



ACHM

AUSTRALIAN CULTURAL
HERITAGE MANAGEMENT

European Cultural Heritage Assessment.

Kilmore- Wallan Bypass Historical
Assessment. Heritage Victoria Report
4066

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By: Vicki Vaskos, Laura Donati and Fiona Schultz

Date: 19 November 2012

Client Name: VicRoads

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The professional advice and opinions contained in this report are those of the consultants, Australian Cultural Heritage Management (Victoria) Pty Ltd, and do not represent the opinions and policies of any third party.

The professional advice and opinions contained in this report do not constitute legal advice.

Spatial Data

Spatial data captured by Australian Cultural Heritage Management (Victoria) Pty Ltd in this report for any newly recorded sites has been obtained by using hand held or differential GPS units using the GDA94 co-ordinate system.

Abbreviations

Term	Meaning
AAV	Aboriginal Affairs Victoria, Department of Planning and Community Development
ACHM	Australian Cultural Heritage Management (Victoria) Pty Ltd
Activity Area	Investigation area, all five options combined
AHA 2006	Victorian Aboriginal Heritage Act 2006
AHR 2007	Victorian Aboriginal Heritage Regulations 2007
BP	Before Present
CHA	Cultural Heritage Assessment
CHM	Cultural Heritage Management
HV	Heritage Victoria
In Situ	In archaeology, in situ refers to an artefact or an item of material culture that has not been moved from its original place of use, construction or deposition
KWB	Kilmore Wallan Bypass
KWBE	Kilmore Wallan Bypass Examination
LGA	Local Government Area
Newly recorded site	Site recorded as part of the Kilmore Wallan Bypass Examination (both Phase 1 and 2)
Previously Recorded Site	Site located as part of previous unrelated fieldwork
Taungurung	Taungurung Clans Aboriginal Corporations
RAP	Registered Aboriginal Party
VicRoads	Roads Corporation

Acknowledgements

ACHM would like to acknowledge and thank the following people:

Jeremy Smith (Heritage Victoria)

Executive Summary

Aims and Objectives of the Project

This Cultural Heritage Assessment has been prepared for VicRoads.

This Cultural Heritage Assessment (CHA) is being prepared to investigate the activity area for matters of post-contact archaeological and historical significance.

Nature and extent of proposed activity

VicRoads propose to construct a bypass around the townships of Kilmore and Wallan, which links the Northern Highway to the north of Kilmore with the Hume Freeway.

The bypass construction will involve:

- Construction of a 2-lane 2-way road, with further land acquired to allow for future capacity enhancements if required;
- civil works and a variety of structural works that include large culverts, creek crossings, a rail crossing, pedestrian underpasses and major interchanges; and
- clearing of vegetation, general earthworks (including topsoil stripping, excavation, filling and topsoil spreading), relocation of utility services, drainage installation, landscaping, installation of traffic controls, lighting and signage.

The activity area comprises of five (5) bypass options, which are located in the towns of Kilmore and Kilmore East. The five options that are the subject of the Kilmore Wallan Bypass assessment are:

1. Sunday Creek Road;
2. Dry Creek Road;
3. O'Gradys Road;
4. Quinns Road; and
5. Western Option.

The corridors for investigation purposes cover approximately 928 ha. The functional design for the road and bridge works shows a development footprint for the ultimate duplicated facility as listed below for each

option:

- Dry Creek – 165 ha
- Quinns Rd – 173 ha
- O'Gradys Rd – 166 ha
- Western – 197 ha
- Sunday Ck – 149 haa

Route Length:

The length of each option is as follows:

- Dry Creek – 11.2 km
- Quinns Rd – 12.7 km
- O'Gradys Rd – 12.3 km
- Western – 17.1 km
- Sunday Ck – 11 km

The activity area, which lies approximately 60 kilometres north of Melbourne, encompasses a roughly rectangular area of land between Wandong and Broadford.

Desktop Assessment

No previously existing historic sites were located within the activity area during the desktop assessment. A total of 95 historic sites were previously recorded within the region.

The majority of previously recorded sites are located within the urban areas that lie within the study area, with only a limited number of agricultural or private sites being located outside the major town centres. As the majority of the activity area has survived modern urban development there is a low to moderate likelihood that previously unrecorded historical sites may have been preserved within the activity area. Given that the activity area consists of agricultural land, both currently as well in the European historic past, it is more likely that structures that facilitate this agricultural land use may be preserved.

Survey and Preliminary Recommendations

The first phase of fieldwork was carried out between 6 February and 14 February 2012 by ACHM archaeologists Vicki Vaskos, Jennifer Chandler and Edward Turner together with traditional owner representatives Mick Harding, Rodney Monk, Shane Monk and Chris Hume from the Taungurung. The second phase of fieldwork was carried out between 3 October - 10 October 2012 and on 23 October by ACHM archaeologists Vicki Vaskos, Erica Walther, Fiona Schultz and Edward Turner together with traditional owner representatives Mick Harding and Rodney Monk from the Taungurung.

The activity area was inspected for the presence of archaeological sites and areas of cultural heritage sensitivity. Ground surface visibility across a majority of the activity area was extremely poor (<10 %) due to dense grass cover. Portions of the ground surface were exposed due to stock movement, ploughing and erosion around waterways.

No archaeologically significant historic sites were located during the survey. Therefore, no further historic or archaeological assessment is required.

A single memorial of local significance, the Beuhne memorial, was identified during the survey, which is located on the Broadford Kilmore Road in the north of the investigation area. The memorial lies each of the five bypass options and is impacted by the earthworks footprint.

If impact to this structure cannot be avoided, then consultation with Mitchell Shire Council prior to any impact to the memorial will be required.

Based on the assessment of each option according to the VicRoads rating assessment criteria, each of the five options have the same impact on European cultural heritage. No historic sites of state significance were located in these options however one site of local significance (the Beuhne Memorial) is located in each five of the options. Based on this all five options are rated Negligible [0] (according to the VicRoads rating assessment methodology).

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1 Introduction

Cultural heritage sites or places represent a tangible or intangible record of human interactions within the landscape. The daily activities of humans throughout the millennia survive as the archaeological record across the continent. In Victoria, these sites or places provide evidence of approximately 30,000 years of Aboriginal occupation prior to the arrival of Europeans, and also evidence of the more recent past since European settlement.

Throughout most jurisdictions in Australia, cultural heritage sites or places are protected by either state or commonwealth heritage legislation, or a combination of both. All the historical archaeological sites in Victoria older than 50 years are protected under the *Heritage Act* 1995 (Vic) regardless of whether they are recorded by Heritage Victoria.

According to Section 1 of the *Heritage Act*, one of the main purposes of that Act is to provide for the protection and conservation of places and objects of cultural heritage significance and the registration of such places and objects.

Section 131 of the *Heritage Act* states the legislative requirements for archaeological surveys. Following is Section 131 of that Act:

Section 131 (1) A person who undertakes an investigation or survey of any land for the purposes of finding an archaeological site or relic must—

(a) notify the Executive Director of his or her intention to undertake an investigation or survey prior to the commencement of the investigation or survey; and

(b) provide all site documentation collected in the investigation or survey to the Executive Director.

Penalty: In the case of a natural person: 120 penalty units.

In the case of a body corporate: 240 penalty units.

(2) In this section, site documentation includes site records, photographs, maps, plans and field notes and any prescribed documentation relating to the investigation or survey of the site.

1.1 Project Background

This Cultural Heritage Assessment (CHA) was commissioned by VicRoads.

In undertaking the Kilmore - Wallan Bypass assessment VicRoads have engaged ACHM (Vic) to assess the broad study area for matters of both European and Aboriginal cultural significance. This information will then be compiled into a report that will assist VicRoads determine the most appropriate alignment whilst considering these and other factors.

1.2 Individuals/ Organisations undertaking the study

The field assessment and writing of this assessment was undertaken by Australian Cultural Heritage Management (Victoria) Pty Ltd.

Dr Shaun Canning supervised all aspects of this project. Vicki Vaskos and Fiona Schultz undertook the desktop assessment. Vicki Vaskos, Jenni Chandler and Edward Turner undertook the survey. All geospatial data was prepared by Sarah Turner and Russell Pilbeam. Laura Donati undertook historical research. Vicki Vaskos is the primary author. Erica Walther and Matthew Wilson assisted with the assessment and QA of the report.

The supervisor of this assessment is:

- Dr Shaun Canning is senior archaeologist and anthropologist and a General Manager of the consulting firm Australian Cultural Heritage Management (Vic) Pty Ltd. (ACHM), which specializes in cultural heritage assessment, expert advice, management of complex and large-scale cultural heritage management projects (both primarily in relation to Australian Indigenous culture and heritage), native title research, Indigenous community development issues, geographic information systems, cartography and analysis. Dr. Canning holds a Bachelor of Arts degree majoring in Cultural Heritage Studies and Anthropology, a Bachelor of Applied Science (Hons) degree in Parks, Recreation and Heritage, and a PhD in Australian Indigenous Archaeology (La Trobe), specialising in predictive modelling and cultural heritage management in the Melbourne metropolitan area. Shaun has extensive experience in Indigenous cultural heritage management in the resources and public land management sectors, alongside considerable experience in community consultation and Aboriginal education. Shaun has particular expertise in the use of GIS and predictive modelling in archaeological, cultural and natural heritage management contexts. Shaun is active in many professional associations, and is currently National Webmaster of the Australian Association of Consulting Archaeologists Inc. Shaun is a Fellow of the Australian Anthropological Society (FAAS) and a Full Member of the Australian Association of Consulting Archaeologists Inc. (MAACAI).

The authors of this assessment are:

- Vicki Vaskos is an archaeologist at Australian Cultural Heritage Management (Vic.) Pty Ltd. (ACHM). Vicki has completed a Bachelor of Arts degree with Honours, majoring in Classical Studies and Archaeology, at The University of Melbourne (2005). Vicki has also completed a Bachelor of Laws with Honours at Monash University (2010), and was admitted to legal practice in March 2011. Since early 2011 she has worked on archaeological surveys and excavations throughout Victoria and Western Australia. Vicki is a qualified cultural heritage advisor and archaeologist in accordance with the requirements of Section 189 (1) of the Aboriginal Heritage Act 2006.
- Laura Donati has completed both Honours and Master degrees in Arts, specialising in Australian history. Laura's extensive experience as a professional historian has enabled her to work with a wide variety of communities and organisations and also publish a number of historical works.
- Fiona Schultz has completed a Bachelor of Archaeology degree at La Trobe University (2011). Since 2006 she has worked on archaeological projects in Victoria, Western Australia and has also participated in academic surveys in Ghana, West Africa.

1.3 Methodology

The background research identified 96 previously recorded historic sites within the region. None of the sites occur within or are immediately adjacent to the activity area.

