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Heritage Interpretation Strategy

Rudders Bond – 53-57 Campbell Road, St Peters

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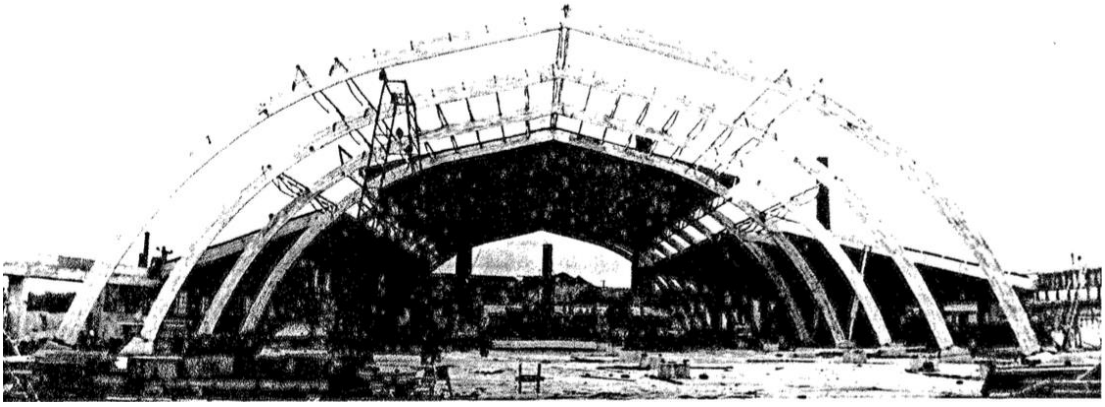

prepared for

CDS Joint Venture

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Extent Heritage Pty Ltd
ABN 24 608 666 306
ACN 608 666 306
www.extent.com.au
info@extent.com.au

SYDNEY
2/729 Elizabeth St
Waterloo NSW 2017
P 02 9555 4000
F 02 9555 7005

MELBOURNE
2/35 Hope St
Brunswick VIC 3056
P 03 9388 0622

PERTH
25/108 St Georges Tce
Perth WA 6000
P 08 9381 5206

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1. INTRODUCTION

1.1 The Brief

EXTENT Heritage Pty Ltd has been commissioned by CPB Dragados Samsung Joint Venture to advise on the potential opportunities and constraints around the salvage, future installation and interpretation of the Rudders Bond laminated timber arched beams.

The purpose of this interpretation strategy is to present the options for interpretation, including installation concepts, designs and materials, potential locations, functional uses and some general implementation recommendations. The intention is to provide an integrated and innovative interpretation scheme across the Rudders Bond site, responding to the relevant themes and influences of the area.

This site-specific interpretation strategy will compile some general comments and concepts which will form part of the overall interpretation plan for the WestConnex Stage 2 Heritage Interpretation Plan which is still under development.

1.2 Limitations

The historical overview provides sufficient historical background to provide an understanding of the place in order to explore and provide various interpretation concepts, however, it is not intended as an exhaustive history of the site. It was prepared from research undertaken by Extent Heritage and presented in the *Rudders Bond Store Comparative Analysis, July 2016.*

1.3 Author Identification and Acknowledgements

The following staff members at Extent Heritage Pty Ltd have prepared this Heritage Interpretation Concept Plan:

[redacted] Senior Associate, NSW Historic Places Team Leader

[redacted] Heritage Advisor

[redacted] Heritage Advisor

[redacted] Heritage Advisor

Information was sourced for this report from:

- Listing Sheets for the precinct from *www.environment.nsw.gov.au/heritage*
- National Library of Australia image database, www.trove.nla.gov.au

1.4 Terminology

The terminology in this report follows definitions presented in The Burra Charter. Article 1 provides the following definitions:

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including components, fixtures, contents, and objects.

Conservation means all the processes of looking after a *place* so to retain its *cultural significance.*

Maintenance means the continuous protective care of the f*abric* and *setting* of a *place*, and is to be distinguished from repair. Repair involves restoration or reconstruction.

Preservation means maintaining the *fabric* of a *place* in its existing state and retarding deterioration.

Restoration means returning the existing *fabric* of a *place* to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Reconstruction means returning the *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material into the *fabric*.

Adaptation means modifying a *place* to suit the existing use or a proposed use.

Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use that respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

Interpretation means all the ways of presenting the *cultural significance* of a *place*.

Setting means the area around a *place*, which may include the visual catchment.

Related place means a place that contributes to the *cultural significance* of another place.

The ENAME Charter Definitions:

Interpretation refers to the full range of potential activities intended to heighten public awareness and enhance understanding of cultural heritage site. These can include print and electronic publications, public lectures, on-site and directly related off-site installations, educational programmes, community activities, and ongoing research, training, and evaluation of the interpretation process itself.

Presentation more specifically denotes the carefully planned communication of interpretive content through the arrangement of interpretive information, physical access, and interpretive infrastructure at a cultural heritage site. It can be conveyed through a variety of technical means, including, yet not requiring, such elements as informational panels, museum-type displays, formalized walking tours, lectures and guided tours, and multimedia applications and websites.

Interpretive infrastructure refers to physical installations, facilities, and areas at, or connected with a cultural heritage site that may be specifically utilised for the purposes of interpretation and presentation including those supporting interpretation via new and existing technologies.

