


Architectural Heritage: RAIA REPORT FORMAT

This report follows the UIA format with some additional fields and full details that will be referred to from UIA.

	Eric Martin with the assistance of Robyn Riddett
Author Contact Details:	Eric Martin and Associates
Street name & No	10/68 Jardine Street, Kingston
Suburb	Canberra
State	ACT
Postcode	2604
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Status:	
Project ID:	Sidney Myer Music Bowl, Melbourne
Image:	

SIDNEY MYER MUSIC BOWL

NOTE:

This document presents details of heritage buildings developed for Internet searches. An indexing form on the internet allows the on-line submission of this information. This document is intended to let anyone who is willing to participate forward the RAIA information about buildings to be added to the system without using the Web.

Importance of the criteria column lets you to point at the particularly importance of one or several elements of description of the building. You can here indicate (decreasing order A,B,C,D,E, ie International, National, State, Regional, Local) whether an element of description appears to you as decisive in its selection for the index.

Name of the Criteria	Importance of the criteria	Your Building
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Name of the Criteria	Importance of the criteria	Your Building
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TABLE n° 1 : DESCRIPTION OF BUILDING / SITE

MODULE 1 : IDENTITY OF THE BUILDING / SITE		
Current name		Sidney Myer Music Bowl
Previous or other name(s)		
Present owner		Government of Victoria, managed by the Victorian Arts Centre Trust
Status of the owner		State Government
Materials and techniques		Steel cables and masts supporting a tent-like skin of 'Alumply' (aluminium-faced plywood).
Description		The Sidney Myer Music Bowl is a canopy of aluminium-faced plywood supported by steel cables and tapered steel masts, stretched over a stage and orchestra pit with some fixed timber seating, and a sloping lawn area. At the rear of the stage and under the stage are a number of service and support rooms.
Year of project design		1955 – 57
Year of beginning of construction		1958
Year of end of construction		1959
Initial Design (if differs from description)		–
Changes to initial changes		Changes to the building have been largely to backstage areas, including the installation of a plant room for ice making.
Documentation and References		<p>Documentation of the Music Bowl, in the form of the architects' and structural engineers' design development and working drawings produced in 1957 and 1958 are held by the City of Melbourne Building Control Department. Some drawings showing subsequent works, including the 1984 alterations to the basement dressing rooms, are also held by the Department. The 1957 architects' drawings differ from the building as constructed in a number of areas, detailed in the following sections, and appear to show the scheme as developed before the detailed structural design was undertaken. The structural engineers' drawings include a number of drawings showing earlier proposals for cable fixings and the cladding and indicate the process of refinement of details that took place during the documentation and construction phase. A detailed existing conditions report by structural engineers, Scott Wilson Irwin Johnston was completed in 1995.</p> <p>Photographs showing the construction of the Music Bowl and the structure following completion are held by the Coles Myer archives.</p>

		Allan – Lovell in association with Dr Phillip Goad Conservation Management Plan 1996
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MODULE 2 : BUILDING / SITE LOCALISATION		
Postal Address: street, n°		3000 Kings Domain
Postal Address: town/suburb		Melbourne
Postal Address: Postal code		3004
Urban centre/city		City of Melbourne
Local Government area		
Region (State)		Victoria
Country		Australia
Regional Context (eg Coastal, urban, rural)		Inner Melbourne
Continent		Australia
Urban context (ex: Port, new town, etc...)		Set within a large Park close to the CBD of Melbourne

MODULE 3 : AUTHORS		
Project Design:		
Name, first name, (dates), job, country of origin		Yuncken Freeman Bros Griffiths & Simpson. Patten, Barry (1927 –), Architect, Australia Dimitroff, Angel
Information on the author / the team		<p>Born in Melbourne in 1927, Barry Patten graduated from the architecture school at the University of Melbourne in 1951. A talented skier, Patten returned from the 1952 Winter Olympics in Oslo in 1953, when he took up a position as a partner at the Melbourne architectural practice of Yuncken Freeman Bros Griffith & Simpson. The Sidney Myer Music Bowl was one of Patten's first substantial projects with the firm, and represented the early stage of what was to be a long and very distinguished career in the profession. Patten remained for most of his career with the same firm, which was later known as Yuncken Freeman Ltd. He was director responsible for the commercial design arm of the practice which was one of Australia's largest and which employed at its peak a staff of 200 in eight different offices.</p> <p>Angel Dimitroff, Barry Patten's principal assistant on the project, had joined Yuncken Freeman in 1952, not long before Patten was made a partner. Though operating at a more junior level within the practice, on the Music Bowl project, Dimitroff worked with Patten through the design development stage, making the first model and producing the final drawings. Dimitroff stayed with the firm of Yuncken Freeman for 39 years, and worked again on many occasions with both Patten and the other main design partner, Roy Simpson.</p>