Most of the previously recorded sites are located within the urban areas within the study area, with only a limited number of agricultural, quarry or private sites located outside the major town centres.

As the majority of the activity area has not been subjected to modern urban development, there is a low to moderate likelihood that previously unrecorded historical sites may have been preserved within the activity area. The background assessment determined that given the assessment area consists of agricultural land (both currently and in the European historic past), it is more likely that structures that facilitate this agricultural land use may be preserved.

1.4 Survey

The fieldwork component of this assessment, comprising a pedestrian archaeological survey, was completed in partnership between ACHM (Vic) Vicki Vaskos (Archaeologist, Cultural Heritage Advisor), Jennifer Chandler (Archaeologist, ACHM), Erica Walther (Archaeologist, ACHM), Fiona Schultz (Archaeologist) and Edward Turner (Archaeologist, Cultural Heritage Advisor) and representatives of the Taungurung Mick Harding, Rodney Monk, Shane Monk and Chris Hume.

A systematic surface survey, using a pedestrian transect methodology, was carried out across the entire activity area. Specific attention was paid to areas of higher ground surface visibility.

The survey was undertaken in two phases. Subsequent to the completion of the first phase of fieldwork, amendments were made to the activity area, which included an additional western option. These additional areas, including the new western option, were surveyed during the second phase of fieldwork (See Map 5).

The first phase of the field survey was carried out between 6 February and 14 February 2012 by ACHM archaeologists and qualified cultural heritage advisors Vicki Vaskos, Jennifer Chandler and Edward Turner

together with traditional owner representatives Mick Harding, Rodney Monk, Shane Monk and Chris Hume from the Taungurung. The second phase of the field survey was carried out between 3 October - 10 October and on 23 October 2012 by ACHM archaeologists and qualified cultural heritage advisors Vicki Vaskos, Erica Walther, Edward Turner and Fiona Schultz together with traditional owner representatives Mick Harding and Rodney Monk.

1.5 Nature and Extent of the Activity Area

This report presents the results of a historical cultural heritage assessment for the Kilmore Wallan Bypass.

VicRoads propose to construct a bypass of the townships of Kilmore and Wallan linking the Northern Highway to the north of Kilmore with the Hume Freeway (See Map 1-1).

The activity area encompasses a roughly rectangular area of land between Wandong and Broadford and comprises of five (5) bypass options, which are located in proximity to the towns of Kilmore and Kilmore East (See Map 1-2). The five options that are the subject of the Kilmore Wallan Bypass assessment are:

1. Sunday Creek Road;
2. Dry Creek Road;
3. O'Gradys Road;
4. Quinns Road; and
5. Western Option.

The corridors for investigation purposes cover approximately 928 ha. The functional design for the road and bridge works shows a development footprint for the ultimate duplicated facility as listed below for each option:

1. Dry Creek – 165 ha
2. Quinns Rd – 173 ha
3. O'Gradys Rd – 166 ha
4. Western – 197 ha
5. Sunday Ck – 149 ha

Route Length:

The length of each option is as follows:

1. Dry Creek – 11.2 km
2. Quinns Rd – 12.7 km
3. O'Gradys Rd – 12.3 km
4. Western – 17.1 km
5. Sunday Ck – 11 km

The bypass construction will involve:

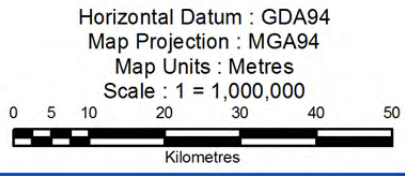
- Construction of a 2-lane 2-way road, with further land acquired to allow for future capacity enhancements if required;
- civil works and a variety of structural works that include: large culverts, creek crossings, a rail crossing, pedestrian underpasses and major interchanges; and
- clearing of vegetation, general earthworks (including topsoil stripping, excavation, filling and topsoil spreading), relocation of utility services, drainage installation, landscaping, installation of traffic controls, lighting and signage.

The proposed activity will involve ground disturbance, as construction of the new carriageways will involve both 'cut' and 'fill' earthworks. These will necessitate the stripping of topsoil within the designated construction zone, thus disturbing Aboriginal cultural material that may be located on the surface and within shallow subsurface deposits.

The works associated with the road duplication are summarised below:

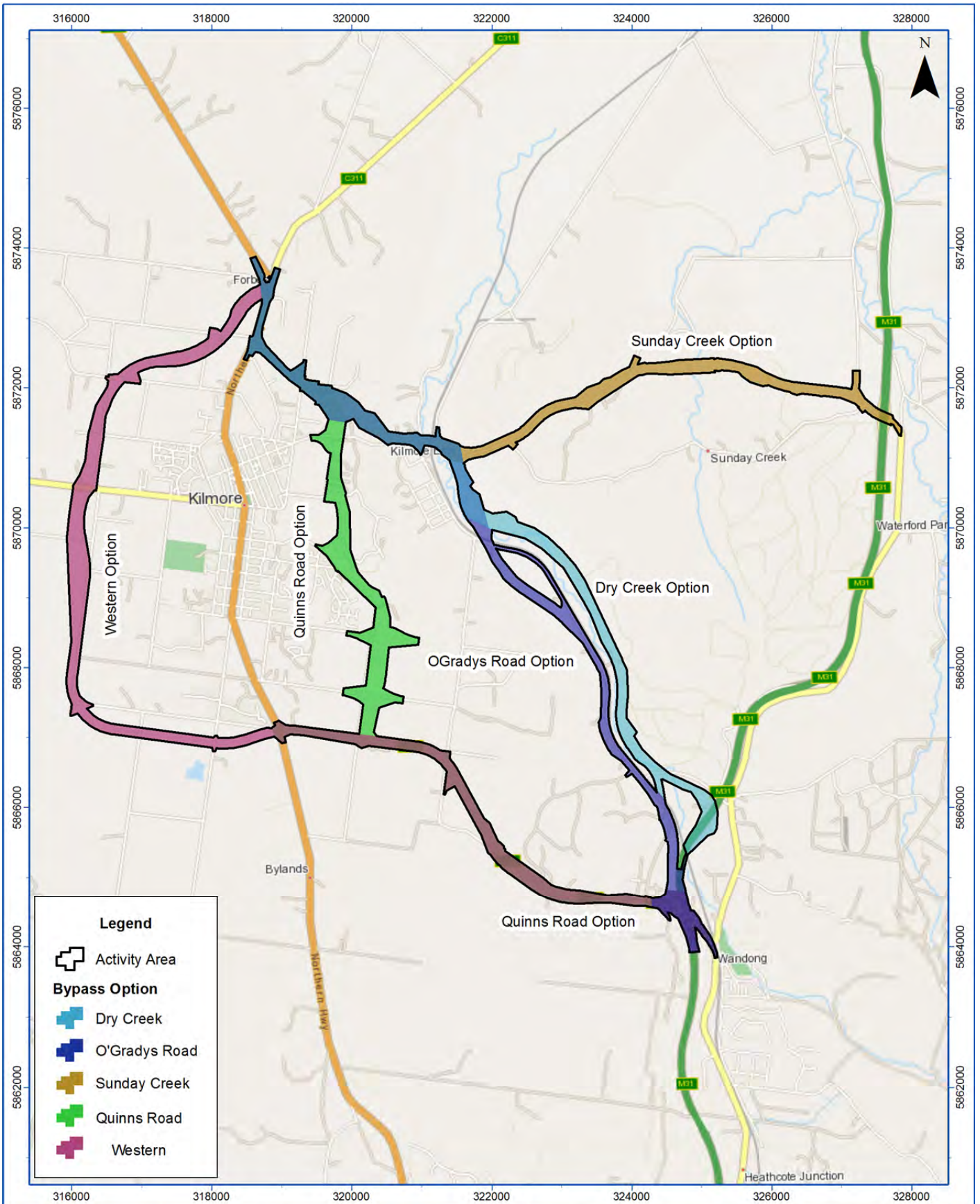
- Road construction – highway, services roads and property access;
- Site offices and stockpile sites;

- Structural works (including major culverts, creek and rail crossings, pedestrian underpasses and major interchanges);
- Utility/service relocation;
- Installation of traffic controls;
- Drainage works;
- Landscaping;
- Clearing of vegetation;
- Car Parking;
- Temporary/realigned property access;
- Earthworks – cut and fill ;
- Installation and lighting and signage.



Cultural Heritage Assessment for the Kilmore - Wallan Bypass	
General Location Map	
Source Document : VR08-General Location Rev2	PMD : VR08-PMD-026
Published : Joshua on 19/11/2012	

Map 1-1: General Location Map



 <p>ACHM AUSTRALIAN CULTURAL HERITAGE MANAGEMENT</p>	<p>Horizontal Datum : GDA94 Map Projection : MGA94 Map Units : Metres Scale : 1 = 75,000</p>  <p>0 500 1,000 2,000 Metres</p>		<p>Cultural Heritage Assessment Kilmore - Wallan Bypass</p>	
			<p>Activity Area</p>	
<p>Source Document : VR08-Activity Area - Phase 2 Rev 2 Published : Joshua on 16/11/2012</p>			<p>PMD ID : VR08-PMD-022</p>	

Map 1-2: Map showing the activity area.

2 Background Information

The assessment was undertaken by Vicki Vaskos and Fiona Schultz and consisted of a review of the natural and historic background of the activity area.

2.1 Environmental Background

This background assessment included a review of the physical context and natural resources present within the activity area. These environmental factors affect how people used the landscape in the past. This information is used to gain an understanding of past human behaviours and provides an indication of where archaeological sites and heritage places may be located within the landscape. These environmental factors are summarised below.

2.1.1 Geology and Geomorphology

The activity area lies on the dissected uplands within the Eastern and Western Victorian Uplands land system. The East Victorian Uplands land system is characterised by mountains and hills and sedimentary rock. Generally, the ridge tops in this system have become more convex and their elevations are low (Victorian Resources Online, 2012). In general, the landscapes of the Palaeozoic sedimentary rocks, of the Western Victorian Uplands system, are characterised by undulating low hills dissected by a dendritic drainage pattern (Victorian Resources Online, 2012).

The underlying geology of the eastern section of the activity area comprises predominantly of Upper Silurian deposits of Kilmore Siltstone (Sxk), with smaller areas of Quaternary unnamed colluvium (Qc1) (Department of Sustainability and Environment 2011). The underlying geology of the western section of the activity area comprises of Quaternary Unnamed colluvium (Qc1), Quaternary unnamed incised colluvium (Nc1), Quaternary Unnamed sheetflow basalt (Qno1) and a Neogene Pintadeen Basalt(Nx1) (Department of Sustainability and Environment 2011).

