

Bacchus Marsh Avenue of Honour

Proactive Tree Removal and Replacement

Heritage Impact Statement

January 2025

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1.0 Introduction

1.1 Purpose

This Heritage Impact Statement (HIS) has been prepared for Moorabool Shire Council to accompany a planning permit application to Heritage Victoria for the proposed proactive removal and replacement of trees in the Bacchus Marsh Avenue of Honour over a ten-year period in accordance with the Bacchus Marsh Avenue of Honour Preservation Plan 2023 and Management Strategy 2023.

1.2 Background

The Bacchus Marsh Avenue of Honour is managed by Moorabool Shire Council. In 2023, Council adopted the Bacchus Marsh Avenue of Honour Preservation Plan and Management Strategy to address issues that may affect the heritage significance of the avenue and to guide its ongoing maintenance and management. The documents replaced an earlier Strategic Management Plan (2004) and aim to ensure the Avenue of Honour is effectively managed, conserved and enhanced in perpetuity as a living memorial, commemorating the soldiers of the Bacchus Marsh district.

In October 2023, Council met with Heritage Victoria to discuss the Preservation Strategy and Management Plan following adoption of the plans. Heritage Victoria provided feedback on the documents and pre-application advice on how to proceed with implementing the plan in a letter dated 16 October 2023. Heritage Victoria's advice included:

A permit application will be required for the implementation of the works associated with renewal of the whole Avenue. A permit application for the first 10 years of the replacement strategy should be made, with the support of the Preservation Plan and the Management Strategy. If approved, the tree removal works in the permit would be generally in accordance with those anticipated in the Management Strategy, but with sufficient scope to allow reactive removal and replacement where deemed necessary. A permit with a 10 year validity would provide clarity to the Council, Heritage Victoria and the community regarding the replacement strategy, and reduce the requirement for individual applications each year, aiming to streamline the approval process. The permit application would require public advertising, and so the Council are encouraged to have undertaken the necessary community consultation on the renewal strategy prior to applying for the permit.

The letter also outlined likely permit conditions should a permit be issued for the works. Several changes to the documents were also recommended, though it is noted that the plans had already undergone community and stakeholder engagement and were adopted by Council at that time and as such, these changes would require further consultation, engagement, and re-adoption by Council which would impact Council's ability to commence the renewal program and adhere to the action timeframes to ensure appropriate management of the avenue trees.

In April-May 2024 Council undertook the first round of proactive tree removals and replanting in accordance with the Preservation Plan. A permit exemption was granted from Heritage Victoria to undertake these works.

Due to the nature of the work, replanting must occur in the cooler months when climate and soil conditions provide the best opportunity for tree survival and growth. As such, to adhere to the action plan timeframes, the next twelve tree removals are required to be undertaken in April-May 2025 to allow for

replanting in June-July 2025. This will avoid delays to the next cycle of replacement and resulting impacts on the ten-year renewal program.

Council therefore sought a permit exemption for the next twelve tree replacements in December 2024 in accordance with previous practices for managing the Avenue of Honour. Heritage Victoria responded to this request advising that a permit application would be required in accordance with the advice provided in October 2023.

As such, this Heritage Impact Statement has been prepared to accompany a planning permit application for the works required in the first ten years of the tree renewal program as outlined in the Bacchus Marsh Avenue of Honour Preservation Strategy and Management Plan 2023.

1.3 Methodology

This HIS has been prepared in accordance with the Australia ICOMOS *Charter for Places of Cultural Significance, 2013 (the Burra Charter)* and its guidelines, and in general accordance with Heritage Victoria's *Guidelines for Preparing Heritage Impact Statements* (June 2021).

The report outlines the statutory heritage controls and listings that apply to the site, provides a brief history and physical description of the Avenue of Honour, outlines the heritage significance of the Avenue of Honour, describes the proposal and assesses the impacts, if any, of the proposal.

1.4 Documentation

The following documents have been referenced in preparation of this HIS:

- Bacchus Marsh Avenue of Honour Preservation Plan 2023, Moorabool Shire Council
- Bacchus Marsh Avenue of Honour Management Strategy 2023, Moorabool Shire Council
- Assessed Trees Bacchus Marsh Avenue of Honour Proposed Replacement Strategy, 2 June 2023, Ryder Arboriculture and Environment
- P38818 Avenue of Honour, Bacchus Marsh Road Bacchus Marsh, Moorabool Shire (H2238) Pre-application letter, Heritage Victoria, dated 16 October 2023
- Heritage permit exemption application form P40579 for the Avenue of Honour, completed by Moorabool Shire Council and dated 12 December 2024
- Permit Exemption Application Number P40579, Avenue of Honour, Bacchus Marsh Road Bacchus Marsh, Moorabool Shire (H2238) Pre-application letter, Heritage Victoria, dated 19 December 2024
- Bacchus Marsh Avenue of Honour Strategic Management Plan, Moorabool Shire Council, June 2004

2.0 Statutory Heritage Controls and Listings

2.1 Victorian Heritage Register

The Bacchus Marsh Avenue of Honour is included on the Victorian Heritage Register as place number H2238. Places on the VHR are subject to the requirements of the *Heritage Act 2017*.

The extent of registration includes all the dedicated avenue trees planted along the north and south sides of the Bacchus Marsh Road and all the memorial name plaques associated with the trees within the land marked L1 on Diagram 2238 at Figure 1. This includes the road reserve and 20 metres into the adjoining land on both sides in order to protect the critical root zone area.

In addition to the general exemptions that apply to all places on the VHR, the registration for the Avenue of Honour includes the following place specific exemptions:

- *Management and maintenance of trees including formative and remedial pruning, removal of deadwood, pest and disease control, cabling, mowing, weed control and mulching.*
- *In the event of loss or removal of trees, replanting with Dutch elms (*Ulmus X hollandica*) or Huntington elms (*Ulmus X hollandica 'Vegeta'*) to maintain the landscape character identified in the statement of significance. Removal of tree seedlings and suckers but excluding herbicide use.*
- *Management of trees in accordance with Australian Standard; Pruning of amenity trees AS 4373.*
- *Removal of plants listed as Prohibited and Controlled Weeds in the Catchment and Land Protection Act 1994.*
- *Repairs, conservation and maintenance to structures and hard landscape elements, memorial name plaques, asphalt and gravel paths, stone and concrete edging, fences and gates.*

The registration also includes the following permit exemption policy:

The purpose of the exemptions is to allow works that do not negatively affect the cultural heritage significance of the place.

The cultural heritage significance of the Bacchus Marsh Avenue of Honour is primarily as an intact commemorative planting that symbolises the response of a rural community to World War I. Each tree is dedicated to an individual soldier and contributes to the significance of the Avenue of Honour as a whole. The significance of the Bacchus Marsh Avenue of Honour lies in the uniform planting of the trees and the alphabetical ordering of the associated name plaques.

In managing changes to the Avenue of Honour, the Bacchus Marsh Avenue of Honour Strategic Management Plan June 2004 by Moorabool Shire Council 2004 should be consulted.

