Vietnam War Memorial Cherry Tree Walk

Conservation Management Plan

Mittagong Rivulet, Bowral

For Wingecarribee Shire Council

May 2024

By Louise Thom Heritage
in collaboration with
Moore Trees,
Sydney Artefacts Conservation and
Planning Plus.

Louise Thom Heritage
M 0421 983 971
E info@louisethomheritage.com.au
W www.louisethomheritage.com.au
P P.O. Box 155, Corrimal NSW 2518

Cover Images: Vietnam War Memorial Cherry Tree Walk – Monument and Cherry Trees in bloom (Wingecarribee Shire Council, 2023)

Moore Trees

Tree Consultancy
PO Box 3114 Austinmer
NSW 2515
0242 680 425
www.mooretrees.com.au
Paul Vezgoff
Consulting Arborist
Member:
Arboriculture Australia (AA) Registered Consultant
International Society of Arboriculture (ISA)

SYDNEY ARTEFACTS CONSERVATION

Sydney Artefacts Conservation
PO Box 2164
Clovelly NSW 2031
Mob: 0419 444 633
anne@artconservation.com.au
Anne Cummins PM AICCM
Materials Conservator & Director

PLANNING PLUS

Planning Plus (NSW) Pty Ltd
7 Rosemont Street, West Wollongong NSW 2500
PO Box 113 Keiraville NSW 2500
M 0418 616 443
Wendy Todd, Principal

DOCUMENT CONTROL			
ISSUE	DESCRIPTION	DATE ISSUED	SENT TO
A	Preliminary Draft Section 1 to 7	13/3/2024	Key Stakeholders
B	Draft	20/3/2024	Wingecarribee Shire Council
C	Draft Section 9 to 13	22/3/2024	Key Stakeholders
D	Final	1/4/2024	Wingecarribee Shire Council
E	Final after WSC feedback	23/5/2024	Wingecarribee Shire Council
F	Adopted	7/8/2024	Wingecarribee Shire Council

Table of Contents

Table of Figures

1. Executive Summary

The significance of the Vietnam War Memorial Cherry Tree Walk in Bowral NSW should be conserved for present and future generations. The aim of this Conservation Management Plan (CMP) is to investigate and analyse documentary and physical evidence to formulate a statement of cultural significance, and to provide conservation policy to conserve this significance. This CMP was commissioned by Wingecarribee Shire Council.
In summary the CMP is divided into the following sections:

Historical and Physical Evidence
This report concludes that the Vietnam War Memorial Cherry Tree Walk's original form and configuration can be clearly understood. The overall memorial is in good condition – although 27 % of the Taihaku Cherry Trees are in poor condition or dead. A succession plan is in place to replace the trees. It is critical that any works at the memorial be documented and implemented in a way that the significance of the memorial is conserved.

Statement of Cultural Significance
The Vietnam War Memorial Cherry Tree Walk has historic, aesthetic and social significance, and representative and rarity value to Wingecarribee and the Southern Highlands and potentially the State of New South Wales

Constraints and Opportunities
The Vietnam War Memorial Cherry Tree Walk should be retained and conserved. The biggest challenge for the memorial is the health and longevity of the 307 Taihaku Cherry Trees.

Conservation Policy
In summary if the landscape memorial is valued, maintained and managed with care befitting its significance the Vietnam War Memorial Cherry Tree Walk can retain its heritage value and social significance to Wingecarribee and the State of New South Wales.

Maintenance
Maintenance recommendations for this document were informed by the expertise of Level 5 Arborist Paul Vezgoff from Moore Trees. Paul's report contained in Attachment 1 provides a condition description of every tree within the curtlilage. The CMP was also informed by the expertise of Anne Cummins, Materials Conservator from Sydney Artefacts Conservation who provided a condition report on all the monoliths which can be found in Attachment 2.

Consultation
As the memorial has very high social significance community engagement was a significant part of this CMP. Wendy Todd assisted the author Louise Thom in reaching out to the Veterans who had previously expressed an interest. In addition wider public consultation was undertaken through Councils web site Participate Wingecarribee, the results of which are included in Attachment 3.

Attachments – Arborist and Materials Conservator
The attachments are an integral part of this CMP. This CMP should only be reproduced as a whole containing all sections including the attachments.

2. Introduction

Report Objectives

The Bowral Vietnam War Memorial Cherry Tree Walk was established in 1995 and is currently under the management of Wingecarribee Shire Council. Council has commissioned this Conservation Management Plan (CMP) to guide the future conservation of the memorial.

Methodology and Structure

This document is guided by the methodology provided by the Heritage Council of NSW. Specifically, the following documents:

Guidance on developing a conservation management plan, Heritage Council of NSW 2021
Statement of best practice for conservation management plans, Heritage Council of NSW 2021
Conservation management plan checklist, Heritage Council of NSW 2021

The document is also based upon the standard of practice established in *The Australia ICOMOS Charter for Places of Cultural Significance*, 1999 Revised (The Burra Charter). The author is a member of Australia ICOMOS.

Authorship

This report was prepared by Louise Thom, Heritage Consultant. All photographs unless otherwise specified were taken by Louise Thom.

The report is informed by the expertise of the following specialists:
Paul Vezgoff, Consulting Arborist and Lisa Vezgoff of Moore Trees.
Anne Cummins, Conservator, Sydney Artefacts Conservation.
Wendy Todd, Community Engagement, Planning Plus.

Report limitations

There is a large amount of uncollated documentation in many different locations. There is no centralised repository for information on the memorial and many key documents such as the Council's original Development Application file are missing. The historical background contained in the CMP is therefore limited but sufficient to inform the assessment of significance and policy.

Acknowledgements

Many people were helpful in getting this document together. In particular I would like to acknowledge Ray McCann, Grahame Tooth, Roy Elbourne, Tony Blake and Annabelle Murray. I would also like to acknowledge the help of the staff of Wingecarribee Shire Council.

Terms

The Vietnam War Memorial Cherry Tree Walk is one memorial and should be considered as a whole. The following terms are used throughout the document.

Table 1. Terms used in this document

Term used in this CMP	Meaning
Vietnam War Memorial Cherry Tree Walk	The whole war memorial
The Memorial	Vietnam War Memorial Cherry Tree Walk as a whole
Cherry Tree Walk	The Cherry Tree lined pathway

Term used in this CMP	Meaning
The Monument	The 5 Monoliths, raised mound, four Cherry Trees and garden ring and the Casuarinas.
Sacred Grove	The grove of Casuarinas
Dedicated Area	The wider ceremonial area including the flag pole and the monument and the Casuarinas and pergola. See Figure 48.
The 8RAR monument dedicated area	The 8RAR monument and immediate area within and including the ring of Cherry Trees that was officially dedicated.
The 8RAR monument	The 8th Royal Australian Regiment monument.
Mittagong Road Entrance Pillars	Two monoliths marking the entrance at Mittagong Road.
Boolwey Entrance Pillar	One monolith marking the Boolwey Street entrance.
Taihaku 'Great White' Cherry Trees	The ornamental cherry tree sometimes also spelt Tai-Haki or Tai-Haku, *Prunus serrulata*
Mittagong Rivulet	Many sources refer to Mittagong Rivulet as Mittagong Creek. Mittagong Creek is used interchangeably to reflect the document cited.

War Memorial (meaning)

A war memorial is a commemorative object or place intended to remind us of the people who served in and died as a result of war. War memorials may take many forms, but common to all of them is the intention that they remind us of those we have lost to war. (Department of Veterans' Affairs, 2023)

Individual war memorials take different forms. The Vietnam War Memorial Cherry Tree Walk in Bowral is a landscape memorial. Whilst it has distinct parts, they are tied together by the landscape itself. Referred to by the original designers as an environmental memorial it is comprised of an avenue of trees, a monument and a formal ceremonial space seamlessly linked by the parkland, Mittagong Rivulet and the surrounding setting.

Location

The Vietnam War Memorial Cherry Tree Walk is located in Bowral in the Southern Highlands of NSW.

Study Area

The Vietnam War Memorial Cherry Tree Walk commences at 142 Mittagong Road, Bowral. It then follows Mittagong Creek (Rivulet) to cross over Victoria Street, then Rose Street, passes the end of Banksia Street, crossing Jasmine and Merrigang Streets, crosses Shepherd Street and terminates at Boolwey Street. The Vietnam War Memorial ceremonial area is in Settlers Park. The Cherry Tree Walk commences in Settlers Park and passes through Rivulet Park, Foley Park and Venables Park.

The property description for the Vietnam War Memorial Cherry Tree Walk includes the following parcels in full or part:

1//85220; 9//260073; 8//260073; 7//260073; 12//603108; 6//260073; 1//612724; 17//11818; 18//11818; 1//1108051; 2//603694; 2//1244951; 4//745766 and part of Banksia Street road reserve.

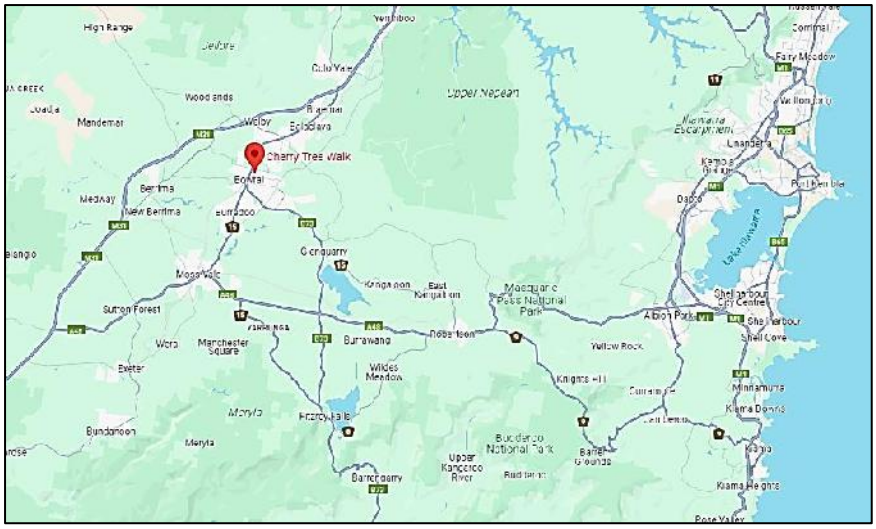


Figure 1. Vietnam War Memorial Cherry Tree Walk is in Bowral in the Southern Highlands of NSW

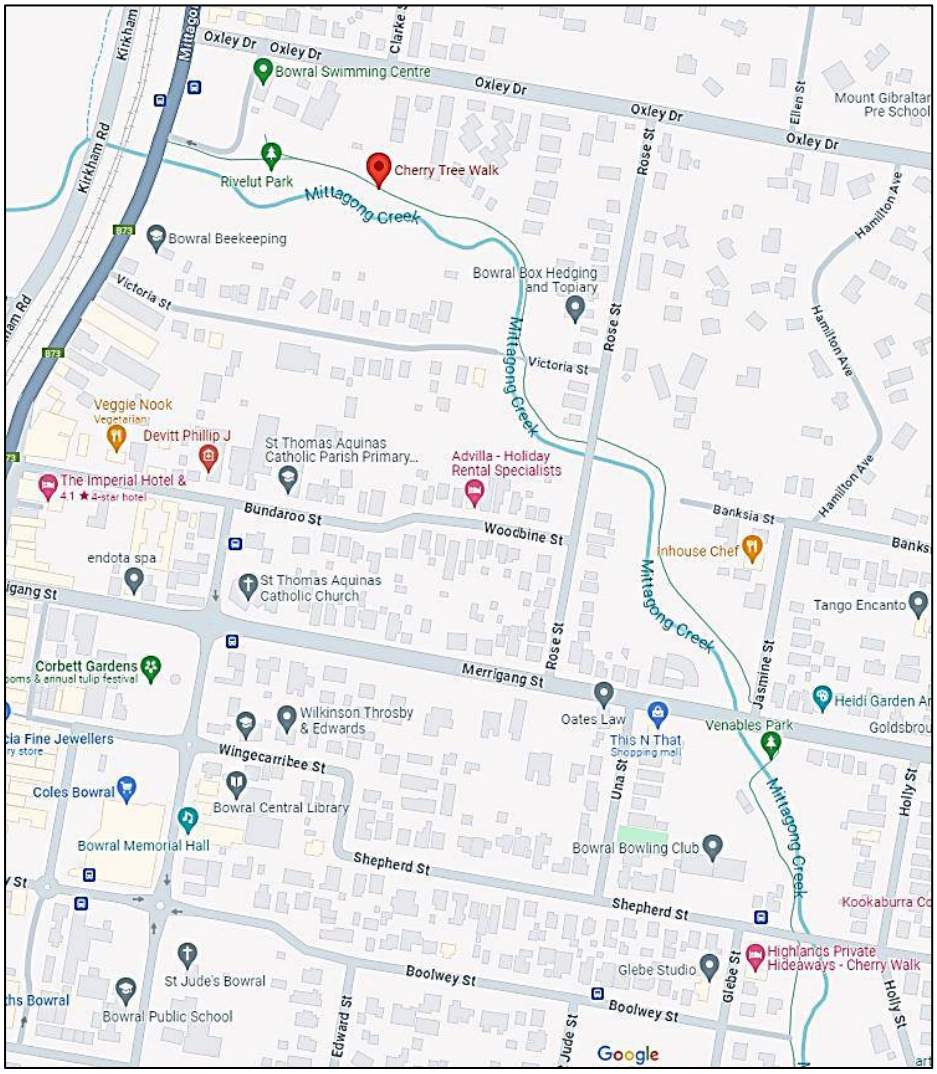


Figure 2. Vietnam War Memorial Cherry Tree Walk is situated between Mittagong Road and Boolwey Street and follows Mittagong Creek. The ceremonial area is in Settlers Park/Rivulet Park

3. Heritage Status

3.1. Statutory registers and schedules

There are a number of statutory heritage lists in Australia which are governed by different legislation.

- A World Heritage site recognises the place is of outstanding value to humanity. The listing is designated by UNESCO.
- A National Heritage listing recognises places of significance for Australia. The listing is made under the Environment Protection and Biodiversity Conservation Act 1999.
- A Commonwealth Heritage listing recognises places of significance that are owned by the Commonwealth. The listing is made under the Environment Protection and Biodiversity Conservation Act 1999.
- An Aboriginal Place declaration recognises the special significance of an area in NSW to Aboriginal people and their culture. The listing is declared by the Minister for Environment and Heritage under the National Parks and Wildlife Act 1974.
- A State Heritage Register listing recognises a place or object has significance for all of NSW. The listing is made under the Heritage Act 1977 by the Minister for Planning and Environment at the recommendation of the Heritage Council of NSW.
- A local heritage listing recognises the place has significance to the local government area and community. The listing is included in a local environmental plan, made under the Environmental Planning and Assessment Act 1979.

The Vietnam War Memorial Cherry Tree Walk, Bowral is not listed as a heritage item on any statutory heritage lists, registers or schedules.

Sections of the Memorial are included in Bowral Conservation Area (HCA) which is listed in Schedule 5 of Wingecarribee local Environmental Plan # C59, C89.

Statement of significance for the Bowral HCA C89:

The Bowral Urban Conservation Area is significant as an urban cultural landscape which provides evidence of the phases of major development of the town of Bowral. Each precinct has a different character and presents different aspects of town foundation and growth. Periods represented range from its establishment as a private town in the 1860s through to the interwar period. Functions represented include residential, civic, religious and educational. While the nature of the buildings and the gardens, public and private, illustrate the importance of Bowral as a 'rural retreat' for wealthy Sydneysiders in particular, associations with other community groupings are also represented in more modest vernacular streetscapes which are included in the Area.

In addition to the historical attributes the precincts in the Area, possess significant streetscapes which, considered as a whole, reveal the harmonious townscape character which is highly valued by the local community and visitors alike. (Heritage NSW, 2023)

Vietnam Cherry Tree Walk is contributory to the significance of Heritage Conservation Area C89 as a cultural landscape that is highly valued by the local community and visitors alike.

Statement of significance for the Bowral HCA C59:

Bowral Heritage Conservation Area - Northern Residential Precinct

The Victoria Street Precinct is significant in its associations with the main phases of growth of the town of Bowral. It is a cultural landscape which contains buildings which illustrate a range of residential periods and styles linked to the period of initial development after the opening of the railway to Sydney through to the post WWII period. Thus it is the illustration of layers of development that is the main feature unlike a townscape such as Berrima where there is a consistency of style and period.

The precinct is also significant to the local community as a townscape where the houses were built for the "townspeople" and in the main, represent the vernacular forms of domestic architecture of the periods represented in contrast to other areas such as Burradoo where the "grander" more substantial residences were often constructed as summer homes. Thus, while better individual examples of particular architectural styles exist elsewhere in Bowral, there is a sense of place associated with the area which is created by the vernacular character of the built form in combination with the elements of its setting such as the street trees, the creek and the layout of the streets. (Heritage NSW, 2023)

Vietnam Cherry Tree Walk is contributory to the significance of Heritage Conservation Area C59 as it contributes to the sense of place as an important element within the setting of the creek and parklands.

Figure 3. Bowral Heritage Conservation Areas are shown hatched red. Parts of Cherry Tree Walk are inside the HCA Shown circled.

3.2. Non-statutory heritage lists

There are a number of non-statutory heritage lists in Australia.

Register of the National Estate

- ≈ The Register of the National Estate (RNE) was closed in 2007 and is no longer a statutory list. The RNE is maintained on a non-statutory basis as a publicly available archive and educational resource by the Department of Climate Change, Energy, the Environment and Water.
- ≈ The Bowral Vietnam War Memorial Cherry Tree Walk is not listed on the DCCEEW heritage database.

Places of Pride, National Register of War Memorials, Australia

- ≈ Places of Pride is the National Register of War Memorials in Australia. It is an Australian War Memorial initiative to record the location and photo of every publicly accessible war memorial in Australia. (Australian War Memorial, 2023)
- ≈ The Vietnam War Memorial Cherry Tree Walk, Bowral is listed on the Places of Pride - National Register of War Memorials

NSW War Memorials Register

- ≈ The NSW War Memorials Register is a database of war memorials in New South Wales. It currently holds more than 3,000 war memorial records, and more than 200,000 veteran records. The Register enables communities to record accurate information about war memorials, provides best practice information about war memorial conservation, and connects memorials and veterans to sustain NSW military and commemorative history. The Register is hosted and maintained by the NSW Office for Veterans Affairs and the State Library of New South Wales. (NSW War Memorial Register, 2023)
- ≈ Vietnam War Memorial Cherry Tree Walk, Bowral is listed on the NSW War Memorials Register.

4. Historical Background

4.1. General historical background

Aboriginal history

Aboriginal groups traditionally occupying the Southern Highlands were the Gandangara (Gundungara) and the Dharawal (Tharawal). People living in the highlands relied upon vegetable sources such as tubers of the yam daisy, wattle seeds and orchid tubers. They caught fish and crayfish in the rivers and hunted possums and larger grazing animals.

The traditional lifestyle of Southern Highlands Aboriginal groups was disrupted when colonial settlement began in the early 19th century. This impacted water sources and affected vegetable and animal sources essential to their diet as well affecting their health through the introduction of disease, particularly the influenza epidemic of 1846-7. Some Aboriginal people adapted by working for the new settlers. (NSW Department of Planning, Industry and Environment, 2016)

The Wingecarriibee, Wollondilly and Nattai rivers continue to have particular cultural significance to the Gundungurra people. Another place of high cultural significance is Nungungungulla (Jubilee Rocks) which has been recognised as an Aboriginal Place under the National Parks and Wildlife Act for its pre-historic and historic significance.

Exploration and early settlement

One of the first Europeans recorded to have entered the County of Argyle was John Kennedy, uncle to Hamilton Hume. In 1817 Dr Charles Throsby explored the southern district, accompanied by Hamilton Hume, Joseph Wild and John Rowley. Throsby had the previous year explored the Illawarra. Throsby made several trips to the Berrima District between 1817 and 1821. (Jervis, A History of The Berrima District 1798-1973, 1986)

Governor Macquarie ordered the commencement of the road south in 1819. It was finally surveyed and built by Surveyor-General Thomas Mitchell in 1833. The road provided access to the district and settlement followed.

A small settlement was established at Sutton Forest which together with Throsby Park, formed the beginnings of the occupation of the district. In 1821 Surveyor-General Oxley commenced surveying lands for the making of grants. The land on which most of Bowral is built today is the eastern portion of a grant of 2400 acres made to John Oxley by the Governor in 1823 in recognition of his services. The Oxley property, known as 'Wingecarribee', also had a homestead of the same name. With later purchases Oxley's holding comprised 5000 acres. It extended from Mt. Gibraltar in the north and from the Old South Road in the east, to the new line of road between Mittagong and Berrima in the west.

In 1867 railway line from Sydney opened and in anticipation for an influx of people, the owners of the large estates began subdividing, with the first town plots sold in 1863. In 1870 Bowral Station opened. Quarrying commenced in the Mount Gibraltar area following the opening of the railway.

The 'Gibraltar Rock Quarries' were opened by Messrs Leggat and Company in 1886. By 1888 Loveridge and Hudson, who had been quarrying poorer quality stone at the top of Oxley Street, took over Chaker's quarry at the top of Cliff Street.

4.2. Site specific historical background

The area was originally granted to John Norton Oxley and Henry Molesworth Oxley by Crown Grant on 15 August 1855. John Norton Oxley was the son of John Oxley, Surveyor General of NSW. Henry Molesworth Oxley was the second son of Oxley Snr and lived at Wingecarribee House, Bowral. The 5000 acre estate was given to both John Norton and Henry Molesworth by their father. J. N Oxley received a township area while H. M. Oxley received the grazing portion.[1] (National Library of Australia, n.d.) A small settlement was formed in 1861 when part of the Oxley lands were subdivided as the Bowral Estate. (Jervis, 1937)

[1] *Oxley Family History*, *Sydney Mail*, 25 Sep 1918, p.25

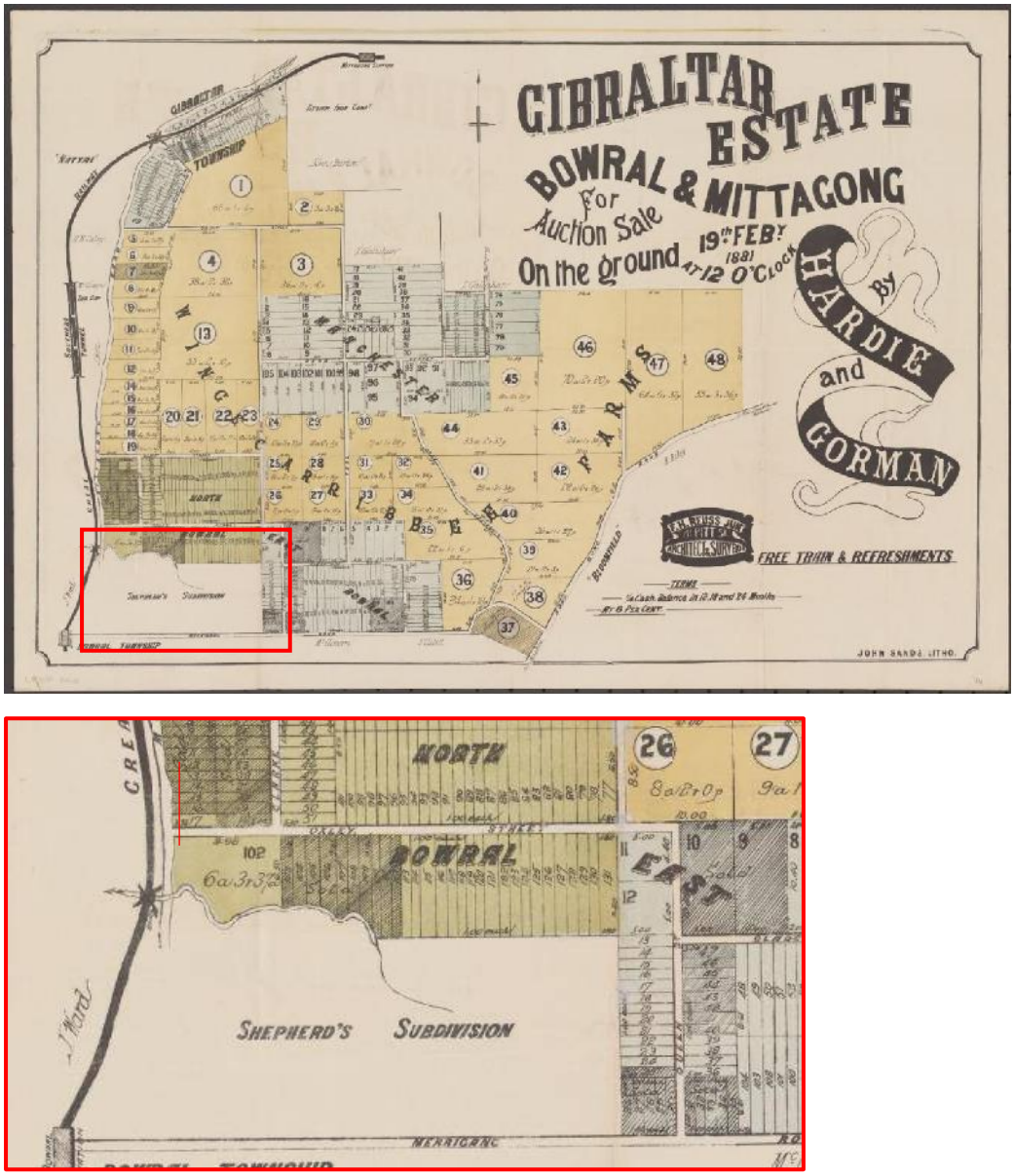


Figure 4. The 1881 subdivision sale plan for Gibraltar Estate, Bowral. Close up view Mittagong Rivulet and Shepherds Subdivision (National Library of Australia, n.d.)

The area where the Memorial is located is in the North Bowral Gibraltar Estate and PLC Shepherd's Subdivision (Patrick Lindesay Crawford Shepherd).

Settlers Park (Lot 1 DP 85220)

Sheldon Property Trust purchased Lot 102 of the North Bowral Gibraltar Estate and part of Lot 5 Section A of Shepherd's Subdivision comprising approximately 6 acres in January 1943. Originally known as Smiths Paddock the land was transferred to the Council of the Municipality of Bowral in March 1966. The land was finally dedicated as a public reserve in April 1974. The reserve did not become known as Settlers Park until 1996 when the Bowral Parks and Gardens Advisory Committee designed the park and dedicated it to the early European settlers in the Southern Highlands.

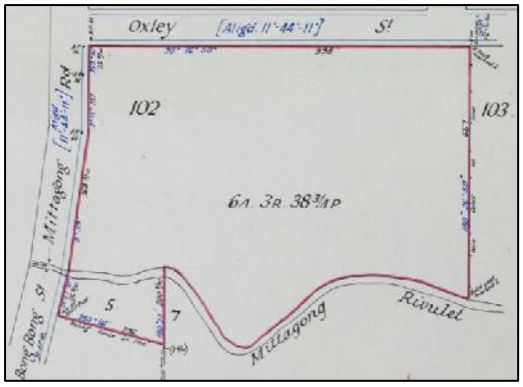


Figure 5. Diagram from land title showing lands which was dedicated as a public reserve in 1974 (CT 5360-62)

The Lions Club of Bowral together with a Skill Share program undertook landscaping and a monument was installed bearing the dedication. Settlers Park was officially opened by Hon. John Fahey MP, Minister for Finance in September 1996. (Micris Management Services, 2008)

Rivulet Park (Between Mittagong Road and Victoria Street)

Figure 6. The park at Mittagong Road during 1986 Floods (Bewsher Consulting Pty Ltd, 2009)

Mittagong Rivulet and adjoining lands have been subject to rising waters during heavy rain periods on many occasions.

In 1981 the Tulip Time Management Committee of Bowral proposed turning the area into a pleasure ground with the Rivulet as the main source of interest with at least one play pool for children to sail boats. With winding pebble paths, hillocks of trees and rustic bridges and at least one waterfall. A rustic bridge over the creek was approved by Council on 2 August 1983.

Figure 7. Looking north along Mittagong Road across Mittagong Creek in March 1975 (Bewsher Consulting Pty Ltd, 2009)

Lots 6, 7, 8, and 9 DP 260073 are located between lots facing Oxley Drive and Mittagong Creek. They were surveyed for the Deposited Plan in 1977 and set aside for a public reserve in 1979 and 1980.

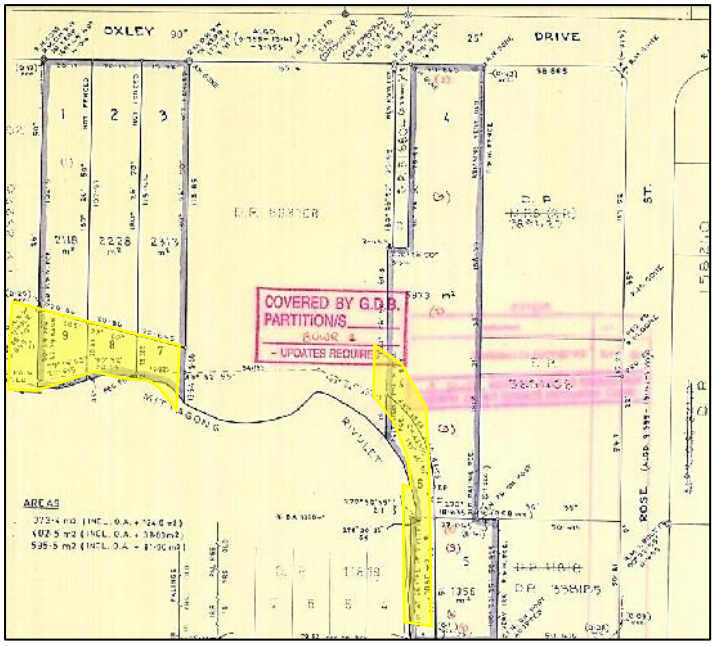


Figure 8. Survey plan for DP260073

Victoria Street to Rose Street (Lots 13, 17, 18 DP11818 and Banksia Street and Lot 1 DP612724)

These lots were part of a parcel of land purchased by Frederick Charles Williams a Clerk of Holy Orders from Croydon in February 1923. The two acres were surveyed and subdivided in March that year. The plan of subdivision also shows the end of Banksia Street as a closed Road.

Lots 13, 17 and 18 were sold to John William Norman in October 1925. The lots were transferred to the Council of the Municipality of Bowral in April 1958 (CT3918-112). These lots are now part of Foley Park.

The rear boundaries of Lots 14, 15 and 16 of DP11818 were later adjusted to create a new lot with Mittagong Rivulet and incorporated into Foley Park. Foley Park was donated to the community in 1979. The Park was named after Mr. W.F. Foley, a former Alderman and Mayor of Bowral Municipal

Council. Foley Park was formally opened in August 1979 and gazetted with the Geographical Naming Board on the 31st August 1979.

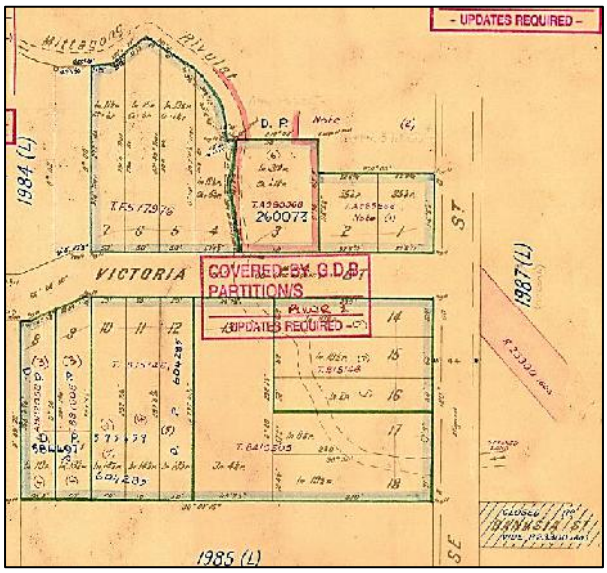


Figure 9. Survey plan of DP11818

Lots 4, 5, 6 and 7 were transferred to the Municipality of Bowral in 1952 (CT6461-129). These lots are now part of Rivulet Park.

Banksia Street to Jasmine Street (Lot 2 DP603694)

This lot runs from Banksia Street to Jasmine Street. It was owned by Alice Elsie Barton until 1948 when she sold it to Ivy Sarah Clingham. The lot was part of the Shepherds's Subdivision, being Lot 3 of Section 17.

Venables Park, Merrigang Street to Shepherd Street (Lot 2 DP1244951)

Venables Park was donated to the community in 1956. The Park was named after H. Fergus Venables who was the Mayor of Bowral for a 15 year term and an Alderman for 34 years, the Reserve was officially opened on the 6th October 1956 by Sir John Northcott.

Shepherd Street to Boolwey Street (Lot 4 DP745766)

The prior title to this lot is CA23012 (Converse Action). No information has been found on this lot.

4.3. Chronology

This chronology is compiled from a large number of sources with the principal information sources being books by Naoko Abe (Abe, 2019) and Peter Edwards (Edwards, 2014), Wingecarribee Shire Council files (Wingecarribee Shire Council, 1996-2005), a timeline compiled by Berrima District Historical Society provided in documents provided by the Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association (Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association) and *Vietnam War Memorial Cherry Tree Walk* by Graham Tooth (Tooth G. , 2023).