The geology of the activity area contains sheet flow basalt formed through sedimentary and extrusive volcanic processes of a Neogene (Miocene) age. These deposits are predominantly olivine basalt with minor scoria and ash layers (Department of Primary Industries 2011). These volcanic flows overlie Late Silurian (c.420 MYA) deep marine siltstone and sandstones. The Miocene period is relatively recent in geological terms (5.3-23.0 MYA), however the date of this geological feature predates the Quaternary, which includes the human occupation of Australia (2.6MYA).

The activity area is intersected by Dry Creek, Nanny Creek, Kilmore Creek and Broadhurst Creek. Several minor watercourses drain into these creeks and intersect the activity area. These creeks are incised channels flanked by deposits of Quaternary (Holocene) fluvial alluvium, including gravel, sand and silt. Quaternary (Pleistocene and Holocene) colluvial deposits are also located beside Dry Creek.

2.1.2 Topography

The activity area is characterised by rises, ridges and drainage lines. The landscape contains flats, low and moderate rises with crests and both gentle and steep gradients. Beyond the large rivers and creeks, which follow channels incised into the underlying basalt flow, drainage is only slightly incised. The top of the rises in the activity area affords views of the surrounding terrain and valleys.

2.1.3 Hydrology

The most dominant hydrological features within the activity area are Dry Creek, Nanny Creek, Kilmore Creek and Broadhurst Creek, and their associated tributaries. The Kilmore Creek is one a series of tributary watercourses of the Goulburn River.

Given that the activity area is dominated by hydrological features, it is considered likely that water was perennially available within the current activity area, and generally throughout the geographic region.

2.1.4 Vegetation Regime

The activity area is located within the Central Victorian Uplands Bioregion and the Highlands - Northern Fall (Department of Sustainability and Environment 2011).

The modelled pre-1750 (pre-settlement) *Ecological Vegetation Classes* (EVCs) indicate that prior to European settlement the activity area was likely to have contained forests (EVC 47 (Valley Grassy Forest), EVC 23 (Herb-rich Foothill Forest), EVC 22 (Grassy Dry Forest) and EVC 18 (Riparian Forest). The 2005 EVC's note that there is

some remnant Herb Rich Foothill Forest (EVC 23), Grassy Dry Forest (EVC 22) and Valley Grassy Forest (EVC 47). Species typical of these EVC classes are listed below:

- Species typical of Grassy Dry Forest (EVC 22) include *Acacia dealbata*, *Epacris impressa*, *Hovea heterophylla*, *Pimelea humilis*, *Acacia aculeatissima*, *Senecio tenuiflorus*, *Gonocarpus tetragynus*, *Viola hederacea* sensu Willis, *Hypericum gramineum*, *Dichondra repens*, *Hydrocotyle laxiflora*, *Goodenia lanata*, *Joycea pallida* Silvertop, *Poa sieberiana*, *Lomandra filiformis*, *Dianella revoluta* s.l., *Microlaena stipoides* var. *stipoides*, *Pteridium esculentum* and *Hardenbergia violacea*.
- Species typical of Herb-rich Foothill Forest (EVC 23) include *Acacia dealbata*, *Hovea heterophylla*, *Acrotriche prostrata*, *Wahlenbergia stricta*, *Senecio tenuiflorus*, *Senecio minimus*, *Senecio quadridentatus*, *Stellaria pungens*, *Viola hederacea* sensu Willis, *Acaena novae-zelandiae*, *Dichondra repens*, *Hydrocotyle laxiflora*, *Lomandra longifolia* ssp. *Longifolia*, *Lomandra filiformis* ssp. *Coriacea*, *Luzula meridionalis* var. *flaccida*, *Austrodanthonia pilosa*, *Poa ensiformis*, *Microlaena stipoides* var. *stipoides*, *Poa tenera*, *Echinopogon ovatus*, *Pteridium esculentum*, *Asplenium flabellifolium*, *Clematis aristata*, *Glycine clandestine*, *Billardiera scandens* var. *scandens* and *Hardenbergia violacea*.
- Species typical of Riparian Forest (EVC 18) include *Pomaderris aspera*, *Acacia melanoxylon*, *Prostanthera lasianthos*, *Olearia lirata*, *Coprosma quadrifida*, *Cassinia aculeate*, *Acrotriche prostrata*, *Senecio minimus*, *Senecio linearifolius*, *Acaena novae-zelandiae*, *Stellaria pungens*, *Geranium potentilloides*, *Dichondra repens*, *Lobelia pedunculata* s.l., *Leptinella filicula*, *Lomandra longifolia*, *Carex appressa*, *Lepidosperma elatius*, *Poa labillardierei*, *Tetrarrhena juncea*, *Dianella tasmanica*, *Isolepis inundata*, *Microlaena stipoides* var. *stipoides*, *Poa tenera*, *Polystichum proliferum*, *Blechnum nudum*, *Pteridium esculentum*, *Adiantum aethiopicum*, *Clematis aristata*.
- Species typical of Valley Grassy Forest (EVC 47) include *Acacia melanoxylon*, *Acacia dealbata*, *Daviesia leptophylla*, *Epacris impressa*, *Hovea heterophylla*, *Pimelea humilis*, *Dillwynia cinerascens* s.l., *Acacia aculeatissima*, *Acrotriche serrulata*, *Bossiaea prostrata*, *Senecio tenuiflorus*, *Senecio quadridentatus*, *Gonocarpus tetragynus*, *Drosera peltata* ssp. *Auriculata*, *Burchardia umbellate*, *Opercularia varia*, *Goodenia lanata*, *Poa labillardierei*, *Deyeuxia quadriseta*, *Lomandra filiformis*, *Poa sieberiana*, *Dianella revoluta* s.l., *Microlaena stipoides* var. *stipoides*, *Pteridium esculentum* and *Hardenbergia violacea*.

2.2 Historical Background

This historical background will examine the surrounding areas of Wallan and Kilmore, the two towns that sit approximately 60km north of Melbourne and will be affected by the Kilmore-Wallan bypass. There will be a specific focus on the role the Hume freeway (previously known as Sydney rd.) has had in the establishment of Kilmore and Wallan as townships.

During the post settlement period, the region was first traversed by the explorers, Hamilton Hume and William Hovell as they made their way overland from Sydney in search of a favourable stock route to Melbourne in 1824 (Pegram 2012). One of the first Europeans to settle in the Kilmore district was Charles Booney in 1837 when he established a sheep station, the only one within a twenty mile radius. Due to difficulties hiring labourers (partly because of the property's remoteness) he soon abandoned it and moved to nearby Mt Macedon (Knight 2008). Prior to his departure, though, his sheep station was the second overnight stop for the newly established mail courier service that ran between Melbourne and Sydney (Knight 2008). The site was also a popular resting place for many people travelling along the crudely constructed road to Sydney, a journey that was both arduous and long. The watering hole and shelter of the station were welcome relief, for both people and stock alike.

In 1837, Kilmore became an important stop in the mail route from Melbourne to Yass and later onwards to Sydney. Although the condition of the route along Sydney Road was anything but satisfactory, it must have been adequate to envisage a regular mail run, especially in wet weather when creek and river crossings became particularly perilous. This mail run became significant as it helped to set out the path that would one day become the Hume Freeway. It also provided the first direct and regular overland connection between Melbourne and Sydney (Anderson 1994)(Figure 2-1).



Figure 2-1: The cramped conditions of a country mail coach, c.1900 (Anderson 1994).

In 1841, William Rutledge purchased 5120 acres of Crown land as part of a Special Survey, for which he paid a pound an acre. The Special Survey made provisions for a township, with one or twenty acre plots. In time, Rutledge called the town Kilmore, after his hometown in Ireland (Pegram 2012). Soon after acquiring the land, Rutledge sought to sell off allotments, but the 1841 sales were hampered by a depression that had gripped the young colony. Unable to sell, he rented out much of his land. By 1843 the economic situation had improved and Rutledge was able to sell the remaining few allotments of his land (Knight 2008).

By 1843 the township of Kilmore was well established. It soon became the colony's first inland Catholic diocese (1849) and Anglican parish (1850)(Pegram 2012). Proximity to the Sydney Road and to fresh and reliable water sources made it an appealing town for many, as did its rich soils (Knight 2008). Agricultural activities were pursued, such as wheat production, and by 1851, the surrounds of Kilmore were cultivating some three thousand acres of wheat. As a result, the town boasted three flour mills, the first of which was constructed in 1847 (Knight 2008). The position of the mills were important as it meant that locals no longer had to travel to Melbourne or elsewhere to access a flour mill (Birkett-Rees and Thiele 2010). Other commercial enterprises also flourished. Businesses serving the passing traffic along Sydney Road sprung up, from boot makers and boarding houses to live stock keepers and blacksmiths (Knight 2008). A maximum security gaol (1859) and St Patrick's Catholic Church (1857-62) were established as was Kilmore's own newspaper which was named 'The Kilmore Standard of Freedom'. In 1865, the township's population had reached two thousand (Birkett-Rees and Thiele 2010).

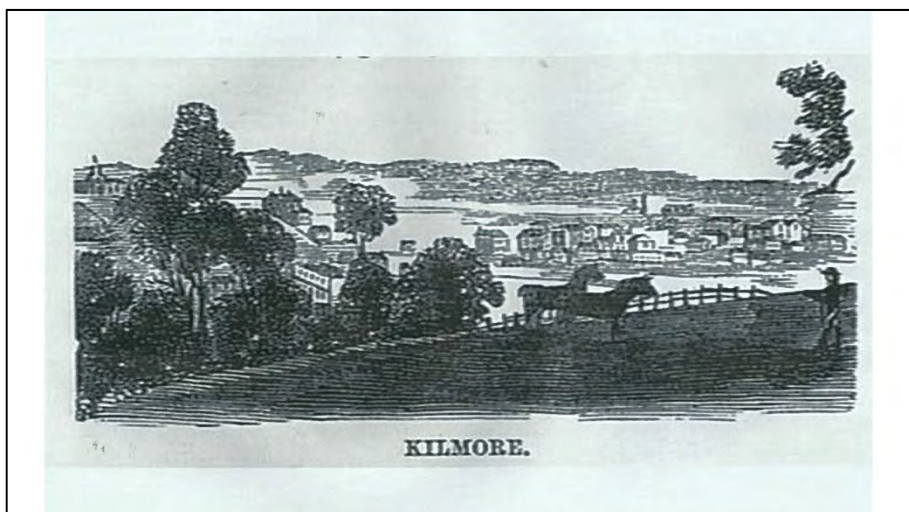


Figure 2-2: A wood engraving of Kilmore, 1873 (Anonymous 1873).

As time progressed and the new century advanced, Kilmore and surrounds relied heavily on agricultural production. Wheat continued to be one of the main crops, together with potatoes, hay, peas, turnips, oats and barley (Birkett-Rees and Thiele 2010). Dairying was also a popular pursuit and by 1891 the old Kilmore gaol was transformed into a butter factory, thereby utilising milk produced in the region.

