tree groups.¹² Several large remnant eucalypts were to be retained along with most of the existing apple trees at the rear of the property. The apple trees were later removed when gardening services was outsourced.¹³ Planting and ground development continued into 1974 after being delayed by a drought in 1972 and early 1973.¹⁴ In 1974, the site was inspected by the Mayor and senior officers of Nunawading City Council who praised the ARRB for its contribution to the local environment.¹⁵

The new premises allowed the ARRB to expand its in house research programs, as reported in a 1973 ARRB brochure:

This impressively equipped \$1.5 million building in Vermont, Victoria, has been erected as the permanent headquarters of the Australian Road Research Board in anticipation of expanding national research demands. The centre at present accommodates a staff of about 120 engaged in research, administration, and service activities.

Its establishment was planned to coincide with an urgent need to expand facilities for the investigation and discussion of the problems and needs of our road and transport systems.

The three storey administrative wing comprises the Board Room, executive offices, administration, an excellent technical library and the information services group.

The two research wings at present comprise first floor office accommodation for the research officers and ground floor laboratory areas. Special facilities now coming into use are:

the human factors laboratories, including a soundproof room, signals tunnel and human reaction study room with projection equipment;
the construction materials laboratories, including constant temperature environment rooms, bitumen and soil testing equipment;
computer facilities which are being installed to process experimental results and road traffic and road safety statistics;
and
*a separate building which houses comprehensive workshop facilities.*¹⁶

¹¹ ARRB brochure, 1973. Unpaginated.

¹² *Australian Road Research Board, Head Office and Research Centre, Burwood Highway, Nunawading Melbourne. Narrative Brief.* Mockridge Stahle & Mitchell Architects. p.14.

¹³ ARRB: *The First Fifty Years*, p. 17.

¹⁴ ARRB *Report on Activities*, 1973 p 2.

¹⁵ ARRB *Report on Activities*, 1974, pp. 6-7.

¹⁶ ARRB brochure, 1973. Unpaginated.

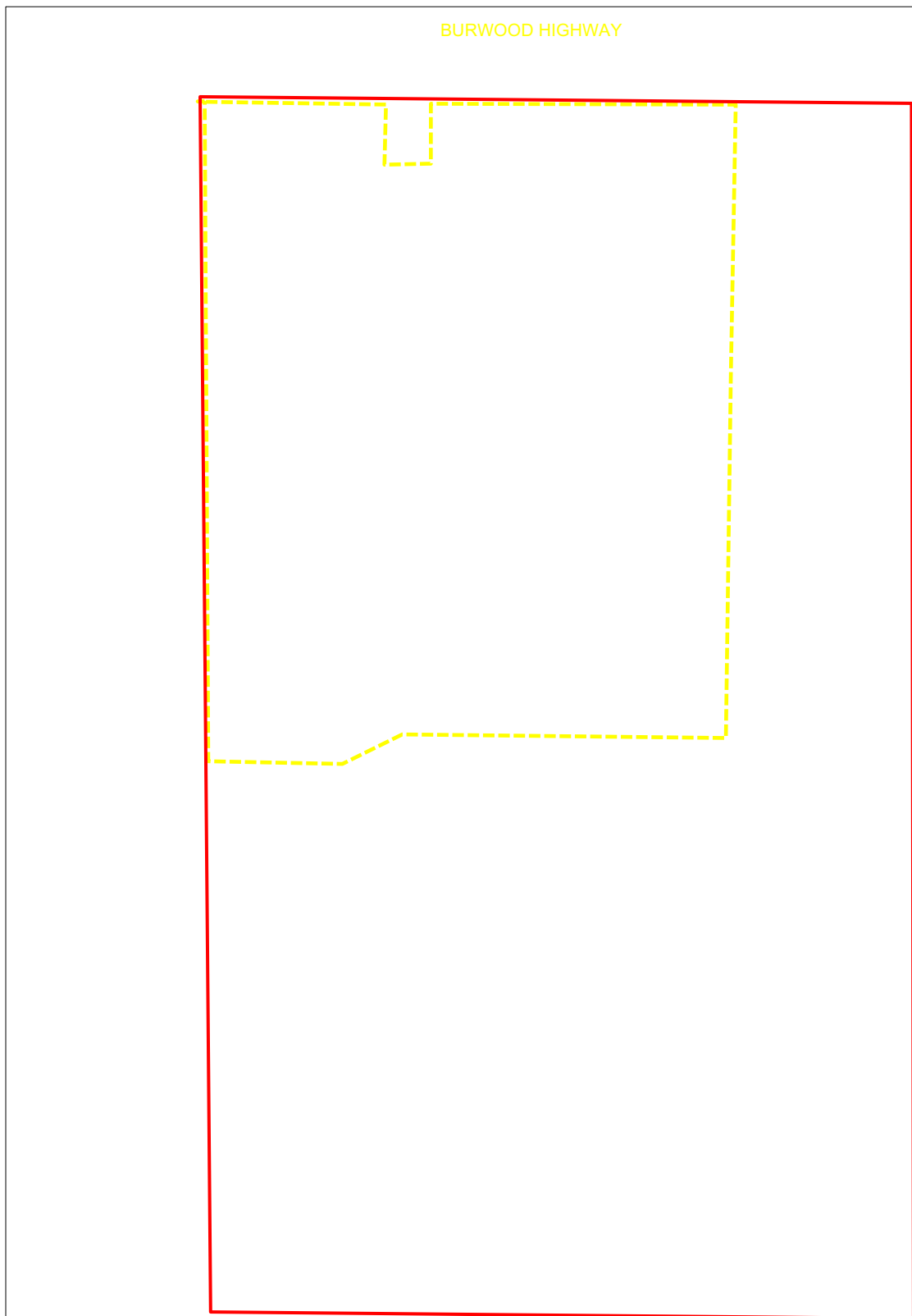


Figure 7 *A c1973 photograph of the ARRB site showing part of the apple tree orchard retained at the rear of the site. The current site boundary is marked by the dashed yellow line. Source: 'ARRB: The First Fifty Years'.*

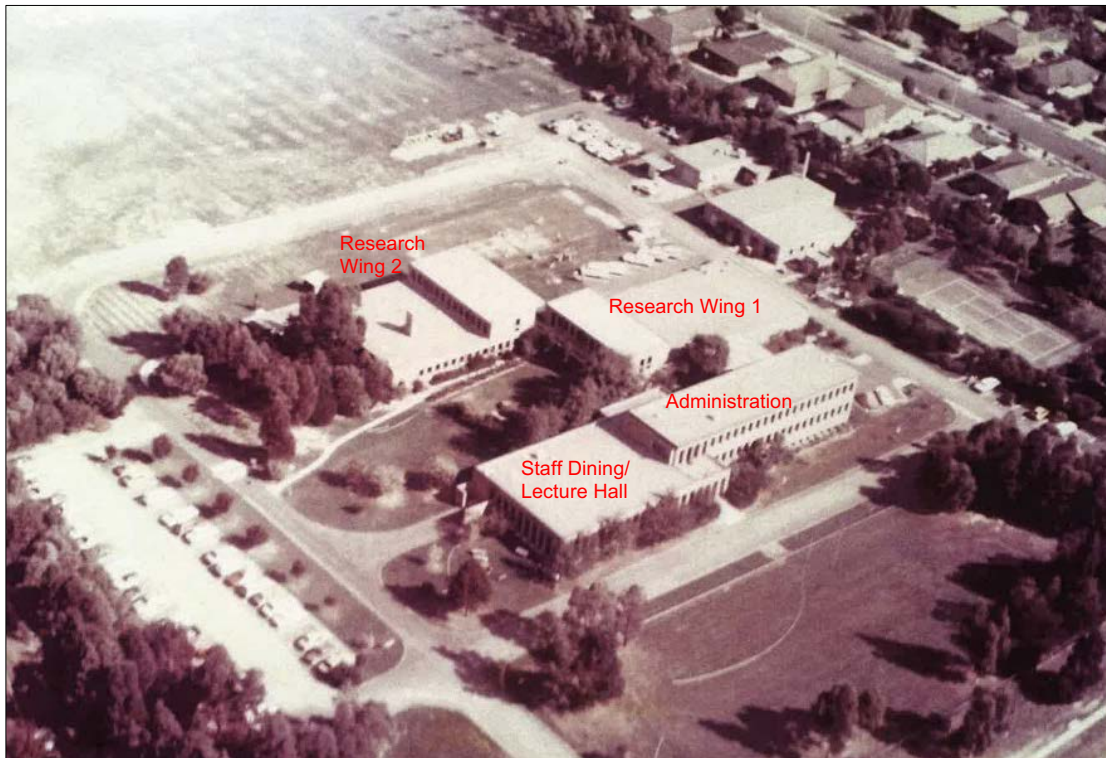


Figure 8 A 1975 aerial photograph of the ARRB site. Source: ARRB



Figure 9 The front elevation of the Administration Building, 1976. Source: ARRB Annual Report 1976.

Research Wing 2 was extended eastwards in 1974 to accommodate machinery for bitumen testing.¹⁷ In the same year an agreement was reached with the ARRB Staff Association to build a tennis court along the western boundary of the site.¹⁸ By c1975 Research Wing 1 had been extended westwards.

In 1977, the ARRB site was awarded the industrial category in the Nunawading Jaycees garden competition.¹⁹

A tilt deck for testing articulated vehicles was installed at ARRB site in 1984 and in 1986 a new research wing (R3) was opened.²⁰ The establishment of a concrete technology division at the ARRB in 1997 necessitated the construction of a new concrete testing laboratory.

By the end of the 1990s, land surplus to the ARRB's requirements was sold to raise badly need funds.²¹ The existing buildings and associated carparking were retained on approximately 2.6 hectares of land with 4 hectares redeveloped as retirement village in 2000. An electrical substation was built c2004 at the front of the site to service a tram extension along Burwood Highway. Renovation of the bitumen and asphalt laboratories also occurred c2000.²²

The ARRB's Vermont South site was sold in 2017 and the organisation's headquarters was relocated to new offices in Port Melbourne.



Figure 10 The tilt deck for testing articulated vehicles, installed at the ARRB site in 1984 (removed c2002). Source: ARRB 1993 Annual Report.

¹⁷ ARRB Report on Activities, 1974, p.7.

¹⁸ ARRB Report on Activities, 1974, p.7.

¹⁹ Commemorative plaque on the administration building.

²⁰ ARRB: The First Fifty Years, p. 51 & 62.

²¹ ARRB: The First Fifty Years, p. 106.

²² ARRB: The First Fifty Years, p. 118.

3.3 The Architects – Mockridge Stahle & Mitchell

Architect John Mockridge (1916-1994) trained at the Gordon Institute of Technology, Geelong (now Deakin University). He gained a Bachelor of Architecture in 1942 and, after serving in the Royal Australian Airforce during World War Two, worked for architects Buchan Laird & Buchan. In 1948 Mockridge established a partnership with two returned servicemen (and RMIT graduates), Ross Stahle (1917-2010) and George Mitchell (1916-2006). The firm's early work was mostly residential, but the practice came to be strongly defined by the projects for institutional clients, including universities, colleges and schools. Mockridge Stahle and Mitchell received ongoing commissions from Melbourne Grammar and other private schools such as Brighton Grammar School and Geelong College, in addition to designing a number of highly regarded state schools in Canberra. The firm also had a significant body of ecclesiastical work including St Faith's Church of England, Burwood (1958) and the religious centre at Monash University (1965-68). As described by Neil Clerehan, Mockridge was a talented draughtsman, painter and sculptor, and Mitchell was an urbane figure, prominent in high Anglican circles. While the three partners collaborated on basic design decisions, roles emerged with Mitchell handling client relationships and officialdom, Mockridge became the main designer, and Stahle took on an administrative role, supervising staff and managing building contracts.²³

The grounds of the ARRB were landscaped to a design Beryl Mann, a founding member of the Australian Institute of Landscape Architects. Mann had initially studied architecture at Gordon Institute but later shifted her interest to landscaping, completing a horticultural course at Burnley College in 1939. In 1948, Mann joined Mockridge Stahle & Mitchell architects at the foundation of the partnership. She became an associate of the firm in 1961 and worked there until resigning in 1976 due to ill health. Mann had an interest in Australian flora, but her selection of plant species was generally based on those she considered appropriate to the particular requirements of the overall landscape, taking into account site conditions and the maintenance needs.²⁴

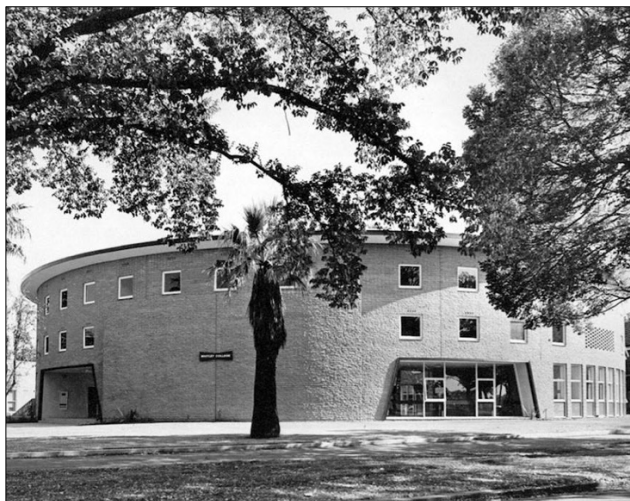


Figure 11 (left) *Whitely College, Parkville. Mockridge Stahle & Mitchell Architects (1962-65).*



Figure 12 (right) *Mary Immaculate Church, Ivanhoe. Mockridge Stahle & Mitchell Architects (1961).*

²³ Neil Clerehan, "Schools were 'in' for designer" in *The Age*, 5 July 2010
<https://www.theage.com.au/national/victoria/schools-were-in-for-designer-20100704-zvu1.html>

²⁴ Ruth Sanderson, 'Beryl Mann: Her Contribution to landscape architecture in Australia' in *Landscape Australia*, November 1984, pp. 303- 309.