Site interpreters refer to staff or volunteers at a cultural heritage site who are permanently or temporarily engaged in the public communication of information relating to the values and significance of the site.

Cultural Heritage Site refers to a place, locality, natural landscape, settlement area, architectural complex, archaeological site, or standing structure that is recognized and often legally protected as a place of historical and cultural significance.

2. SITE

2.1 Location

The subject property is located at 53-57 Campbell Road and intersections Lots 101 and 102 Lot DPs 845651 and 871150. It is bounded by Campbell Road to the north-east and Burrows Road to the south-east. The area to the North of the Rudders Bond Store contains Sydney Park, while the streetscapes to the south of the area are characterised by warehouses.

Figure 1. Map indicating location of 53-57 Campbell Road Building outlined in red (Source: Google Maps – 29/2/2016).

Figure 2. Aerial view with subject property (Source: NSW Land and Property Information SIX viewer 29-2-2016).

3. HERITAGE MANAGEMENT FRAMEWORK

3.1 Heritage Status

The subject site is listed as a local heritage item (#I1405) under Schedule 5 of the Sydney *Local Environmental Plan* 2012.

3.2 Statement of Significance

The following Statement of Significance is provided from the City of Sydney *LEP* Heritage Item Inventory Sheet:

> *The site is of historical significance for its role in the production of engineered timber in Australia from c1946 to 1958. Symonds was a pioneering manufacturer of such timbers and the building contains a good example of the companies work in the timber frame of the building. The building has strong associations with Ralph Symonds a pioneer of laminated timber construction in the post-war era in Sydney and Melbourne whose factory this site was and who designed the laminated timber structure supporting the roof. This building is of State and Australian significance as a surviving example of the laminated arches pioneered by Ralph Symonds. As a physical example of these structures the building has great research potential for studying this innovative building technology and to some extent the production processes. Surviving early laminated timber buildings are rare. The site is significant for its role in the history of engineered timbers across Australia and is of state level of significance.*

Additionally, this comparative analysis has identified that:

> *The Rudders Bond Store is rare as one of five remaining Ralph Symonds industrial buildings in Australia. It is one of three located within NSW. The building is rare as one of less than 18 known large-scale glue laminated timber structures identified as possibly remaining in Australia.*

4. BRIEF HISTORY

4.1 Rudders Bond Store

The former Symonds Warehouse is located at 53-57 Campbell Road, St Peters. Various histories of the site provide a conflicting timeline of events. Given the conflicting accounts found in documentation, this history primarily relies on aerial photographs and historic maps and plans to present a history of site development.

It is presumed that Ralph Symonds acquired the site at some stage in the early 1940s. The original warehouse on site was a large rectangular building with what appears to have been an arched roof. The style of building was commonly referred to as an igloo style of building and records indicate in may have been used for aircraft works.

By 1949 this building has been demolished and a new factory along Holland Street constructed. Reportedly this first section was built c1946 at which point the Symonds factory is believed to have begun operating at the site. Shortly after construction was completed, the council granted permission for the premises to be used for general storage by Rudders with the property being leased to them by Symonds.[1]

4.2 Ralph Symonds and his Company

Ralph Symonds commenced his lifelong association with timber fabrication in 1924 with the foundation of Standardised Furniture at Marrickville in Sydney, which specialised in sliced veneer faced plywood panels.[2] By 1942 he had registered as a proprietary company and became a public company in 1950. He moved into the design of machines for the manufacture of large sheets and incorporated these into his factories where he produced some of the first durable and fire-resistant plywoods.[3]

In 1935 Symonds rented a factory in Moreley Avenue, Rosebury and set it up with machinery for his wood manufacture. By 1943 he had added to this to have other premises at Lilyfield as well as occupying two small spaces on Regent Street, Redfern.[4] Symonds then began construction on his own factory building at St Peters (Rudders Bond Store), which commenced operations in 1946, though the Morley Avenue plant continued to be the main site of operations until 1958.[5]

Symonds was renowned as a master of plywood who specialised in doing things that most people said could not be done. He went bankrupt more than once and built a series of one-off timber and plywood structures. He regarded these projects as essential aspects of product development and company promotion.[6] Symonds maintained "that glue laminated factories were most economic for spans greater than 90ft (27.4 m).

Thought to be Symond's first building venture is the extant former National Springs igloo building at 52-54 O'Riordan Street in Alexandria, constructed in 1941 and used for the engineering and construction

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[1] AECOM Australia Pty Ltd (November 2015) *WestConnex New M5 Environmental Impact Statement*
[2] Cochrane, J. *Ralph Symonds Pty Ltd and the Sydney Opera House*, Faculty of Architecture, The University of Newcastle.
[3] Wyatt, Ken (2000) Ralph Symonds Plywood Factory. In: Lowe, PG (Editor); Hill, RF (Editor). Second Australasian Conference on Engineering Heritage, Auckland: Proceedings. Auckland, N.Z.: Institution of Professional Engineers New Zealand: 243-248.
[4] Honchcroft, Y. (1987). *Company History of Ralph Symonds Australia Ltd* (unpublished). Mitchell Library, Sydney.
[5] Honchcroft, Y. (1987). *Company History of Ralph Symonds Australia Ltd* (unpublished). Mitchell Library, Sydney.
[6] Cochrane, J. *Ralph Symonds Pty Ltd and the Sydney Opera House*, Faculty of Architecture, The University of Newcastle.

of aircraft during the war.[7] This building is credited with being the first use of glue laminated timber for large-scale building construction in Australia.

