



**HERITAGE
COUNCIL**
OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES

Assessment Documentation

11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

In determining cultural heritage significance, the Heritage Council has had regard to the factors in the *Heritage Act 2018* and the indicators adopted on 14 June 2019.

11(a) Importance in demonstrating the evolution or pattern of Western Australia's history;

Main Roads Western Australia Building (Don Aitken Centre), East Perth illustrates the expanding role of State Government in the development of road-based infrastructure in the Late Twentieth Century in response to the post-war mineral boom, and the increased need for new office accommodation at that time.

At *Main Roads Western Australia Building (Don Aitken Centre), East Perth*, all agencies and functions of the Main Roads department were concentrated under one roof, in purpose designed accommodation, which allowed for efficient and effective co-ordination across planning, design, construction and maintenance activities. This demonstrated emerging trends in best practice engineering management at that time.

11(d) Its importance in demonstrating the characteristics of a broader class of places;

Main Roads Western Australia Building (Don Aitken Centre), East Perth is representative of the adaptation of the International style of architecture to the Australian environment through the use of sunshade control devices.

11(f)¹ Its importance in exhibiting particular aesthetic characteristics valued by any group or community;

Main Roads Western Australia Building (Don Aitken Centre), East Perth is a good, substantial and intact representative example of a Late Twentieth Century

¹ For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. A *Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present*, Angus and Robertson, North Ryde, 1989.

For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate*, Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

International style building, with elements of the Brutalist style, making it a landmark in East Perth.

11(g) Any special association it may have with the life or work of a person, group or organisation of importance in Western Australia's history;

Main Roads Western Australia Building (Don Aitken Centre), East Perth is associated with Don Aitken, Commissioner of Main Roads for 22 years, and the youngest ever appointed at the age of 40.

Main Roads Western Australia Building (Don Aitken Centre), East Perth is associated with Master Builder H A Doust and his son John Doust whose company specialised in the new forms of concrete construction being developed in Perth from the 1960s, including the use of pre-stressed and reinforced concrete, and slip-form construction.

Main Roads Western Australia Building (Don Aitken Centre), East Perth is a good representative example of the work of prominent Perth architectural firm Oldham, Boas, Ednie-Brown & Partners in the Late Twentieth century period.

Main Roads Western Australia Building (Don Aitken Centre), East Perth is associated with Perth artist Margaret Priest, one of the foremost figures in post-war art in Western Australia, whose bronze sculpture adorns the buildings foyer, the design of which remains the emblem for Main Roads in 2021.

11(h) Its importance in demonstrating a high degree of creative or technical achievement;

The use of slip-formed concrete for the construction of the services core of *Main Roads Western Australia Building (Don Aitken Centre), East Perth* coincided with significant improvements in reliable concrete supply associated with the expansion of the 'readymix' concreting industry in Western Australia in the 1960s, and demonstrates an early application of this technique in the State outside of its more common agricultural and industrial mining applications.

12. DEGREE OF SIGNIFICANCE

12.1 CONDITION

Main Roads Western Australia Building (Don Aitken Centre), East Perth is in good condition and has been well maintained since construction. Isolated water leaks observed in the sub-piazza basement carpark appear to relate to service penetrations or poorly executed building modifications. Bore water staining and discolouration to original precast concrete panelling and concrete rendered elements is extensive, and panel joints have deteriorated. The impact of climbing vegetation to the east elevation should be closely monitored.

12.2 INTEGRITY

This section explains the extent to which the fabric is in its original state.

Main Roads Western Australia Building (Don Aitken Centre), East Perth has a high degree of integrity, with its original form and the majority of its original building fabric intact. General office level interiors (levels 1 to 8 inclusive) are of low integrity.

12.3 AUTHENTICITY

This section explains the extent to which the original intention is evident, and the compatibility of current use.

Main Roads Western Australia Building (Don Aitken Centre), East Perth remains in use for its original purpose and has a high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by the Department of Planning, Lands and Heritage, in September 2021, with amendments and/or additions by the Heritage Council and the Department.

13.1 DOCUMENTARY EVIDENCE

Main Roads Western Australia Building (Don Aitken Centre), East Perth comprises a ten-storey plus basement, concrete government office building (1970) designed in the Late Twentieth Century International style, with elements of the Brutalist style, that includes a sculpture by Perth artist Margaret Priest (1970), and associated entry piazza and landscaped gardens.

The Noongar groups living in and around the Perth area are collectively known as the Whadjuk, whose significant cultural sites include Derbal Yerrigan (Swan River) and Karra kata (King's Park).² The Whadjuk comprised small family groups moving through the landscape in response to seasonal change, utilising a toolkit of wooden and flaked stone tools and grinding stones, notably of quartz, dolerite and chert.³ This way of life began to be disrupted after 1829 with the arrival of British colonists, who established the settlements of Perth and Fremantle along the Swan River.

At this time, Perth was situated on the arable land at the foot of Mount Eliza, with long, thin land grants jostling for access to the fertile soils along the river.⁴ Despite the initial burst of colonial expansion, the swampy area immediately east of the Perth settlement remained largely vacant throughout the early colonial period, and was used for market gardens, abattoirs and a water mill.⁵ The most notable use of East Perth was for the Colony's first cemetery (P2164 *East Perth Cemeteries* RHP), located on a hill above the waterlogged soils of the area.⁶

From the 1880s, the discovery of gold in the Murchison and Eastern Goldfields resulted in unprecedented expansion of the State's economy resulting in a population boom. Between 1884 and 1894, East Perth's population expanded from 600 to 6000 people with many affluent families establishing themselves along Adelaide Terrace.⁷

In 1886, Perth Gas Company established a gas plant in East Perth and by 1916, the East Perth Power Station had been commissioned on the river foreshore. This

² 'About the Whadjuk Region', *Kaartdijin Noongar – Noongar Knowledge*, accessed 5 February 2020, <https://www.noongarculture.org.au/whadjuk/>

³ Crawford, I M, 'Aboriginal cultures in Western Australia', & Hallam, S, 'The First West Australians', in *A New History of Western Australia*, C T Stannage (ed.), UWA Press, 1981, pp. 16-20, 56-66; Meagher, S & Ride, W D L, 'Use of natural resources by the Aborigines of south-western Australia', & Berndt, R M 'Aborigines of the South-West', in *Aborigines of the West: Their Past and Present*, R M Berndt & C H Berndt, (eds.), UWA

⁴ Statham, P, 'Swan River Colony', in C T Stannage (ed.) *A New History of Western Australia*, UWA Press, 1981, pp. 187-188, 206; Statham, P, 'Swan River Colony', in C T Stannage (ed.) *A New History of Western Australia*, UWA Press, 1981, pp. 187-188, 206.