Perhaps wishing to instil some order in Kilmore, the government surveyed a new town centre in 1851 and within months, some of the allotments were auctioned. To differentiate this from the 1841 town of Rutledge's privately owned Special Survey, it became known as the New Township or Government Survey for many years (Knight 2008). The two neighbouring town centres joined together to form a larger centre, with the New Township becoming the business and administrative heart of Kilmore. Befitting its status, the new part was where the post office (1861) and courthouse (1864) were located. Today, approximately forty of Kilmore's historic buildings are listed on the Register of the National Estate (Pegram 2012).

Unlike Kilmore, the rise of the township of Wallan, in the parish of Wallan Wallan, was more modest. Fifteen years after Kilmore received a post office, Wallan's post office opened in 1858. The first church, a simple wooden construction costing £71, was built in 1865 by the Methodists (Environment 1999; Goodman 2008).

The young Port Phillip District was irreversibly changed by the discovery of gold in Ballarat in the early 1850s. Kilmore, Wallan and other small towns became nearly overrun with miners, storekeepers and a plethora of other people as they sought their way to the gold fields along the old Sydney Road. Four hundred people alone were said to have hurried to the Reedy Creek diggings in 1858 (Department of Natural Resources & Environment). Gold was even unearthed in Kilmore, as well as Reedy Creek (1858 to 1890s), Strath Creek and Parrot Creek, all of which are located just to the north west of Wandong (Environment 1999). In 1866, the lucrative Sunday Creek gold (approximately nine miles south east of Kilmore) was found. By 1874 little gold was unearthed (Environment 1999). As a direct result of gold fever, Melbourne's population swelled from 29,000 in 1851 to 123,061 just a decade later (Goodman 2008). Thus, the road networks, from poorly constructed roads to bush tracks, became ever important as did the towns along the path that serviced the travellers.

Today, the Hume Freeway, or National Highway M31 as it is officially called, is a 303 kilometre road that, in Victoria, stretches from Thomastown to Wodonga. From the New South Wales border, the road continues on to Sydney and retains the Hume Highway name. As a result, it is an important link between Australia's two principal cities, as well as connecting the many towns along its way.

Prior to the construction of the Hume Highway, the Sydney Road was the main northbound road from Melbourne (Figure 2-3). The first Sydney Road (now referred to as the Old Sydney Road) travelled via Yuroke to Kilmore. Sometime later, a new road was created that commenced at Pentridge (present day Coburg) and went north through Kalkallo (then called Rocky Water Holes), Beveridge and Wallan. Until government intervention, these roads were not rigid paths but rather fluid constructions and *"for generations 'the Sydney Road' referred not to a line of pavement, but to a roughly defined route along which travellers had many choices of track"* (Anderson 1994). This new route was gazetted and formalised in 1850 although no money was spent on its construction or repair until 1853-55 (Lemon, Broadmeadows et al. 1982). Even when money was had, work on the road was still difficult as gold mania had reduced the number of available men, resulting in a labour shortage and high wages (Lemon, Broadmeadows et al. 1982). One of the foremost motivations to construct the road was the heavy traffic of vehicles and pedestrians that travelled on it as they sought the easiest route to the goldfields of Bendigo and beyond (Anderson 1994).

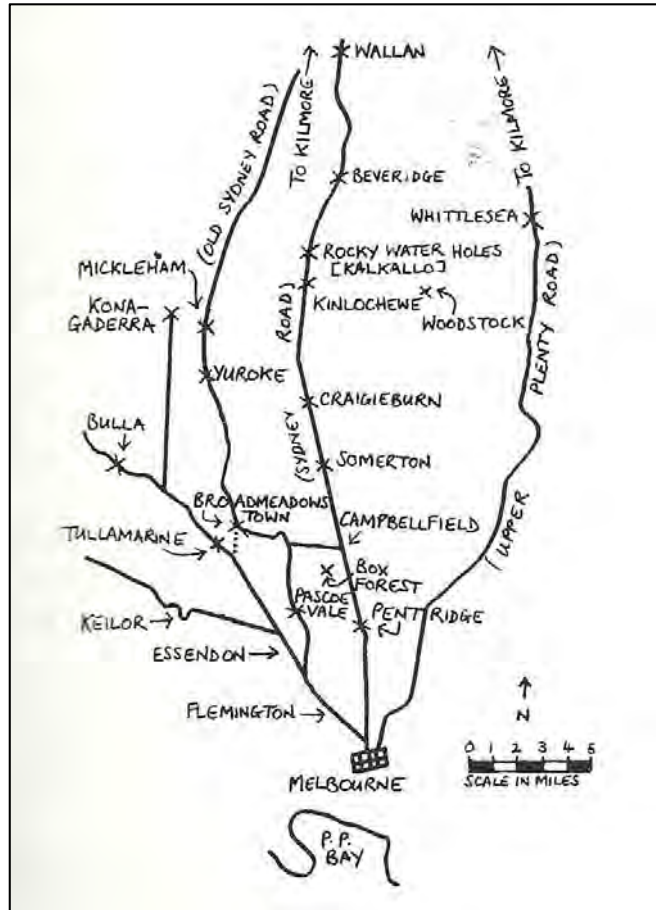


Figure 2-3: Various routes north from Melbourne in the 1850s. Note the different roads heading north towards Kilmore and Wallan (Lemon, Broadmeadows et al. 1982).

In 1914 the Central Roads Board was established with a mandate to oversee the planning, construction and maintenance of the state’s road networks. In its inaugural year, it proclaimed Sydney Road a main road and in 1928, the two lane thoroughfare was renamed the Hume Highway, after one of the area’s first explorers, Hamilton Hume. In 1976, the highway was upgraded to a freeway complete with four lanes (Rands 2002).

With the advent of the car, the thoroughfare was frequently improved and upgraded as the busy motorway continued to deteriorate. Large trucks and buses compromised the road’s surface as it was not designed to take such heavy loads, surfaces which were further ruined by the ever increasing number of cars traversing its length (Figure 2-4). Local residents became increasingly incensed about the heavy traffic passing through their towns. To counteract such resentment, a bypass from Wallan to Broadford commenced in 1976, followed by other bypasses, including that of Violet Town (1980) and Seymour (1982) (Rands 2002). The Wallan-Broadford bypass meant that the old stretch of the Hume from Wallan to the Northern Highway and Broadford-Kilmore intersection was no longer required. Instead, the new freeway would divert north of Beveridge, thereby circumventing Kilmore, Broadford and Wallan.



Figure 2-4: The Hume Highway in the days when it was known as Sydney Road. The road's poor condition is evident by the exposed foundation stones, 1914 (Anderson 1994).

Natural events have also shaped the development of the Kilmore and Wallan region. The roads in the Kilmore and Wallan region were subject to flooding as a number of creeks and rivers meander their way through the region, including the Kilmore and Broadhurst Creeks. The periodic inundation of water not only caused bridges and roads to collapse but also damaged homes and livelihoods. Such events occurred in 1860, 1899, 1906, 1910, 1931 and 1946 (Birkett-Rees and Thiele 2010). As well as the hazards caused by inundation, bushfires have also threatened the area. In 1851, Kilmore was encircled by flames, but the township remained unharmed. Other large fires occurred in 1883, 1906, 1913, 1914 and 1927. In 2009, Kilmore East was burnt by the 'Black Saturday' fires (Birkett-Rees and Thiele 2010).

Today, Kilmore retains its appeal as a country outpost. A significant number of people choose to reside in Kilmore and work in Melbourne, a journey of approximately sixty kilometres by either car or rail from Kilmore East (Pegram 2012). While some seventy per cent of Kilmore's surrounds are still given to grazing, subdivision and the ever present encroachment of the city will inevitably result in a decline of available grazing land in the near future (Pegram 2012).

In 2010, the Victorian Government announced its intention to construct a Wallan-Kilmore bypass by 2017. Presently, approximately 10,000 cars, trucks and buses pass through Kilmore and Wallan each day (ABC 2010). VicRoads (the government road authority responsible for planning and implementing the activity) is investigating five alternative routes, each chosen according to the benefits that may be gained for local residents and Hume Freeway users alike. In justifying the two lane bypass, the road agency explained that it would limit the traffic, especially that of heavy trucks, on the streets of Wallan and Kilmore. In doing so, the towns' main streets would be safer and easier for local residents to use.

2.3 Archaeological background

A number of regional and localised archaeological investigations have taken place in the Kilmore region since the early 1990s. These include regional studies taking in Kilmore and surrounds.

2.4 Previous Archaeological Heritage Studies

2.4.1 Historical Cultural Heritage Reports and Assessments

The Kilmore Heritage Study (Kilmore Council & Planning Collaborative (Vic) Pty Ltd 1982) was commissioned by the then Shire of Kilmore for the purpose of identifying elements of the built environment of Kilmore. The area assessed during this study comprised only the main town area of Kilmore and did not include outlying areas. A total of 129 buildings of significance were identified.

In 2000, an archaeological survey of a proposed water re-use plant was undertaken within the Parish of Moranding (Clarke, Thomson et al. 2000). The survey extended over the road reserve and the allotments 3, 4, 13, 14, 17, 18, and 25. As a result of the survey one site, Moranding House (VHI 7823-0042), was identified. This site consists of the ruins of the homestead as well as the remains of outbuildings, a cistern and a refuse area as well as a garden of pine, cypress and fruit trees.

In 2006 an archaeological survey of a proposed residential subdivision was undertaken at 114 George Street, Kilmore (Bell and Paynter 2006). The survey extended over approximately 45 acres. A number of historical sites were identified during the investigation including eight quarry locations and an artefact scatter. These sites were given a 'D' classification on the Victorian Heritage Inventory.

In 2001, an investigation of the proposed Northern Highway works was undertaken (Muir and Vines 2001). The investigation extended south of Kilmore. Three sites of local significance were identified as part of the survey: Inverloch Castle Inn (VHI H7823-0045), Pretty Sally Culverts (VHI D7823-0044) and Kilmore Creek Bridge (VHI D7823-0046). Of these, only Inverloch Castle Inn was granted statutory protection. This site consists of the ruins of a castle and iron sheds as well as a stock run. The castle was built in 1855 by Angus Cameron and later taken over by John Lattan. It functioned both as a hotel and as Cobb and Co staging post as it was at a convenient stopping point both on the goldfields route and on the Melbourne to Sydney route.

Clark et al. (2006) undertook a survey and assessment of a section of the Northern Highway between the intersection of the Hume Highway and the south of Kilmore. The following new historical sites were identified:

- Quillinan House Ruin (VHI H7823-0059). This is a weatherboard homestead with an associated brick and bluestone outbuilding and well.
- Former Quillinan Family Cottage (VHI H7823-0060). This is a standing brick cottage with mature conifers.
- Union Lane Quarry (VHI D7823-0061);
- Big Hill Hotel site (VHI H7823-0064). This is the location of a 1860s hotel site which consists of a raised area, aged conifers, some fragments of hand-made bricks.
- Northern Highway Quarry, Bylands. This consists of two quarry areas. (VHI D7823-0062);
- Former Union Hotel (VHI H7823-0063).

