VicRoads

Report for Western Highway Project
Impact Assessment Report
July 2012
Section 2

Cultural Heritage: Historical

Authors: Ricky Feldman, Sharne Thomas,
Eden Alley-Porter, Michael Lever
This Historical Heritage Impact Assessment Report ("Report"):  

1. Has been prepared by Andrew Long & Associates Pty Ltd ("ALA") for GHD Pty Ltd ("GHD") on behalf of VicRoads;  
2. May only be used for the purpose of informing the Environment Effects Statement and Planning Scheme Amendment for the Western Highway Project (and must not be used for any other purpose); and  
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The services undertaken by ALA in connection with preparing this Report were limited to those specifically detailed in Section ‘4. Methodology’ of this Report.

The opinions, conclusions and any recommendations in this Report are based on assumptions made by ALA when undertaking services and preparing the Report ("Assumptions"), as specified in Section ‘4. Methodology’ and throughout this Report.

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Executive Summary

VicRoads is progressively upgrading the Western Highway as a four-lane divided highway between Ballarat and Stawell (Western Highway Project). The Western Highway Project consists of three sections, to be constructed in stages. Section 2 (Beaufort to Ararat) of the Western Highway Project (the Project) is the subject of this report.

On 27 October 2010, the Victorian Minister for Planning advised that an Environmental Effects Statement (EES) would be required to identify the anticipated environmental effects of the Project. GHD commissioned Andrew Long and Associates Pty Ltd (ALA) to undertake cultural heritage impact assessment for part of the Project as part of the EES.

Following a multi-criteria assessment of numerous potential alignment options, VicRoads selected an alignment for the Project which was subjected to the risk and impact assessment presented in this report. The Alignments Options (identified as Option 1, Option 2 and Option 3) were subject to the risk and impact assessment presented in this report. The Alignment Options are outlined in Section 6.1 of this report.

This report, together with other technical reports prepared by GHD and other consultants as part of the EES, will inform VicRoads’ selection of the preferred and alternate alignment for the Project from the three Alignment Options. VicRoads’ preferred and alternate alignment for the Project will be documented in the EES.

The cultural heritage evaluation objective of the Project EES is to protect Aboriginal and non-Aboriginal (historical) heritage. This report details the historical cultural heritage of the Project area. A report detailing Aboriginal cultural heritage is considered elsewhere. The EES scoping requirements for the historical heritage impacts assessment of the Project are detailed in section 2 of this report.

In addition to the existing conditions and values of the Project, the following legislation, guidelines and policies described in section 3 form the criteria suitable to differentiate each alternative alignment option.

For the non-Aboriginal (historical) cultural heritage aspects of the Western Highway Project, the relevant draft evaluation objectives outlined in the EES Scoping Requirements are:

- To protect non-Aboriginal cultural heritage.

The evaluation criteria were defined to allow for the consideration of all existing and potential values in the criteria.

- Impact on registered and potential Heritage Inventory (HI) places, local planning scheme Heritage Overlay (HO) places, Victorian Heritage Register (VHR) places and other historical heritage registers.

The impact assessment undertaken by ALA involved:

- desktop assessment;
- heritage register searches;
- community consultation; and
- field survey.

The impact assessment identified a total of eight sites that would be affected by the construction and operation of the proposed alignment options 1-3.
The impacts across the three proposed alignment options are outlined below. The risks presented by the adverse impacts identified can be managed and mitigated through implementing mitigation measures outlined in Chapter 7 of this report.

Option 1
If the current design were maintained Option 1 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, HO or HI sites thereby causing neither destruction nor damage to any sites other than the one DSE listed local site, Major Mitchell’s Cairn, which would require relocation.

Option 2
If the current design were maintained Option 2 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on two HI sites (H7523-0087 Peacocks Road House Ruins and H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn) which would require relocation.

Option 3
If the current design were maintained Option 3 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on one HI site (H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn), which would require relocation.

The key outcomes in terms of management and legislative obligations/approvals can be defined in four categories based on risk description, as follows:

Risk Category 1
Where construction encounters locally significant historical heritage feature or site (DSE local listing), a submission to approvals authority (relevant LGA/DSE) prior to damaging, disturbing or otherwise impacting cultural heritage site to relocate site to an agreed area is required.

Risk Category 2
Where construction is immediately adjacent to an historical heritage feature or site (HI), the current design should be maintained and site avoided.

Risk Category 3
Where construction encounters known historical heritage feature or site (HI), approval is to be sought from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites alleviating any potential delays resulting from unexpected finds and does not compromise the collection of data.

Risk Category 4
Where construction encounters previously unregistered and unassessed historical cultural heritage sites, an EMP should be prepared to include contingency measures that manage the unexpected discovery of historical cultural heritage sites and features. Subsequent avoidance or approval from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites should be sought.

Based on the risks and impacts identified historical heritage is impacted by all three alignment options but these impacts can be mitigated. Overall, from an historical cultural heritage perspective Alignment Option 1 is the preferred option because it would only impact one site of local significance. Options 2 and 3 would impact three and two sites of local significance respectively. All options have a low overall impact on historical cultural heritage.
1. Introduction

1.1 Background

The Western Highway (A8) is being progressively upgraded as a four-lane divided highway for approximately 110 kilometres (km) between Ballarat and Stawell. As the principal road link between Melbourne and Adelaide, the Western Highway serves interstate trade between Victoria and South Australia and is the key corridor through Victoria’s west, supporting farming, grain production, tourism and a range of manufacturing and service activities. Currently, more than 5500 vehicles travel on the highway west of Ballarat each day, including 1500 trucks.

The Western Highway Project (the Project) consists of three stages, illustrated in Figure 1:

- Section 1: Ballarat to Beaufort
- Section 2: Beaufort to Ararat
- Section 3: Ararat to Stawell

Figure 1: The Western Highway Project

Works on an initial 8 km section between Ballarat and Burrumbeet (Section 1A) commenced in April 2010 and will be completed in 2012. Construction for Section 1B (Burrumbeet to Beaufort-Carngham Road) commenced in early 2012 and is expected to be completed by June 2014. The last 3 km section from Beaufort-Carngham Road to Smiths Lane in Beaufort (Section 1C) commenced in late 2011 and will finish in 2012. Separate Environment Effects Statements (EESs) and Planning Scheme Amendments (PSAs) must be prepared for both Sections 2 and 3. It is expected that Sections 2 and 3 will be completed and opened in stages through to 2016, subject to future funding.