CHAPTER 4.0

THE PHYSICAL FABRIC

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4.1 Site

The former ARRB complex occupies approximately 2.5 hectares of land on the south side of Burwood Highway. The complex is fronted by an administration building with attached staff dining and display rooms, set well back from Burwood Highway. A covered walkway at the rear of the Administration Building provides access to three separate research wings with landscaped courtyards between. Various ancillary structures are sited towards the rear of the complex, including a store, garden maintenance shed, garage, and concrete labs/HV workshop.

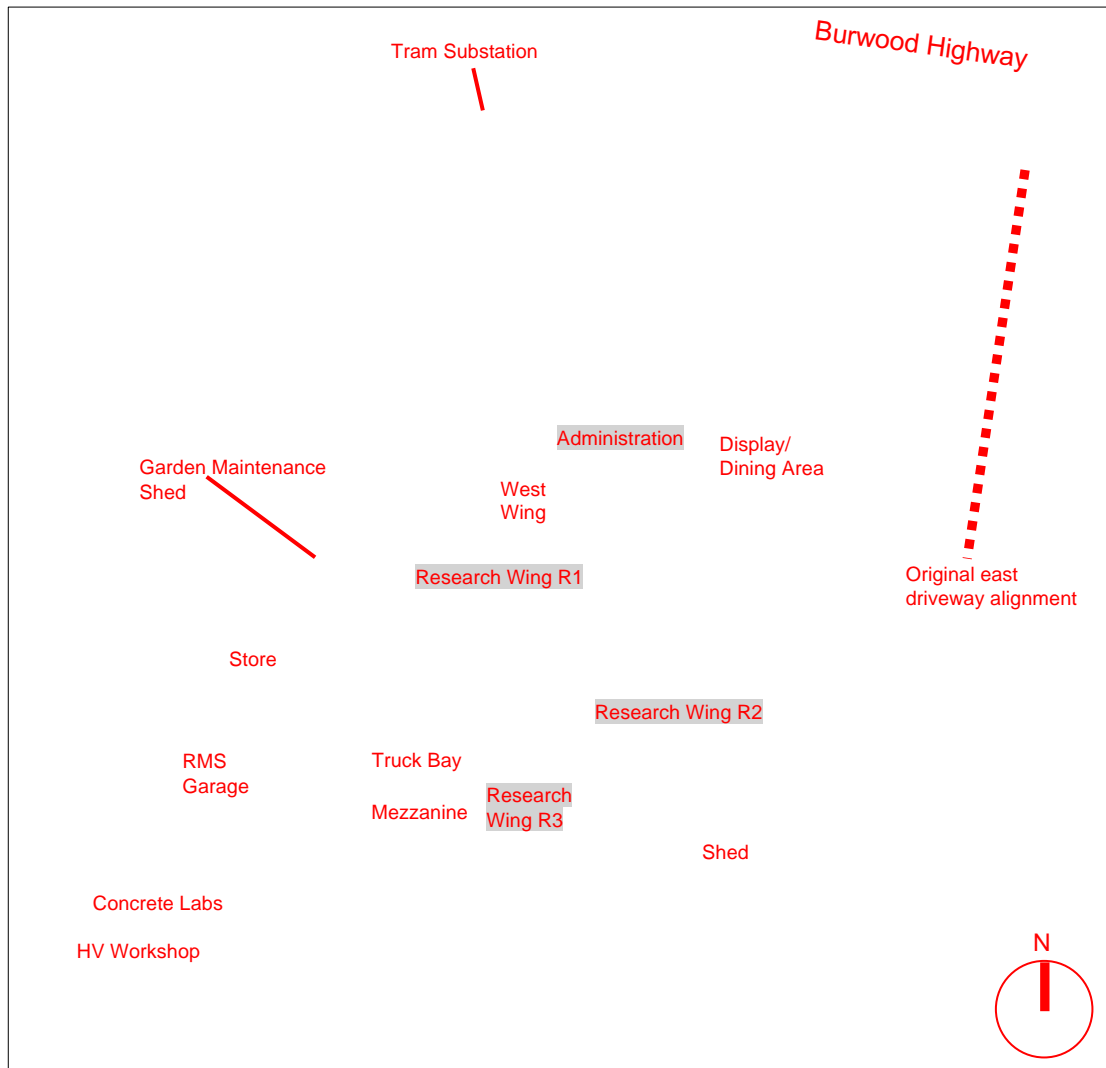


Figure 13 Aerial photograph of the former ARRB site.

In terms of the landscape, the deep front setback to the Administration Building has a broad sweep of lawn with two (presumably original) flagpoles and informal plantings of native trees along the Burwood Road frontage. The trees form a dense canopy around the driveway entrance at the north-west corner of the site. Consequently, the Administration Building is obscured in views from this part of Burwood Road. Tree plantings thin out towards the eastern end of the front boundary, allowing some limited views to the Administration Building. The site is enclosed on its east and rear boundaries by a modern Colorbond fence and in part on the west boundary by a standard timber paling fence.

The grounds have been much reduced in extent, with land to the south and east of the complex having been subdivided and redeveloped. As a consequence, the original alignment of the east driveway has been shifted further west. The configuration of the access road and carparking to the front of the Administration Building appears largely unchanged. An electrical substation has been built in the front setback, alongside the main driveway entrance. Remnants of the original native tree plantings appear to survive along the west boundary although the original plantings to the rear and east boundaries have been lost as a consequence of the subdivisions. The tennis court established in mid 1970s near the western boundary is now used as a carpark. The courtyard between Research Wings 1 and 2 is shown in early photographs as being a simply landscaped area of lawn with paved carparking. The courtyards are now heavily overgrown and do not give the impression of having been a 'designed' landscape. The small courtyard between the Administration Building and the West Wing (formerly the publications room) has brick paving with a modern timber deck. As described in section 3 of this CMP, the internal landscape was originally intended to have an 'open character'. The courtyard between the staff dining room and Research Wing 2 retain an open area of lawn with a simple brick BBQ at the centre.



Figure 14 The ARRB site viewed from Burwood Highway. The main driveway entrance is to the right of the sign.



Figure 15 *The eastern half of the Burwood Road frontage with the Administration Building partially visible through the trees.*



Figure 16 *The lawn and tree plantings to the front of the Administration Building (partially visible to the left of the image).*



Figure 17 *The courtyard between the Administration Building and Research Wing 2.*



Figure 18 *The courtyard between Research Wings 1 and 3.*

4.2 Administration Building

The Administration Building has a long rectangular plan form orientated on an east-west axis. It is comprised of a three level office wing with a partial basement level (within which was located the library), and an attached single-storey wing encompassing the main entry, display and staff dining areas and kitchen. The building is concrete framed with a flat steel deck roof, non-loadbearing walls of light brown coloured brick and anodised aluminium window frames. The front elevation is articulated by narrow, regularly spaced window openings with deep reveals and splayed sills. The verticality of the fenestration is counterpoised by the strong horizontal emphasis of a timber eaves and fascia presenting as a simplified version of a classical cornice. The building could be described as late-twentieth century striped classical revival style and has the ‘simplicity and dignity’ described in the architect’s brief.

The exterior is substantially intact with only minor changes including the modern tile paving to the main entry steps and metal handrails. With regards to the condition of the external fabric, the metal deck roofing has areas of surface corrosion and there is a peeling paint finish to the parapet coping. Cracks were observed in the wall at the north-east corner of office wing, at the roof terrace above the main entry.

The interiors of the Administration Building are largely intact but are generally unremarkable. The reception desk and tile paving in the entry foyer are non-original. The most notable space is the elliptical main stairwell with a metal handrail, wood panelled walls and a circular skylight. The board room and an office opening onto the roof terrace have coffered ceilings, with an unusual brass light fitting in the latter.



Figure 19 *The front (north) elevation of the Administration Building.*



Figure 20 (left) Partial view of the north elevation of the Administration Building showing the deep window reveals and cornice like eaves detail.



Figure 21 (right) Partial view of the south elevation of the Administration Building overlooking a small courtyard.



Figure 22 The east elevation (dining area).



Figure 23 The west elevation of the Administration Building.



Figure 24 (left) The refurbished entry foyer to the Administration Building. The tile floor and reception desk are non-original.



Figure 25 (right) The intact main stairwell in the Administration Building.