⁵ MacIlroy, J, *East Perth Project: Historic and Historical Archaeological Site in the East Perth Redevelopment Area*, National Trust of Western Australia, 1985, p. 9.

⁶ Assessment Documentation, P2164 *East Perth Cemeteries* (RHP); Collins, A, *Street scene - 1890 to 1990: to 1895 - Cemetery Rd, East Perth, from 1895 - Forrest Ave, East Perth*, Unpublished report, 1993, pp. 1-3

⁷ Seddon, G. & Ravine, D. 'A City and its Setting', Fremantle Arts Centre Press, Fremantle, p 264 as cited in Bush, F., Bodycoat, R., and Palmer, P. 'Conservation Plan- East Perth Cemeteries, January 2005, commissioned by the National Trust WA, p. 16

substantial growth in industry saw the area become a working class suburb as industry expanded into residential areas.⁸

In 1926, as a result in the growth of the State's economy, the increased use of roads and the availability of federal road grants spurred the creation of the Main Roads Board, taking over some of the responsibilities of the Public Works Department. The Board was re-established as the Main Roads Department in 1930, when the *Main Roads Act 1930* came into effect. The *Act* made provision for the Commissioner of Main Roads to approve the construction, access, maintenance, and supervision of highways, main and secondary roads, and other roads, and to consult with local governments on proposed permanent improvements to any highway or main road.⁹ Up until this point, since 1871, district Road Boards had maintained the authority to construct and improve all roads, as well as erect and repair new or existing bridges, either using their own money or funding from the State Government.¹⁰

During the inter-war period, Main Roads became an active part of the State's response to the economic crisis, providing short-term work for the unemployed on a variety of infrastructure projects, even while struggling to cut costs and staff within its own structure.¹¹

In the decades following World War II, the expansion of mining activities dramatically influenced the development of the State. The value of the State's mineral production doubled in the 1950s, with the previous supremacy of the gold industry being challenged by the rapid discovery and expansion of the exploitation of iron ore, which by the 1960s surpassed gold as the State's chief mineral export.¹²

Part of the State government's reaction to these changes was the 1955 '*Plan for the Metropolitan Region*' by J.A. Hepburn and G Stephenson, which articulated plans for the future growth of Perth and the surrounding areas. This controversial plan underwent an extended public debate and was put into practice as the '*Metropolitan Region Scheme*' in 1963.

The Scheme put an emphasis on development, and encouraged the dominance of post-war architecture, with older buildings being replaced by 'modernist' designs and high-rise towers.¹³ This period saw the creation of new Perth landmarks in contemporary styles, including the *Narrows Bridge* (P4795 RHP) in 1959, *Council House, Perth* (P2097 RHP) in 1963, the *Perth Concert Hall* (P4571 RHP) in 1973, as well as the creation of the Perth Cultural Precinct.¹⁴ More prosaic changes included creating better access and transport routes to accommodate the increase in private

8 Register of Heritage Places: East Perth Primary School (fmr), 12 November 2010, p. 6

9 Government of Western Australia, Department of Justice. Western Australian Legislation: *Main Roads Act 1930* Available at: https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_560_homepage.html

10 Edmonds, L, *The Vital Link: A History of Main Roads Western Australia 1926-1996*, UWA Press, 1997, pp 21-23.

11 Ibid, pp. 31, 51-55, 64-65, 78, 86-88, 119

12 K. Spillman, *A Rich Endowment: Government and Mining in Western Australia 1829-1994*, Nedlands WA, UWA Press for the Department of Minerals and Energy in association with the Centre for Western Australian History, p.191-198; Gregory, *op cit.*, pp. 71, 93; Stannage 1979, *op cit.*, p. 344; Ghosh, *op cit.*, p. 277-282, 285

13 Gregory, *op cit.*, p. 93; Seddon, *op cit.*, p. 186-187, Stannage 1979, *op cit.*, p. 344

14 Gregory, *op cit.*, pp. 106-108, 171-180; Seddon, *op cit.*, p. 193; Heritage Council of Western Australia, *Perth central area heritage survey: final report*, 2001, np, section 2.5; see also assessment documentation for P4795 *Narrows Bridge*, P2097 *Council House, Perth*, and P4571 *Perth Concert Hall*

motor cars.¹⁵ This rapid development attracted criticism from some quarters in terms of the loss of colonial and Gold Boom era buildings in Perth. The public disputes over the demolition of most of the Colonial Barracks (*Barracks Arch* (P2120 RHP)) and the Esplanade Hotel were notable flashpoints in the public debate.¹⁶

From the mid-1960s, the Main Roads Department was reorganised to meet the State's growing infrastructure needs, dramatically expanding its staff, increasing the level of staff training and embracing new computer technologies to calculate the engineering requirements of major road projects. The Department had been squeezed into the Colonial Barracks building (P2120 *Barracks Arch* [RHP]), which had been scheduled for demolition since the early 1960s. The new iron ore economy and resulting rapid metropolitan development saw the expansion of the technological role of the Main Roads Department, and in 1967, it was announced that the Department would need its own building.¹⁷