Section 2 of the Project commences immediately west of the railway crossing (near Old Shirley Road) west of the Beaufort township and extends for a distance of approximately 38 km to Heath Street, Ararat.

Section 3 of the Project commences at Pollards Lane, Ararat and extends for approximately 24 km to Gilchrist Road, Stawell.

The EES will focus on assessment of the proposed ultimate upgrade of the Western Highway between Beaufort and Stawell to a duplicated highway standard complying with the road category 1 (freeway) of VicRoads Access Management Policy (AMP1). The project includes a duplicated road to allow for two lanes in each direction separated by a central median.
The EES has also considered a proposed interim upgrade of the Western Highway to a highway standard complying with the VicRoads Access Management Policy AMP3. When required, the final stage of the project is proposed to be an upgrade to freeway standard complying with AMP1.

The proposed interim stage of the Project (AMP3) will provide upgraded dual carriageways with wide median treatments at key intersections. Ultimately the Western Highway is proposed to be a freeway (AMP1) where key intersections will be grade separated, service roads constructed and there will be no direct access to the highway.

To date $505 million has been committed for the Western Highway Project by the Victorian Government and the Australian Government as part of the Nation Building Program.

Highway improvements for the three sections between Ballarat and Stawell will involve:

- Constructing two new traffic lanes adjacent to the existing highway, separated by a central median.
- Constructing sections of new four-lane divided highway on a new alignment.

In addition to separating the traffic lanes, highway safety will be improved with sealed road shoulders, safety barriers, protected turning lanes, intersection improvements, and service lanes for local access at some locations.

Town bypasses of Beaufort and Ararat are not included in the current proposals. Beyond Stawell to the Victorian border, ongoing Western Highway improvements will continue with shoulder sealing works, new passing lanes and road surface improvements.

The aims/objectives of this Project are to:

- Provide safer conditions for all road users by:
  - Reducing the incidence of head-on and run-off-road crashes;
  - Improving safety at intersections; and
  - Improving safety of access to adjoining properties.
- Improve efficiency of freight by designing for High Productivity Freight Vehicles.
- Provide adequate and improved rest areas.
- Locate alignment to allow for possible future bypasses of Beaufort and Ararat.
1.2 Project and Study Areas

1.2.1 Project Area
The project area was defined for the purposes of characterising the existing conditions for the Project, and to consider alignment alternatives. The project area encompasses a corridor extending up to 1500 metres (m) either side (north and south) of the edge of the existing Western Highway road reserve (encompassing the extent of new alignment possibilities).

1.2.2 Study Area
A study area was defined for the purpose of this historical cultural heritage assessment that was different to the project area described above. For the purposes of the Existing Conditions assessment the physical footprint of the study area extended 200 metres (m) beyond the alignment options that are furthest from the existing Western Highway alignment. In addition, a 100 m Buffer around the alignment options was considered to ensure that spatial data represented in the datasets as point data was not overlooked.

1.3 Proposed Alignment
A multi-criteria assessment of alignment options was conducted based on information from the existing conditions assessments. The outcome was the selection of three proposed alignments to take forward to the risk and impact assessment presented in this report. These three alignments are described in Section 6. The assessment and selection of the proposed alignments is documented in Chapter 5 of the EES for Section 2, and in the Options Assessment Paper (Technical Appendix to the EES).
2. EES Scoping Requirements

2.1 EES Objectives
For the non-Aboriginal (historical) cultural heritage aspects of the Western Highway Project, the relevant draft evaluation objectives outlined in the EES Scoping Requirements are:

- To protect non-Aboriginal cultural heritage.

2.2 EES Scoping Requirements
The EES should identify, assess and document all non-Aboriginal places of cultural significance within the project area. The EES should assess significance in terms of place types, periods and heritage values. In assessing significance, the proponent should consult the Heritage Council Criteria for the Assessment of Cultural Heritage Significance (August 2008), Victoria's Framework of Historical Themes (February 2010) and Guidelines for Conducting Archaeological Surveys (July 2008).

The EES Scoping Requirements for historical cultural heritage aspects are as follows:

- To identify relevant historical information within the vicinity of the project area and provide a thematic history of the area.
- To provide an inventory of any historical cultural heritage places of significance in and within the vicinity of the project area, including the Woodnaggerak Homestead and the former Cobb & Co. Changing Station at Buangor. Survey work may be required to ensure that the inventory is a thorough listing of all historical heritage places in and within the vicinity of the project area.
- To establish the cultural heritage significance of any known or newly recorded sites in consultation with Heritage Victoria and the Pyrenees Shire Council and Rural City of Ararat.
- To identify and assess the potential effects of the project on known and recorded sites, including whether the project will affect the setting and context of heritage places.
- To identify measures to avoid, mitigate or manage potential effects on known and recorded places of cultural heritage significance. Include details of any proposed measures such as project redesign, site protection measures, site recording and documentation, funding options and relocation procedures, if necessary, and any requirements under either the Pyrenees or Ararat Planning Schemes and the Heritage Act 1995.
- To identify the residual effects of the project on historical cultural heritage and values in or nearby to the project area.

2.3 EES Evaluation Criteria
The evaluation criteria were defined to allow for the consideration of all existing and potential values in the criteria.

- Impact on registered and potential Heritage Inventory (HI) places, local planning schemes Heritage Overlay (HO) places, Victorian Heritage Register (VHR) places and other Historical Heritage Registers.
3. Legislation, Policy and Guidelines

The following legislation, policies and guidelines detail the requirements of this cultural heritage study and future investigations regarding historical heritage.