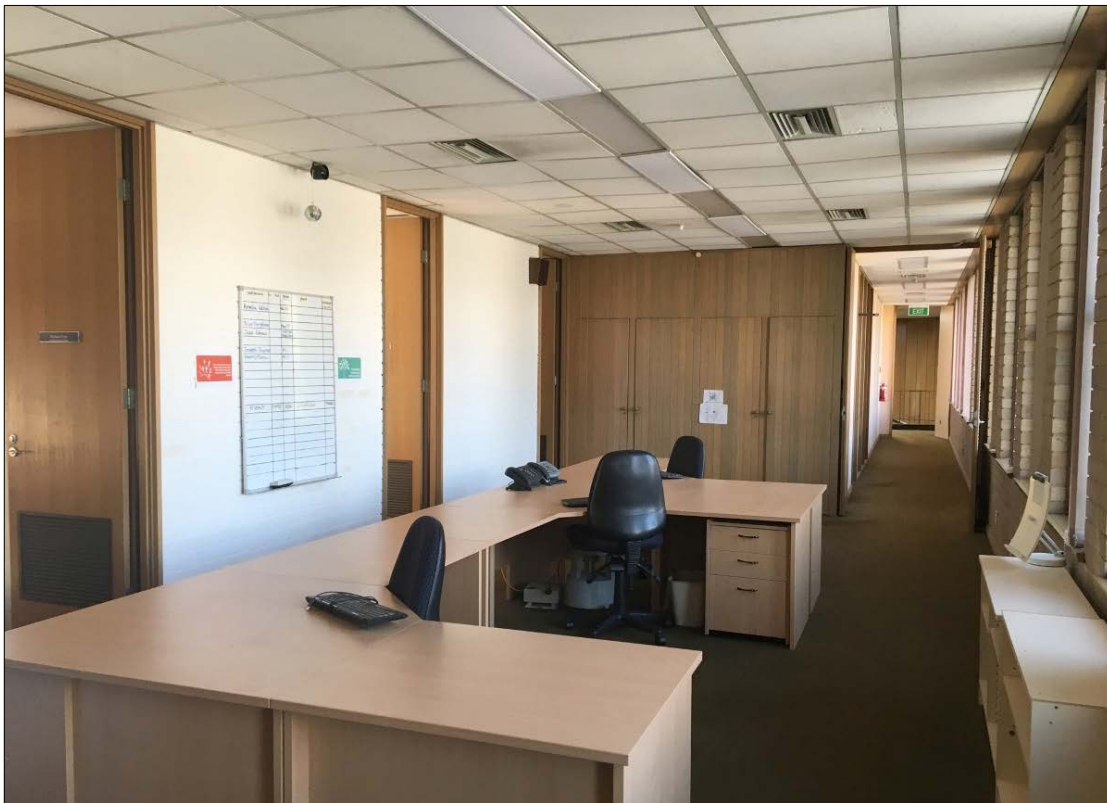


Figure 26 *Typical office space in the Administration Building.*

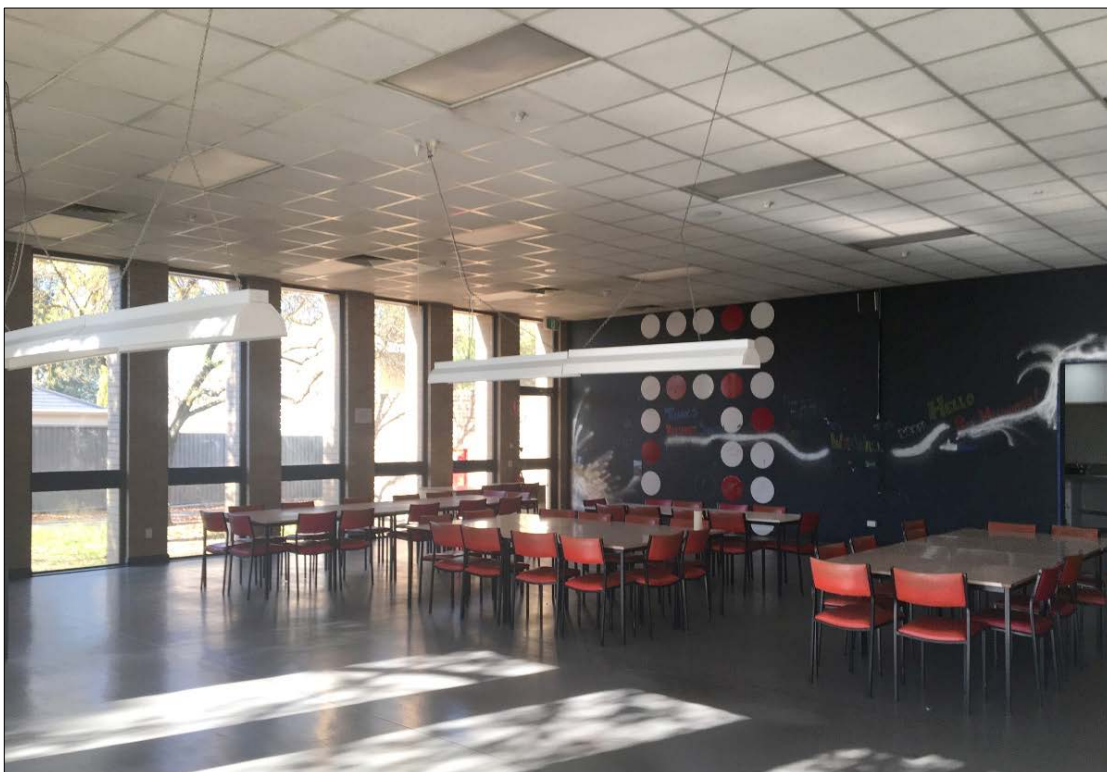


Figure 27 *The staff dining area.*

4.3 West Wing

The West Wing (labelled as ‘publications’ on early site plans) is a flat roofed single-storey structure abutting the south side of the Administration Building. It has light brown brick walls matching the Administration Building but is otherwise a much plainer design without the deep window reveal detail.



Figure 28 The west elevation of the west wing.

4.3 Research Wings 1 & 2

Research Wings 1 and 2 form part of the ARRB’s initial c1971-72 stage of development. Early site plans identify Research Wing 1 as ‘*Transport planning, traffic engineering and human factors*’ and Research Wing 2 as ‘*Bituminous Materials, pavement materials, soil engineering and foundations.*’ The Research Wings have light brown brick walls (matching the Administration Building) and flat metal deck roofs with no eaves. They are for the most part single-storey but with narrow double-storey office wings, which are connected to the covered walkway. Architecturally, the Research Wings are utilitarian in character, lacking the formal ‘stripped classical’ qualities of the Administration Building’s main facade.

The exteriors are largely intact apart from matching single-storey additions built 1974 at the east end of Research Wing 2 and c1975 at the west end of Research Wing 1. Research Wing 2 contains a ground floor laboratory. The interiors otherwise a series of unremarkable offices spaces with some modern refurbishment having taken place.



Figure 29 *The north elevation of Research Wing 1.*



Figure 30 *The east elevation of Research Wing 1.*



Figure 31 *Ground floor interior in Research Wing 1.*



Figure 32 *The west elevation of the Research Wing 2.*

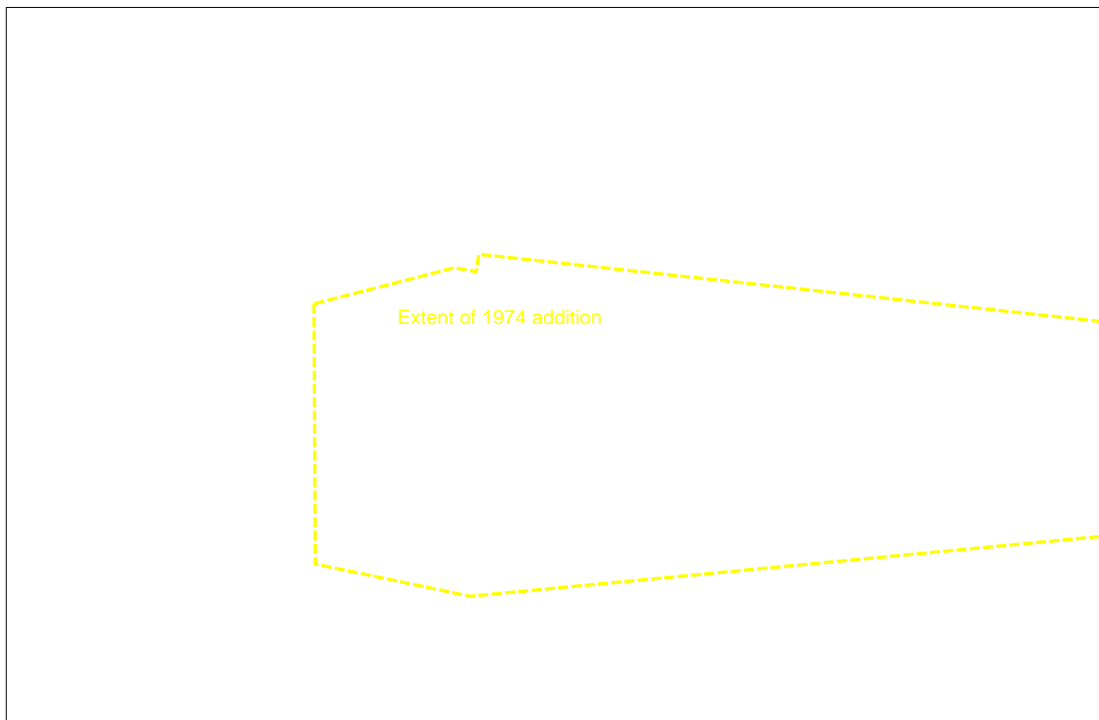


Figure 33 Research Wing 2 viewed from the south-east.

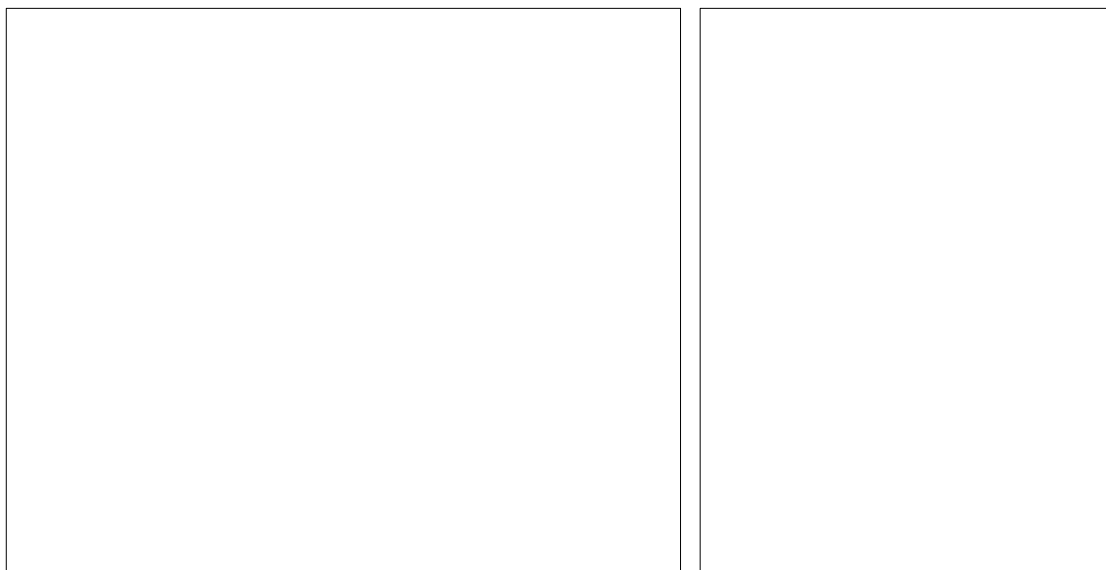


Figure 34 (left) Ground floor laboratory in Research Wing 2.

Figure 35 (right) Corridor to first floor offices in Research Wing 2.

4.4 Research Wing R3

Research Wing 3 was completed in 1986 with a design matching the original research wings to its north. The interiors are characterised by plainly appointed office spaces.



Figure 36 *The south elevation of Research Wing 3.*



Figure 37 *Ground floor office space in Research Wing 3.*

4.6 Truck Bay/Mezzanine

The Truck Bay/Mezzanine is a double-height metal clad building with the appearance of a generic industrial shed. It is a comparatively recent addition to the site and the design does not make any reference to the original 1970s buildings.



Figure 38 Truck Bay, west elevation.



Figure 39 Truck Bay interior.

4.7 Concrete Labs/HV Workshop

The Concrete Labs/HV workshop was built c1997. It is utilitarian, single-storey building with metal cladding to the walls and roof.



Figure 40 The Concrete Labs/HV workshop.



Figure 41 (left) Partitioned laboratory spaces in the eastern half of the Concrete Labs/HV Workshop.

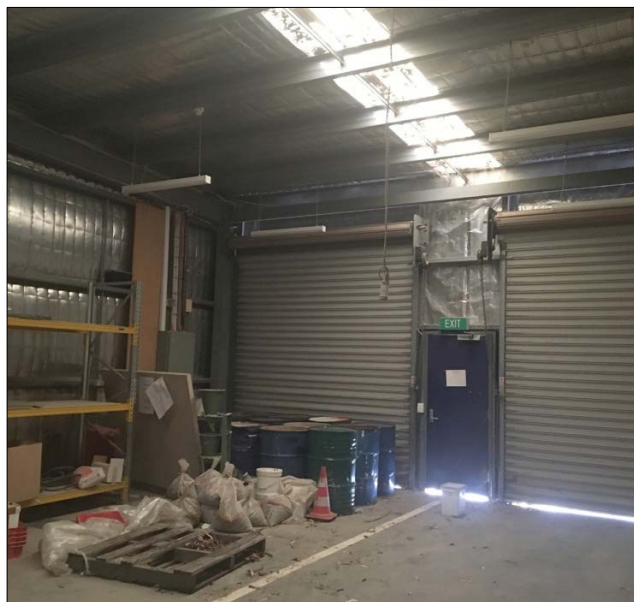


Figure 42 (right) Concrete Labs/HV workshop interior.

4.8 RMS Garage

A plainly designed single-storey structure with face brick walls matching the main ARRB buildings. The northern half of the building is visible in early 1970s aerial photographs of the site and is presumed to have been part of the initial phase of development. The southern half of the building is a later addition. The interiors are utilitarian with concrete floors, face brick walls and unlined ceilings.

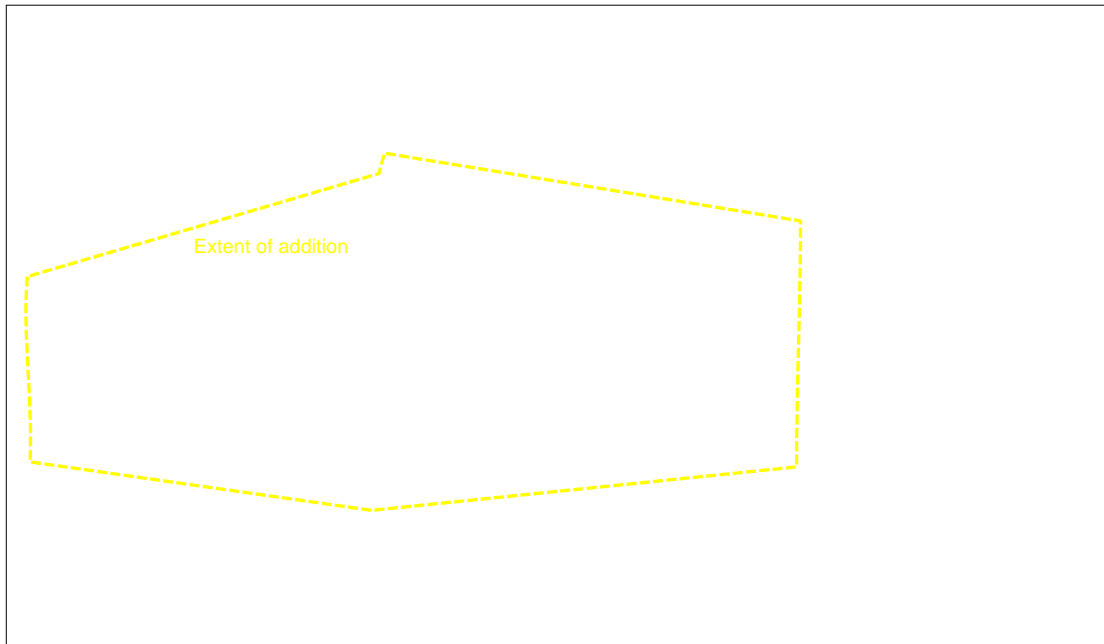


Figure 43 The RMS Garage.