During the war, Symonds made plywood landing craft for the Army and decoy Kittyhawk aircraft for the Air Force. Constructed specifically for a singular event was the 'Ceremonial Arches' commemorating Queen Elizabeth II's visit to Sydney in 1954. Six arches were constructed for the event for display in Sydney as well as an additional arch manufactured for Melbourne. They were named: 'The Timber Development Association's Log Arch'; 'The City Council Boomerang Arch'; 'The Insurance Companies' Arch'; 'The Bankers' Arch'; 'The Retail Traders' Arch'; The Agricultural Society's Arch'.[8] Only documentary evidence of these arches remains.

In 1959 the Symonds company moved to a new structure purpose built by Symonds at Homebush Bay. The new factory covered an area of over 14 acres and made use of a waterside location for transport. It consisted of three parallel rows of tied three pin glue laminated arches. The arches were glue laminated on the ground slab of the building and erected by Symonds' own work force. The whole work took only 18 months. Each row of arches is at 52 m centres while each arch spans 43 m. Glue laminated rafters span between. There are 46 arch bays in each row at 7. 6 m centres. This gives a building over 156m wide and 350m long. This is the largest timber building constructed in Australia. [9]

Symonds work was used in the construction of the Sydney Opera House. The technology developed by Ralph Symonds Limited was essential to architect Joern Utzon's method of design development for the structure. Utzon was an ally to Symonds in his willingness to technically develop Symonds ideas about the creative potential for plywood in architecture. Symonds and Utzon appear to have worked in collaboration, with Symonds solutions being applicable to the irregular plan and form of the building. Ralph Symonds died prematurely in 1961 and Ralph Symonds Ltd carried on the work on the Opera House under the direction of Mr Ellis Ezra. [10]

Symonds produced at least one other major arch building before 1958. This was a 120 ft (36. 6 m) span factory for Neon Industries in Melbourne. The arches for this building appear very similar to those used in Symonds St Peters factory. They were 28 x 4 ins (710 x 100 mm) members glue laminated from oregon. Symonds shipped them from St Peters to Melbourne on a special truck and bogey. He is also responsible for another Victorian building, the Turner & Burge factory built in 1945.

4.3 Timber Construction – World War II and Post War

Following the commencement of WWII, the Government began to order the resources of the Commonwealth for the nation's defense and it recognised that timber was now an essential construction material. As a consequence, it established an office of the Controller of Timber and placed all the timber resources of the nation under its control. To co-ordinate this mass of construction work associated with defense building, the government established the Allied Works Council (AWC) and from 26 February 1942, it assumed control for all defense projects for the Allied Armies.[11]

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[7] AECOM Australia Pty Ltd (November 2015) *WestConnex New M5 Environmental Impact Statement*
[8] Nolan G. (October 1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston, p.34-7
[9] Nolan G. (1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston.
[10] Cochrane, J. (1998) *Ralph Symonds Pty Ltd and the Sydney Opera House*, Faculty of Architecture, The University of Newcastle.
[11] Noland G. (1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston.

With the huge war building program and with the necessity to conserve steel, the AWC recognized the advantages of the use of Australian timber as a building material for large engineering structures.[12] The AWC made departures from accepted design practices in timber and the war removed major factors that had previously restricted design and construction in timber. Timber design technology and experience became available from elsewhere and an urgent demand existed for large structures. As a result, largely untried timber technologies became the foundation of most major building construction in the period 1942-45, during which time the AWC built thousands of structures, many timber, throughout Australia. The longest span, most numerous, most diverse and most widely spread examples of timber buildings seen in Australia were all built at this time.[13]

In the post-war period a major cycle of building was underway by 1950 and all building materials were in short supply. Following 1945, all forms of manufacturing increased enormously for the next two decades. This represented the strongest period of Australia's industrial history.[14] Timber design and engineering re-emerged to take advantage of this opportunity with an expansion in long span industrial timber structures. During this time, timber was used as a comparable alternative to steel by several dedicated engineering practitioners. However, while it held economic advantages it was still not seen as a favoured choice by the dominant professional groups.[15]

The war time shortage of materials demanded experimentation with timber building solutions. During this war and post-war period, the manufacturer Ralph Symonds along with the engineer Malcolm Stanley were two of major practitioners using long span timber construction in the form of glue laminated timber. The conditions allowed for experimentation with timber structures and both used glue laminated timber in their work.

4.4 Glue Laminated Timber

Glued laminated timber (now referred to as Glulam) is a type of structural engineered wood product comprising a number of layers of lumber bonded together with adhesives. By laminating a number of smaller pieces of lumber, a single large, strong, structural member is manufactured. Using this technology creates freedom in shaping the timber, which can include curved and arched shapes. This methodology can also produce long span beams and arches due to its high strength.