3.1 Burra Charter

The Burra Charter and its accompanying guidelines define the basic principles, processes and practices upon which statutory assessments of heritage significance in Australia are based. The Charter is not a statutory document rather it informs the principles by which field work and consideration of sites (significance and registration) is undertaken. The general assessment criteria are as follows:

- association with special events, developments or phases;
- rarity due to association with a distinctive way of life, custom, process, land use, function or design no longer practiced;
- importance for demonstrating principal characteristics of a particular type or class of human activities (for example stating a stone quarry is a classic example of its type as it has all the features typically associated with utilised stone sources in good condition);
- aesthetic value to the local community (for example as a landmark);
- value for demonstrating a particular technical or creative process;
- strong or special association with a particular community or ethnic group for social, cultural or spiritual reasons; and
- special association with a famous person or group of people.

Generally these criteria can be grouped into three main categories: social (I), scientific (II) and historical (III), depending on the nature of a given place or item.

3.2 Commonwealth

Amendments introduced in January 2004 to the Environment Protection and Biodiversity Conservation (EPBC) Act 1999, together with amendments to the Environment Protection and Biodiversity Conservation Regulations 2000 (the ‘Regulations’), introduced a new national cultural heritage management regime. The Regulations defined a suite of Commonwealth Heritage Values / Commonwealth Heritage Management Principles and National Heritage Values / National Heritage Management Principles. The Heritage Values derive from aesthetic, historic, scientific or social significance or other special value for future generations as well as for the present community. The Heritage Management Principles are broad principles which provide a guiding framework for excellence in managing heritage properties, and address aspects of the management of heritage properties including objectives, standards, processes and practices.

The amended legislation also established two new lists or registers for heritage places at Commonwealth/National level, the National Heritage List (for places of outstanding cultural heritage significance to Australia) and the Commonwealth Heritage List (for significant heritage places owned or controlled by Commonwealth Government organisations). The National Heritage List criteria require that a place has outstanding value to the Australian community as a whole, whereas the Commonwealth Heritage List can contain heritage items that have State, Territory or local heritage significance.
3.2.1 National Heritage List
The National Heritage List is a list of places of outstanding heritage significance to Australia, and comprises natural, historic and indigenous places. Unlike the Commonwealth Heritage List places, there is no requirement that National Heritage List places be Commonwealth owned. Places that are included in the National Heritage List are subject to management and approvals requirements detailed in the EPBC Act and its regulations.

3.2.2 Commonwealth Heritage List
To be considered for inclusion in the Commonwealth Heritage List, a place must be owned or leased by the Australian Government. Places that are included in the Commonwealth Heritage List are subject to management and approvals requirements detailed in the EPBC Act and its regulations.

3.2.3 Register of the National Estate
The Register of the National Estate (RNE) is a national inventory of important natural, Indigenous and historic places throughout Australia. Initially established under the now-repealed Australian Heritage Commission Act 1975, but retained under the amended EPBC Act, places on the Register that are in Commonwealth areas, or subject to actions by the Australian Government, are protected under the EPBC Act by the same provisions that protect Commonwealth Heritage places. The Register of the National Estate is the predecessor to the National Heritage List. Following amendments to the Australian Heritage Council Act 2003 it was frozen on 19 February 2007, which means that no new places can be added, or removed. The Register ceased as a statutory register in February 2012.

3.3 State
3.3.1 Heritage Act 1995
The main purpose of this 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 through the administering agency of Heritage Victoria. There are extensive enforcement provisions which apply in relation to unlawful activities to registered places, objects, archaeological sites, historic shipwrecks, shipwreck relics and protected zones.

3.3.2 Victorian Heritage Register
The Victorian Heritage Register (VHR) lists the State’s most significant heritage places and objects. These can be searched on the Victorian Heritage Database. The guiding principle for places in the Register is to protect and conserve as much of the fabric of the place and the relics/ artefacts as is possible. There are enforcement provisions for unlawful activities in relation to archaeological relics and places.

3.3.3 Heritage Inventory
The Heritage Inventory (HI) includes all known historical archaeology sites in Victoria. It includes information about sites and artefacts, including a description and assessment of significance. The Heritage Inventory enables Heritage Victoria to record and monitor sites that are not considered to be of State significance (which are included in the Victorian Heritage Register) or where the significance is unknown.
For places listed in the Heritage Inventory the guiding principles of recording, excavating and monitoring are the usual methods of assessing and managing the heritage values of a site. Any activities that will result in the excavation or disturbance to an archaeological site or its objects included on the Heritage Inventory must have first obtained the consent of Heritage Victoria.

Note that all archaeological sites more than 50 years in age in Victoria are protected by the *Heritage Act 1995*, regardless of whether they are included in the Heritage Inventory.

3.3.4 Department of Sustainability and Environment (DSE) List

The Department of Sustainability and Environment has a listing of heritage places with significance ratings. Whilst this list has no legislative status or statutory protection, it is consulted to verify whether the sites are required to be registered elsewhere (e.g. registered for the Heritage Inventory or recommended for inclusion on the Heritage Overlay).

3.4 Planning Scheme Heritage Overlays

For all municipalities in Victoria, the requirements for land use, development and protection are covered by land use planning controls which are prepared and administered by State and local government authorities through planning schemes. The legislation governing such controls is the *Planning and Environment Act 1987*. Places of heritage significance to a locality can be protected by a Heritage Overlay. Heritage Overlays are contained within planning schemes and assist in protecting the heritage of a Local Government Area (LGA). Heritage Overlays include places of local significance as well as places included in the VHR. There are two LGAs within the Section 2 study area: Pyrenees Shire Council and Ararat Rural City Council, each having a planning scheme with heritage overlays.
4. Methods

4.1 Existing Conditions
A report documenting the Cultural Heritage (Aboriginal and Historical) Existing Conditions for the Western Highway Duplication Section 2 EES was initially prepared by Andrew Long and Associates Pty Ltd in September 2011 to assist the alignment options assessment process and thereby guide development across the Western Highway Project. The existing conditions data has been updated for the preparation of this cultural heritage impact assessment.

Research on existing conditions was conducted through:

- desktop assessment;
- GIS datasets;
- ground truthing; and
- community consultation.