In addition to these, a number of historical features were also recorded but not registered on the Victorian Heritage Inventory. These features include drystone walls, a historic artefact scatter and a historically scarred tree (Clarke et al 2006: 20-24).

In 1999, a study was undertaken in the Kilmore-Yea region to document gold mining sites (Department of Natural Resources and Environment 1999). The desktop study identified a number of mining sites, all of which are outside of the current activity area. Mining operations were active in this area between the 1850s and the 1890s. There were numerous but insignificant finds in Willowmavin, west of Kilmore, as well as on King Parrot Creek, Strath Creek, Reedy Creek and Prices Creek which all lie to the east of Kilmore. A survey was undertaken to investigate and record these historically documented mining areas. As a result one site was included on the Victorian Heritage Inventory and an additional six sites were noted as having local significance. The Captains Reef Quartz Roasting Kilns (HI 7923-0038) was in use between 1860 and 1866 and consists of two small stone lined roasting bowls and an ore processing area. The remaining sites, which were found to have only local significance have no statutory protection. They include five reef workings and a water race.

In 2006, a heritage assessment was undertaken over the entirety of the Mitchell Shire (Huddle 2006). The study area included Kilmore, Broadford and Seymour and several smaller towns including Pyalong, Tallarook, Tooborac, Wallan, and Wandong. The aims of the study were to identify post-colonial places of cultural

significance, to develop heritage precincts and to develop a thematic study of the area. As a result of this study, 58 heritage places were discovered and recorded in addition to the 52 that were already known. It was recommended that all 110 places were protected on the heritage overlay.

2.4.2 Cultural Heritage Registers

The following Commonwealth and local registers were searched for any known heritage sites or places in the activity area on 10 January 2012, 24 July 2012 and on 24 September 2012. These included:

- The Victorian Heritage Register;
- Victorian Heritage Inventory;
- National Heritage List;
- Commonwealth Heritage List;
- Local Government Authority Planning Schemes;
- National Trust of Australia (Victoria) Register; and
- World Heritage List.

Ninety six previously recorded historic sites have been recorded within the region. None of sites occur within or are immediately adjacent to the activity area.

The following table (Table 2-1) summarises the number and type of previously recorded historical places within the region.

Site Number	Site Listing	Site Name	Site type	Site within activity area?
B5355 4414 HO77	National Trust Register of the National Estate Heritage Overlay	11 Powlett Street Kilmore	Residential building	No
B1615	National Trust	32 Main Road Kilmore	Residential building	No
B5350 4411 HO50	National Trust Register of the National Estate Heritage Overlay	86 Albert Street Kilmore	Residential building	No
4408 HO69	Register of the National Estate Heritage Overlay	Albion Mill (Former) 1 Old Mill Rd, Kilmore	Industrial Building	No
4412 HO90	Register of the National Estate Heritage Overlay	All Nations Hotel (Former) 38 Sydney St Kilmore	Leisure Building	No
HO103	Heritage Overlay	Assumption College Precinct	Precinct	No
B1614 4401 HO85	National Trust Register of the National Estate Heritage Overlay	Assumption College Sutherland Street Kilmore	Educational Building	No
B5352 4416 HO56	National Trust Register of the National Estate Heritage Overlay	Banool 18 Fitzroy Street Kilmore	Residential building	No
B5356 4426 HO79	National Trust Register of the National Estate Heritage Overlay	Bindley House 20-22 Powlett Street Kilmore	Residential building	No
B5354	National Trust	Broomhall Real Estate 1 Powlett Street Kilmore	Commercial Building	No
B5361 HO97	National Trust Heritage Overlay	Christ Anglican Church Church Street Kilmore	Religious Building	No
4395	Register of the National Estate	Christ Church Anglican Church Union St Kilmore	Religious Building	No
4398	Register of the National Estate	Church House Union St Kilmore	Residential building	No
4415 HO72	Register of the National Estate Heritage Overlay	Colonial Bank (Former) 1 Powlett St Kilmore	Commercial Building	No
4429	Register of the National Estate	Colonial Bank (Former) 39 Sydney St Kilmore	Commercial Building	No
4440	Register of the National Estate	Cushen House George St Kilmore	Residential building	No
B5983 4420	National Trust Register of the National Estate	Farm Complex Foote Street Kilmore	Agricultural Complex	No
B725 4434	National Trust Register of the National Estate	Former Kilmore Gaol 8 - 12 Sutherland Street Kilmore	Government Building	No
H1190 B1092 4425 HO73	Victorian Heritage Register National Trust Register of the National Estate Heritage Overlay	Former Kilmore Post Office 2 Powlett Street Kilmore	Government Building	No
B372 HO86	National Trust Register of the National Estate Heritage Overlay	Former Town Hall 16 Sydney Street Kilmore	Government Building	No
4439	Register of the National Estate	House 15 Powlett St Kilmore	Residential building	No
4435 68987 HO54	Register of the National Estate Heritage Overlay	House 16 Bourke St Kilmore	Residential building	No
4432 HO52	Register of the National Estate Heritage Overlay	House 44 Andrew St Kilmore	Residential building	No
4438 HO55	Register of the National Estate Heritage Overlay	House 5 Chapel St Kilmore	Residential building	No
4424 HO67	Register of the National Estate Heritage Overlay	House 52 Melbourne St Kilmore	Residential building	No
4423	Register of the National Estate	House 63 Fitzroy St Kilmore	Residential building	No
4436 HO60	Register of the National Estate Heritage Overlay	House 67 Fitzroy St Kilmore	Residential building	No
4422 HO64	Register of the National Estate Heritage Overlay	House 7 Gipps St Kilmore	Residential building	No
4419 HO70	Register of the National Estate Heritage Overlay	House 7 Piper St Kilmore	Residential building	No

Site Number	Site Listing	Site Name	Site type	Site within activity area?
B5360 HO96	National Trust Heritage Overlay	House (Former Church Rectory) Church Street Kilmore	Residential building	No
4409 HO95	Register of the National Estate Heritage Overlay	Hudsons Warehouse (Former) 85 Sydney St Kilmore	Industrial Building	No
4407 HO89	Register of the National Estate Heritage Overlay	Ian B Still And Co Building 32 Sydney St Kilmore	Commercial Building	No
H7823-0080	Heritage Inventory	Kilmore Brewery Complex Site 57 Melbourne Street Kilmore	Industrial Building	No
14209	Register of the National Estate	Kilmore Conservation Group		No
H1471 B728 4421 HO75	Victorian Heritage Register National Trust Register of the National Estate Heritage Overlay	Kilmore Court House 4 Powlett Street Kilmore	Government Building	No
HO102	Heritage Overlay	Kilmore Creek and Hudson Park Precinct	Precinct	No
H1685 B735 4405 HO51	Victorian Heritage Register National Trust Register of the National Estate Heritage Overlay	Kilmore District Hospital 1 Anderson Road Kilmore	Medical Building	No
H7823-0058 HO110	Heritage Inventory Heritage Overlay	Kilmore East Station Complex O'Gradys Road Kilmore East	Transport Building	No
N/A	War Heritage Inventory	Kilmore Memorial Hall 14 Sydney Street, Kilmore	War memorial	No
B4773 4410 HO76	National Trust Register of the National Estate Heritage Overlay	Kilmore Police Station 26 Powlett Street, Kilmore	Government Building	No
4413 HO66	Register of the National Estate Heritage Overlay	Kilmore Private Hospital (Former) Kilmore East Rd Kilmore	Medical Building	No
B2439 4433 HO58	National Trust Register of the National Estate Heritage Overlay	Kirkbrae 50 Fitzroy Street Kilmore	Residential building	No
HO104	Heritage Overlay	Lake Precinct	Heritage Overlay	No
4441 HO93	Register of the National Estate Heritage Overlay	London Mart 52 Sydney St Kilmore	Commercial Building	No
B5359 4404 HO94	National Trust Register of the National Estate Heritage Overlay	Mac's Hotel 57 Sydney Street Kilmore	Leisure Building	No
B5351 4400 HO53	National Trust Register of the National Estate Heritage Overlay	Masonic Hall (Former Church) Bourke Street Kilmore	Religious Building	No
4396	Register of the National Estate	Mechanics Institute 3 Powlett St Kilmore	Leisure Building	No
4406	Register of the National Estate	Melrose Farm Melrose Dr Kilmore	Residential building	No
B3381 HO68	National Trust Heritage Overlay	Melrose Hall Tootle Street Kilmore	Residential building	No
H7823-0042	Heritage Inventory	Moranding House Site Boundary Road Willowmavin	Residential building	No
B727	National Trust	Pair Of Shops 85 Sydney Street Kilmore	Commercial Building	No
HO101	Heritage Overlay	Powlett Street North Precinct	Heritage Overlay	No
B369 4397 HO92	National Trust Register of the National Estate Heritage Overlay	Red Lion Hotel 43 Sydney Street Kilmore	Leisure Building	No
4437 HO57	Register of the National Estate Heritage Overlay	Rose Hill 23 Fitzroy St Kilmore	Residential building	No
B2839 4402 HO87	National Trust Register of the National Estate Heritage Overlay	Royal Oak Hotel Hume Highway Kilmore	Leisure Building	No
HO100	Heritage Overlay	Society Street Precinct	Precinct	No
B726 4427 HO65	National Trust Register of the National Estate Heritage Overlay	St Andrews Presbyterian Church Hamilton Street Kilmore	Religious Building	No