The proposed building was to be ten storeys high and designed to take full advantage of views to the Swan River and Darling Ranges. It was to include eight floors of office space, a floor set aside for a cafeteria and recreation facilities, another floor for caretaker's quarters, plant and observation gallery and a basement car park. The building would be fully air conditioned. It was positioned on the site to allow for the construction of another office building to the north if the need arose. On the selected site, an existing brick residence, brick shed, and brick change rooms were to be demolished, and existing sports playing fields levelled, to make way for the new development.¹⁸ Tenders for the work were called in early 1968 and a quote for \$3,266,330 was accepted. However, with about a fifth of the work completed the contractor went bankrupt and work stopped until a new contract was awarded.¹⁹

The design for the new building was awarded to local architectural firm Oldham, Boas, Ednie-Brown & Partners. While the long-established firm had previously been known for their Federation and Inter-War style commercial buildings, in 1967 the firm designed a modern hospital block for the Sisters of St John of God at Mount Lawley.²⁰ Other office block projects completed by the firm during this time include London House, 216 St Georges Terrace (1962), Hamersley House, 191 St George's Terrace (1971), the Oakleigh and Birds Buildings, 18-24 St Georges Terrace (1968) – demolished, State Electricity Commission, 365 Wellington Street (1968) and Willmar House, 600-608 Murray Street (1972).²¹

¹⁵ Gregory, *op cit.*, pp. 102-103; Seddon, *op cit.*, p. 186; Morison & White, *op cit.*, p. 548

¹⁶ Gregory, *op cit.*, pp. 106-108, 114-115, 171-180; Seddon, *op cit.*, p. 193; Seddon, *op cit.*, pp. 187-188; Morison & White, *op cit.*, p. 549; see also assessment documentation for P2120 *Barracks Arch*

¹⁷ Edmonds, *op cit.*, pp. 197-209

¹⁸ Site plan for M.R.D. Building, Oldham Boas Ednie-Brown & Partners Architects, date stamped 20 June 1969, courtesy Main Roads Western Australia; Metropolitan Sewerage map for Waterloo Crescent Perth, SROWA, Series 634, Consignment 4156, Item 0049, no date, via Retromaps, accessed 20/10/21.

¹⁹ Edmonds, *op cit.*, p. 200

²⁰ 'Celebrating the 50th Anniversary of the main hospital building opening', *St John of God Mt Lawley Hospital*, accessed 4 November 2020; P9953 Killowen (Local Heritage Survey) incorporates the new building but is focussed on the original colonial mansion.

²¹ 'Oldham Boas Ednie-Brown', *The Encyclopaedia of Australian Architecture*, P Goad & J Willis (eds.), Cambridge University Press, 2011, p. 515; *Oakleigh Building and Birds Building, St George's Terrace* [picture], Battye Historic Image Collection, 340923PD-340927PD; *State Electricity Commission, 365 Wellington Street, Perth* [picture], Battye Library Historic Image Collection, P340982PD-230984PD; *Willmar House, 600-608 Murray Street, corner of Coolgardie Street, West Perth* [picture], Battye Historic Image Collection, 160106PD

Archival drawings²² authored by Oldham Boas Ednie-Brown & Partners Architects, date stamped 20 June 1969, show a ten-storey concrete tower with 'precast concrete' sun hoods; 'aluminium windows'; 'precast concrete spandrels'; 'marblecrete' facings to columns and beams; and '6" steel deck cladding' to the rooftop lift and cooling tower enclosure. Nominated paving treatments include 'hot mix paving' for outdoor parking areas; 'asbestos tiles on felt roofing' for the northern balcony and 'exposed aggregate tiles' for the piazza. At basement level, the drawings note 'granite walling'; a 'sandblasted concrete fascia' with 'gargoyles'; 'folding doors' to basement carpark entrances; and 'sandblasted precast concrete surrounds' to exhaust vents. Other nominated exterior finishes include 'travertine tile' dados on the lower north and south walls; and 'exposed aggregate' sunhoods, balcony balustrades, and banding.

The floor plans show staff dining and recreation areas on level 1; an enclosed observation deck and caretaker's flat on level 9; and general office areas on other levels. Level 3, 4, 5, 6 and 7 are identified as 'typical' office floors, with open plan office areas laid out around the central services core. Levels 2 and 8 and the ground floor are also similarly laid out with general office areas. The west end of level 8 is shown partitioned into an executive area, with a 'Commissioner's Conference Room' and four offices (marked 'Commissioner', 'Assistant Commissioner', 'Commissioner's Typiste', and 'Secretary') serviced by a dedicated amenities area. A private 'Commissioner's Toilet' in the amenities areas is shown separate to the 'Executive Ablutions' and 'Pantry'. The level 1 dining areas included a kiosk overlooking the northern balcony; a large cafeteria and servery at the east end; and a private 'Executive Dining' room with its own servery along the southern corridor. The caretaker's flat, positioned at the eastern end of level 9, is laid out with three bedrooms to the north, a bathroom, laundry, and separate toilet, and a south facing living room and kitchen. Nominated interior finishes include 'vinyl tiled' floors to general office areas, 'terrazzo' floors and cubicle partitions to staff ablutions and 'travertine marble' floors to the main entrance hall and lift lobby. Finishes to the 'Main Entrance Hall' include 'filled travertine' on the windlock roofs; 'boarded walling' around the reception area and first floor level void; 'marble sills' to the northern windows; and 'travertine walling' along the back wall. Level 9 executive office areas note 'timber panelling' to partition walls and 'granolithic' floors'.

