South Australian HERITAGE COUNCIL

SUMMARY OF STATE HERITAGE PLACE

REGISTER ENTRY

Entry in the South Australian Heritage Register in accordance with the Heritage Places Act 1993

NAME: Bicentennial Conservatory

PLACE NO.: 20996

ADDRESS: Adelaide Botanic Garden Hackney Road, Adelaide SA 5000 CR 5943/443, A102, DP66751, Hundred of Adelaide

STATEMENT OF HERITAGE SIGNIFICANCE

The 1989 South Australian Bicentennial Conservatory located in the Adelaide Botanic Garden demonstrates a high degree of creative and technical accomplishment, as a well-executed South Australian example of a glass house of the 'Late Twentieth Century Structuralist' style architecture.

The Bicentennial Conservatory stands as an exemplar work of the celebrated local architect Guy Maron, who produced a creative and technically excellent contemporary design solution responding to the problems of designing a tropical glasshouse within a dry, temperate climate.

RELEVANT CRITERIA (under section 16 of the Heritage Places Act 1993)

(d) it is an outstanding representative of a particular class of places of cultural significance.

The Bicentennial Conservatory is an outstanding late 20th Century example of a South Australian glasshouse. It is outstanding due to its architectural design quality, scale and fit for purpose. It complements existing State Heritage listed glasshouses, which are 19th Century structures, as a local 20th Century interpretation of the building type.

The glasshouse was constructed to celebrate the Bicentenary of Australia in 1988, marking 200 years since the arrival of the First Fleet in New South Wales in 1788.

(e) it demonstrates a high degree of creative, aesthetic or technical accomplishment or is an outstanding representative of particular construction techniques or design characteristics.

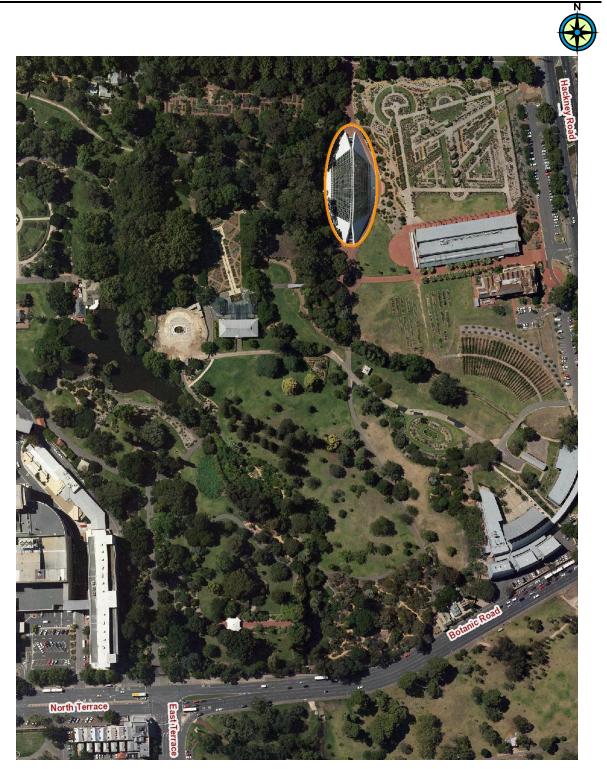
The Bicentennial Conservatory is an outstanding representative of late 20th Century Structuralist style architecture in South Australia and is an architectural exemplar of accomplished local architect Guy Maron. The structure is a creative and technically excellent contemporary design solution to the problems of designing a tropical glasshouse within a dry, temperate climate.

As a South Australian architect of the 1970s-2010+ period, Guy Maron's work reflects contemporary architectural theory of the period, exploring the architectural expression of structure and function in material and form.

The Bicentennial Conservatory is considered Guy Maron's most accomplished work. Maron received a Royal Australian Institute of Architects (RAIA) (SA Chapter) Award of Merit (1990) and the RAIA Sir Zelman Cowan Award (1991) for the Bicentennial Conservatory – a nationally significant architecture award for public buildings.