Site Number	Site Listing	Site Name	Site type	Site within activity area?
B5358 4399 HO84	National Trust Register of the National Estate Heritage Overlay	St Patrick's Catholic Church 37 Sutherland Street Kilmore	Religious Building	No
HO99	Heritage Overlay	Sydney Street Precinct	Heritage Overlay	No
B5357	National Trust	The Camp (Former Police Superintendent's) Ryan's Road Kilmore	Government Building	No
4442 HO62	Register of the National Estate Heritage Overlay	The Rocks George St Kilmore	Residential building	No
B5332 4403 HO98	National Trust Register of the National Estate Heritage Overlay	The Towers 54 Victoria Street Kilmore	Residential building	No
4430	Register of the National Estate	Uniting Church Powlett St Kilmore	Religious Building	No
B5926 4428 HO88	National Trust Register of the National Estate Heritage Overlay	Wallder's Butchery 30 Sydney Street Kilmore	Commercial Building	No
B5614 HO80	National Trust Heritage Overlay	Wesleyan Methodist Uniting Church Powlett Street Kilmore	Religious Building	No
B734 4390 HO71	National Trust Register of the National Estate Heritage Overlay	Whitburgh Cottage 10 Piper Street Kilmore	Residential building	No
102879	Register of the National Estate	Clonbinane Park Clonbinane	Recreational reserve	No
102697	Register of the National Estate	Comet Sawmill Wandong	Industrial site	No
4411	Register of the National Estate	House 86 Albert Street, Kilmore	Residential building	No
4414	Register of the National Estate	House 11-13 Chapel Street, Kilmore	Residential building	No
H7923-0027	Heritage Inventory	Mount Disappointment Internment Campsites Allison Road Mount Disappointment, Wandong	War Heritage site	No
H7923-0041	Heritage Inventory	Clonbinane School Site 495 Clonbinane Road Clonbinane, Mitchell Shire	School Building	No
H7923-0018	Heritage Inventory	Jenkins Mill Dry Creek Road Clonbinane, Mitchell Shire	Structure	No
H7923-0017	Heritage Inventory	Bump Incline Dry Creek Road Clonbinane, Mitchell Shire	Structure	No
H7923-0019	Heritage Inventory	Harpers Mill Dry Creek Road Clonbinane, Mitchell Shire	Structure	No
H7923-0006	Heritage Inventory	Clonbinane Mine Sites Dry Creek Road Clonbinane, Mitchell Shire	Structure	No
B1889	National Trust	St John's Anglican Church 195 High Street Heathcote, Greater Bendigo City	Religious Building	No
H0930 HO22	Victorian Heritage Register Heritage Overlay	Exhibition Goods Shed 330 Union Lane Bylands, Mitchell Shire	Structure	No
B4436 HO20	National Trust Heritage Overlay	Bylands Primary School No 1105 Northern Highway, BYLANDS, Mitchell Shire	School buildings	No
H7823-0059	Heritage Inventory	Quillinan House Ruin 1140 Northern Highway Bylands, Mitchell Shire	Residential Building	No
H7823-0060	Heritage Inventory	Former Quillinan Family Cottage 1175 Northern Highway Bylands, Mitchell Shire	Structure	No
H7823-0063	Heritage Inventory	Union Hotel Site, Bylands 370 Union Lane Bylands, Mitchell Shire	Leisure Building	No
H7823-0042	Heritage Inventory	Moranding House Site Boundary Road Willowmavin, Mitchell Shire	Structure	No
NA	War heritage inventory	Broadford War Memorial High Street Old Market Place, BROADFORD	Structure	No
NA	War heritage inventory	Broadford Avenue of Honour White Street, BROADFORD	Structure	No
B2040	National Trust	Clonbinane Park	Area	No
HO14	Heritage Overlay	Stray's Blacksmith High Street, Broadford	Structure	No
HO15	Heritage Overlay	State School No. 1125	Structure	No

Site Number	Site Listing	Site Name	Site type	Site within activity area?
		Elizabeth Street, Broadford		
HO16	Heritage Overlay	St. George's Presbyterian Church Corner Hamilton and High Street Broadford	Structure	No
HO11	Heritage Overlay	Former Hilldene & Kur Kurruck Creek Primary School building, Former Mills Cottage, Former Courier Office, and Former Straw Boiler from Broadford Paper Mill, all relocated to Broadford Historical Reserve High Street, Broadford	Structure	No
HO13	Heritage Overlay	Hume & Hovell Memorial High Street, Broadford	Structure	No
HO21	Heritage Overlay	Former Railways Department residence and platform mound, Bylands	Structure	No
HO85	Former Convent of Mercy (Assumption College)	43 Sutherland Street, Kilmore	Religious Building	No
VHI D7823-0044	Kilmore Creek Bridge	Northern Highway, Kilmore	Structure	No
VHI D7823-0057	Eight Historic Quarries	Burgess Road, Kilmore	Structure	No
7823-0076	Heritage Inventory	Aberdeen's Creek Paddock 40 Old Kilmore-Lancefield Road Kilmore	Agricultural	No

Table 2-1: Previously recorded historic sites within the geographic region.

2.5 Site Prediction

Ninety six previously recorded historic sites have been recorded within the region. None of sites occur within or are immediately adjacent to the activity area.

The majority of sites identified during the site search consist of buildings of various uses, including private, agricultural, religious and governmental. Other types of sites identified include commercial, leisure, transport, war, educational, and medical historic sites.

Most of the previously recorded sites are located within the urban areas within the study area, with only a limited number of agricultural, quarry or private sites located outside the major town centres. As the majority of the activity area has not been subjected to modern urban development, there is a low to moderate likelihood that previously unrecorded historical sites may have been preserved within the activity area. Given that the activity area consists of agricultural land (both currently and in the European historic past), it is more likely that structures that facilitate this agricultural land use may be preserved.

3 Fieldwork

This section of the report documents the results of survey undertaken by ACHM.

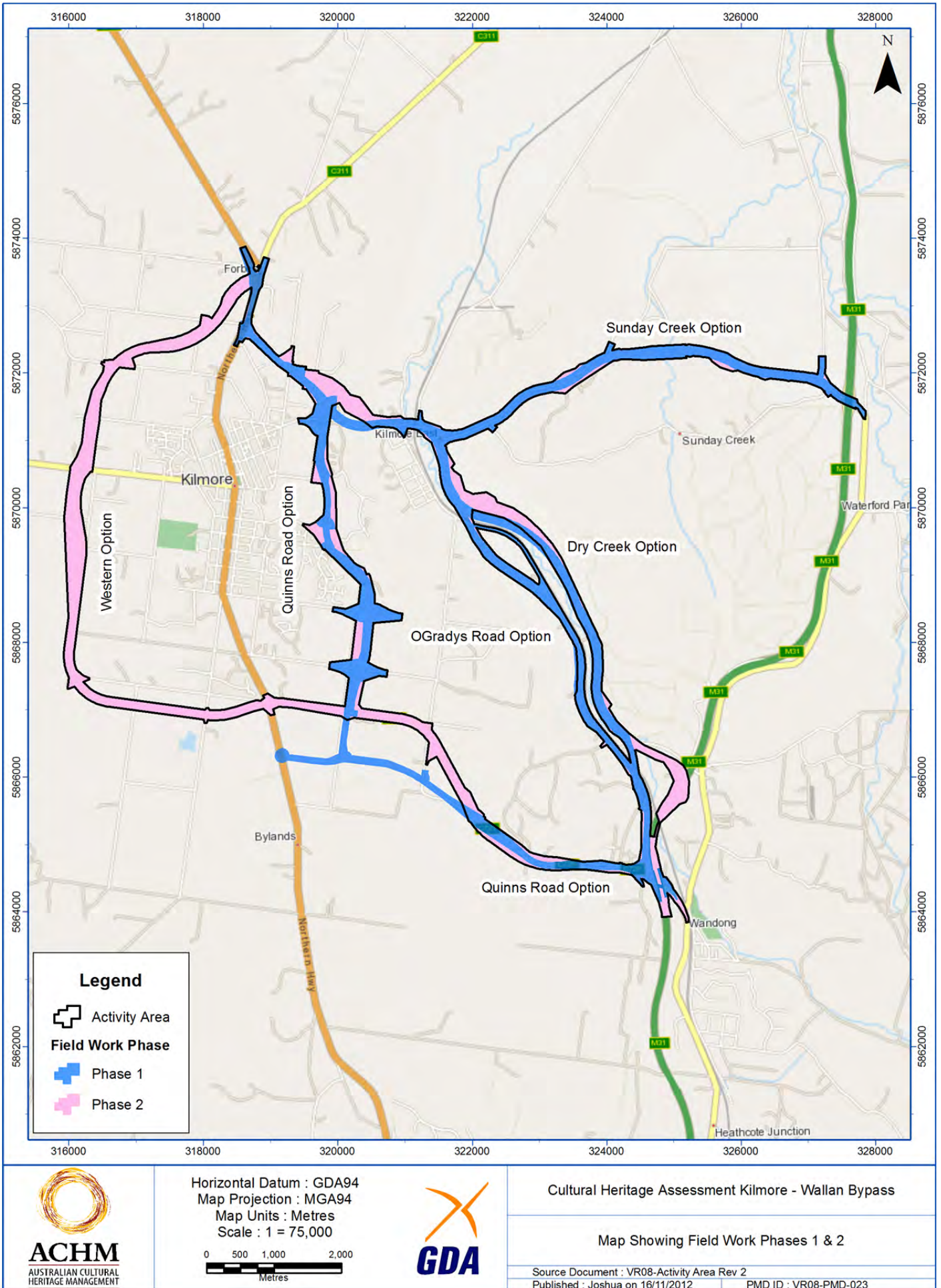
3.1 Project Aims and Field Methodology

A systematic surface survey, using a pedestrian transect methodology, was carried out across the entire activity area to determine if any previously unrecorded historical places were located within the investigation area.

The survey was undertaken in two phases (See Map 3-1). Subsequent to the completion of the first phase of fieldwork, amendments were made to the activity area, which included an additional western option. These additional areas, including the western option, were surveyed during the second phase of fieldwork (Map 5).

The first phase of the field survey was carried out in the period of 6-14 February 2012 by ACHM archaeologists and qualified cultural heritage advisors Vicki Vaskos, Jennifer Chandler and Edward Turner together with Traditional Owner representatives Mick Harding, Rodney Monk, Shane Monk and Chris Hume from the Taungurung Clans Aboriginal Corporation (Taungurung). The second phase of the field survey was carried out between 3 October - 10 October and on 23 October 2012 by ACHM archaeologists and qualified cultural heritage advisors Vicki Vaskos, Erica Walther, Edward Turner and Fiona Schultz together with traditional owner representatives Mick Harding and Rodney Monk.

The percentage of ground surface visibility was recorded throughout the survey. Evidence of prior ground disturbance as well as any areas of potential archaeological sensitivity was closely inspected during the survey. A photo log was kept in order to record the conditions encountered in the activity area.



Map 3-1: Map showing fieldwork phases 1 and 2.

3.2 Survey Coverage

The survey was limited by two variables:

1. ground surface visibility; and
2. access to individual properties within the activity area.

Ground Surface Visibility

Ground surface visibility during the standard assessment on the whole was extremely low (<10%). Given that the activity area intersects rural properties, a majority of these rural properties had considerable grass cover. As such, visibility was very limited and in some places the visibility was <2% (Figure 3-1).



Figure 3-1: A typical example of the groundcover encountered during the survey. Visibility is extremely limited at <2%. Facing east on the Sunday Creek Option.

Areas of good visibility (60%-80%) also often occurred on or around tracks or in association with cattle grazing (Figure 3-2).



Figure 3-2: An example of access track visibility within the activity area. Here the visibility was approximately 80%.

Access to private properties

Access was granted to the majority of properties within the activity area. However, a number of properties were not surveyed due to access not being granted by the landowners. The list below details the properties that were not surveyed.