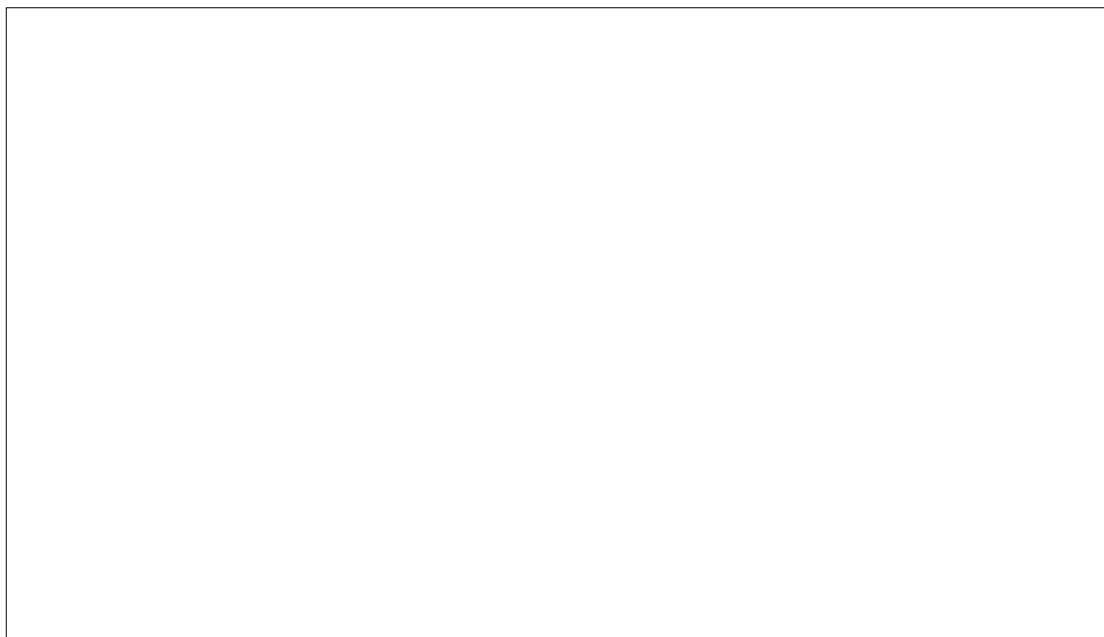


Figure 44 The RMS Garage interior.

4.9 Store

The Store is similar to the RMS Garage, being a very basic single-storey brick building with face brick walls and a shallow pitched gable roof. The southern half of the Store dates to the early 1970s. The northern half is a c1975 addition.



Figure 45 Store.



Figure 46 Store interior.

4.9 Garden Maintenance Shed

The Garden Maintenance Shed is a small utilitarian single-storey building with light brown brick walls matching the main ARRB complex.

4.9 Shed

The Shed, located on the south side of Research Wing 2, is a modern metal clad structure of generic design. It is a comparatively recent addition to the site.



Figure 47 (left) Garden Maintenance Shed.

Figure 48 (right) Shed.



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CHAPTER 5.0

COMPARATIVE ANALYSIS

5.1 Mockridge Stahle & Mitchell

The architectural practice of Mockridge Stahle & Mitchell is generally recognised as an important and innovative firm on the basis of their designs for educational and ecclesiastical buildings, particularly through the 1950s and 1960s. From early commissions such as the Melbourne Grammar School Boat House (1953) the architecture of Mockridge Stahle & Mitchell demonstrated a mediation between regionalism and Modernism.²⁵ Their buildings incorporated overseas influences associated with ‘New Empiricism’ – a term which was broadly applied in post-war decades to a contextualised and more humane strand of Modernist architecture.

Mockridge Stahle & Mitchell experimented with geometrical plans shapes in their ecclesiastical work, notably in the innovative circular form of St Faith’s Anglican Church, Charles Street, Glen Iris (1957-58) [VHR H2254]. Their design approach was distinguished by a frequent reference to context, rare in mid-century Melbourne modernism, exemplified in the Bromby Building at Melbourne Grammar School (1954, demolished) and the Camberwell Civic Centre (1967-69). The later was specifically designed to echo the neighbouring Victorian Boom-style Town Hall by using pre-cast panels with curved openings with deep reveals and splayed sills.

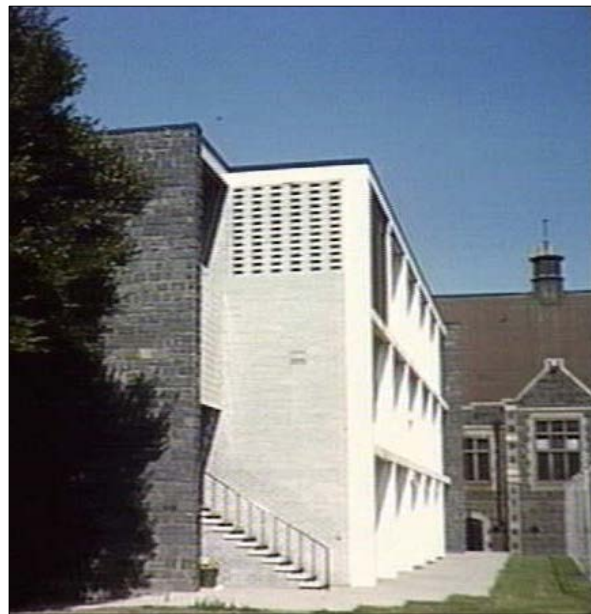
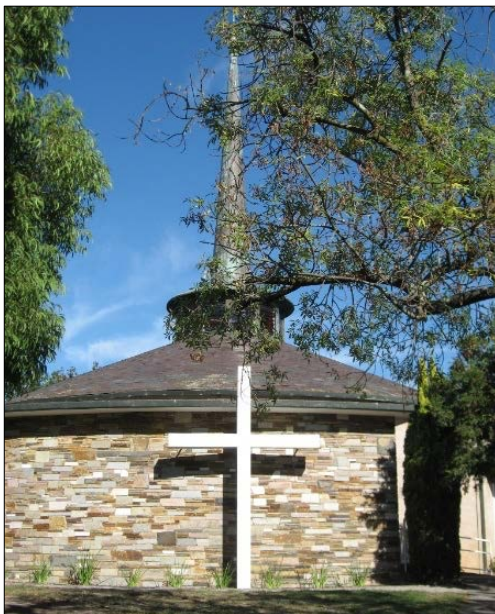


Figure 49 (left) *St Faith's Anglican Church, Glen Iris. Mockridge Stahle & Mitchell (1957-58).*

Figure 50 (right) *Bromby Building, Melbourne Grammar School. Mockridge Stahle & Mitchell (1954, now demolished).*

²⁵ Winsome Callister, ‘Mockridge, Stahle & Mitchell’ in *The Encyclopedia of Australian Architecture*, p.461.

The Camberwell Civic Centre's monumentality is simultaneously modern (ie block-like forms and pre-cast concrete units) and traditional (ie bluestone plinth, repetitive round-arched windows and grand entry portico). According to Simon Reeves of Built Heritage Pty Ltd, the Camberwell Civic Centre stands out within the oeuvre of Mockridge Stahle & Mitchell as a particularly large and important public commission.²⁶ By way of comparison, Reeves describes the ARRB complex as 'block like' and a 'much simpler design', lacking the distinctive historicist articulation that is such a striking part of the character of the Camberwell Civic Centre.²⁷ The ARRB complex also seems fairly modest in comparison to the monumental formalism of the buildings designed by Mockridge Stahle & Mitchell at La Trobe University. While the ARRB complex demonstrates Mockridge Stahle & Mitchell's skilful use of a regional modernist expression and their capability in the design of institutional buildings, it is not among the firm's most important works.



Figure 51 *A c2010 photograph of the Camberwell Civic Centre. Mockridge Stahle & Mitchell (1967-69). It forms part of the Camberwell Civic and Community Precinct (HO506, Boroondara Planning Scheme).*

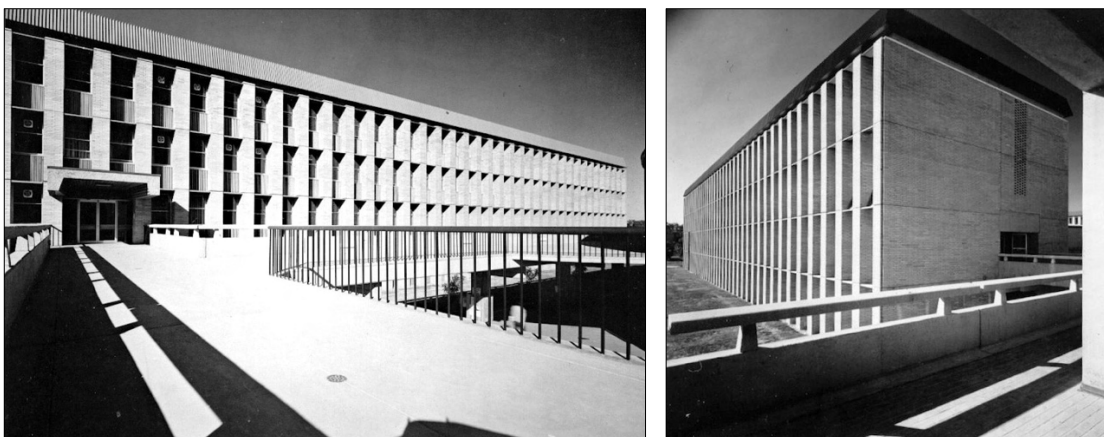


Figure 52 *c1970 photograph of the Social Sciences Building, La Trobe University. Mockridge Stahle & Mitchell (1970)*

²⁶ Built Heritage Pty Ltd, *Survey of Post War Built Heritage in Victoria: Stage 2*, p. 109.

²⁷ Built Heritage Pty Ltd, *Survey of Post War Built Heritage in Victoria: Stage 2*, p. 109.

5.2 Late-twentieth Century Modernism

While the ARRB complex was built for specialised research purposes, its site planning and architectural hierarchy can be compared with industrial buildings of the era. These sites typically had an architectural ‘show-piece’ office building to the front as the company’s public face, with ancillary staff amenities and larger utilitarian industrial buildings to the rear. A good example is the administration building at the former BP refinery, Crib Point (VHR H1016). Constructed in 1965 to a design by architect Don Henry Fulton, the BP administration building has a cantilevered glass curtain wall on the first floor overhung by cornice-like eaves and an enclosing colonnade. Designed as the flagship of the BP refinery, it demonstrates the desire of the company to create a high-quality corporate image against the backdrop of an industrial plant.



Figure 53 Former BP Refinery Administration Building, Crib Point. Architect Don Hendry Fulton (1965).

Perhaps the most directly comparable Melbourne building in terms of function is the former BHP Research Laboratories, Wellington Road, Mulgrave by architects Eggleston MacDonald & Secomb (1969). Clad in Cor-ten steel, the laboratory is an elegant, minimalist design with a crisp Miesian expression. The laboratory had a sunken courtyard to the rear with access to a staff dining room. As assessed by Andrew Ward, the BHP laboratory’s ‘understated’ landscape setting accentuates the architectural statement.²⁸ Eggleston MacDonald & Secomb designed a second modernist style wing to the rear of the site in 1992 with expressed diagonal structural members. The 1969 and 1992 wings are listed on the Monash heritage overlay schedule (HO85) with a curtilage of land to the front of the site and also encompassing the sunken courtyard. Much like the ARRB site, the original grounds of the former BHP Research Laboratories have been greatly reduced in extent. Only the two modernist buildings remain from a larger complex of BHP laboratories and the front setback (either side of the main 1969 facade) has been redeveloped with office buildings.

²⁸ Andrew Ward, *Monash Heritage Study*, 1999. Datasheet 22-2.