Use of glue laminated timber is recorded in use in Europe in the sixteenth century and was widely used in Europe before WWII. German Otto Hetzer obtained the first patent for glue laminated wood members in 1906, though his system (Known as the Hetzer System) may have been used as early as 1890. [16] The Hetzer system was also used to some extent in Austria, Czechoslovakia, France and Italy and had been introduced to the USA by the 1920s.[17]

Following on from growing use in the USA, glued laminated timber arches were discussed in print for the first time in the 1942 supplement to Langlands & Thomas's *Handbook of Structural Timber Design.*[18] There has been a claim that glue laminated arches were used in the Methodist church in Hesse St,

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[12] Allied Works Council Report (1942-43), p354. In Noland G. (1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston.
[13] Nolan G. (1994). *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston
[14] City Plan Heritage (2014). *City of Sydney Warehouses and Industrial Buildings Heritage Study Report*
[15] Nolan G. (1994). *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston
[16] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[17] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[18] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.

Queenscliff, Victoria, in 1868, and though the appearance of arches is consistent with this, it is unconfirmed.

There are records of glue laminated timber being in use as a technology in Australia in 1938 and the first documented application using glue laminated rafters was a store building designed by H. Garnet Alsop, Architect in 1941. It used 325 x 90 mm beam laid up from 105 x 18 floor boards to span 6 m with a 3m cantilever.[19] Additionally laminated wood was used in bridges in Australia in the 1850s, with the earliest in Australia possibly being Edmund Blackett's Wallis Creek bridge at Maitland NSW built in 1851. A variety of bridges built in this period used laminated timber but without glue.[20] In the 1850/60s laminated timber was used in a number of structures in Western Australia and Victoria, including the Fremantle Prison Chapel, the Perth Town Hall, in a cell block in Melbourne Gaol, Melbourne Metropolitan Meat Market and in the Maldon market house, though these were shorter spans. The Sydney Exhibition Building (1878-9) has laminated arches.[21]

Though not the first use of the material, Ralph Symonds Ltd is credited with the first large-scale building constructed using glue laminated timber as its principal structural members in Australia. It was for the National Springs Ltd building in O'Riordan Street, Alexandria in 1942. The building is a three pin parabolic arch structure for which Symonds fabricated the arches from 29 laminations of low grade rimu. The building's construction demonstrates an early and innovative structural use of laminated timber to achieve the quick construction, efficient use of materials and wide spans needed for wartime factories at a time of materials and labour shortages.[22]

Previous methods had involved progressive cramping of the laminated arch in four or five operations, taking several days, but during the war Symonds had developed and patented a method, using thousands of 'metal hangers', together with air pressure, to complete the whole operation in forty-five minutes. The radius of curvature was never less than eighty times the thickness of the laminate, and the number of laminations in an arch never less than twenty-four.[23] Symonds's patent application for his 'purlin' or lateral bracing system appears to date from 1944.[24]

Another practitioner that used laminated timber technology was Symonds friend Malcolm Stanley. He was involved with glue laminated arch structures from at least 1943. Then as senior partner of the consulting engineering firm of Stanley and Llewellyn, he designed a steady stream of long span industrial structures in timber from 1950 to 1955. He and his office developed the flat pier to pier two pin tied arch form to such an extent that by 1952, they had patented a stiffened tied arch. The arches became known as 'Stanley' arches. They were site laminated from a variety of timbers using casein-based glues. Stanley's work was widely reputed in the building and timber literature of the day. It greatly interested the CSIRO and they struggled to keep up with his developments.

Stanley used stitch bolts through the arches at about 900mm centres to guarantee adhesion.[25] Symonds' three pin glue laminated arch form and Stanley's pier to pier two pin tied glue laminated arch form can be traced directly from both men's earliest work with glue laminated timber construction and were developed during the War. Neither Stanley nor Symonds exploited nailed joints and their work showed sophistication in aesthetics, construction and amenity. Post war design used glue laminated

[19] Nolan G. (October 1994). *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston
[20] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[21] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[22] Former National Motor Springs Igloo Building, State Heritage Inventory Listing #5062448, City of Sydney Council.
[23] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[24] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[25] Nolan G. (1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston.

arches derived from circular arcs for the main structure with bolts and shear connector joints fixing secondary members.

In 1951 architect Frank Zipfinger published an article on laminated timber. He was involved with a project (Rheem Factory, Rydalmere) that used bow truss laminated arches made of Swedish fir and treated with xylamon to resist pests, imported from Dutch fabricators NV Nemano-Holland.[26] Walter & Morris of Port Adelaide also manufactured glue laminated beams from the 1950s.[27]

In late 1954, several major South Australian timber merchants, including Geddes, Lloyds and Wadlows, established a new company called Laminated Timber Products Limited to exploit the developments in glue laminated technology.[28] During 1955, they constructed at least four major glue laminated buildings: a 32ft (9. 75m) span steep three pin portal church, a 32ft (9. 75m) span three pin gothic arch church at Kurralta Park, a 130ft (39.6m) semi-circular three pin foundation arch factory in Hanson Road, Adelaide, and a large factory at Kalangadoo. Though the company was reported to have further orders for 1956, it went out of business before 1963.

[26] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[27] Lewis, M. B. (2012). *Australian building a cultural Investigation* http://www.mileslewis.net/australian-building/.
[28] Nolan G. (1994) *The Forgotten Long Span Timber Structures of Australia*, *A Thesis for the Degree of Master Of Architecture,* Department of Architecture, University of Tasmania Launceston.