Date	Event
Taihaku Cherry Tree (Abe, 2019)	
1919	Englishman Collingwood Ingram first became interested in Cherry Trees.
1923	Ingram visits Annie Freedman at Greyfriers Estate where he found a cherry tree he hadn't seen before and took a cutting which he grew at his home 'the Grange'. *The blossoms, were huge up to 2.4 inches and the leaves as long as 7.5 inches*. (p145)
1925	Ingram's Japanese friend, Duke Nobusuke Takatsukasa, visited the Grange and named the large flowering tree 'Taihaku' – the Great White Cherry
1926	In a trip to Japan Ingram noted that many species of cherry trees were endangered or extinct. He arranged for Cherry Tree 'scions' from all over Japan to be shipped to him in England.
1926	Ingram learns that Taihaku is extinct after Seisaku Fonatsu showed him a painting by his grandfather of the once flourishing Taihaku.
1930s	Collingwood "Cherry" Ingram was importing and exporting seeds and scions all around the world and was fast becoming the leading Western expert on Cherry Trees.
1932	After numerous tries Ingram successfully exported a Taihaku seedling to Japan.
Australia and the Vietnam War (Edwards, 2014)	
1962	Australian government announces deployment to Vietnam of Australian Army Training Team Vietnam (AATTV) and an RAAF squadron to Thailand.
1964	Australian government introduces selective conscription for 20 year old males under the National Service Act.
1965 Apr	Prime Minister Menzies announces commitment of an infantry battalion to Vietnam.
1965 May	1st Battalion, Royal Australian Regiment (1RAR)(1100 personnel) arrive at Bien Hoa air base in Vietnam to serve with a US brigade
1966 March	Australian commitment increased to 4500 personnel including 500 conscripts
1966 Aug	Battle of Long Tan
1967 Oct	Third infantry battalion committed. Australian commitment reaches 8000 personnel
1968 Feb	John Gorton Prime Minister announces no further Australian commitment to Vietnam
1969 Jun	US President Nixon announces withdrawal of 25 000 US troops
1970 May	First Moratorium protests against Australia's involvement in the war

Date	Event
1971 Aug	Prime Minister McMahon announces all troops to be withdrawn by Xmas. AATTV to remain
1972	Gough Whitlam was elected as Prime Minister and immediately stopped national service
1972 Feb-Mar	Withdrawal of most remaining army and RAAF forces leaving small contingent in non-combat roles
1972 Dec	Final withdrawal leaving a platoon to guard the embassy in Saigon.
1973 Jan	Governor General proclaims cessation of hostilities in Vietnam by Australian forces.
Vietnam War Memorial Cherry Tree Walk, Bowral (Various sources see references)	
1994 Apr	Bowral Parks and Gardens Advisory Committee formed as a committee of Wingecarribee Shire Council (WSC)
1994 June	First meeting of BPGA Committee. Effie Kerr, Chair and Kevin Gallagher Vice Chair and Secretary.
1994 Jul	After inspection of Mittagong Rivulet the BPGA Committee determine to develop its potential.
1994 Aug	Kevin Gallagher, Landscape Architect, presents proposal to BPGA which includes planting either side of the existing pathway with Kanzan Cherry Trees, a popular tree found in Corbett Gardens.
1995 Feb/	BPGA present their concept for Mittagong Rivulet to WSC and were appointed under section 355 of the Local Government Act as the management committee for Mittagong Rivulet Reserve.
1995 May	BPGA Committee made a presentation to an Ordinary Meeting of WSC regarding the Mittagong Rivulet Refurbishment Project. Stage 1 of the project was approved with the other stages to be reviewed in 12 months.
1995	The first stage, Settlers Park was completed.
1996 May	First four Taihaku Cherry Trees planted with a small ceremony.
1996 Sept	Effie Kerr, Chairperson Bowral Parks and Gardens Committee seeks Council funds to establish a new Trust to manage public donations and the construction of the Vietnam War Memorial in the Mittagong Rivulet Reserve.
1997 Mar	First meeting of Bowral Vietnam Memorial Walk Trust Inc.
1997	150 Cherry Trees stored and growing at a local nursery
1997 May	First large Commemorative Ceremony and Planting of 12 trees, attended by 200 people including Veterans from Victoria and Queensland and ACT and all over NSW
1998 Jan	Grant funding from Dept Veterans Affairs. Seeking funds from individual donations of $250 per tree. Monument estimated to cost $35,000
1998 Jan	250 Cherry Trees ordered. 250 have been grafted and are growing at Pikes Nursery at Neerim Junction in Victoria.
1998 Jun	Tree planting ceremony

Date	Event
1998 Oct	Delegated authority granted by WSC to the Trust to undertake continued development of Settlers Park, Cherry Tree Walk and Mittagong Rivulet Reserve.
1999	The Trust receives notification that a new sewer line is going to affect the area planned for the monument and will affect dedicated cherry trees.
1999 May	The monument location is moved closer to the Casuarinas and the first dedicated cherry trees are to be repositioned at Councils expense.
1999 May	Development Application approved by WSC
1999 Jun - Aug	Construction of the monument
22 Aug 1999	Dedication Ceremony for Monument. Starting with March of Veterans from all wars from Corbet Gardens to the Vietnam Monument and finishing with lunch at Mittagong RSL.
1999 Sep	The Trust decided not to provide lighting at the monument.
1999	Vandalism and flooding leads to loss of trees
1999 Nov	Flooding of Mittagong Rivulet carries away 21 cherry trees.
2000	Donation of brick pavers for a garden edge around the monument and planting of Ajuga[2] in garden beds
2000	The Rotary start work on the pergola
2000 May	Vandalism to monument including removal and smashing of granite tiles
2000 Sept	Sewer line under construction causing delays in tree planting.
2001 Aug	Council to plant 200 Cherry Trees
2001 Aug	Remembrance service
2002	Bowral Urban Landcare Group seek environmental management of the riparian environment of Mittagong Rivulet, which appears to be supported by WSC
2002	Effie Kerr received OAM nominated Vietnam Vetrans who constructed monument and Bowral Garden Club.
2002 Apr	Council confirms its long standing support for the Cherry Tree Walk. Approval granted for extension to Bowral Street. Trust to submit details of remaining planting between Merrigang Street and Old South Road. (Ordinary Meeting 24 April 2002)
2003	The original tiled surface of the monument – ¼" black granite tiles fixed with adhesive began to fail and was exacerbated by vandalism.
2003	125 Trees ordered at a cost of $6,875
2003	Grants received to refurbish the monument

[2] Ajuga (Ajuga reptans) or Carpet Bugle Weed is often used in shady gardens as a low ground cover. Often grown for their rosettes of bronze or dark green leaves and their blue flowers that make an appearance in spring or early summer. https://www.yates.com.au/how-to-grow/ajuga/

Date	Event
2004	Refurbishment of Monument, granite sheets used and a different style of plaque.
2003-2004	Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association formed. Association conducts ongoing annual Vietnam Veterans Day services at the memorial.
2004 Feb	Rededication of memorial commemoration. Guests of Honour include Governor General of Australia Major Michael Jeffery and WO2 Keith Payne VC a Victoria Cross recipient for service in Vietnam.
2004 Feb	Unveiling and blessing of 8th Battalion Royal Australian Regiment (8RAR) Vietnam Memorial and planting of a Cherry Tree beside the Cherry Tree Walk.
2005-2006	Preparation of Plan of Management for Mittagong Creek Reserve causes concern. Council proposes to move line of Cherry Trees to plant riparian species. This causes alarm to the Trust and the Veteran community. An international petition results in hundreds of letters to WSC from USA and Canadian Vietnam veterans.
2006 Aug	40th Anniversary of the Battle of Long Tan commemorated at the memorial.
2006	Entrance pillars at Mittagong Road installed by Genner Constructions
2008	Plan of Management for Mittagong Creek Reserve adopted by Council.
2009-2010	Entrance pilar at Boolway Street constructed by Box Concrete company
2011 Feb	Bowral Vietnam War Memorial Trust is disbanded, and care of the Memorial is given over to WSC.
2016 Feb	50th Anniversary of the Battle of Long Tan commemorated at the memorial.
2016-2017	Council Meeting moved to replace 100 dead or missing trees at full cost to council
2018	Plaque installed commemorating work done by Effie Kerr
2021	The garden at the base of the monument becomes overgrown and causes concern to the local Vietnam Veterans Peacekeepers and Peacemakers Association of Australia, Southern Highlands Sub-Branch Inc. (Vietnam Veterans Assoc.) who wish to plan future commemorations at the monument.
2021	Project brief for restoration and 'future proofing' prepared by the Vietnam Veterans Assoc. and approved by WSC subject to funding from Veteran's Affairs.
2022	The living wreath in the garden bed around the monoliths (originally petunias and ajuga replaced with rosemary) removed and replaced with bark chips.
2022 Feb	*In February 2022, Council made an application for a Grant of $132,000 under the Saluting Their Service Commemorative Grants Program on behalf of the Vietnam Veterans Peace Makers and Peace Keepers Association of Australia Southern Highlands Sub-Branch and was successful in obtaining $61,000 for works to the Bowral Vietnam War Memorial. (Council Minutes 19 April 2023)*
2023	Works authorised and undertaken by Wingecarribee Shire Council to realign the two rings of the living wreath and install a low concrete retaining wall below ground level to protect the monument from flooding. This changed the dimensions of the flower bed and modified its height which originally followed the contour. This work was the source of strong disagreement between Veterans who constructed the monument

Date	Event
	and the Vietnam Veterans Association. Note: See policy 12.4.
2023	Petition and representations from some Veterans who were involved in the original construction of the monument presented to WSC objecting to the works to the Vietnam War Memorial.
2023 April	Wingecarribee Shire Council adopt a motion to proceed with a Conservation Management Plan prior to any other works taking place.
2023 Aug	Department of Veterans Affairs sponsors 50th Anniversary of the end of the Vietnam War commemoration service at the memorial hosted by Vietnam Veterans Association.
2023 Dec	Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association ceases to operate and Mittagong RSL Sub-Branch takes on a caretaker role.

Historical notes on Taihaku Ornamental Cherry (Prunus serrulata)

In Japan cherry blossoms, or *sakura* as they are known, are a national symbol, signifying new life and beginnings. During cherry blossom season the Japanese populus visits parks and avenues of trees where they hold *hanami* or cherry blossom viewing parties. Today cherry blossom season is limited to a flowering season of about eight days due to the homogeneity of the preferred cherry species cultivated in Japan. Historically over thousand of years there were hundreds of species cultivated. This is now limited to about 10 specimens with the majority being *Somei-yoshino*. (Abe, 2019)

The disappearance of historic cherry trees was noted by Englishman Collingwood "Cherry" Ingram in his visit to Japan in the 1920s. Ingram became a passionate collector of Cherry Trees, establishing a large collection in his garden in Kent where he introduced about 50 different kinds of cherries from Japan. Ingram's most enduring legacy was saving the *Taihaku* "Great White" which had become extinct in Japan. It is thanks to Collingwood Ingram that the Bowral Cherry Tree Walk has been able to create an avenue of honour with these once endangered trees. (Abe, 2019)

Figure 10. Collingwood Ingram in his garden at 'the Grange' (Abe, 2019)

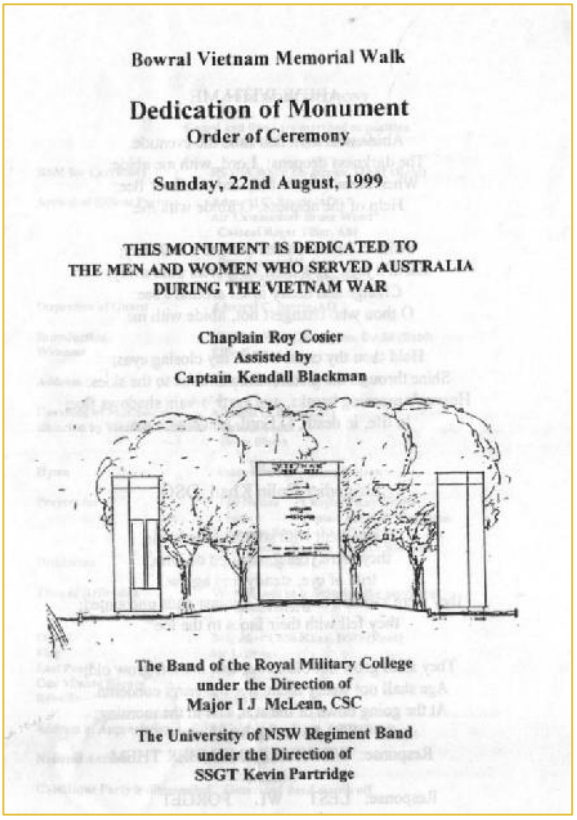
4.4. Bowral Vietnam War Memorial Cherry Tree Walk

On 3 March 1995 the Southern Highland News published an article about the early concept for the memorial. The article stated that Effie Kerr, Kevin Gallagher and the Bowral Parks and Gardens Advisory Committee would like to see Bowral Swimming Pool Park upgraded as a first stage in the

refurbishment of the Mittagong Rivulet and surrounding green areas. In 1996 the Bowral Vietnam Memorial Walk Trust was formed with Chairperson Effie Kerr, the Vice Chairman Sir James Willis, Secretary Kevin Gallagher and Treasurer Darrell Chadwick.[3] The Trust was incorporated so that it could accept donations and make decisions relevant to the management of the memorial. The Mayor of WSC was a member of the Trust and meetings were often held in the General Manager's or the Mayor's office.

The Trust organised tree planting ceremonies which were attended by Veterans from Australia wide as well as dignitaries and politicians. Some ceremonies were smaller and were prompted by donations from individuals. The first large ceremony was held on Veterans Day on 22nd August 1999 when the monument was unveiled and dedicated. Newspapers reported 2000 Veterans were expected at the dedication ceremony coming from all over Australia. On the day over 3000 people; Vietnam Veterans, their families and friends and the community of Southern highlands attended the ceremony.

Figure 11. Effie Kerr OAM with Tony Sprigett at the memorial circa 2003 (Berrima District Historical Society)


Bowral Vietnam Memorial Walk

Dedication of Monument

Order of Ceremony

Sunday, 22nd August, 1999

THIS MONUMENT IS DEDICATED TO
THE MEN AND WOMEN WHO SERVED AUSTRALIA
DURING THE VIETNAM WAR

Chaplain Roy Cosier
Assisted by
Captain Kendall Blackman

The Band of the Royal Military College
under the Direction of
Major I J McLean, CSC

The University of NSW Regiment Band
under the Direction of
SSGT Kevin Partridge

Figure 12. Order of ceremony for the dedication of the monument 1999 (Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association)

Over the years as the division of tasks became necessary and a management committee was formed to organise ceremonies and care for the memorial. A copy of minutes from a May 2002 meeting shows that the Bowral Vietnam Memorial Management Committee was in charge of organising ceremonial events as well as coordinating working days with volunteers. The Trust Directors seemed

[3] This information came directly from Councils files. (Wingecarribee Shire Council, 1996-2005)

to take on a more formal role. It is noted that Effie Kerr was both a Trust Director and a Management Committee member. (Wingecarribee Shire Council, 1996-2005)

4.5. Evolution of the design

Kevin Gallagher prepared a written report on the construction program in 1997 which he revised in 1999 that contains detailed notes on the planned memorial and attached was a sketch marked Sketch 4 shown in part in Figure 13. This drawing is significant as it shows the dedicated area which included the monument, the casuarina grove and the open grassed area. The pergola was not included in the ceremonial area. Some of the plans did not eventuate such as the ceremonial steps, a wall commemorating donors, and a footbridge over the rivulet leading to an ornamental garden. Gallagher also prepared a sketch of the monument which was one of many. The final design for the monument submitted to Council in the Development Application was specified in the engineering drawings (Figure 15).

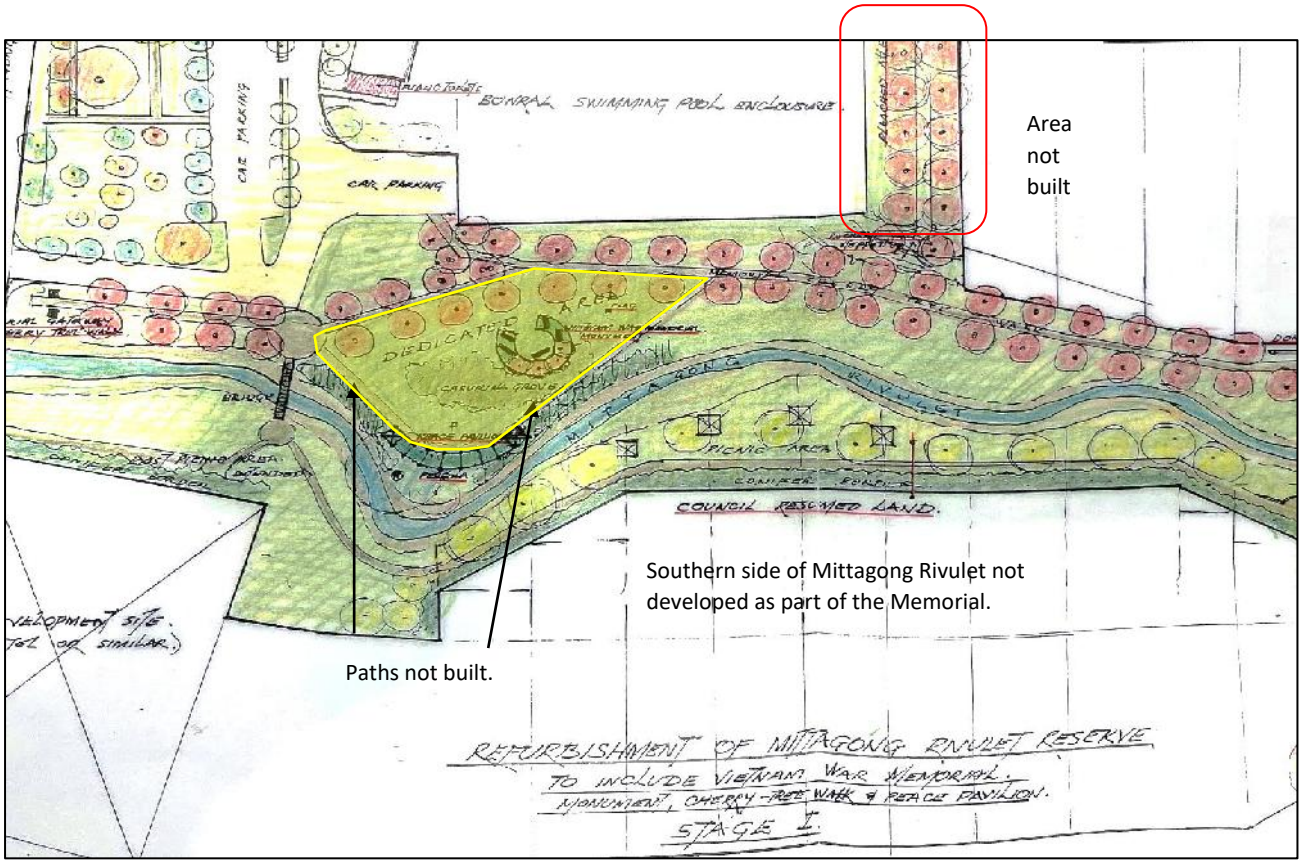


Figure 13. Schematic Layout by Kevin Gallagher. This drawing shows the dedicated area shaded darker green and outlined and shaded yellow by Louise Thom Heritage. All mark up by LTH. (Wingecarribee Shire Council, 1996-2005)

4.6. Memorial Design

The Vietnam War Memorial Cherry Tree Walk is an 'environmental memorial' to Australians who served and died in the Vietnam War.[4] It was to feature Taihaku 'Great White' Cherry Trees planted

[4] Environmental memorial is a term adopted by Effie Kerr OAM and Kevin Gallagher and used by the Bowral Vietnam Memorial Walk Trust.

either side of a pathway following Mittagong Rivulet each representing an Australian killed in the Vietnam conflict.[5] The existing number of Taihaku Cherry Trees is 307. A feature of the memorial is the monument which provides a recognition for the service of all Australians who served Australia in the conflict and is a focal point for commemorative events. The monument consists of a circular raised mound, a highly symbolic element which can be found in numerous other war memorials.[6] It has four polished black granite monoliths engraved with all the names of the Australian Vietnam War dead set in a semicircular garden bed with four Taihaku cherry trees. A fifth dedication monolith is centred on the circular grassed mound. When planted as intended the garden bed forms a living wreath encompassing the monoliths with the names of the fallen. Behind the wreath is a sacred grove of Australian Casuarina Trees. The monument is deemed to be sacred and located on 'holy ground' in the same way a headstone or grave carries profound meaning on multiple levels. The ceremonial area containing the monument was dedicated in 1999 and rededicated in 2004. In these ceremonies the monument and surrounding memorial landscape were consecrated by a member of clergy.

The design of the Memorial was conceptualised by Effie Kerr and developed and realised in conjunction with Kevin Gallagher and the Bowral Parks and Gardens Advisory Committee and later the Bowral Vietnam Memorial Walk Trust. Landscape architect, architect and heritage architect Kevin Gallagher prepared numerous sketches with various designs as well as a model of the monument.

In 1997 Kevin Gallagher described the monument as having 4 free standing monuments and a central sculpture.

The memorial would have four free-standing monoliths carrying 504 names of those killed in the war and, in front of these, a small symbolic sculpture signifying "reconciliation". The sculptural form would carry the words VIETNAM WAR 1965 – 1973 and the motto, They Served Their Country With Honour". The whole ensemble (monoliths and sculpture) would be set beside the walk within the ring of four TAI HAKU cherry trees already planted last year.[7]

As with many of the initial ideas for the memorial it evolved over time and in discussion with the Trust with the final design changing from a central sculpture to become another monolith.

The underlying concept which was restated year after year in the brochures printed for commemoration and dedication ceremonies is captured below.

[5] According to the Australian War Memorial 523 Australians were killed between 3/8/1962 and 29/4/1975 in the Vietnam War. https://www.awm.gov.au/articles/encyclopedia/war_casualties

[6] Ken Inglis describes the Shrine of Remembrance in Melbourne as "rising from a mound in the Domain" - holy ground based on ancient forms. (Inglis, 2008)

[7] Meeting Minutes of Bowral Vietnam War Memorial Walk Trust (Undated circa 1997)

Vietnam War Memorial

The design proposal for the War Memorial was to avoid the single built monument in favour of a series of parkland amenities, each having a commemorative aspect, so that they become the memorial. Included was to be a simple monument built within a ring of trees which will carry the names of the Australian war dead from the Vietnam conflict. Primarily there was to be a commemorative pathway, approximately four kilometers long, lined with cherry trees to be named The Cherry Tree Memorial Walk.

The Monument is integrated with the Cherry Tree Walk which is the major feature of the Memorial. It is designed to be seen in a large parkland setting and not in an urban environment. In keeping with this natural setting and the request for understatement, design references for the form of the Monument are taken from timeless landform imagery:- the circle, the sacred grove of trees, a ring of monoliths, the earthen mound and so forth. A modern interpretation of these ageless forms is used here. Thus we have a ring of four polished black granite monoliths obliquely grouped around a grassy knoll on which stands a fifth upright, the dedication monolith, set within a semicircle of cherry trees. The whole grouping, four cherry trees and monoliths, is set in a circular flower bed – a permanent wreath. The whole grouping is backed by a screen of Australian casuarina trees.

Commemorative Order of Service Program, 24 August 2002

Effie Kerr OAM worked tirelessly to make the memorial a reality. She was highly respected and a woman of great strength and influence. She was successful in gathering sponsors within the business community. Volunteers who worked on the monument such as Grahame Tooth were also influential in organising sponsorship. Peter Genner of Genner Constructions who contributed greatly to the construction of the monument and entry at Mittagong Road. Darral Chadwick supported the project for 15 years as did Ken Halstead OAM, engineer and Councillor on Wingecarribee Shire Council.

Cherry Trees

Planting of *Taihaku* Ornamental Cherry (*Prunus serrulata*) began with four trees which were intended to be part the living wreath of the monument. These trees were planted in a tree planting ceremony on 20 May 1996 and were the first trees planted in the Vietnam War Memorial Cherry Tree Walk. Unfortunately, after they had been planted the sewer line was realigned and the trees had to be moved along with the proposed location of the monument.

In a letter to Council Kevin Gallagher describes the specification for the trees:

A major part of the Vietnam War Memorial in Mittagong Rivulet Reserve, Bowral, is the planting of a walkway of 504 cherry trees to commemorate those servicemen killed in the war. . .

Our specification for these trees is that they be 'Tai Haku' cherries, three years old, grown straight for 'avenue planting', under pruned to 1.8 metres, of high quality approved by a nurseryman representative, and potted up (not bare rooted) ready for planting.[8]

Tree planting ceremonies continued whilst the Vietnam War Memorial Cherry Tree Walk was established. The ceremonies were important means to gather support and recognition for the project and were often attended by persons of influence who advocated for the project and often contributed funding. For example, in 1997 200 people attended a tree planting ceremony and amongst the attendees were, veterans from Victoria and Queensland, Federal Minister for Finance John Fahey, State MP Peta Seaton, Wingecarribee Mayor Jim Tuddenham and former Senator Sir Robert Cotton.[9] A tree planting ceremony in June 1998 was focussed more on those who had served in the Vietnam conflict. Trees were planted by Veterans or families of Veterans who had lost someone in the Vietnam War. Mrs Allison Richmond who was assigned to the Australian Embassy in Vietnam between 1963 and 1965 planted a tree in recognition of the ancillary groups in Vietnam.

We always think of the three arms of the defence services but the ancillary groups who served in Vietnam are also recognised by this memorial. Effie Kerr (OAM)[10]

In April 1997 Wingecarribee Shire Council called for expressions of interest for a nursery to supply Tai Haku Cherry Trees for the memorial. A specification was prepared by Bowral Parks and Gardens Advisory Committee:

> *SPECIFICATION: Cherry Trees for Vietnam War Memorial "Cherry Walk"*
>
> *Species:* *PRUNUS SERRULATA – cultivar "Tai Haku"*
>
> *Height:* *Every tree is to measure 3000 mm above ground when planted.*
>
> *Character:* *Trees are to be true to type with single straight trunk in excess of 65mm calliper. They must have a clear stem height in excess of one metre: ideally grafted as "half Standards".*
>
> *All trees must have the same foliage (size texture and colour) and the same extension growth as a vigorous specimen of the species . . .*
>
> *Maximum variation in crown balance on opposite sides of the trunk to be 20%.*
>
> *All trees supplied must show a uniformity of growth with consistent internode distance on trunk and branches proportional to the nature of the species . . .* (Wingecarribee Shire Council, 1996-2005)

The specification stated that eventually 504 trees would be needed and to be supplied at 100 per annum. In 2000 the supplier for the cherry trees was John McKenzie, Mount Murray Nursery, in Bowral.

[8] Kevin Gallagher, Secretary, Bowral Vietnam Memorial Walk Trust to Wingecarribee Shire Council 8-6-00
[9] The District Times 26-5-1997 from Council file No. 6527/14.1
[10] Southern Highland News 19-06-1998 from Council file No. 6257/14.1

Construction of the monument

Development consent for the Monument was granted by Wingecarribee Shire Council on 10 May 1999 (DA-342/99). The approval granted combined consent for development, a construction certificate and land use as the land was owned by WSC. Drawings were prepared by Kevin Gallagher and BBK Head and Associates Consulting Civil and Structural Engineers.

The construction of the monument was undertaken by a team of nine volunteers, all Vietnam War Veterans with a combined set of skills in construction and engineering.[11] Grahame Tooth's description of the construction of the monument is a very descriptive and detailed account and is best read in his book. (Tooth G. , 2023)

The monument was constructed by volunteers using materials and labour donated by businesses such as Genner Constructions, Gardner Excavations, Welby Bobcat and Tipper Hire and Mittagong Cement Products[12]. (Tooth G. , 2023)

The monument is comprised of five monoliths mounted on three slabs each with four piers.

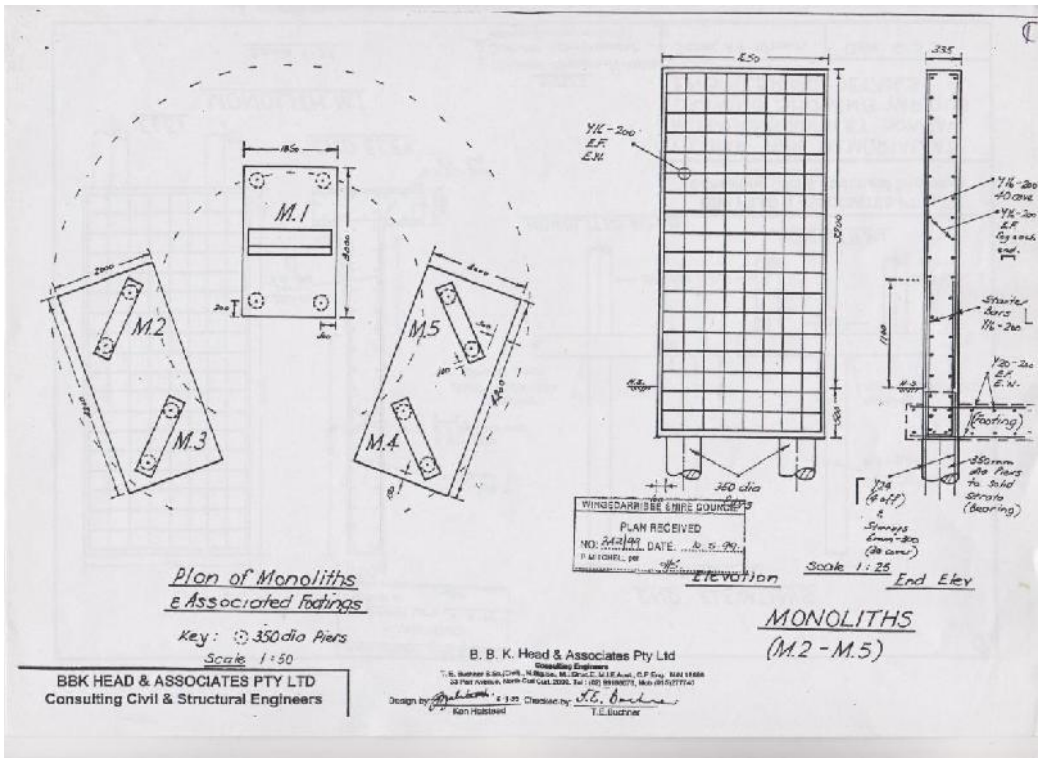


Figure 14. Approved Development Application - Engineers drawing of monoliths (Supplied by Graham Tooth)

The construction of the monoliths took eight days after which the monoliths were faced with black granite tiles fixed to the cement face of the monolith with adhesive. These tiles have since been replaced. Names on the monoliths were etched onto bronze plaques and gold leaf inscribed granite tablets were also fixed to the concrete face.

[11] Volunteers included Grahame Tooth, Doug Blatch, Bruce Boffinger, Rodney Smith, Dennis Mulquiney, Billy Lamb, Roy Elbourne, David Babbage and Billy Clack (Tooth G. , 2023)

[12] A list of businesses was published in the Southern Highlands News in 1999 included the following: W & M Saunders Transport, Tulip Time Festival, BHP Ltd, Genner Constructions P/L, RTA, Empire Cinema, Mittagong RSL, Welby Bobcat & Tipper Hire, Gardener Excavations and Piers, Rentaquip (NSW) P/L, Mittagong Cement Products, Mittagong Timber & Trading, K & C Turner, John Mulquiney Landscapes. (Tooth G. , 2023)

The site was turfed so that it merged with the surrounding grassed parkland and a flag pole was installed. The circular garden bed established by the Bowral Parks and Garden Club.

The design drawn by Gallagher originally positioned the Monument closer to the path. However, the Shire Council decided to install a new sewer line in the vicinity of the path and through the location of the proposed monument and four existing dedicated cherry trees. In addition, they relocated a water main and drainage line from the swimming pool. The Trust was not made aware of the proposal until they lodged their Development Application. It wasn't until April 1999 that a meeting with the Trust and Council took place and the location of the new sewer line was discussed. (Wingecarribee Shire Council, 1996-2005)

The finished Monument was dedicated on 22 August 1999.

4.7. The Pergola

At the rear of the monument closer to Mittagong Rivulet is a pergola which was part of Kevin Gallaghers original design. The Rotary constructed the pergola in 2000 as a peace pavilion:

. . . intended to embrace and describe the dedicated area of the Vietnam War Memorial. . .

This sentence contributes to the understanding that the curve of the pergola defines the southern edge of the dedicated area without being a part of the dedicated area. The pergola project was a Rotary undertaking to celebrate their 60th anniversary. The structure that was built is a simplified version of the plans prepared by Kevin Gallagher. The floor of the pergola which is currently grassed was intended to be lined with a paved surface which joined pathways at either end which were also not built. A garden bed and three seats were positioned on the outer curve. Roses were donated by Swane's Nursery to complete the Rotary Peace Pavilion. The variety of rose was called "4th of July" to symbolise the Australian participation with American Forces in the Vietnam War.[13]

4.8. 8 RAR Memorial

Located along the Cherry Tree Walk to the east is a small clearing ringed by Taihaku Cherry Trees and in the centre is a small monument to the 8th Battalion Royal Australian Regiment (8 RAR). This monument was dedicated on 28 February 2003. It is the only monument to a specific regiment within the Vietnam War Memorial Cherry Tree Walk.

The 8RAR monument was not part of the original design as the main monument carries the names of all the fallen from all regiments. The 8RAR monument is now imbued with meaning and is a dedicated monument that has been included in ceremonies at the memorial.

Opinions varied as to whether having monuments to specific regiments was appropriate within the memorial. The minutes of one meeting of the Bowral Vietnam Memorial Walk Trust mentioned that there were other spaces within the memorial that could be utilised by other regiments if they sought to do so. This was presented in the minutes as a passing comment rather than a Trust decision. After sever vandalism to the memorial the Trust made this statement in its 2004 report:

While we were enthusiastic to construct specific Regimental areas along the 'Walk', it is now doubted if we would ever undertake another Regimental Park such as the 8RAR parklet. . . The vandalism that specifically pin pointed this area, caused near total destruction of the small 8RAR Memorial area and

[13] Bowral Vietnam Memorial Walk Trust, Newsletter Volume 1 Issue 8

was devastating to the 8 RAR Association. The cost of its repair could be considered an unfair burden on public funds. . .[14]

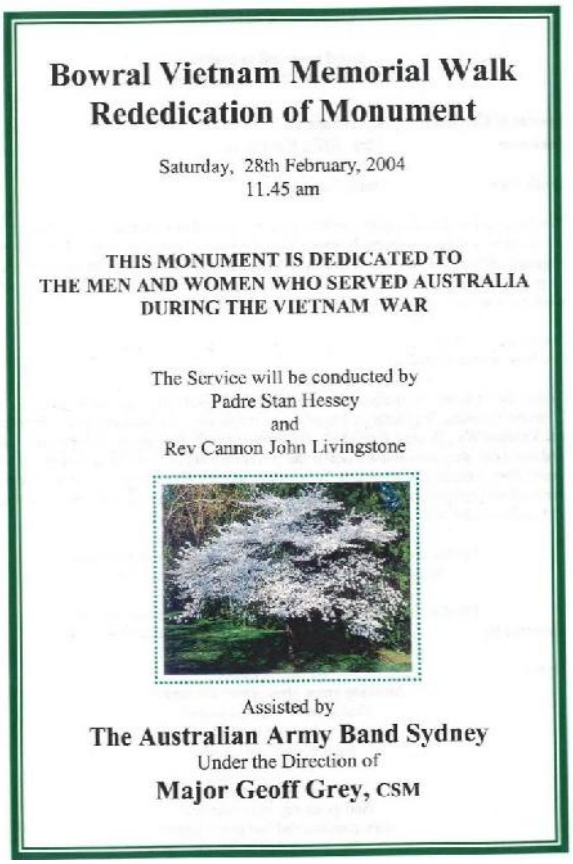
4.9. Resurfacing and rededication of the monument

On 28 February 2004 the monument was rededicated after extensive work to rectify damage. Over the years the memorial has faced many issues. In a report from 2003 vandalism to trees included, stealing trees, breaking branches, scarring trunks and pushing and pulling trees causing them to grow at an angle. The trees in Venables Park were affected badly with only 1 out of 50 trees surviving. (Wingecarribee Shire Council, 1996-2005)

In 2003 the Southern Highlands News reported that the tiles used to cover the monument were coming loose and were in urgent need of replacement. Many other tiles were stained or discoloured. After consulting a 'granite-fixing expert' it was decided to remove all tiles and plaques and replace them with slabs of black granite. The sheets of granite would be ½" and attached to the monoliths with stainless steel dowels and wire clamps. This method was intended to allow moisture to flow between the granite and the concrete. After a considerable amount of fundraising by Effie Kerr OAM which included writing letters to businesses and politicians the estimated cost of $35,000 was raised. The work was carried out in 2004 in time for the rededication ceremony.