4.1.1 Desktop Assessment
A desktop assessment assisted the preparation of a preferred alignment option and thereby guided development across the Western Highway Project. The purpose of the desktop review was:

- to determine the level of prior cultural heritage assessment (for example the 2008 Noble et. al. report ‘Western Highway Duplication: Burrumbeet to Stawell, Cultural Heritage Due Diligence’) of the study area and the surrounding region;
- to determine the presence of registered historical heritage places within the study area and the surrounding region; and
- to determine the environmental context of the study area with regard to landform.

The desktop assessment report considered all known heritage listings and associations, including but not limited to:

- Victorian Heritage Register
- Heritage Inventory
- Register of the National Estate
- Commonwealth Heritage List
- National Heritage List, and
- Planning Scheme Heritage Overlays:
  - Pyrenees Shire Council
  - Ararat Rural City Council.

4.1.2 GIS Datasets and Methodology
To inform the existing conditions assessment a number of spatial datasets were consulted (Table 1). The intersection of the various ESRI ArcGIS datasets was applied specifically to the alignment options in order to determine the number of heritage places and administrative elements impacted by the alignment options. For polygon data, the surface area of areas of intersection was calculated.
Table 1: Spatial datasets consulted for cultural heritage existing conditions

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heritage Register gda94_region</td>
<td>Heritage Register polygons, Heritage Victoria</td>
</tr>
<tr>
<td>Heritage Inventory gda94_region</td>
<td>Heritage Inventory polygons, Heritage Victoria</td>
</tr>
<tr>
<td>Heritage Inventory delisted gda94_region</td>
<td>Delisted Heritage Inventory polygons, Heritage Victoria</td>
</tr>
<tr>
<td>heritageoverlay</td>
<td>Heritage Overlay polygons, Heritage Victoria</td>
</tr>
</tbody>
</table>

4.1.3 Rationale for Historical Heritage Assessment

The impact the alignment options had on registered and potential Heritage Inventory (HI) places, planning scheme Heritage Overlay (HO) places, Victorian Heritage Register (VHR) places and other Historical Heritage Registers (e.g. DSE) was determined by the:

- inspection of previously registered sites and confirmation of their extents, and the
- integration of georeferenced parish maps, in consultation with local historical societies, community members, and local councils.

4.1.4 Site Inspection Survey

A site inspection survey to confirm the existence of previously registered historic places within the Western Highway Project study area was undertaken by ALA historical archaeologists Eden Alley-Porter and Helene Athanasiadis on 13 -16 September 2011.

The extent of previously registered places was examined and their significance rating assessed. Unregistered historical places were also documented where possible and recommendations made for further assessment.

The results of the site inspection survey are presented in the Historical Cultural Heritage Site Assessment Table (Options Assessment Report Section 2, Appendix 7) and their spatial distribution represented in the Historical Cultural Heritage Site Maps (Options Assessment Report Section 2, Appendix 8). The Historical Cultural Heritage Site Assessment Table was consulted for the Options Assessment Ratings Table (Options Assessment Report Section 2, Appendix 1).

4.1.5 Research

The following sources were consulted at Public Record Office Victoria for the initial research stages of the Western Highway Project:

- Parish maps: Eurambeen, Beaufort, Woodnaggerak, Buangor, Colwinsby, Gorrinn, Langi Ghiran, Ararat, Concongella, Concongella South, Mokepilly, Stawell
- VPRS 625 Selection Files, Sections 19 and 20, Land Act 1869*
- VPRS 626 District Selection Files, Sections 19 and 20, Land Act 1869*
- VPRS 627 Land Selection Files, Section 31, Land Act 1869*
- VPRS 629 Land Selection Files, Section 33, Land Act 1869*
- VPRS 5920 Pastoral Run Files*
Numerous individual files within these series were accessed and reviewed. These form the basis of a Land Use History Report (Options Assessment Report Section 2, Appendix 9) undertaken by historians Sarah Rood and Fiona Poulton.

4.1.6 Community Consultation

In addition to primary source research and prior to the site inspection survey described above, consultation meetings with relevant local councils and historical societies were undertaken by historians Sarah Rood and Fiona Poulton. The purpose of this consultation was threefold – to present the existing historical research, seek feedback on this research and identify any additional sites that could potentially be impacted by the proposed highway duplications.

In order to present the existing research, parish maps of the area were geo-referenced and overlayed with the maps of the proposed alignments. This allowed the research to be visually presented to the local community and council staff who were being consulted. A tabulated summary of the early ownership and land use history of the parcels of land potentially impacted by the proposed alignments was also presented during consultation. A log of the consultation is presented in Appendix A of this report.

Large format maps were also used to note the approximate locations of additional historical sites identified during the consultations. These sites were cross referenced with information gathered during the research phase as well as additional secondary source material that was made available during the community consultations. As a result, it was possible to verify the likely existence of some of the identified sites and whether additional research would be worthwhile. Information about the identified sites can be found in Options Assessment Report Section 2, Appendix 7.

4.1.7 Unregistered Sites

Following the site inspection survey of existing registered sites within the study area, archival research and community consultation, two new unregistered sites types were identified and added to the existing conditions Historical Cultural Heritage Site Assessment Table:

1) Potential sites that were cited locations from community consultation (U); and
2) Potential sites where there was reference to a built structure within the historical record (HR).

These potential sites were mapped in accordance with community identification (for U sites) and relevant allotment parcels for (HR sites).