SITE PLAN

Bicentennial Conservatory Adelaide Botanic Garden Hackney Road, Adelaide SA 5000 PLACE NO.: 20966



Bicentennial Conservatory, generally indicating the extent of listing (Outlined in orange)

COMMENTARY ON THE LISTING

Description and notes with respect to a place entered in the South Australian Heritage Register in accordance with the *Heritage Places Act* 1993

Physical Description

The components currently identified as being intrinsic to the heritage significance of Bicentennial Conservatory include:

• the original form, materials and design of the 1989 Conservatory building.

The interior plantings are excluded from the listing.

History of the Place

The seventh Gardens Director, Brian Morley (1981-2000) was responsible for the development of a new tropical conservatory – the Bicentennial Conservatory. Plans were first prepared for a new tropical conservatory in Botanic Park by architect Guy Maron, of Raffen Maron Architects, in 1984. Public opinion rose against the proposal, as the conservatory would have encroached upon the Adelaide Parklands. In 1985, the State Government of the day offered the Gardens a narrow parcel of redundant Municipal Tramways Trust land to the east of the Gardens. This land became the site for the proposed conservatory. Raffen Maron Architects were engaged to design the Conservatory and funding was sourced from the Federal Government, as a part of its 'Commonwealth/State Bicentennial Commemorative Programme'. Maron studied overseas glass house models in Frankfurt, London (Kew) and Philadelphia and developed an organic building form which was able to be easily prefabricated, provided a suitable tropical environment and expressed its function in a contemporary, honest and innovative manner.

Construction commenced in October 1987 and was completed in time for the planting of the landscape in May 1989. The Conservatory was opened on 18 November 1989.

The Conservatory is the largest single span conservatory in the southern hemisphere and is 100 metres long, 47 metres wide and 27 metres high. The building is steel framed in construction, incorporates 2434 m² of toughened glass and is clad with insulated aluminium panels at its base. The curved segmental form evolved from the requirements to need to standardise and prefabricate glazing and framing to suit timing constraints and quality control. The internal Conservatory environment was initially managed by substantial mechanical plant. Nearly a thousand National Aeronautics and Space Administration (NASA) developed misting nozzles in the roof create a 'cloud' effect. This acts as an efficient cooling, shading and humidifying system depending on the outside weather conditions. Until April 2012 when heating was discontinued, night time temperature was maintained at 12°C, with a minimum day time temperature of 23°C rising to a maximum of 35°C. The relative humidity is maintained between 65% and 75%.

On opening day, 18 000 people passed through the building. A glass sculpture 'Cascade' by artist Sergio Redegalli, was located to the southern end of the site. 'Cascade' was commissioned by the World Expo '88 Authority and was shown in Brisbane as part of that year's Expo. It was donated to the Adelaide Botanic Garden by Pilkington (Australia) following completion of World Expo '88.

The project team responsible for the design and erection of the Conservatory included:

- Architect: Raffen Maron Architects Pty Ltd Guy Maron
- Structural Engineer: Connell Wagner (SA) Chris Michelmore
- Mechanical Engineer: Bassett PDG Consulting Engineers Ken Daunt
- Electrical Engineer: Bassett PDG Consulting Engineers Ken Daunt
- Landscape Architect: Land Systems Pty Ltd
- Contractor: Hansen & Yuncken

Architect, Guy Maron AM (c1935-) completed his architectural studies at the University of New South Wales in 1962 and gained early professional experience in Sydney and then Canada. Among other projects, he was the architect responsible for the new Fanshawe College of Applied Arts and Technology in Toronto, Canada in 1970. By 1973, Maron had returned to Australia and settled in Adelaide, as a partner in the highly prolific practice of Cheesman, Doley, Neighbour & Raffen. In 1978, when the practice was dissolved, Maron and Raffen established Raffen Maron Architects.