Engineering:		
Name, first name, (dates), job, country of origin		WL Irwin & Associates (Structural Engineers)
Information on the author / the team		
Construction:		
Name, first name, (dates), job, country of origin		John Holland Construction and ASCOM Construction
Information on the author / the team		The construction of the Myer Music Bowl was undertaken by John Holland Construction and ASCOM Construction, the latter being a company made up mainly of young Italian riggers who had come to Australia to erect television masts during the early days of television.
Contracting Authority:		
Name, first name, (dates), job, country of origin		Victorian Government
Information on the author / the team		

MODULE 4 : TYPOLOGY		
Type (single building/complex)		Single Building
Initial use		Performance Space
Present use		Performance Space
Planned use)		Performance Space
Architectural Style		Late Twentieth Century Structuralist

MODULE 5 : EVALUATION (Analysis of significance)		
Background		
		<p>A philanthropic donation by Sidney Myer (through Sidney Myer Charity Trust) enabled this purpose built outdoor venue to be constructed in Melbourne to enable live outdoor performances to be enjoyed by the public.</p> <p>It is set within 2.734 hectares of landscaped parkland and uses the natural slope, slightly modified to provide the amphitheatre form.</p> <p>Designed in 1955 by Yuncken Freeman one of Melbourne's leading Architectural firms its structural expression is of world importance.</p>
Technical		
Comments		At the time of its construction the Sidney Myer Music Bowl was one of a small number of structures in Australia to combine a tensile structural system with a free form roof and was the most important in terms of scale, sophistication and boldness of structural expression.
Social		
Comments		The Sidney Myer Music Bowl has strong association

		with the Myer family and has been a major public venue for Melbourne's performing arts including the annual Carols by Candlelight.
Aesthetic		
Comments		The Sidney Myer Music Bowl is of outstanding aesthetics. The simple free flowing form and parkland setting provide a pleasing organic mix of technology and nature that work in harmony with each other.
Contextual		
Comments		In the context of structural expression only the Olympic Swimming Pool Melbourne is of the same period and in an international context it is of world importance in tensile construction. The development of outdoor public performing arts centre is also important to Melbourne Culture.
Historical		
Comments		It was the first major purpose built live outdoor cultural venue constructed in Melbourne which has held a wide range of memorable events.
Originality		
Comments		The structural expression and system established was part of the avant garde approach to Melbourne Architecture in the 1950's and this established technology equal to anything in the world at the time.

AWARDS FOR EXCELLENCE		

TABLE n° 2: STATE OF BUILDING / SITE

MODULE 1 : ANALYSIS OF CURRENT STATE		
Building Condition		The building is undergoing major conservation work in 2000.
Evaluation of danger (decreasing order A,B,C,D,E)		
Nature of danger		–
Comments		–

MODULE 2 : PROTECTION		
Current Heritage Listing		Australian Government Heritage Register (Register of the National Estate)
Administrative level of protection (Statutory or Non-Statutory)		Statutory
Authority / Institution providing listing		Australian Heritage Commission
Registration Reference		Database Number: 101639 File Number: 2/11/033/0706
Planned restoration		2000
Current Heritage Listing		Victorian State Government Heritage Register
Administrative level of protection (Statutory or Non-Statutory)		Statutory
Authority / Institution providing listing		Victorian State Government
Registration Reference		No H1772
Planned restoration		2000
Current Heritage Listing		Classified in Community Register (National Trust)
Administrative level of protection (Statutory or Non-Statutory)		Non-Statutory
Authority / Institution providing listing		National Trust of Australia (VIC)
Registration Reference		
Planned restoration		2000
Current Heritage Listing		Listed in RAIA National Register of Significant Twentieth Century Architecture
Administrative level of protection (Statutory or Non-Statutory)		Non-Statutory
Authority / Institution providing listing		Royal Australian Institute of Architects, National Heritage Register
Registration Reference		(TBA)
Planned restoration		2000