Figure 54 *A c1969 photograph of the BHP Research Laboratories, Wellington Road, Mulgrave. Source: State Library of Victoria.*



Figure 55 *A c1969 photograph of the BHP Research Laboratories, Wellington Road, Mulgrave. Source: State Library of Victoria.*

The site planning for the ARRB complex relying on modular design with flexibility for future expansion was in keeping with (by the late 1960s) long established principles of modernist architecture. A notable example of this approach in Australia is the Cameron Offices in Canberra, built in stages from 1969 to designs by architect John Andrews. The Cameron Offices are organised as seven wings of modular design, connected by an elevated pedestrian spine with access to landscaped courtyards. The design of the Cameron Offices had its origins in the concept of ‘mat-building’ in which the plan form is conceived as a series of interconnected modules generally adopting a standardised pattern but with scope for flexibility according to programmatic needs. Dutch architect Aldo van Eyck’s Amsterdam orphanage (1955-60) exemplified mat building principles by using domed roof modules set on orthogonal grid. The ARRB complex adopts a less sophisticated approach to serial/modular planning and is more closely aligned to the ‘finger plan’ schools conceived in the 1930s by Californian architect Ernest Kump. The finger plan sought to optimise access to daylight and open space by organising classrooms as separate modules connected by covered walkways. Further classroom modules could be added as required to accommodate growing student populations.

Anticipating future expansion was also a major concern for university campuses established on greenfield suburban sites in post war Australia. The masterplan for La Trobe University (1964-67) by Roy Simpson allowed for phased development (with each stage presenting as a completed entity), flexibility for growth and change within the buildings and services, and affinity of design between all buildings and between buildings and the landscape.²⁹ A central open space, known as the Agora, was surrounded by a checkerboard arrangement of academic buildings and landscaped courtyards, with a raised circulation concourse connecting them. The courtyards and covered walkway at the ARRB are planned along similar lines, albeit on a much smaller scale. The masterplan for Macquarie University, Sydney (1965) also sought to accommodate future growth using a grid layout with buildings connected by a pedestrian spine. This demonstrated trends in post war campus design that emphasised walkability and the desirability of attractively landscaped public areas connected to key hubs.

Similar architectural principles are evident in Michael Dysart’s designs for high schools in New South Wales. Conceived in 1958, Dysart’s ‘doughnut’ plant schools combined traditional planning strategies based on cloisters and quadrangles, creating intimate courtyard spaces and large gathering places. Dysart’s work reflects a broader principles of 1960s school design that sought to provide flexible learning environments, with architects often working in collaboration with landscape architects to highlight the qualities of the site and the potential for engagement with nature.³⁰ Landscape design for institutional /education complexes in the late 1960s invariably made use of native trees and plants. As observed by Robin Boyd, modernist architecture and Australian trees *‘have been practically inseparable from the first moment they met’*.³¹ By the late 1960s, the ‘bush garden’ had emerged as a local style, based on a predominate use of Australian plants in naturalistic combinations, commonly with other complementary natural materials such as timber, rocks and water.

Having regard for the above, it is apparent that the original design concept for the ARRB complex based on modular units with flexible plan forms, access to open space, and the capacity for future expansion was not innovative or unusual for its period of construction. The informal landscape design at the ARRB and the predominate use of native trees also reflected a fairly widespread approach for institutional/education sites in the 1960s.

29 Roy Simpson ‘The Master Plan’ in *Building La Trobe University*, p. 42.

30 Cameron Logan ‘Education’ in *Australia Modern*, p. 56.

31 Richard Aitken, *Cultivating Modernism*, p. 155.

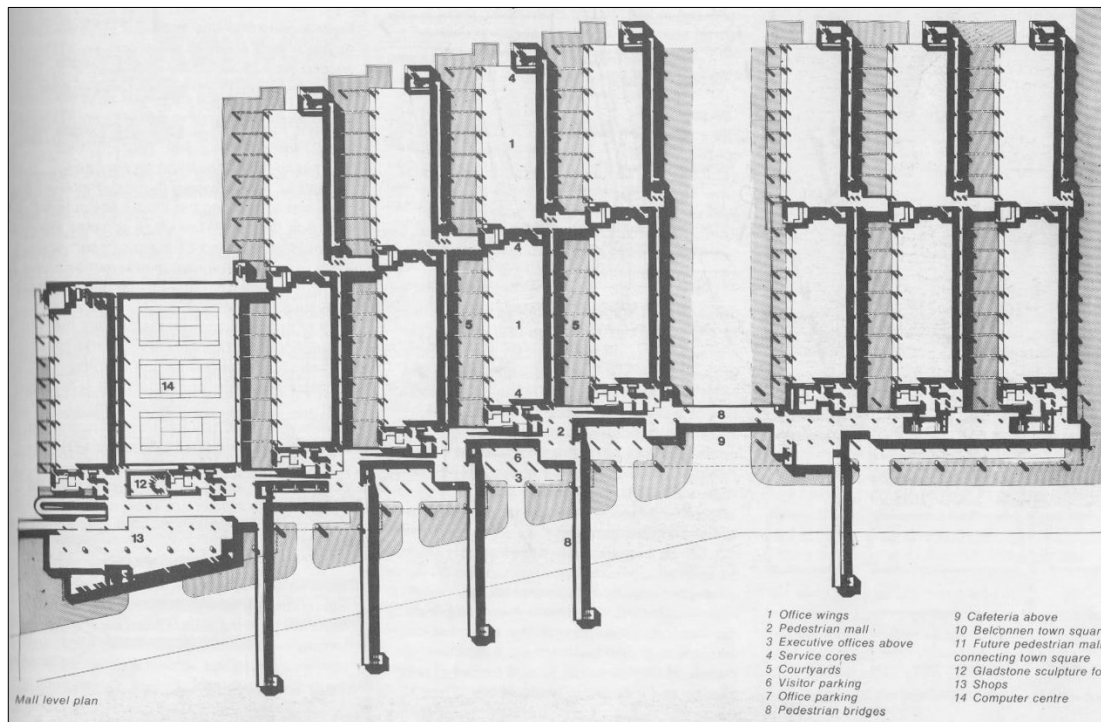


Figure 56 Plan of Cameron Offices, Canberra. Architect John Andrews.

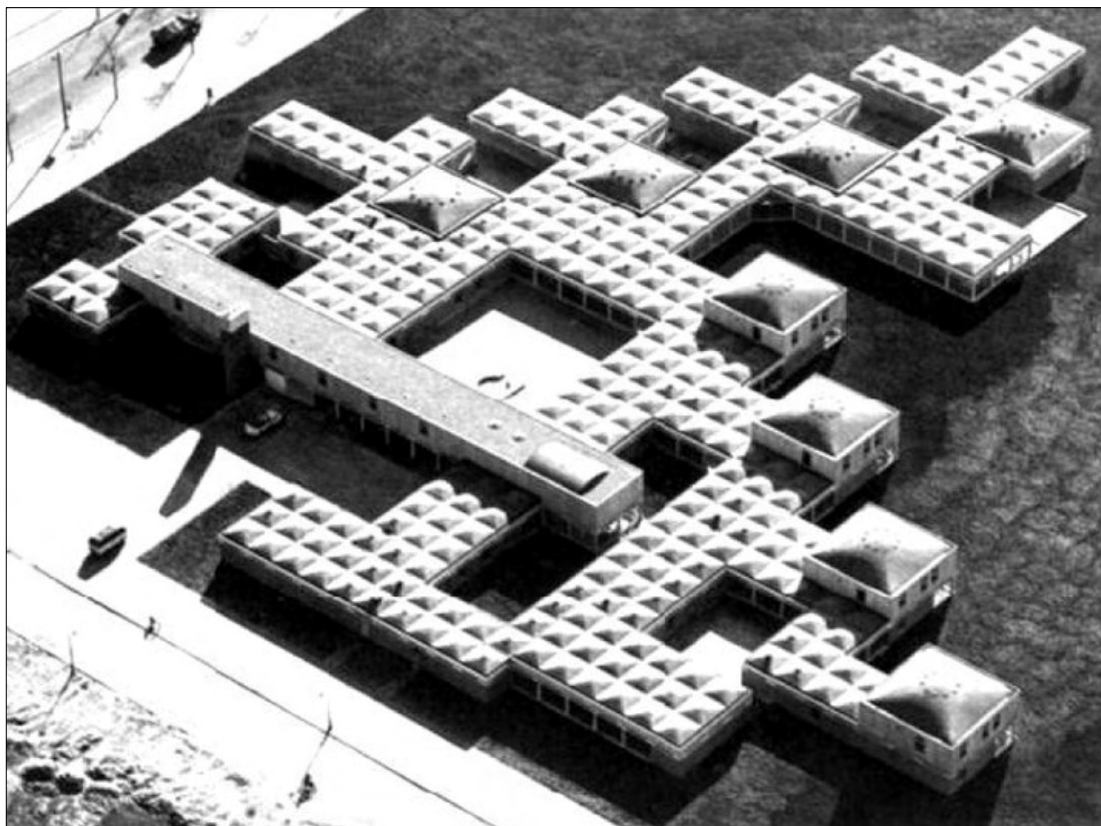


Figure 57 Amsterdam Orphanage, Aldo van Eyck (1960).

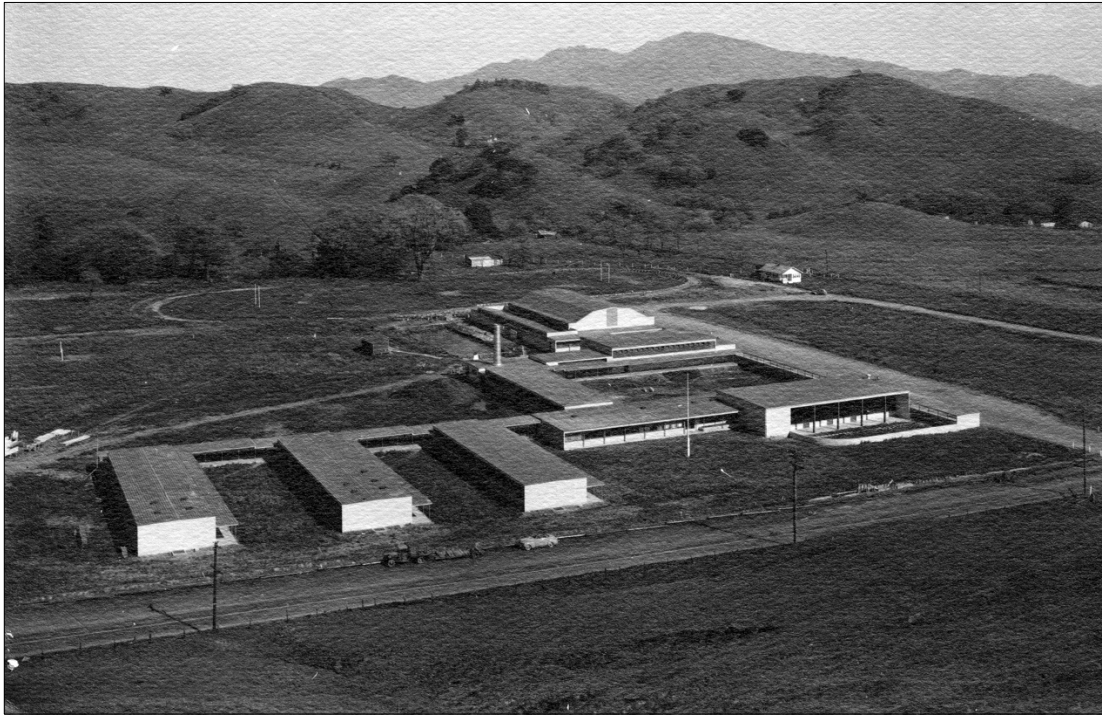


Figure 58 *Acalanes Union High School, California, 1940. Architects Franklin & Kump. Source: Environmental Design Archives, University of California, Berkeley.*



Figure 59 *A 1954 photograph Acalanes Union High School showing further expansion using a repetitive classroom module connected by covered walkways. Source: http://www.acalanes61.com/class_gallery.cfm?gallery_link_id=14790*



Figure 60 The 1965 masterplan for La Trobe University. Source: *Building La Trobe University*.