The design of the new Main Roads building may be attributed to the small group of lead architects at Oldham, Boas, Ednie-Brown & Partners at the time, including Sydney Musto and Max Bevilaqua. A particular influence was the role of Colin Ednie Brown in his role as mentor to Peter Arney, a young architect who had joined the firm as a student in 1946 and was one of the lead design partners and drivers of the firm until his retirement in the 1990s.²³ Arney designed the Parmelia Hotel in Perth (c.1968) and was involved in many office building projects.²⁴

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- 22 Site plan, floor plans and elevations for M.R.D. Building, Oldham Boas Ednie-Brown & Partners Architects, date stamped 20 June 1969, courtesy Main Roads Western Australia.
- 23 Taylor, John, & Tony Ednie-Brown: *Colin Ednie –Brown Biography*, February 2013, Available at: <https://www.taylorarchitects.com.au/Biographies/CW%20Ednie-Brown%20for%20AIA%20 WA .pdf> [Accessed 21/0/2021]
- 24 'Oldham Boas Ednie-Brown', *The Encyclopaedia of Australian Architecture*, P Goad & J Willis (eds.), Cambridge University Press, 2011, p. 515; 'Colin Ednie-Brown c. 1930', by Dr John J, Taylor and Tony Ednie-Brown, Australian Institute of Architects website, accessed 4 November 2020, <https://www.taylorarchitects.com.au/Biographies/CW%20Ednie-Brown%20for%20AIA%20 WA .pdf> 'Public Place Names (Taylor) Determination 2018 (No 2)', *ACT Parliamentary Counsel*, ACT Legislation website, accessed 4 November 2020, <https://www.legislation.act.gov.au/DownloadFile/di/2018->

These new office projects took inspiration from the contemporary styles of architecture popular in Europe and the USA at the time. One of the most popular was the International style, which stripped back the ornamentation of older styles to feature sleek, cubiform buildings which favoured efficient use of internal space by utilising steel, concrete and glass. Australia's most noted proponent of the International style was Harry Seidler, whose designs inspired a host of both residential and commercial applications of the style.²⁵

Other projects undertaken by the firm in this period tended towards the Brutalist style. Derived from the French term *beton brut* ("rough concrete"), and applied to post-war architects including Le Corbusier, this post-war European approach was a reaction to the sleek idealism of the International style, favouring heavy, sculptural buildings featuring expanses of rough concrete. Brutalism became popular in Eastern Europe and Britain in the 1950s, and by the 1960s was making its presence felt in Australia, notably for offices and government buildings.²⁶

One of the technological advancements that enabled this shift in architectural style was the use of pre-stressed and reinforced concrete, which in the 1960s was beginning to dramatically change Perth's built environment.²⁷

Slip-forming, a concrete placing method in which concrete is poured into a continuously moving form, as distinct from conventional fixed formwork, was a special concreting application used to construct the services core of the new Main Roads building^{28 29}. Developed and patented in the United States of America in the early twentieth century³⁰, vertical slip-forming was first used in Western Australia for concrete grain silo construction from the c.1940s, before being adopted for a wider range of applications, including mining shafts and elevated water tanks, throughout the 1950/60s³¹. Horizontal slip-forming was also applied to road construction during this period, with kerbing and traffic barrier walls soon routinely produced throughout Australia by slip forming and extrusion processes³².

[213/current/PDF/2018-213.PDF](#); Vacant block awaiting construction of Parmelia House, St Georges Terrace (corner of Mill Street), Perth, Battye Library Image Collection, 144264PD

25 Apperly, *et al.*, *op cit.*, pp. 214-217; 232-235

26 Boyle, B, 'Brutalism', *20th Century Architecture*, Available: <http://architecture-history.org/schools/BRUTALISM.html> [accessed 11/10/21]

27 I Hocking, Perth – The Building Challenge, The Master Builders Association of Western Australia, 1987, pp. 26-27; I Molyneux, 'Building in Western Australia 1940-1979', *Western Towns and Buildings*, M P Morison, J White (eds.), UWA Press, 1979, pp. 135, 143; M U Beasley, 'Architectural styles and their sources since 1831', *Western Towns and Buildings*, M P Morison, J White (eds.), UWA Press, 1979, p. 188; I Hocking, 'Growth and change in central Perth', *Western Towns and Buildings*, M P Morison, J White (eds.), UWA Press, 1979, p. 28

28 Cement Concrete & Aggregates Australia, *A Guide to Concrete Construction*, August 2020, Part VI Special Concrete Applications, Section 19 Slip-Formed Concrete, pp.2. Available at: https://www.ccaa.com.au/documents/GCC2020/PART_VI_-_19_-_SLIP-FORMED_CONCRETE_GTCC_2020.pdf [Accessed 28/09/2021]

29 The un-cited statement: '[t]his was the first time the slip-form method of construction (where the service core is built first) was used in Perth on such a large scale' appears in 'A century of change', the corporate timeline on the Main Roads Western Australia website. See <https://www.mainroads.wa.gov.au/timeline/#modal--1970> [Accessed 28/09/2021]

30 Cement Concrete & Aggregates Australia, *op.cit.*, p.3.

31 Email communication from Mike Taylor for Engineers Australia (WA Division) received 23/09/202, in response to query from Lara Watson, Senior Heritage Officer for the Department of Planning Lands and Heritage.

32 Cement Concrete & Aggregates Australia, *op.cit.*, pp.6-7.

Requiring an optimal relationship between formwork movement and concrete performance characteristics, slip-formed concrete was critically dependent upon a continuous 24/7 supply of quality concrete. It was therefore not until the expansion of the local 'readymix' concreting industry in the 1960s that the technique began to be considered for larger applications outside of the agricultural, industrial and road construction sectors. By the c.1980s, slip-forming techniques were in routine use across a wide variety of applications, including building construction, particularly where increased speeds of concrete placement and reduced labour and formwork costs provided advantages over conventional formwork systems. Against this backdrop, slip-forming of the services core of the Main Roads building represents an early example of this technique being applied to a medium-rise commercial office building.

