Australian Institute of Architects ACT Chapter

Register of Significant Architecture

Prepared by Can Ercan, Anna Leeson and Ken Charlton with amendments by Laurie Virr.

RSA No: **R137**

Name of Place: **Rivendell**

Other/Former Names: **Virr House**

Address/Location: 17 Meredith Circuit KAMBAH ACT 2902
Block 15 Section 204 Kambah

Listing Status:	Registered	Other Heritage Listings:	None
Date of Listing:	November 2019	Level of Significance:	Territory
Date of Citation	September 2017	Category:	Residential
Citation Revision No:	2		
Citation Revision Date:	September 2020	Style:	Late 20th Century Organic Style
Date of Design:	1975	Designer:	Laurie Virr
Construction	1980	Client/Owner/Lessee:	Laurie Virr
		Builder:	Laurie Virr

STATEMENT OF SIGNIFICANCE:

'Rivendell' was designed by Canberra architect Laurie Virr for his family in 1975 and was substantially built with his own hands, and when the occasion allowed those of his wife and son. The complex plan, based on a hemicycle combined with triangular and hexagonal elements, was most creative. The house exhibits characteristics of energy efficient residential design in the ACT during the mid-1970s. It is a remarkable example of solar passive design, and remains comfortable in summer and winter without mechanical heating.

'Rivendell' is an excellent example of the Late Twentieth Century Organic style 1950–, which exhibits the style's broad characteristics of being inspired by the organic philosophy of Frank Lloyd Wright, appearing to grow from the site and being designed and constructed for energy efficiency. The key style indicators present are: free, asymmetrical massing expressing functional elements naturally and the retention of the natural setting.

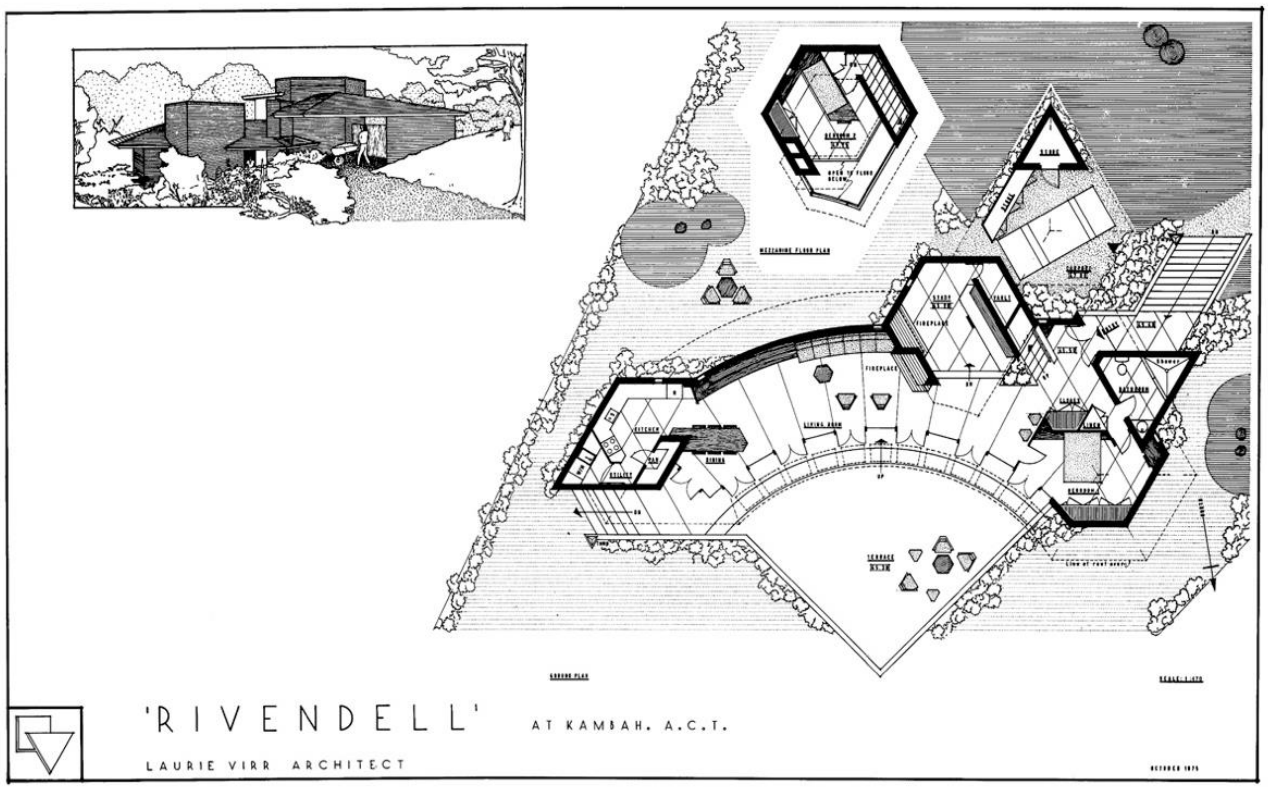
Laurie Virr's design philosophy, demonstrated at 'Rivendell', provides important insights for architects today, particularly with regard to creativity, responsible design and sustainability. The ground plan, which is really a very simple idea, makes manifest the individual spaces. 'Rivendell' demonstrates a high degree of creativity, still evident today, which was recognised by the house receiving the Australian Institute of Architects ACT Chapter's Enduring Architecture Award in 2016.