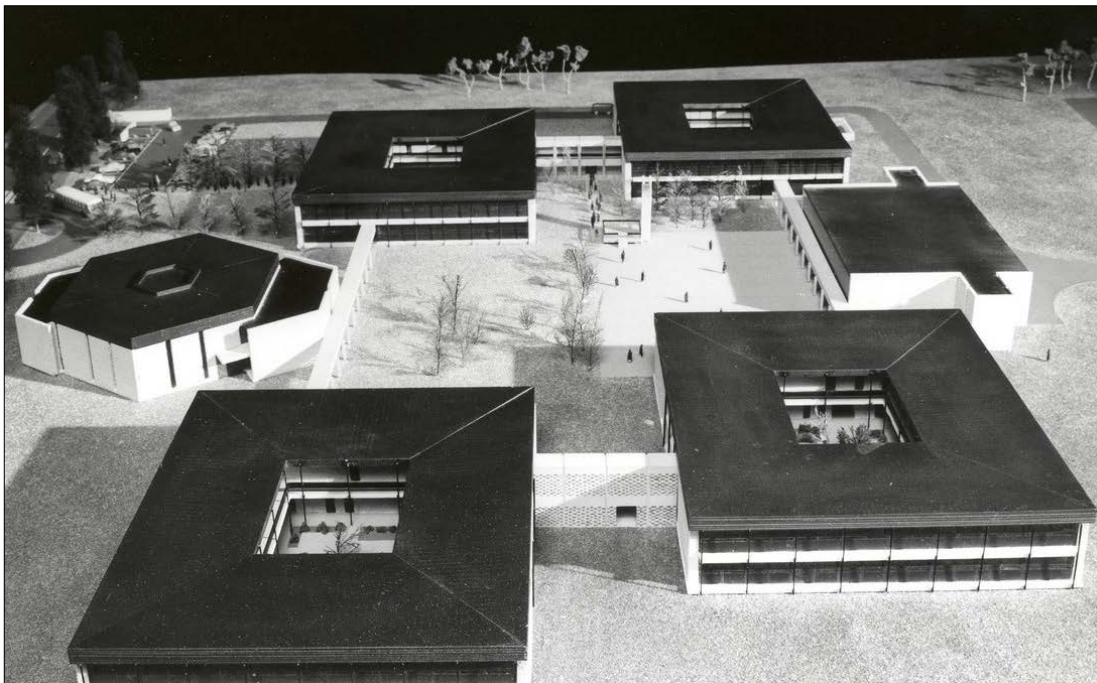


Figure 61 A model of architect Michael Dysart's 'doughnut' plan for New South Wales High Schools (undated). Source: *ArchitectureAU*.

CHAPTER 6.0

SIGNIFICANCE

6.1 The Concept of Cultural Significance

The assessment of significance requires an objective analysis of the values that contribute to distinguishing a particular place. While there is a subjective element in such an assessment the objective is to avoid making judgements within narrow preferences, biased by particular interests or without historical perspective. The history, description and analysis developed in the previous chapters has sought to provide material sufficient to make this assessment. The following brings together the major elements identified with respect to the significance of the place.

6.2 Statement of Significance

A statement of significance for the site is included in the *City of Whitehorse Heritage Review* as follows:

The Australian Road Research Board building is of aesthetic significance. It is a fine example of an office building designed by the important Melbourne firm of Mockridge, Stahle & Mitchell. Through its simple massing and composition, particularly the repetitive fenestration and assured use of face masonry, the building is a confident example of the type of building which typified institutional, and to a lesser extent commercial, architecture in the late 1960s and early 1970s. The building is enhanced by its large landscape site, designed by important landscape architect Beryl Mann.

This CMP generally concurs with the above assessment, although it is to be recognised that the ARRB site is much reduced from its original extent, and that aspects of the Beryl Mann designed landscape have been lost or otherwise diminished.

6.3 Relationship between Significance and Extant Fabric

At present, all of the former ARRB complex is included within the heritage overlay. Within this heritage overlay curtilage, there is some variation in the degree of significance of different constituent elements. These may be categorised using a three-tiered classification system that divides the fabric into that which is of primary significance, that which is of secondary significance, and that which is of little/no significance.

The Administration Building is of primary significance to the extent of its original external form and fabric. The Administration Building's elliptical main stair is of secondary significance as the most architecturally distinctive interior within the complex. All other interiors are of little or no significance.

Research Wings 1 and 2 and the West Wing are of secondary significance to the extent of their 1970s external form and fabric. While they form part of the complex's initial stage of development, the Research Wings are utilitarian in appearance and do not exemplify the work of architects Mockridge Stahle & Mitchell. The plain design of the Research Wings also renders them of limited interpretative potential in terms of understanding their original function. All other buildings and structures on the site are of little or no significance.

The significance of trees and other soft landscape elements was not assessed in detail as part of this CMP. However, it is recognised that the sweeping lawn to the front of the site and associated mature native trees in the front setback contribute to the setting of the Administration Building. The overall layout of the complex with courtyards separating the buildings is of contributory significance. All other landscape elements, including roads, paths, paving materials, the former tennis courts, signage, fencing and lighting, are of little or no significance.

Further to the significance of the ARRB landscape, it is again noted that Beryl Mann’s original concept for the site has been compromised by subdivision of the land and the substantial reduction in the curtilage provided to the buildings. As discussed in Chapter 5 of this CMP, Beryl Mann’s use of open lawns in combination with informally planted native trees was not remarkable for the period in which the ARRB complex was first developed. Moreover, the courtyard to the south of the Administration Building is basically an area of undulating open lawn with various native trees and shrubs to its perimeter. Much of the courtyard between Research Wings R1 and R3 is occupied by visually unattractive hard stand carparking.



Figure 62 The former ARRB site plan showing levels of significance (not to scale). !

CHAPTER 7.0

CONSERVATION POLICY

7.1 Introduction

The following conservation policy has been developed with regard to the significance of the former ARRB complex and is intended as a guide to the manner in which the place should be treated to maintain that significance. Specifically, the intention of the conservation policy is to provide a framework for the future use and conservation of the complex including protection of the significant fabric. Broadly speaking, it is hoped that this policy will enable the place to retain its significant architectural character while allowing for adaptive reuse and future redevelopment. A detailed guide to periods of construction, and to the nature and significance of individual elements of the fabric, information that informs these policies, can be found elsewhere in this report.

This CMP has been prepared in response to a proposal for redevelopment of the site with a mix apartments and townhouses, involving demolition of all existing built form other than the Administration Building. It is standard conservation practice in Australia to prepare CMPs with a view to issues of significance and without specific reference to any particular proposal. In the present instance there has been an attempt to acknowledge issues specific to the current proposal as well as other issues that would remain relevant even if the redevelopment were not to take place.

The conservation policy is based on the processes outlined within the *Burra Charter*, the charter of Australia ICOMOS, which has been adopted by most governmental and private conservation bodies and individuals in Australia. The Burra Charter is reproduced in full as Appendix B.

The policy below outlines broad principles that are recommended be formally adopted as policy. All decisions concerning future modifications to the site should adhere to these principles. It is intended that this policy and the CMP as a whole should be endorsed by the City of Whitehorse.

7.2 Fabric and Setting

The former ARRB complex is recognised as a place of local significance pursuant to the Statement of Significance cited in Chapter 6, and is subject to a heritage overlay control. The significance of the place is primarily related to the external architectural character of the Administration Building.

Before undertaking any works, whether redevelopment, repairs or maintenance, consideration should be given to the level of significance of the fabric that will be affected and the impact of any proposed works on the fabric. To assist in these works, the guidelines contained in the Burra Charter should be used in consideration of any proposed building works.

As noted in Chapter 6.0 of this CMP, the elements of the place that comprise the former ARRB complex may be classified according to their relative levels of significance using a three-tiered classification system of primary, secondary and little/no significance.

Before undertaking any works on the building, consideration should be given to the significance of the fabric which will be affected and the impact of any proposed works on the fabric. To assist in these works, the guidelines contained in the Burra Charter should be used in consideration of any proposed building works. Most notably, every effort should be taken to preserve and maintain fabric of primary significance. No works that affect fabric of primary significance, other than maintenance and repair, should be undertaken without consultation with the City of Whitehorse.

Specific policies for the future retention and management of built fabric on the site will vary according to the level of significance attributed individual elements. In general, it is preferable that alterations, additions and/or partial demolition be confined to those parts of the fabric deemed to be of secondary or little/no significance. Where original fabric can be revealed or reinforced by sympathetic new works then this approach is encouraged.

Elements of Primary Significance

Elements and spaces of primary significance are those that contribute in a fundamental way to an understanding of the significance of the site and are predominantly intact in form and fabric to the significant phase of the site's development. These elements should be retained and restored.

Elements deemed to be of primary significance include:

- The Administration Building to the extent of its original external form and fabric.

In the event that retention of any significant elements is not possible, the affected fabric should be recorded by way of an archival quality photographic record, which should be lodged with the City of Whitehorse.

Secondary Significance

Elements and spaces of secondary significance are of a contributory nature in understanding the overall significance of the site. While they contribute to understanding the history and significance of the place, they are not of individual distinction with regard to the original plan form, fabric or function. They may not be completely intact to their original construction and form. Their key role may be in contributing to the setting of the place.

Elements of secondary significance should preferably be retained but might be removed or altered as part of an otherwise supportable redevelopment of the site that provides a sustainable future for the place.

Elements of secondary significance are listed in the previous chapter, and include:

- The West Wing and Research Wings 1 and 2 (and associated covered walkways) to the extent of their 1970s external form and fabric.
- The open lawn, flagpoles and mature native trees in the front setback of the Administration Building.
- The main stair in the Administration Building.
- The planning concept using repetitive building modules separated by courtyards and connected by a main pedestrian spine (but not the fabric of the courtyards).

Little/No Significance

These are elements and spaces that contribute little or nothing to an overall understanding of the significance of the site, and which may be so heavily altered as to have lost whatever significance they originally had. These elements may be retained or demolished as required.

Elements of little or no significance are listed in the previous chapter, and include:

- Research Wing 3, the Truck Bay/Mezzanine, Store, Shed, RMS Garage, Concrete Labs/HV Workshop, Garden Maintenance Shed and electrical substation.
- All interiors other than the main stair in the Administration Building.
- Internal roads and paths, the former tennis courts, signage, lighting and all fencing.

7.3 Use

Adaptive reuse of the ARRB buildings need not diminish the identified cultural heritage of the site, and it is capable of supporting a number of use alternatives, including residential or commercial use. All future use(s) for the site must be consistent with the retention of elements of primary significance.

The use of the site by the ARRB has discontinued and is unlikely to be reinstated. The current proposal for an apartment and townhouse development is an appropriate use. A number of other uses, such as commercial offices or school/university campus, would also be acceptable, providing impact upon the place's significant fabric and setting is carefully controlled.

7.4 Interpretation

An interpretative strategy should be devised to explain aspects of the site history that are not readily demonstrated by the built form.

To further understand the history and significance of the place, it is recommended that an interpretative strategy be devised. This would ideally include interpretative signage (located in publicly accessible areas of the site) with historical images and text the describing the occupation of the site by the ARRB.

Interpretation of the place may also be achieved through secondary sources, such as this CMP, the records of the architectural practice of Mockridge Stahle & Mitchell (forming part of the State Library of Victoria's Manuscripts Collection) and past ARRB reports and publications (available through the ARRB's online 'Knowledge Base' at: www.arrb.com.au/national-interest-services). It would also be appropriate to undertake an archival photographic survey of the place by a professional photographer prior to any major new works.

7.5 Management

The site manager/owners will be required to liaise with the City of Whitehorse on any proposed works to the buildings of identified significance other than straightforward repairs and general maintenance.

The owner(s) of the buildings should have overall responsibility for the implementation of the conservation plan. Additionally, users of the site or any future lessees/tenants, should also be responsible for ensuring that the objectives of this CMP are met.

7.6 Control of Physical Intervention in the Fabric

Interventions at the place which result in the loss of fabric of primary significance, as identified in Chapter 6, should be avoided wherever possible. The City of Whitehorse should be advised of any work that might result in the loss of original fabric, and consulted regarding its appropriateness. Permits will be required for works.

Present and future owners should be discouraged from works that involve the loss of fabric of primary significance. The significance of the place rests primarily with the architectural character of the Administration Building, and in particular the largely intact front facade. Consequently, there is limited scope for interventions to this facade other than works that are essential to the adaptive reuse of the place (eg alterations to provide DDA compliant access). The plainer side and rear parts of the Administration Building could withstand a greater degree of change. It is noted that the Administration Building was originally designed to support an upper level addition (the extent of which is not known) as well as a future theatre addition to the south-west corner of the dining area. As such, retention of the building envelope to its present extent is not integral to an appreciation of architectural significance.

Retention of the Administration Building's main stair remains the preferred heritage outcome although it is noted that the Heritage Overlay does not at the time of writing provide internal alteration controls for this site.

Where repairs are necessary, effort should be made to retain the surviving original fabric of primary significance, rather than replace it with new fabric of a similar material or design. Where fabric is unable to be repaired and/or reused, it should be replaced with a compatible alternative of similar appearance.