The building firm which took over the Main Roads project was H A Doust Pty Ltd, led by John Doust AM (son of Master Builder H A Doust), which specialised in the new forms of concrete construction being developed in Perth.³³

John Doust was President of the WA Master Builders Association from 1968-1970 and President of the Master Builders Federation of Australia from 1975-1977. In 2012, he was awarded a Member of the Order of Australia (AM) for his lifetime of commitment to the building profession and industry.³⁴ By 2016, Doust was in his seventh year as a tutor of students studying for a Bachelor of Applied Science (Construction Management) at Curtin University.³⁵

Other commercial buildings built by the Doust firm in the wider Perth CBD at this time included Doust Building, West Perth in 1973 (P25570 Below Threshold), R&I Bank Tower (1986), 108 St Georges Terrace, CML Office Tower (1982), 55 St Georges Terrace, and the Telstra Exchange Building in Wellington St, Perth (1974-79).³⁶

The building was completed in 1970 and in June, 430 Main Roads staff moved into the new building, which could accommodate 660 people. For a time, the unoccupied space was taken up by Police administration. When the move was complete, it was the first time that all Main Roads staff had been together in one building since 1928.³⁷

A sculpture by Perth artist Margaret Priest was commissioned for the public reception and foyer of the new building and was officially unveiled by the Minister for Works, Ross Hutchison on 28 October 1970.³⁸ Made of bronze, the artwork is an emblem for Main Roads that symbolises roads and bridges in urban and rural areas with an infinite line representing the future.³⁹ The emblem is still in use in 2021. Margaret Priest was one of the foremost figures in post-war art in Western Australia. Between 1950 and 1980, she created an important body of work, much of it in high profile public places

³³ *The West Australian*, 28 June 1951, p. 4; *Sunday Times*, 6 August 1950, p. 23.

³⁴ *Ibid*, pp 20-21.

³⁵ *Christ Church Grammar School, Old Boys Newsletter*, John Doust, 12 October 2016: Available at: <https://www.ccgswa.edu.au/ob-newsletter/john-doust> [Accessed 6/9/2021]

³⁶ Vale, John Lewis Doust, in *CM Construct Magazine*, Issue Three 2019, pp 20-21.

³⁷ Edmonds, *op cit.*, p. 200

³⁸ Plaque in entrance foyer of *Main Roads Building (Don Aitken Centre)*, East Perth: Site visit September 2021

³⁹ *Main Roads Western Australia Timeline 1970*, Available at: <https://www.mainroads.wa.gov.au/timeline/#modal-1970>

in the city of Perth, including her 'Pioneer Woman', a centrepiece of the public space in Kings Park.⁴⁰

Main Roads Western Australia Building (Don Aitken Centre), East Perth was officially opened on 27 November 1970, by Hon Sir David Brand, Premier of Western Australia. A promotional pamphlet for the opening of the building stated:

*The building commands outstanding panoramic views of the city... Projecting sunhoods and deep exposed columns provide a bold functional character to the building and are designed to control sunlight penetration and sky glare throughout the year... The structure consists of a reinforced concrete frame with suspended floor slabs and was built around a slip formed concrete central core in special stages to avoid the use of expansion joints.*⁴¹

In 1993, the building was named in honour of Don Aitken, Commissioner of Main Roads for 22 years, and the youngest ever appointed at the age of 40. Aitken was also one of the Department's longest serving engineers, with a career spanning 41 years. He retired in 1987 and was said to have put "Main Roads on the international map through his leadership as the first Australian president of the "Road Engineering Association of Asia and Australasia". During his career, Aitken saw many changes take place, from the construction of Perth's first set of traffic lights at the West Perth subway in 1953 to the development of the Mitchell and Kwinana freeway system.⁴²

Since the 1970s Main Roads has continued to develop the State's road system, particularly by expanding urban areas and major regional roads, while also turning its attention to the renewal and maintenance of aging established roads. The Department was renamed Main Roads Western Australia in 1992, as part of a push to become more publicly engaged.⁴³

In the late 1990s, due to changes in his personal circumstances, Australian Football League great, Graeme (Polly) Farmer and his wife were provided with temporary accommodation in the Caretaker's Flat located in the Main Roads Building.⁴⁴

Since *Main Roads Western Australia Building (Don Aitken Centre), East Perth* was constructed, the character of East Perth has changed with smaller individual residences being increasingly replaced by apartment blocks, and former industrial areas being redeveloped into commercial, government and residential uses.

The place has been subject to a number of alterations over the years. Externally, the roof level enclosure has been extended along the northern and southern sides near the eastern end, and original roof sheeting and rainwater goods have been replaced. In c.2016 works were carried out to adapt part of the basement carpark and internal painter's store to a new bicycle storage and locker area and a new cycle access point was created off the southern carriageway. Original exterior light fittings have been replaced and carpark lighting was upgraded in c.2018. Work to upgrade the roof deck,

40 Margaret Priest, Holmes à Court Gallery, Available at: <http://www.holmesacourtgallery.com.au/article/margaret-priest#:~:text=Margaret%20Priest%20was%20one%20of,European%20practice%20at%20that%20time>.

41 *Official Opening Main Roads Department's New Head Office*, Unpublished promotional document, Main Roads Department, 1970.

42 Eric Charlton, Former Minister for Transport: Media Statement, *Main Roads East Perth building named Don Aitken Centre*, Tuesday, 25 May 1993. Available at: <https://www.mediastatements.wa.gov.au/Pages/Court/1993/05/Main-Roads-East-Perth-building-named-Don-Aitken-Centre.aspx> [Accessed 2 August 2021]

43 Edmonds, *op cit.*, pp. 341-342, 349, 352-353, 378-379, 394-400

44 Polly Farmer : Available at : [Polly Farmer - Wikipedia](#) [Accessed 11/10/2021]

including replacement of waterproofing membranes and coating systems, was completed in 2020. Other external modifications include infilling of the piazza feature fountain and changes to the boundary fence paint colour, from white to red.

Internally, the original reception desk has been replaced with a wheelchair accessible counter, and lift doors, lift car interiors and call buttons upgraded throughout. A recent café fitout has replaced the original staff cafeteria interior and the general office areas across all levels have been subject to various fitout upgrades, with a number of different refurbishment campaigns evident through levels 1 to 8, and ground floor office areas.