Description

'Rivendell' faces north on a suburban lot of 1108 square metres on the north side of Meredith Circuit, Kambah, and is sited to reap the benefits of solar access. Halfway up a hill, the site slopes down at 1:6 for the first 10 metres of its depth and the gradient then eases to 1:8 for the remaining distance to the rear lot line.

The brief for 'Rivendell' stipulated the requirements of the family: areas for living and dining, two small, but adequate bedrooms, a studio, kitchen, laundry-utility, bathroom, and a carport capable of sheltering a small car—at just over 123 square metres, a modest, clever, energy efficient design.

The house is based on a hemicycle—an architectural planning device that has been employed since Ancient Egypt and used in designs for twentieth century houses. All these latter designs used the hemicycle in conjunction with other elements, either circular or rectilinear. In 1975, however, it was unusual to combine the hemicycle with triangular and hexagonal elements.



Laurie Virr's 1975 design for 'Rivendell'

The ground plan is really a very simple idea: an arc terminating in polygons, with a two-storey central hexagonal mass anchoring the whole composition. The terminals also extend in height above the lower ridge line and all three masonry masses are embraced as they penetrate the sheltering roof. In further aspects of architectural expression, each space is articulated in both ground plan and elevation. The interpenetration of forms, both horizontally and vertically, makes manifest the architectural expression of the individual spaces, and the broad roof overhangs gratify the sense of shelter. The French doors and stationary glass on the north face of the house encompass an arc of 90°, making it an architectural expression of the problem. This is also exemplified by the walls that define the terrace and mark the extent of the glazing.

The living, dining, kitchen and studio are small areas in themselves, but they are arranged in such a manner that they borrow from each other, and together with the mezzanine bedroom, form one horizontal and vertical space. Moreover, the hemicycle form of the body of the house, and the disposition of the terminals is such that it is difficult to determine the extent of the space, for there always appears to be something beyond what is immediately visible.

The house is effectively one room wide, with very little area dedicated solely to circulation space. Unlike many so called solar houses that have warm living areas to the north, and very cold bedrooms to the south, the ground plan allows most of the walls and floors to act as solar collectors. During winter the sun strikes a wall of the main bedroom as soon as it rises above the hill to the east in the morning, and still shines in the area of the dining table, at the other end of the house, late in the afternoon. The masonry alone—30,000 bricks—furnishes 120 tonnes of mass, and this is enhanced by that of the insulated concrete floor slab. 'Rivendell' is comfortable in summer and winter without mechanical heating. Provision is made for cross-ventilation during the summer months, while the eaves and heavily insulated roof ensure that the effects of the sun are excluded during the warmest time of the year. 'Rivendell' has achieved a minimum temperature in winter of 12° Celsius without artificial heating, when the minimum temperature outdoors was -9° Celsius.

The construction materials are predominantly face brick masonry, wood casement sash and French doors, a coloured concrete floor slab, trowelled smooth and grooved along the lines of the module, and glass. The roof is clad in wood shingles. Almost all the furniture is timber, and built into the structure, with custom made upholstery for the bench seat. Laurie Virr included built-in furniture on all his presentation drawings, as he saw them as important and integral parts of each house. They were features of all his houses. In Rivendell the beauty and fine craftsmanship of the furniture form a significant part of the appeal of the home. All the details are the same and all are made of similar materials, giving the house harmony, warmth and beauty.