**TABLE n° 3 : CHARACTERISATION OF THE BUILDING / SITE
(Significance of the building under the Stated Criteria)**

Categories of Criteria		
MODULE 1 : PERIOD OF DESIGN / CONSTRUCTION		
<p>Outstanding national importance in demonstrating the principal characteristics of a particular class or period of design.</p>		<p>Structural expression and material experiment were popular amongst Melbourne's more <i>avant-garde</i> architects in the 1950s, but this interest was expressed mainly through residential buildings. In terms of larger scale public buildings, only the Olympic Swimming Pool Melbourne, designed by John and Phyllis Murphy, Kevin Borland and Peter McIntyre (1953-6) can be compared with the Sidney Myer Music Bowl. Along with the hinged, trussed Swimming Pool building, the Bowl is a notable experiment in the use of structural steel in a new innovative structural system. In the architectural expression of structure through form, and both buildings drew national acclaim.</p> <p>In the international context, the Sidney Myer Music Bowl differed from the concrete shell structures which may have partly inspired its designers, and which offered a challenge to traditional architectural forms during this period. Its structural design appeared to echo the thinking of German architect / engineer, Frei Otto, whose book on the subject, <i>Das Hangende Dach</i>, (The Hung Roof) was published in 1954, yet it predated experiments in tensile-stress construction by Otto and others by almost ten years.</p> <p>At the time of its construction, the Sydney Myer Music Bowl was one of a small number of structures in Australia to combine a tensile structural system with a free-form roof, and was by far the most important in terms of its scale, sophistication and boldness of structural expression. The project represented an enormous achievement for its architects and structural engineers, and involved input from a number of technical and scientific consultants, including members of the Aeronautical Research Laboratories and CSIRO Forest Products Division.</p> <p>The Sidney Myer Music Bowl is a rare example of a large scale sound shell in the Australian context.</p>
MODULE 2 : FORMAL ARCHITECTURAL VALUE		
<p>Outstanding national importance in exhibiting particular aesthetic characteristics.</p>		<p>The aesthetic values and design of the Sidney Myer Music Bowl are outstanding. Although the shape strongly influenced the structure the attention to detail and how its shape fits within its setting has been carefully and cleverly resolved. The Bowl in its modified natural amphitheatre and the integration of structure in a modern form provides an outstanding design solution.</p>

MODULE 3 : RELATION TO THE LOCATION		
<p>Outstanding national importance in establishing a high degree of creative achievement.</p>		<p>The Sidney Myer Music Bowl is located in the King's Domain south of Alexandra Avenue and Linlithgow Avenue. The landscaped parkland curtilage mostly comprises expanses of mown grass and groups of mature eucalypts and other native and exotic tree species. The King George V monument is located near the Music Bowl to the south-west.</p> <p>The Music Bowl site (Bowl plus seating area) currently comprises 2.734 ha, including the area to the south and on each side of the Bowl within the current fence line and an area to the north including the sloping access roads. The Bowl is oriented on a north-south axis facing the upward slope to the south. The natural slope of the site was modified by construction of large earth mounds on each side and to the south of the Bowl to create an amphitheatre form and to provide additional shielding from outside noise. The amphitheatre is covered with lawn and is crossed by asphalt paths with brick and terracotta spoon drains on each side of the Bowl. The grassed slope south of the canopy was made steeper in 1989 to improve sight lines. Simple galvanised tubular steel railings line the sloping paths on each side of the Bowl. Trees are planted around the perimeter of the amphitheatre to the south and on top of the mounds. A cast bronze sculpture <i>Maggiore</i> (Pino Conte) is located on the lawn south-west of the Bowl.</p> <p>The undated sculpture, comprising a seated female figure supported on a steel and concrete base, appears to date from the 1950s.</p> <p>To the north of the Bowl are two service access roads, approached from Lithgow Avenue and laid in a horseshoe form with a set down to stage level loading bays on the east and west sides. The clay and mudstone sides of the excavations are covered with Gunite sprayed concrete. Privet hedges are planted above the access road excavations, covering Cyclone wire mesh fences. New sections of Cyclone wire mesh fences were constructed to replace sections of the original hedges above the 1989 extension to the rear of the stage. Several mature trees are located on the flat lawn area immediately north of the Bowl. A large public toilet block, reconstructed in 1989, is located next to the Bowl to the north-east. A Cyclone wire mesh fence encloses the amphitheatre, following the 1980s 'Men at Work' concert line.</p>
MODULE 4 : MONUMENTAL OR SYMBOLICAL SIGNIFICANCE		
<p>Having outstanding monumental and symbolic importance to the development of architecture and the history of architecture.</p>		<p>The Bowl was the first major purpose-built outdoor cultural venue to be constructed in Melbourne and was designed to accommodate a completely new scale of live outdoor performance events. In</p>