Figure 15. Photograph taken in 2019 showing the Cherry Trees in bloom, landscaping at the base of the monoliths and on the far right an existing seat. (Blake)

[14] Extract from Bowral Vietnam Memorial Walk Trust, Cherry Tree Walk Report Stage 1 2004 (Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association)



Bowral Vietnam Memorial Walk
Rededication of Monument

Saturday, 28th February, 2004
11.45 am

THIS MONUMENT IS DEDICATED TO
THE MEN AND WOMEN WHO SERVED AUSTRALIA
DURING THE VIETNAM WAR

The Service will be conducted by
Padre Stan Hessey
and
Rev Cannon John Livingstone

Assisted by
The Australian Army Band Sydney
Under the Direction of
Major Geoff Grey, CSM

Figure 16. Figure 18. Cover of Order of Ceremony – Rededication of Monument 28 Feb 2004 (Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association)

Figure 17. Effie Kerr OAM with General Cosgrove MC (Blake)

5. Physical Evidence

The Vietnam War Memorial Cherry Tree Walk commences at Mittagong Road in Settlers Park and continues for approximately 1.3 kilometres ending at Boolwey Street. The war memorial is a landscape memorial comprised of different elements. The memorial walk is lined with Taihaku 'great white' cherry trees (*Prunus x serrulata* 'Tai Haku'). Documents show that the number of cherry trees to be planted was to be equal to the number who died in Vietnam. During the development of the Cherry Tree Walk the proposed number of trees started at 500, then was altered to 504 or 506. The number of Australian war dead according to the National War Memorial is 523[15]. The existing number of trees in the Cherry Tree Walk between Mittagong Road and Bowley Street is 307.

The pathway travels through several parks and reserves which were existing at the commencement of the first tree plantings. Some existing features of the parks were incorporated into the final design. For example, the Casuarina trees in Settlers Park were well established when the memorial was initiated and were incorporated into the final design.

[15] According to the Australian War Memorial 523 Australians were killed between 3/8/1962 and 29/4/1975 in the Vietnam War. https://www.awm.gov.au/articles/encyclopedia/war_casualties

5.1. The Monument

The Monument is based upon a circular mound, a highly symbolic element which can be found in numerous other war memorials.[16] There are four polished black granite monoliths engraved with all the names of the Australian Vietnam War dead set in a semicircular garden bed with a backdrop of four Taihaku cherry trees. Each monolith is constructed of a concrete slab on which the granite slabs are fixed. Each pair of monoliths rests on a single concrete footing which is piered down to bedrock with concrete piers. A fifth granite monolith, also constructed of reinforced concrete with a concrete footing piered to bedrock and faced with polished black granite is a dedication monolith with a splayed base against which wreaths are laid. The dedication monolith is situated inside the circle atop the mound.

The Monument is a formal symbolic space within the cultural landscape of the War Memorial. Despite its formality it has been designed to appear as another feature within the landscape character of the memorial. This has been achieved by laying grass on the centre of the mound so that it flows into the surrounding landscape. The semicircular garden bed is designed as a living wreath with soft land scaping around the Taihaku cherries which have been chosen as smaller trees that have not been grown as standards like those along the walk.

Another feature of the monument design is the Casuarina Trees which were intended to represent Australian landscape. This juxtaposition of the Australian trees and Asian species of cherry tree is also intended to be symbolic.

Figure 18. View of the monument from the side rear

[16] Ken Inglis describes the Shrine of Remembrance in Melbourne as "rising from a mound in the Domain" - holy ground based on ancient forms. (Inglis, 2008)

Figure 19. Front view of the Monument

Figure 20. Avenue of River Oaks (Casuarina cunninghamiana)

Figure 21. The River Oaks have grown considerably since the monument was built

The River Oaks were existing when the monument was built and were incorporated into its design. There are two avenues of trees comprising a total of 34 River Oaks.

5.2. Cherry Tree Walk

A qualified arborist (Paul Vezgofff, Moore Trees) has made a survey and assessment of the trees in the Vietnam War Memorial Cherry Tree Walk, see Attachment 1 for the full report. The arborist has made the following conclusion regarding the condition of the existing trees.

There are 307 Japanese Flowering Cherry Trees (Prunus serrulata 'Tai-Haku') on the walk of which 84 (27%) are dead. The condition of the trees varies greatly. Original plantings were obvious by their size as were the replacement plantings that exist along the entire study area. Most of the site trees have been mulched with a ring of mulch extending not further than 500mm for most trees. The mulch was mounded above 100mm in depth.

There are 2 Sawtooth Oak Trees (*Quercus acutissima*), 1 English Oak (*Quercus robur*) and 34 River Oak (*Casuarina cunninghamiana*) within the study area.

The following photographs were taken by Louise Thom on 29 January, 13 October, 16 November and 11 December 2023.

Figure 22. Entrance to Bowral Vietnam War Memorial Cherry Tree Walk from Mittagong Street

The following photographs are in order starting from Boolwey Street and proceeding towards Mittagong Road.

Figure 23. View A - Boolwey Street entrance to Cherry Tree Walk

Figure 24. View B - Looking back from Shepherd Street to Boolwey Street

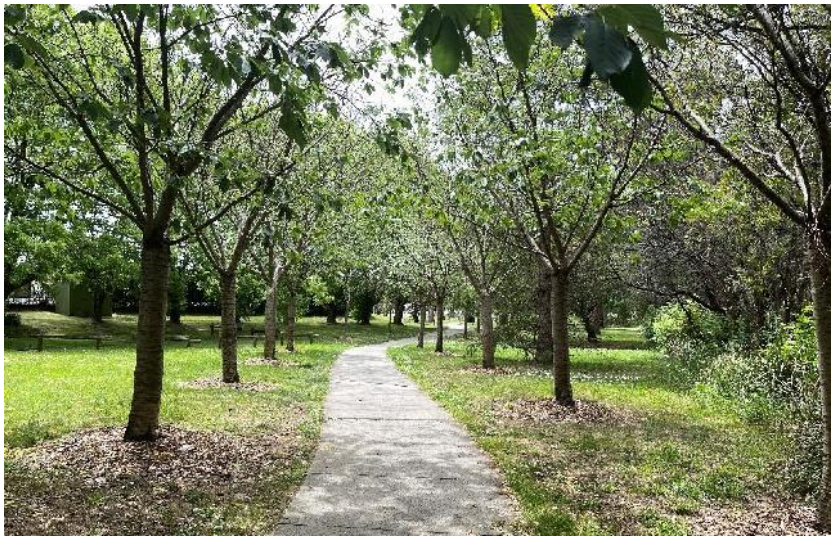


Figure 25. View C - The walk looking north as it passes Bowral Bowling Club

Figure 26. From Venables Park looking across Merrigang Street

Figure 27. View D - From Jasmine Street looking north

Figure 28. Between Jasmine and Banksia Streets

Figure 29. Looking north towards the Rose Street bridge

Figure 30. Looking north towards Victoria Street footbridge.

Figure 31. There is a short section north of the Victoria Street footbridge that has no Cherry Trees

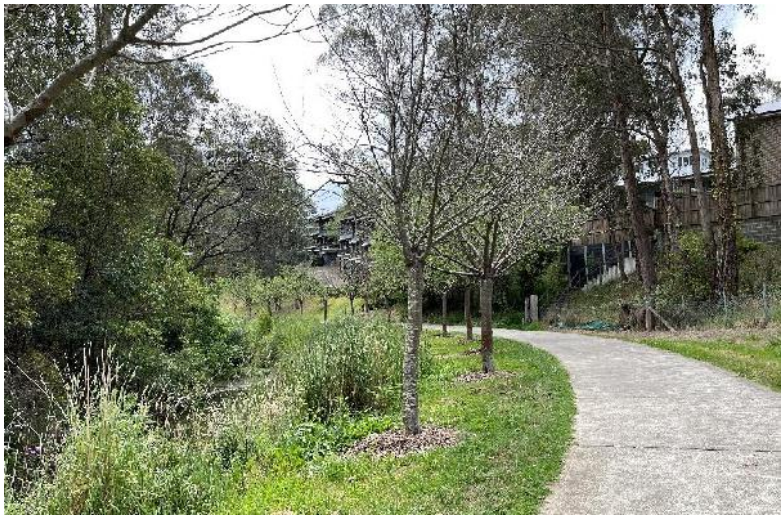


Figure 32. The Cherry Tree planting begins again at the curve as the path heads west to the ceremonial area

Figure 33. As the path leads west it is bordered by residential properties some of which have direct access onto the Cherry Tree Walk

Figure 34. At Rivulet Park there is an open area ringed by cherry trees in the centre is a small monument to the 8RAR

5.3. Other elements within the curtilage

8RAR Monument and ceremonial area

Figure 35. Memorial to 8 Royal Australian Regiment Vietnam War Memorial

The 8RAR Memorial is a brick structure mounted on a concrete pad on a brick sub-base. It is faced with black granite and has a sloping black granite top. A plaque is mounted to the northern side and another plaque listing all the 8RAR service personnel who died in Malaysia or Vietnam is mounted on top.

Pergola

The pergola (Rotary peace pavilion) is constructed of treated pine timber. It is constructed in an arc with the outer side facing the creek and the inner side to the monument. It is supported on cylindrical poles embedded directly into the ground. Double rafters span between each pole and between rows of battens span the rafters. The structure is open without any cladding to the sides or the roof. At either end of the pergola the rafters and battens form a pyramidal termination.

Underneath the pergola there are five ornamental masonry seats and several surviving '4th of July' climbing roses.

Figure 36. Close view of seat under the pergola

Figure 37. The pergola showing seats and 4th of July climbing roses.

Plaque to Effie Kerr OAM

A small understated plaque dedicated to Effie Kerr OAM has been erected on a stone beneath a Cherry Tree.

Figure 38. Plaque to Effie Kerr OAM commemorating her work to establish the memorial

5.4. Modifications

Figure 39. The monument after modification works.

In 2021 members of the Southern Highlands Vietnam Veterans Association met with Council staff to discuss their concerns regarding the monument. They were concerned that garden beds were overgrown, and three of the four Cherry Trees had died and the evidence of flooding could still be seen at the monument. They put forward proposals to address these issues and applied to Department of Veterans Affairs (DVA) for funding. A grant of $61,000 was recieved from the DVA in February 2022 to prepare a CMP and for minor landscaping works prior to the commemoration of the 50th Anniversary of the end of the Vietnam War.

At this stage no consultation had been undertaken with other veterans with an interest in the monument. Several months of negotiations between parties led to an unresolved conflict regarding the work. The project brief was revised and the following works were undertaken by Wingecarribee Shire Council.[17]

The work completed by Council is detailed below:

1. *Retain the one surviving cherry tree on the memorial* (monument) *site.*
2. *Provide three new cherry trees to replace the three failed* (dead) *cherry trees.*
3. *Remove existing vegetation and soil within the inner and outer circles and replace with new soil.*
4. *Install sub-surface drainage within the inner and outer circles on the southern side of the monument area.*
5. *Construct a concealed concrete cut-off wall of variable height to a maximum of 400 mm on the alignment of the outer circle's southern quadrant to protect against flooding.*
6. *Repairs to the inner and outer circle edging by reusing existing pavers laid vertically (as originally placed), including making the inner and outer edges align horizontally and vertically as concentric circles.*

[17] The description of modifications was supplied by Ray McCann.

7. *Provision of new mulch within the inner and outer circles.*
8. *Uplifting of selected casuarina trees to allow in more light.*
9. *Provision of new park seat.*
10. *Maintenance work, including repainting, of the nearby Peace Pavilion.*

Figure 40. Photo during the modification works 13/07/2023. (McCann, 2023)

Figure 41. Photo taken during the modification works 13/07/2023 (McCann, 2023)

Figure 42. The seat installed during the modifications. There was previously another seat in this location–when it was installed and when it was removed is not known. see Figure 16.

Some veterans are concerned that this work was undertaken within a consecrated area and that the monument therefore needs to be rededicated. Whether or not the monument should be rededicated is something veteran user groups need to decide amongst themselves.

The work undertaken by Wingecarribee Shire Council does not fall into the description under the *Summary Offences Act 1988* where wilfully damaging or defacing a memorial is an offence.

Council has commissioned a drawing showing the monument as it is existing. It was not prepared at the time of this report but when it is finalised it will be included as attachment 4.

Mittagong Creek

Mittagong Creek, Bowral is also referred to as Mittagong Rivulet. The section of Mittagong Rivulet which lies alongside the Vietnam War Memorial Cherry Tree Walk runs east from Mittagong Road and south to Boolwey Street. The rivulet continues to the west and to the south but these parts of the creek are outside the study area of this CMP. Mittagong Rivulet is included in the curtilage of the Memorial.

Figure 43. The monument as existing 20 March 2024. (Tooth G. , 2024)

Figure 44. The garden bed around the monument as existing 20 March 2024 (Tooth G. , 2024)

6. Comparative Assessment

6.1. Other Cherry Tree avenues of honour

The website https://avenuesofhonour.org/ has recorded 474 avenues of honour in Australia. These avenues and groves of trees were planted as landscape memorials. Of these 105 are actual avenues of trees whereas 300 are groves of trees and 148 are lone pines.

There is another avenue of Cherry Trees in NSW. Located in Cowra it is an avenue of approximately 450 Japanese cherry trees (Prunus x serrulata cv.) planted on both sides of the Boorowa and Grenfell Roads. Planted in 1988, as a bicentennial project, Cowra Shire Council planted 1988 cherry blossom trees between the Cowra War Cemetery, the site of the Prisoner Of War Camp, and the Japanese Gardens as a sign of peace and reconciliation with the Japanese people.

Visit Cowra website states:

A highlight of spring for locals and visitors alike is a drive from the Cowra Japanese Garden up Sakura Avenue, or Avenue of Cherry Trees. Brilliant blossoms line the way along the Avenue, which links the Japanese Garden with the site of the POW Camp and continues on to the Australian and Japanese War Cemeteries. Each tree is sponsored by Japanese businesses and citizens as well as Australian school children.

In 2010 it was reported that many cherries have died and are being replaced with flowering crab apples (Malus floribunda cv.).

6.2. Other Vietnam War Memorial Avenues of Honour

Vietnam Memorial Wall, Memorial Grove and Commemorative Walk, Seymour, Victoria.

The commemorative project, commencing in earnest in 2012, was undertaken in a series of stages. From design and construction, development of an interpretive centre, the meandering walk set amongst native trees and the focal piece – a winding wall of DigiGlass panels with photographic underlays, depict the story of the Vietnam conflict. The panels list over 60,000 names of every serviceman and servicewoman, in alphabetical order. Homage is also paid to several tracker dogs, vital to Australia's service during the Vietnam campaign.

The use of trees serving as a landscape tribute to represent the vegetation in Vietnam and also as a reminder of Australia's homeland vegetation, is no accident. They include Spotted Gums (Corymbia maculata), arranged in plantation style, to resemble rubber trees. Tussock grasses were planted in neat beds, to simulate rice paddies.

In 2014, young Queensland Bottle Trees (Brachychiton ruprestis) were planted along the High Street verge to form a vanguard avenue. (Avenues of Honour, n.d.)

Figure 45.Vietnam Memorial Wall, Memorial Grove and Commemorative Walk, Seymour, Victoria. (Avenues of Honour, n.d.)

Vietnam Veterans Avenue of Honour, Geelong, Victoria

The official opening of the Avenue of Honour took place on 1 October 1995. The avenue of trees flank a pathway which runs alongside the Princes Highway in North Geelong. It commences in a park where a memorial and flagpoles are located. Along the pathway are interpretive panels about the Vietnam War.

Figure 46. Vietnam Veterans Avenue of Honour Geelong, Victoria (Avenues of Honour, n.d.)

Figure 47. One of the interpretive plaques along the walk (Avenues of Honour, n.d.)

Vietnam Memorial Avenue of Honour, Bandiana, Victoria

The Vietnam Memorial Avenue of Honour, along the Murray Valley Highway adjacent the Army Barracks at Bandiana, was created to commemorate those who served, suffered and sacrificed during the Vietnam conflict (1962 – 1975).* (Avenues of Honour, n.d.)

The Vietnam Memorial Avenue of Honour, was opened on November 11th 1991. The memorial consists of an avenue of Pin Oaks (*Quercus palustris*) lining the verges and the median strip of the divided highway.

Figure 48. Vietnam Memorial Avenue of Honour, Bandiana, Victoria (Avenues of Honour, n.d.)

6.3. Other Vietnam War Memorials in park settings

The following are some examples of other Vietnam War Memorials:

- Newcastle Civic Park Vietnam and National Service Memorials are located in a park and comprise two memorials in close proximity.
- Broken Hill Vietnam Veterans Memorial is located in Broken Hill War Memorial Reserve. It is comprised of a wall and a cross with plaques.
- Wollongong Vietnam War Memorial is a large sculptural monument within the park on Flagstaff Hill. It records many names, possibly all those who died in the Vietnam conflict.
- Wagga Wagga Vietnam War Memorial is a small monolith in a park setting. There are also three tablets set into the ground.

7. Social Value

During preparation of this document consultation with individuals and the broader community was undertaken. Full details of consultation are included in Appendix 3.

Consultation with Vietnam Veterans helped to shape the statement of significance. Individuals also contributed feedback on the draft CMP.

A page on Participate Wingecarribee with a survey ran for three weeks in February 2024.

Two key questions were asked. Word clouds were extrapolated from the data to show a graphic representation of the answers to the questions. The more often a word was repeated the larger the text appears in the image.

Figure 49. Graphic representation of answers to the question "Why is the Vietnam War Memorial Cherry Tree Walk important to you?"

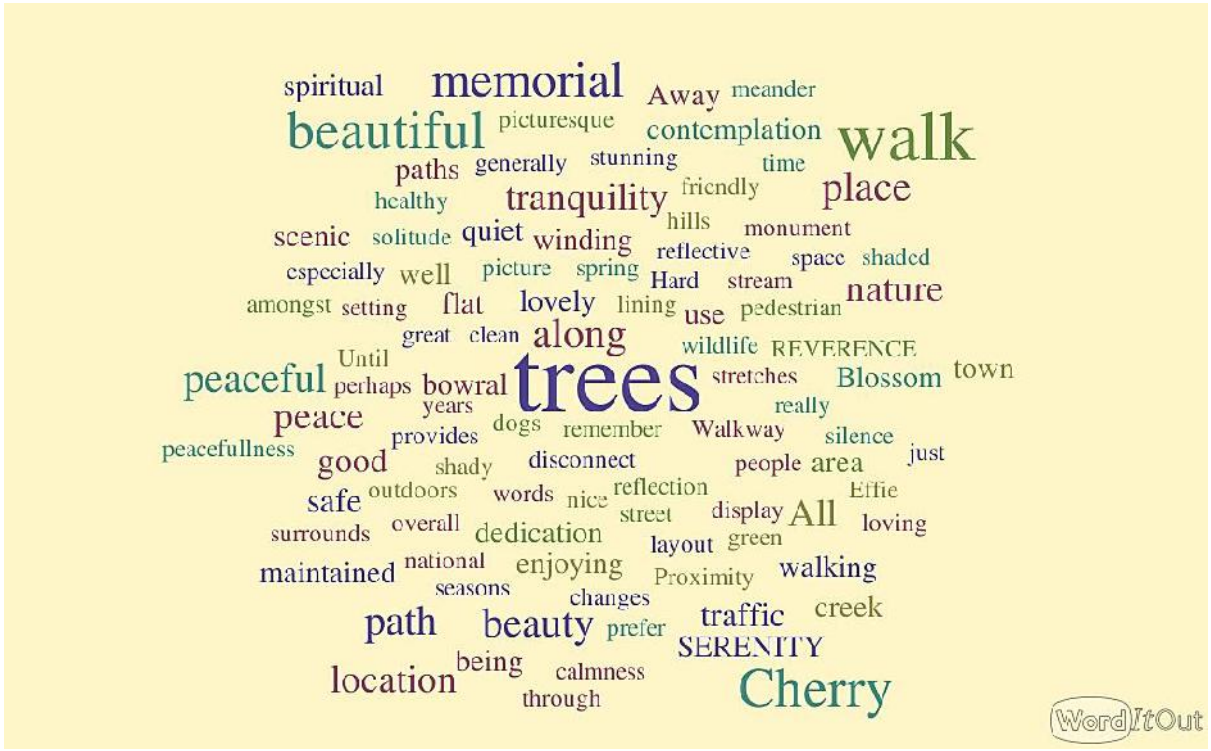


Figure 50. Graphic representation of answers to the question "What do you like most about the Cherry Tree Walk?"

8. Significance Assessment

8.1. Significance Assessment Criteria

The following criteria are used in the assessment of cultural heritage significance. These criteria are the standard criteria for use in NSW that have been prepared by Heritage NSW, Department of Planning and Environment. These criteria are recognised by State and local government when making assessments for statutory heritage schedules and registers. The place does not need to meet all criteria in order to be considered significant.

For a place to be deemed to be significant it must meet at least one of the following criteria:

a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);
b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area);
c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
d) an item has strong or special association with a particular community or cultural group in in NSW (or the local area) for social, cultural or spiritual reasons;
e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);
f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);
g) an item is important in demonstrating the principal characteristics of a class of NSW's - cultural or natural places; or - cultural or natural environments. (Or a class of the local area's cultural or natural places; or - cultural or natural environments).

8.2. Application of Significance Assessment Criteria

a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);

The memorial has historical significance as it provides evidence of the Australian involvement in Vietnam War between 1962 and 1975. The monument is historically significant as a record of every Australian who died in the Vietnam conflict. The Taihaku 'great white' cherry tree has historic value as a cherry tree once common in Japan that became extinct in its native land until it was reintroduced by English cherry collector Collingwood Ingram. Effie Kerr OAM believed there was a parallel between the history of the Taihaku to that of the Vietnamese war veteran who'd been historically ignored in Australia to such an extent that they were also in danger of becoming extinct.

b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area);

The memorial has historical association with Effie Kerr OAM a highly respected and driven person without whom the memorial would not have become a reality. Effie's legacy also represents the history of the Vietnam War in Australia as she initially protested against the Vietnam War and then later dedicated herself to ensuring respect and recognition was given to the service and sacrifice of those who served. The memorial is also historically associated

with the Bowral Parks and Gardens Advisory Committee and founders of the Bowral Vietnam Memorial Trust which included the late Kevin Gallagher, landscape architect who put Effie's and the Trusts' ideas into practice. The memorial is associated with numerous Veterans and individuals who volunteered their time and resources. The memorial is associated with Vietnam Veterans Day commemorations which occur at the memorial on an annual basis.

c) *an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);*

The Cherry Tree Walk has aesthetic significance – it is a place of seasonal beauty and inspiration, reflection and contemplation. The walk runs alongside the meandering Mittagong Rivulet passing through areas of open parkland which add to its scenic value. The memorial has aesthetic significance as a rare 1.3 km Taihaku cherry tree avenue of honour. The monument was designed as a monument in a parkland setting, not an urban environment. In the architect's words: the design utilises "timeless landform imagery: - the circle, the sacred grove of trees, a ring of monoliths, the earthen mound. . ." The design of the monument is aesthetically significant due to the combination of symbolic elements – the circular mound, four monoliths inscribed with the names of the fallen in a garden bed with four Taihaku cherry trees that forms a living wreath flanking a central dedication monolith. The symbolic elements within their spatial arrangement form a dedicated sacred space within which wreaths and tributes are laid. The central mound is grassed, linking the monument with the surrounding lawn and emphasising the 'environmental' landscape character of the memorial. Integral to the design of the monument is a grove of Australian Casuarina trees which provide a juxtaposition with the Asian cherry trees. The location following alongside Mittagong Rivulet and traversing several public parks is essential to the setting of the memorial.

d) *an item has strong or special association with a particular community or cultural group in in NSW (or the local area) for social, cultural or spiritual reasons;*

The Vietnam War Memorial Cherry Tree Walk is of high social value. The memorial is dedicated to the Australian men and women who served during the Vietnam War. The monument holds the names of all the Australians who died in the Vietnam conflict whilst the cherry trees represent life lost in the war. The monument has special significance as a 'surrogate grave' as it records every Australian life lost in the conflict and is imbued with meaning as a sacred space. The memorial has special meaning for relatives and friends of the fallen and the veterans who remain.
The Vietnam War Memorial has spiritual significance as a place of commemoration and ritual occurring in a ceremonial consecrated space. The memorial follows the tradition of the sacred plantings of trees, particularly in memorial avenues, as a continuation of life and remembrance. The ceremonial space and the monument are significant symbolic spaces associated with annual ceremonies and commemorations of the fallen and the veterans of the Vietnam War. The memorial serves an important purpose for Veterans as a designated place to reflect on their service and to honour and value their fallen mates. The memorial is a point of focus for residents and visitors to remember those that paid the ultimate sacrifice, it is considered to be an important place to show respect and gratitude for their service in

light of how poorly Vietnam service men and women were treated on their return to Australia.
The memorial has social significance for veterans in USA and Canada who served with Australian service personnel and demonstrated their support for the memorial in 2006 when it was perceived to be under threat when the Mittagong Creek Reserve Plan of Management was being prepared.
The walk has significance to the Wingecarribee community who value it as recreational resource and for its contribution to the sense of place of the locality.

e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);

This criterion refers to the research potential of a place and is generally associated with archaeological potential. The Vietnam War Memorial Cherry Tree Walk does not meet this criterion.

f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);

The memorial has rarity value. Whilst there are other cherry tree avenues of honour such as the one in Cowra, the Bowral Vietnam War Memorial avenue of honour is believed to be the only Taihaku avenue in Australia. The memorial is one of only a few Vietnam War Memorials that carries the names of all those who died in the conflict. It is the only Vietnam War Memorial avenue of honour in the southern highlands and a rare example of a Vietnam War Memorial avenue of honour in NSW.

g) an item is important in demonstrating the principal characteristics of a class of NSW's - cultural or natural places; or - cultural or natural environments. (Or a class of the local area's cultural or natural places; or - cultural or natural environments).

The memorial is representative of the need for Australian communities to respect, remember and commemorate the fallen. The memorial has representative value as an example of Vietnam War Memorials in Australia and their symbolic representation of the sacrifice made by those who fought in the war. The memorial is an excellent example of a landscape memorial.

8.3. Summary Statement of Significance

The Vietnam War Memorial Cherry Tree Walk is a memorial landscape that encompasses a 1.3 km walk lined with Taihaku Cherry Trees, a dedicated and consecrated ceremonial area and a monument to Australian men and women who died in the Vietnam War. All these elements are part of the memorial as a whole and each is essential to its significance.

The Vietnam War Memorial Cherry Tree Walk is of high social value. The memorial is dedicated to the Australian men and women who served during the Vietnam War. The monument holds the names of all the Australians who died in the Vietnam conflict whilst the cherry trees represent life lost in the war. The monument has special significance as a 'surrogate grave' as it records every Australian life lost in the conflict and is imbued with meaning as a sacred space. The memorial has special meaning for relatives and friends of the fallen and the veterans who remain.

The Cherry Tree Walk has aesthetic significance – it is a place of seasonal beauty and inspiration, reflection and contemplation. The walk runs alongside the meandering Mittagong Rivulet passing through areas of open parkland which add to its scenic value. The memorial has aesthetic significance as a rare 1.3 km Taihaku cherry tree avenue of honour.

The Vietnam War Memorial has spiritual significance as a place of commemoration and ritual occurring in a ceremonial consecrated space. The memorial follows the tradition of the sacred plantings of trees, particularly in memorial avenues, as a continuation of life and remembrance. The ceremonial space and the monument are significant symbolic spaces associated with annual ceremonies and commemorations of the fallen and the veterans of the Vietnam War. The memorial serves an important purpose for Veterans as a designated place to reflect on their service and to honour and value their fallen mates. The memorial is a point of focus for residents and visitors to remember those that paid the ultimate sacrifice, it is considered to be an important place to show respect and gratitude for their service in light of how poorly Vietnam service men and women were treated on their return to Australia.

The monument was designed as a monument in a parkland setting, not an urban environment. In the architect's words: the design utilises "timeless landform imagery: - the circle, the sacred grove of trees, a ring of monoliths, the earthen mound. . ." The design of the monument is aesthetically significant due to the combination of symbolic elements – the circular mound, four monoliths inscribed with the names of the fallen in a garden bed with four Taihaku cherry trees that forms a living wreath flanking a central dedication monolith. The symbolic elements within their spatial arrangement form a dedicated sacred space within which wreaths and tributes are laid. The central mound is grassed, linking the monument with the surrounding lawn and emphasising the 'environmental' landscape character of the memorial. Integral to the design of the monument is a grove of Australian Casuarina trees which provide a juxtaposition with the Asian cherry trees. The location following alongside Mittagong Rivulet and traversing several public parks is essential to the setting of the memorial.

The ceremonial space is a dedicated area that was consecrated by a member of the clergy during the opening ceremonies in 1999 and 2004.

The memorial has historical significance as it provides evidence of the Australian involvement in Vietnam War between 1962 and 1975.

The memorial has historical association with Effie Kerr OAM a highly respected and driven person without whom the memorial would not have become a reality. Effie's legacy also represents the history of the Vietnam War in Australia as she initially protested against the Vietnam War and then later dedicated herself to ensuring respect and recognition was given to the service and sacrifice of those who served. The memorial is also historically associated with the Bowral Parks and Gardens Advisory Committee and founders of the Bowral Vietnam Memorial Walk Trust which included the late Kevin Gallagher, landscape architect who helped to visualise Effie's and the Trusts' ideas. The memorial is associated with numerous Veterans and individuals who volunteered their time and resources. The memorial is associated with Vietnam Veterans Day commemorations which occur at the memorial on an annual basis.

The Taihaku 'great white' cherry tree has historic value as a cherry tree once common in Japan that became extinct in its native land until it was reintroduced by English cherry collector Collingwood Ingram. Effie Kerr OAM believed there was a parallel between the history of the Taihaku to that of

the Vietnamese war veteran who'd been historically ignored in Australia to such an extent that they were also in danger of becoming extinct.

The memorial has rarity value. Whilst there are other cherry tree avenues of honour such as the one in Cowra, the Bowral Vietnam War Memorial avenue of honour is believed to be the only Taihaku avenue in Australia and the only avenue of cherry trees that form a Vietnam War Memorial avenue of honour. The memorial is one of only a few Vietnam War Memorials that carries the names of all those who died in the conflict. It is the only Vietnam War Memorial avenue of honour in the southern highlands and a rare example of a Vietnam War Memorial avenue of honour in NSW.

The Vietnam War Memorial has aesthetic value as an excellent example of an environmental landscape memorial that features an avenue of honour, a commemorative area and a dedicated monument within a circle and a grove of trees.

The memorial has social significance for veterans in USA and Canada who served with Australian service personnel and demonstrated their support for the memorial in 2006 when it was perceived to be under threat when the Mittagong Creek Reserve Plan of Management was being prepared.

The walk has significance to the Wingecarribee community who value it as recreational resource and for its contribution to the sense of place of the locality.

The memorial is representative of the need for Australian communities to respect, remember and commemorate the fallen. The memorial has representative value as an example of Vietnam War Memorials in Australia and their symbolic representation of the sacrifice made by those who fought in the war.

9. Grading of Significance

The following gradings of significance provide a guide for analysing gradings of significance for each individual element or a place or object. (Department of Planning and Environment, 2023)

Exceptional – Rare or outstanding element directly contributing to a place or object's significance.

Considerable (High) – High degree of original fabric. Demonstrates a key element of the place or object's significance. Alterations do not detract from its significance.

Moderate – Altered or modified elements. Elements with low heritage value, but which contribute to the overall significance of the place or object.

Little – Alterations detract from its significance. Difficult to interpret.

Intrusive – Damaging to the place or object's significance.

Table 2. Grading of significance

Element or Space	Grading	Tolerance for change
Vietnam War Memorial Cherry Tree Walk within its curtilage	Exceptional	None. The design and layout are integral to its significance.
Cherry Tree Walk – The tree lined walkway from Mittagong Road through to Boolway Street.	High	Replacement of dead or damaged trees. Repair to pathway

Element or Space	Grading	Tolerance for change
Each of the 307 Taihaku Cherry Trees standards	High	The older healthier trees are of high value. Dead or dying trees are of less value and should be replaced with the same species and specifications.
Dedicated area	High	The ceremonial space has no tolerance for change.
Monument	High	The monument has no tolerance for change except for maintenance.
Garden bed around base of monoliths	High	The garden bed should be planted with prostrate Rosemary
4 Taihaku Cherry Trees (non-standard) at monument	High	The trees should not be pruned for aesthetic reasons. The trees should only be pruned for health reasons as specified by an arborist.
Grove of River Oaks (Casuarina cunninghamiana)	High	These trees are part of the memorial and should not be pruned except for the health of the tree or to prevent damage to the monument. All pruning must be undertaken by a qualified arborist.
Pergola	High	The pavilion contributes to significance but could be rebuilt or repaired by replacement of elements in the same configuration without impacting significance. The location of the pergola is important as it defines the southern edge of the dedicated area.
Seats in pergola	Moderate	The pergola is intended to be a place of contemplation. Providing seating contributes to this function. The existing seats are out of character with the memorial and in poor condition. Existing seating could be upgraded with more appropriate seating in the same location. The footings of seats should not be visible above ground.
4th of July Roses in pergola	High	Contributes meaning to the memorial. Need to be maintained and weeded.
Other plants at the pergola	Low	Other appropriate climbing plants could be grown over the pergola
Entry Monoliths at Mittagong Road	High	Maintain

Element or Space	Grading	Tolerance for change
Entry Monolith at Boolway Street	High	Maintain
8RAR Monument and ceremonial area	Moderate/High	This memorial has moderate significance relative to the Vietnam War Memorial Cherry Tree Walk. It has high significance in its own right. There is no tolerance for change other than maintenance.
Circle of trees around the 8RAR Monument	High	The older healthier trees are of high value. Dead or dying trees are of less value and can be replaced with the same species and specifications.
2 Sawtooth Oaks (*Quercus acutissima*) and 1 English Oak (*Quercus robur*)	Moderate	Not part of the original design but they have high amenity value.
Seat adjacent to monument	Low	Within the dedicated area of the monument. Can be removed. The seat is on a heavy concrete foundation which is out of character with the landscape memorial. Any foundation for seating should not be visible above the ground.
Pedestrian Bridge over Mittagong Rivulet	Low	Not within the memorial curtilage

10. Curtilage and setting

. . . the term "heritage curtilage" means the area of land (including land covered by water) surrounding an item or area of heritage significance which is essential for retaining and interpreting its significance. (Heritage Office of NSW, 1996)

The definition is not referring to a statutory heritage listing, it can be applied to any area of heritage significance. In the case of the Vietnam War Memorial Cherry Tree Walk this CMP has assessed its heritage value against the NSW Heritage criteria and determined that the memorial has heritage significance.