Maron's work expresses the formal possibilities in the architectural expression of function and structure. His early buildings were often Brutalist in style, with dominant grids and dressed concrete forms. Later buildings were lighter in expression, with structural systems celebrated in form, pattern and connection. He received (SA Chapter) RAIA Awards of Merit for Regency Park Community College, SA (1981), Neales Place Housing, Adelaide (1983), and also awards for Alice Springs Railway Station and the Australian Automobile Association Headquarters in Canberra during this period.

Maron received the RAIA (SA Chapter) Presidents Medal in 1996. Maron became a Member of the Order of Australia in June 2000, 'For service to architecture, particularly to contemporary design, and in the management of professional associations'.

Subsequent to the construction of the Conservatory, further Tramways land was passed to the Gardens in the early 1990s and redundant shedding removed, improving the garden setting of the Conservatory.

The Gardens undertook a review, including the plant collection, visitor experience, running costs and Greenhouse Gas Emissions associated with the Bicentennial Conservatory in 2011 and it was discovered that energy costs associated with the Bicentennial Conservatory were in the order of \$70 000 per year.

In April 2012 heating to the Bicentennial Conservatory was turned off. The plant collection has been transitioned to that of a warm temperate rainforest (capable of tolerating lower winter temperatures) rather than tropical rainforest. The key themes associated with rainforest plants and their distinctive adaptive features will still be demonstrated by the changed selection of plant species on display.

The Adelaide Botanic Gardens Bicentennial Conservatory was erected to further the aims of the Gardens as a place to conserve, study and enjoy plant species. The Conservatory reflects the late twentieth century needs of the Gardens, as a high quality piece of public architecture, for the presentation and conservation of rainforest plant species – many of which are at threat of extinction at the close of the century.

References

The primary source for this Summary was:

• Grieve Gillett Pty Ltd 2012, Heritage Assessment Report 'Bicentennial Conservatory, Botanic Gardens of Adelaide', commissioned by DEWNR.

Refer to the Heritage Assessment Report for more detailed information about the history of the Bicentennial Conservatory', Adelaide Botanic Garden and references.

SITE RECORD

Bicentennial Conservatory Adelaide Botanic Garden Hackney Road, Adelaide SA 5000

FORMER NAME:	N/A	
DESCRIPTION OF PLACE:	Steel framed building clad with a series of 100m ² x 24 metre long pre-fabricated composite aluminium/ glass panels. Panels are supported by 28 trusses.	
DATE OF COMPLETION:	1989	
SA HERITAGE REGISTER STATUS:	Description: Date:	Confirmed 12 December 2014
LOCAL HERITAGE STATUS		N/A
CURRENT USE:	Description: Dates:	Glass house 1989 to present
PREVIOUS USE(S):	Description: Dates:	N/A N/A
ARCHITECT:	Name: Dates:	Guy Maron AM (then of Raffen Maron Architects Pty Ltd) 1986-89
BUILDER:	Name: Dates:	Hansen and Yunken Pty Ltd 1988-89
LOCAL GOVERNMENT AREA:	Description:	Adelaide City Council
LOCATION:	Unit No.: Street No.: Street Name: Town/Suburb: Post Code:	N/A N/A Hackney Road Adelaide 5000
LAND DESCRIPTION:	Title Type: Volume: Folio: Lot No.: Section: Hundred:	CR 5943 443 102, DP66751 571 Adelaide

PHOTOS

Bicentennial Conservatory Adelaide Botanic Garden Hackney Road, Adelaide SA 5000 PLACE NO.: 20966



Bicentennial Conservatory, Adelaide Botanic Garden (From the East)



Bicentennial Conservatory, Adelaide Botanic Garden (From the North-east)

PHOTOS

Bicentennial Conservatory Adelaide Botanic Garden Hackney Road, Adelaide SA 5000 PLACE NO.: 20966



Bicentennial Conservatory, Adelaide Botanic Garden (From the North)