Register of Significant Twentieth Century Architecture

RSTCA No: R133

Name of Place: **Australian Institute of Sport Swimming Pool Centre**

Address/Location: Leverrier Crescent, Bruce ACT 2617
Block 26 Section 8 of Bruce

Listing Status:	Registered	Other Heritage Listings:	None
Date of Listing:	16/9/03	Level of Significance:	National
Citation Revision No:	Draft 3	Category:	Government
Citation Revision Date:	14/6/12	Style:	Late 20th-Century Late Modern
Date of Design:	1981	Designer:	Daryl Jackson Pty Ltd
Construction:	1982	Client/Owner/Lessee:	NCDC for the AIS
Additions:		Builder:	John Holland Constructions

Statement of Significance

The AIS Swimming Pool Centre, designed by Daryl Jackson Pty Ltd and completed in 1982, has meritorious design and aesthetic qualities which have led to it receiving several important awards. The first was the 1984 Canberra Medallion in the RAIA ACT Chapter awards, then the RAIA National Award for Design Excellence – the 1984 Sir Zelman Cowen Award – and, because the building has continued to serve its users and society well for over 25 years, the 2012 Award for Enduring Architecture in the AIA ACT Chapter awards.

The building is a notable example of the Late Twentieth-Century Late Modern style of architecture. The principal mass is determined by simple geometry, which is the key indicator of that style. Other characteristics of the style displayed in the building are precision, lightness and elegance, rounded profiles and exposed steelwork with glass and metal cladding panels. Because of its architectural significance, the building can provide information which will contribute to a wider understanding of its style and will be of educational value for future generations.

The AIS Swimming Pool Centre has strong associations with Daryl Jackson, who has played a significant role in Australia's cultural history. He is one of Australia's most notable architects of the late twentieth century, being awarded the RAIA Gold Medal in 1987 and made an Officer of the Order of Australia in 1990. The AIS Swimming Pool Centre holds an important place in the new generation of Australian swimming pools, many of which he has designed.

The AIS Swimming Pool Centre has strong associations with world record-breaking and World Championships, Olympic and Commonwealth Games gold medal-winning swimmers who have been based at the AIS and used the building as part of their daily training. The quality of Australian swimmers is among the best in the world and their achievements have helped, probably more than in any other sport, to put the AIS and Australia on the world sporting arena. By being available to the general public for swimming lessons and competitions, the building plays an important part in fostering the development of competitive swimming in the local community and nationally.

Description: External

A mainly single-storey building with a 50m main pool and a 25m training pool. The building steps down in height towards the west with curved forms and roof lights.

The framing of the building is structural steel, some elements of which extend beyond the external walls. These are the steel roof trusses which penetrate the wall skin and are post tensioned to the earth mound. The rainwater heads and collection sumps are intentionally overstated as external elements of the design. Boiler room flues are integrated with the structure on the south side. The trusses and rainwater heads are references to the visually-active National Indoor Stadium and the Gymnastics Hall, both by Philip Cox & Partners, which are nearby.

The building is clad in sheeting, originally panels of compressed asbestos cement but now Alucobond, painted in horizontal bands. The base colour is dark blue-green lightened off progressively to light grey towards the sky. Interspersed with those bands are bands of water green. The plinth and some other external elements are off-form concrete. Windows are powder-coated aluminium, many being fixed glazing. Northern windows have steel-framed

screens clad in flat sheeting. The north sides of both pools have panel-lift doors which lead to a small fenced area of paving and lawn. A low earth berm has been formed around the west and south sides of the building.

Description: Internal

The building includes 50m and 25m pools and change rooms, with associated plant and service areas and, on an upper level, a weight-training room and a general-purpose room. The 50m pool has below-water viewing windows, a moveable bulkhead, a perimeter weir and a constant depth of 2.2m.

Internally, the pool complex consists of a steel-framed structure with tubular exposed trusses in two directions with a galvanised perforated ripple-iron ceiling for acoustic benefits. Curved translucent skylights occur at each of the steps of the roof and provide a high level of natural light without glare. Exposed circular air conditioning ductwork is slotted between trusses under each step of the roof. Artificial lighting is by large suspended fittings.

Wall cladding is sheeting with bands of colours replicating the external colours. The structure around the change rooms is concrete, with off-form columns and beams and infill painted masonry walls. The north sides of both pools have glazed panel-lift doors. Windows on all sides are fixed glazed in powder-coated aluminium frames. Under each of the roof steps on the north and south sides is a clear glass block section with bands of the AIS red and blue glass blocks.

The 50m pool is concrete with a perimeter weir set below the concourse. Stained timber bleachers (retractable seating) with non-slip surfaces provide spectator seating along its south side. A white-painted tubular steel gantry along each side of the 50m pool and crane between provide the means to relocate the moveable bulkhead and for camera-tracking of swimmers. The pools and concourse are tiled and the upper level and rear walking area is studded rubber. A small spa and sauna is provided in the south-east corner of the building.