Colours used in the house blend with landscape and the landscaping of the site displays the same concern for the environment as does the house. The planting is predominantly comprised of trees, shrubs and ground covers native to the immediate region.

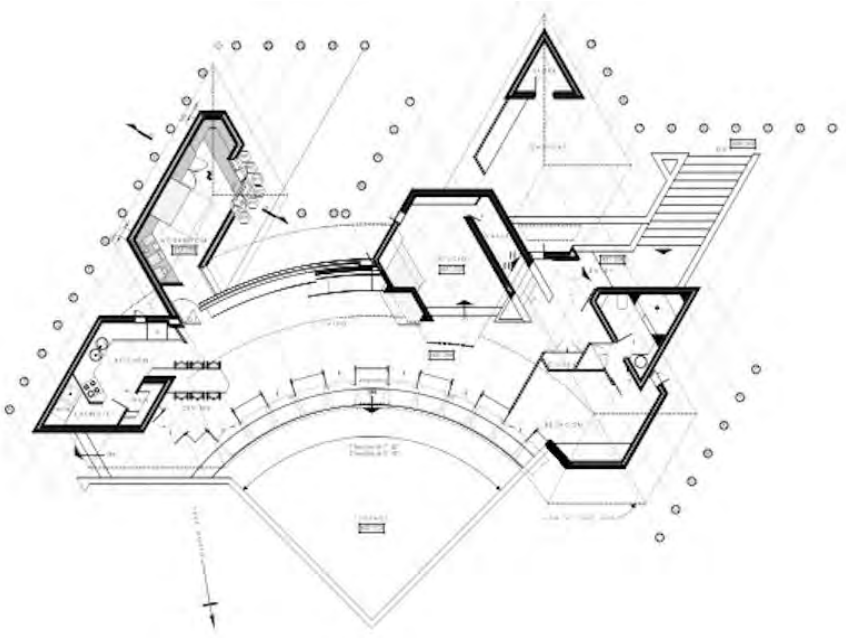
‘Rivendell’ is an excellent example of the Late Twentieth Century Organic style 1960– exhibiting the style’s broad characteristics: being inspired by the organic architecture of Frank Lloyd Wright, appearing to grow from the site and energy efficient design and construction. The key style indicators present are: Free, asymmetrical massing expressing functional elements naturally and the retention of the natural setting. The house has other characteristics of the style: Complex angular geometry with curves echoing shapes found in nature; horizontally boarded fascias; highlight windows and clearly expressed timber structure.

In 2016, ‘Rivendell’ was awarded the Australian Institute of Architects ACT Chapter’s Enduring Architecture Award. The award citation stated:

> ‘Rivendell, The Virr House, designed and built by architect Laurie Virr and completed in 1975, is a place that evokes an emotional response. There are senses of warmth, delight, tranquillity and connectivity to nature to be experienced upon entering this place. A remarkable synthesis of form, space, planning, detailing and integration with site, the Virr House embodies references to Frank Lloyd Wright and Walter Burley Griffin's geometric forms and organic planning. The formal and aesthetic qualities of Rivendell are indicative of Virr's broad understanding of architecture, landscape design, art and craft. The successful interpretation of a complex, ‘hemicycle’ geometric plan is unusual within the Canberra context.
>
> Laurie Virr’s architecture has been published widely in the United States, Europe and Australia, but, he remains relatively unknown in Canberra. Virr’s design philosophy provides important insights for architects today, particularly with regard to creativity, responsible design and sustainability. At only 123 square metres, this is a small house, only slightly larger than a standard government house of its time. Yet it encapsulates a feeling of expansive space that belies the relative compactness of the site and floor plate.
>
> The Virr House is an appropriate response to the Canberra environment. It is an example of solar passive design, and remains comfortable in summer and winter without mechanical heating. The enduring success of the house over 40 years derives from Laurie Virr’s strong design skills, from his deep philosophical beliefs about an appropriate way to live, and from his unwavering commitment to sustainability: economic, social and environmental. Rivendell reflects the passions and lifestyles of the occupants; the love and care bestowed upon it by its owners, Laurie and Mary Virr, support and enhance the enduring qualities of the architecture.’

Condition

Alterations and the addition of a workroom were designed by Laurie Virr in 2002 and built soon afterwards. The house is well maintained and in excellent condition.



Laurie Virr’s 2002 plan with the workroom addition.