Property Number	Landowner Name	Landowner Address
105881	Michael Lawrence & Sharlene Novak	3 Lowell Court KILMORE VIC
107295	Francesco Cichello	105 Wandong Road KILMORE VIC
108156	Michael & Lois Cassar	12 Kellys Lane KILMORE VIC
108206	Michael Hammond	3 Hunts Road KILMORE VIC
108211	Graham & Debra Walters	13 Hunts Road KILMORE VIC
108597	Terrence & Debra Court	250 O'Gradys Road KILMORE VIC
108659	Mark Cummins & Jennifer Antionette Frieling	25 O'Sheas Road KILMORE EAST VIC
108624	Stephen Lacey & Maxine Coucill	35 The Dene WANDONG VIC
108720	Anton & Maria Sakic	760 Wandong Road WANDONG VIC
107295	Francesco Cichello	105 Wandong Road KILMORE VIC

Table 3-1: Properties not accessed, and therefore not surveyed, as part of the standard assessment.

3.3 Results

3.3.1 Historic Sites

No sites of historical archaeological significance were located during the survey.

One place of local historical and social significance, the Beuhne memorial, was identified on the Broadford-Kilmore Road (Map 3-2 and Figure 3-3).

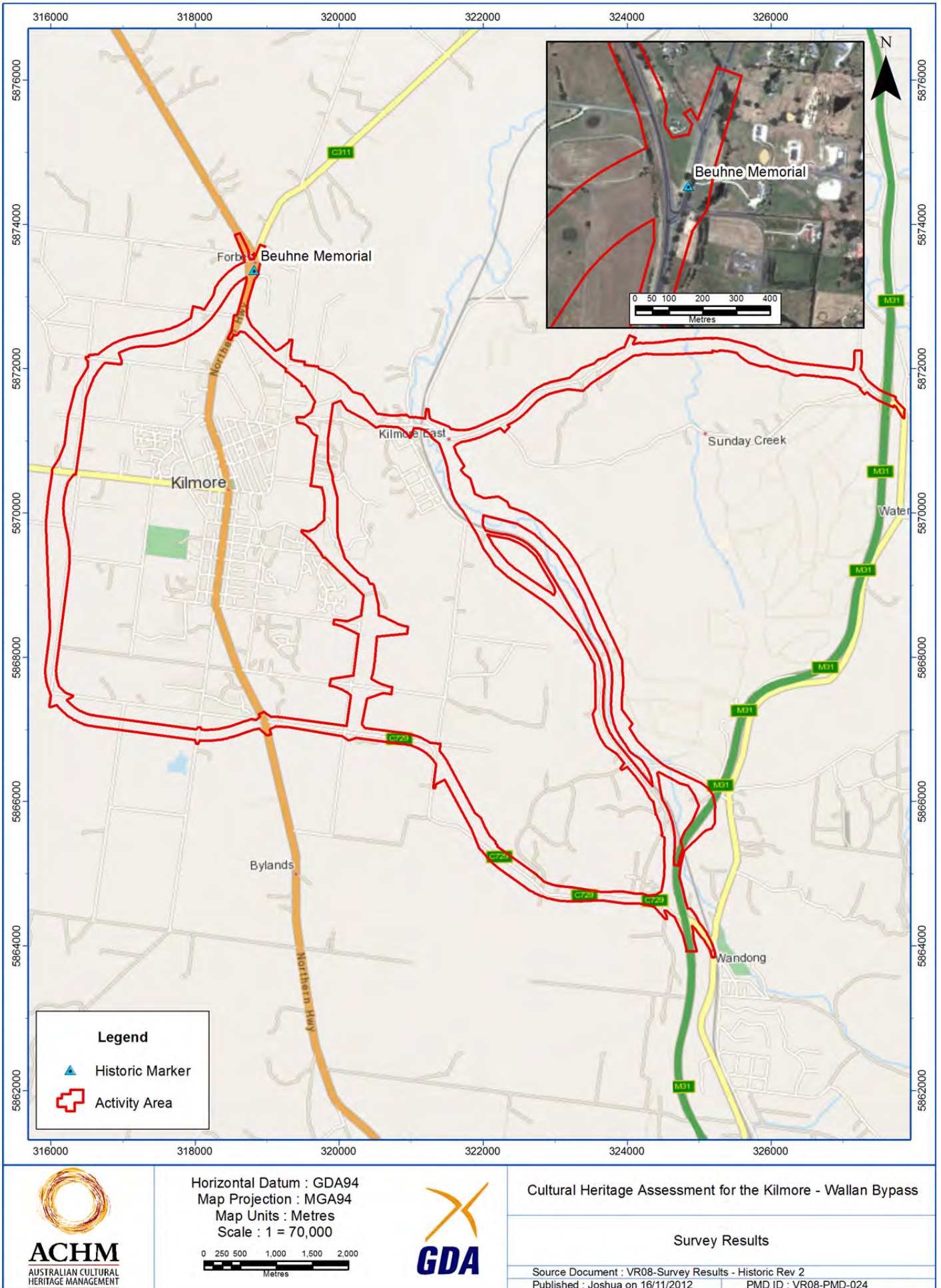
This memorial lies within the investigation area and is impacted by the earthworks footprint (Map 3-2 and Map 3-3).

The inscription on the memorial reads:

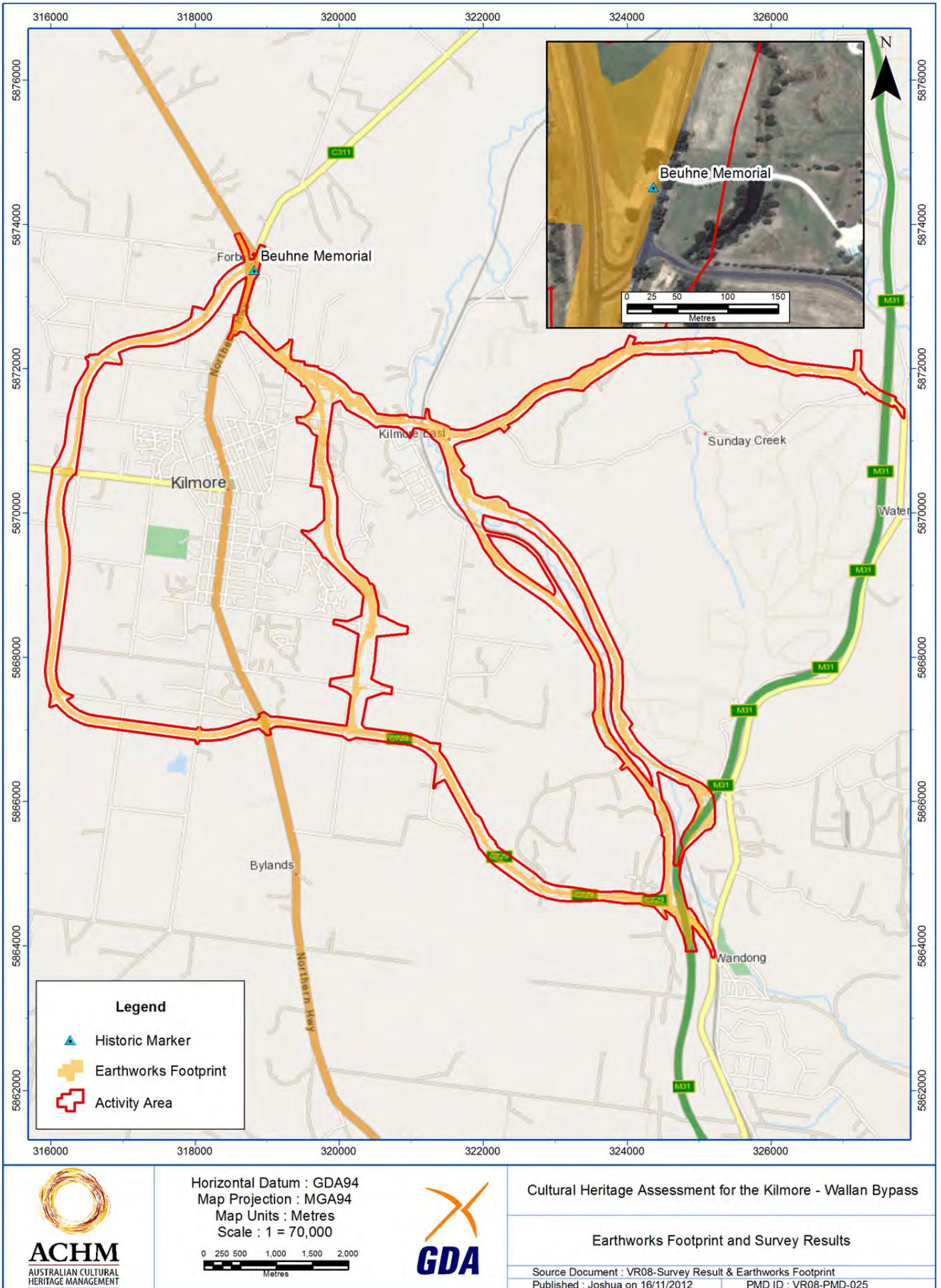
"Beuhne Memorial. This cairn marks an avenue of trees planted by the Victorian Apiarists Association in appreciation & commemoration of the life work of Frederick Richard Beuhne in the interest of apiculture."



Figure 3-3: Beuhne Memorial located on the Broadford-Kilmore Road road reserve.



Map 3-2: Map showing the location of the Beuhne Memorial within the investigation area.



Map 3-3: Map showing the location of the Beuhne Memorial within the earthworks footprint.

The following article from the Kilmore Free Press details dedication of the memorial in 1949:

On Friday afternoon last just on 100 persons - assembled on the Hume Highway just north of Kilmore for the unveiling ceremony of a Memorial Cairn erected in honour of the late Mr. Frederick Richard Beuhne. The memorial was erected by the Victorian Apiarists' Association of which the late Mr. Beuhne was a foundation member and formerly resided at Tooborac.

Association's Golden Jubilee

The ceremony was held on Friday afternoon last as a culmination to the Association's Jubilee Conference held in Melbourne last week. Apiarists from throughout Victoria travelled to Kilmore for the occasion by two buses and a number of cars from Melbourne. Included in the gathering were representatives of the N.S.W., South Australian, Western Australian and Queensland Apiarists' Associations.

Crs. J. Clancy (President) and T. G. Chapman were also present representing the Kilmore Shire Council.

Visitors Welcomed

Mr. Geo. Loft, President of the Victorian Apiarists' Association, in extending a welcome to the visitors said the occasion was a memorable one for apiarists, as the man whose memory they were honouring had contributed so much to the success of their Association and the beekeeping industry of Australia. He particularly welcomed the representatives of the Kilmore Shire and all were pleased that they were able to attend. It was also very pleasing to have Mr. Claude Beuhne, a son of the late Mr. F.R. Beuhne, present, and other-relatives.