5. GUIDING PRINCIPLES

5.1 The Burra Charter

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013 (Burra Charter) is considered the guiding document of best practice standards for the management of cultural and natural heritage within Australia.

The Charter states that it can be applied to all types of places of cultural significance including natural, Indigenous and historic places with cultural values. The Burra Charter Process outlines an approach of Understanding the Significance, Develop Policy, and Manage.

Articles of the Burra Charter that are appropriate and relevant to the interpretation of Rudders Bond and the associated arched beams include:

Article 3. Cautious Approach

3.1 Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.

3.2 Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 5. Values

5.1 Conservation of a place should identify and take into consideration all aspects of cultural and natural significance without unwarranted emphasis on any one value at the expense of others.

Article 6. Burra Charter Process

6.1 The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy. This is the Burra Charter Process.

6.2 Policy for managing a place must be based on an understanding of its cultural significance.

6.3 Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.

6.4 In developing an effective policy, different ways to retain cultural significance and address other factors may need to be explored.

Article 24. Retaining Associations and Meanings

24.1 Significant associations between people and a place should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of these associations should be investigated and implemented.

24.2 Significant meanings, including spiritual values, of a place should be respected. Opportunities for the continuation or revival of these meanings should be investigated and implemented.

Article 25. Interpretation

The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and engagement, and be culturally appropriate.

5.2 The ENAME Charter

The *ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites* is the most recent development in the guiding principles dealing with interpretation of cultural heritage sites. It sets forth seven cardinal principles upon which Interpretation and Presentation, in whatever form or medium deemed appropriate, should be based. Ratified in 2008, the International charter defines its purpose as being:

"to define the basic principles of Interpretation and Presentation as essential components of heritage conservation efforts and as a means of enhancing public appreciation and understanding of cultural heritage sites".

Principles of the ENAME Charter that are appropriate and relevant to the interpretation of Rudders Bond Store and the associated arched beams include:

Principle 1: Access and Understanding

1.1 Effective interpretation and presentation should enhance personal experience, increase public respect and understanding, and communicate the importance of the conservation of cultural heritage sites.

1.2 Interpretation and presentation should encourage individuals and communities to reflect on their own perceptions of a site and assist them in establishing a meaningful connection to it. The aim should be to stimulate further interest, learning, experience, and exploration.

1.3 Interpretation and presentation programmes should identify and assess their audiences demographically and culturally. Every effort should be made to communicate the site's values and significance to its varied audiences.

1.4 The diversity of language among visitors and associated communities connected with a heritage site should be taken into account in the interpretive infrastructure.

1.5 Interpretation and presentation activities should also be physically accessible to the public, in all its variety.

1.6 In cases where physical access to a cultural heritage site is restricted due to conservation concerns, cultural sensitivities, adaptive re-use, or safety issues, interpretation and presentation should be provided off-site.

Principle 2: Information Sources

2.1 Interpretation should show the range of oral and written information, material remains, traditions, and meanings attributed to a site. The sources of this information should be documented, archived, and made accessible to the public.

2.2 Interpretation should be based on a well-researched, multidisciplinary study of the site and its surroundings. It should also acknowledge that meaningful interpretation necessarily includes reflection on alternative historical hypotheses, local traditions, and stories.

2.4 Visual reconstructions, whether by artists, architects, or computer modelers, should be based upon detailed and systematic analysis of environmental, archaeological, architectural, and historical data, including analysis of written, oral and iconographic sources, and photography. The information sources on which such visual renderings are based should be clearly documented and alternative reconstructions based on the same evidence, when available, should be provided for comparison.

2.5 Interpretation and presentation programmes and activities should also be documented and archived for future reference and reflection.

Principle 3: Attention to Setting and Context

3.1 Interpretation should explore the significance of a site in its multi-faceted historical, political, spiritual, and artistic contexts. It should consider all aspects of the site's cultural, social, and environmental significance and values.

3.2 The public interpretation of a cultural heritage site should clearly distinguish and date the successive phases and influences in its evolution. The contributions of all periods to the significance of a site should be respected.

3.3 Interpretation should also take into account all groups that have contributed to the historical and cultural significance of the site.

3.4 The surrounding landscape, natural environment, and geographical setting are integral parts of a site's historical and cultural significance, and, as such, should be considered in its interpretation.

Principle 4: Preservation of Authenticity

4.1 Authenticity is a concern relevant to human communities as well as material remains. The design of a heritage interpretation programme should respect the traditional social functions of the site and the cultural practices and dignity of local residents and associated communities.

4.2 Interpretation and presentation should contribute to the conservation of the authenticity of a cultural heritage site by communicating its significance without adversely impacting its cultural values or irreversibly altering its fabric.

4.3 All visible interpretive infrastructures (such as kiosks, walking paths, and information panels) must be sensitive to the character, setting and the cultural and natural significance of the site, while remaining easily identifiable.

Principle 5: Planning for Sustainability

5.1 The development and implementation of interpretation and presentation programmes should be an integral part of the overall planning, budgeting, and management process of cultural heritage sites.