It is recommended that no works be undertaken without the guidance of tradesmen or other persons skilled in the particular tasks to hand.

7.8 Future Development

Future works should not detract from the legibility or appearance of Administration Building facade and the landscaped setting to its front. New external structures should be readily distinguishable from the significant fabric.

It is again noted that this CMP has been prepared in response to a proposal for redevelopment of the site with townhouses and apartments. All existing building form on the site would be demolished apart from the Administration Building. Residential development would occur on the balance of the land, at heights ranging from 3 to 6 storeys.

The intention at this stage is to adapt the Administration Building for residential use. New buildings are proposed for the north-west and north-east corners of the site. These buildings adopt a triangular plan form to minimize interference with sightlines to the front of the Administration Building.

The current proposal also includes a landscape strategy that references Beryl Mann's approach to native garden design whilst also retaining stands of mature native trees and the area of lawn to the front of the Administration Building. This is an appropriate design response having regard for the identified levels of significance. In respect to the potential loss of other original landscape elements, it is noted that there are presently no tree controls under the heritage overlay. Furthermore, the integrity of the original landscape design has already been compromised to a degree due to large portions of the site having been sold off and redeveloped with a retirement village/aged care facility.

The site can accommodate development at its north east and north west corners without adverse impacts on the significance of place. Development in the north-west corner of the site would not unreasonably interfere with views to the Administration Building from Burwood Highway - noting that there are already buildings in this location, and also because of the concealment afforded by the dense tree plantings. To the extent that development in the north-east corner of the site would conceal views to the Administration Building, it is noted that the ARRB complex presently does not have a strong streetscape presence on account of the boundary tree plantings, its deep front setback and its siting on lower ground. Historically, maintaining high level of public exposure was more a concern for commercial places and industrial complexes where the front office buildings were often designed as a 'billboard' for the company.

The potential for new development to interfere with views to the Administration Building façade would need to be tested through sightline diagrams and 3D modelling of any new proposal. To this end, the proposed Design and Development Overlay for the former ARRB site includes a requirement that the visual impact of new development be tested through view line analysis and 3D modelling from vantages along Burwood Highway and surrounding areas. It is appropriate that the impacts of development in the front setback be tested at the application stage, noting that the suitability of such development would best be determined with an understanding of the massing, setbacks, architectural character and materiality of new built form.

With respect to the potential loss of the existing courtyards, it is recognized that they form part of the original design concept, but they do not have an attractive landscape character, per se. The principal role of the courtyards is to provide open space between the buildings, rather than being inherently significant because of their precise configuration and plantings. Furthermore, the architect's original narrative brief does not suggest that the courtyards were so essential to the design concept as to prevent their enclosure, to quote the brief: '*immediate expansion is readily achieved by roofing the 3 enclosed courtyards*'.³² As such, retention of the existing footprint of the courtyards between the Administration Building and Research Wings is not seen as essential provided that the general courtyard schema is interpreted in any future development. The current proposal achieves this objective, noting that amendments to the scheme have been made to provide larger open space to the south of the Administration Building.

It is important that new built form proximate to the Administration Building designed with appropriate regard for the character, appearance and significance of the place, while nonetheless being expressive of its own time, i.e. good contemporary design.

³² *Australian Road Research Board, Head Office and Research Centre, Burwood Highway, Nunavading Melbourne. Narrative Brief.* Mockridge Stahle & Mitchell Architects. p.17.

In a very general sense it would also be appropriate for new development fronting Burwood Highway and behind the Administration Building to be designed to create an architecturally neutral setting to the Administration Building. Similarly, upper level additions could be made to the Administration Building, provided they are setback from the facade and have a visually recessive architectural character.

7.8 Extent of Heritage Overlay

It is appropriate that the extent of the heritage overlay be reconsidered with an emphasis on protecting the elements of primary significance.

As previously noted, a Heritage Overlay applies to all of the site. The Heritage Overlay could reasonably be reduced in extent to that buildings of primary and secondary significance (ie the Administration Building, West Wing and Research Wings 1 & 2), the front setback and a curtilage of land to the sides of the buildings [excluding built form elements of little or no significance]. That said, a reduction in the extent of the Heritage Overlay is not sought as part of the current proposal for redevelopment. In the event that the proposed redevelopment occurs, it would be a sensible planning outcome for the Heritage Overlay curtilage to be reduced to the extent of the Administration Building, its front setback to Burwood Highway, the east boundary of the site, the western driveway alignment and a boundary drawn in a straight line 5 metres out from the rear elevation of the Administration Building. This would be consistent with recent approaches to the mapping of institutional/educational Heritage Overlay sites, including Methodist Ladies College, Kew. A 5 metre curtilage was typically provided to the rear of the College's heritage buildings as part of Amendment C305 to the Boroondara Planning Scheme (refer figure 64 below).

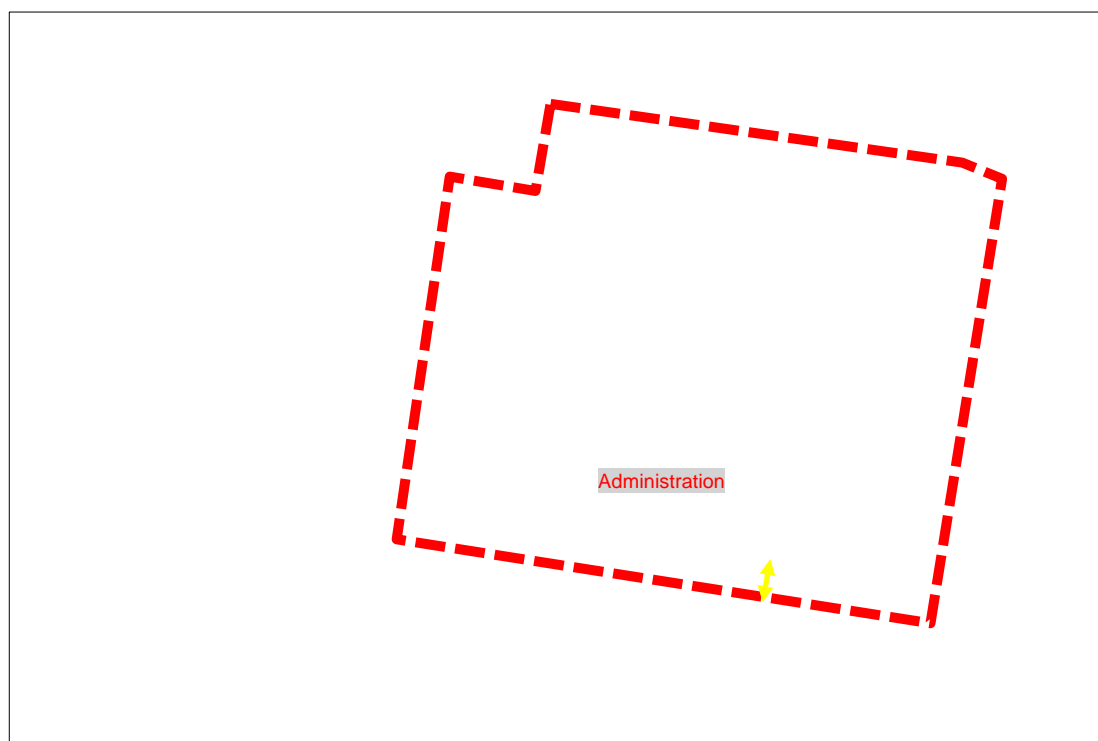


Figure 63 Revised Heritage Overlay curtilage recommended for the former ARRB site (in the event that the site is redeveloped as currently proposed).



Figure 64 Extract from the Incorporated Document for Methodist Ladies College showing the Heritage Overlay curtilage recently introduced as part of Boroondara Amendment C305.

7.9 Adoption and Review

This Conservation Management Plan should be reviewed at a maximum interval of ten years in consultation with the City of Whitehorse.

It is standard practice for conservation management plans to be reviewed at regular intervals, to ensure that they make provision for the changing circumstances of the particular place and to accommodate new information and improved conservation technologies and philosophies. This 2021 document should be reviewed within the next ten years.

7.11 Maintenance and Repair

A systematized programme of inspection, repairs and routine maintenance should be implemented so as to preserve significant fabric into the future.

The ARRB buildings generally appear to be in good condition, although the metal deck roofing exhibits widespread surface corrosion, and the paint finish to the Administration Building's metal parapet coping is peeling/decaying. Subject to further detailed inspection, the roof cladding and coping may be replaced to match existing.

There was also localised cracking to the Administration Building's north elevation (at the eastern end of the three-storey wing, above the roof terrace). The cracks, and the building more generally, should be inspected by a suitably experienced structural engineer and rectified or monitored as required. Affected brickwork is to be repaired to match existing.

In addition to the conservation works described above, a maintenance program should be prepared (if such a program does not already exist) to give detailed guidance regarding the repair and ongoing maintenance of the ARRB complex. The maintenance program would include the following:

- Inspect roofs, gutters, rainwater heads and downpipes every six months, or more frequently if required. Remove debris and vegetation, and rectify defects as required to maintain the storm water disposal system in a sound operational condition.
- Inspect doors and window frames every 12 months and ensure that they are sound and watertight.
- Inspect brickwork every 12 months for loose, fretted, broken or missing mortar joints and bricks.
- Inspect external horizontal surfaces every 12 months for grime, organic growth from joints and bird excretion.
- Inspect heritage fabric for any evidence of structural movement or dampness every three years. Undertake rectification works as required.
- Subject to inspection and assessment of condition, repaint all external painted surfaces every seven years.

As a general rule, problems with the building fabric should be investigated in detail to determine the likely cause before any repairs are undertaken.

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Trove (Pictures, Photos, Objects)

Manuscripts Collections

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Building:	Australian Road Research Board	Significance:	B
Address:	500 Burwood Highway, Vermont South	Melway Map Ref:	62 H8

Building Type:	Office	Construction Date:	1970
Architect:	Mockridge, Stahle & Mitchell	Builder:	Unknown



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G[x] F[] P[]

Condition:
G[x] F[] P[]

Existing Heritage Listings:

Victorian Heritage Register	[]
Register of the National Estate	[]
National Trust	[]

Recommended Heritage Listings:

Victorian Heritage Register	[]
Register of the National Estate	[x]
Heritage Overlay Controls	[x]

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History

The Australian Road Research Board conducts research in many fields related to traffic, transport and the use of roads. In the late 1960s, the Board acquired a fifteen-acre site in Vermont to establish their headquarters, which were to be a large complex of offices, workshops, laboratories and other research facilities. The site, located on the south side of Burwood Highway, was formerly an orchard, and it offered 'excellent views of the Dandenongs'.¹ The distinguished architectural firm of Mockridge, Stahle & Mitchell was appointed to design the building, budgeted at one million dollars.

The principal of the firm, John Mockridge (1916-1994), trained at the Gordon Institute, now Deakin University, in Geelong. In 1948, he established the firm with two other young architects, Ross Stahle and George Mitchell. The work of the practice was largely residential and institutional, and included the Roman Catholic churches in Ivanhoe and Heidelberg, the Anglican Church of St Faith's in Burwood and work in several private schools including Brighton Grammar, Haileybury, Geelong College and Ivanhoe Grammar.²

The ARRB building at Vermont South was designed for maximum flexibility. Its structure was designed so that an additional storey could be added if needed later, and had three courtyards which similarly could be enclosed if more space was required. The plan was laid out on a 15' module, with external walls in the form of non-structural brick infill panels. This allowed flexibility in creating new doorways. Despite this functionalist approach, aesthetics was still a major consideration. At the sketch design stage, the architects proposed that:

by the simplicity and dignity, [the building] will attract staff and at the same time provide a good background for public relations to visitors and representatives of other interested bodies who in turn attract money towards the cost of the functions of the Board.³

The garden around the ARRB building was designed by noted landscape architect Beryl Mann. Like John Mockridge, Mann had studied architecture at Gordon Institute in Geelong in the 1930s but she later turned to landscaping, completing a course in horticulture at Burnley College in 1939. She joined Mockridge, Stahle & Mitchell in 1948, and worked both as an architect and a landscape designer. She became an associate of the firm in 1961, and retired in 1975.⁴ In landscaping the huge site at Vermont, Mann proposed the retention of several large remnant eucalypts; she also recommended that the boundaries be densely planted with native trees to act both as windbreaks and to screen the building from any future residential development around the site. She perceptively noted that the landscaping provided 'the opportunity for the testing and display of plants suitable for roadside or road median planting'.⁵

Description

The Australian Road Research Board headquarters is a office building, in the 'late twentieth century stripped classical' style.⁶ The building is concrete-framed with non-structural fawn brick infill and a flat steel deck roof. In plan, the building has a long central corridor with several elongated wings that project alternately from either side. The street front consists of a double-storey administration wing and a double-height lobby/dining room wing, while the wings at the rear are mostly single-storey. The fenestration is regular and repetitive, comprising high windows with deep reveals and splayed sills. They contain aluminium framed sashes with grey-tinted glazing.