Works associated with water, gas, power, sewer or similar services that occur within the road reserve and 20 metres into the adjoining land on either side will require an arborist's report and approval from the Executive Director of Heritage Victoria.

Other than those buildings and works specifically exempt, the demolition of an existing structure and any new buildings, structures or works (including vehicle crossovers) that are proposed within the

road reserve or 20 metres into the adjoining land on either side of the reserve require the consent of the Executive Director of Heritage Victoria.

Any changes to the name plaques other than repairs, conservation and maintenance will require approval from the Executive Director of Heritage Victoria.

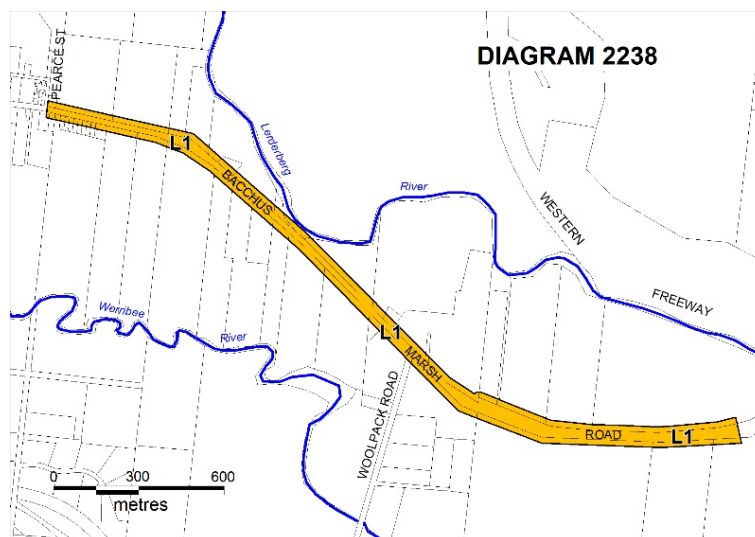


Figure 1 Extent of registration for the Bacchus Marsh Avenue of Honour shown shaded as L1
Source: Victorian Heritage Database

2.2 Moorabool Planning Scheme

The Bacchus Marsh Avenue of Honour is included in the Schedule to the Heritage Overlay of the Moorabool Planning Scheme as HO47 – Avenue of Honour. The extent of HO47 aligns with the VHR listing as required by the *Heritage Act 2017*. See Figure 2.

Flanking the Avenue of Honour is a row of Elm Trees also included in the Heritage Overlay as HO204. These trees do not form part of the VHR registration.

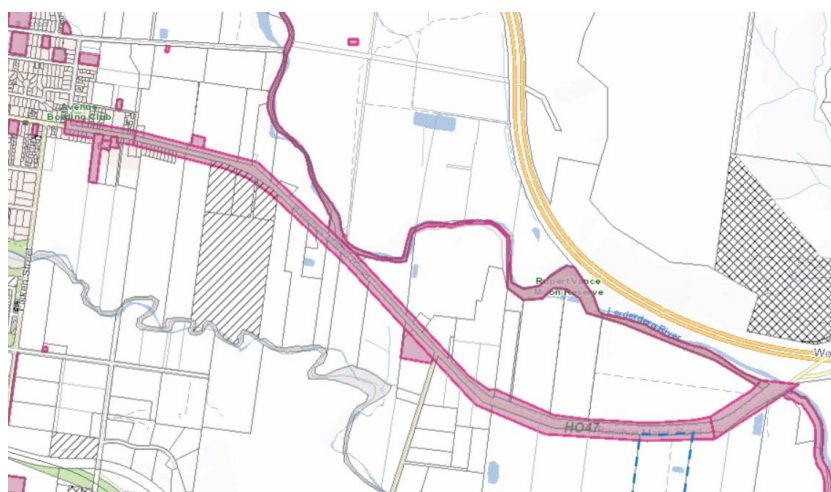


Figure 2 Extent of HO47 shown shaded pink and labelled, as included in the Moorabool Planning Scheme
Source: VicPlan

3.0 History and Physical Description

3.1 Brief Historical Summary

The Bacchus Marsh Avenue of Honour was planted on 10 August 1918 to commemorate the contribution of local service persons to World War I. The trees were planted by volunteers in the community, each tree representing a service person, and planted by a friend or relative. They were planted in a modified alphabetical order with no priority given to order of enlistment, rank or those who died during the war efforts.

Each tree was originally protected by timber guards made from pickets that were nearly 2 metres tall. A copper name plate mounted on a wooden block with the soldier's name, rank and unit was affixed to each guard. As with the trees, the plaques were placed alphabetically and numbered, with the odd numbers on the north side of the road and the even numbers on the south. This allowed the members of each family to be kept together (Bacchus Marsh Express, 17 August 1918, p3).¹

The ceremony commenced with a bugle call to signal volunteers to commence planting simultaneously, following the digging of 200 holes that morning. Although the Council stood as guarantor for the costs of the Avenue, the majority of the costs were funded by the Community. The Express article noted that 232 of the 281 trees had been sponsored by the community. The final community contribution is not known (Murphy 2001).

The full planting ceremony was described in detail in an article in The Express on 17 August 1918, as follows:

The movement was only taken up a few weeks ago and the enthusiasm grew as the people became better acquainted with what was expected of them, so much so that on Saturday a crowd of over 1000 persons assembled to witness and assist in the planting ceremony. The Woolpack was chosen as the meeting place, it being about the half-way point of the Avenue.

The trees (Canadian elms) are planted on both sides of the main Melbourne-Ballarat road, commencing from the present avenue of trees at the east end of the town and extend to within sight of the Lerderderg River at Hopetoun, a distance of nearly two miles. Next season the Avenue may be extended to Anthony's Cutting. Each tree stands as a silent sentry representing a gallant soldier, and the length of road so covered gives some faint idea of the district's magnificent contribution in men (the world's best soldiers) to the Empire's Army. The trees are protected by well-made timber guards, affixed to each of which is a neat sheet-copper embossed name plate, giving the soldier's number, rank, Battalion, &c.

The soldiers have been placed in alphabetical order and numbered-the odd on one side and the even on the other, thus placing the members of one family together. This explanation is given for those who may wonder at the interweaving of the names, as given on the list sheet.

To plant 281 trees in one afternoon seemed an almost impossible task, but so complete were the arrangements that the feat was accomplished without a single hitch, not only in the afternoon, but in

¹ Bacchus Marsh Avenue of Honour Management Strategy, Moorabool Shire Council, 2023, p. 5

about half-an-hour. The holes for the trees had already been prepared by a band of willing workers in the morning.



Figure 3 Ceremony of 10 August 1918
Source: annotated image taken from Moorabool Shire Council 2004

The Bacchus Avenue of Honour is one of at least 128 avenues planted in Victoria between 1917 and 1921.² It is understood to be the third largest avenue in Victoria, behind the avenues in Ballarat and Ballarat East. In 1987, it was one of only 52 Great War Avenues remaining in Victoria.³

The Avenue of Honour has had some change over time in order to maintain and manage the significant landscape feature. It has also been under threat to development, which resulted in its addition to the VHR in 2010.