A targeted site inspection of a number of these sites was undertaken by members of the project team and David Bannear, Heritage Victoria, on 24 November 2011. Following this field trip, a process for considering sites and potential sites affected by the shortlisted alignment options under the Impact Assessment was devised and is presented in Figure 2.
Figure 2: Historical Cultural Heritage Recommendation Process

Historical Sites Recommendation Process

Further documentary research

Determine site extent

If evident in field
REGISTER SITE
(VHI, VHR, HQ)

If not evident in field or determined to be present outside of the activity area
STOP

Seek recommendation from approvals authority

Test archaeological excavation

Architectural recording

Monitoring

Comprehensive archaeological excavation
4.2 Impact and Risk Assessment

The following impact assessment methodology was used to determine the historical cultural heritage impact pathways and risk ratings for the Project:

1. Determine the ‘impact pathway’ (how the Project impacts on a given historical cultural heritage value).
2. Describe the ‘consequences’ of the impact pathway.
3. Determine the maximum credible ‘consequence level’ associated with the impact. Table 2 provides guidance criteria for assigning the level of consequence. The method for defining these criteria is described in Section 4.2.1.
4. Determine the ‘likelihood’ of the consequence occurring to the level assigned in step 3. Likelihood descriptors are provided in Table 3.
5. Using the Consequence Level and Likelihood Level in the Risk Matrix in Table 4 to determine the risk rating.

Table 2 Historical Cultural Heritage Impacts Consequence Table

<table>
<thead>
<tr>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Catastrophic</th>
</tr>
</thead>
<tbody>
<tr>
<td>No impact to heritage sites. Sites remain unaffected.</td>
<td>Disturbance to a locally significant heritage feature or site (HO or DSE local listing).</td>
<td>Complete removal of heritage site of local significance (HO); and/or Disturbance of a historical heritage inventory site (HI).</td>
<td>Disturbance of a heritage site of State or National significance (VHR).</td>
<td>Complete removal of a heritage site of State or National significance (VHR).</td>
</tr>
</tbody>
</table>

Table 3 Likelihood Guide

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost Certain</td>
<td>The event is expected to occur in most circumstances</td>
</tr>
<tr>
<td>Likely</td>
<td>The event will probably occur in most circumstances</td>
</tr>
<tr>
<td>Possible</td>
<td>The event could occur</td>
</tr>
<tr>
<td>Unlikely</td>
<td>The event could occur but not expected</td>
</tr>
<tr>
<td>Rare</td>
<td>The event may occur only in exceptional circumstances</td>
</tr>
</tbody>
</table>
### Table 4  Risk Matrix

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Catastrophic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost Certain</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Extreme</td>
<td>Extreme</td>
</tr>
<tr>
<td>Likely</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Extreme</td>
</tr>
<tr>
<td>Possible</td>
<td>Negligible</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Unlikely</td>
<td>Negligible</td>
<td>Low</td>
<td>Medium</td>
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</tr>
<tr>
<td>Rare</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

#### 4.2.1 Consequence Criteria

Consequence criteria (Table 2) range on a scale of magnitude from “insignificant” to “catastrophic”. Magnitude was considered a function of the size of the impact; the spatial area affected and expected recovery time of the environmental system. Consequence criteria descriptions indicating a minimal impact over a local area, and with a recovery time potential within the range of normal variability were considered to be at the insignificant end of the scale. Conversely, catastrophic consequence criteria describe scenarios involving a very high magnitude event, affecting a State-wide area, or requiring over a decade to reach functional recovery.

In relation to historical heritage:

- Insignificant Consequence was considered only where no impacts to heritage sites are proposed and those sites remain unaffected by construction.
- Minor consequence was considered where disturbance to a locally significant heritage feature or site, HO or Department of Sustainability and Environment (DSE) local listing will be affected by construction.
- Moderate consequence was considered where there would be complete removal of heritage site of local significance (HO); and/or the disturbance of a heritage site of State significance (HI).
- Major consequence was considered where there would be complete removal of a heritage site of State significance (HI); and/or the disturbance of a heritage site of State or National significance (VHR).
- Lastly, a Catastrophic consequence was considered to be the complete removal of a heritage site of State or National significance (VHR).
5. Existing Conditions

A comprehensive Land Use History Report is presented in Appendix 9 of Options Assessment Report Section 2 for the Western Highway Duplication Section 2 EES and was initially prepared by Andrew Long and Associates Pty Ltd in September 2011 to assist the alignment options assessment process and thereby guide development across the Western Highway Project. The existing conditions data has been summarised for the preparation of this cultural heritage impact assessment.

This information is described from east to west along the proposed alignment routes and assisted in formulating subsistence and occupation patterns in the study area. An analysis of the documented archaeological record is also provided, summarising regional and local reports, and studies specifically undertaken on the study area in relation to this project.

5.1 A Review of the Land Use History of the Study Area

Major Thomas Mitchell, surveyor-general of New South Wales, and his party were the first European explorers to travel through this region in 1836, while on an expedition to chart tributaries along the Murray River. European settlement began in the region soon after, in the 1840s, with vast expanses of pastoral land taken up by squatters who used the land for agricultural purposes, bringing with them thousands of livestock. The proposed alignments pass directly through, or nearby to, two major pastoral runs:

- Eurambeen, or Mt Cole, occupied by brothers Alexander and Colin Campbell from 1840; and
- Buanger, or Buangor, subdivided from the Eurambeen run in 1949 and taken over by Colin Campbell.

Each of these land owners constructed houses and used their land primarily for grazing purposes.

The main road linking the towns of Ballarat and Stawell was first constructed during the gold rushes of the 1850s, which attracted a huge influx of miners into western Victoria. This main road eventually became known as the Western Highway. A comparison of present day maps and parish maps dating from the 19th century demonstrates that the road followed much the same route as it does today. The gold rushes led to the foundation of settlements near the major diggings in this area, including Beaufort and Ararat. Beaufort and Ararat were both established along the Western Highway as a direct result of the existence of major goldfields. The rich gold diggings at Fiery Creek led to the development of the township of Beaufort, which was originally called Fiery Creek. The first gold to be found in the Ararat area was in 1854. Gold diggers flocked to the region in their thousands after Chinese diggers discovered the rich Canton Lead at Ararat a few years later in 1857.

The introduction of the North Western Railway in the mid-1870s was another major factor in the development of towns in the study area, enabling ferrying of both people and goods, including machinery, produce, livestock and building materials to and from Melbourne. The line to Beaufort in Section 2 was officially opened on 11 August 1874 and the extension to Ararat on 5 April 1875, with stations at Buangor and Dobie.