The building occupies a very large site which is landscaped with well-established native trees.

Comparative Examples

Camberwell Civic Centre, 340 Camberwell Road, Camberwell (Mockridge, Stahle & Mitchell, 1971)
Library, La Trobe University, Bundoora
National Gallery of Victoria, St Kilda Road, Melbourne

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Significance

The Australian Road Research Board building is of aesthetic significance. It is a fine example of an office building designed by the important Melbourne firm of Mockridge, Stahle & Mitchell. Through its simple massing and composition, particularly the repetitive fenestration and assured use of face masonry, the building is a confident example of the type of building which typified institutional, and to a lesser extent commercial, architecture in the late 1960s and early 1970s. The building is enhanced by its large landscaped site, designed by important landscape architect Beryl Mann.

Source

Context Pty Ltd. *City of Nunawading Heritage Survey Project*. 1994. (Graded C)

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- 1 Mockridge, Stahle & Mitchell. 'Australian Road Research Board, Head Office and Research Centre: Narrative Brief'. Unpublished typescript, 5 November 1969. Mockridge Stahle & Mitchell Archive, Australian Manuscripts Collection, State Library of Victoria.
 - 2 Obituary, *The Age*, Tuesday 6 December 1994, p. 18.
 - 3 Mockridge, Stahle & Mitchell. 'Australian Road Research Board, Head Office and Research Centre: Narrative Brief'. Unpublished typescript, 5 November 1969.
 - 4 Ruth Sanderson. 'Beryl Mann: Her Contribution to Landscape Architecture in Australia'. *Landscape Australia* VI, 4 (November 1984), pp 304ff.
 - 5 Mockridge, Stahle & Mitchell. 'Australian Road Research Board, Head Office and Research Centre: Narrative Brief'. Unpublished typescript, 5 November 1969. p 14.
 - 6 Richard Apperly et al. *A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present*. North Ryde, NSW, 1989.

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Preamble

Considering the International Charter for the Conservation and Restoration of Monuments and Sites (Venice 1964), and the Resolutions of the 5th General Assembly of the International Council on Monuments and Sites (ICOMOS) (Moscow 1978), the Burra Charter was adopted by Australia ICOMOS (the Australian National Committee of ICOMOS) on 19 August 1979 at Burra, South Australia. Revisions were adopted on 23 February 1981, 23 April 1988, 26 November 1999 and 31 October 2013.

The Burra Charter provides guidance for the conservation and management of places of cultural significance (cultural heritage places), and is based on the knowledge and experience of Australia ICOMOS members. Conservation is an integral part of the management of places of cultural significance and is an ongoing responsibility.

Who is the Charter for?

The Charter sets a standard of practice for those who provide advice, make decisions about, or undertake works to places of cultural significance, including owners, managers and custodians.

Using the Charter

The Charter should be read as a whole. Many articles are interdependent.

The key concepts are included in the Conservation Principles section and these are further developed in the Conservation Processes and Conservation Practice sections. The flow chart explains the Burra Charter Process (Article 6) and is an integral part of the Charter. Explanatory Notes also form part of the Charter.

The Charter is self-contained, but aspects of its use and application are further explained, in a series of Australia ICOMOS Practice Notes, in The Illustrated Burra Charter, and in other guiding documents available from the Australia ICOMOS web site: australia.icomos.org.

What places does the Charter apply to?

The Charter can be applied to all types of places of cultural significance including natural, Indigenous and historic places with cultural values.

The standards of other organisations may also be relevant. These include the Australian Natural Heritage Charter, Ask First: a guide to respecting Indigenous heritage places and values and Significance 2.0: a guide to assessing the significance of collections.

National and international charters and other doctrine may be relevant. See australia.icomos.org.

Why conserve?

Places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records, that are important expressions of Australian identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and the Australian landscape. They are irreplaceable and precious.

These places of cultural significance must be conserved for present and future generations in accordance with the principle of inter-generational equity.

The Burra Charter advocates a cautious approach to change: do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained.

Articles

Article 1. Definitions

For the purposes of this Charter:

- 1.1 Place means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.
- 1.2 Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.
Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.
Places may have a range of values for different individuals or groups.
- 1.3 Fabric means all the physical material of the place including elements, fixtures, contents, and objects.
- 1.4 Conservation means all the processes of looking after a place so as to retain its cultural significance.
- 1.5 Maintenance means the continuous protective care of a place, and its setting.

Maintenance is to be distinguished from repair which involves restoration or reconstruction.
- 1.6 Preservation means maintaining the fabric of a place in its existing state and retarding deterioration.
- 1.7 Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- 1.8 Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric.
- 1.9 Adaptation means changing a place to suit the existing use or a proposed use.
- 1.10 Use means the functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.
- 1.11 Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.
- 1.12 Setting means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.
- 1.13 Related place means a place that contributes to the cultural significance of another place.
- 1.14 Related object means an object that contributes to the cultural significance of a place but is not at the place.
- 1.15 Associations mean the connections that exist between people and a place.
- 1.16 Meanings denote what a place signifies, indicates, evokes or expresses to people.
- 1.17 Interpretation means all the ways of presenting the cultural significance of a place.

Conservation Principles

Article 2. Conservation and management

- 2.1 Places of cultural significance should be conserved.
- 2.2 The aim of conservation is to retain the cultural significance of a place.
- 2.3 Conservation is an integral part of good management of places of cultural significance.
- 2.4 Places of cultural significance should be safeguarded and not put at risk or left in a vulnerable state.

Article 3. Cautious approach

- 3.1 Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.
- 3.2 Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 4. Knowledge, skills and techniques

- 4.1 Conservation should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the place.
- 4.2 Traditional techniques and materials are preferred for the conservation of significant fabric. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.

Article 5. Values

- 5.1 Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.
- 5.2 Relative degrees of cultural significance may lead to different conservation actions at a place.

Article 6. Burra Charter process

- 6.1 The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy. This is the Burra Charter Process.
- 6.2 The policy for managing a place must be based on an understanding of its cultural significance.
- 6.3 Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.
- 6.4 In developing an effective policy, different ways to retain cultural significance and address other factors may need to be explored.
- 6.5 Changes in circumstances, or new information or perspectives, may require reiteration of part or all of the Burra Charter Process.

Article 7. Use

- 7.1 Where the use of a place is of cultural significance it should be retained.
- 7.2 A place should have a compatible use.

Article 8. Setting

Conservation requires the retention of an appropriate setting. This includes retention of the visual and sensory setting, as well as the retention of spiritual and other cultural relationships that contribute to the cultural significance of the place.

New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.

Article 9. Location

- 9.1 The physical location of a place is part of its cultural significance. A building, work or other element of a place should remain in its historical location. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
- 9.2 Some buildings, works or other elements of places were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other elements do not have significant links with their present location, removal may be appropriate.
- 9.3 If any building, work or other element is moved, it should be moved to an appropriate location and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.

Article 10. Contents

Contents, fixtures and objects which contribute to the cultural significance of a place should be retained at that place. Their removal is unacceptable unless it is: the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place. Such contents, fixtures and objects should be returned where circumstances permit and it is culturally appropriate.

Article 11. Related places and objects

The contribution which related places and related objects make to the cultural significance of the place should be retained.

Article 12. Participation

Conservation, interpretation and management of a place should provide for the participation of people for whom the place has special associations and meanings, or who have social, spiritual or other cultural responsibilities for the place.

Article 13. Co-existence of cultural values

Co-existence of cultural values should be recognised, respected and encouraged, especially in cases where they conflict.

Conservation Processes

Article 14. Conservation processes

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these. Conservation may also include retention of the contribution that related places and related objects make to the cultural significance of a place.

Article 15. Change

- 15.1 Change may be necessary to retain cultural significance, but is undesirable where it reduces cultural significance. The amount of change to a place should be guided by the cultural significance of the place and its appropriate interpretation.

- 15.2 Changes which reduce cultural significance should be reversible, and be reversed when circumstances permit.
- 15.3 Demolition of significant fabric of a place is generally not acceptable. However, in some cases minor demolition may be appropriate as part of conservation. Removed significant fabric should be reinstated when circumstances permit.
- 15.4 The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods, or different aspects of cultural significance, emphasising or interpreting one period or aspect at the expense of another can only be justified when what is left out, removed or diminished is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.

Article 16. Maintenance

Maintenance is fundamental to conservation. Maintenance should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance.

Article 17. Preservation

Preservation is appropriate where the existing fabric or its condition constitutes evidence of cultural significance, or where insufficient evidence is available to allow other conservation processes to be carried out.

Article 18. Restoration and reconstruction

Restoration and reconstruction should reveal culturally significant aspects of the place.

Article 19. Restoration

Restoration is appropriate only if there is sufficient evidence of an earlier state of the fabric.

Article 20. Reconstruction

- 20.1 Reconstruction is appropriate only where a place is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the fabric. In some cases, reconstruction may also be appropriate as part of a use or practice that retains the cultural significance of the place.
- 20.2 Reconstruction should be identifiable on close inspection or through additional interpretation.

Article 21. Adaptation

- 21.1 Adaptation is acceptable only where the adaptation has minimal impact on the cultural significance of the place.
- 21.2 Adaptation should involve minimal change to significant fabric, achieved only after considering alternatives.

Article 22. New work

- 22.1 New work such as additions or other changes to the place may be acceptable where it does not distort or obscure the cultural significance of the place, or detract from its interpretation and appreciation.
- 22.2 New work should be readily identifiable as such, but must respect and have minimal impact on the cultural significance of the place.

Article 23. Retaining or reintroducing use

Retaining, modifying or reinstating a significant use may be appropriate and preferred forms of conservation.

Article 24. Retaining associations and meanings

- 24.1 Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented.
- 24.2 Significant meanings, including spiritual values, of a place should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.

Article 25. Interpretation

The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate.

Conservation Practice

Article 26. Applying the Burra Charter process

- 26.1 Work on a place should be preceded by studies to understand the place which should include analysis of physical, documentary, oral and other evidence, drawing on appropriate knowledge, skills and disciplines.
- 26.2 Written statements of cultural significance and policy for the place should be prepared, justified and accompanied by supporting evidence. The statements of significance and policy should be incorporated into a management plan for the place.
- 26.3 Groups and individuals with associations with a place as well as those involved in its management should be provided with opportunities to contribute to and participate in identifying and understanding the cultural significance of the place. Where appropriate they should also have opportunities to participate in its conservation and management.
- 26.4 Statements of cultural significance and policy for the place should be periodically reviewed, and actions and their consequences monitored to ensure continuing appropriateness and effectiveness.

Article 27. Managing change

- 27.1 The impact of proposed changes on the cultural significance of a place, including incremental change, should be assessed with reference to the statement of significance and the policy for managing the place. It may be necessary to modify proposed changes following analysis to better retain cultural significance.
- 27.2 Existing fabric, use, associations and meanings should be adequately recorded before any changes are made to the place.

Article 28. Disturbance of fabric

- 28.1 Disturbance of significant fabric for study, or to obtain evidence, should be minimised. Study of a place by any disturbance of the fabric, including archaeological excavation, should only be undertaken to provide data essential for decisions on the conservation of the place, or to obtain important evidence about to be lost or made inaccessible.
- 28.2 Investigation of a place which requires disturbance of the fabric, apart from that necessary to make decisions, may be appropriate provided that it is consistent with the policy for the place. Such investigation should be based on important research questions which have potential to substantially add to knowledge, which cannot be answered in other ways and which minimises disturbance of significant fabric.

Article 29. Responsibility

The organisations and individuals responsible for management decisions should be named and specific responsibility taken for each such decision.

Article 30. Direction, supervision and implementation

Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.

Article 31. Keeping a log

New evidence may come to light while implementing policy or a plan for a place. Other factors may arise and require new decisions. A log of new evidence and additional decisions should be kept.

Article 32. Records

32.1 The records associated with the conservation of a place should be placed in a permanent archive and made publicly available, subject to requirements of security and privacy; and where this is culturally appropriate.

32.2 Records about the history of a place should be protected and made publicly available, subject to requirements of security and privacy, and where this is culturally appropriate.

Article 33. Removed fabric

Significant fabric which has been removed from a place including contents, fixtures and objects, should be catalogued, and protected in accordance with its cultural significance.

Where possible and culturally appropriate, removed significant fabric including contents, fixtures and objects, should be kept at the place.

Article 34. Resources

Adequate resources should be provided for conservation.