In the early 1960s the Country Roads Board planted some new trees after road alignments works and installed new green bevel-edged hardwood name plaques on white hardwood posts. An aerial photo from 1966 shows a section of the Avenue of Honour where eight trees had been removed, presumably as part of road realignment works (Figure 4). The trees replanted in this area and another section on the southern side of the road were Wych Elm (*Ulmus glabra*) rather than Dutch Elm.

² Bacchus Marsh Avenue of Honour Strategic Management Plan, Moorabool Shire Council, 2004, p.15

³ Ibid.



Figure 4 Tree removal evident from a 1966 aerial photo
Source: Department of Sustainability and Environment, annotated image taken from Lovell Chen 2010.

The Avenue of Honour was part of the Western Highway until 1972 when the Bacchus Marsh Bypass was completed. The alignment of the new Western Freeway was to the north of the town. The Country Roads Board was responsible for the management of the Avenue of Honour during this period and in 1972 the road was re-declared as a Main Road (Bacchus Marsh Road). The Council assumed day to day management from that time and still provides management of the avenue.⁴

The name plaques have also undergone changes over the years as the original timber guards collapsed and timber frames were removed (Figure 5). Some plaques were lost and remain missing. In the late 1960s and 1970s, missing name plaques were replaced with embossed aluminium name plaques on hardwood backing. By the late 1980s cast aluminium name plaques were being attached to the trees. In the late 1990s, cast bronze name plaques were mounted on the trees.⁵

In 2009 the plaques were removed for restoration and remounted in 2010. The 84 remaining original plaques are held in storage by Moorabool Shire Council and are in varying condition.⁶ In 2018, it was agreed to handover the remnant plaques to the Bacchus Marsh RSL.

⁴ Bacchus Marsh Avenue of Honour Management Strategy, Moorabool Shire Council, 2023, p. 6

⁵ Bacchus Marsh Avenue of Honour Management Strategy, Moorabool Shire Council, 2023, p. 9

⁶ Bacchus Marsh Avenue of Honour, National Trust Significant Tree Register, accessed 27.12.24, https://trusttrees.org.au/tree/VIC/Bacchus_Marsh/Bacchus_Marsh_Avenue_Of_Honour_Bacchus_Marsh_Road

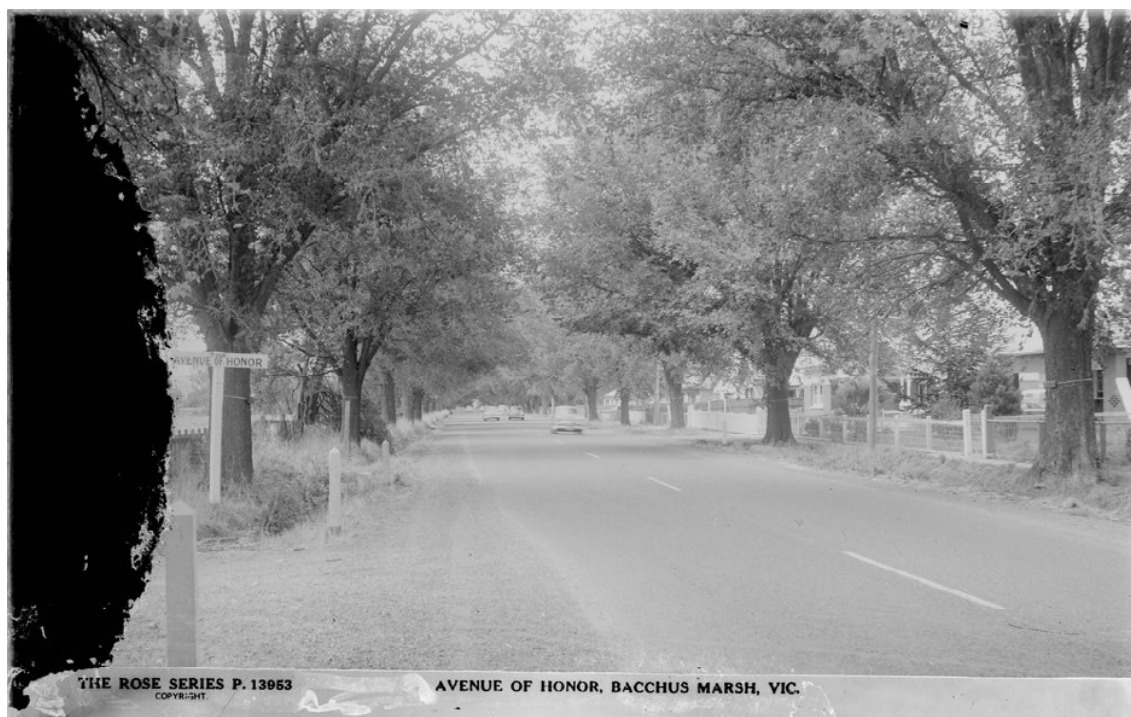


Figure 5 The plaques were initially attached to trees
Source: Rose Stereograph Company c1920-1954.

3.2 Physical Description

The Bacchus Marsh Avenue of Honour is a row of 281 Canadian Elm trees located on both sides of Bacchus Marsh Road at the eastern gateway to Bacchus Marsh, extending approximately 2.9km in length. It is located on the traditional land of the Wathaurong people. The trees are planted in pairs, approximately 20 metres apart. The dedicated avenue is located between Pearce Street and a pair of flagpoles at the eastern end, approximately 300m west of where the Lederberg River crosses Bacchus Marsh Road. The flagpoles and a sign affixed to metal poles identifies the formal start to the Avenue of Honour (See Figure 8).

The Avenue of Honour trees are regularly inspected and full audits have been completed in 2008, 2014, 2019, 2020 and 2023. As of 2023, there were 7 Elm species in the avenue and 3 vacant sites. These include:

- 163 Dutch Elm – *Ulmus xhollandica* (columnar form)
- 93 Hungtingon Elm – *Ulmus xhollandica* 'Vegeta'
- 11 Wych Elm – *Ulmus glabra*
- 4 Variegated Elm – *Ulmus minor* 'Variegata'
- 4 English Elm – *Ulmus procera*
- 2 Desert Ash – *Fraxinus oxycarpa*
- 1 Golden Elm – *Ulmus Glabra* 'Lutescens'

As noted in the Preservation Plan, the health of the Avenue of Honour trees is generally good. The trees typically have relatively dense canopies and adequate shoot elongation. Age related decline, physical damage to the trunk or roots (vehicle collision and underground service installation) and compacted soils are the most likely factors that have contributed to tree decline.⁷

Tree structure is slowly declining over time. From 2014 to 2023, there has been a significant drop in the good structure ratings with a shift to poor and very poor. Significant works completed after the 2021 storms meant that some trees with poor structure failed and the defective parts removed, reducing the number of trees in this category.⁸

An additional row of Elm trees is located to the east and west of the dedicated avenue (Figure 6). These trees do not form part of the planting to commemorate World War I service persons; however, they do present as a continuation of the dedicated avenue. The western approach comprises 48 Elm trees on both sides of Bacchus Marsh Road, between Pearce and Fiskin Streets. These trees were likely planted around 1885.⁹ The eastern approach comprises 36 Elm trees on both sides of Bacchus Marsh Road, between the pair of flagpoles and the Lerderderg River. These trees were planted in the mid-1960s.¹⁰

The eastern and western Elms are included in the Schedule to the Heritage Overlay of the Moorabool Planning Scheme as a separate heritage place to the dedicated Avenue of Honour. The eastern and western Elms are not of State significance and are not included in the VHR.