Background/History

Lawrence George Virr (1933-), known as Laurie, is a Canberra-based architect who has designed work in the United States, New South Wales and Victoria, along with a number of houses in Canberra. Throughout a career spanning over fifty years, his primary concerns have been the design of energy efficient solar houses on rural sites and efficient planning for small spaces. Together with Enrico Taglietti, he has been one of the most original and important practitioners of the Late Twentieth Century Organic style of architecture working in Canberra.

Laurie Virr has qualifications in both architecture and engineering. From 1950 to 1958 he gained formal qualifications in civil engineering in England and was employed on large scale projects including bridges, water storage reservoirs, major storm water drainage works, high rise buildings and turbine installations.

Laurie Virr migrated to Australia in 1959, but returned to England to begin studying architecture at Kingston-on-Thames in 1962. He eventually graduated from the University of Melbourne with Honours in Design, after a period (1963-4) in the studio of American architect Malcolm Wells, in Cherry Hill, New Jersey. It was during this period that he designed and supervised the construction of his first passive solar house, and began to experiment with the idea of earth sheltered buildings. Examples of his work formed part of the Australian exhibits at the Commonwealth Institute, London, in 1972, and the Paris Biennale in 1982.

In January 1967 he established a practice in Canberra, where he has remained. His practice has been based on commissions for custom residences, with occasional forays into the design of workshops for light industrial processes. In Canberra, he played a role in the development of engineering infrastructure for the Russell Hill Defence complex. The majority of the residences have been at rural sites, and all of them have been either solar houses in cool temperate climates, or of low mass, as is required in tropical locations. Spasmodically, he has also been involved in the planning and design of schemes for the establishment of solar precincts in areas subject to urban renewal. This work has attracted the attention of local authorities in New South Wales, and of a private developer in Massachusetts, U.S.A.

Laurie Virr's first house in Canberra was built in the new bush suburb of Aranda in 1969 for Mr and Mrs Andrews. It demonstrates the themes he would explore in his residential projects over the next three decades: the use of massing, geometric forms and deep roof overhangs in an energy efficient, solar house.

Other notable buildings designed by Laurie Virr include:

- House 5 Juad Place, Aranda (1969)
- 14 Fergusson Crescent, Deakin (1982)

Throughout his career Laurie Virr has been invited to conduct classes in Architectural Design and the Theory of Architecture, at a number of universities. Recently he was nominated for the Bruce Goff Chair of Creative Architecture at the University of Oklahoma, Norman, Oklahoma. He has been a guest lecturer at universities in Australia, including the University of Canberra, and the United States of America. These latter include the Frank Lloyd Wright School of Architecture, Spring Green, Wisconsin, College of Architecture, University of Oklahoma, Norman, Oklahoma, University of Washington, Spokane, University of Minnesota, Minneapolis, and University of Idaho, Moscow.

The place Laurie Virr holds in Australia's architecture, particularly in the 1970s, is marked by his close relationship with a number of talented architects, such as Canberra's Bert Read and Enrico Taglietti. Architects elsewhere in Australia included Bruce Rickard, Richard Leplastrier, Geoffrey Woodfall, Charles Duncan, Robin Boyd, Rex Addison and Eddie Oribin. Laurie had spent time in their homes, and many visited him in Canberra, where they shared their views and dreams.

Comparable Houses in Canberra

This section provides a brief assessment of comparable buildings in Canberra to establish the relative importance, representativeness and rarity of the 'Rivendell' in the Canberra context. This comparative analysis has been directed by the significant qualities of the house, namely the value that lies in its organic form and its early interpretation of energy efficient design in private residences.

14 Jansz Crescent, Griffith

14 Jansz Crescent was built and adapted between 1958 and 1973 by the architect Derek Wrigley and was designed as a sustainable and solar house. Designed for Wrigley's family, the brick veneer house featured

glazing and a vertical timber panelled gable to the north façade of the living room and adjacent bedroom. In the open plan central living room, the full height doors and wall outlets near the ceiling assisted warm air circulation throughout the home. This house was nominated to the ACT Heritage Register for its architectural style however was denied listing due to the high degree of change that has occurred.

5 Juad Place, Aranda

Designed by Laurie Virr in 1969, this was his first noteworthy commission and demonstrates themes he would develop throughout his career, including the use of massing, geometry, deep roof overhangs and solar orientation. A densely treed site and a client's desire to retain them inspired the triangular module floor plan.