Condition and Integrity

The integrity of the building is high. The original panels of compressed asbestos cement wall sheeting have been replaced with Alucobond. The colours of the new sheeting retain the original gradation, but the effect has been lessened by the growth of a belt of shrubs along the south and west earth berms. The internal walls now have bands of grey and a deeper blue to match the colour below the water, while photo murals of swimmers enliven the open trusses across the main pool.

Background/History

The context for the design of the Swimming Pool Centre was that the AIS was expanding and a swimming complex was required. It was decided by the National Capital Development Commission to award the project to Daryl Jackson Pty Ltd. The Centre was to be of world standard, with a fast pool and blend aesthetically with the architectural language established at the AIS by Philip Cox & Partners, with the Athletics Stadium and Indoor Arena. The facilities required were a 50m pool with moveable bulkhead to suit world short course requirements including the imperial measurements used in America, a 25m training pool, a diving pool (later deleted) plus flexible spectator seating for 650, change facilities, weights room, general purpose room and support facilities. [1]

A study tour to Europe by Greg Deas of the NCDC and Daryl Jackson was undertaken and the design followed in 1981. The initial design intention was to have a retractable roof where sections would concertina into each other, thus creating the stepped form. The retractable roof was abandoned because of its cost, but the general form remained. The other design aspect was to blend the new building with the adjacent Indoor Arena, prompting the earth berm, off-form concrete and expressed structure. The stepped form has a human scale along Leverrier Crescent, while also relating to the 10m high Tennis Hall on the east. [2]

A key person who was consulted in the design of the Centre was Don Talbot (AIS Director at the time and former National Swimming Coach). A fast pool was essential to ensure its world standing and design features of a constant depth of 2.2m and a continuous weir to prevent backwash assisted this. They also meant it was suitable for water polo. The overhead crane for video tracking of swimmers, the bulkhead which could be shifted quickly and the underwater pool windows were features added to assist training and performance. The Centre was the first in Australia with these features, although they had been used overseas. Many AIS swimmers who have trained at the Centre have broken world records, and won Olympic Games, World Championships and Commonwealth Games gold medals. [3]

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[1] *Architects of Australia*, Images Australia 1988, Daryl Jackson Pty Ltd, p 92-3.
[2] ibid.
[3] Australian Institute of Sport Internet site www.ais.org.au/Swimming/Hall of Fame

The design concept is part of the evolution of swimming pools by Daryl Jackson Pty Ltd, with the Centre heralding a new generation of pool design. This evolution includes 8 pools between 1967 and 1988 in Victoria, WA and the ACT. Innovations used at the AIS Swimming Pool Centre include:

- Heat recovery unit to minimise energy
- Night-time purge cycle to get rid of vapour
- Double-glazed skylights
- Ripple-iron ceiling with vapour barrier behind
- Extensive use of steel with good quality surface treatment, in preference to timber

The style of the building is defined in *A Pictorial Guide to Identifying Australian Architecture* as Late Twentieth-Century Late Modern. The building is one of several used in that publication to illustrate the style, with a caption noting it as "a high-tech reflection of the activities conducted within." [4] The principal mass is determined by simple geometry, which is the key indicator peculiar of that style. Other characteristics of the style displayed in the building are its precision, lightness and elegance, its rounded profiles and exposed steelwork with glass and metal cladding panels. The building is similar to others of that style with precise, machine-like forms and curved profiles (Parklea Prison, NSW, 1983, Merlin Hotel, Perth, 1984, 'The Parks' office building, Rose Park, SA, 1983). The way the building steps down in height, with curved rooflights at the steps is also seen in the ADFA Cadets Mess, also designed about 1981, but it is of concrete and glass and more Brutalist in style. Daryl Jackson's Ringwood Pool, designed about 1985, also responds to the colours of the landscape and its topography, with a curved low roof. Other similarities to the AIS Swimming Centre are its internal expression of structure, its top lighting and glass walls which open to allow movement outdoors.

The critic James Grose observed in 1984, regarding Jackson's colour preference, that other Late Modern style buildings he was designing at that time – the Australian Film & Television School, North Ryde NSW and in a far more subtle manner the Singapore High Commission, Canberra, used stripes to express an architectural "image", so those buildings are also comparable with the Centre. [5] "Late Modern architecture was nothing if not sleek and glossy" wrote Apperly, Irving and Reynolds, so in those respects the Centre is comparable with Lawrence Nield's hospital at Mount Druitt, NSW.