10.1. Curtilage Description

The curtilage for the memorial should be taken as follows:

i) The boundary of the Cherry Tree Walk shall be 4.8 metres from the centre line of the pathway in either direction.[18]
ii) The boundary shall also include Mittagong Rivulet;
iii) The boundary will encompass the area around the 8RAR Monument including the Rivulet and 4.8 metres from the centre of the path to the north. The boundary will have a minimum 2 metre radial clearance around each Cherry Tree.

[18] This has been specified by the arborist. See Attachment 1.

iv) At the northern end of the memorial the southern boundary will include Mittagong Rivulet and shall include the dedicated area with the northern boundary 4.8 metres from the centre line of the path.
v) The branching pathway from the car park shall be included within the curtilage with the boundary being 4.8 metres from the centre line of the path.

10.2. Setting

Immediate setting

The defining environmental features in the setting of the memorial are Mittagong Rivulet and the parkland setting. The Cherry Tree Walk follows the rivulet winding its way through parklands that widen and narrow providing focussed and expansive views. At the dedicated area the park widens and encompasses the monument, the Casuarina Avenue and the ceremonial area.

Designed as an environmental memorial the Vietnam War Memorial Cherry Tree Walk is integrated with its setting. It is not an urban memorial it is a war memorial landscape.

Wider Setting

The memorial is located in a series of parks: Rivulet Park, Foley Park, Venables Park, Settlers Park which contribute to the landscape setting of the memorial. Beyond this the memorial is in a culturally significant heritage area which has older buildings with developed gardens and mature trees with Mount Gibralter as a defining feature.

In addition to the historical attributes the precincts in the Area, possess significant streetscapes which, considered as a whole, reveal the harmonious townscape character which is highly valued by the local community and visitors alike. (Bowral HCA)

The Dedicated Area

This drawing shown in Figure 48 shows the dedicated area after the dedication of the monument in 1999. The sketch made by Kevin Gallagher for the Vietnam War Memorial Trust is dated March 2000. The sketch shows paths to the pergola that were never built and the pergola which was built in 2000. Although the note on the drawing states: *Pergola is part of the dedicated area described by the pathways,* the pergola was not built when the area around the monument was dedicated in 1999 and the pathways to the pergola have never been built. For the purpose of this CMP the dedicated area is assumed to be from the edge of the pergola as originally specified (See section 4.7). Further consultation and research may lead to a different conclusion.

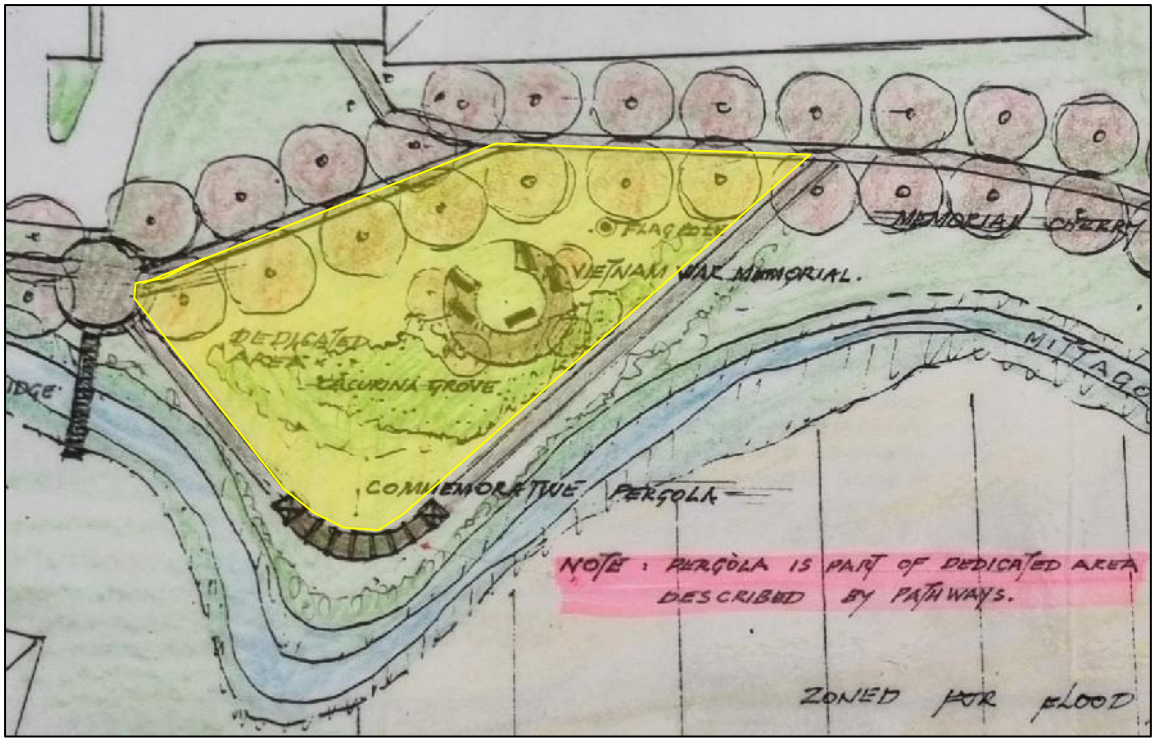


Figure 51. The dedicated area shaded yellow by LTH, original drawing by Kevin Gallagher & Associates for Vietnam War Memorial Trust Titled: General Layout Stage 1 Drawing No. SK28 Prelim Sketch dated March 2000. (Wingecarribee Shire Council, 1996-2005)

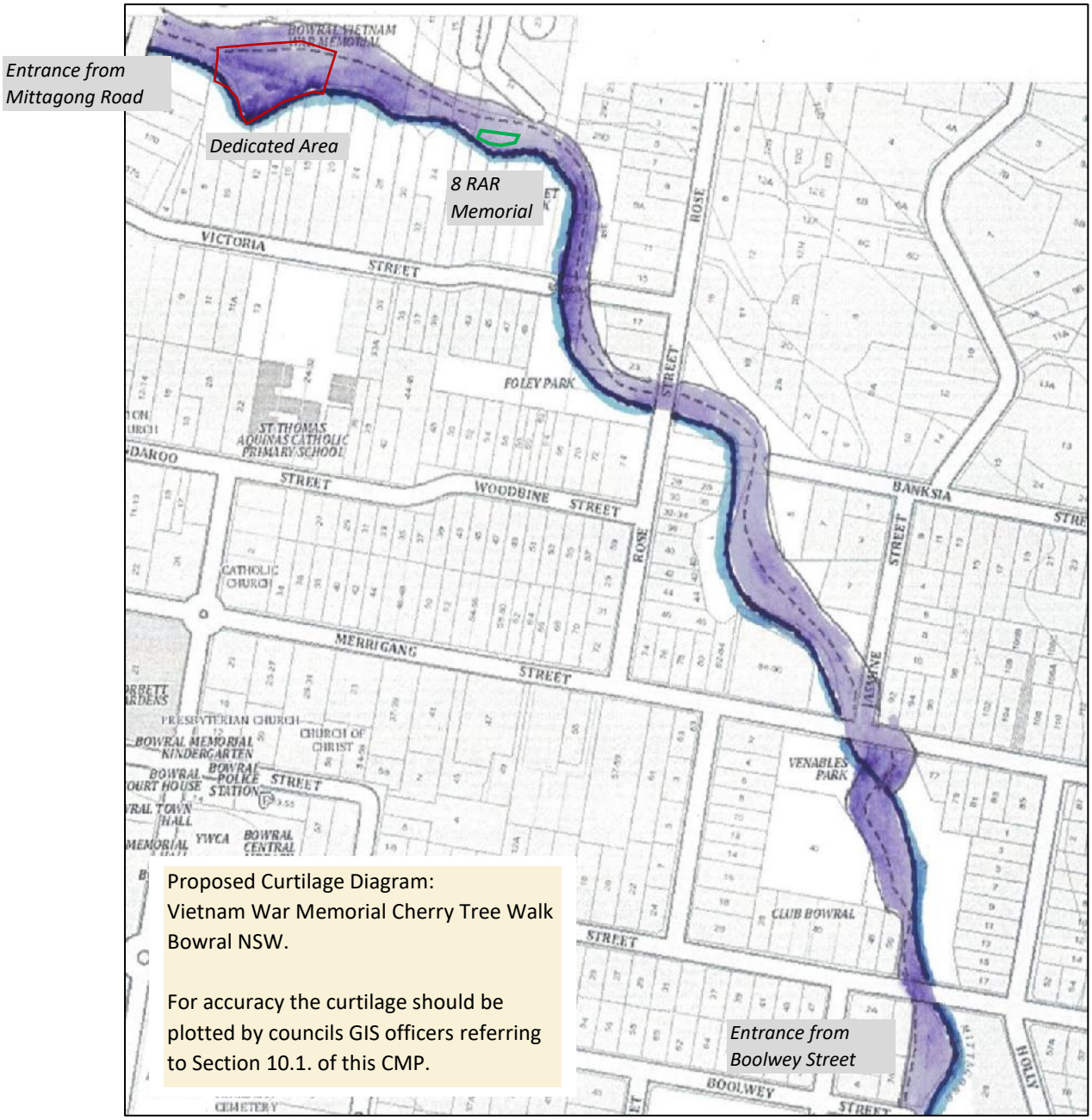


Figure 52. Roughly drawn sketch of recommended curtilage does not follow lot boundaries. This map is indicative only. For a clearer image of the dedicated area see Figure 51.

11. Constraints and Opportunities

11.1. Factors arising from significance

The Vietnam War Memorial Cherry Tree Walk has heritage significance at a local level and possibly at a State level. The significance of the memorial is such that it has very little tolerance for change apart from maintenance.

11.2. Owners/managers needs and aspirations

Wingecarribee Shire Council has inherited a legacy of high significance that also has high maintenance requirements.

This CMP shows that the Vietnam War Memorial Cherry Tree Walk is highly valued by the community and there are high expectations from the community that the memorial will be conserved and maintained.

A major challenge faced by the Council is the ongoing survival and health of the Taihaku Cherry Trees. The trees need to be actively managed with a succession plan along with tree plotting and a maintenance program and education for staff in the care of these trees. Appropriated budget needs to be provided to achieve this forward planning.

Existing practices that affect the significance of the memorial need to cease such as the under pruning of the Casuarina trees. See the policy section for more detail.

Maintenance of Mittagong Rivulet is another maintenance issue. The memorial is located in a riverine environment. Flooding will occur and clean up after floods will be required. The monument will need to be cleaned according to the conservators recommendations. Trees may be affected and the garden bed will need weeding and debris removed.

11.3. Legal and statutory obligations

Wingecarribee Local Environmental Plan 2010

The land is zoned RE1 Public Recreation the objectives of the zone are to

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To enable ancillary development that will encourage the enjoyment of land zoned for open space.*

One of the activities allowed without consent is environmental protection works. This has the potential to cause conflict between management of the riverine landscape and management of the Cherry Tree walk as has happened previously.

Water Management Act 2000

> *Controlled activities carried out in, on or under waterfront land are regulated by the Water Management Act 2000 (WM Act). The NSW Office of Water administers the WM Act and is required to assess the impact of any proposed controlled activity to ensure that no more than minimal harm will be done to waterfront land as a consequence of carrying out the controlled activity. Waterfront land includes the bed and bank of any river, lake or estuary and all land within 40 metres of the highest bank of the river, lake or estuary. This means that a controlled activity approval must be obtained from the Office of Water before commencing the controlled activity.* (Department of Primary Industries, Office of Water, 2012)

WSC Cenotaphs and War Memorial (Protected Places) Security and Protection Policy, Adopted 27 July 2016

The objectives of this policy are:

- *to avoid the placement of objects or signage within the curtilage of War Memorials and Cenotaphs that will obscure or obstruct their viewing, context or meaning.*
- *To avoid any use, development or activity that restricts access to or pedestrian circulation around War Memorials and Cenotaphs*

- *To avoid any activity or actions that detract or damage any part of War Memorials and Cenotaphs and that do not show respect for what they represent to the wider Wingecarribee Community and Returned Service personnel in particular.*

Vietnam War Memorial Cherry Tree Walk is covered by this policy. For the purpose of the policy the curtilage is defined as a distance of 2 metres from the edge of the memorial. The Vietnam War Memorial Cherry Tree Walk has a wider curtilage than this see section 10.1.

Summary Offences Act 1988

Division 1 Offensive behaviour

8 Damaging or desecrating protected places

(1) In this section—

interment site has the meaning it has in Part 4 of the Cemeteries and Crematoria Act 2013 and includes a memorial (within the meaning of that Act).

protected place means a shrine, monument or statue located in a public place, and (without limitation) includes a war memorial or an interment site.

war memorial means a war memorial located in a public place, and (without limitation) includes—

(a) the Anzac Memorial in Hyde Park, Sydney, being—

(i) the memorial building referred to in the Anzac Memorial (Building) Act 1923, and

(ii) the land described in the Schedule to that Act, and

(iii) any other structure on that land, and

(b) any other place prescribed under subsection (4) as a war memorial for the purposes of this section.

(2) A person must not wilfully damage or deface any protected place.

Maximum penalty—40 penalty units.

(3) A person must not commit any nuisance or any offensive or indecent act in, on or in connection with any war memorial or interment site.

Maximum penalty—20 penalty units.

Under the Summary Offences Act 1988 it is an offense to willfully damage or deface a shrine, statue or memorial in a public place.

11.4. Physical condition

There are 307 Taihaku Cherry Trees in the Cherry Tree Walk. At this time 84 of those tree are dead. The health and longevity of the Cherry Trees is the most significant challenge for the War Memorial.

The monument and entry monoliths have had some minor damage that will need to be rectified.

The garden bed when reestablished with Rosemary will require regular weeding.[19]

[19] The Australian War Memorial makes the following observations about Rosemary: *Since ancient times this aromatic herb has been believed to have properties to improve the memory. Perhaps because of this, rosemary became an emblem of both fidelity and remembrance in literature and folklore. Traditionally, sprigs of rosemary are worn on Anzac Day and sometimes on Remembrance Day, and are usually handed out by Legacy and the RSL. Rosemary has particular significance for Australians, as it is found growing wild on the Gallipoli peninsula.*

11.5. Uses, activities or practices essential to significance

Cultural practices and historical uses have been specifically for commemoration events. There is also an important user function which is the recreational value of the Cherry Tree Walk. Both of these uses are important in the management of the memorial.

11.6. Risks or threats

Health of the Cherry Trees

The Cherry Tree specimens have been subject to several threats. Initially the most prevalent was vandalism. When the trees were planted many were pulled out. The second threat has been a naturally occurring problem caused by a fungal disease Phytophera. The Arborists report in Appendix 1 provides an in depth discussion of this problem.

Flooding

A Flood report prepared by Brewster Consulting made several recommendations regarding Mittagong Rivulet which referred to impact on the Cherry Tree Walk.

Site 4: Shepherd Street – Merrigang Street – Rose Street. Drawing 3-11062-6 TREATMENT • Undertake investigation/ survey to allow detailed design of the creek line from Merrigang St through to Rose St. This area exhibits large exposed, vertical banks, erosion in close proximity to the Cherry Tree Walk and is adjacent to contaminated lands.

Victoria Street – Mittagong Road. Drawing 3-11062-8 TREATMENT • Undertake investigation/ survey to allow detailed design of the creek line from Victoria Street as shown. This area exhibits large exposed, vertical banks, erosion in close proximity to the Cherry Tree Walk and is adjacent to significant specimen trees; (Bewsher Consulting Pty Ltd, 2009)

The flood map in the Brewster report shows the Vietnam War Memorial is within the high flood risk precinct. Flooding has always been a constraint for the memorial. The original designers were well aware that flood risk was a factor.

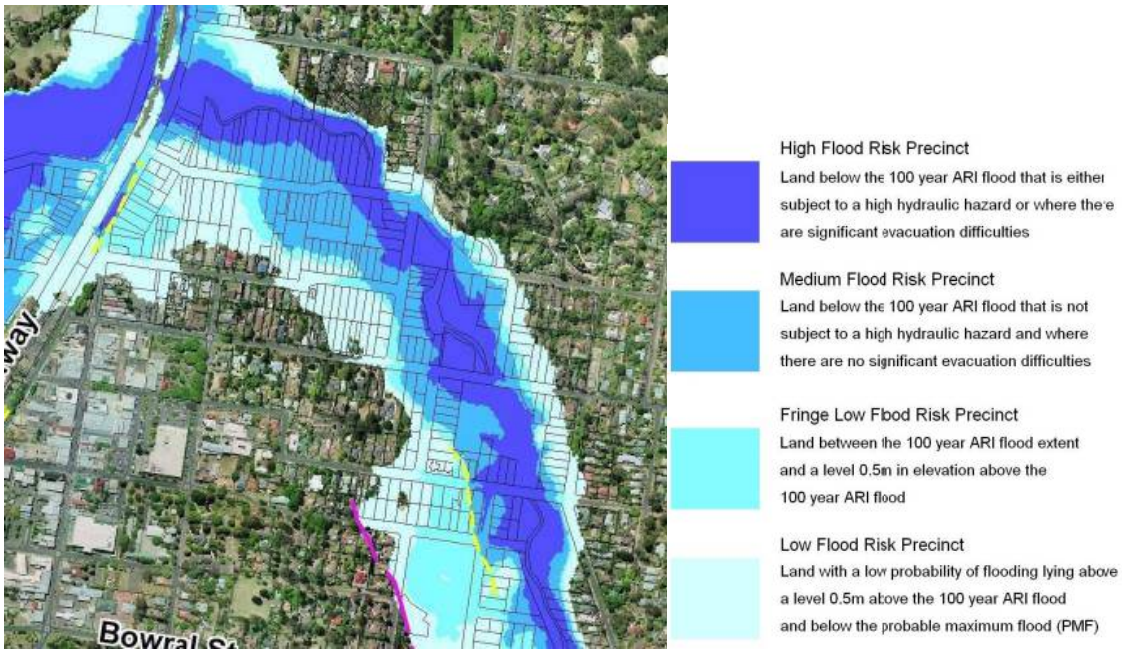


Figure 53. Flood risk areas associated with Mittagong Creek. (Bewsher Consulting Pty Ltd, 2009)

Urban development has occurred since the 2009 flood map was prepared which is likely to have changed the flood mapping. The 2009 map is included here to indicate the extent of the flood zone.

11.7. Record Keeping

There is no single repository for documents relating to the Vietnam War Memorial Cherry Tree Walk. An appropriate archive for all historic documents needs to be agreed upon by those holding records.

12. Conservation Policy

12.1. Intention of conservation policy

The primary purpose of a conservation plan is to establish policies which will guide the future care and development of a place. (Kerr, 2000)

Decisions made regarding the care and maintenance of the Vietnam War Memorial Cherry Tree Walk must be firmly grounded in an understanding of the significance of the place.

The conservation policy contained here is intended to facilitate the conservation and management of Bowral Vietnam War Memorial Cherry Tree Walk.

12.2. Requirements for retention of significance

The principal aspects of the significance of the place that should be retained and conserved are:

12.2.1. The significance of Bowral Vietnam War Memorial Cherry Tree Walk should be conserved in accordance with this Conservation Management Plan.

12.2.2. The significance assessment and grading of significance within this report should form the basis for decision making.

12.2.3. This CMP should be adopted as a guiding document for the care and management of Bowral Vietnam War Memorial Cherry Tree Walk.

12.2.4. The principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) should be applied to future management and development of the place.

12.3. Future works

Decisions affecting the conservation of the Vietnam War Memorial Cherry Tree Walk must be based on the assessment of significance contained in Section 9 of this CMP and the grading of significance contained in Section 1.

12.3.1. The elements classified as exceptional significance in Section 10 have no tolerance for change except for conservation work.

12.3.2. The layout and design of the memorial is considered to have exceptional significance and must not be changed.

12.3.3. The memorial is considered to be complete and no further monuments are to be added within its curtilage.

12.3.4. The elements of moderate significance contribute positively to the significance of the memorial. There is room for modification of these elements providing it is done in consultation with key stakeholders and after a heritage impact assessment.

12.3.5. Elements of low value can be removed without impacting the significance of the memorial. However, if they have amenity value there may be reason to retain them.

12.3.6. Intrusive elements should be removed as they are detrimental to the significance of the memorial.

12.4. Consultation

The Vietnam War Memorial Cherry Tree Walk has high social value and carries deep personal and spiritual meaning for many Veterans. Any decision making regarding the memorial must be undertaken in such a way that all persons with an interest have the opportunity to be involved.

12.4.1. No decisions regarding the Vietnam War Memorial Cherry Tree Walk are to be made without consultation with veterans involved in the building of the monument and veterans who live in the area who express an interest.

12.4.2. Where disagreement occurs during consultation this CMP should be used to assist in final decision making. A heritage impact statement should be prepared if change is proposed.

12.4.3. Where disagreement continues to exist then a professional mediator should be engaged to manage the consultation.

12.5. Taihaku Cherry Trees (*Prunus serrulata* 'Tai-Haku')

The Taihaku Cherry trees must be cared for in accordance with the recommendations of the Arborist Report in Appendix 1 of this CMP.

12.5.1. Wingecarribee Shire Council should continue the program of succession planting where new trees are grown off site to replace those that die. The current numbers of trees being propagated should be doubled to address ongoing issues.

12.5.2. Replacement trees within the Cherry Tree Walk must be Prunus serrulata 'Tai-Haku' matching the specifications of the existing trees.

12.5.3. When removing dead trees and replacing with new trees the recommendations of the arborist contained in Appendix 1 should be followed to prevent soil pathogens and fungal diseases from reoccurring.

12.5.4. Pruning or works that affect the Cherry Trees shall only be undertaken by a qualified arborist.

12.5.5. Council should map and plot each Prunus serrulata 'Tai-Haku' cherry tree on its Tree Plotter Asset Management System. The tree health and condition schedule and tree location plans contained in the arborist report in Attachment 1 in this CMP should be used as a starting point.

12.6. River Oak Trees (*Casuarina cunninghamiana*)

The River Oak Trees are part of the memorial and are inside the dedicated ceremonial area. They are intended to be part of the monument.

12.6.1. Pruning of the Casuarinas must only take place to remove damaged or diseased limbs or where the limb is making physical contact with the monoliths of the monument.

12.7. Living Wreath garden at monument

The River Oak Trees shed needles which have the affect of retarding the growth of other plants. In order for plants in the garden bed to survive the fallen needles will need to be removed on a regular basis. Management such as periodic removal of the mat of fallen 'needles' may reduce this effect and amelioration with soil conditioners may also improve plant health.

12.7.1. Seek horticultural advice for effective and efficient management to ensure the longevity of the garden plantings.

12.8. The importance of keeping records.

It is essential that records associated with the care, maintenance and cultural significance of Bowral Vietnam War Memorial Cherry Tree Walk are maintained in a secure local location. Recording changes made to the Memorial – before, during and after works with descriptions and photographs provides valuable information for future asset managers and custodians. It is important to record details such as tree planting, removal of dead trees, planting of garden beds or new plantings, treatment of existing trees such as pruning, to facilitate long term management and conservation.

All documents relating to the Memorial should be stored on a Wingecarribee Council file specific to the Bowral Vietnam War Memorial Cherry Tree Walk.

Copies of this CMP and historical information should also be lodged with the local history section of Wingecarribee Shire Library and Mittagong Heritage and History Society archives, so they are publicly available for reference.

12.8.1. Records must be maintained to record any change or maintenance in the Bowral Vietnam War Memorial Cherry Tree Walk. Changes should be recorded with photographs and written descriptions.

12.8.2. All records associated with Bowral Vietnam War Memorial Cherry Tree Walk must be stored on a Wingecarribee Shire Council file dedicated to the Memorial. A copy of this CMP and any historical information is to be provided to the Wingecarribee Shire library.

12.9. Curtilage, views and setting.

12.9.1. No changes other than maintenance are to be made within the curtilage of the Vietnam War Memorial Cherry Tree Walk without heritage impact assessment and consultation.

12.9.2. No new trees are to be planted within the curtilage other than replacement Taihaku Cherry Trees.

12.9.3. Any proposals for remediation or restoration of Mittagong Rivulet within the curtilage should be the subject of Heritage Impact Assessment.

12.9.4. No new seating, planting or other permanent fixtures are to be introduced within the dedicated ceremonial area.

12.9.5. The park setting of the memorial should be maintained for passive recreational use to allow the tranquillity of the memorial to continue.

12.10. Maintenance

12.10.1.The memorial shall be maintained in accordance with the recommendations of this conservation management plan.

12.11. Vandalism

12.11.1.If the monoliths are affected by graffiti or physical damage from vandalism the advice of a professional materials conservator must be sought. Rectification of the damage must be undertaken to the specification of the materials conservator.

12.11.2.If vandalism to the trees within the curtilage occurs follow the advice of the arborist.

12.11.3.As the memorial is protected by the Summary Offences Act 1988 it is a criminal offence to wilfully damage or deface the Cherry Trees or the Monument. Vandals can be prosecuted under this Act.

12.12. Flooding and Mittagong Rivulet

The memorial is in a riverine environment and consequently it is within an area prone to flooding. This should be acknowledged as one of the environmental characteristics of the memorial that has to be managed along with other environmental issues such as growing grass and weeds. Flooding should not be treated as a problem that needs to be solved but one which requires increased levels of maintenance after flood events.

12.12.1.Asset management staff from Wingecarribee Council should inspect the whole of the Vietnam War Memorial Cherry Tree Walk after significant flood events to assess and record any damage. Work to rectify any damage should then be undertaken by suitably qualified persons.

12.12.2.Remove Casuarina debris from the monument garden bed, as part of post flooding and regular maintenance work.

12.12.3.Work to rectify flood damage should be maintenance only. Proposals for flood prevention by changing the design of the memorial will have an adverse impact upon its significance.

12.12.4.Proposals for the stabilisation of Mittagong Creek, whether by planting or structural works should be the subject of a heritage impact assessment if located beyond the top of the embankment. Vegetation and debris removal and scour protection works can be undertaken without heritage impact assessment between embankments so as to minimise flood damage on the memorial.

12.13. Path maintenance and infrastructure

12.13.1.If the pathway requires repair or renewal this should be done in consultation with Council's lead arborist.

12.13.2.If infrastructure such as drainage requires repair or upgrade within the curtilage the work must be done in consultation with Council's arborist.

12.14. Treatment of uncharacteristic elements

12.14.1.Elements are marked as intrusive in Table 1 should be removed or relocated outside the curtilage.

12.15. Temporary Structures

12.15.1.Temporary elements such as marquees, seating, rostrums, tables and so on are appropriate inside the curtilage if they are directly associated with a commemorative event directly related to the significance of the memorial.

12.15.2.Temporary elements in the dedicated ceremonial area must not obscure views to the monument.

12.16. Events

12.16.1.Events held within the curtilage must be relevant to the significance of the memorial.

12.17. Signage

12.17.1.Signage within the curtilage must be directly relevant to the Vietnam War Memorial.

12.17.2.Wayfaring signage must be discrete and located at intersections only.

12.18. Interpretation

Interpretation is a means of sharing the significance of the place and any stories associated with the place. It is essential that interpretation does not impact the significance of the place. For example, signage or plaques can be intrusive if not placed with care. Electronic story telling is recommended as an alternative.

12.18.1.Interpretation of the War Memorial must not negatively impact its heritage values.

12.19. Personnel

12.19.1.Appropriately qualified staff and contractors should be the only ones to undertake repairs and maintenance. Skilled and experienced trades people should be engaged.

12.19.2.Consultant trades-people and supervisory staff will be appropriately qualified in their relevant fields and will have knowledge and experience of sound conservation practices;

12.19.3.All personnel should be provided with heritage training in the significance of the Vietnam War Memorial Cherry Tree Walk and should be provided with a copy of the policies and maintenance recommendations in this CMP.

12.19.4.The arborists report should be provided to all personnel.

12.20. Statutory heritage listing

12.20.1.The Vietnam War Memorial Cherry Tree Walk should be included in Schedule 5 of Wingecarribee Local Environmental Plan as a heritage item. The listing should include the whole curtilage as described in Section 10.1 of this CMP.

12.20.2.The Vietnam War Memorial Cherry Tree Walk has potential to be of State significance. A nomination should be prepared for a State Heritage Register listing and submitted to the Heritage Council of NSW for consideration.

12.21. Public Availability of CMP

12.21.1.This conservation management plan should be made available to the general public as a hard copy kept at each of the Wingecarribee Council Branch Library's and as an electronic document available to download from Council's website.

12.22. Adoption of the CMP

12.22.1.This Conservation Management Plan should be adopted by Wingecarribee Shire Council.

12.22.2.This CMP is incomplete without its attachments. All reproductions of this CMP must include all attachments.

12.23. Review of the CMP

12.23.1.This CMP should be reviewed after 10 years.

13. Maintenance

13.1. Taihaku Cherry Trees

Recommendations of the Arborist (Moore Trees, Paul Vezgoff, 2024)

Soil pathogens and fungal diseases

The risk of occurrence of the establishment of soil pathogens and fungal diseases can be reduced but ultimately difficult to fully protect from. It should be remembered that these diseases are natural processes whether introduced (Phytophthora) or not. A common factor in the spread of many of this disease is hygiene and maintaining good plant vigour and health in the first place. As the controls show, there are limited treatments once this disease has established.

Existing Council practices

Wingecarribee Shire Council currently has a replacement process in place. The current process, using off site propagation is recommended to continue. Currently there are 30-50 new trees being grown by the company Specialty Trees (Victoria). Due to the difficulty in the propagation of this species it is required to be carried out by this company. As the species is grafted the Root stock is known as F12/1 which I have been informed is more resilient to Phytophthora. Root stock 'F 12/1' is a clonally propagated selection of 'Mazzard' and favoured over to 'Mazzard' due to its uniformity and resistance to bacterial canker. 'Maxma 14' (P. mahaleb × P. avium) is a clonal selection of P.mahaleb and originated from an open-pollinated 'Mahaleb' tree (F.A. Canlı* and F.Demir, 2014). Treatment of the soils with Phosphonate is also occurring. These existing practices are all beneficial for the management of the Phytophthora.

Succession planting

According to the arborists assessment the 30-50 new trees currently being grown should be doubled.

Australian Standards

Australian Standards relevant to the care of the trees are AS 4373 (2007) *Pruning of Amenity Trees*, and AS 4970 (2009), *Compost, Soil Conditioners & Mulches*. These two (2) Standards both have important specifications and procedures that should be implemented so as to help restrict the spread of this disease and potentially other diseases.

AS 4373 (2007) *Pruning of Amenity Trees* provides well researched specifications on pruning techniques that should be implemented at all times. Bodies responsible for the monitoring of works have a responsibility to ensure that pruning works are undertaken in accordance with this standard. Poor pruning techniques greatly encourage the establishment of pest and disease along with tool hygiene.

AS 4454 (2012) Compost, Soil Conditioners & Mulches provides manufacturers, suppliers, customers and government bodies with the minimum requirements for the physical, chemical and biological properties of composts, soil conditioners, mulches and vermicast, as well as labelling and marking, in order to facilitate the beneficial recycling and use of compostable organic materials with minimal adverse impact on environmental and public health, by avoiding biosecurity and phytotoxicity risks associated with inappropriate products (AS4454, 2012).

It is strongly recommended that the Contractors or staff who maintain the Cherry Tree Walk obtain and familiarise themselves with these Standards in order to help reduce the risk of contamination of the soil pathogens and fungal diseases to the site.

Mulching

With regards to *P.cinnamomi*, the root zone below each tree should be kept mulched in order to maintain soil microbe activity with a combined leaf and wood chipped based mulch. It was noted that several specimen trees were mulched around the base, which is good horticultural practice however, ideally, the mulch should be spread to the drip line. Exposed woody surface roots should also be covered with mulch so as to reduce the chance of mechanical damage to these roots. To ensure a good environment for soil microbes, mulch particles need to be larger than 16mm but nolarger than 30mm. A good quality mulch supplier should be able to provide this information on their products. For more detailed information on mulch specifications, please refer to AS4454, 2012. Mulching to the drip line will also help reduce soil compaction from mowing practices, thus helping fine feeder roots grow.

Mapping

With any serious pest or disease, the mapping of the locations should occur so as to provide a quick visual reference and maintain a record of confirmed or possible affected areas with the site. This could be included in any Council asset management system. The infected areas should be mapped against the tree locations using the Tree Plotter® asset management system. The previous pathology report was completed in 2011 and as such is quite old. Updated testing is recommended along the entire length of the walk or between each street section.

Three step system to deal with Phytophthora

The following three (3) step system can also help deal with Phytophthora. These three (3) key elements below should be followed within Council. They are detailed as follows;

Prevention (mitigate risk of new outbreaks):

Garden beds should be kept mulched in order to maintain soil microbe activity Ideally the mulch should be spread to the drip line of any tree. Avoid water logging and general plant stress. All tools used for pruning should be cleaned before and after use with 70% methylated spirits and water or diluted household bleach in order to sterilize tools. Any symptoms of this disease should be tested immediately to confirm its presence. Positive identification shall be mapped onto a Disease Location Map. All horticultural and arboricultural field staff should be made aware of any infected areas upon site induction. Prevention is obviously difficult when the site is already colonised.

Preparedness and emergency response

Preparedness and emergency response (define the process which needs to be in place to respond to new outbreaks): Confirmation of the disease should be undertaken through scientific testing. If identified the disease should be mapped onto a Disease Location Map. Affected trees will die quickly so their removal shall be undertaken so as not to leave infected wood particles in the soil as best as possible. The infected tree will be taken to a landfill site and not mulched on site.

Ongoing management

Ongoing management (have the appropriate arrangements to be in place for the ongoing management of pest and diseases that become established): Fungicides that contain potassium phosphonate are registered for control of this disease. The manufacturer's instructions shall be followed for this type of application.

13.2. Conservation of the Monument and entry obelisks

All staff responsible for maintaining the monument as well as any volunteers should undergo training with a specialist materials conservator.[20]Maintenance can be undertaken by staff with training. Please refer to the condition report in Attachment 2 for description and diagram of monolith numbers.

Regular maintenance would include the following (Sydney Artefacts Conservation, 2024):

a. Washing down the monoliths every 2-3 months to remove dirt build up, urine stains and accumulation of cobwebs and plant material. Dry brush the tops and sides to remove casuarina pine needles and cobwebs, then hand wash with non-ionic detergent[21] and sponges. Extreme care must be taken when washing around the gilded lettering. No water blasting.
b. Inspect to determine if Casuarina tree branches are overhanging or in contact with the monoliths. In particular Monoliths 4, 5 and 6. Any tree branches in contact with the monoliths should be pruned by an arborist.
c. Monitor cherry blossom trees at the rear of Monolith 6 and Monolith 9. If touching the monoliths assess whether there is likely to be damage and prune judiciously if required. Otherwise clean the area where there is minor contact with the monolith.
d. Regular weeding around the monoliths. Do not over water next to the monoliths.
e. Monitor the pointing. If there are missing or damaged areas then engage a specialist to repoint to ensure there is no water ingress.