In 2021, Main Roads Western Australia continues to operate out of *Main Roads Western Australia Building (Don Aitken Centre), East Perth*.

13.2 PHYSICAL EVIDENCE

Main Roads Western Australia Building (Don Aitken Centre), East Perth is a ten-storey plus basement, concrete government office building designed in the Late Twentieth Century International style, with elements of the Brutalist style, that includes a sculpture by Perth artist Margaret Priest, and associated entry piazza and landscaped gardens.

The place is located on an elevated site in Waterloo Crescent, East Perth, on the outskirts of the Perth CBD. The square lot occupies a whole block bound by Plain Street, Waterloo Crescent, Horatio Street, and Bronte Street. *P2164 East Perth Cemeteries* (RHP) is located across Bronte Street to the northeast and *P2173 Perth Girls School (fmr)* (RHP) is across Plain Street to the northwest. The surrounding area is characterised by low-rise residential and mixed use development.

The steeply sloping terrain is terraced into soft and hard landscaped zones by concrete retaining walls and batters. The site's presentation to Waterloo Crescent is dominated by an imposing, angular concrete rendered wall, whilst the rest of the site has a relatively open aspect, afforded by the low-height painted steel boundary fence and simple landscape design.

The rectangular office tower is carefully sited towards the south-western edge of the block, oriented with its long sides (front and rear) facing directly north and south to optimise natural light and ventilation. The tower overlooks a large grassed forecourt and concrete paved entry piazza to the north, with a smaller landscaped terrace to the south. Landscaped areas are informally laid out with grass, concrete paths, and mature native and exotic trees and shrubs, including box hedging and topiary plantings, with larger specimens mainly concentrated around the Bronte and upper Plain Street site periphery.

A large bitumen paved open public carpark is terraced into the northern forecourt, with additional open parking provided adjacent to vehicle carriage ways on the eastern and southern sides of the tower. The southern right-of-carriage way also provides access to a single-storey basement bicycle store abutting the tower on its western side. Concrete steps provide pedestrian access down to the carpark level from Bronte Street, with vehicle access off Horatio Street.

On the same level as the northern carpark is the entry piazza, which is raised over a rectangular-shaped secure basement carpark attached to the northern side of the tower. The concrete piazza decking is softened along its northern edge by a curved grass area. A curved concrete rendered balustrade and associated hedged plantings

mark the northern edge of the piazza and basement carpark. The sloped transition between the two carparks is addressed through the use of concrete paved battering. A large louvred plant enclosure attached to the northern wall of the basement carpark, which resides in this battered zone, is a later addition. A concrete bridge link elevated over the battered zone provides a formal pedestrian connection from the northern carpark to the piazza deck. A set of angular concrete steps, framed by an original dressed granite and concrete rendered retaining wall, provides the main pedestrian access to the piazza deck from Plain Street. A 'Main Roads Western Australia' logo sign is fixed to the southern retaining wall next to the entry steps. Three flagpoles are positioned in the grassed area directly north of the steps.

A central feature of the piazza is the granite fountain sculpture, which although still contained within its original circular concrete pond enclosure, has since been infilled and hedged as a garden bed. Also extant on the piazza deck are the original rectangular and circular bespoke concrete planters situated around the main entrance and external to each façade bay.

The external form of the building demonstrates many of the principal characteristics of c.1960s-70s commercial buildings constructed in the Late Twentieth Century International style, such as expressed structural framing, expanses of glazing contrasted by textured facade panels, cantilevered forms and external sunshade control devices integrated into the design.⁴⁵

The tower has a tall, narrow form, rising nine full storeys above piazza level, with a full basement below deck level. An additional floor level, which is set back behind the main tower parapet, rises from the tower roof deck. Above this, a smaller rooftop enclosure, which accommodates air conditioning cooling towers and the original lift motor rooms, rises over the central core zone. The tower materials palette is dominated by the use of exposed aggregate concrete finishes in contrasting textures and colours of white quartz and basalt blue, although many white facings have dulled to a grey or brown appearance over time.

The building has a reinforced concrete frame, exposed aggregate precast concrete panel cladding, aluminium framed fenestration and a concealed roof deck. Originally concrete paved, the roof deck has been recently replaced with a modern bituminous membrane coating system. Two angular concrete windlocks define the public entrances on the north side and a bronzed letter sign, reflecting the 1993 'Don Aitken Centre' name change, appears on the balcony spandrel between the two entry canopies. Both windlocks are finished to match the high standard interior finishes of the ground floor main entrance hall, with polished travertine cladding and batten timber soffits evident. Similarly, the split face travertine cladding to the ground floor level exterior walls on the north side of the building matches interior travertine wall cladding to the ground floor lift lobby and reception areas.

The basement level is distinguishable by its use of dressed granite masonry for the exterior walls, which forms a striking wedge-shaped plinth to the main tower. Distinctive drainage spouts are incorporated into the sand blasted plinth fascia and the east and west walls each contain an unusual trapezoid-shaped exhaust vent set into an inverted sand blasted precast concrete surround.

⁴⁵ Apperly, R, Irving, R, Reynolds, P, 'Late Twentieth Century International 1960-', A Pictorial Guide to Identifying Australian Architecture, Angus & Robertson, 1994, pp.234-235.

At first floor level, a concrete balcony, incorporating precast concrete balustrade panels and a concrete paved deck, is supported on angular concrete struts to project out over the piazza for the entire length of the northern façade. A two-storey concrete rendered exterior staircase, positioned near the eastern end of the balcony, provides direct access to the balcony from the piazza and sub-deck levels. Concrete aggregate finishes to the balcony, balustrade panels and staircase match those to the main tower.

On the tower roof deck, level 9 is set back behind the main tower parapet. This level, which has been extended on its northern and southern side near the eastern end, has half height split face brick walls, with aluminium framed fenestration, pre-finished metal screens and louvres and a framed mansard roof clad in standing seam metal sheeting.