The Avenue of Honour and adjoining row of Elms creates a defining character to the town gateway at the eastern approach of Bacchus Marsh. It is a key landscape feature within the district that identifies the entry to the town. The mature Elms form a continuous overarching canopy which is emphasised by the winding road.

Land use along the Avenue of Honour is residential at the western end, slowly changing to rural along its length towards the freeway (See Figure 9 and Figure 10).



Figure 6 The Bacchus Marsh Avenue (Western approach, Avenue of Honour, and Eastern Approach)
Source: Annotated image taken from 2023 Preservation Plan, Moorabool Shire Council

⁷ Bacchus Marsh Avenue of Honour Preservation Plan 2023, Moorabool Shire, p. 6

⁸ Ibid.

⁹ Avenue of Honour Strategic Management Plan 2004, Moorabool Shire, p. 14

¹⁰ Ibid.



Figure 7 The start of the Bacchus Marsh Avenue of Honour at the western end, looking east
Source: Moorabool Shire Council 2025



Figure 8 The start of the Bacchus Marsh Avenue of Honour at the eastern end, looking west
Source: Moorabool Shire Council 2025



Figure 9 Residential land uses along Bacchus Marsh Road, partly included in the VHR curtilage
Source: Moorabool Shire Council 2025



Figure 10 Agricultural land uses along Bacchus Marsh Road, partly included in the VHR curtilage
Source: Moorabool Shire Council 2025

4.0 Heritage Significance

The Bacchus Marsh Avenue of Honour is of State and Local heritage significance. The VHR registration identifies the place as being of historical, aesthetic and scientific (research and botanical) significance to the State of Victoria. The Statement of Significance included in the VHR registration is reproduced below:

What is significant?

*The Bacchus Marsh Avenue of Honour is a combination of 281 Dutch elms (*Ulmus X hollandica*) and Huntington elms (*Ulmus X hollandica* 'Vegeta') planted in pairs approximately 20 metres apart. It is the second largest Avenue of Honour in Victoria and is largely intact.*

The Avenue of Honour is a cultural landmark located on the eastern side of the Bacchus Marsh township and extends for approximately 2.9 km along Bacchus Marsh Road from Pearce Street in the west to the flag poles on either side of the road approximately 300 metres before the Lerderderg River. The dedicated Avenue of Honour sits within a longer avenue of elms and provides a continuous, impressive visual link between the town and the river. The Avenue of Honour is a key landscape feature of the district and is characterised by the curved road with the overarching canopies of the mature elms.

The Avenue of Honour is on the traditional land of the Wathaurong people.

The Avenue of Honour was planted in the afternoon of 10 August 1918 to commemorate locals who volunteered to serve in World War 1. The tree planting was a community effort attracting one thousand spectators, with workers from the Darley Firebrick Company and other volunteers digging the holes and erecting tree guards in readiness for the planting. After a bugle call 281 elms were simultaneously planted with each tree representing an individual volunteer soldier. In a display of egalitarianism, the name plaques associated with each tree were arranged in alphabetical order along the Avenue. This kept families together and symbolised the idea that each individual's contribution to the war effort was equally important.

Each tree was originally protected by timber guards with attached copper embossed name plaques mounted on a wooden block giving the soldier's name, rank and battalion details. As the guards collapsed and timber frames were removed, many of the name plaques were either lost or attached to the trees by the 1950s. In the early 1960s the Country Roads Board replanted some new trees after road realignment work and installed new green bevel-edged hardwood name plaques on white hardwood posts. In the late 1960s and 1970s missing name plaques were replaced with embossed aluminium name plaques on hardwood backing plaques which was likely to be the first systematic replacement of the name plaques. By the late 1980s cast aluminium name plaques were being attached to the trees. In the late 1990s some cast bronze name plaques were mounted on the trees. In 2009 the plaques were removed for restoration and remounted in 2010. The 84 remaining original plaques are in varying condition are held in storage at the Shire Offices.

How is it significant?

The Bacchus Marsh Avenue of Honour is of historical, aesthetic and scientific (research and botanical) significance to the State of Victoria.

Why is it significant?

The Bacchus Marsh Avenue of Honour is of historic significance as a World War 1 Avenue of Honour and as one of the earliest examples of this important form of memorial planting in Victoria. The Bacchus Marsh Avenue of Honour is significant for its representation of the phenomenon of commemorating individual sacrifice for the World War 1 effort through the planting and maintenance of a tree in an Avenue of Honour.

The Bacchus Marsh Avenue of Honour is of historic significance for the egalitarian treatment of the individuals commemorated by each tree within the Avenue. The name plaques associated with each tree are arranged in alphabetical order along the Avenue of Honour, keeping families together and symbolising the idea that each individual's contribution to the war effort was equally important, regardless of rank.

The Bacchus Marsh Avenue of Honour is aesthetically significant for the dramatic, continuous and unbroken cathedral-like arching of the canopy, making it one of the most distinctive elm avenues in Victoria. The trees form a visually impressive colonnade effect in all seasons. The regular spacing and pairing of trees on either side of the road is a strong design element reflecting the dual purposes of commemoration and amenity enhancement. These design elements contribute to the Avenue of Honour being a cultural landmark at entrance of Bacchus Marsh.

The Bacchus Marsh Avenue of Honour is of scientific (research and botanical) significance for its potential to tell us about how Victorians dealt with the effects of war, and as an increasingly rare elm avenue due to the decimation of elms through Dutch elm disease in Europe and North America.

While not of State-level social significance, the Bacchus Marsh Avenue of Honour is of high local social significance for its relationship with the community as a living memorial to those who enlisted in World War 1. The planting of trees was seen as a symbol of hope and a tangible way for local people to become involved in commemorating soldiers who enlisted to serve their country at war.

The heritage citation for the Bacchus Marsh Avenue of Honour (HO47) was prepared in the Bacchus Marsh Heritage Study 1995. The citation includes the elm trees covered by HO204 which are excluded from the VHR registration. The Statement of Significance in the citation is reproduced below:

*A memorial avenue of about 390 mature English Elms (*ulmus procera*) over 3.3km in length on the Bacchu Marsh in its approach to the town from Melbourne, was planted on August 10, 1918. (This was well before the armistice, not signed until November 11, 1918).*

The Avenue is of state historical significance in demonstrating a commemorative association with a nationally important and influential phenomenon, said to signify the coming-of-age of the nation.