Many recently constructed houses in Canberra incorporate energy efficient technology and design and could be discussed in this assessment. However, 'Rivendell' is a rare, surviving example of the early use of energy efficient design in Canberra. This assessment has demonstrated that there are few examples from the period that incorporate these principles, making 'Rivendell' an important surviving piece of Laurie Virr's work and an important example of energy efficient design in Canberra.

Frank Lloyd Wright's Solar Hemicycle Houses

Laurie Virr gained valuable experience during 1963-4 in the studio of Malcolm Wells, who was a pioneer of earth-sheltered architecture and a follower of the renowned architect, Frank Lloyd Wright (1869-1959). Two decades earlier, Wright had conceived what he called a solar hemicycle house. The word hemicycle, from the Greek for a semicircle, referred to the arc of a glass wall to capture the sun.

Jacobs House 2 *Source: pdhonline.com*

Cooke House in 2015 *Source: steinerag.com*

The Herbert Jacobs House 2, Wisconsin, designed in 1944, was Wright's first hemicycle house. It was to be a solar house, one that would turn its sheltered back to the cold north winds and invite the sun in through its two-storey high wall of south-facing glass. The house was constructed by 1948.

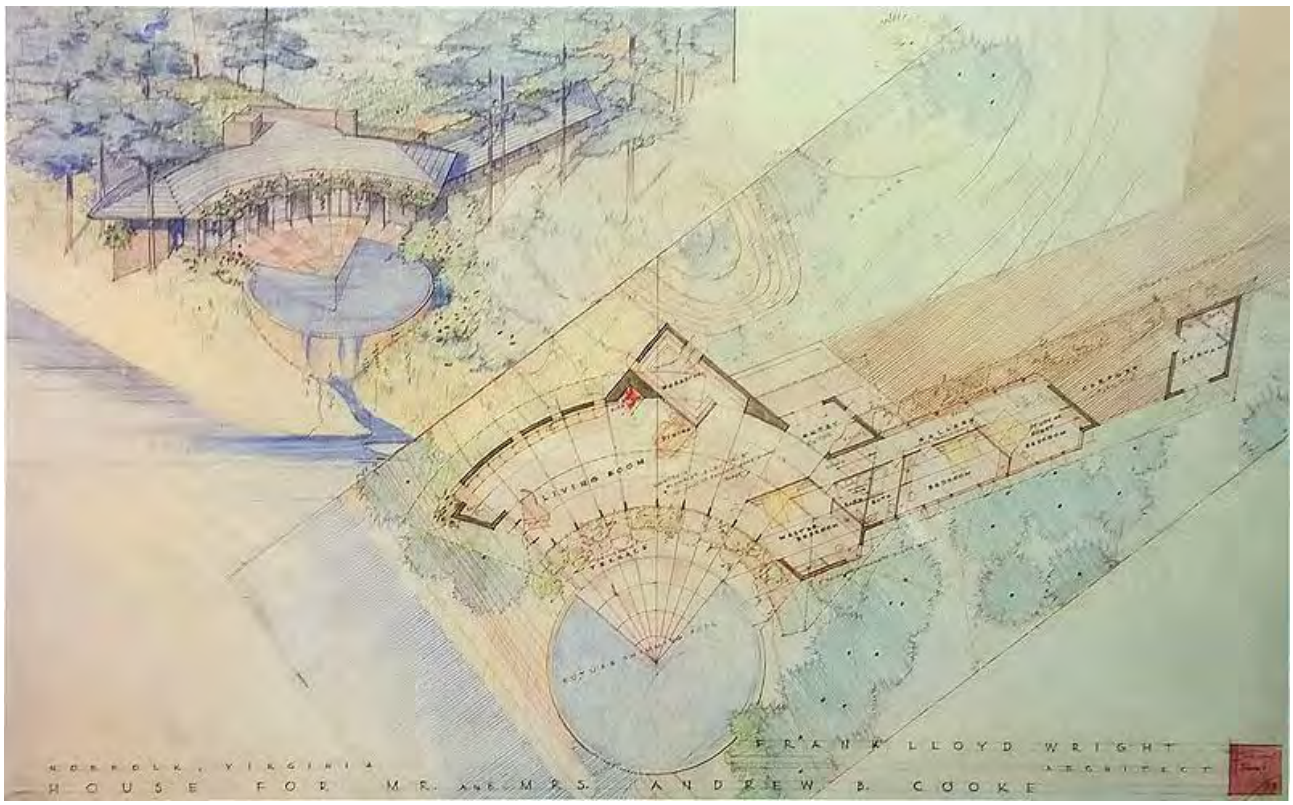


Illustration from The Wright Library, courtesy of the Frank Lloyd Wright Foundation. Source: steinerag.com

Wright refined the concept in several of his later houses, such as the Cooke House, Norfolk, Virginia in 1953. It was planned with a quarter-circle wall of glass on the south side of the single-storey living space with the centre converging at a point outside on the terrace. The bedroom wing is based on a diamond module, which Wright was also using in the 1950s for major projects such as the Price Tower in Bartlesville, Oklahoma.