The main tower facades have a vertical emphasis, with the long (north and south) facades of the main tower configured into ten even bays separated by the structural columns, which are expressed as projecting concrete fins. Horizontally, the bays are configured into a regular pattern corresponding to floor-to-floor zones, comprising precast concrete wall panels and spandrels and clear anodised aluminium framed fenestration. Windows are shaded by angled precast concrete sun hoods which appear integral to adjacent wall panels. Ground and first floor level bays differ from upper floor level bays in that they have larger fixed windows, concrete rendered beams and, at ground floor level, split face travertine cladding. First floor level sun hoods incorporate concrete rendered fins. Precast elements, including wall panelling, spandrels, sun hoods and tower parapet panels, have an exposed aggregate finish and feature expressed vertical joints, which give the appearance of smaller elements banked together into groups of four. Concrete rendered elements, including the balcony beams, staircase, tower fins and beams, retain original white quartz exposed aggregate facings.

By contrast, the east and west facades are each simply expressed as a full height concrete panel wall with minimal glazing. A wide exposed aggregate band marks the transition between level 1 and the upper floor levels. Vertical joints to the panel walls are expressed to form a regular pattern of narrow strips, giving a strong vertical emphasis to these façades. Fenestration is confined to the first and last panel strips, which present with a similar spandrel/panel/glazing/sun hood configuration as the return facades. As for the main facades, cutaway corner columns resemble projecting fins.

The internal layout is dictated by the structural system of the building, which comprises reinforced concrete slab and beam floors, supported on a modular grid of reinforced concrete columns, built around a solid concrete core. Floor-to-ceiling heights are approximately 3.2 metres through the ground and first floor level and 2.7 metres to general office levels.

Contained within the core are two enclosed stairwells, a lift lobby serviced by four lifts, male and female amenities, staff tea prep areas, and building services ducts and risers. Staff amenities and tea prep areas are furnished with contemporary fixtures and finishes. Drinking cooler recesses, built into the core fabric near the amenities areas on each floor level, are an original element, some of which retain early stainless steel cup disposal chutes and burnt orange glazed ceramic tiling. The ground floor lift lobby displays polished and split faced travertine floor and wall finishes and batten timber ceiling linings, matching those of the ground floor main entrance hall. Upper floor level lift lobbies generally have a variation of timber look batten ceilings that were

completed as part of the whole floor refurbishment or a more recent ceiling replacement project, with the exceptions of levels 8 and 9 and the basement. Walls are generally painted plasterboard with modern carpeted or timber floors. The ceiling to the level 5 lift lobby is a timber look metal batten ceiling installed in 2020. Lift car doors and interiors, including call buttons, are contemporary stainless steel and timber. Stairwells retain original finishes including sprayed vermiculate soffits, vinyl flooring and stair trims, and painted steel and moulded plastic handrails.

The basement level accommodates secure staff parking areas, storage and service areas and bulk plant and equipment. The western carpark directly links through to the sub-piazza carpark on the north side. The eastern basement car park also directly links to the outside open car park to the north. Original cement breeze blocks are built into the northern wall of the carpark to provide natural ventilation and structural columns are unlined. The original painter's store at the west end has been adapted for use as a bicycle store, whilst the original parking attendant's office, near the entrance to the eastern carpark, remains in use as a store. Interior spaces on this level have utilitarian finishes and treatment, with face brick or painted brick walls, concrete floors, and painted concrete ceilings, some of which have been retrofitted with exposed insulation.

The ground floor level is laid out with the main entrance hall, comprising public foyer and reception areas, to the north, a large records area to the east and general office accommodation in the remaining areas. Common to many office buildings of this era, the ground floor level public areas are more generous in volume and demonstrate a higher standard of finish than the general office areas. This is particularly evident in the main entrance hall, which opens out to a void to first floor level over the waiting area to the west and features polished travertine floors, split face travertine wall cladding and batten timber soffits. Over the void, the ceiling is treated with sprayed render, resembling vermiculite, and original ceiling vents and recessed down lights appear extant. The Margaret Priest bronze logo artwork, accompanied by a small wall-mounted identifier plaque, is prominently displayed on the travertine wall at the western end of the lobby void. Two bronze plaques, commemorating the official opening of the building on 27 November 1970 and the 'Don Aitken Centre' name change on 25 May 1993, are fixed to the wall behind the reception desk. The space is populated with a large contemporary reception desk, contemporary loose furniture, slatted timber planters and rectangular display cabinets in timber and glass.

At first floor level, the original staff kiosk and cafeteria at the eastern end, which opens out onto the northern balcony, remains in use as a café and staff leisure area, albeit with contemporary finishes fixtures, and equipment. A goods hoist that originally serviced this level has been removed, however part of the original hoist mechanism remains extant in one of the kitchen stores. Recently introduced glazed partitions and operable walls throughout the east end provide flexible spaces for large conferences and gatherings in the area previously used for executive dining and ancillary kitchen spaces. Contemporary fitout and finishes are evident in the former recreation area to the west of the lift lobby, which is now a general office area. A notable original feature of this level is the narrow bridge link connecting the western office area with the café. Looking out over the void to the ground floor level waiting area, the bridge link is sympathetically finished to match, with a solid split face travertine balustrade, painted steel and dressed timber handrail and terrazzo tiled floor. Another element of note is the framed artist impression of the Main Roads building, signed 'L.Norman', displayed in the southern corridor, which is possibly an original architectural drawing.

Levels 2 to 8 accommodate general office areas and are typically laid out around the central core, with enclosed offices and meeting rooms concentrated in the column free zones to the north and south of the core and open plan office areas positioned in the gridded zones at the eastern and western ends. Although much altered in layout and appearance, level 8 retains original executive functions, with the Commissioner's office and executive board room located at the western end of this level. Having been subject to progressive interior upgrades over a number of years, general office levels demonstrate a variety of contemporary finishes, fittings and fitouts, with several different refurbishment campaigns evident. Most interior fabric, including to level 8 executive areas, appears less than 20 years old. Levels 5 and 7 appear to retain some elements that may be attributable to older fit outs, including isolated sections of early painted timber skirting, and glazed timber partitions. The east end of level 7, which was under refurbishment at the time of inspection, was not able to be assessed.