Conservation treatments to stabilise the condition (Sydney Artefacts Conservation, 2024):

It is recommended that a specification is prepared prior to any conservation works to determine the full scope of works, locations of damages and techniques and materials to be used in the restoration. The specification should be prepared by a specialist Materials Conservator.

Options for inclusion in the specification.

- Clean all monoliths first.
- Minimise water ingress into the monoliths by
    - Remove and replace elastomeric sealant where it has failed or is missing in joints. Care at edges where cracks are adjacent to the joins as these will require patching.
    - Repair damaged cement footings surrounding Monolith 8.
- It is recommended that the very damaged granite slabs are replaced as the extensive cracking is compromising the integrity and aesthetics of the individual monolith. It is suggested that two extensively cracked granite panels on Monolith 9; the cracked inscription panel on the obverse (west) and the cracked panel on the north side, are replaced with matching 20mm thick polished granite panels.
- Cracked panels can be consolidated and patched with conservation grade adhesives and fillers.
- Holes and losses in the granite to be patch repaired with conservation grade materials to match the surrounding areas to ensure continuity of the surface and to present a cared for appearance.

[20] For example, Sydney Artefacts Conservation has run half day workshops for City of Sydney maintenance staff.

[21] Non-ionic detergent is a specialist conservation surfactant. It is available to purchase online. It is not recommended use any other type of detergent.

- The unpolished grey areas to be repolished to match the surrounding surface finish.
- The oxidised plaque on Monolith 8 requires a conservation treatment to improve legibility, reduction of corrosion products, repatination of the background surface, polishing and regilding the tops of the relief letter and application of a protective coating.

Garden bed around the monoliths:

The garden bed should be weeded and planted with Groundcover Rosemary *Rosmarinus officinalis* 'Prostrata'. Rosemary is traditionally associated with remembrance of those lost in war.

Rosmarinus officinalis Prostrata is a low growing, hardy, woody stemmed, evergreen, shrub with olive green, needle-like foliage that releases fragrant oils when crushed. It will grow in any well-drained, lighter soil but will put up with poor soils. It is generally pest and disease free.

When established it should be lightly pruned regularly to keep it tidy.

The bed will need to be weeded until the Rosemary is well established.

When established the Rosemary should be pruned to at least 300mm from the monoliths and 500mm from the Cherry Trees.

When watering the garden bed keep moisture away from the monoliths.

13.3. Park maintenance within the curtilage[22]

Principles

13.3.1. The parklands within the memorial curtilage shall be maintained in accordance with the conservation policy of this conservation management plan.

13.3.2. No changes other than maintenance are to be made within the curtilage of the Vietnam War Memorial Cherry Tree Walk without heritage impact assessment and consultation.

13.3.3. The park setting of the memorial should be maintained for passive recreational use to allow the tranquillity of the memorial to continue.

13.3.4. All personnel with responsibility for maintenance shall be provided a copy of this CMP and its attachments.

Trees

13.3.5. No new trees are to be planted within the curtilage other than replacement Taihaku Cherry Trees.

13.3.6. Council should continue the program of succession planting where new trees are grown off site to replace those that die. The current numbers of trees being propagated should be doubled to address ongoing issues.

13.3.7. Replacement trees within the Cherry Tree Walk must be Prunus serrulata 'Tai-Haku' matching the specifications of the existing trees.

13.3.8. When removing dead trees and replacing with new trees the recommendations of the arborist contained in Appendix 1 should be followed to prevent soil pathogens and fungal diseases from reoccurring.

[22] The following recommendations are based upon the policy in this CMP. They are summarised here to provide an easy reference guide for Council staff. If there is any doubt over meaning Section 12 and the rest of the CMP should be consulted.

13.3.9. Pruning or works that affect the Cherry Trees shall only be undertaken by a qualified arborist.

13.3.10. There is to be no under pruning of the Casuarinas.

13.3.11. Pruning of the Casuarinas must only take place to remove damaged or diseased limbs or where the limb is making physical contact with the monoliths of the monument.

Monument Garden

13.3.12. Remove Casuarina debris from the monument garden bed, as part of post flooding and regular maintenance work.

Furniture and other fixtures

13.3.13. No new seating or other permanent fixtures are to be introduced within the dedicated ceremonial area.

13.3.14. Proposals for seating or signs or other permanent fixtures outside the dedicated area and within the curtilage must be subject of a heritage impact assessment and consultation according to the policy of the CMP.

13.3.15. Signage within the curtilage must be directly relevant to the Vietnam War Memorial.

13.3.16. Wayfaring signage must be discrete and located at intersections only.

Mittagong Creek

13.3.17. Flooding should not be treated as a problem that needs to be solved but one which requires increased levels of maintenance after flood events.

13.3.18. Asset management staff from Wingecarribee Council should inspect the whole of the Vietnam War Memorial Cherry Tree Walk after significant flood events to assess and record any damage. Work to rectify any damage should then be undertaken by suitably qualified persons.

13.3.19. Any proposals for remediation or restoration of Mittagong Rivulet within the curtilage should be the subject of Heritage Impact Assessment.

13.3.20. Work to rectify flood damage should be maintenance only. Proposals for flood prevention by changing the design of the memorial will have an adverse impact upon its significance.

Vandalism

13.3.21. As the memorial is protected by the Summary Offences Act 1988 it is a criminal offence to wilfully damage or deface the Cherry Trees or the Monument. Vandals can be prosecuted under this Act.

13.3.22. If the monoliths are affected by graffiti or physical damage from vandalism the advice of a professional materials conservator must be sought. Rectification of the damage must be undertaken to the specification of the materials conservator.

13.3.23. If vandalism to the trees within the curtilage occurs follow the advice of the arborist.

Pathway maintenance

13.3.24. If the pathway requires repair or renewal this should be done in consultation with Council's lead arborist.

13.3.25. If infrastructure such as drainage requires repair or upgrade within the curtilage the work must be done in consultation with Council's arborist.

14. References

Abe, N. (2019). *The Sakura Obsession.* New York: Alfred A. Knopf.

Australian Garden History Society. (2023). Landscapes at Risk.

Australian War Memorial. (2023). Retrieved from Places of Pride, National War Memorial Register: https://placesofpride.awm.gov.au/

Australian War Memorial. (2023). *Vietnam War 1962-75*. Retrieved from Australians at War: https://www.awm.gov.au/articles/event/vietnam

Avenues of Honour. (n.d.). *Avenues of Honour*. Retrieved from Avenues of Honour: https://avenuesofhonour.org/

Berrima District Historical Society. (n.d.). Vietnam War Memorial files.

Bewsher Consulting Pty Ltd. (2009, April). Bowral Floodplain Risk Management Study & Plan. *Final Draft Report*.

Blake, T. (n.d.). Photograph collection.

Department of Planning and Environment. (2023, May). Assessing heritage significance: Guidelines for assessing places and objects against the Heritage Council of NSW criteria.

Department of Primary Industries, Office of Water. (2012, July). Guidelines for riparian corridors on waterfront land. *Controlled activities on waterfront land*.

Department of Veterans' Affairs. (2023, October 19). *War Memorials*. Retrieved from Department of Veterans' Affairs: https://www.dva.gov.au/recognition/commemorations/memorials/war-memorials

Edwards, P. (2014). *Australia and the Vietnam War.* Australian War Memorial.

Heritage NSW. (2023). *NSW State Heritage Inventory*. Retrieved from NSW Heritage: https://www.heritage.nsw.gov.au/search-for-heritage/search-for-nsw-heritage/

Heritage Office of NSW. (1996). *Heritage Curtilages.* Department of Planning and Environment.

Inglis, K. I. (2008). *Sacred Places, War Memorials in the Australian Landscape.*

Jervis, J. (1937, August 1). Wingecarribee and Southern Highlands District. Its Discovery and Settlement. *Royal Australian Historical Society Bulletin Volume 23 Part 4. (1937)*.

Jervis, J. (1986). *A History of The Berrima District 1798-1973.* Wingecarribee Shire Council.

Kerr, J. S. (2000). *Conservation Plan.* National Trust.

Kerr, J. S. (2000). *Conservation Plan (The Fifth Edition).* The National Trust of Australia.

McCann, R. (2023, July 13). Photos and description of works .

Micris Management Services. (2008, July). Plan of Management Mittagong Creek Reserve Issue B. *Adopted 9 July 2008 Motion OC 135/08*. Wingecarribee Shire Council.

Moore Trees, Paul Vezgoff. (2024). *Arboricultural Report – Vietnam War Memorial Cherry Tree Walk.*

National Library of Australia. (n.d.). *Newspapers and Gazettes*. Retrieved from Trove: https://trove.nla.gov.au/newspaper/

NSW Department of Planning, Industry and Environment. (2016, April 18). South Eastern Highlands - regional history. NSW.

NSW War Memorial Register. (2023). Retrieved from NSW War Memorial Register: https://www.warmemorialsregister.nsw.gov.au/about-register

SIX Maps. (2016). *Spatial Information Exchange*. Retrieved from Land and Property Information.

Southern Highlands Vietnam Veterans' Peacekeepers and Peacemekers Association Inc. . (2023). *Activities*. Retrieved from Southern Highlands Vietnam Veterans' Peacekeepers and Peacemekers Association Inc: http://shvva.com/

Southern Highlands Vietnam Veterans Peacemakers and Peacekeepers Association. (n.d.). Box of documents provided by Ray McCann. *Miscellaneous collection from Bowral District Historical Society*.

Sydney Artefacts Conservation. (2024). *Condition Report on The Vietnam War Memorial Cherry Tree Walk.* Anne Cummins.

Tooth, G. (2023). *Vietnam War Memorial.* Bundanoon: Tooth.

Tooth, G. (2024, March). Photographs .

War Memorials Trust. (n.d.). *Conservation and management of war memorial landscapes.* London: War Memorials Trust.

Wingecarribee Shire Council. (1996-2005). File No. 6527/14.1 and 6527/14.2. *Mittagong Rivulet Park, The Bowral Vietnam Memorial Walk Trust*.

Wingecarribee Shire Council. (2023). Retrieved from Wingecarribee Shire Council.

Wingecarribee Shire Council. (2023). *Parks - Vietnam War Memorial Cherry Tree Walk*. Retrieved from Wingecarribee Shire Council: https://www.wsc.nsw.gov.au/Places/Facilities/Parks/cherry-tree-walk-bowral

Annexure 1. Arboricultural Report by Paul Vezgoff, Moore Trees

Annexure 2. Condition Report by Anne Cummins, Sydney Artefacts Conservation

Appendix 3 Consultation

Engagement with the community was facilitated by Wendy Todd of Planning Plus.

Face to face discussions were held with the following:

- Annabel Murray, a member of Australian Garden Historical Society but not representing the society – 10 December 2023
- Graham Tooth, Vietnam Veteran, original team member for construction of the memorial – 11 December 2023.
- Roy Elbourne, Vietnam Veteran, original team member for construction of the memorial– 11 December 2023.
- Ray McCann, Southern Highlands Vietnam Veterans, Peacekeepers and Peacemakers Association – 16 November 2023.
- Graham Tooth and Roy Elbourne, phone call 31 January 2024.
- Tony Blake Vietnam Veteran, original team member for construction of the memorial – Phone call 28 February 2024.

A Draft Statement of Significance was sent to the following on 16 January 2024:

- Bud Townsing, Berrima & District Historical Society
- Annabel Murray, a member of Australian Garden Historical Society but not representing the society
- Graham Tooth, Vietnam Veteran, original team member for construction of the memorial
- Roy Elbourne, Vietnam Veteran, original team member for construction of the memorial
- Ray McCann, Southern Highlands Vietnam Veterans, Peacekeepers and Peacemakers Association
- Baden Taylor, Sub Branch President, Mittagong RSL
- John Cummins, Sub Branch President, Bowral RSL
- Robert McClaren, Sub Branch President, Moss Vale RSL
- Robert Williams, Sub Branch President, Bundanoon RSL
- Robert Brown, Sub Branch President, Southern Highlands National Servicemen (NSAA)

A page on Participate Wingecarribee website with a survey and a copy of the Draft Statement of Significance was open for submissions from 31 January 2024 until 21st February 2024. A summary of submissions was provided by Council and is included here.

Vietnam War Memorial Cherry Tree Walk

Summary of Feedback

Demographics of People Visiting the Vietnam War Memorial Cherry Tree Walk

Age of Visitors						
10-17 yrs	18-30 yrs	31-44 yrs	45-55 yrs	56-65 yrs	66-75 yrs	75+ yrs
1	3	4	5	5	23	33

Resident, Visitor or Veteran		
Resident	Visitor	Veteran
62	3	9

Wingecarribee Resident	
Resident	Non-resident
71	3

Overview

The Bowral Cherry Tree Walk and Vietnam War Memorial community consultation saw 74 people visit the Participate Wingecarribee website and complete the online survey (demographics of people who completed the survey shown above).

The responses also highlighted the following:

- 36 people visited the site at least once a week,
- 10 people visited it at least once per month
- 25 people visited it rarely but at least once per year
- 2 people never visited or were no longer able to visit the site
- While the memorial / walk was visited at all times of the day, morning was the most numerous of responses received,
- While the site is visited all year round, Spring and when events are held were the favourite time of the year to visit.
- 44 of survey respondents visited the Memorial only or Memorial and walk
- 72 of survey respondents visited the walk only of walk and memorial

Of the 72 respondents that used the walk / path, the usage was as follows:

Cherry Tree Walk – Usage of walk			
Walk	Run	Cycle	Walk Dog
54	4	4	12

The two themes that permeated the responses centred around the natural beauty of the site (particularly the walk and the trees) and the memorial that commemorates those that served during the Vietnam war.

Comments surrounding the natural beauty included: "beautiful peaceful place, cherry trees blossoms, quiet place, vistas along the paths"

Comments surrounding the Vietnam Memorial included: "honouring those that lost their lives, place to remember lost friends, commemorates the war veterans, fitting memorial to our Vets".

The following tables contain the answers to two questions in the survey.

1. What do you like most about the Cherry Tree Walk?
I think the memorial is stunning and the cherry trees are beautiful in spring
The layout and beauty
How peaceful it is. The memorial provides a place for contemplation.
The peacefulness and silence as you stroll along enjoying nature.
The trees
It is beautiful, and sacred
It is a scenic and enjoyable ride along the Mittagong Rivulet
Hard to put into words, perhaps the overall effect?
Serenity
It's a steady beautiful paved walk that you can safely meander through.
Walkway between east bowral and central bowral
The trees
TRANQUILITY AND REVERENCE.
The trees(although too many are now dead or neglected). It's a lovely walk, beautiful and peaceful and with a flat path.
peaceful and easy walk..creek needs regular cleaning to allow water to flow
That it is a place for reflection.
The trees , clean , tidy , well maintained, generally not too busy, and meeting the dogs .
being able to exercise in a safe location
It is just right for its location
Comfortable safe beautiful
No hills.

1. What do you like most about the Cherry Tree Walk?
The peace and tranquility
It's a good walk that changes with the seasons.
All of the names of those lost are on there, it is in a peaceful area.
a healthy walk
All of it
Proximity to town
The Cherry Trees and the general walking environment.
Beautiful shaded path
the location
The memorial to Vietnam Veterans, the solitude, the green umbrella of trees
The trees
The disconnect from everyday concerns.
Away from traffic, peaceful and a great way into town
The monument circle amongst the Casuarinas
From the picture it looks a really beautiful memorial
The tranquility of the walk & the beauty of the memorial & its surrounds
A reflective walk created by a 'loving few' to remember fallen.
The lovely walk
Its peacefullness yet constant use
It is an attractive, shady, quite protected nature walk
It's flat, safe and visually very beautiful
Blossom and its long stretches
no traffic or very little
The cherry trees & the winding path along the creek
Every thing and anything that may add to the tranquility of this unique and spiritual walk.
The flower display. being outdoors
The cherry trees lining the good walking paths. A place for contemplation
Public use. The national scope of the memorial. Tastefully presented.
It's a picturesque scenic walk
THE TREES & SERENITY

1. What do you like most about the Cherry Tree Walk?
Definitely the trees (when they were in good condition years ago)
Memorial
space
A quiet place to sit
it's location and the dedication of Effie Kerr .
The creek, and ducks. I prefer native bush but the Cherry blossom is nice
Peace, quiet & beauty
Away from traffic
You meet friendly people as you walk.
The trees, the winding roads and the wildlife
calmness and time to reflect
Trees and peace and seeing others enjoying the walk
the trees, rural setting
Meandering along the stream surrounded by nature
Cherry trees and concrete path
What is represents and the beauty of the Cherry trees
All the trees
Until they all started dying, the trees, the vistas along the path, its significance, its beauty
off street
the vegetation especially the cherry trees
The assorted greenery and well maintained pedestrian paths
The dedication area
The peace and spiritual nature of the place

2. Why is the Vietnam War Memorial Cherry Tree Walk important to you?
It's important to show respect to our Vietnam Veterans who were so ill-treated on their return from the conflict
It's a great reminder of what the Vietnam vets went through and just how many soldiers were killed
As stated in previous question, because my husband is a Vietnam Veteran, conscripted. To this day I am still angry about the injustices these men had to endure over not only their

2. Why is the Vietnam War Memorial Cherry Tree Walk important to you?
period of service but throughout their lifetime.
It is a very special place to commemorate and remember in a beautiful setting the brave Service people who served Australia.
It is a lovely walk
It is a part of the sacred site, recognising the service of our Vietnam Veterans, and honouring those who lost their lives.
To remember the fallen, and i enjoy my cycling
As a Veteran having served in Vietnam as an Infantry soldier, its important to have a recognised site to reflect on our service and Honour those who did not return.
Valuing those who fought
It's a beautiful connecting walk way between through the neighbourhoods. Additionally it's a great tourist attraction to the area. When the trees are blossoming it's breathtaking and just a wonder place my family and I frequent on a weekly basis. It's great for walking, running, cycling with family and small kids plus walking my dog. Love it.
Walking space
It is a beautiful reminder of the service and sacrifice of hundreds, integrated directly into the way of life in Bowral.
IT IS FOR THE MEMORY OF THOSE WHO SERVED OR LOST THEIR LIVES SERVING THIS COUNTRY OF OURS.
It's respectful to the veterans and a part of our history that is often overlooked.
My father was a Vietnam Veteran and the memorial contains names of people i knew
It is incredibly important to preserve the memory of those who served our country in times of war.
It's a very pleasant walk. Plus I like the equipment at the pool end and I feel it's important to remind everyone the Vietnam War and all wars. It's a credit to Wingecarribee council to see the walk so well maintained. It's always pleasurable .
It is a great place to exercise that is car free - although there are a few road crossings. There are very few places for recreation in Bowral - most foot paths are uneven, overgrown or non-existent. It is a treasured community asset that allow residents to enjoy the local environment
It commemorates a significant war in Australia's history, and one which had far less attention than it should have
Provides the opportunity to pay our respects to the fallen in that controversial time. Renewed gratitude for the lives we all live in this beautiful country. Thank you for including those who served in 1975, as I did. This war for me ended then.
Friends of mine who served in the war.

2. Why is the Vietnam War Memorial Cherry Tree Walk important to you?
It's a well used community space
It's a time and place of reflection - it's a community resource that is loved by visitors and residents alike - there is wildlife in the creek - Rakali and platypus - lots of bird life and is well maintained and a pleasure to walk along every morning ending at the outdoor gym or the pool.
It is a historic asset
recognises war vets
To remember my mates who were killed in the Vietnam War and remember all the hard work that went into the construction of the Memorial
We are a family of veterans.
They are both dear to my heart as they are living memorials to the servicemen that lost their lives during the Vietnam War. It is relevant to the memory f all servicemen and women in my opinion.
My father in law was a Vietnam vet and they need to be honored, it's also a lovely community walk, I see all different ages enjoying it on a Sunday morning everyone out getting some fresh air and exercise it beautiful
it is dedicated to those who died and those who served. Their service should never be forgotten.
It symbolizes what Austalian service men do for our country.
It is important to me to remember all those who served in past wars from our community.
My Generation
It's a beautiful part of Bowral
Childhood friend of R G Birse - fragged 10th December 1967
My brother was in the Vietnam war and came back with PTSD and later took his life
I am a past president of the Southern Highlands Vietnam Veterans Association & have attended numerous services at the memorial. To me it is a vital point of focus for residents & visitors who served, to remember those that paid the ultimate sacrifice
Remembering lives lost. I did national service when Vietnam war was on but never did active service but friends did and some were injured and killed.
As I was the Vietnam War Memorial Cherry Tree Walk Treasurer along with the late Effy Kerr and the late Kevin Galliger
That each Cherry tree represents a person's ultimate contribution to Australia
As a safe place to walk for exercise
It's beautiful, quiet and safe to walk, it's flat and easy to navigate and always nice to greet others enjoying the walk and see the ducks and other animals along the way

2. Why is the Vietnam War Memorial Cherry Tree Walk important to you?
Recognition of those who served especially those who were conscripted for 2 years of their early 20s
to remember people who died in the war
To honour the Vietnam Veterans. And the walk is so pretty
A safe place to be that will last forever.
I love the cherry trees.
It is THE most beautiful memorial to a tragic war that involved my contemporaries, many of whom lost their lives & should never be forgotten
I have a relative named on the memorial
Being a local resident I find it very tranquil to walk under the cherry trees
THIS WALK / MEMORIAL IS SOMEWHAT UNIQUE, ESPECIALLY FOR A REGIONAL TOWN. SHOULD BE MORE CULTIVATED, (LOCALS), & ADVERTISED MORE BROADLY
It's a beautiful walk year round and it's rare to be able to walk on a shaded path in summer
Appropriate place to remember veterans, my brother served in Vietnam.
calm peaceful, off road
Remembering friends lost
because it helps my mates
Commemoration of the war that affected me and the people born around 1945 to 55. The war in Vietnam dominated my young adulthood and I know many people still affected
Because it is a wonderful & fitting Memorial to remember our Vets from the Vietnam War
Commemorates the Vietnam war and the casualties suffered by Australia
It is a lovely place to walk and contemplate the past.
It's a beautiful and peaceful place to spend time and walk through the town
remembrance
History and recognition of local commitment to pursuing peace
My husband is a Vietnam Veteran
So we will always remember the sacrifices soldiers made for us
Natural beauty and pleasant walk
We should never forget the sacrifices made and in particular how poorly our Vietnam Veterans were treated on their return to Australia. It is vitally important to continue to show respect and gratitude for their service.

2. Why is the Vietnam War Memorial Cherry Tree Walk important to you?
Beautiful walking track with the cherry trees, oak trees, creek, and heritage homes
For every reason - the memorial to the Vietnam soldiers, for its beauty and its significance in the shire
Peaceful
it is a safe and beautiful walking track
It is one of the great green walks/runs through Bowral that emphasise the beauty of the city. It is a good place to take dogs, to show visiting family, and just to workout/enjoy.
To commemorate and honour those who died; to acknowledge the pain and suffering of those who were wounded both physically and mentally; to pay tribute to all who served in South Vietnam in the military during the war; and to remind everyone of the futility of war
It is a significant social, historical and memorial place.

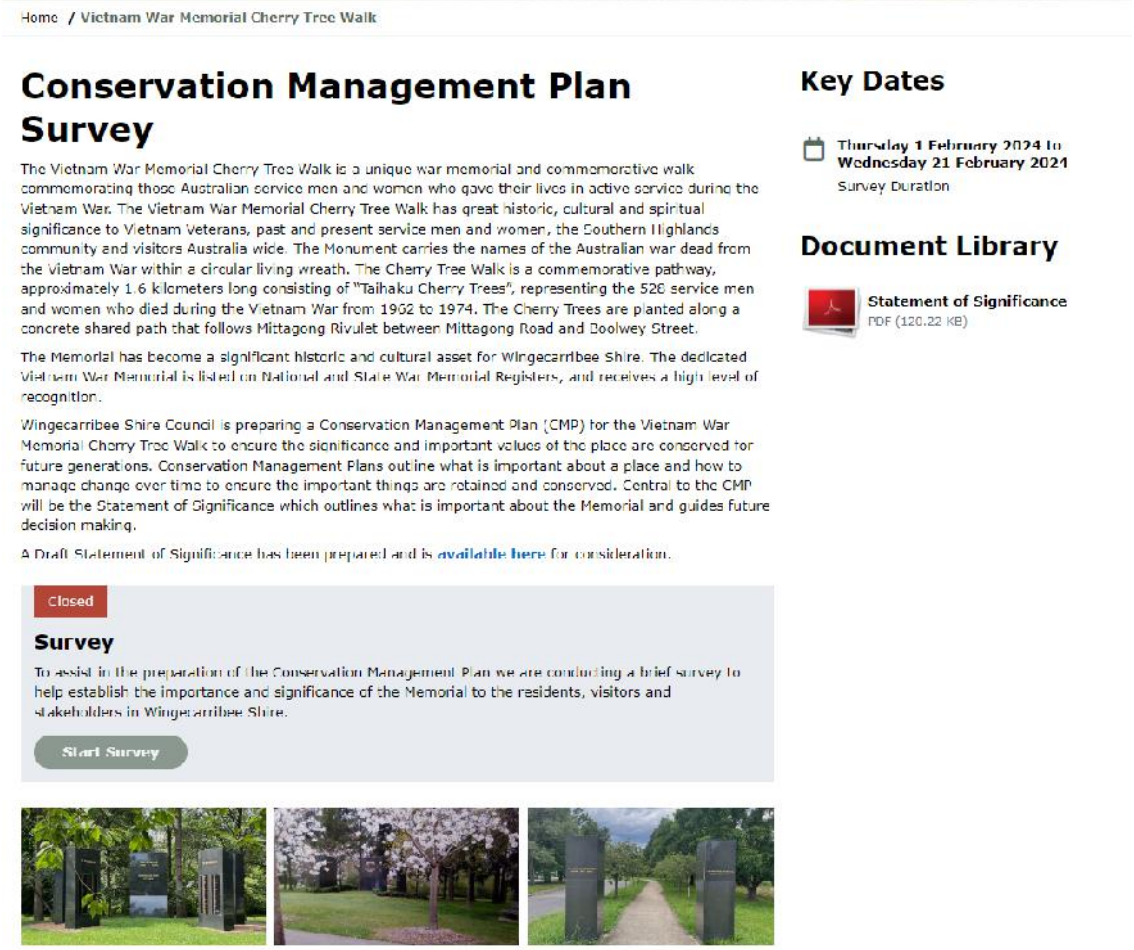
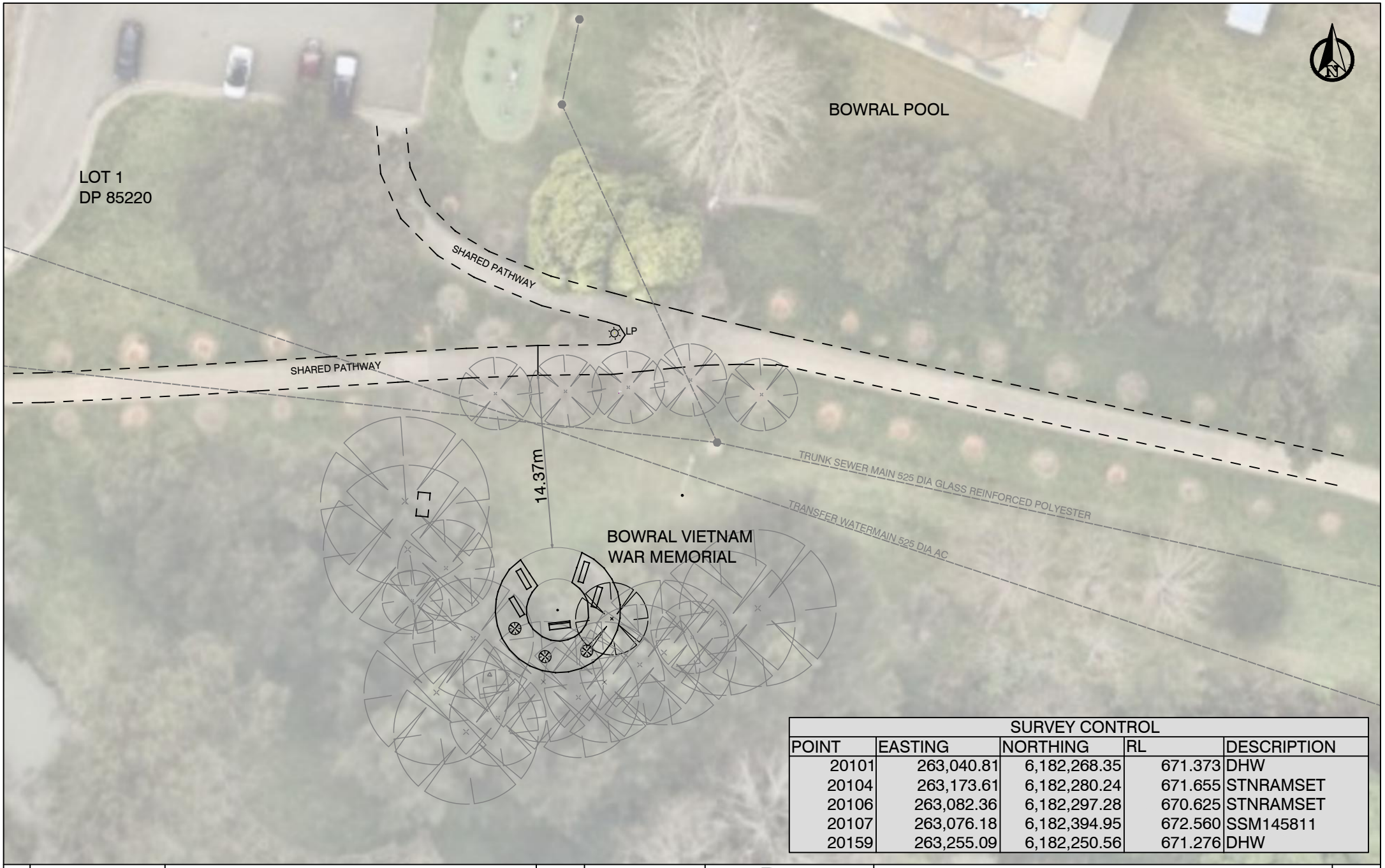


Figure 54. Snapshot of Participate Wingecarribee Web Page

Annexure 4. Drawing of Existing Monument



SURVEY CONTROL				
POINT	EASTING	NORTHING	RL	DESCRIPTION
20101	263,040.81	6,182,268.35	671.373	DHW
20104	263,173.61	6,182,280.24	671.655	STNRAMSET
20106	263,082.36	6,182,297.28	670.625	STNRAMSET
20107	263,076.18	6,182,394.95	672.560	SSM145811
20159	263,255.09	6,182,250.56	671.276	DHW

ISSUE	AMENDMENTS
P1	

SCALES

1:400 0 2 4 6 8 10

DATUM AHD

GRID MGA2020

A4

SURVEYED 11/09/2024

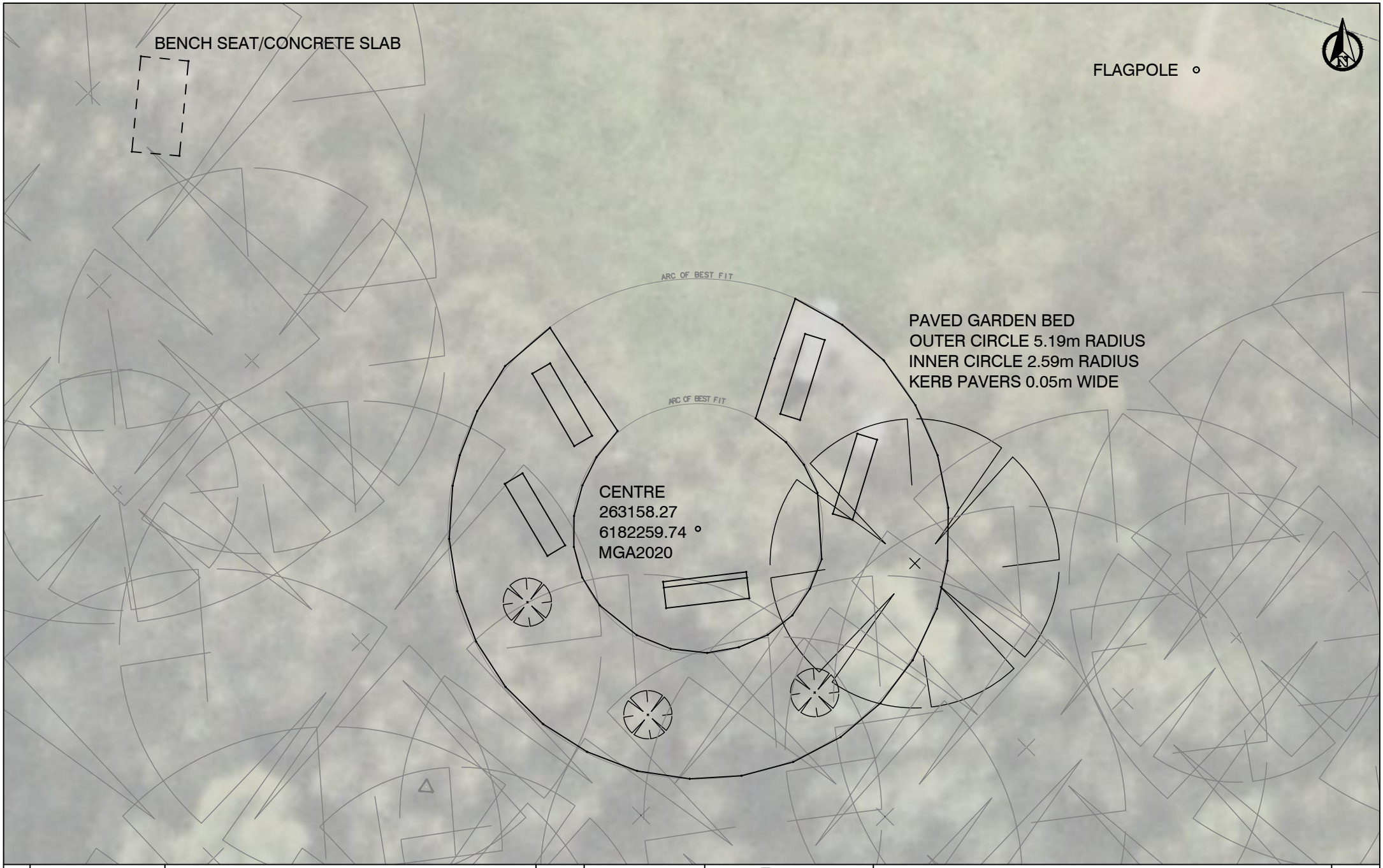
DRAWN TJ

SURVEYOR MS

WINGECARRIBEE SHIRE COUNCIL
Civic Centre, Elizabeth Street, Moss Vale, N.S.W. 2577
PO Box 141, Moss Vale, N.S.W. 2577
Ph: (02) 4868 0888 Fax: (02) 4869 1203

WINGECARRIBEE SHIRE COUNCIL

BOWRAL VIETNAM WAR MEMORIAL
CHERRY TREE WALK
BOWRAL



P1	
ISSUE	AMENDMENTS

SCALES

1:100 0 0.5 1 1.5 2

DATUM AHD

GRID MGA2020

A4

SURVEYED 11/09/2024

DRAWN TJ

SURVEYOR MS

WINGECARRIBEE SHIRE COUNCIL
Civic Centre, Elizabeth Street, Moss Vale, N.S.W. 2577
PO Box 141, Moss Vale, N.S.W. 2577
Ph: (02) 4868 0888 Fax: (02) 4869 1203

WINGECARRIBEE SHIRE COUNCIL

BOWRAL VIETNAM WAR MEMORIAL
CHERRY TREE WALK
BOWRAL

SHEET 2 OF 2

Moore Trees
Arboricultural Services
ABN 90887347745

ARBORICULTURAL REPORT

Vietnam War Memorial Cherry Tree Walk
Bowral NSW 2576

February 2024
FINAL

Prepared for: Lousie Thom
Heritage Consultant 204 Princess Hwy Corrimal NSW 2518

Prepared by: Paul Vezgoff
Consulting Arborist
ISA, AA
Arboriculture Australia Registered Consultant

PO Box 3114 Austinmer NSW 2515
Ph: 0242 680 425
Mob: 0411 712 887
Email: enquiries@mooretrees.com.au
Web: www.mooretrees.com.au

Summary

This report has been conducted to assess the health and condition of three hundred and forty four (344) trees located Bowral Vietnam War Memorial Cherry Tree Walk, 142 Mittagong Road, Bowral NSW 2576. This report has been commissioned by Louise Thom, Heritage Consultant on behalf of Wingecarribee Shire Council as required for the proposed upgrade works at this site.