Lease applications in the period 1877 and 1888 for the area reveal Michael Kelly cultivated 84 acres with wheat and oats. He had also constructed a five-room weatherboard cottage on the property, as well as a stable made of slab and bark, a stockyard, garden and dairy. In addition, McCabe cultivated 20 acres of...
wheat and oat crops and Mulcahy cultivated 25 acres of wheat, oats and potatoes and that he had lived on the allotment since 1867 in a weatherboard and shingle dwelling. The property also contained a weatherboard and shingle barn, slab and bark stable and a mud and bark dairy, as well as a 7-foot well, piggery, fowl house, stock yards, garden, smithy and cart sheds.

The proposed alignments then cross Middle Creek, where there is a homestead known as ‘White’s’ or ‘Woodnaggerak’. Consultation with the local community revealed the existence of this homestead, which is still occupied today by the grandson of the original owner of the site, Sir Cyril Bingham Brudinell White.

On the southern side of the Western Highway, in the parish of Woodnaggerak, is land that was owned by David Dunn, which contained a weatherboard house with a shingle roof. This was not Dunn’s place of residence as he kept a hotel about a quarter of a mile away. At the time Dunn leased the land in 1877, most of the land was being used for stock grazing. There was also a blacksmith shop located on this allotment. Michael Fay leased the adjoining land and he cultivated the entire 34 acres, 1 rood and 28 perches with potatoes, carrots, oats and wheat. Adjacent to Fay, Thomas Hillman’s property contained a weatherboard house with a shingle roof, a bark fowl house and 6-foot deep well and 21 acres of the allotment was cultivated. George Pearson resided with his family on the following allotment in a three-roomed weatherboard house. He cultivated almost the entire allotment with oats and wheat crops. The property also contained a barn store, dairy, stable and a blacksmith, as well as a dam, 30-foot well, cow yard, stock yard and piggery.

North of the Buangor pastoral run, John Brennan took up residence there with his family in a two-room slab and weatherboard house. In addition, Brennan had sown over 80 acres of wheat and oats. To the north-west of the Buangor pastoral run was where the township of Buangor developed. David Wilkinson, who leased the area of land north of the township of Buangor cultivated 80 acres of wheat and potatoes on the allotment and was living in a two-room sawn timber house.

At the foot of Mount Langi Ghiran (named Mount Mistake by Major Thomas Mitchell in 1836), was a small settlement which no longer exists. Local community consultation led to the identification of this community, known as Colvinsby. Fay’s Hotel was located between the Western Highway and the railway line on the southern border of the Langi Ghiran State Park. The allotment contained a four-room weatherboard cottage, a stone and bark dairy and a slab and bark stable, as well as a dam and a well. Fay also describes the land as being heavily timbered and the map of the area in *Coaches Called Here* indicates that east of Mount Langi Ghiran was a significant sawmill area, with three sawmills lining the eastern edge of the mountain. There was also a school at Colvinsby, which was built out of stone in 1874 on Allotment 8B of section B. By 1892 enrolments had declined and the school was closed and by 1913, the Colvinsby school was a considered a ‘virtual ruin’.

Continuing past Langi Ghiran State Park, in the parish of Colvinsby, Joseph Clough purchased the Crown Grant in 1879 and cultivated 57 acres with hay, wheat and oats and that he resided on the land with his family in a five-roomed wooden house. Through the parish of Langi Ghiran, where the town of Dobie’s Bridge was located, a railway settlement is said to have existed, consisting of a railway station and two railway houses. There was also a school at Dobie’s Bridge.

Green Hill Lake appears on the map of the Parish of Ararat as a Public Recreation Reserve. Around the year of 1866 stationeer John Cannon leased the land and said the land was ‘unfit for agricultural purposes, being principally sand and scrub’.
5.2 Review of Reports about Historical Cultural Heritage in the Region


In October 2008 Noble et al. undertook a cultural heritage due diligence for the Western Highway Duplication from Burrumbeet to Stawell. Part of the area examined overlaps with the current study area. The duplication study area included 500 metres either side of the Western Highway. A field inspection was conducted during the assessment in order to relocate previously recorded Aboriginal cultural heritage places and historical places.

The following places which occur within the current study area are listed by Noble et al. which have not been registered with Heritage Victoria or the local council.

Buangor: Avenue of Honour on both shoulders of the Western Highway. Noble et al. (2008, 26) stated that background research be conducted to determine if heritage protection is warranted.

Major Mitchell Cairn: A historic marker is located at Buangor East which may be impacted by the duplication. The cairn was constructed in 1930 to commemorate Major Mitchell but is not listed on the Planning Scheme heritage overlay (it has a DSE local listing).

Noble et. al. noted that there were a number of unrecorded historic sites that were observed during the field inspection which may be impacted by the proposed road duplication. Further research in to these observations was undertaken by Andrew Long and Associates and considered for the alignment options assessment in September 2011 and the current impact assessment (Table 5 of this report).


The Victorian Honorary Correspondent Supply Depot Project was a statewide initiative commissioned by AAV to examine aspects of Aboriginal and European interaction in the late 19th Century, which included historical and archaeological investigations at six locations in northern and western Victoria, including Buangor Station (Long and Clark 1999).

The Buangor depot was one of six depots established as part of the Victorian Honorary Correspondent Supply Scheme (VHCS or 'The Scheme') that began in 1860 under the Central Board to Watch over the Interests of Aborigines (Long and Clark 1999, 11). Colin Campbell was the Honorary Correspondent for the Buangor depot from 1864 until 1866 (Long and Clark 1999, 17). The Honorary Correspondents were appointed by the Board, and their title was changed to Local Guardian in 1871. The primary role of the Honorary Correspondent was to requisition and distribute basic supplies to Aboriginal people within the area they were allocated guardianship for (Long and Clark 1999, 18). Honorary Correspondents often formed close and positive relationships with the local Aboriginal people, and Colin Campbell was identified by the local Aboriginal clan as ngammadjidj, or a resuscitated former clansperson (Long and Clark 1999, 18). His Aboriginal name was Muchlemumen (Long and Clark 1999, 114).