Level 9, which originally accommodated an observation deck and caretaker's flat, has been adapted for use as a Health and Wellbeing facility. Accessible by a single lift only, this level has been extended east of the lift lobby along the southern and northern sides and extensively altered to accommodate the Health and Wellbeing facility, that includes, three small enclosed multi-use rooms and associated amenities. Finishes in this area comprise modern carpeted floors, painted plasterboard walls and suspended painted plasterboard ceilings. The original caretaker's flat appears to have been completely removed, with no discernible evidence of the original layout or fabric. West of the lift lobby, the original large plant and chiller rooms, containing the original boiler flue and much of the early mechanical plant and equipment, remain. As with the basement level, interior finishes to plant room areas are utilitarian, comprising face brick walls, concrete floors and what appear to be original bonded wood fibre ceilings. Much of the pipework and equipment, some of which displays evidence of early painted signs, appears to be original.

13.3 COMPARATIVE INFORMATION

Principal Australian Historic Theme(s)

- 3.8.5 Moving goods and people on land
- 3.8.7 Building and maintaining roads
- 4.1 Planning urban settlement
- 4.2 Supplying urban services (power, transport, fire prevention roads, water, light & sewerage)

Heritage Council of Western Australia Theme(s)

- 108 Government Policy
- 203 Road transport
- 504 Depression and boom
- 507 Water, power, major transport routes

Comparative Analysis

Main Roads Western Australia Building (Don Aitken Centre), East Perth was constructed in 1970 during a period of State government expansion, fuelled by the mineral boom during 1960-1990, which saw the construction of reinforced concrete and steel office blocks in and around the Perth CBD. Comparable buildings

constructed in this period in the Late Twentieth Century International and Brutalist styles include:

- P3048 *Western Australian Police Service Complex* (1965) - a nine storey office building located in East Perth (RHP) - Late Twentieth Century International Style.
- P3550 *Co-operative Bulk Handling Building (fmr)*, West Perth (RHP): purpose-built in 1968 for CBH Ltd in the Late Twentieth Century International-style.
- P3849 *Dumas House* (1966) (RHP) - Late Twentieth Century International style.
- P16722 *Art Gallery of Western Australia Complex* (RHP): the main structure, (1979) is a fine example of the Late Twentieth Century Brutalist style.
- P16472 *Mineral House* - consisting of two office blocks at East Perth, built c.1974 and c.1989, in the Late Twentieth Century Brutalist style.
- P14873 *Curtin University: the Architecture Building, Robertson Library, Physics Building and Social Science Building* are considered examples of Late Twentieth Century Brutalist, constructed after 1965.
- P19841 *G Block* (1982), Sir Charles Gairdner Hospital, the largest building in the Hospital complex constructed in the Late Twentieth Century Brutalist style.

Other examples of substantial Late Twentieth Century office buildings built in this period include:

- P2097 *Council House, Perth* (RHP) - constructed in 1960 in the Post-War International style, the place is considered to represent Perth's modernist outlook in the early 1960s.
- P2106 *Allendale Square* (c1977) - a 33 storey office tower in the Late Twentieth Century Late Modern style. (Assessment Program)
- P18721 *SGIO Atrium* - a brick, concrete and steel office block (1982).
- P26006 *Central Park, Perth* - constructed 1988-1992 in the Late Twentieth Century Late Modernist style. (Does Not Warrant Assessment)

Oldham, Boas, Ednie-Brown & Partners

Better known for their Federation and Inter-War style commercial buildings, the following places are less common examples of buildings designed by Oldham, Boas, Ednie-Brown & Partners during the late Twentieth Century period (1960-1990):

- State Electricity Commission, 365 Wellington Street, Perth (1968)
- Hamersley House, 191 St George's Terrace (1971)
- Willmar House, 600-608 Murray Street (1972)
- TAB Building, 169 Hay Street, East Perth (1977)
- Bartholomew House, 31 Ventnor Avenue, West Perth (1983)

H A Doust Pty Ltd – Builder

There are 5 places associated with the Doust building company on the database. However, as builders are not often recorded in Municipal Inventories and other sources, the exact number of places constructed by the company is unknown.

Known commercial buildings constructed by the Doust building company c1970s - 1980s include the following places:

- P25570 Doust Building, West Perth (1973) (Below Threshold): this Late Twentieth Century International style building was constructed by H A Doust Pty Ltd for use as their headquarters.
- P16488 Telephone Exchange Tower (1975)
- R&I Bank Tower (1986)
- CML Office Tower (1982)

Conclusion

The comparative evidence indicates that *Main Roads Western Australia Building (Don Aitken Centre), East Perth* is a good and intact representative example of a State government building constructed in the in the Late Twentieth Century International style, with elements of the Brutalist style as a response to the post-war mineral boom. The place is a good representative example of the work of Oldham, Boas, Ednie-Brown & Partners, in this period and of concrete construction specialist H A Doust Pty Ltd.

13. 4 KEY REFERENCES

13. 5 FURTHER RESEARCH

Further research may reveal more information about the original c.1967-68 architectural design, including the name of the individual or architectural firm responsible for the design.

Further research would be needed to substantiate determine whether *Main Roads Western Australia Building (Don Aitken Centre), East Perth* represents one of the first post war examples of a purpose-built office building in which all agencies and functions of a government department were concentrated in a single location under one roof and that this represented international best practice at the time. Research would be needed to:

- determine which other post war examples concentrated a government department into a single location
- examine international best practice in relation to housing government departments in this era
- confirm efficiencies and effectiveness of Main Roads once services were located to the new building
- determine if the provision of space for rapid communication including computing facilities was a distinctive feature of the place, or if other buildings constructed at this time also had these features.

Research into the development of the public service more generally in this era may assist in clarifying these matters.