5.2 The potential effect of interpretive infrastructure and visitor numbers on the cultural value, physical characteristics, integrity, and natural environment of the site must be fully considered in heritage impact assessment studies.

5.3 Interpretation and presentation should serve a wide range of conservation, educational and cultural objectives. The success of an interpretive programme should not be evaluated solely on the basis of visitor attendance figures or revenue.

5.4 Interpretation and presentation should be an integral part of the conservation process, enhancing the public's awareness of specific conservation problems encountered at the site and explaining the efforts being taken to protect the site's physical integrity and authenticity.

5.5 Any technical or technological elements selected to become a permanent part of a site's interpretive infrastructure should be designed and constructed in a manner that will ensure effective and regular maintenance.

5.6 Interpretive programmes should aim to provide equitable and sustainable economic, social, and cultural benefits to all stakeholders through education, training and employment opportunities in site interpretation programmes.

Principle 6: Concern for Inclusiveness

6.1 The multidisciplinary expertise of scholars, community members, conservation experts, governmental authorities, site managers and interpreters, tourism operators, and other professionals should be integrated in the formulation of interpretation and presentation programmes.

6.2 The traditional rights, responsibilities, and interests of property owners and host and associated communities should be noted and respected in the planning of site interpretation and presentation programmes.

6.3 Plans for expansion or revision of interpretation and presentation programmes should be open for public comment and involvement. It is the right and responsibility of all to make their opinions and perspectives known.

6.4 Because the question of intellectual property and traditional cultural rights is especially relevant to the interpretation process and its expression in various communication media (such as on-site multimedia presentations, digital media, and printed materials), legal ownership and right to use images, texts, and other interpretive materials should be discussed, clarified, and agreed in the planning process.

Principle 7: Importance of Research, Training and Evaluation.

7.1 The interpretation of a cultural heritage site should not be considered to be completed with the completion of a specific interpretive infrastructure. Continuing research and consultation are important to furthering the understanding and appreciation of a site's significance. Regular review should be an integral element in every heritage interpretation programme.

7.2 The interpretive programme and infrastructure should be designed and constructed in a way that facilitates ongoing content revision and/or expansion.

7.3 Interpretation and presentation programmes and their physical impact on a site should be continuously monitored and evaluated, and periodic changes made on the basis of both scientific and scholarly analysis and public feedback. Visitors and members of associated communities as well as heritage professionals should be involved in this evaluation process.

7.4 Every interpretation programme should be considered as an educational resource for people of all ages. Its design should take into account its possible uses in school curricula, informal and lifelong learning programmes, communications and information media, special activities, events, and seasonal volunteer involvement.

6. INTERPRETATION STRATEGY

6.1 'Best Practice' Interpretation

Heritage is a cultural asset. As such it belongs and relates to all persons in a community and is linked to other aspects of a community's cultural traditions, physical environment and community life.

The heritage interpretation of a place should connect to audiences on all cultural levels and engage them in forming their own personal association to the site. It should be adaptable to all urban and regional contexts, whilst still respecting and appreciating the culture and values of the target audiences. Its ultimate aim is to share Australia's range of cultural heritage values through the effective and creative use of multi-faceted and dynamic platforms, installations and devices, as well as a wide variety of physical, face-to-face and digital media interfaces.

This heritage interpretation strategy identifies the interpretive principles that are particularly pertinent in regards to the Rudders Bond Store and its value as a rare example of a laminated timber arched beam construction within its context of the development of Sydney and of industrial technology in NSW.

This strategy aims to present several contemporary but meaningful opportunities to interpret these timber-arched beams with the most obvious limitations in mind regarding their size and scale. This strategy will demonstrate how the integrated use of interpretation types, from multi-functional installations too digital and 3D media can provide a 'best practice' approach for this somewhat logistically problematic site.

6.2 Interpretation Principles Used

To deliver the range of interpretation appropriate to the Rudders Bond Store the following 'best practice' principles, derived from established standards as outlined above, will be utilised:

Principle 1 – A Sense of Place

Interpretation will create a linkage and interaction between local residents, businesses and community whilst contributing to the experience of the visiting audience.

This principle will build on the long-standing connection of the place to the industrial development and prosperity of the region.

Principle 2 – Integration with the surrounding built environment

Interpretation will reaffirm its historic role in the community through meaningful design, while concurrently enhancing the existing built, natural and cultural landscape.

Principle 3 – Media

Interpretation will integrate a wide range of media and platforms to create sustainable and effective interpretation infrastructure.

Principle 4 – Community Engagement

Interpretation development will engage and incorporate community aspects as appropriate to create a sense of community ownership.

6.3 Relevant Historic Themes

This section identifies potential historic themes which could be effectively interpreted as a part of the Rudders Bond Store and associated arched beams concepts. These are drawn from the NSW

framework for Historic Themes set out in the *NSW Heritage Manual*[29]. These themes should be understood as broad guides and the points against them more detailed issues related to the site. It is not necessary to interpret all themes within the site. This would be in fact be undesirable, as it would lead to a crowded and potentially confusing interpretive experience.