The Avenue is also historically significant in demonstrating the effect on a close rural community and its response and sacrifice in support of government action. It is significant also as an intact survival of a major memorial avenue, and of state aesthetic significance in the quality of its scenic beauty, as a continuous vaulted form and of the views on either side.

Finally, it is of social significance, as a landmark used by travellers to Ballarat for orientation and illustrated in representative views (postcards, tourist literature, horticultural handbooks). It is one of those landscape elements known and valued by the community as part of its sense of identity in the Garden State.

There is no existing Conservation Management Plan for the Bacchus Marsh Avenue of Honour. However, the place has been managed in accordance with the Bacchus Marsh Honour Strategic Management Plan (June 2004) and the Bacchus Marsh Avenue of Honour Preservation Plan and Management Strategy 2023.

5.0 Bacchus Marsh Avenue of Honour Preservation Plan and Management Strategy 2023

In 2023 Council adopted the Bacchus Marsh Avenue of Honour Preservation Plan and Management Strategy to address issues that may affect the heritage significance of the avenue and to guide its ongoing maintenance and management. The documents replaced an earlier Strategic Management Plan (2004) and aim to ensure the Avenue of Honour is effectively managed, conserved and enhanced in perpetuity as a living memorial, commemorating the soldiers of the Bacchus Marsh district.

Significant community and stakeholder consultation was undertaken in preparation of the plans, including with Council's Heritage Advisor.

The Management Strategy provides an overview of the avenue and its history, sets the vision for the future, and provides a high-level strategic action plan. The Preservation Plan provides a detailed management plan for the avenue trees and proposes a proactive infill replacement program to ensure that the avenue is conserved for future generations. The documents address the integrity of the avenue, the health and longevity of the trees, future climate predictions, the critical connection between the trees and individual service persons, infrastructure and development conflicts and ongoing maintenance regimes.

Some of the key actions in the Management Strategy Action Plan include implementation of the 2023 Preservation Plan, establishing a program of tree propagation from bud material collected from the existing avenue trees to ensure a stock of like for like replacements with a connection to the original trees, reviewing the Tree Preservation Plan every five years and submitting any proposed changes to short term replacements to Heritage Victoria for approval.

5.1 Preservation Plan 2023

The Preservation Plan proposes a renewal program over 20 years divided into five time periods: current avenue, within five years (2028), in ten years (2033), in 15 years (2038) and in 20 years (2043). The plan suggests an average removal of approximately 10-12 trees per year. The time periods allow for the plan to be reviewed on an ongoing basis, particularly the longer-term periods.

A total of 50 trees have been recommended for replacement within the next 5 years (since 2023) due to poor tree condition (hazardous and declining) or a strategic replacement of the Avenue of Honour trees. This has been further broken down into 2 sub-categories, 0-2.5 years and 2.5-5 years.

Several trees in fair or good condition have been identified and recommended for removal for strategic reasons, including trees that were replaced with incorrect species or at inappropriate locations. These trees are not historically accurate and detract from the visual cohesion and aesthetic qualities of the Avenue of Honour. Replacing them with a historically accurate species (Elm) and in the correct location seeks to rectify these past errors and restore the cohesion of the avenue, therefore enhancing the significance of the place.

5.2 Proactive removals 2024

In 2024, Council undertook the first round of proactive tree removals and replacements in accordance with the Preservation Plan. The works were undertaken in April to May and included removal of ten trees with like for like detail using young nursery trees propagated from bud material collected from the

existing avenue trees. A permit exemption was sought from Heritage Victoria for these works. All work was undertaken using the same methodologies as currently proposed and in accordance with the relevant Australian Standards and site safety and management plans. The following trees and species were replaced with like:

Tree Number	Species
N43	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'
N03	Huntingdon Elm <i>Ulmus ×hollandica</i> 'Vegeta'
S32	Huntingdon Elm <i>Ulmus ×hollandica</i> 'Vegeta'
S30	<i>Ulmus glabra</i>
S36	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'
N41	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'
N47	Huntingdon Elm <i>Ulmus ×hollandica</i> 'Vegeta'
S90	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'
N101	Huntingdon Elm <i>Ulmus ×hollandica</i> 'Vegeta'
N105	Huntingdon Elm <i>Ulmus ×hollandica</i> 'Vegeta'



Figure 11 Two young Elm trees planted in 2024 as part of the renewal program in the Preservation Plan 2023
Source: Moorabool Shire Council

6.0 Proposed Works

The current proposal is for the works over the first ten years of the tree renewal program as outlined in the Preservation Plan and as shown on the Proposed Replacement Strategy plans prepared by Ryder Arboriculture & Environment, dated 2 June 2023. This includes the proactive removal of 95 trees over ten years and replanting with the same species (like for like) propagated from bud material from existing Avenue of Honour trees to maintain a connection to each original tree where possible.

The full ten-year program is detailed below, arranged by timeframe and including tree number and species:

Timeframe	Species	Tree Numbers	Total Trees
1 year (2025)	Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Desert Ash <i>Fraxinus oxycarpa</i> 'Hollandica' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S92 S110 S112 S118 N17 N49 N103 N109 N115 N169	12 (in 1 year)
1-2.5 years	Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N17 N63 N65 S94 N111 S146 S150 S152 N157 N167 N171 S280	12 (over 2.5 years)
2.5-5 years	Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	N05 N09 N11 N25 N27 S162 S164 S218 S222 S224 N237 N239 S242 S278	14 (over 2.5 years)
5-10 years	Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica' Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N01 S04 N13 N19	57 (over 5 years)

Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S22
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S24
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N23
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S40
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N43
Other <i>Ulmus</i> spp.	S44
Fraxinus oxycarpa	N53
Other <i>Ulmus</i> spp.	S58
Other <i>Ulmus</i> spp.	S60
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N67
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N73
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N75
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	N77
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N83
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S86
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S88
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N91
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N93
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S100
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N123
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S124
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S130
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N135
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N137
Fraxinus oxycarpa	S138
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N143
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N145
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N151
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N153
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N155
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S168
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N173
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S180
Other <i>Ulmus</i> spp.	N187
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S180
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	S202
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N205
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N207
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S208
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N209
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N213
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N215
Huntingdon Elm <i>Ulmus xhollandica</i> 'Vegeta'	N217
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S220
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S238
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S240
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S248
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	N247
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S250
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	N249
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S252
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	N251
Dutch Elm <i>Ulmus xhollandica</i> 'Hollandica'	S252

	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	S254	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	N269	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	S270	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	N271	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	S272	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	S274	
	Dutch Elm <i>Ulmus ×hollandica</i> 'Hollandica'	S276	

6.1 Works Methodology

All works will be undertaken in accordance with the relevant Australian Standards, including Australian Standard AS 4970 *Protection of Trees on Development Sites* and AS2303-2018 *Tree Stock for Landscape Use*.

A Site Safety Management Plan will be prepared for the work site. Prior to any works, the area around each affected tree is set up for the required safety and works equipment such as elevated work platforms, traffic control, crane trucks, and chippers. A Traffic Management Plan is prepared to inform traffic control and safety and minimise impacts on Bacchus Marsh Road and the broader avenue.