The study area that includes the Cherry Tree Walk, the memorial and ceremonial areas are known as The Vietnam War Memorial Cherry Tree Walk. The site of the Cherry Tree Walk was conceived as a cycle/walking track along Mittagong Rivulet, and approved by Wingecarribee Shire Council in 1995. It is planted on either side with white flower Tai Haku Cherry Trees and restoration of the neglected Mittagong Rivulet was also deemed a necessary part of the project. The Vietnam War Memorial ceremonial space and monument are located within the Cherry Tree Walk and provide aesthetic significance as a rare 1.3 km Tai Haku Cherry Tree avenue of honour.

The three hundred and seven (307) specimens of Tai Haku Cherry Trees were assessed for this report. It has been written that there were to be one tree planted for every Australian soldier killed during the Vietnam War which, based on the Australian War Memorial totalled 523 service personnel. To date, there appears to be a deficit of two hundred and sixteen trees. Of the three hundred and seven (307) specimens, eighty four (84) were dead (27%) at the time of inspection.

The risk of occurrence of the establishment of soil pathogens and fungal diseases can be reduced but is ultimately difficult to fully protect from. It should be remembered that these diseases are natural processes whether introduced (*Phytophthora*) or not. A common factor in the spread of many of this disease is hygiene and maintaining good plant vigour and health in the first place. As the controls show, there are limited treatments once this disease has established.

Council currently has a replacement process in place. The current process, as discussed with Council representative Tree Management Team leader Charlene Ferguson, of offsite propagation is recommended to continue. Currently there are 30-50 new trees being grown by the company Specialty Trees (Victoria). Due to the difficulty in the propagation of this species it is required to be carried out by this company. As the species is grafted the root stock is known as F12 which I have been informed is more resilient to *Phytophthora.*

Table of Contents

VERSION CONTROL

Date of Issue	Details
21/02/2024	Draft 1 issued
8/03/2024	Final version issued

1 INTRODUCTION

1.1 This report has been conducted to assess the health and condition of three hundred and forty four (344) trees located at the Vietnam War Memorial Cherry Tree Walk, 142 Mittagong Road, Bowral NSW 2576. This report has been commissioned by Louise Thom, Heritage Consultant on behalf of Wingecarribee Shire Council as part of a Conservation Management Plan as required for the ongoing management of the site.

The scope of this report is as follows;

1. Genus and Species identification of the relevant subject trees.
2. Assess health, hazard, structure, amenity value and safe useful life expectancy (SULE) rating for the subject trees.
3. Identify pests or disease, fauna or potential habitat, any site changes and surrounding structures that may affect the health of the subject trees.
4. Management recommendations to ensure long term health and condition of the subject trees is optimised.
5. A Tree Location Plan of the relevant subject trees, allocating an individual number to each tree.

In addition to the scope, I have also conducted a basic soil compaction test and soil pH testing at three (3) locations. The scope of works does not include the surveying of the subject trees or risk assessment.

Also noted for the purpose of this report were:

- Health and vigour; using foliage colour and size, extension growth, presence of deadwood, dieback and epicormic growth throughout the tree.
- Structural condition using visible evidence of bulges, cracks, leans and previous pruning.
- Age rating; Over-mature (>80% life expectancy), Mature (20-80% life expectancy), Young, Sapling (<20% life expectancy).

1.2 **Location:** The site is located at Vietnam War Memorial Cherry Tree Walk at 142 Mittagong Road, Bowral NSW 2576. The study area that includes the Cherry Tree Walk, the memorial and ceremonial areas are known as The Vietnam War Memorial Cherry Tree Walk. This area from herein will be referred to as "the Site". The study area is shown in Diagram 2.

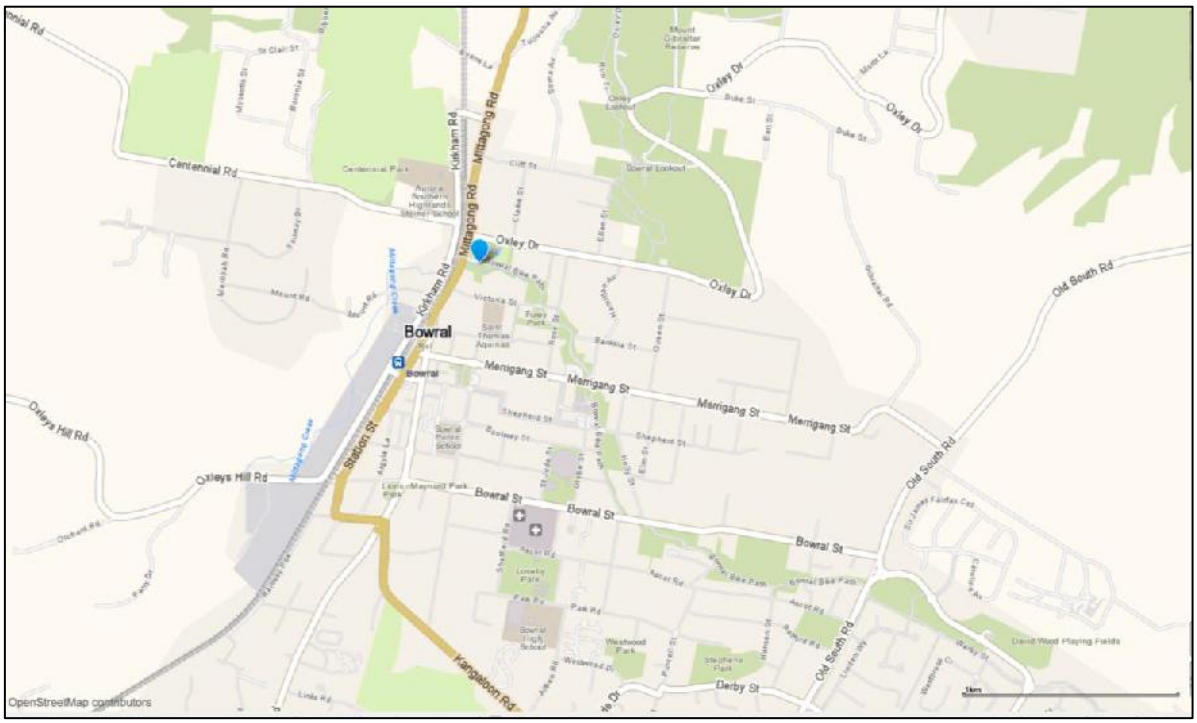


Diagram 1: Location of subject site, Cherry Tree Walk, Bowral NSW 2576 (Blue Marker) (whereis.com.au, 2024)

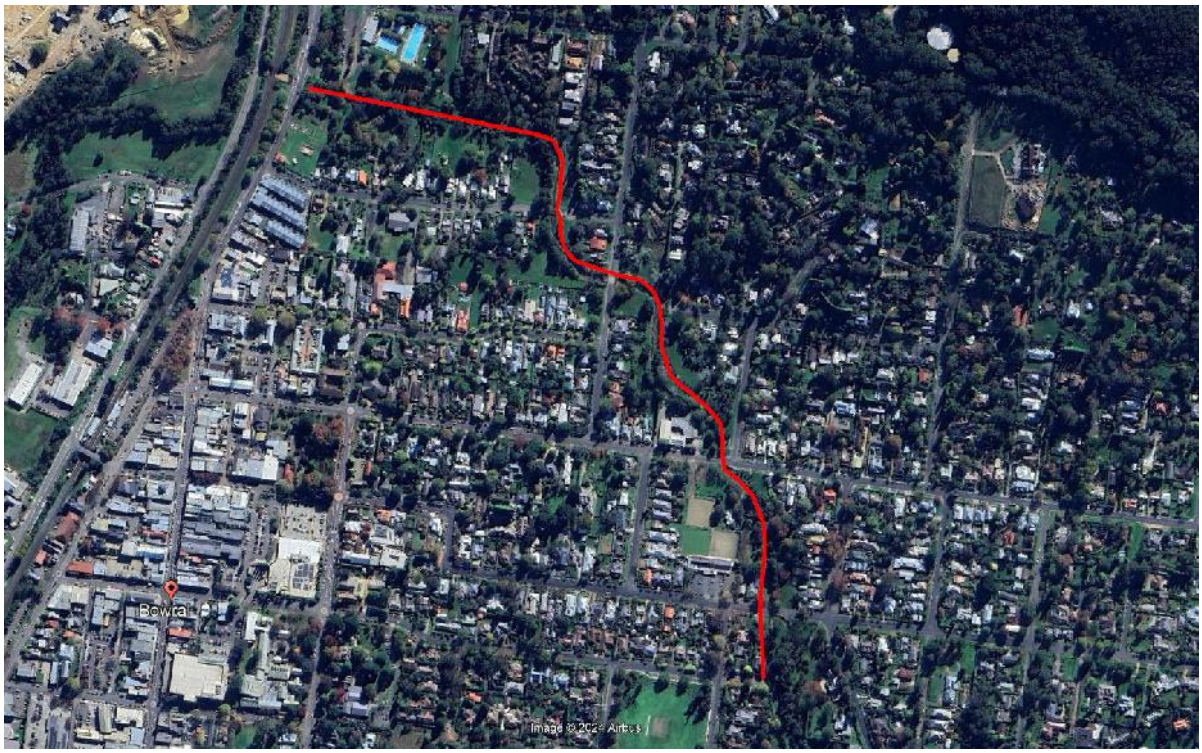


Diagram 2: The study area is the red path (Google earth 2024).

2 METHODOLOGY

2.1 To record the health and condition of the trees, a Visual Tree Assessment (VTA) was undertaken on the subject trees on 30/01/2024 and 7/02/2024. This method of tree evaluation is adapted from Matheny and Clark, 1994 and is recognised by The International Society of Arboriculture, Arboriculture Australia and The Institute Australian of Consulting Arborists (IACA). It is also known as a Level 2: Basic Assessment Process as per the International Society of Arboriculture best management practices.

2.2 **Height:** The heights and distances within this report have been measured with a Bosch DLE 50 laser measure or estimated where required.

2.4 **Tree Protection Zone (TPZ):** The TPZ is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable. TPZ's have been calculated for each tree only as a guide for any potential trenching or drainage works for the walk. The TPZ calculation is based on the Australian Standard *Protection of trees on development sites*, AS 4970, 2009.

2.5 **Structural Root Zone (SRZ)**: The SRZ is a specified distance measured from the trunk that is set aside for the protection of tree roots, both structural and fibrous. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The TPZ and SRZ are measured as a radial measurement from the trunk. No roots should be severed within the SRZ area. A detailed methodology on the TPZ and SRZ calculations can be found in Appendix 5.

2.6 **Safe Useful Life Expectancy (SULE)**: The subject trees were assessed for a Safe Useful Life Expectancy (SULE). The SULE rating for each tree can be seen in the Tree Assessment Schedule (Appendix 2). A detailed explanation of SULE can be found in Appendix 4.

2.7 **Plans and information provided:** For this Arboricultural Report I was supplied the following documents:

- Thom Louise, 2024. *Draft Statement of Significance.*
- *Vietnam War Memorial* by Graham Tooth 2023
- Original Brief - 2021 by Vietnam Vets Southern Highlands

3 RELEVANT BACKGROUND INFORMATION AND OBSERVATIONS

3.1 The site of the Cherry Tree Walk was conceived as a cycle/walking track along Mittagong Rivulet, and approved by Wingecarribee Shire Council in 1995. It is planted on either side with white flower Tai Haku Cherry Trees and restoration of the neglected Mittagong Rivulet was also deemed a necessary part of the project. The Vietnam War Memorial ceremonial space and monument are located within the Cherry Tree Walk and provide an aesthetic significance as a rare 1.3 km Tai Haku Cherry Tree Avenue of Honour. The walk provides a pleasant, generally level, walk away from traffic. The walk and memorial are known as The Vietnam War Memorial Cherry Tree Walk.

Plate 1: Image showing one of the walk entry points. P. Vezgoff

3.2 **Environmental Significance**: All trees in the Wingecarribee Local Government Area are protected and cannot be removed without the adequate requirements being met. Specifications relating to what can and cannot be removed are detailed in Bowral and Burradoo Township Development Control Plan (DCP) Version 14,March 2021; and also within the Wingecarribee Local Environment Plan (WLEP) 2010 specifically Section 7 Vegetation Management & Landscaping A7.1 Preservation of Trees and Other Vegetation A7.1.1.

3.3 Section 6 Vegetation Management and Landscaping, A6.1 Preservation of Trees and Other Vegetation effective 1 January 2021. This DCP protects all trees in the Wingecarribee Local

Government Area. A tree means a perennial plant with at least one self-supporting stem which,

(a) has a height of more than 6 (six) metres, and

(b) has an outside circumference of at least 500mm at a height of 1 metre above the ground, or,

(c) has an outside circumference of at least 500mm measured at ground level where the tree has been cut down or removed, or

(d) has a branch and foliage crown spread of at least 4 metres

3.4 Section 4.20 of the DCP states that Arborist Reports submitted to Council are required to be from a minimum AQF Level 5 (Diploma) Consulting Arborist. I confirm that I have the AQF Level 5 Diploma of Arboriculture qualification.

3.5 **The Species:** Japanese Flowering Cherry *(Prunus serrulata* 'Tai-Haku') was thought to be extinct in Japan in the 1920s when an English plant collector, Collingwood Ingram, matched a tree growing in Sussex to a Japanese painting of a white cherry. Japanese cherry trees only blossom for a short period of time, so diverse varieties with different flowering times are often planted together to prolong the blossoming period.

3.6 Effie Kerr OAM (one of the original instigators of the walk) believed there was a parallel between the history of the Tai Haku to that of the Vietnamese war veteran, who'd been historically ignored in Australia, to such an extent that they were also in danger of becoming extinct (Thom 2024).

Plate 2: Japanese Flowering Cherry *(Prunus serrulata* 'Tai-Haku'). (Papervale Trees 2023)

In optimum conditions this species can grow to six (6) metres tall and the same wide. It performs best in full sun and moist, well-drained soils.

Propagation is through budding or grafting and soft wood cuttings in early summer are possible.

3.7 The three hundred and seven (307) specimens of Tai Haku Cherry Trees were assessed for this report. It has been written that there were to be one tree planted for every Australian soldier killed during the Vietnam War which, based on the Australian War Memorial totalled 523 service personnel. To date, there appears to be a deficit of two hundred and sixteen trees. Of the three hundred and seven (307) specimens, eighty four (84) were dead (27%) at the time of inspection.

Plate 3: Image showing some of the dead and dying specimens. P. Vezgoff

3.8 **The Site Trees:** The site was inspected on 30/01/2024 and 7/02/2024. Each tree has been given a unique number for this site and can be viewed on the Tree Location Plans (Appendix 1, Plans 1-8). These plans are not survey accurate and are based on a Six Maps© image. Only trees directly next to the footpath, and around the war memorial monuments, have been assessed for this report.

3.9 The study area extends from Mittagong Road along a 1.6 km concrete footpath through to Boolway Street. The path follows Mittagong Creek that lies at the base of Mount Gibraltar.

3.10 In total three hundred and forty four (344) trees were assessed for this report. Of these two (2) species are Sawtooth oak *(Quercus acutissima),* one (1) is English oak *(Quercus robur)* and thirty four are River oak *(Casuarina cunninghamiana)*. There were three hundred and seven (307) specimens of Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku').

3.11 The condition of the site trees varied greatly. Original plantings were obvious by their size as were the replacement plantings that exist along the entire study area. Most of the site trees have been mulched with a ring of mulch extending not further than 500mm for most trees. The mulch was mounded above 100mm in depth (Plate 4).

Plate 4: Image showing mulch above the basal flare. P. Vezgoff

3.12 Smaller trees that were senescent were clearly dead, as evidenced by the smaller branches that easily snapped when bent. A basic pull test was undertaken on some of the younger trees and found that the root ball could be rotated by hand indicating a sub soil issue with poor root health and vigour.

3.13 Some trees had extensive wounding to the trunks, with a degree of wound wood development. My early opinion was that possibly these wounds had been caused by flood events with debris contacting the specimens, however the damage did not correspond with the direction of water flow. Upon speaking with a local of twenty-seven (27) years, she informed me that when the walk was established vandalism occurred on several occasions. The local also stated that the stream did flood and that the water runoff from Mount Gibraltar was extensive in heavy rain events.

Plate 5: Image showing Trees 25-29 all with extensive stem wounds. P. Vezgoff

3.14 **Memorial areas**: The Main Memorial is located to the south of the main car park area near the public swimming pool. The memorial consists of granite towers with brass names plates of those who perished during the war. A group planting of River oak *(Casuarina cunninghamiana)* providing a backdrop for this memorial. These trees were found to be, mostly, in good health and condition. They favour the moisture laden riverbank soils and, as such, have grown into tall healthy specimens that have grown into codominant canopies. Only one specimen was noted as having a structural defect where the two codominant stems are beginning to split (Tree 340, Plate 7). This tree is several metres away from the memorial area.

3.15 A small garden area next to the granite towers contains four (4) small Cherry tree specimens. One (1) tree is older than the other three (3) trees. The other three (3) trees appear to have been planted in the last 2-3 years. All four (4) are in good health and condition (Plate 9). They have underplanted with Rosemary *(Salvia Rosmarinus)* bushes, which is often associated with ANZAC Day.

Plate 6: Image showing the Main Memorial area. P. Vezgoff

Plate 7: Image showing Tree 340 with an active crack. P. Vezgoff

3.16 8 RAR Memorial: The 8 Royal Australia Regiment Memorial area is surrounded by Trees numbered as Trees 188 to Trees 199. This memorial area contains a small stone monument surround by lawn area. Several of the Cherry trees have died in this area. Two (2) mature specimens of Sawtooth oak *(Quercus acutissima)* are present, and both are in good health and condition.

Plate 8: Image showing the 8 RAR Memorial. The Sawtooth oak *(Quercus acutissima)* to the right and centre of the image. P. Vezgoff

Plate 9: Young specimens near the granite towers. P. Vezgoff

3.17 Soil compaction: A simple soil compaction test was undertaken with a metal spike around trees numbered Trees 8 to Trees 14. The soil in the entire area probed was found to be highly compacted, as evidenced by the probe only being possible to push 100mm to 150mm in depth. One hole was excavated between Trees 9 and 10. The hole was excavated to a depth of 150mm when solid compacted clay was reached (Plate 10).

Plate 10: Image showing the soil test hole. P. Vezgoff

3.18 Soil pH: Three soil pH tests were undertaken from the base of Trees 299, 208 and 167. The tests revealed the pH to generally be between 5 and 6.5, that being a slightly acid soil.

Plate 11: Image showing one of the soil pH test results. P. Vezgoff

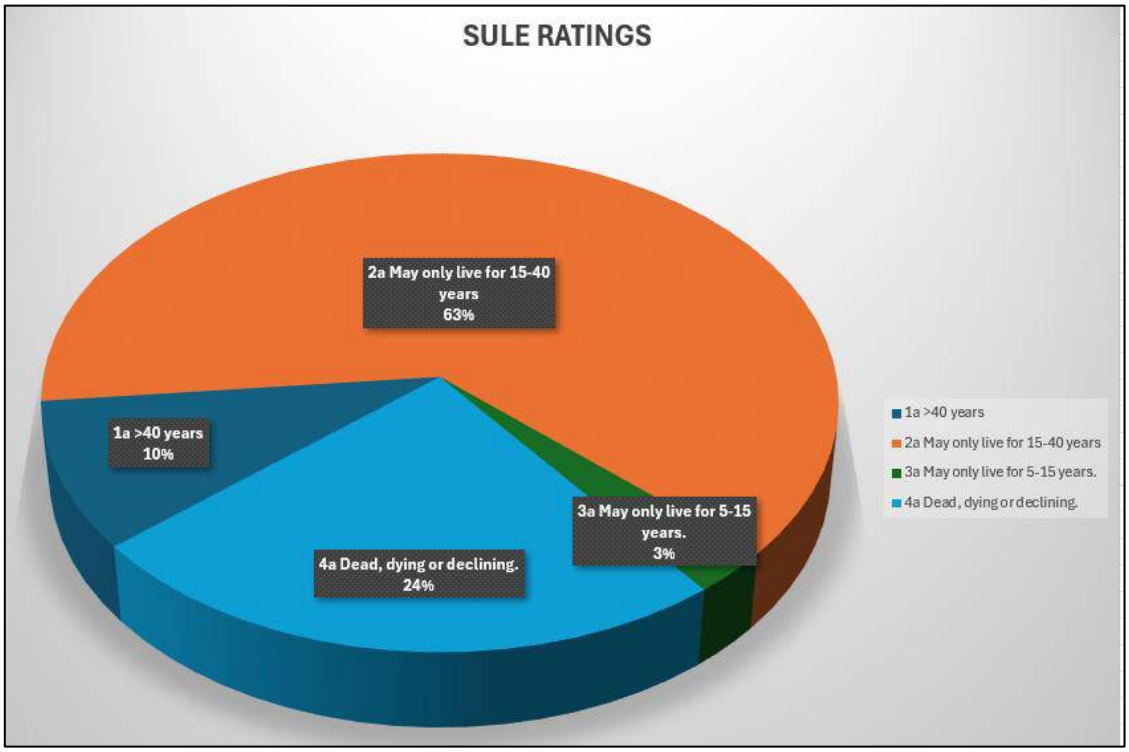
3.19 **Surface hydrology:** The walkway follows the Mittagong Creek. As such, the study area would be considered to be part of a "Fluvial" system. The Fluvial process sculpts the landscape, eroding landforms, transporting sediment, and depositing it to create new landforms. Water along Mittagong Creek is controlled by a combination of manmade piped areas and culverts along with levee banks and areas of talus deposits. As seen in the 2022 flood events, this area can become totally saturated taking weeks and even months to dry out. This natural system of water flow will be important when discussing the impacts and future ramifications of the *phytophthora* that has been found on site.

3.20 **Disease:** Soil testing was undertaken for disease diagnosis on the subject site in 2011. A Report by Botanic Gardens Trust (BGT), Sydney is attached in Appendix 4 showing results and positive samples found *Pythium* and *Phytophthora* species.

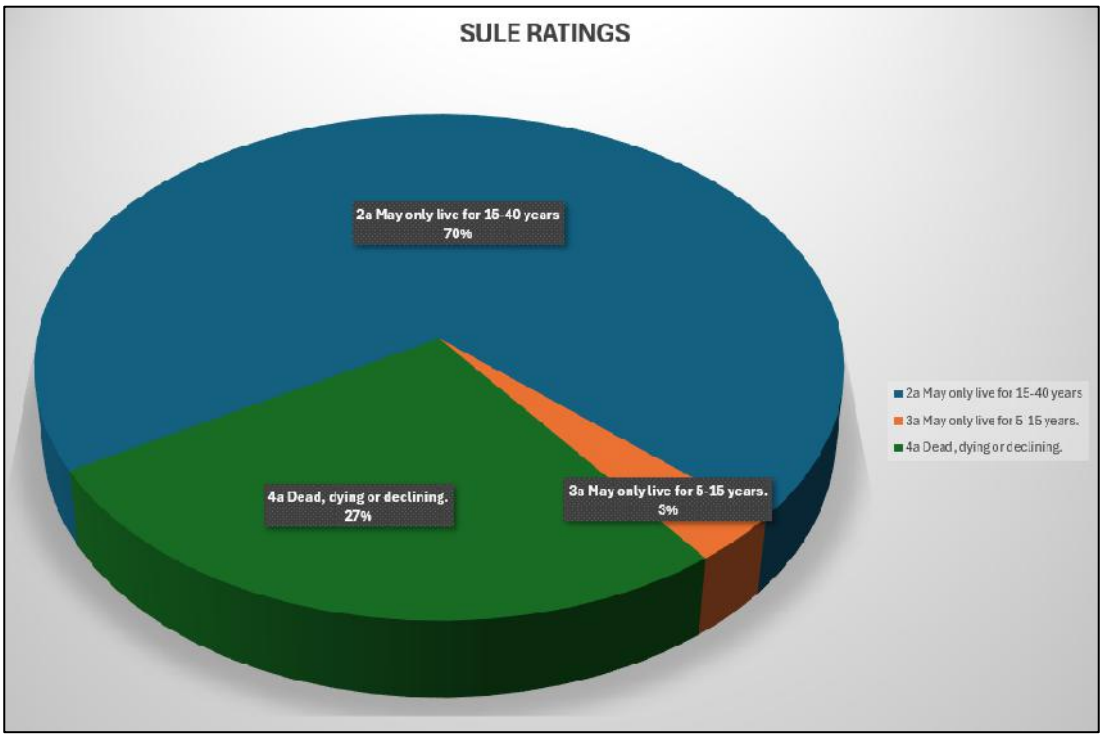
3.21 *Pythium* is a genus of parasitic oomycetes. Many *Pythium* species, along with their close relatives *Phytophthora*, are plant pathogens of economic importance in agriculture. *Pythium* spp. tend to be very generalistic and unspecific in their large range of hosts, while *Phytophthora* sp. are generally more host-specific. *Pythium* is not considered a serious issue for woody plants, but its impacts can be very bad for seeding stock in agriculture. As such, the *Pythium* is not considered an issue for the site trees.

3.22 The Department of Climate Change, Energy the Environment and Water (DCCEEW) states; *Phytophthora* as a *Key threatening process*. *'Dieback caused by the root-rot fungus Phytophthora cinnamomi' is listed as a key threatening processes under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. Since its listing, further research has determined that Phytophthora cinnamomi is a water mould and not a fungus.*

3.23 Safe Useful Life Expectancy (SULE) is a method of evaluating individual trees. The evaluation is a subjective assessment, not an absolute judgement, because the nature of trees and opinions on trees can vary greatly. SULE assessments are made only by those who are experienced and knowledgeable in tree management. SULE is generally accepted and used world-wide as a method of evaluating trees. Each category has a number of sub-categories. These sub-categories should always be recorded to help future users of the information appreciate the reason for each allocation decision. It is normal to have instances where trees will not fit neatly into a single SULE category. The assessment of the site trees can be seen in Graphs 1 and 2. Based on the site age and current condition of the site trees I have not rated any Cherry tree greater than 2a (15-40 years). However, it should be noted that the *Casuarina* species do skew the results due to their 1a rating. As such, Graph 1 shows the SULE ratings including the *Casuarina* species and Graph 2 without.



Graph 1: SULE ratings for the site incluiding the *Casuarina* species.



Graph 2: SULE ratings for the site not including the *Casuarina* species.

4. DISCUSSION

4.1 The future management of the site's signature trees is not straight forward and would appear to require a long-term strategic plan to be implemented and followed. The requirements will likely outlast Council staff employment periods (20+ years), and such should be readily available, easy to understand and to implement over a number of years.

4.2 The greatest threat to the site trees would appear to be the *Phytophthora* followed by ongoing management practices, such as under mulching (but mulching too thick) and lawn maintenance that increases compaction with time. Extending mulched areas will be beneficial to the overall soil condition and tree health.

4.3 I am not aware of how much has been spent on replacement plantings since the inception of the walk, however in my time assessing the site it is clearly a favourite walk for people of all ages and throughout the entire day. The walks value to remembering the 523 dead military personnel is as symbolic as the Cherry tree flower itself, falling at the peak of its beauty. Although other species could be considered for these harsh growing conditions it would be difficult to find a tree species of equal relevance.

4.4 The importance of the site is also detailed in the Statement of Hertiage report by Louise Thom, which states; *The memorial has rarity value. Whilst there are other cherry tree avenues of honour such as the one in Cowra, the Vietnam War Memorial avenue of honour is believed to be the only Taihaku avenue in Australia and is certainly the only avenue of cherry trees that form a Vietnam War Memorial avenue of honour. The memorial is one of only a few Vietnam War Memorials that carries the names of all those who died in the conflict. It is the only Vietnam War Memorial in the southern highlands and the only avenue of honour of such a length.*

4.5 To continue with the same species, a program of succession growing would be required. Removal and replacement could become a regularly programmed, and even an annual event, where returned soldiers are allowed to replace specimens along the walk, allowing the military remembrance to continue. Succession plantings should be grown off site and retained at the council nursery or even at a local private nursery.

4.6 Should succession growing be an option, some indicative costings might include the tree itself, storage of the stock, some ongoing soil pathology testing (approximately $300 per test on a sliding scale) prior to planting. It would be a process not much different than removal and replacement of street trees throughout the LGA. I note that the minimum land rate for a resident of Wingecarribee Shire is set at $1266.97. I estimate that it would only take a handful of land rates to allow this succession program to be implemented. For my research into this project, I spoke with Council representative Charlene Ferguson (Team leader, Tree Management) about the current management processes for the site (See Section 6, Recommendations 6.2) which are acceptable, but could be improved through a dedicated budget.

5. DISEASE CONTROL MEASURES

5.1 There are hundreds of soil pathogens and fungal diseases throughout the world and several that are prevalent on the east coast of Australia affecting a broad range of flora. It is estimated that only 15% of fungi in Australia have been identified (Royal Botanic Gardens 2024).

5.2 *Phytophthora cinnamomi* is a microscopic soil borne organism, invisible to the naked eye, which causes root rot in a wide variety of plant species including many native and introduced plants and trees. There is no way of visually telling if the pathogen is present in the soil. *Phytophthora cinnamomi* requires moist soil conditions and warm temperatures to be active, but damage caused by the disease most often occurs in summer when plants are drought stressed. Infection often results in the death of the plant (RBG, 2012).

5.3 *Phytophthora cinnamomi* is pathogenic on at least 805 plant species. Nearly half of these are indigenous to native plant communities in Australia. It is noted that in South-Eastern forests *E. sideroxylon, E. viminalis, E, ovata* and *E. goniocalyx* are apparently highly resistant to this disease (Keane, Kile, Podger & Brown, 2000) however, this report is only assessing the impacts to the site Cherry trees.

5.4 The Department of Climate Change, Energy the Environment and Water (DCCEEW) has detailed control measures, however they have a focus on native bushland. The Vietnam War Memorial Cherry Tree Walk site is a totally different situation, in that it is located within an urban environment with heavy pedestrian use and constant turf management practices.

5.5 Phytophthora Root Rot control methods. At present, there is no one simple method for controlling *Phytophthora cinnamomi*. A combination of sanitation measures, good horticultural management, selective use of some fungicides and the addition of organic matter to soils can be used to retard the activity of *Phytophthora*.

5.6 Prevention Measures

(a) Soil preparation: Regardless of whether the pathogen is present in a soil it is important to add quantities of organic matter such as mulches, manures, and composted material to the area (if this is appropriate to the plant species). These components increase the level of soil micro-organisms, such as fungi (eg. *Trichoderma*), actinomycetes and bacteria, which suppress the activity of *Phytophthora* and retard disease development. Mulches also minimise the contact between soil and footwear so that there is less potential for the transport of soil. Ensure that drainage is adequate to prevent water logging, which promotes disease incidence and severity. All run-off water from known infected sites should be contained and directed to the storm water channels. Water can very easily transport *Phytophthora cinnamomi*.

(b) Prevention and caring of infected plants: Fungicides containing potassium phosphonate are registered for control of this disease in certain situations. Plants should never be moved from an infected site to an uninfected site. When removing plants it is essential to remove as much of the dead tissue, including roots, as possible. The pathogen may persist in dead tissue for many years.

(c) Hygiene: Sanitation of tools, machinery and boots is probably the most effective means by which the spread of *Phytophthora cinnamomi* can be limited. Spades and other tools should always be washed free of soil before and between plantings. In addition, tools should be regularly drenched in a solution of 70% methylated spirits and water or diluted household bleach. Wherever possible, soil should be removed from boots and tyres to limit the movement of soil and the fungus. Vehicle movements, if required, within infected areas should be kept to a minimum and be washed down after working in these areas before use in clean areas.

5.7 The RBG report (Appendix 3) states; "*Prunus species are reported as being susceptible to Phytophthora. Therefore Phytophthora is highly likely to be the cause of the cherry tree decline control of Phytophthora is not always successful in this situation. We recommend removing the dead cherry trees, and the soil associated with the roots where possible and taking care not to spread the soil to an affected areas. The area around the dead trees should be drenched with metalaxyl or furalaxyl. As Phytophthora can be spread through contaminated soil and free water. It may be prudent to treat adjacent and any symptomatic trees with phosphonate. The manufacturer's instructions should be followed for this with further doses in 4 to 5 weeks' time. It is important to undertake this process only if the soil is saturated, or if rain is expected, improving plant health may reduce the susceptibility of unaffected trees. Plant health can be improved with the application of organic fertilizers and root growth promoter, such as Seasol®, combined with deep watering whenever possible."*

6. RECOMMENDATIONS

6.1 The risk of occurrence of the establishment of soil pathogens and fungal diseases can be reduced but ultimately difficult to fully protect from. It should be remembered that these diseases are natural processes whether introduced (*Phytophthora*) or not. A common factor in the spread of many of this disease is hygiene and maintaining good plant vigour and health in the first place. As the controls show, there are limited treatments once this disease has established.