Several structures from the depot along with features such as a private cemetery remain at the location of the Buangor depot (Long and Clark 1999, 111).
The Buangor pastoral run was a subdivision of the Mt Cole Run which originally covered 10,368 hectares (Long and Clark 1999, 111). Colin Campbell and his brother, Alexander, were at the Mt Cole Station from February 1840, on 48,000 acres of the Fiery Creek located north west of Beaufort (Long and Clark 1999, 114). An outstation was established on the banks of Charliecombe Creek closeby the current station. In February 1849, the station was subdivided into Eurambeen, held by Alexander Campbell, and Buangor held by Colin Campbell (Long and Clark 1999, 114). Colin Campbell held the license to Buangor until 1877. A section of the original Buangor homestead has loopholes for gun barrels in the slab timber walls (Long and Clark 1999, 115). This building had been utilised as a machinery shed during the 1970s, and was the only part of the original homestead still standing during this time (Long and Clark 1999, 115). According to Campbell, there were about 300 Aboriginal people who lived in the Buangor area in the early 1840s, with some of the Aboriginal clans camping near the homestead (Long and Clark 1999, 115). During 1852, Campbell employed Aboriginal people to work on the Buangor Station. The Aboriginal men employed by Campbell washed approximately 40,000 sheep, and worked until the end of shearing time (Long and Clark 1999, 115). Campbell paid the men 12s. per week for this work, with several of the men paid a pound a week as bullock drivers. There is little evidence of Aboriginal association with the Buangor station following the closure of the depot around 1866. Many of the original structures and features of the Buangor station have survived into more contemporary times, attributed by Long and Clark (1999, 130) to reflect the quality of durable, local building materials, such as bluestone, granite, brick and mudbrick which have resulted in the survival of footings and also wall collapse deposits.

The old Buangor homestead was situated to the south of the present Buangor Park, and the house was long and rectangular with rooms running off of the verandah. The homestead contained varying masonry construction that probably dated from several different periods. Parts of this homestead were still standing (1999), including the original 1849 bluestone and granite rubble homestead with later editions and the ruins of an adjacent mud brick structure, as well as landscaped garden and a former building site (Long and Clark 1999, 118). There are also associated structures such as possible sheeypards, a woolshed and sheep dip, 4 huts, and a small private cemetery. The bluestone and rubble homestead contains 4 windows, a stone fireplace and 2 opposing doors. Internally, a later timber panel divides rooms, and there is cement plastering with plaster and 19th century wallpaper adhering to sections of the walls. The floors have been replaced with a concrete slab (Long and Clark 1999, 120). Verandahs flank this structure, and may have been added later in the 19th century.


Nathan Wolski (1998) conducted extensive fieldwork in the vicinity of the former Mt. Cole and Buangor Park Stations, including the excavation of an outstation site with possible Aboriginal associations.

The Mt Cole run, held by the Campbell brothers, is defined by Fiery Creek, Middle Creek and Charliecombe Creek. This property in the area was the first to be taken up by European settlers in 1840. The local Aboriginal group who camped at the Mt Cole property were the Beeripmo balug and the Utoul balug peoples. In 1851 there were about 100 Aboriginal people camping on the property. Apparently, Colin Campbell prohibited his European employers to visit the outstations on the property, to prevent altercations with the local Aboriginal people. These outstations would have been relatively simple structures, made of bark, with an earthen floor and a fireplace. Through archaeological excavation, Wolski aimed to investigate the Mt Cole outstations for evidence of Aboriginal-European interaction. The outstation from the Mt Cole run was located at the junction of the Dairymaid and Middle Creek. The excavation took place, and the key features of the outstation were defined, and a number of Aboriginal
and European artefacts were identified. The fireplace of the outstation was constructed of locally available granite. Two possible post holes were discerned. Two phases of occupation were identified at the outstation. The first was a prehistoric occupation layer dominated by quartz stone artefacts, and the second phase was a European layer with material from the outstation. There are also Aboriginal artefacts associated with the outstation within the European layer. It is unknown whether the Aboriginal artefacts within the European layer are in situ, or whether they came from the lower prehistoric layer and were brought to the upper layers through ground disturbing activities. Wolski states that the date when the outstation was abandoned by Europeans is unknown, and that it may have been after Colin Campbell sold his sheep in 1843 that the outstation fell into disuse.
5.3 Registered and Potential Historical Cultural Heritage Sites in the Existing Conditions Study Area

In the Existing Conditions Study Area of Section 2 the historical heritage sites listed in Table 5 were identified as a result of:

- site inspecting previously registered sites and confirmation of their extents;
- the integration of georeferenced parish maps;
- historical archival research; and
- community consultation.

Table 5: Number of Registered and Potential Historical Cultural Heritage Sites in the Existing Conditions Study Area

<table>
<thead>
<tr>
<th>Registered Historical Cultural Heritage Sites</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Heritage List</td>
<td>0 National</td>
</tr>
<tr>
<td>Commonwealth Heritage List</td>
<td>0 National</td>
</tr>
<tr>
<td>Register of the National Estate</td>
<td>0 National</td>
</tr>
<tr>
<td>Victorian Heritage Register (VHR) :</td>
<td>1 State</td>
</tr>
<tr>
<td>Former Cobb and Co Staging Stables</td>
<td></td>
</tr>
<tr>
<td>Heritage Inventory (HI)</td>
<td>0 State/Local</td>
</tr>
<tr>
<td>Heritage Overlay (HO) :</td>
<td>2 Local</td>
</tr>
<tr>
<td>The Hill 122 Green Hill Drive</td>
<td></td>
</tr>
<tr>
<td>Former Cobb and Co Staging Stables</td>
<td></td>
</tr>
<tr>
<td>DSE List</td>
<td>4 State</td>
</tr>
<tr>
<td>Former Cobb and Co Staging Stables</td>
<td></td>
</tr>
<tr>
<td>Primary School # 2072, Buangor</td>
<td></td>
</tr>
<tr>
<td>Railway Station Buangor</td>
<td></td>
</tr>
<tr>
<td>Major Mitchell Cairn, Buangor</td>
<td></td>
</tr>
<tr>
<td>Potential Historical Cultural Heritage Sites (Unregistered)</td>
<td></td>
</tr>
<tr>
<td>U Cited locations from community consultation</td>
<td>7</td>
</tr>
<tr>
<td>Historical references to built structures</td>
<td>32</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46</td>
</tr>
</tbody>
</table>
5.4 Registered and Potential Historical Cultural Heritage Sites in the Short-listed Alignment Study Area

The options assessment process reduced the number of alignments considered for impact assessment from six to three, thereby reducing the total number of sites from 46 to 26 (Table 6) within the proposed alignments study area. These sites were assessed in the detail described in the Historical Sites Recommendations Process (Figure 2).