Extant plaques at affected trees will be carefully removed and stored offsite prior to any tree removals.

Following the site setup and removal of plaques, the above ground portion of the tree is first removed, followed by the stump which is removed from the root plate using a stump grinder. The outer root system of the tree will remain in situ.

All tree removals will be overseen by a skilled and qualified arborist with a minimum AQF Level 5 Diploma Arboriculture and demonstrated experience working on heritage listed trees.

Council currently has an ongoing arrangement with a reputable nursery to propagate new trees from bud material collected from the existing Avenue of Honour trees, which ensures a supply of appropriate replacements in the correct species and with a direct connection to the original tree. It takes approximately 3-4 years to produce a tree ready to be planted and stock is inspected by Council prior to delivery to ensure that replacement trees are the correct species and of appropriate quality for planting. Tree growth systems and the supplied stock will be in accordance with AS2303-2018 *Tree Stock for Landscape Use*.

Works must be undertaken between April and September of each year. Tree removals typically occur in the autumn months (April-May) to ensure planting can occur within the next planting season, being the cooler months of the year (June-September). This ensures climate and soil conditions will provide the best opportunity for tree survival and growth. At this time, canopy cover is minimal and ensures new trees receive adequate sunlight.

In accordance with the Preservation Plan, native soil will be used as backfill for the planting hole. An organic mulch ring of a minimum 2m diameter will be applied on the soil surface. Plastic water wells or soil berms will be installed to ensure effective watering of the newly planted trees. See Figure 12 for details of the planting methodology.

Good post-planting practices are important to ensuring rapid tree establishment. Irrigation is typically the most critical aspect of post-planting maintenance. To avoid drought stress, frequent and regular irrigation will be undertaken until the tree's root system has established.

Lastly, plaques are reinstalled once trees are planted. Plaques will be reattached to a timber post that is concreted into the ground to match existing detail. For trees with missing plaques, a replica plaque will be reproduced by Ballarat Memorials, with detail to match the original plaques including accurate service person name and position. These will be reinstalled with the same detail to match other plaques in the avenue and in correct alphabetical order for historical accuracy.

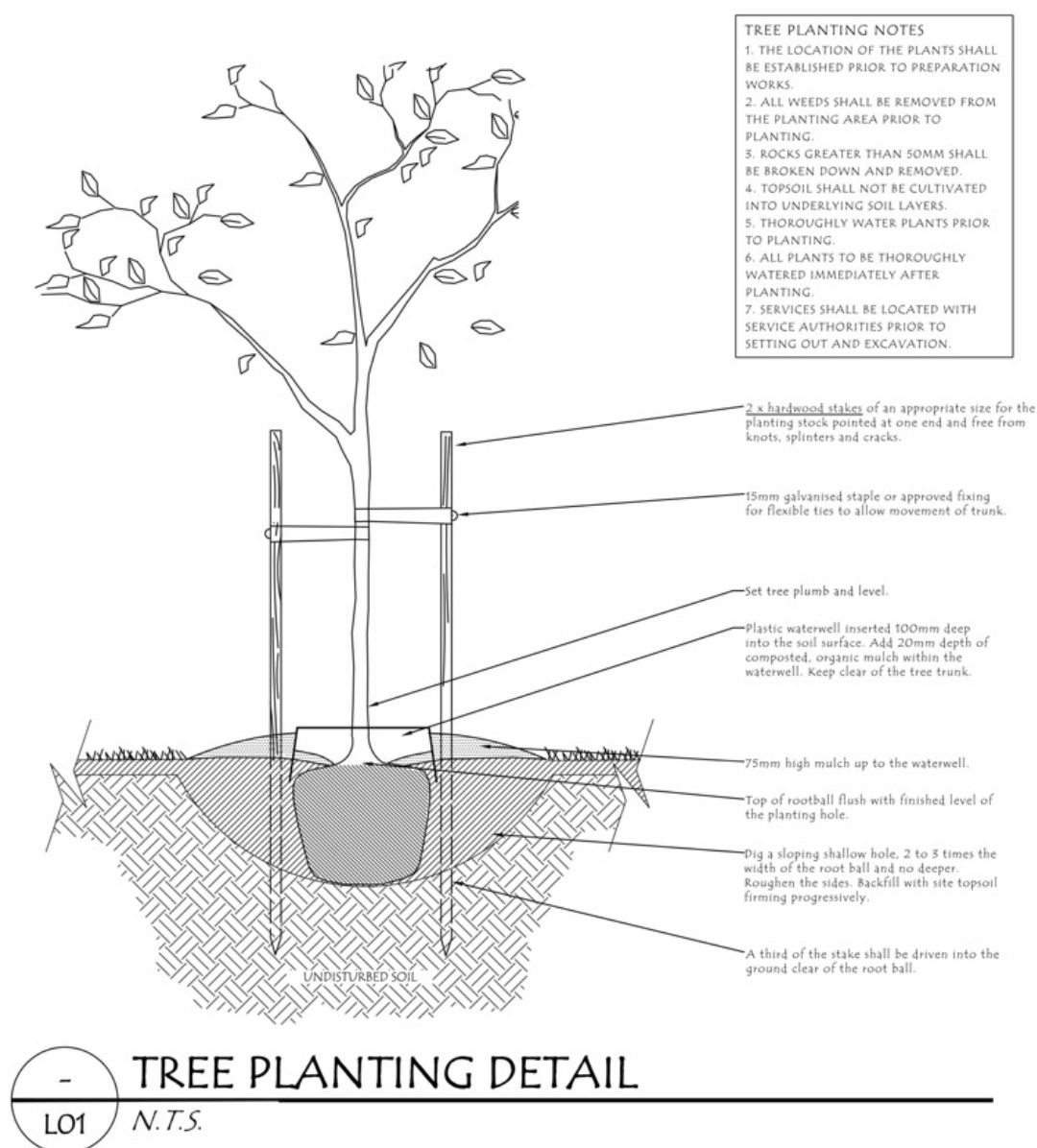


Figure 12 Tree planting detail
Source: BMAOH Preservation Plan 2023, p. 18.

7.0 Assessment of Heritage Impacts

Applications for works to places on the VHR are considered under the requirements of the *Heritage Act 2017*. The following directions regarding matters to be considered in the determination of permit applications are provided at Section 101(2)(a) (impact on cultural heritage significance) of the Act:

101 Determination of permit applications

(2) In determining whether to approve an application for a permit, the Executive Director must consider the following—

- (a) the extent to which the application, if approved, would affect the cultural heritage significance of the registered place or registered object;*
- (b) the extent to which the application, if refused, would affect the reasonable or economic use of the registered place or registered object;*
- (c) any submissions made under section 95 or 100;*
- [...]*
- (f) any matters relating to the protection and conservation of the registered place or registered object that the Executive Director considers relevant.*

(3) In determining whether to approve an application for a permit, the Executive Director may consider—

- (a) the extent to which the application, if approved, would affect the cultural heritage significance of any adjacent or neighbouring property that is—*
 - (i) included in the Heritage Register; or*
 - (ii) subject to a heritage requirement or control in the relevant planning scheme; or*
- (b) any other relevant matter.*

The following sections of this report provide a response to these considerations and assess the impact of the proposal on the cultural heritage significance of the place.