6.2 Council currently has a replacement processes in place. The current process, as discussed with Council representative Tree Management Team leader Charlene Ferguson of offsite propagation is recommended to continue. Currently, there are 30-50 new trees being grown by the company Specialty Trees (Victoria). Due to the difficulty in the propagation of this species it is required to be carried out by this company. As the species is grafted the root stock is known as F12/1 which I have been informed is more resilient to *Phytophthora*. Root stock 'F 12/1' is a clonally propagated selection of 'Mazzard' and favoured over to 'Mazzard' due to its uniformity and resistance to bacterial canker. 'Maxma 14' (P. mahaleb × P. avium) is a clonal selection of P. mahaleb and originated from an open-pollinated 'Mahaleb' tree (F.A. Canlı* and F. Demir, 2014). Treatment of the soils with Phosphonate is also occurring. These existing practices are all beneficial for the management of the *Phytophthora*.

6.3 Based on my data collected, this quantity of 30-50 new trees being grown should be doubled.

6.4 Australian Standards relevant to this report are AS 4373 (2007) *Pruning of Amenity Trees*, AS 4970 (2009), *Compost, Soil Conditioners & Mulches*. These two (2) Standards both have important specifications and procedures that should be implemented so as to help restrict the spread of this disease and potentially other diseases.

6.5 **AS 4373 (2007) *Pruning of Amenity Trees***. This Standard has been available for some time now and although quoted frequently its governance leaves more to be desired. This Standard provides well researched specifications on pruning techniques that should be implemented at all times. Bodies responsible for the monitoring of works have a responsibility to ensure that pruning works are undertaken in accordance with this standard. Poor pruning techniques greatly encourage the establishment of pest and disease along with tool hygiene.

6.6 **AS 4454 (2012) *Compost, Soil Conditioners & Mulches*** *The objective of this Standard is to provide manufacturers, suppliers, customers and government bodies with the minimum requirements for the physical, chemical and biological properties of composts, soil conditioners, mulches and vermicast, as well as labelling and marking, in order to facilitate the beneficial recycling and use of compostable organic materials with minimal adverse impact on environmental and public health, by avoiding biosecurity and phytotoxicity risks associated with inappropriate products* (AS4454, 2012). It is strongly recommended that the Contractors or staff who maintain the Cherry Tree Walk obtain and familiarise themselves with these Standards in order to help reduce the risk of contamination of the soil pathogens and fungal diseases to the site.

6.7 **Mulching:** With regards to *P.cinnamomi*, the root zone below each tree should be kept mulched in order to maintain soil microbe activity with a combined leaf and wood chipped based mulch. It was noted that several specimen trees were mulched around the base, which is good horticultural practice however, ideally, the mulch should be spread to the drip line. Exposed woody surface roots should also be covered with mulch so as to reduce the chance of mechanical damage to these roots. To ensure a good environment for soil microbes, mulch particles need to be larger than 16mm, but no larger than 30mm (Pittaway, 2012). A good quality mulch supplier should be able to provide this information on their products. For more detailed information on mulch specifications please refer to AS4454, 2012.

Mulching to the drip line will also help reduce soil compaction from mowing practices, thus helping fine feeder roots grow.

6.8 **Mapping:** With any serious pest or disease, the mapping of the locations should occur so as to provide a quick visual reference and maintain a record of confirmed or possible affected areas with the site. This could be included in any Council asset management system. I am aware Council has recently instigated the Tree Plotter® asset management system. It should be possible to map the infected areas against the tree locations with this software. The previous pathology report was completed in 2011 and as such is quite old. Updated testing is recommended along the entire length of the walk or between each street section.

6.9 The following three (3) step system can also help deal with *Phytophthora.* These three (3) key elements below should be followed within Council. They are detailed as follows; Prevention, Preparedness and emergency response, and Ongoing management.

6.10 **Prevention (mitigate risk of new outbreaks):** Garden beds should be kept mulched in order to maintain soil microbe activity Ideally the mulch should be spread to the drip line of any tree. Avoid water logging and general plant stress. All tools used for pruning should be cleaned before and after use with 70% methylated spirits and water or diluted household bleach in order to sterilize tools. Any symptoms of this disease should be tested immediately to confirm its presence. Positive identification shall be mapped onto a Disease Location Map. All horticultural and arboricultural field staff should be made aware of any infected areas upon site induction. Prevention is obviously difficult when the site is already colonised.

6.11 **Preparedness and emergency response (define the process which needs to be in place to respond to new outbreaks):** Confirmation of the disease should be undertaken through scientific testing. If identified the disease should be mapped onto a Disease Location Map. Affected trees will die quickly so their removal shall be undertaken so as not to leave infected wood particles in the soil as best as possible. The infected tree will be taken to a landfill site and not mulched on site.

6.12 **Ongoing management (have the appropriate arrangements to be in place for the ongoing management of pest and diseases that become established):** Fungicides that contain potassium phosphonate are registered for control of this disease. The manufacturer's instructions shall be followed for this type of application.

6.13 A defined area of curtilage should be implemented to provide a boundary for the heritage listing. This will help ensure that there is a clearance zone to prevent other plantings occurring too close to the subject Cherry trees. An approximate distance of 4.8 metres from the centre line of the path will be enough to encompass the existing Cherry trees and their canopies. The scattered Cherry trees around the monument areas should have a two (2) metre radial clearance around each tree.

If you have any questions in relation to this report please contact me.

Paul Vezgoff
Consulting Arborist
Dip Arb (Dist), Arb III, Hort cert, AA, ISA

7 March 2024

www.mooretrees.com.au

Appendix 1

Plan 1

Tree Location Plans

Tree Location Plan

Moore Trees

MOORE TREES

Plan 1

Joins Plan 2

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 3

Moore Trees

Tree Location Plan

MOORE TREES

Plan 2

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 2

Joins Plan 4

Moore Trees

Tree Location Plan

MOORE TREES

Plan 3

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 3

Joins Plan 5

Moore Trees

Tree Location Plan

MOORE TREES

Plan 4

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 4

Joins Plan 6

Tree Location Plan

MOORE TREES

Moore Trees

Plan 5

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 5

Joins Plan 7

Moore Trees

Tree Location Plan

MOORE TREES

Plan 6

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 6

Joins Plan 8

Tree Location Plan

MOORE TREES

Moore Trees

Plan 7

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Joins Plan 7

Tree Location Plan

MOORE TREES

Moore Trees

Plan 8

Trees not survey accurate

Date:	10.02.24
Drawn:	P.Vezgoff
Site Address:	Cherry Tree Walk Bowral NSW

Appendix 2

Tree health & condition assessment schedule

TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE – Cherry Tree Walk, Bowral

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
1	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	92	2a May only live for 15-40 years	Good	Mature		3.1	2.1
2	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	0.5	0.09	0.1	0	4a Dead, dying or declining.	Dead	Dead		1.1	1.2
3	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	0.5	0.09	0.1	0	4a Dead, dying or declining.	Dead	Dead		1.1	1.2
4	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	0.5	0.09	0.1	95	2a May only live for 15-40 years	Good	Mature		1.1	1.2
5	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.17	0.27	92	2a May only live for 15-40 years	Good	Mature		2	1.8
6	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.15	0.25	92	2a May only live for 15-40 years	Good	Mature		1.8	1.8
7	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	0.5	0.09	0.1	0	4a Dead, dying or declining.	Dead	Dead		1.1	1.2
8	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	1.9	0.03	0.03	0.05	95	2a May only live for 15-40 years	Good	Sapling		0.4	0.9
9	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	1.9	0.03	0.03	0.05	95	2a May only live for 15-40 years	Good	Sapling		0.4	0.9
10	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
11	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	1	0.2	0.3	80	3a May only live for 5-15 years.	Fair	Mature	Large section of damaged main stem on the western side of the trunk cracking splitting for a damage poor wound wood development	2.4	1.9
12	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	0.5	0.06	0.1	90	2a May only live for 15-40 years	Good	Mature	Treat on slight lean. lower stem wind	0.7	1.2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
13	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	1	0.2	0.3	80	3a May only live for 5-15 years.	Fair	Mature	Large section of damaged main stem on the western side of the trunk cracking splitting for a damage poor wound wood development. On lean	2.4	1.9
14	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	92	2a May only live for 15-40 years	Good	Mature		3.1	2.1
15	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.19	0.36	92	2a May only live for 15-40 years	Good	Mature		2.3	2.1
16	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.36	92	2a May only live for 15-40 years	Good	Mature		2.4	2.1
17	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.19	0.29	0	4a Dead, dying or declining.	Dead	Dead		2.3	1.9
18	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.36	92	2a May only live for 15-40 years	Good	Mature		2.4	2.1
19	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.19	0.29	0	4a Dead, dying or declining.	Dead	Overmature		2.3	1.9
20	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.15	0.25	0	4a Dead, dying or declining.	Dead	Overmature		1.8	1.8
22	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	2	0.16	0.26	95	2a May only live for 15-40 years	Good	Mature		1.9	1.8
23	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
24	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
25	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
26	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
27	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
28	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
29	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
30	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
31	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.06	0.09	0.1	95	2a May only live for 15-40 years	Fair	Mature	long wound on main stem	1.1	1.2
32	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.22	0.32	92	2a May only live for 15-40 years	Good	Mature		2.6	2
33	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
34	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	2.1	0.15	0.2	90	3a May only live for 5-15 years.	Fair	Mature	Extensive stem wounds and Borat damage	1.8	1.6
34	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.19	0.36	0	4a Dead, dying or declining.	Dead	Overmature		2.3	2.1
35	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.19	0.36	0	4a Dead, dying or declining.	Dead	Overmature		2.3	2.1
36	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.1	0.25	0	4a Dead, dying or declining.	Dead	Overmature		1.2	1.8
37	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
38	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.16	0.26	92	2a May only live for 15-40 years	Good	Mature		1.9	1.8
39	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature	Lower mechanical stem wound	2	1.8
40	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
41	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
42	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
43	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
44	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
45	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
46	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
47	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
48	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
49	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.07	0.1	0	4a Dead, dying or declining.	Dead	Sapling		0.8	1.2
50	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	1.8	0.18	0.2	0	4a Dead, dying or declining.	Dead	Overmature		2.2	1.6
51	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	1.8	0.18	0.2	0	4a Dead, dying or declining.	Dead	Overmature		2.2	1.6
52	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.04	0.1	0	4a Dead, dying or declining.	Dead	Sapling		0.5	1.2
53	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
54	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
55	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.1	0.2	95	2a May only live for 15-40 years	Good	Mature		1.2	1.6
56	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
57	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
58	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
59	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
60	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.15	0.25	95	2a May only live for 15-40 years	Good	Mature		1.8	1.8
61	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
62	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.1	0.2	95	2a May only live for 15-40 years	Good	Mature	Slightly damaged canopy do you to fallen tree	1.2	1.6
63	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
64	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
65	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
66	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
67	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
68	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature		3.1	2.1
69	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature		3.1	2.1
70	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature		3.1	2.1
71	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
72	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
73	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
74	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature	Suppressed under large Ash tree	1.7	1.6

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
75	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.07	0.1	0	4a Dead, dying or declining.	Dead	Sapling		0.8	1.2
76	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2	0.16	0.17	95	2a May only live for 15-40 years	Good	Mature	Suppressed under large Ash tree	1.9	1.5
77	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
78	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
79	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
80	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
81	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
82	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.13	0.5	0	4a Dead, dying or declining.	Dead	Mature		1.6	2.4
83	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.14	0.24	90	2a May only live for 15-40 years	Good	Mature		1.7	1.8
84	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.14	0.24	90	2a May only live for 15-40 years	Good	Mature		1.7	1.8
85	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.14	0.24	90	2a May only live for 15-40 years	Good	Mature		1.7	1.8
86	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
87	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
88	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
89	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.14	0.24	95	2a May only live for 15-40 years	Good	Mature		1.7	1.8
90	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.8	0.14	0.24	95	2a May only live for 15-40 years	Good	Mature		1.7	1.8

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
91	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
92	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
93	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
94	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.12	0.13	70	3a May only live for 5-15 years.	Good	Mature	Suppressed by large mature oak tree	1.4	1.4
95	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
96	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.05	0.1	95	2a May only live for 15-40 years	Good	Sapling		0.6	1.2
97	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
98	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
99	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
100	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	1	0.1	0.2	95	2a May only live for 15-40 years	Good	Mature		1.2	1.6
101	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	1	0.15	0.25	95	2a May only live for 15-40 years	Good	Mature		1.8	1.8
102	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
103	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
104	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
105	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature		1.7	1.6
106	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
107	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.5	0.08	0.2	95	2a May only live for 15-40 years	Good	Sapling		1	1.6
108	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.5	0.08	0.2	95	2a May only live for 15-40 years	Good	Sapling		1	1.6
109	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
110	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
111	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
112	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
113	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
114	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
115	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
116	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
117	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
118	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
119	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
120	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	1.5	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
121	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.19	0.25	95	2a May only live for 15-40 years	Good	Mature		2.3	1.8
122	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
123	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
124	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
125	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
126	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.12	0.2	95	2a May only live for 15-40 years	Good	Mature		1.4	1.6
127	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
128	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
129	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.4	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
130	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
131	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
132	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
133	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
134	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
135	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
136	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.1	0.22	0.32	0	4a Dead, dying or declining.	Dead	Overmature		2.6	2
137	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature		3.1	2.1
138	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.28	0.38	95	2a May only live for 15-40 years	Good	Mature		3.4	2.1

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
139	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
140	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
141	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
142	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.28	0.38	95	2a May only live for 15-40 years	Good	Mature		3.4	2.1
143	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
144	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2
145	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
146	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.1	0.2	95	2a May only live for 15-40 years	Good	Mature		1.2	1.6
147	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
148	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2	0.15	0.2	95	2a May only live for 15-40 years	Good	Mature		1.8	1.6
149	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
150	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
151	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
152	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
153	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
154	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
155	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
156	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
157	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.24	0.34	95	2a May only live for 15-40 years	Good	Mature		2.9	2
158	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
159	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
160	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
161	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.12	0.2	95	2a May only live for 15-40 years	Good	Mature		1.4	1.6
162	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.16	0.17	95	2a May only live for 15-40 years	Good	Mature		1.9	1.5
163	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.25	0.35	95	4a Dead, dying or declining.	Dead	Overmature		3	2.1
164	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
165	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.25	0.35	0	4a Dead, dying or declining.	Dead	Overmature		3	2.1
166	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.18	0.28	0	4a Dead, dying or declining.	Dead	Overmature		2.2	1.9
167	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.16	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.9	1.6
168	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.16	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.9	1.6
169	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.16	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.9	1.6
170	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.18	0.28	0	4a Dead, dying or declining.	Dead	Overmature		2.2	1.9

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
171	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
172	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
173	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	2.3	0.16	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.9	1.6
174	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature		1.7	1.6
175	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature		1.7	1.6
176	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.7	1.6
177	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.7	1.6
178	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature		1.7	1.6
179	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.14	0.2	95	2a May only live for 15-40 years	Good	Mature		1.7	1.6
180	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.17	0.2	95	2a May only live for 15-40 years	Good	Mature		2	1.6
181	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
182	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.14	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.7	1.6
183	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.05	0.1	0.2	0	4a Dead, dying or declining.	Dead	Sapling		1.2	1.6
184	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
185	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
186	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
187	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.19	0.2	0	4a Dead, dying or declining.	Dead	Overmature		2.3	1.6
188	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.1	2.3	0.19	0.2	95	2a May only live for 15-40 years	Good	Mature		2.3	1.6
189	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.5	2.5	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
190	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.5	2.5	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
191	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
192	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.5	0.2	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.4	1.9
193	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.06	0.08	0	4a Dead, dying or declining.	Dead	Sapling		0.7	1.1
194	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.8	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
195	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	2	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
196	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.14	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.7	1.6
197	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.14	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.7	1.6
198	Sawtooth oak *(Quercus acutissima)*	11	6	0.52	0.62	95	2a May only live for 15-40 years	Good	Mature		6.2	2.6
199	Sawtooth oak *(Quercus acutissima)*	11	6	0.54	0.64	95	2a May only live for 15-40 years	Good	Mature		6.5	2.7
200	English oak (Quercus robur)	14	11	0.59	0.69	95	2a May only live for 15-40 years	Good	Mature		7.1	2.7
201	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1	0.1	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.2	1.6
202	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	1	0.12	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.4	1.6

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
203	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	1	0.15	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.8	1.6
204	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.23	0.33	92	2a May only live for 15-40 years	Good	Mature		2.8	2
205	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1	0.12	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.4	1.6
206	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.05	0.2	0	4a Dead, dying or declining.	Dead	Sapling		0.6	1.6
207	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Sapling		0.4	0.9
208	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1	0.12	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.4	1.6
209	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.05	0.2	0	4a Dead, dying or declining.	Dead	Sapling		0.6	1.6
210	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1	0.12	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.4	1.6
211	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1	0.12	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.4	1.6
212	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	2.1	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
213	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	0.5	0.09	0.2	0	4a Dead, dying or declining.	Dead	Overmature		1.1	1.6
214	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.4	2.1	0.19	0.2	95	2a May only live for 15-40 years	Good	Mature		2.3	1.6
215	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	1	0.09	0.1	95	2a May only live for 15-40 years	Good	Mature		1.1	1.2
216	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
217	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.07	0.1	0	4a Dead, dying or declining.	Dead	Overmature	Semi-mature specimen extensive stem wounds.	0.8	1.2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
										poor wound wood development		
218	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
219	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	1.5	0.08	0.1	95	2a May only live for 15-40 years	Good	Mature		1	1.2
220	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
221	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	1.5	0.06	0.1	95	2a May only live for 15-40 years	Good	Mature		0.7	1.2
222	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
223	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
224	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	0.5	0.05	0.1	90	3a May only live for 5-15 years.	Poor	Mature	Semi-mature specimen extensive stem wounds. poor wound wood development	0.6	1.2
225	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
226	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2
227	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
228	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
229	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.27	0.37	95	2a May only live for 15-40 years	Good	Mature		3.2	2.1
230	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.3	0.26	0.36	92	2a May only live for 15-40 years	Good	Mature		3.1	2.1
231	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	0.5	0.06	0.1	90	2a May only live for 15-40 years	Good	Mature	Treat on slight lean. lower stem wind	0.7	1.2
232	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2	0.5	0.03	0.05	0	4a Dead, dying or declining.	Dead	Dead		0.4	0.9
233	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	1.9	0.03	0.03	0.05	95	2a May only live for 15-40 years	Good	Sapling		0.4	0.9
234	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	1.9	0.03	0.03	0.05	95	2a May only live for 15-40 years	Good	Sapling		0.4	0.9
235	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
236	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
237	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	1.8	0.08	0.1	95	2a May only live for 15-40 years	Good	Sapling		1	1.2
238	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.1	1.8	0.08	0.1	95	2a May only live for 15-40 years	Good	Sapling		1	1.2
239	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
240	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2.1	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
241	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	1.5	0.14	0.2	0	4a Dead, dying or declining.	Dead	Dead		1.7	1.6
242	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
243	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
244	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.5	1.2	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
245	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
246	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
247	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.5	2	0.15	0.25	0	4a Dead, dying or declining.	Dead	Mature		1.8	1.8
248	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.5	2	0.15	0.25	0	4a Dead, dying or declining.	Dead	Mature		1.8	1.8
249	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	2	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
250	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
251	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4	2.3	0.13	0.2	95	2a May only live for 15-40 years	Good	Mature		1.6	1.6
252	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
253	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.22	0.32	95	4a Dead, dying or declining.	Dead	Dead		2.6	2
254	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
255	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.19	0.2	95	2a May only live for 15-40 years	Good	Mature		2.3	1.6
256	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.15	0.2	95	4a Dead, dying or declining.	Dead	Dead		1.8	1.6
257	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.11	0.2	95	4a Dead, dying or declining.	Dead	Dead		1.3	1.6
258	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	2	0.17	0.27	60	4a Dead, dying or declining.	Poor	Mature	Extensive borer damage to the main stem and decay	2	1.8
259	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.26	0.36	0	4a Dead, dying or declining.	Dead	Overmature		3.1	2.1

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
260	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.3	0.4	95	2a May only live for 15-40 years	Good	Mature		3.6	2.2
261	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature	Mower damage to surface roots	3.1	2.1
262	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.26	0.36	95	2a May only live for 15-40 years	Good	Mature		3.1	2.1
263	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.5	2.1	0.17	0.2	0	4a Dead, dying or declining.	Dead	Overmature		2	1.6
264	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.5	2.1	0.16	0.26	95	2a May only live for 15-40 years	Good	Mature		1.9	1.8
265	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.1	2.2	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
266	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
267	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
268	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
269	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.1	2.2	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
270	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.1	2.2	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
271	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.1	2.2	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
272	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
273	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.5	0.09	0.2	95	2a May only live for 15-40 years	Good	Mature		1.1	1.6
274	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.5	0.09	0.2	95	2a May only live for 15-40 years	Good	Mature		1.1	1.6
275	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.5	2.1	0.17	0.2	0	4a Dead, dying or declining.	Dead	Overmature		2	1.6

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
276	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.5	2.1	0.19	0.3	0	4a Dead, dying or declining.	Dead	Overmature		2.3	1.9
277	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.9	2.2	0.2	0.3	95	2a May only live for 15-40 years	Good	Mature		2.4	1.9
278	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.5	0.09	0.2	0	4a Dead, dying or declining.	Dead	Dead		1.1	1.6
279	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.5	2.1	0.2	0.3	0	4a Dead, dying or declining.	Dead	Dead		2.4	1.9
280	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	2	0.12	0.2	0	4a Dead, dying or declining.	Dead	Dead		1.4	1.6
281	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3	2	0.12	0.2	0	4a Dead, dying or declining.	Dead	Dead		1.4	1.6
282	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.9	2.2	0.17	0.27	95	2a May only live for 15-40 years	Good	Mature		2	1.8
283	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.19	0.2	95	2a May only live for 15-40 years	Good	Mature		2.3	1.6
284	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
285	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.23	0.33	95	2a May only live for 15-40 years	Good	Mature		2.8	2
286	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2
287	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.15	0.2	95	4a Dead, dying or declining.	Dead	Dead		1.8	1.6
288	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.15	0.2	95	2a May only live for 15-40 years	Fair	Mature		1.8	1.6
289	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.15	0.2	95	2a May only live for 15-40 years	Fair	Mature		1.8	1.6
290	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.15	0.2	0	4a Dead, dying or declining.	Dead	Dead		1.8	1.6
291	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	1.8	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
292	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	1.8	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
293	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.3	1.5	0.14	0.2	0	4a Dead, dying or declining.	Dead	Dead	Extensive stem wounds and Borer damage	1.7	1.6
294	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.8	2	0.17	0.2	0	4a Dead, dying or declining.	Dead	Dead		2	1.6
295	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	1.8	0.11	0.2	95	2a May only live for 15-40 years	Good	Mature		1.3	1.6
296	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
297	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	4.3	2.3	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
298	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	2.2	1.5	0.09	0.2	95	2a May only live for 15-40 years	Good	Mature		1.1	1.6
299	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.4	0.16	0.2	95	2a May only live for 15-40 years	Good	Mature		1.9	1.6
300	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.4	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2
301	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.22	0.32	95	2a May only live for 15-40 years	Good	Mature		2.6	2
302	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
303	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	3.2	2.4	0.25	0.35	95	2a May only live for 15-40 years	Good	Mature		3	2.1
304	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
305	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.18	0.28	95	2a May only live for 15-40 years	Good	Mature		2.2	1.9
306	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2
307	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.21	0.31	95	2a May only live for 15-40 years	Good	Mature		2.5	2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
308	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.19	0.3	95	2a May only live for 15-40 years	Good	Mature		2.3	1.9
309	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.35	0.45	95	2a May only live for 15-40 years	Good	Mature		4.2	2.3
310	Japanese Flowering Cherry (*Prunus serrulata* 'Tai-Haku')	5	2.6	0.33	0.43	95	2a May only live for 15-40 years	Good	Mature		4	2.2
311	River oak *(Casuarina cunninghamiana)*	18	8	.15-.35	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
312	River oak *(Casuarina cunninghamiana)*	18	8	.15-.36	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
313	River oak *(Casuarina cunninghamiana)*	18	8	.15-.37	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
314	River oak *(Casuarina cunninghamiana)*	18	8	.15-.38	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
315	River oak *(Casuarina cunninghamiana)*	18	8	.15-.39	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
316	River oak *(Casuarina cunninghamiana)*	18	8	.15-.40	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
317	River oak *(Casuarina cunninghamiana)*	18	8	.15-.41	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
318	River oak *(Casuarina cunninghamiana)*	18	8	.15-.42	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
319	River oak *(Casuarina cunninghamiana)*	18	8	.15-.43	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
320	River oak *(Casuarina cunninghamiana)*	18	8	.15-.44	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
321	River oak *(Casuarina cunninghamiana)*	18	8	.15-.45	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
322	River oak *(Casuarina cunninghamiana)*	18	8	.15-.46	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
323	River oak *(Casuarina cunninghamiana)*	18	8	.15-.47	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
324	River oak *(Casuarina cunninghamiana)*	18	8	.15-.48	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
325	River oak *(Casuarina cunninghamiana)*	18	8	.15-.49	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
326	River oak *(Casuarina cunninghamiana)*	18	8	.15-.50	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
327	River oak *(Casuarina cunninghamiana)*	18	8	.15-.51	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
328	River oak *(Casuarina cunninghamiana)*	18	8	.15-.52	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
329	River oak *(Casuarina cunninghamiana)*	18	8	.15-.53	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
330	River oak *(Casuarina cunninghamiana)*	18	8	.15-.54	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
331	River oak *(Casuarina cunninghamiana)*	18	8	.15-.55	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
332	River oak *(Casuarina cunninghamiana)*	18	8	.15-.56	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
333	River oak *(Casuarina cunninghamiana)*	18	8	.15-.57	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
334	River oak *(Casuarina cunninghamiana)*	18	8	.15-.58	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
335	Ash *(Fraxinus sp.)*	18	8	.15-.59	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
336	River oak *(Casuarina cunninghamiana)*	18	8	.15-.60	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
337	River oak *(Casuarina cunninghamiana)*	18	8	.15-.61	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
338	River oak *(Casuarina cunninghamiana)*	18	8	.15-.62	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
339	River oak *(Casuarina cunninghamiana)*	18	8	.15-.63	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2

Tree	Species	Height (m)	Spread (m)	DBH (m)	SRZ basal	Live canopy %	SULE	Condition	Age	Comments	TPZ (m)	SRZ (m)
340	River oak *(Casuarina cunninghamiana)*	18	8	.15-.64	0.4	95	4c	Poor	Mature	Active crack between two stems	4	2.2
341	River oak *(Casuarina cunninghamiana)*	18	8	.15-.65	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
342	River oak *(Casuarina cunninghamiana)*	18	8	.15-.66	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
343	River oak *(Casuarina cunninghamiana)*	18	8	.15-.67	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2
344	River oak *(Casuarina cunninghamiana)*	18	8	.15-.68	0.4	95	1a >40 years	Good	Mature	Dimensions estimated	4	2.2

KEY

Tree No: Relates to the number allocated to each tree for the Tree Plan.

Height: Height of the tree to the nearest metre.

Spread: The average spread of the canopy measured from the trunk.

DBH: Diameter at breast height. An industry standard for measuring trees at 1.4 metres above ground level, this measurement is used to help calculate Tree Protection Zones.

Live Crown Ratio: Percentage of foliage cover for a particular species.

Age Class:	Young:	Recently planted tree	Semi-mature:< 20% of life expectancy
	Mature:	20-90% of life expectancy	Over-mature:>90% of life expectancy

SULE: See SULE methodology in the Appendix 3

Tree Protection Zone (TPZ): The minimum area set aside for the protection of the trees trunk, canopy and root system throughout the construction process. Breaches of the TPZ will be specified in the recommendations section of the report.

Structural Root Zone (SRZ): The SRZ is a specified distance measured from the trunk that is set aside for the protection of the trees roots both structural and fibrous.

Appendix 3

Botanic Gardens Trust, Sydney – Cherry Tree Disease Diagnosis (4/03/2011)

Botanic Gardens Trust
SYDNEY

Science Education
CONSERVATION
Horticulture Recreation

Plant Disease Diagnostic Unit
Tel (61 2) 9231 8189
Fax (61 2) 9241 1135

David Wilson
Wingecarribee Shire Council
Civic Centre
Elizabeth Street
PO Box 141
Moss Vale
NSW 2577

4 March 2011

Dear David,

Cherry Tree Disease Diagnosis (BGT Ref. E11/48)

We have finished examining the photographs, foliage/stem specimens and have processed the three soil samples from the three Cherry trees (*Prunus serrulata*) for disease diagnosis. Advanced decline and defoliation was observed in the photographs, without an obvious cause. The foliage specimens were too decomposed for fungal isolation. No cankers or lesions were observed on the stem sections. The soil samples were tested for major soil borne fungal plant pathogens. All three samples were positive for *Pythium* and a *Phytophthora* species.

Pythium is not considered to be a serious pathogen of mature, woody plants, but it can be a problem for annuals, some vegetable crops or plants that are affected by other factors such as environmental stress. It is therefore highly unlikely to be responsible for the Cherry decline.

The *Phytophthora* species isolated was not the highly pathogenic species *Phytophthora cinnamomi*. However, all *Phytophthora* species are potentially pathogenic given the right environment and host. *Prunus* species are reported as being susceptible to *Phytophthora*. Therefore, *Phytophthora* is highly likely to be the cause of the cherry tree decline. Control of *Phytophthora* is not always successful. In this situation we recommend removing the dead Cherry trees and the soil associated with the roots, where possible, and taking care not to spread soil to unaffected trees. The area around the dead trees should be drenched with metalaxyl or furalaxyl. As *Phytophthora* can be spread through contaminated soil and free water it may be prudent to treat adjacent and any symptomatic trees with phosphonate.

Royal Botanic Gardens & Domain
Mrs Macquaries Road
Sydney NSW 2000 Australia
Tel (61 2) 9231 8111
Fax (61 2) 9251 4403

Mount Annan Botanic Garden
Mount Annan Drive
Mount Annan NSW 2567 Australia
Tel (61 2) 4648 2477
Fax (61 2) 4648 2465

Mount Tomah Botanic Garden
Bells Line of Road
via Bilpin NSW 2758 Australia
Tel (61 2) 4567 2154
Fax (61 2) 4567 2037

National Herbarium of NSW
Mrs Macquaries Road
Sydney NSW 2000 Australia
Tel (61 2) 9231 8111
Fax (61 2) 9251 7231

www.rbgsyd.nsw.gov.au
Botanic Gardens Trust is part of Department of Environment and Climate Change

Follow the manufacturer's instructions for dilution rates and apply one dose now, with a further dose in 4-5 weeks' time. It is important not to apply phosphonate when the soil is saturated or if rain is expected. Improving plant health may reduce the susceptibility of unaffected trees. Plant health can be improved with the application of an organic fertiliser and root growth promoter such as Seasol™ combined with deep-watering whenever possible. A thick layer of mulch to improve soil moisture and texture is also recommended.

Please do not hesitate to contact me if you have any questions regarding this report. An invoice for $240 (plus GST) will be sent to you separately.

Regards,

Dr Edward Liew
Manager Plant Pathology
Email: edward.liew@rbgsyd.nsw.gov.au

Appendix 4

SULE categories (after Barrell, 2001)[1]

SULE Category	Description
Long	*Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.*
1a	Structurally sound trees located in positions that can accommodate for future growth
1b	Trees that could be made suitable for retention in the long term by remedial tree care.
1c	Trees of special significance that would warrant extraordinary efforts to secure their long term retention.
Medium	*Trees that appeared to be retainable at the time of assessment for 15-40 years with an acceptable level of risk.*
2a	Trees that may only live for 15-40 years
2b	Trees that could live for more than 40 years but may be removed for safety or nuisance reasons
2c	Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide for new planting.
2d	Trees that could be made suitable for retention in the medium term by remedial tree care.
Short	*Trees that appeared to be retainable at the time of assessment for 5-15 years with an acceptable level of risk.*
3a	Trees that may only live for another 5-15 years
3b	Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.
3c	Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide for a new planting.
3d	Trees that require substantial remedial tree care and are only suitable for retention in the short term.
Remove	*Trees that should be removed within the next five years.*
4a	Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.
4b	Dangerous trees because of instability or loss of adjacent trees
4c	Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
4d	Damaged trees that are clearly not safe to retain.
4e	Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide for a new planting.
4f	Trees that are damaging or may cause damage to existing structures within 5 years.
4g	Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f).
4h	Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.
Small	*Small or young trees that can be reliably moved or replaced.*
5a	Small trees less than 5m in height.
5b	Young trees less than 15 years old but over 5m in height.
5c	Formal hedges and trees intended for regular pruning to artificially control growth.

updated 01/04/01)

1 (Barrell, J. (2001) "SULE: Its use and status into the new millennium" in *Management of mature trees*, Proceedings of the 4th NAAA Tree Management Seminar, NAAA, Sydney.

Appendix 5

TPZ and SRZ methodology

Determining the Tree Protection Zone (TPZ)

The radium of the TPZ is calculated for each tree by multiplying its DBH x 12.

TPZ = DBH x 12

Where

DBH = trunk diameter measured at 1.4 metres above ground

Radius is measured from the centre of the stem at ground level.

A TPZ should not be less than 2 metres no greater than 15 metres (except where crown protection is required.). Some instances may require variations to the TPZ.

The TPZ of palms, other monocots, cycads and tree ferns should not be less than 1 metre outside the crown projection.

Determining the Structural Root Zone (SRZ)

The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree.

The SRZ only needs to be calculated when major encroachment into a TPZ is proposed.

There are many factors that affect the size of the SRZ (e.g. tree height, crown area, soil type, soil moisture). The SRZ may also be influenced by natural or built structures, such as rocks and footings. An indicative SRZ radius can be determined from the trunk diameter measured immediately above the root buttress using the following formula or Figure 1. Root investigation may provide more information on the extent of these roots.

SRZ radius = $(D \times 50)^{0.42} \times 0.64$

Where

D = trunk diameter, in m, measured above the root buttress

NOTE: The SRZ for trees with trunk diameters less than 0.15m will be 1.5m (see Figure 1).