Primary Themes		
National Theme	**NSW Theme**	**Local Theme**
Developing local, regional and national economies	Industry	Rudders Bond, Ralph Symonds Company, Laminated timber manufacturing.
Developing local, regional and national economies	Technology	Laminated timber manufacturing.
Building Settlements, towns and cities	Towns, suburbs and villages	Concentration of industry in Inner West Sydney
Governing	Government and administration	Wartime rationing and material restrictions.
Developing Australia's cultural life	Creative endeavour	Architectural application of laminated timbers for large structures used in Sydney Opera House and large warehouses like Rudders Bond and Bridge Road, Homebush.
Marking the phases of life	Persons	Martin Stanley and Ralph Symonds.

6.4 Identifying the Audience

A critical pathway in the establishment of effective interpretation is undertaking the necessary research into the target audience for the site. The Interpretation Plan (to be developed in future) would provide detailed design and extensive research specifically tailored to its identified audience.

At a very basic level, the target audiences associated with the site would include:

- Residents and Locals
- Visitors (Family and Friends)
- General Public (walkers, runners and bike riders, fitness groups)

The level of audience interaction and connection is very much dependent on location, landscape and access, as these factors are critical in determining how sites will be activated, and the level of experience that an audience will have the opportunity to connect with. However, detail of these factors have not been determined or approved at this stage of the WestConnex Stage 2 development.

This strategy can however present potential interpretive locations and precincts within and around the proposed WestConnex Stage 2 development area, and how those areas can be not only activated by interpretation, but enhanced.

[29] Heritage Office and Department of Urban Affairs and Planning (1996) NSW Heritage Manual: History and Heritage, p. 6

6.5 Interpretation Locations and Precincts

The following analysis of the development area and the greater region has sought to identify precincts and general locations where interpretation specific to the Rudders Bond Store and the associated timber laminated arched beams might be located. This analysis is purely strategic and can be used to guide the decision making and planning process regarding future development and land use.

The options have been considered based on a consideration of the site, but also on the input provided by HASSELL who are currently preparing the landscape master plan for the site. There are a number of key constraints which impact on the provisions of interpretation and HASSELL has provided the following brief summary:

- Majority of the interchange is located on an existing landfill site which will be capped and subject to extremely high settlements over the long term. Constructing any structure over the capped areas requires complex structural solutions, which may not be feasible.
- The area available for large interpretative pieces, including a dedicated interpretation centre is limited. The interchange area includes a significant area of public open space that is not suitable due to landform (batters and mounds), drainage and vast array of utilities associated with the project works.
- The potential scale, form and function of the structure would be best suited to an area of relatively flat, useable parkland, of which space is limited to only a few areas, and also reliant on pending outcomes from other planning conditions.
- Stage 3 handover and construction – final design of parkland will be delivered under the future works program. This presents challenges in terms of design integration within the final scheme, especially given that it does not have planning approval.

HASSELL has also identified a number of issues still to be resolved which impact on potential interpretation options:

- Elevated pedestrian path (potentially to be removed from project scope) that currently divides open space opportunities adjacent to Campbell Road. Recreational open space requirements as part of Ministers Condition of Approval B62 (b).
- This includes increased provision for open playing fields and additional car parking. This presents challenges in terms of design integration within the final scheme.
- The requirements and space allocation for the future land bridge link to Sydney Park as part of Ministers Condition of Approval B62 (a). This presents challenges in terms of design integration within the final scheme.

The following is a preliminary desktop analysis only that has made use of publicly accessible plans of the development area. We have not considered any other known or unknown factors, expectations or outcomes in relation to these areas we have identified.

6.5.1 Campbell Road Parkland

Landscaping of the eastern half of the Campbell Road Parkland lies within the current Stage 2 of the Westconnex program.

The western portion of the proposed Campbell Road Parkland is part of the future works program for WestConnex Stage 3, and provides the opportunity for the arched beams to be treated holistically in terms of the overall site within the design phase for the future works. Any interpretation works to public art schemes will be able to be tied into the overall urban design scheme which is being prepared to

comply with the requirements of MCoA condition B62 ‘St Peters Interchange Recreational Area Sub-Plan’.

The sheer size and openness of this area in question provides a number of opportunities for small and large scale installations which promote an understanding of the overall bulk and scale of the arched beams. Opportunities include large physical public art installations, as well as signage, visual projections and structural elements.

As this is future works and not part of the current program, the landscape and overall urban design concept has not been determined and as such the final outcome is currently unknown. Furthermore, approval for this future phase has not been given. This presents a degree of uncertainty which cannot be cleared at this stage, but also presents an extensive opportunity to establish the parameters and inclusions early so the design can mature around the set requirements.

6.5.2 Sydney Park

While not specifically within the curtilage of the WestConnex project and subsequently not relating to Rudders Bond. Sydney Park is an adjacent site which currently interprets the industrial heritage of Sydney, specifically the former brick pits of the local area. The area is heavily trafficked by walkers, runners and general pedestrians, but also provides opportunities for physical and recreational activities.

As a potential location, Sydney Park and St Peters Interchange provides the opportunity to connect two prominent industrial locations in a conducive interpretation scheme. The scheme can be informative, while also being interactive, allowing groups to immerse themselves into an area, which use to be the industrial heartland of the Sydney area.

The arched beams can form a physical and digital element within the project area, with an emphasis on the construction methodology, the identities associated and the industrial innovation which permeated through Australia in response to the material shortages of World War II.