		<p>February 1959, attendances at the opening night (30,000) and for American evangelist, Billy Graham, (in excess of 70,000) demonstrated the vast capacity of the Bowl and its surrounds. Since this time, the Bowl has continued to operate as an improved outdoor venue, and for large numbers of Melburnians, has been the scene of many memorable performances. Despite the construction of other major performance venues such as the Victorian Arts Centre and the Sports and Entertainment Centre, the Sidney Myer Music Bowl remains an important part of the Melbourne performing arts scene. More recently, the Bowl has been used as an ice skating rink, allowing year round use of the venue.</p> <p>The Sidney Myer Music Bowl has important historical associations with Sidney Myer and the Myer family. Construction of the Bowl was funded by the Sidney Myer Charity Trust. A lover of classical music, Sidney Myer had sponsored free outdoor performances by the Melbourne Symphony Orchestra since 1929, and before his death in 1934 had expressed a wish that a permanent home for such performances be constructed in Melbourne and then funded the new Bowl. Construction were overseen by members of the Myer family, most notably the late Kenneth Myer, Sidney's son. The Myer family has had an ongoing role and interest in the Music Bowl. From its opening in early 1959, the venue was managed by the Sidney Myer Charity Trust, until management was transferred to the Victorian Arts Centre Trust in 1980. The Bowl influenced other architecture of the time.</p>
MODULE 5 : ATYPICITY		
<p>Having a special association with the life or works of an architect of outstanding importance to our history.</p>		<p>The originality of the work principally stems from the structural system which was the largest of its type in Australia and also equal to anything similar in the world at the time. The work is an outstanding example of work by one of Australia's leading architects Yuckmen Freeman</p>
MODULE 6 : CONSTRUCTION / STRUCTURE		
<p>Outstanding national importance in demonstrating a high degree of technical achievement of a particular period.</p>		<p>The structure of the Music Bowl canopy is based on a web of pre-stressed steel cables which support a skin of aluminium-faced plywood ('Alumply') panels. While the canopy is held down on the west, north and east sides by the cables and the tubular steel window frame mullions, all of the primary structural joints and the joints between the plywood panels were designed to be flexible to allow the structure to act as a dynamic form and for limited movement under wind loads and thermal movement.</p> <p>The large primary support cable is a bundle of seven steel cables, with a total diameter of 254 mm anchored to the ground on each side of the open</p>