Laurie Virr demonstrated his understanding of Wright's approach to solar house principles in his design of 'Rivendell' where the hemicycle is oriented to maximise exposure to the sun. He also kept the character firmly organic, with brick walls, a wood shingled roof and a diamond module.

Images of 'Rivendell'

Clockwise from top left:

ACTPLA Aerial photo, June 2019.

The roof above the living room. Photo by Laurie Virr, posted on wrightchat.savewright.org

The studio flowing into the living room; and the central tower. Photos by Tim Wimborne, from *100 Canberra Houses*.

The living room. Photo: Rachel Jackson, *2016 ACT Architecture Awards booklet.*

ASSESSMENT AGAINST CRITERIA IN THE HERITAGE ACT 2004

a. Importance in the course or pattern of the ACT's cultural or natural history

'Rivendell' does not have importance to the course or pattern of the ACT's cultural history. Consequently, it is considered that 'Rivendell' does not meet the threshold for Criterion a.

b. Has uncommon, rare or endangered aspects of the ACT's cultural or natural history

'Rivendell' does not demonstrate uncommon, rare or endangered aspects of the ACT's cultural history. Consequently, 'Rivendell' does not meet the threshold for Criterion b.

c. Potential to yield information that will contribute to an understanding of ACT's cultural or natural history

'Rivendell' does not have the potential to yield information that will contribute to our understanding of ACT's cultural or natural history.
Consequently, it is considered that 'Rivendell' does not meet meet the threshold for Criterion c.

d. Importance in demonstrates the principal characteristics of a class of cultural or natural places or objects

'Rivendell' is an excellent example of the Late Twentieth Century Organic style 1960–, which exhibits the style's broad characteristics of being inspired by the organic architecture of Frank Lloyd Wright, appearing to grow from the site and being designed and constructed for energy efficiency. The key style indicators present are: free, asymmetrical massing expressing functional elements naturally and the retention of the natural setting. The house has other characteristics of the style: complex angular geometry with curves echoing shapes found in nature; horizontally boarded fascias; highlight windows and clearly expressed timber structure.

Consequently, it is considered that 'Rivendell' meets the threshold for Criterion d to a high degree.

e. Importance in exhibiting particular aesthetic characteristics valued by the ACT community or a cultural group in the ACT.

There is insufficient evidence that the community or a cultural group values the aesthetic characteristics of 'Rivendell'.
Consequently, it is considered that 'Rivendell' dose not meet the threshold for Criterion e.

f. Importance in demonstrating a high degree of creative or technical achievement for a particular period

The successful achievement of a complex plan based on a hemicycle, combined with triangular and hexagonal elements was very creative in the mid 1970s. The ground plan allows most of the walls and floors to act as solar collectors. During winter the sun strikes a wall of the main bedroom as soon as it rises above the hill to the east in the morning, and still shines at the other end of the house late in the afternoon. It remains comfortable in summer and winter without mechanical heating. Provision is made for cross-ventilation during the summer months, while the eaves and heavily insulated roof ensure that the effects of the sun are excluded during the warmest time of the year. 'Rivendell' demonstrates a high degree of creativity which was recognised by the AIA ACT Chapter's Enduring Architecture Award in 2016.

Consequently, it is considered that 'Rivendell' meets the threshold for Criterion f to a high degree.

g. Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons. This includes the significance of a place to Indigenous peoples as part of their continuing and developing cultural traditions.

Rivendell does not have any strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
Consequently, it is considered that 'Rivendell' does not meet meet the threshold for Criterion g.

h. Special association with the life or works of a person, or group of persons, of importance in our history.

Laurie Virr is known beyond the ACT more than within it, where he remains relatively unknown.
Consequently, it is considered that 'Rivendell' does not meet meet the threshold for Criterion h.

REFERENCES

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https://msd.unimelb.edu.au/alumni/alumni-profiles/laurie-virr

www.laurievirrarchitect.com