The openness of Sydney Park provides the opportunities for large installations within the vicinity of Campbell Road, while the visual connection between the site and the current Rudders Bond provides the opportunity for place identity installations which allow visitors to compare the past to the present.

This option while possessing a number of interpretation options, presented a key difficulty in that the site is not part of the St Peters Interchange site and as such getting agreement to place interpretation within this area may not be possible. This option is not a preferred option, but is one which is considered to be worth pursuing as a part of the interpretation plan.

6.5.3 WestConnex St Peters Interchange – Princes Highway

The area along Princes Highway, is a small open space area sitting at one of the highest points of the site. The area is connected to Princes Highway and Campbell Road by a through link pedestrian path which runs along the existing embankment. The area sits behind an existing McDonalds and residential building and is general secluded from the public eye.

The subject site runs along one of the motorway ramps, however when considering the interchange as a functional major motorway, meaningful interpretation would be very limited along the motorway as there will be very little audience interaction excepting fleeting glimpses by road users. Furthermore, it is unlikely any substantial engaging interpretation would be accepted along the motorway due to the potential distraction to motorists. However, it is considered that there are opportunities within the parkland and areas adjacent.

The pedestrian paths around the site and dissecting the area provide a greater opportunity for meaning interpretation which can act as arrival destinations or “pit stops” along the way. These could be in the form of visual or physical elements as either public art or interactive. The pedestrian path linking Princes

Highway at Canal Road with Princes Highway at Campbell Road, provide overlooking opportunities which are conducive to viewing platforms and visual interpretation elements that relate to the entire site as well as Rudders Bond.

The location provides the option for an interpretation centre which can be integrated into the existing adjacent land uses, but also provide a point of destination along the pedestrian path. The interpretation centre can include elements of the Rudders Bond arched beams, while also providing an interpretation experience for the entire site.

Interpretation within this area should be undertaken as a part of an overarching landscape and urban design plan with the aim of providing an integrated concept across the area. A consideration of the site holistically will ensure that the final design outcome considers all available design and integration options and works effectively on the site.

The design for the pathway and/or interpretation centre within the Princes Highway area should include cantilevered decks away from the cliff face. This would provide additional space within the area for interpretation, but also the opportunity to consider interpretation of the cliff face under the overall scheme.

6.5.4 WestConnex St Peters Interchange – Canal Road

A small area has been set aside as a part of WestConnex Stage 2 on the western side of the St Peters Interchange adjacent to Canal Road for the purposes of a public recreation area. The area sits at an RL level of +19.1 and provides a valuable overlooking point within the boundary of the WestConnex development.

The space is limited within the area and as such large artistic or public art placements are not seen to be possible, however the space does provide opportunities for viewing platforms or similar types of interpretative installations which will enable someone to understand the current and historic context of the area. This would apply to Rudders Bond but also to other sites including the former brick works and establishments along Alexandria Canal.

Small installations are possible within this area but as with the motorway portal options, the devices would be esoteric, indirect and would need to be supplemented by additional interpretation either on the subject site or within visual range from the site to enable a connection.

There is the opportunity to provide a visual connection between this site and the Princes Highway area located to the north which would integrate different areas and components of the site into a single concept or idea.

Similar to the previous option, any concept for interpretation within this area should be considered as a part of a holistic landscape plan for the area too sure an integrated design is implemented. The interpretation should be integrated into the landscape to have a purpose and to appear as it should belong. The Canal Road site cannot be considered as a stand-alone site due to the limitations mentioned above, as such an integrated approach will ensure the site is a part of an overall concept for the site.

7. CONCLUSIONS

EXTENT Heritage Pty Ltd has prepared this heritage interpretation strategy in response to the Condition of Approval requirements to present reuse options to the Heritage Council of NSW to be approved prior to demolition of the Rudders Bond building.

This interpretation strategy is a preliminary document focusing on the interpretation options for Rudders Bond and will feed into the overall interpretation plan for the entire St Peters Interchange and WestConnex Stage 2 area.

The strategy has identified 4 potential precincts for interpretation, this includes the parkland adjacent to Campbell Road, the area adjacent to Canal Road, Princes Highway and Sydney Park. All three sites provide opportunities for a variety of interpretation concepts which can portray the bulk, scale and materiality of Rudders Bond.

What is clear is that the sites should not be looked at individually and need to form part of a coordinated landscape and urban design master plan across the entire St Peters Interchange area. This will provide an integrated response which takes into account the small area of available land within the Canal Road precinct and the differing aspects of the Princes Highway area.

The following recommendations encompass the discussion and findings of this strategy:

1. Interpretation installation options for Rudders Bond are to be devised as a part of the overall interpretation concept plan for WestConnex Stage 2.

2. Interpretation guidelines should be developed to provide input in the future works program for the St Peters Interchange.

3. Interpretation for Rudders Bond should include a mix of physical and digital interpretation installations which demonstrate the bulk, scale and materiality of the building and its components.

4. The interpretation concept plan should focus on the delivery within the Canal Road and Princes Highway area.

5. The Interpretation concept plan is to be devised based on consultation with the relevant stakeholders and final approval from the Heritage Division prior to implementation.

6. The Interpretation concept plan is to be prepared in accordance with The Burra Charter, The ENAME Charter and the *NSW Heritage Manual*.