The RAIA National Sir Zelman Cowen Award in 1984 is an endorsement of the excellence of the building's design. James Grose commented when the award was announced that "Jackson responded to the environmental context by designing a building that adopted a reclining stature – a reflection of its function, and in terms of massing, as a means of relating to the surrounding buildings...The reclining stature also responds to the long low forms of the valley edge, and further beyond to the surrounding Canberra hills." He wrote of "the elegance of the total composition...that relies on both the expressed structure and the applied colour and form..." He concludes "Undoubtedly by the use of colour, form and pattern, the swimming halls building develops an architectural expression which advances the exploration of the Australian idiom, enhancing, rather than at the cost of, the building's function."

The architectural historian and critic Jennifer Taylor, in *Australian Architecture Since 1960* praises how the building "combines many of the best features of Jackson's work" and adds that "It is a handsome building, logically conceived in structure and function." [6]

The centre served all its users and society well from 1982 to 2006, when the adjacent AIS Testing and Training Centre opened, offering a state-of-the-art 50 metre pool, with new-generation technology and a specialised aquatic recovery centre, but this centre has not been available for public use. Some of the elite swimmers prefer to train in the 1982 centre, rather than doing so exclusively in the new facility. Because the 1982 centre is available to the general public, who can be swimmers or spectators, the main pool is a venue for school swimming carnivals and the 25-metre pool is frequently used by schoolchildren for swimming lessons and training. [7]

Daryl Jackson is the founding principal of the firm Daryl Jackson Pty Ltd which has won international recognition through its design excellence and its buildings have been recognised by the RAIA with many awards including the Sir Zelman Cowen Award. Daryl Jackson was awarded the RAIA Gold Medal in 1987, which recognised his contribution to the advancement of architecture in Australia through the execution of buildings of excellence during his then 23 years of practice. In 1990 he was made an Officer of the Order of Australia for services to architecture. [8]

The quality of buildings produced by Daryl Jackson is remarkable, and reveals the high level of his design skill. From his practice with Evan Walker from 1963 to 1978 the School of Art, Canberra (1978) was awarded the Canberra

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[4] Richard Apperly, Robert Irving, Peter Reynolds, *A Pictorial Guide to Identifying Australian Architecture - Styles and Terms from 1788 to the Present.* Angus and Robertson, 1989, p 260.
[5] *Architecture Australia Awards 84*, December 1984, p 4-7.
[6] Jennifer Taylor, *Australian Architecture Since 1960*, RAIA, 1990, p 114.
[7] *2012 ACT Architecture Awards* booklet, AIA ACT Chapter.
[8] *Architecture Australia*, November 1987, Daryl Jackson: RAIA Gold Medal 1987, p 50-82.

Medallion in the RAIA (ACT) Awards and the Sir Zelman Cowen Award (RAIA National Award), both in 1981, and the 25 Year Award in the 2005 RAIA (ACT) Awards.

Major awards to buildings by Daryl Jackson's practice after Evan Walker departed include Canberra Medallions to the Singapore High Commission in 1985, and the ADFA Indoor Sports Complex in 1989. The Hyatt Hotel Canberra was awarded the RAIA National Presidents Award (recycling), the RAIA National Belle Interiors Award and the Interior Design & Conservation Awards, RAIA (ACT) Awards, all in 1989. Buildings by the practice have received many other awards in Victoria, NSW, Queensland and WA.

Analysis against the Heritage Significance Criteria
Pursuant to s.10 of the *Heritage Act 2004,* a place or object has heritage significance if it satisfies one or more of the following criteria.

(b) it exhibits outstanding design or aesthetic qualities valued by the community or a cultural group

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(g) it is a notable example of a kind of place or object and demonstrates the main characteristics of that kind

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(h) it has strong or special associations with a person, group, event, development or cultural phase in local or national history

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The building has strong associations with its architect, Daryl Jackson, who has played a significant role in Australia's cultural history. He is one of Australia's most important architects of the late twentieth century, being awarded the RAIA Gold Medal in 1987 and made an Officer of the Order of Australia in 1990. The AIS Swimming Pool Centre holds an important place in the new generation of swimming pools, many of which he has designed.

(j) it has provided, or is likely to provide, information that will contribute significantly to a wider understanding of the natural or cultural history of the ACT because of its use or potential use as a research site or object, teaching site or object, type locality or benchmark site

Because of its architectural significance, the building can provide information which will contribute to a wider understanding of its style and will be of educational value for future generations.

References

Richard Apperly, Robert Irving, Peter Reynolds, *A Pictorial Guide to Identifying Australian Architecture - Styles and Terms from 1788 to the Present.* Angus and Robertson, 1989, p 260.

Architecture Australia Awards 84, December 1984, p 4-7.

Architecture Australia, November 1987, Daryl Jackson: RAIA Gold Medal 1987, p 50-82.

An Architectural Guide To Australia's Capital Canberra, RAIA 1982, p 38.

Jennifer Taylor, *Australian Architecture Since 1960*, RAIA, 1990, p 114.

2012 ACT Architecture Awards booklet, AIA ACT Chapter.