	<p>end of the Bowl and draped between two cigar-shaped steel masts. The masts are 22.8 m high and spaced 33.5 m apart. They are circular in cross section and have a parabolic tapering form reducing from 914 mm diameter at the centre to 406mm diameter at each end. The initial proposals for a hollow tubular steel construction were later changed, possibly at the instigation of the fabricator Fleet Forge Pty Ltd, to a composite construction comprising a welded square box form structural core and a fibreglass cladding. The masts have hemispherical pivot mountings at the bases, supported on concrete pad footings, and cast steel top caps and pin jointed cable support shoes. The primary cables are encased with concrete below ground level at each end and are anchored to large reinforced concrete blocks buried some 12 m below ground level.</p> <p>A series of secondary cables is draped from the primary cable converging on a ground anchor located to the north of the stage approximately 60 m behind the main support masts. The rear ground anchor is of prestressed reinforced concrete construction, with an inverted L-shaped cross section, and is sunk nearly 12 m into the ground. The secondary cables are fixed to the primary cable with pin-jointed connections to large cast steel clamps which are fixed around the primary cable.</p> <p>Transverse tertiary cables are draped over the secondary cable system and are fixed to individual ground anchors on each side of the Bowl. Their function essentially is to provide lateral stability to the structure and to counteract wind uplift forces on the canopy. They are also used to secure the Alumpy cladding panels. The secondary and tertiary cables are fixed at their intersection points by circular galvanised steel clamp plates fixed with U-bolts.</p> <p>The Alumpy panels comprise 12.7 mm (0.5 inch) thick plywood sheets clad on both sides with aluminium sheet. The panels are fixed between the tertiary cables and are bolted to rectangular galvanised steel brackets fixed to the tertiary cables with U-bolts. Polyethylene and 'Duralon' washers are fixed between the panels and the fixing brackets to act as water seals and to absorb movement. Joints between the panels originally were covered with flexible aluminium strips, shaped to arch over the tertiary cables and screwed onto the panels on a mastic sealant. The south edge of the cladding next to the primary support cable is reinforced against wind loads with a full length steel tube fixed on top of the panels with U-bolts. 25 mm aluminium angle is fixed along the lower edge of the cladding on the</p>
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		<p>east and west sides. Its structural design appeared to echo the thinking of German architect/engineer, Frei Otto, whose book on the subject, <i>Das Hangende Dach</i>, (The Hung Roof) was published in 1954, yet it predated experiments in tensile-stress construction by Otto and others by almost ten years.</p>
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STATEMENT OF SIGNIFICANCE

<p>In which areas is the building a forerunner or exemplary</p>		<p>The Sidney Myer Music Bowl is of considerable historical, social, scientific (technological) and cultural significance.</p> <p>The Sidney Myer Music Bowl was the first major purpose-built outdoor cultural venue to be constructed in Melbourne and was designed to accommodate a completely new scale of live outdoor performance events. Since opening in 1959, the Bowl has been the scene of a wide range of memorable events and performances for large numbers of Melburnians.</p> <p>The Sidney Myer Music Bowl has important historical associations with Sidney Myer and the Myer family. Named for its benefactor, the Sidney Myer Music Bowl is amongst the best-known projects of the Sidney Myer Charity Trust.</p> <p>The Sidney Myer Music Bowl is also of outstanding aesthetic and technological significance. Structural expression and material experiment were popular amongst Melbourne's more <i>avant-garde</i> architects in the 1950s, but this interest was expressed mainly through residential buildings. In terms of larger scale public buildings, only the Melbourne Olympic Swimming Pool has some similarities with the Sidney Myer Music Bowl. Along with the hinged, trussed Swimming Pool building, the Bowl is a notable experiment in the use of a steel tensile structure, and in the architectural expression of structure through form, and both buildings drew national acclaim.</p> <p>In the international context, the Sidney Myer Music Bowl differed from the concrete shell structures which may have partly inspired its designers, and which offered a challenge to traditional architectural forms during this period.</p> <p>At the time of its construction, the Sydney Myer Music Bowl was one of a small number of structures in Australia to combine a tensile structural system with a free-form roof, and was by far the most important in terms of its scale, sophistication and boldness of structural expression (others were the Melbourne Olympic Swimming Pool and some</p>
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		<p>Melbourne houses). The project represented an enormous achievement for its architects and structural engineers, and involved input from a number of technical and scientific consultants, including members of the Aeronautical Research Laboratories and CSIRO Forest Products Division.</p> <p>The Sidney Myer Music Bowl is a rare example of a large scale sound shell in the Australian context and the earliest example using a tensile steel structure in Australia. It is a fine example of one of Australia's leading architects, Yuncken Freeman.</p>
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IMAGE and PLAN

Image:	
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Plan