Cr. J. Clancy, in response, thanked the President for his welcome and expressed pleasure that the site selected for the erection of the memorial was in the Kilmore Shire. He was also pleased to be present to honour the memory of one of Australia's pioneer beekeepers and extended a welcome to the Kilmore Shire to all the visitors.

Generous Tributes

Mr. Loft then called on representatives to pay a small tribute to the life and work of the late Mr. F. R. Beuhne. Mr. Fred Morgan, Federal President of the Australian Apiarists' Association, said the late Mr. Beuhne had given very great service to the industry and was well known throughout Australia. His scientific investigations and work with the Department of Agriculture had laid the foundation for the industry's success and beekeepers owed a great debt to the late Mr. Beuhne. He was an active member of an early Association and a foundation member of the Association when it was re-organised in 1892. The late Mr. Beuhne was the first President of the Victorian Apiarists Association from 1900 to 1910; he was president, secretary and editor of the Association's journal and was never out of office for 33 years.

Mr. Smart (President N.S.W. Association), Mr. Roy Higgins (Vice-President Queensland Association and Mr. Frank Armstrong (West Australian Association) paid tribute to the work of the late Mr. Beuhne and said his writings had made him a nation-wide figure, as well as an authority on every aspect of the industry. Many beekeepers owed their success to the knowledge gained from the late Mr. Beuhne.

Mr. Maurice Morgan said the late Mr. Beuhne was a great leader in the industry and a sincere friend to all with whom he came in contact, ever ready to give of his great store of knowledge in the interests of the industry. It is very gratifying, continued Mr. Morgan, that the Victorian apiarists have erected this memorial in appreciation of the service rendered to beekeepers by the late Mr. Beuhne.

Mr. Eagland (Dept. of Agriculture) joined in the tributes paid and said he had had the privilege to work under the instruction and guidance of the late Mr. Beuhne for some years and owed much of his knowledge to him. The speaker re-called that the first publication by the Department of Agriculture on bees was written by the late Mr. Beuhne and he also wrote "Beekeeping in Victoria" which in itself was a monument to his name.

Foundation Member Welcomed

'The President at this stage extended a particular welcome to Mr. Kneebone, of Ararat, who was the only foundation member of the Association present, and one of the few foundation members now living.

Mr. Kneebone thanked the President for his welcome. He had first met the late Mr. Beuhne in 1900 and he had been one of his best friends. "The late Mr. Beuhne put in a tremendous amount of voluntary work for the Association and had it not been for his efforts when President and Secretary it would have fallen through. I am pleased to see that the work he did was not in vain and the Association has grown to what it is today. It is fitting that in this Jubilee year the Association has erected a wonderful memorial to a wonderful man," added Mr. Kneebone.

Mr. Claude Beuhne, only son of the late Mr. F. R. Beuhne, expressed his thanks on behalf of the family to the speakers for appreciative references to the work and life of his late father. He also thanked the Victorian Apiarists' Association for erecting the fine memorial, and his appreciation to all who had made its erection possible.

Memorial Unveiled

In unveiling the memorial tablet the President of the Association (Mr. G. Loft) said that they could go on indefinitely paying tributes to the work of the late Mr. F. R. Beuhne. As President he felt it a great honour to' unveil the memorial to a man who had contributed so much to the beekeeping industry. The late Mr. Beuhne was a resident of Tooborac for many years until his death in 1933 and well known in this district. In selecting the site for the memorial the Apiarists' Association considered that it was on a Highway which the late Mr. Beuhne had frequently traversed during his lifetime, and on which an avenue of trees had previously been planted.

The Memorial Cairn was built by Mr. J. J. Kenny, of Kilmore, and bears the following inscription : "BEUHNE MEMORIAL. This cairn marks an avenue of trees planted by the Victorian Apiarists' Association in appreciation and commemoration of the work of Frederick Richard Beuhne in the interest of apiculture."

Kilmore Free Press (Kilmore, Vic: 1870 - 1954), Thursday 30 June 1949, 5.

3.3.2 Assessment of Significance - Beuhne Memorial Cairn

What is significant?

The small memorial cairn is of significance. The dedication of the cairn to a local apiarist who was actively involved in the furthering of the beekeeping industry in Victoria is of significance. Beuhne was an author for the Department of Agriculture and a founding member of the Australian Apiarists Association. The location of the cairn at the location of a former avenue planted by the Association is of significance.

How is it significant?

The small memorial cairn site is of local historical and social significance.

Why is it significant?

The cairn is of historical significance for its connection with a founding member of the Australian Apiarists Association. It is of social significance due to the location of the former avenue of trees planted by the association.

3.4 Interpretation and discussion

The activity area was inspected for the presence of historical places and historical archaeological sites and areas of potential sensitivity.

Ground surface visibility during the standard assessment on the whole was extremely low (<10%). Given that the activity area intersects rural properties, a majority of these rural properties had considerable grass cover. As such, visibility was very limited and in some places the visibility was <2%. Areas of good visibility (60%-80%) were also often occurred on or around tracks, roads, ploughed fields or in association with cattle grazing.

The five bypass options are either intersected by or lie within 200 m of Dry Creek, Nanny Creek, Broadhurst Creek and Kilmore Creek. In general, river and creek valleys would have provided the most advantageous settlement localities for people throughout the history of human settlement in the region.

The bypass options, for the most part, avoid the urbanised/developed areas of both Kilmore and Wallan; and in particular no previously recorded sites and places are located within the activity area. The majority of these places are structures of private or public use. As discussed these places were used for a number of varying purposes (Section 2.4.2).

No historic archaeological sites were located during the background assessment. One historic place (the Beuhne Memorial) was located within the activity area during the survey. This site is considered to be of local historical social and historical significance.

This memorial lies within the investigation area, and is impacted by the earthworks footprint (Map 3-2 and Map 3-3).

3.5 Legislative requirements

No sites of state significance are located within the investigation area. One site of local significance is located within the investigation area, the Beuhne Memorial. This memorial is impacted by the earthworks footprint (Map 3-3).

As no archaeologically significant historic sites were located during the assessment no further historic/archaeological assessment is required.

One place of significance was located as a result of the survey. It is recommended that this place be brought to the attention of Mitchell Shire Council, and assessed in regards to the inclusion on to the local heritage overlay.

If the place cannot be avoided, it is likely that provisions for its relocation would be required as part of a planning permit application. Further consultation with Mitchell Shire council is required for clarification once the impacts to the place have been determined.

3.6 Options Rating

The following table details the 7 tiers rating Scale used for the following assessment of each of the five options.

Ratings Table for Kilmore-Wallan Bypass Options Assessment		
Potential Project Benefits	Rating Colour Code	Potential Project Disbenefits
Significant benefit to the State Superior benefit to the region Policy consistency with superior positive impact	VERY WELL 3	
Moderate benefit to the State Significant benefit to the region Superior benefit to the locality Policy consistency with significant positive impact	WELL 2	
Moderate benefit to the region Significant benefit to the locality Policy consistency with moderate positive impact	MODERATELY WELL 1	
Minimal benefit at any level	NEGLECTIBLE 0	Minimal disbenefit at any level
	MODERATELY POOR -1	Moderate disbenefit to the region Significant disbenefit to the locality Policy inconsistency with moderate negative impact
	POOR -2	Moderate disbenefit to the State Significant disbenefit to the region Severe disbenefit to the locality Policy inconsistency with significant negative impact
	VERY POOR -3	Significant disbenefit to the State Severe disbenefit to the region Policy inconsistency with severe negative impact

Figure 3-4: Options Assessment Criteria.

The following table details the sub-objectives and assessment criteria for the applicable planning objectives:

Planning Objective	Sub-Objective	Assessment Criteria
7: Avoid or minimise impacts on areas and features of heritage significance, to the extent practicable	Built Heritage: To avoid or minimize impacts on post settlement European cultural heritage remains and provide appropriate mitigation measures where required in accordance with the Heritage Act 1995 and approval of Heritage Victoria.	To avoid or minimize impacts on post-settlement European cultural heritage

Table 2: Table detailing the sub-objectives for post- settlement European Cultural Heritage.

No historic archaeological sites were located during the background assessment. One historic place (the Beuhne Memorial) was located within the activity area during the survey. This site is considered to be of local historical social and historical significance.

The following table (Table 3) applies VicRoads assessment methodology to each of the five bypass options.

Option	No. of sites within the earthworks footprint	VicRoads Rating Colour Code
Sunday Creek Road Option	1	Negligible - 0
Dry Creek Option	1	Negligible - 0
O'Gradys Road Option	1	Negligible - 0
Quinns Road Option	1	Negligible - 0
Western Option	1	Negligible - 0

Table 3: Table detailing the VicRoads assessment methodology to each of the five bypass options.

3.6.1 Sunday Creek Road Option

The Beuhne Memorial is located within the earthworks footprint of this option. This small memorial cairn site has been interpreted as being of local historical and social significance.

Based on the above, this option is awarded a rating of: Negligible (0).

3.6.2 Dry Creek Option

The Beuhne Memorial is located within the earthworks footprint of this option. This small memorial cairn site has been interpreted as being of local historical and social significance.

Based on the above, this option is awarded a rating of: Negligible (0).

3.6.3 O'Gradys Road Option

The Beuhne Memorial is located within the earthworks footprint of this option. This small memorial cairn site has been interpreted as being of local historical and social significance.

Based on the above, this option is awarded a rating of: Negligible (0).

3.6.4 Quinns Road Option

The Beuhne Memorial is located within the earthworks footprint of this option. This small memorial cairn site has been interpreted as being of local historical and social significance.

Based on the above, this option is awarded a rating of: Negligible (0).

3.6.5 Western Option

The Beuhne Memorial is located within the earthworks footprint of this option. This small memorial cairn site has been interpreted as being of local historical and social significance.

Based on the above, this option is awarded a rating of: Negligible (0).

3.6.6 Preferred Options

Based on the assessment of each option according to the VicRoads rating assessment criteria, each of the five options have the same impact on European cultural heritage. No historic sites of state significance were located in these options however one site of local significance (the Beuhne Memorial) is located in each five of the options. Based on this all five options are rated Negligible [0] (according to the VicRoads assessment methodology).

3.7 Recommendations

This assessment is comprised of background research, a predictive model and a survey.

As no archaeologically significant historic sites were located during the assessment no further historic/archaeological assessment is required.

One place of local significance was located as a result of the survey. It is recommended that this place be brought to the attention of Mitchell Shire Council, and assessed in regards to the inclusion on to the local heritage overlay.

If the place cannot be avoided, it is likely that provisions for its relocation would be required as part of a planning permit application. Further consultation with Mitchell Shire council is required for clarification once the impacts to the place have been determined.

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