7.1 Overview

Moorabool Shire Council has a long history of managing the Avenue of Honour to ensure it is maintained and its heritage significance is protected into the future. In the past, the avenue has been managed in accordance with the Bacchus Marsh Avenue of Honour Strategic Management Plan 2004 (Moorabool Shire Council). Being 20 years since the preparation of this document and predating the inclusion of the avenue on the VHR, it was prudent of Council to review the existing plan and prepare a new plan and strategy to guide management of the avenue into the future. The current proposal is in accordance with the adopted Preservation Plan (2023) and will allow for the first ten years of the renewal program to be undertaken.

Council also implements a cyclical maintenance regime for ongoing management of the Avenue of Honour. This includes 3-yearly inspections and assessments to assess and record tree health, regular remedial pruning, canopy lift pruning, deadwood removal, branch or stem reduction, cable installation/inspection, epicormic shoot management, broken/defective branch removal, young tree maintenance, and decay detection and assessment in accordance with Council's adopted Urban Tree Management Policy. The proactive maintenance regime extends the life of the trees and minimises the need for

reactive works, though does not eliminate it. Council undertakes reactive works as required, including clearing fallen debris from roads, removing loose limbs and branches following weather events, and when required for public safety, tree removal and replacement.

Planted in 1918, the original avenue trees are now over 105 years old. Trees have a finite lifespan, and the original plantings are nearing the end of their natural lives. Useful life spans of Dutch Elms in urbanised areas of Australia are not known; however, it is expected that 100-150 years should be achievable if well maintained.¹¹

Ongoing management, frequent inspection and pruning extends the lifecycle of the trees, but replacement is inevitable due to several factors, including natural senescence. Natural and environmental factors can also cause trees to decline prematurely. Tree replacement in the avenue has been required in the past, as evidenced by the 1966 aerial image (Figure 4). Further, trees, particularly those in the public realm, can be a risk to public safety due to changes overtime, weather conditions, soil conditions, climate change impacts, and other environmental factors, such as surrounding traffic movements and built form.

As managers of the Avenue of Honour, Council carries a responsibility to always ensure public safety and mitigate risks where possible. The Preservation Plan and Management Strategy have been prepared to address the risks and ongoing issues associated with managing the avenue while ensuring the cultural heritage significance of the place is respected and preserved into the future. The overarching goal of the proposal is to ensure the Bacchus Marsh Avenue of Honour will survive in perpetuity for future generations, as a place of both local and state heritage significance.

7.2 Impacts on the cultural heritage significance of the Bacchus Marsh Avenue of Honour

The Bacchus Marsh Avenue of Honour is recognised for its historical, aesthetic and scientific (research and botanical) heritage values. It is an early and longstanding example of a memorial planting associated with World War I in Victoria. It provides insight into how Victorians dealt with the war and honoured those who served in it and reflects the common use of the Elm species at the time, which has since declined in popularity.

The trees are aesthetically significant for the dramatic and unbroken arching canopy over Bacchus Marsh Road that forms a colonnade effect and defines the gateway to the Bacchus Marsh township. The regular spacing and consistent species of the trees contribute to a visual cohesion and continuity along the road. It is a defining landscape feature with landmark qualities that characterises Bacchus Marsh.

While not recognised as being of state-level social significance, the avenue is also strongly valued by the local community of Bacchus Marsh and Moorabool more broadly, particularly for those with relatives commemorated by the planting, or those involved in the planting ceremony itself. It is a living memorial for local service persons who served in the war. Maintaining the avenue, the recognition of service persons and a connection to the original tree is therefore important to the community.

The proposed proactive tree renewal program has been carefully considered and adopted with the avenue's heritage values at the forefront of decision making to ensure its cultural heritage significance is protected and preserved into the future. The proposed renewal program takes a cautious but proactive

¹¹ Bacchus Marsh Avenue of Honour Preservation Plan 2023, Moorabool Shire, p.21.

approach to long-term management that balances Council's obligations to minimise risk to public safety with best practice conservation.

By developing and adopting a long-term tree renewal program that works alongside Council's cyclical maintenance regime, the risk to public safety and the need for reactive works will be reduced. It ensures a consistent and cohesive approach to maintaining and managing the avenue and provides a solution for long-term renewal that will minimise impacts on the historic, aesthetic and research values of the place while preserving its future.

The Preservation Plan adopts an infill strategy which is the most appropriate strategy in comparison to other options and will have the least impact on the aesthetic value and cohesion of the avenue. The infill strategy will ensure tree removals are not co-located, therefore minimising gaps in the avenue, and allows removals to be spaced over a longer period of time, which provides greater flexibility and time to grow propagated stock.

All replacements will be undertaken with like for like detail, ensuring the same species is planted in the original location. Further, Council has a partnership with an established nursery to propagate young trees from bud material collected from the avenue trees. This will ensure that new trees have a connection to the original tree planted and that all replacements are appropriate and historically accurate.

All tree renewals are informed by each tree's predicted end of life based on tree condition and associated risk. Regular monitoring and routine maintenance have informed the proactive steps to mitigate any risk to public safety or tree health and condition and informs the renewal program. The trees identified for short term (within 5 years) removal have been identified as being of poor condition and nearing end of life.

The Preservation Plan collates long-term data and trends that demonstrate the declining condition of the trees and their structure, particularly between 2014 and 2023 during which there was a significant drop in good structure ratings with a shift from poor to very poor.¹² Significant works completed after the 2021 storms meant that some trees with poor structure failed and the defective parts removed, reducing the number of trees in this category.¹³

The three-yearly tree inspections and reviewing the preservation plan every five years will further ensure that decisions to proactively remove and replace any trees are based on current data and tree condition, and no tree removals are undertaken for healthy and safe trees or where it is not warranted. The proposed proactive renewal program seeks to extend the life of the original trees as best possible, prevent reactive removals, and strategically replace trees at the end of life in a way that minimises physical and visual impact on the avenue.

There are a limited number of recommended removals that are not based on tree health and condition. These removals are recommended for strategic purposes and aim to rectify incorrect or uncharacteristic replacements that have occurred in the past. It is proposed to remove any trees planted in an incorrect location or with the incorrect species and replace them with the historically accurate species (Elm) and in the correct location. This is a positive outcome that will reverse negative changes over time and will

¹² Bacchus Marsh Avenue of Honour Preservation Plan 2023, Moorabool Shire, p.8.

¹³ Ibid.

improve the cohesion and consistency of the avenue, its visual presentation, and restore historical accuracy. These works are considered to have a positive heritage impact on the significance of the Avenue of Honour.

7.2.1 Physical impacts

Being located on a main thoroughfare and the gateway to Bacchus Marsh, the removal and replanting of trees in the Avenue of Honour is a complex operation that is undertaken with careful planning and consideration for public safety, the proximity of adjacent trees in the avenue, extant name plaques, and the significance of the broader avenue.