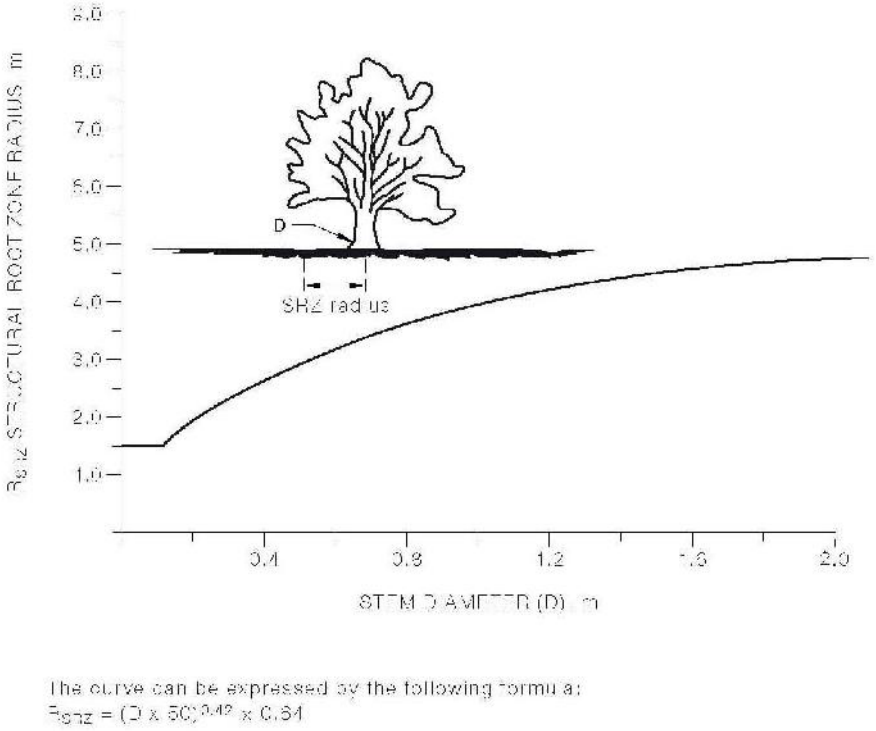


FIGURE 1 - STRUCTURAL ROOT ZONE

Notes:

1 R_{SRZ} is the structural root zone radius.
2 *D* is the stem diameter measured immediately above root buttress.
3 The SRZ for trees less than o.15 metres diameter is 1.5 metres.
4 The SRZ formula and graph do not apply to palms, other monocots, cycads and tree ferns.
5 This does not apply to trees with an asymmetrical root plate.

Appendix 6

Tree structure information diagram

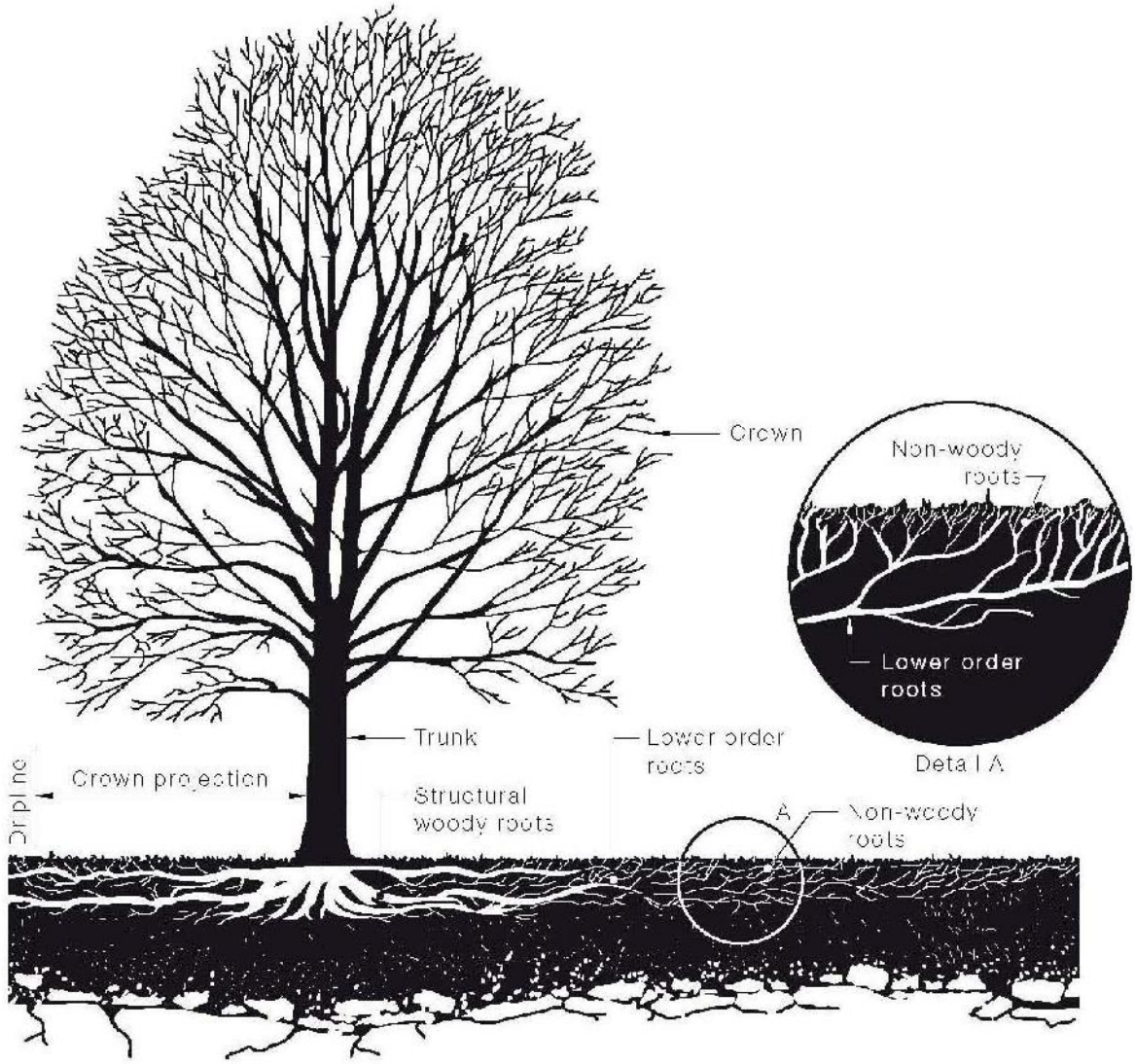


Figure 2: Structure of a tree in a normal growing environment (AS 4970, 2009.).

Appendix 7

Explanatory Notes

- **Mathematical abbreviations:** > = Greater than; < = Less than.

- **Measurements/estimates:** All dimensions are estimates unless otherwise indicated. Less reliable estimated dimensions are indicated with a '?'.

- **Species:** The species identification is based on visual observations and the common English name of what the tree appeared to be is listed first, with the botanical name after in brackets. In some instances, it may be difficult to quickly and accurately identify a particular tree without further detailed investigations. Where there is some doubt of the precise species of tree, it is indicated with a '?' after the name in order to avoid delay in the production of the report. The botanical name is followed by the abbreviation sp if only the genus is known. The species listed for groups and hedges represent the main component and there may be other minor species not listed.

- **Height:** Height is estimated to the nearest metre.

- **Spread:** The maximum crown spread is visually estimated to the nearest metre from the centre of the trunk to the tips of the live lateral branches.

- **Diameter:** These figures relate to 1.4m above ground level and are recorded in metres. If appropriate, diameter is measure with a diameter tape. 'M' indicates trees or shrubs with multiple stems.

- **Estimated Age:** Age is estimated from visual indicators and it should only be taken as a provisional guide. Age estimates often need to be modified based on further information such as historical records or local knowledge.

- **Distance to Structures:** This is estimated to the nearest metre and intended as an indication rather than a precise measurement.

Appendix 8

Bibliography

Draper D B & Richards P A (2009) *Dictionary for managing trees in urban environments*
CSIRO Publishing
Collingwood, Vic

F.A. Canlı* and F. Demir (2014) *In vitro multiplication and rooting of 'F12-1' (Prunus avium L.) and 'Maxma 14' (Prunus mahaleb L. × P. avium L.) rootstocks*.
Department of Biotechnology, Faculty of Agriculture, Suleyman Demirel University.
Turkey

Matheny N.P & Clark J.R. (1994) *Evaluation of hazard trees in Urban areas*
Second edition, International Society of Arboriculture
Illinois.

Mattheck C & Breloer H (2003) *The Body Language of Trees: A handbook for failure analysis.* Research for Amenity Trees No. 4,
Seventh edition, The Stationary Office, London.

Shigo A.L. (2002) *A New Tree Biology.*
Shigo and Trees, Associates, Durham, New Hampshire.

Schwarze, F.W.M.R, Engels, J. Mattheck. C (2000) *Fungal strategies of wood decay in trees*
Springer-Verlag Berlin Heidelberg
Germany

Standards Australia, 2007, *Pruning of amenity trees* AS 4373, 2007
Standards Australia Ltd
Sydney

Standards Australia, 2009. *Protection of trees on development sites*, AS 4970, 2009
Standards Australia Ltd
Sydney

Thom Louise, 2024. *Draft Statement of Significance.*
Lousie Thom Hertiage Consultant
Corrimal NSW

Curriculum Vitae

PAUL VEZGOFF - MOORE TREES P O Box 3114, Austinmer NSW 2515
P 0242 680 425 M 0411 712 887 E enquiries@mooretrees.com.au W www.mooretrees.com.au

EDUCATION and QUALIFICATIONS

- 2013 / 2018 – ISA TRAQ qualification
- 2007 – Diploma of Arboriculture (AQF Cert V) Ryde TAFE. (Distinction)
- 1997 – Completed Certificate in Crane and Plant Electrical Safety
- 1996 – Attained Tree Surgeon Certificate (AQF Cert II) at Ryde TAFE
- 1990 – Completed two month intensive course on garden design at the Inchbald School of Design, London, United Kingdom
- 1990 – Completed patio, window box and balcony garden design course at Brighton College of Technology, United Kingdom
- 1989 – Awarded the Big Brother Movement Award for Horticulture (a grant by Lady Peggy Pagan to enable horticulture training in the United Kingdom)
- 1989 – Attained Certificate of Horticulture (AQF Cert IV) at Wollongong TAFE

INDUSTRY EXPERIENCE

Moore Trees Arboricultural Services **January 2006 to date**
Tree Consultancy and tree ultrasound. Tree hazard and risk assessment, Arborist development application reports
Tree management plans.

Woollahra Municipal Council **Oct 1995 to February 2008**
ARBORICULTURE TECHNICAL OFFICER
August 2005 – February 2008
ACTING COORDINATOR OF TREES MAINTENANCE
June – July 2005, 2006
Responsible for all duties concerning park and street trees. Prioritising work duties, delegation of work and staff supervision.
TEAM LEADER
January 2003 – June 2005
September 2000 – January 2003
HORTICULTURALIST
October 1995 – September 2000

Northern Landscape Services **July to Oct 1995**
Tradesman for Landscape Construction business

Paul Vezgoff Garden Maintenance (London, UK) **Sept 1991 to April 1995**

CONFERENCES AND WORKSHOPS ATTENDED

- TRAQ Conference, Auckland NZ / Sydney (2023)
- International Society of Arboriculture Conference (Canberra May 2017)
- QTRA Conference, Sydney Australia (November 2016)
- International Society of Arboriculture Conference (Brisbane 2008)
- Tree related hazards: recognition and assessment by Dr David Londsdale (Brisbane 2008)
- Tree risk management: requirements for a defensible system by Dr David Londsdale (Brisbane 2008)
- Tree dynamics and wind forces by Ken James (Brisbane 2008)
- Wood decay and fungal strategies by Dr F.W.M.R. Schwarze (Brisbane 2008)
- Tree Disputes in the Land & Environment Court – The Law Society (Sydney 2007)
- Barrell Tree Care Workshop- Trees on construction sites (Sydney 2005).
- Tree Logic Seminar- Urban tree risk management (Sydney 2005)
- Tree Pathology and Wood Decay Seminar presented by Dr F.W.M.R. Schwarze (Sydney 2004)
- Inaugural National Arborist Association of Australia (NAAA) tree management workshop- Assessing hazardous trees and their Safe Useful Life Expectancy (SULE) (Sydney 1997).

SYDNEY ARTEFACTS CONSERVATION

Condition Report

on

The Vietnam War Memorial

Cherry Tree Walk, Bowral

For

Louise Thom Heritage

Anne Cummins
January 2024

T: 02 8096 7584 PO BOX 2164 CLOVELLY NSW 2031 ANNE@ARTCONSERVATION.COM.AU
ABN: 22 932 501 969

Table of Contents

Executive Summary

Sydney Artefacts Conservation (SAC) was engaged by Louise Thom Heritage to prepare a condition report on The Vietnam War Memorial, Cherry Tree Walk, Bowral, which will form part of a conservation management plan for the Memorial that has been commissioned by Wingecarribee Shire Council. The Memorial comprises nine black granite monoliths which are sited in several locations along the walkway which meanders beside Mittagong Creek. The majority of the monoliths being at the Mittagong Road end, near the Bowral Swimming Centre (Oxley Drive) the main five monoliths in Rivelut Park and the final monolith located at the dead end where Boolwey Street intersects with Mittagong Creek.

The Memorial is dedicated to Australians who died during the Vietnam War, 1962-1973. It was unveiled on 22 August 1999, then following extensive vandalism in 2003, the facing stones and brass plaques were replaced, and it was rededicated on 28 February 2004.

A site visit on 12-13 December 2024 to inspect the Memorial was carried out by Anne Cummins of SAC. The Memorial was at that time in fair condition with various cracks evident on the granite panels on all monoliths apart from one (M1). The most prevalent crack types were an arc shaped crack which arched from join to join at the horizontal edge of the panels and diagonal cracks across the corners. Possible vandalism was only noted on one of the monoliths M9 which is the most remotely located.

Recommendations have been provided for conservation of the Memorial.

Fig 1: M3-M7 the main five monoliths in open circle formation

Fig 2: M3-M7 rear perspective showing surrounding trees

Description

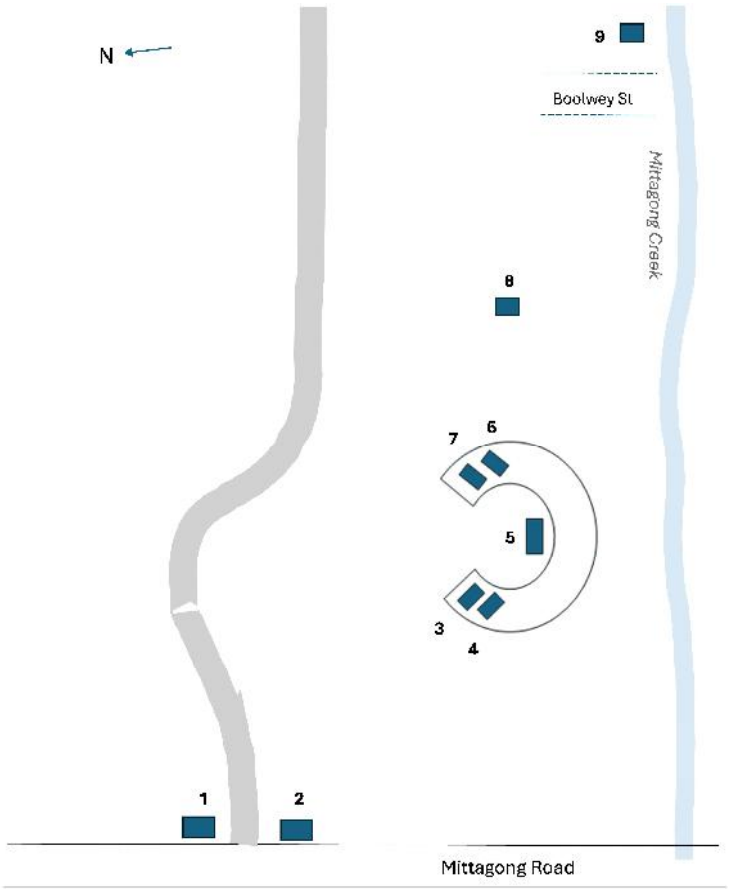
General

The Vietnam War Memorial, Cherry Tree Walk, Bowral (Fig 1) was created by the efforts of the Vietnam War Memorial Cherry Tree Walk Trust committee. It is comprised of nine monoliths with steel reinforced concrete core which are faced with black polished granite with brass plaques listing the names of all Australians who were killed in the Vietnam War.

The monoliths have been numbered arbitrarily for this report M1-M9 (see Table 1).; with M1 being the northern monolith on Mittagong Road, M2 to the south of M1, M3-M7 in an anticlockwise direction from the northwest and M8 along the path towards the east and M9 at the dead end where Boolwey Street intersects Mittagong Creek.

No.	Inscription	Dims HxWxD	Obverse
M1	Vietnam War Memorial Cherry Tree Walk	2400-2500x690x690	west
M2	Vietnam War Memorial Cherry Tree Walk	2445-2500x690x688	west
M3	In Memoriam	2960x1740x430	east
M4	In Memoriam	2960x1740x430	east
M5	Vietnam 1962-1973	3240x1740x430/555	north
M6	In Memoriam	2900x1740x430	west
M7	In Memoriam	2900x1740x430	west
M8	8 RAR 'The Grey Eight'	100/1060x660x660	north
M9	Vietnam War Memorial Cherry Tree Walk	2460x690x690	west

Table 1: Individual Monolith details



Plan 1: Schematic Plan of Cherry Tree Walk, showing numbering of Monoliths, not to scale

The design, dimensions and inscriptions on M1, M2 and M9 are the same “VIETNAM WAR MEMORIAL/ CHERRY TREE WALK” gold leaf incised letters on the obverse (Figs 3-5). The only difference is that M1 and M2 have a protective stainless steel sheet around the inset base which is joined by rivets at the reverse.

Fig 3: Monolith M1

Fig 4: Monolith M2


Fig 5: Monolith M9

The design, dimensions (minor ground height difference) and heading inscription on M3, M4, M6 and M7 are the same “IN MEMORIAM” in gold leaf incised letters (Figs 6-10).

The central focus of the Memorial comprises five monoliths arranged in an open circle on a slight mound, edged with small bricks inside which cherry trees are planted filled surrounded with bark chips (Figs 1-2).

It was first dedicated on 22 August 1999. Following vandalism and water ingress problems, the granite facings and brass honour roll plaques were replaced in 2003, and the Memorial was re-dedicated on 28 February 2004. At which time the three monoliths (M1, M2 & M9) that mark the beginning and end of the walk were added. On 28 February 2003, M8 was dedicated to the 8th Royal Australian Regiment and was unfortunately vandalised in the same year. It was restored in time for the rededication of the main monuments in 2004.

The polished black granite slabs are fixed over a poured concrete core and secured to a concrete pad approximately 4 m down. On the obverse of each monolith are two vertical, cast brass plaques inset into the granite with an honour roll of the surnames and initials of Australian military and non-military personnel who died during the Vietnam war. The border and each person’s name are in relief in gilded brass, one person per line with a black patina background. A coating is likely to be protecting the metal from oxidation and tarnish. The source of the 20mm thick granite facing stones has not been documented. Each monolith is capped with a 20 mm thick slab of granite on top.

Fig 6: Monolith M3

Fig 7: Monolith M4

Fig 8: Monolith M5

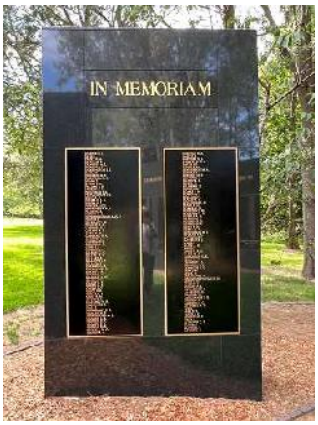


Fig 9: Monolith M6

Fig 10: Monolith M7


Fig 11: Monolith M8

Previous Treatments

The Memorial has undergone at least one known, but poorly documented restoration treatment after extensive vandalism in 2003. In his 2023 publication which discusses the history of the Memorial, Grahame Tooth writes:

> *In 2003 the entire Memorial precinct experienced a terrible bout of vandalism, leaving the Monument in an unstable and unsafe condition. The original granite tiles that were used in the construction of the Monument proved to have an unsuccessful surfacing, combined with a problematic adhesive method used to attach the tiles, which resulted in all of the tiles having to be removed from the Monument.*[1]

The original 1999 small granite "tiles were replaced with large sheets of black granite and fixed the Monument with stainless steel pins"[2]. These are the 20mm thick black polished granite slabs evident today. The source of the both the original and replacement granite tiles is unknown. It is likely that the stainless steel pins and/or adhesives used to fix the tiles to the concrete core are the main cause of the arc shaped cracking that is evident today. As the monument has settled and moved, possibly exacerbated by flood events, the fixings have restrained the granite panels causing the stress to be transferred to the inflexible granite.

The brass plaques with the honour roll were also replaced at this time:

> *At the same time, AI Plaques from Canberra replaced the original name plaques with a different style of plaque. The old name plaques found a new home on another Vietnam Veterans' Monument near Scone in New South Wales.*[3]

M8 which was dedicated to the 8th RAR in February 2003 and was unfortunately vandalised in the same year. It was restored presumably with the main Monoliths in time for the rededication of the entire Memorial on 28 February 2004.

At some unknown time, someone has applied gold paint to localised areas of the left brass honour roll of M7, presumably in attempt to cover discolouration of the polished gilt brass order.

[1] Tooth, Grahame *Vietnam War Memorial Cherry Tree Walk*. Researched and published by Grahame Tooth, 2003 p72.
[2] Ibid.
[3] Ibid.

Condition

General

The Memorial is in fair condition with various cracks and losses evident on the granite panels on all monoliths apart from one (M1). The most prevalent crack types were an arc shaped crack which arched from join to join at the horizontal edge of the panels most likely related to the stainless steel pins and adhesive fixing methods and diagonal cracks across the corners. Possible vandalism was only noted on one of the monoliths M9 which is the most remotely located.

There are cracks and gaps in the cement footings of Monolith 8 which is allowing water ingress underneath the monolith.

Tree branches are overhanging and in contact with some of the monoliths which may cause damage with prolonged contact.

Monoliths

Monolith 1

M1 is sound and in good condition. There are no losses to the granite edges or cracks evident. The gilt inscription is in excellent condition.

The top surface of the granite has grey appearance as the polished surface has been dulled by weathering (Fig 13).

There is a small patch of lichen at the rear capping granite panel on the northeast corner (Fig 14). There is a small loss of the elastomeric sealant from the south side of the edge of the upper inscription panel. On northern top panel between capping slab some buckling of black elastomeric sealant approx. 180 mm in from the edge.

Some minor corrosion on the folded northeast edge of the stainless steel panel and minor horizontal corrosion scratch on the north face extending from the corner edge. Dirt, twigs and grass fragments around the stainless steel panel (Fig 12).

Surface dirt all over as expected from outdoor exposure and some cobwebs across the granite joints. Localised yellow streaky accretions evident on all faces.

Fig 12: M1 stainless steel skirt at base rivets at rear

Fig 13: M1 top showing loss of polished surface

Fig 14: M1 lichen upper north corner

Monolith 2

M2 is sound and in fair condition. The gilt inscription is in excellent condition.

Diagonal cracks are evident in the granite across the corner of the following panels: i) obverse on lower panel in lower southwest corner (Fig 16) and ii) north facade lower panel lower west corner (Fig 15).

Fig 15: M2 diagonal crack and small loss lower north panel at southwest corner & tea staining on stainless steel skirt at base

Fig 16: M2 diagonal crack lower front west panel at southwest corner

Chips and losses from the granite are evident in the following areas: i) obverse west facade lower panel lower north corner small loss, ii) rear east facade abrasion on lower panel northeast corner, and iii) rear east facade medium loss on lower panel southeast corner (Fig 18).

Fig 17: M2 grey area at edge loss of polished surface

Fig 18: M2 loss at lower southeast corner

Notable on this monolith, the edges of several panels are white and rough in texture indicating the polished surface has been removed possibly by abrasion. The locations are i) west face, north edge of the central inscription panel (Fig 17), ii) west face north edge of the panel above inscription panel and ii) east face south edge of the rear lower panel.

Lichen is growing across the joints and into adjacent panels in the following areas: i) obverse, upper joint between capping stone and upper granite slab towards the south side, ii) obverse, a small patch on joint between upper and inscription stone towards the south side, and ii) south façade, upper join between capping stone and upper granite slab towards the west side.

There are small, localised losses of the black elastomeric sealant.

Localised yellow streaky accretions on all faces and surface dirt all over as expected from outdoor exposure.

Tea staining and surface corrosion on the stainless steel panel (Fig 15), a horizontal scratch on the south panel extending towards the east edge.

Monolith 3

M3 is sound and in fair condition. The gilt title inscription and brass plaques are in excellent condition (Fig 19).

Several cracks above and below the joins primarily on the obverse panels. Seven arc shaped cracks beginning and ending at a join; i) four on the east façade (Fig 19) ii) two on the south side (Fig 20) and iii) one on the north side.

Three, quarter circle cracks extending from the join curving into the granite panel on the east façade.

The casuarina needles are falling and resting on the top of the monolith, some extending over the edge and can be seen from the ground. Surface dirt all over. Cobwebs notable on the lower proper left brass plaque on the right side (Fig 21). Lower levels tend to have more dry needles and grass cuttings adhered to the vertical granite surface.

Some localised losses of the black elastomeric sealant, notably at the front central join to capping stone which has allowed water run off to drip down the front of the monument and deposit dirt particles leaving a vertical streak (Fig 19).

Fig 19: M3 Obverse east showing 3 arc shaped cracks and central drip mark from top join

Fig 20: M3 south showing two arc shaped cracks

Fig 21: M3 obverse build up of cobwebs

Monolith 4

M4 is sound and in fair condition. The gilt title inscription and brass plaques are in excellent condition (Fig 22).

There are six arc shaped cracks beginning and ending at a join: i) four arc shaped cracks at the joints on obverse east façade, ii) one on the south façade and iii) one on the north façade (Fig 23).

No arc shaped cracks at the joins of the rear west facade. There is one small, curved crack (30 mm from each end of crack) above the lower most joint towards the southern edge on the west façade.

Some areas at the edge of granite panels which are grey in appearance from loss of the polished surface (Fig 23)

Surface dirt as per other monoliths, concentrated at the lower panels. Localised bird droppings on rear.

Fig 22: M4 obverse east showing four arc shaped cracks

Fig 23: M4 north showing arc shaped crack and grey unpolished edge

Monolith 5

M5 is sound and in fair condition. The gilt title inscription and brass plaques are in excellent condition.

There are ten arc shaped cracks beginning and ending at a join: i) six arc shaped cracks at the joints on the obverse North façade and ii) four arc shape cracks at the joints on the rear south façade. Most of these cracks are very shallow and the cracks are not open and obvious.

The lower northeast corner has a small loss of granite at the obverse and a crack across the 20mm granite thickness on east edge (Fig 26). There is a small chip from the granite at the lower southwest corner. There is one diagonal crack is evident across the corner on east façade, above the first joint up from ground towards the rear south. There are two diagonal cracks above the 'N' in COUNTRY (Fig 24). There is no damage evident on the east facade.

There are localised small losses of black elastomeric sealant.

Surface dirt as per other monoliths, concentrated at the lower panels. Dried grass cuttings stuck to the base level on all sides (Fig 25). Localised bird droppings on rear. Cobwebs evident, notably across joins. Some casuarina pine needles evident on upper surface and also stuck to upper vertical surfaces.

Fig 24: M5 open crack above Country

Fig 25: M5 rear south dirt at base

Fig 26: M5 crack and loss northeast edge

Monolith 6

M6 is sound and in fair condition. The gilt title inscription and brass plaques are in excellent condition.

There are twelve arc shaped cracks beginning and ending at a join; i) eight arc shaped cracks at the joints on obverse west facade all are open cracks apart from the one at the joint below the "AM" in Memoriam which is a closed crack and shallow (Fig 27), ii) four arc shaped cracks on the rear north façade, primarily in the two lower joints.

On the lower course of the west façade there is a long crack towards southern edge that starts 280mm in from corner and runs diagonally to the outer (south) edge with significant loss of granite at the corner indicating this may have been the impact area causing the crack (Fig 28). The loss from the 20mm granite slab edge is also evident on the south façade. There is no damage evident on the north facade.

Branches from a cherry blossom tree planted in the incomplete circle are starting to encroach on the rear of this monolith (Fig 29).

There are localised small losses of the black elastomeric sealant.

Surface dirt as per other monoliths, concentrated at the lower panels. Cobwebs evident, notably across joins. Some casuarina pine needles stuck to vertical surfaces and presumably amassing on the top of the monolith.

Fig 27: M6 obverse two curved cracks between brass plaques

Fig 28: M6 loss on southwest edge and crack on west front facade

Fig 29: M6 overhanging tree

Monolith 7

M7 is sound and in fair condition. The gilt title inscription and brass plaques are in good condition.

There are nine arc shaped cracks beginning and ending at a join; i) three on the obverse west facade all are open cracks, ii) two on the rear east façade, and iii) four on the north façade, with a hard white substance in the joints in the centre of the arc shape cracks on the lower two (Fig 31).

Gold paint has been applied to the lower corners of the left honour roll plaque (Fig 30) and sections of the right brass edge, presumably in attempt to cover discolouration of the polished brass edge.

The two central edge panels to the west are unpolished so the granite appears grey in colour (Fig 31). There is no damage evident on the west facade.

There are localised small losses of black elastomeric sealant.

Surface dirt as per other monoliths, concentrated at the lower panels. Cobwebs evident, notably across joins, some with needle pines caught in the web. Localised yellow specks on surface (Fig 31).

Fig 30: M7 obverse west gold paint in corner of left plaque

Fig 31: M7 north unpolished grey granite edge and hard white accretion below arc crack above

Monolith 8

M8 dedicated to the 8th Battalion of the Royal Australian Regimen is sound and in fair condition.

On the obverse north façade, a small loss is evident from the granite on the lower northwest corner, which is also evident on the west façade. Two small chips from the black granite on the northeast lower corner of the obverse, are also evident on the eastern facade. The east facade has a horizontal crack 300 mm long approximately halfway down the granite slab extending from the front edge and ends towards the centre of the slab. There is no damage evident on the south slab and the top granite slab is in good condition.

The protective coating on the brass plaque on the top has depleted and the brass has oxidised so the previously polished relief letters and borders are now a combination of brown oxide and green copper patina which is reducing the legibility of the text (Figs 32-33). The stippled rough background has also lost the applied brown patina in localised areas resulting in grey patches. This upward facing plaque is exposed to increased weathering.

The brass plaque on the obverse north façade is in an excellent state of preservation, aided by its vertical placement, the protective coatings appear to be intact.

The concrete footing is cracked with some loss of the concrete revealing the brick sub-base and enabling water ingress (Fig 34).

There are cobwebs in localised areas, concentrated around the plaques. Yellow accretions are evident in localised areas all over the granite.

Fig 32: Oxidised brass plaque on top

Fig 33: Detail of top oxidised brass plaque

Fig 34: west side with damaged cement footings

Monolith 9

M9 is sound and in poor condition.

This monolith appears to have suffered from vandalism as the obverse west face and side north face have impact points with complex cracks running off them (Figs 35 & 37).

The obverse west facade has four cracks extending from central impact point which is to the south of K in 'WALK' (Fig 35) all cracks run through to the edges. There are two small chips on the northwest edge approx. 260mm down from horizontal join also evident on the north facade.

Fig 35: M9 Extensive cracking to obverse inscription panel

Fig 36: M9 losses to granite on SW edge below cracking on inscription panel

The north facade appears to have had two impact points which have a series of complex cracks running off them (Fig 37). The cracks run horizontally end to end,

however the vertical cracks are blind, the longest one extending 620mm down the slab.

On the rear east facade an adhesive sticker is attached near the top, with the words “HERO” (Fig 38). No other damage is evidence on this façade.

The south facade has a horizontal crack on the upper block running from the east edge towards the centre and measuring approx. 160mm. There is a small chip and crack on the southwest edge of granite corresponding with extensive damage to the obverse (Fig 36).

Urine stain on the south lower panels towards the front.

Some localised loss of black elastomeric pointing and a messy application of black sealant on the upper block towards west end.

Cherry tree branches overhang from the north and are in contact with top of the monolith (Fig 38).

Surface dirt as per other monoliths, concentrated at the lower panels with a build up of dried grass on inset base.

Fig 37: M9 Extensive cracking to north granite panel

Fig 38: M9 reverse showing tree branches touching monolith and adhesive sticker

Summary of Key Threats

The main threats to the Memorial are vandalism, inherent vice due to the construction of the Memorial, as seen by the arc shaped cracks appearing, possible mechanical and staining damage from overhanging tree branches and flooding from the adjacent stream causing settlement, movement.

Recommendations

The Memorial would benefit from regular maintenance as well as conservation treatments by specialist outdoor conservators and stonemasons to stabilise cracked elements and replace extensively damaged slabs of granite.

Regular maintenance would include the following:

- Washing down the monoliths every 2-3 months to remove dirt build up, urine stains and accumulation of cobwebs and plant material. Dry brush the tops and sides to remove casuarina pine needles and cobwebs, then hand wash with non-ionic detergent and sponges. Extreme care taken when washing around the gilded lettering. No water blasting.
- Trimming tree branches overhanging or in contact with the monoliths.
    - Monitor cherry blossom trees encroaching on rear of Monolith 6 and Monolith 9 and trim as necessary.
    - Large casuarina trees overhanging Monoliths 4,5, 6 dropping needles on top and sometimes suspended on vertical face.
- Regular weeding around the monoliths
- Monitor the pointing and engage monument expert to replace missing or damaged areas to ensure there is no water ingress.
- This work could be conducted by Council staff with training by a specialist monument conservator.

Conservation treatments to stabilise the condition:

It is recommended that a specification is prepared prior to any conservation works to determine the full scope of works, locations of damages and techniques and materials to be used in the restoration.

- Clean all monoliths first
- Minimise water ingress into the monoliths by
    - Remove and replace elastomeric sealant where it has failed or is missing in joints. Care at edges where cracks are adjacent to the joins as these will require patching.
    - Repair damaged cement footings surrounding Monolith 8

- It is recommended that the very damaged granite slabs are replaced as the extensive cracking is compromising the integrity and aesthetics of the individual monolith. It is suggested that two extensively cracked granite panels on Monolith 9; the cracked inscription panel on the obverse (west) and the cracked panel on the north side, are replaced with matching 20mm thick polished granite panels.

- Cracked panels can be consolidated and patched with conservation grade adhesives and fillers.

- Holes and losses in the granite to be patch repaired with conservation grade materials to match the surrounding areas to ensure continuity of the surface and to present a cared for appearance.

- The unpolished grey areas to be repolished to match the surrounding surface finish.

- The oxidised plaque on Monolith 8 requires a conservation treatment to improve legibility, reduction of corrosion products, repatination of the background surface,

polishing and regilding the tops of the relief letter and application of a protective coating.

- The gold paint on brass plaque border of Monolith 7 to be removed and once the underlying surface is revealed an appropriate treatment can be conducted to match the surrounding finish.

- Regular application of a biocide to remove the lichen from Monoliths 1 & 2 and other monoliths as required.

- Polish the stainless steel skirt at the base of Monoliths 1 & 2.

- Gilt lettering touched up as required.

- Consideration to improve lighting around the Memorial.