Potential physical impacts include disturbance of the root system of adjacent trees, damage to name plaques and damage to tree trunks, branches and limbs. There are also several public safety risks associated with removal of the trees, particularly to adjoining properties and structures and vehicles on Bacchus Marsh Road.

These impacts have historically been mitigated by Council and will continue to be mitigated with future tree removals and replanting through the following actions. As outlined in the works methodology at Section 6.1, several measures will be undertaken to ensure that physical impacts will be minimised before, during and after the works. This includes preparation of a Traffic Management Plan and Site Safety Management Plan, undertaking all works in accordance with the relevant Australian Standards, and having a suitably qualified arborist oversee the works.

Planting is undertaken seasonally when canopy cover is minimal to ensure young plants receive adequate sunlight and have the best chance of survival. The cooler months also provide ideal soil and climate conditions to encourage survival of new trees.

All propagated tree stock is checked prior to delivery to site to ensure it is the appropriate species and fit for purpose. Careful and regular monitoring is also undertaken following the planting of the trees to maintain soil moisture and monitor tree growth and condition.

As previously noted, the name plaques have changed over time, and some have been permanently lost. Current plaques are attached to a timber post fixed into the ground with concrete. Prior to any removals, all plaques are carefully removed, stored off site, and reinstated to match existing detail following tree planting. The plaques are an integral part of the avenue and provide a tangible connection to the families of the service persons commemorated by the avenue. Their protection and retention is highly important, as is retaining their original alphabetical order.

The mitigation measures outlined will minimise any physical impact on the avenue trees or plaques before, during and after the works are undertaken and therefore ensure that the works will not adversely impact the significance of the Bacchus Marsh Avenue of Honour.

7.2.2 Visual impacts

Any renewal program will result in some form of visual impact on the continuity and cohesion of the avenue due to the removal of trees, albeit this impact is temporary. The infill strategy will have a reduced visual impact in comparison to other strategies which would result in larger areas of tree removals and therefore create larger and more notable gaps in the broader avenue. See Section 7.3 below for further discussion on options considered.

Notwithstanding this, there will be some breaks in the avenue as trees are removed and replaced and these gaps will not be filled until the new trees mature. However, the renewal strategy has been planned to stagger tree removals along the avenue and seeks to avoid the removal of more than one consecutive tree at a time to minimise the scale and perception of gaps in the avenue.

Visual impacts on the avenue will be temporary in nature and have been minimised as best possible and are therefore not considered to detrimentally harm the significance of the Avenue of Honour.

7.3 Consideration of other options for renewal

In developing the Preservation Plan, three replacement strategies were considered and assessed. These include the chosen infill strategy, and block and complete renewal strategies. While all strategies have advantages and disadvantages, the infill strategy was considered to have the least impact on the significance of the Avenue of Honour and was therefore the preferred strategy for renewal.

The block strategy would have a significant impact on the landscape in the area where tree removal occurs. It results in an area of trees removed simultaneously and replaced at once, resulting in large gaps in the avenue, impacting the visual cohesion and continuity of the avenue. It also results in a 2-tiered appearance until the new trees reach maturity. This strategy has been used in the past, such as the 1960s removal and replanting – the visual impact evident in an historic aerial at Figure 4.

The complete renewal strategy would have a substantial impact on the landscape. It would require removal of all trees simultaneously, effectively removing the avenue of honour in entirety until the trees reach maturity. This approach would have the largest visual impact. Logistically, it would also require a large number of a propagated stock and spare stock for trees that do not take, which would be more difficult to source.

The infill strategy has minimal impact on the landscape, particularly where advanced nursery stock is pre-ordered. While it can be difficult to establish the replacement trees, requires additional ongoing management and maintenance to ensure trees establish and grow, and the overall renewal program is extended over a larger period of time, it also has the least amount of visual impact as it spaces out the removal of trees to maintain the canopy cover and continuity across the broader avenue. The dispersed nature of the removals and replacement helps reduce noticeable gaps and when spread over a period of time, results in a more natural, graduated staggering of trees as they mature. This approach prioritises the aesthetic qualities of the avenue, balanced with the logistical challenges in replacing the trees.

As such, the adopted infill approach has been carefully considered and assessed against other options and is considered to be the most appropriate approach to a long-term renewal program that will minimise long term and overall impacts on the visual qualities of the avenue of honour and its cultural heritage significance as a whole.

7.4 Recommended permit conditions

In the letter dated 16 October 2023, Heritage Victoria indicated potential permit conditions should a permit for the 10-year renewal program be granted. The conditions are as follows:

- the submission of a tree removal and replanting plan for each year of the life of the permit (this would need to be surveyed to ensure the trees were being replaced in the same locations)
- a plaque management plan

- a tree establishment plan
- a tree protection and management plan for retained sections of trees
- signed contract or agreement with the nursery growing on the replacement trees with a contingency of 20% for each planting stage, prior to tree removal
- interpretation strategy for temporary and permanent interpretation of the avenue
- update of the Management Plan after 5 years to guide the following 5 years of replacements.

Council is fully supportive of the recommended conditions outlined above, most of which comprise information already required by the 2023 Preservation Plan to implement the plan.

8.0 Conclusion

In summary, the current proposal is for the first ten years of proactive removal of trees that have deteriorated in condition and have reached or are near reaching their end of life in the Bacchus Marsh Avenue of Honour, in accordance with the Bacchus Marsh Avenue of Honour Preservation Plan and Management Strategy 2023. The works are required for the longevity of the avenue and to ensure that any risk to public safety is minimised.

The proposal adopts a proactive but cautious approach that is informed by regular inspections of tree condition. An infill replacement strategy will be used to minimise visual impacts on the avenue and is considered the most appropriate strategy in comparison to other options. Council will continue its cyclical maintenance regime to ensure that the life of the avenue trees is extended as best possible and to reduce the need for reactive removals, which can have a greater visual and physical impact on the avenue.

Impacts on the Avenue of Honour have been minimised through the careful preparation of the Preservation Plan which considers the avenue's heritage significance and risks and issues associated with its management, and by considering other options for renewal strategies, adopting a strategy which allows for the staggering of tree removals both physically and over time to minimise gaps in the avenue, will replace trees with like for like detail using young trees that are propagated from bud material collected from the original tree, and by taking measures to minimise physical impacts during the works, including the preparation of site safety and management plans, an appropriate works methodology in accordance with the relevant Australian Standards and having a qualified arborist oversee the works.

The proposal will also undertake strategic removals to reverse inappropriate replacements with incorrect species or in incorrect locations to restore historical accuracy and will carefully remove, store, protect and reinstate extant plaques as part of the works.

These measures ensure that the proposal will not have an adverse impact on the significance of the Avenue of Honour, and the minimal visual impacts will be temporary in nature. It is a thorough and well-considered proposal that places the significance of the place at the forefront of decision making and ensures the avenue will be maintained in perpetuity for future generations.