Table 6: Registered and Potential Historical Cultural Heritage Sites in the Proposed Alignments Study Area

<table>
<thead>
<tr>
<th>Registered Historical Cultural Heritage Sites</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DSE local listing</td>
<td>1</td>
</tr>
<tr>
<td>Major Mitchell Cairn, Buangor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Historical Cultural Heritage Sites (Unregistered)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U Cited locations from community consultation</td>
<td>6</td>
</tr>
<tr>
<td>Historical references to built structures</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
</tr>
</tbody>
</table>

These sites were subject to comprehensive background research and an Impact Assessment Survey to verify the existence of potential sites and, if verified, record their extents.

The results of the Impact Assessment Survey were discussed with Heritage Victoria in a workshop on 24 April 2012 and recommendations from Heritage Victoria are described in Table 7.

The three proposed alignments will not impact on the previously registered sites of the Former Cobb and Co Staging Stables (VHR/HO/DSE); The 122 Green Hill Drive (HO); nor the former Railway Station Buangor or the Primary School # 20782, Buangor (DSE/Register of the National Estate).

Nine previously unregistered sites required listing on the HI, three previously unregistered sites require submissions to local Councils for possible inclusion in the Planning Scheme Heritage Overlay and one previously registered DSE site required a letter of recommendation for relocation (Table 7). Detailed documentation of these sites is presented in Appendix B of this report.

Of the sites listed in Table 7 below three sites - Ahern's Road Cistern (H7523-0089), Former Fay’s Hotel Site (H7523-0085) and Former Dobie Hall/School (H7523-0086) - are situated outside the alignment options, and eight sites are either encountered by the construction and operation of the alignment options of Section 2 or are immediately adjacent. The following Impact Assessment section of the report addresses the potential impacts of the construction on these eight sites. An overview of their location is illustrated in Map 1 and their individual contexts in Maps 2-9.
### Table 7 Heritage Victoria Site Recommendations following Impact Assessment Survey

<table>
<thead>
<tr>
<th>Register</th>
<th>Project Site Number</th>
<th>Project Site Name</th>
<th>Description</th>
<th>Additional Information from Impact Assessment</th>
<th>Recommendation from Heritage Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>U2</td>
<td>Woodnaggerak Homestead</td>
<td>This property includes the homestead and is located on the Western Highway around Fiery Creek and Middle Creek</td>
<td>Homestead part of larger historical landscape including the former community of Middle Creek. Two churches were located on land directly adjacent to the homestead - A Presbyterian church (moved to Buangor) and a church of England (whereabouts unknown). A Butter factory (?) was also located on the west side of the homestead.</td>
<td>Submit letter to Pyrenees Shire Council recommending inclusion on Heritage Overlay (HO)</td>
<td></td>
</tr>
<tr>
<td>U2 (2)</td>
<td>Middle Creek Complex</td>
<td>Community precinct including school and dwellings reported by community.</td>
<td>Original 1860's dwelling and farm buildings, and significant trees - land still owned and farmed by descendant (Edward Dunn) of the original European settler. Site includes extensions to the 1860's weatherboard/slab dwelling that will illustrate changes at the property over time. Middle Creek Primary school and School house were identified and recorded within 500m west of the homestead and a blacksmith was located between the school and homestead building.</td>
<td>Register on Heritage Inventory as two separate sites: H7523-0093 Former Middle Creek School site H7523-0088 Former Prince of Wales Hotel Site</td>
<td></td>
</tr>
<tr>
<td>U3</td>
<td>Colvinsby Township</td>
<td>This township was located where the Western Highway and the Railway intersect, south of the Langi Ghiran State Park, north of Hillside Road. Various buildings existed here, including: Colvinsby School, Fay's Hotel, Nagle's Gatehouse, and C Green's Sawmill.</td>
<td>Three sites identified from historical documentary research were identified in the field - Fays Hotel, Colvinsby School and Colvinsby spring. Local resident and Parks Vic staff also indicated the presence of another two stone ruins outside the current study area, one on Roger Louders' Property and a former sawmill roughly 5km north of the current highway in the Langi Ghiran State Park. Survey failed to identify any of the potential structures located along the northern side of the Western Highway in the 1910 map.</td>
<td>Register on Heritage Inventory as a site: H7523-0085 Former Fay's Hotel</td>
<td></td>
</tr>
<tr>
<td>U4</td>
<td>Colvinsby School</td>
<td>Located in township of Colvinsby (above). Stone school building erected 1874, abandoned by 1913.</td>
<td>Series of low mounds likely containing insitu granite and bluestone walls identified in regenrated bushland at the location identified from 1910 map. A large scatter of ceramic glass and redbrick also recorded as well as a possible access track.</td>
<td>Register on Heritage Inventory as a site: H7523-0090 Former Colvinsby School</td>
<td></td>
</tr>
<tr>
<td>U5</td>
<td>Dobie/Dobie's Bridge Railway Siding</td>
<td>Significant railway siding existed here, comprising of a railway station and two railway houses.</td>
<td>Series of insitu concrete slabs, red brickwork and exotic vegetation 500-700m east of the Hopkins River at a location identified through community consultation</td>
<td>Register on Heritage Inventory as a site: H7523-0092 Former Dobie Railway Station</td>
<td></td>
</tr>
<tr>
<td>U6</td>
<td>Dobie/Dobie's Bridge School</td>
<td>School originally located on a 5 acre allotment on the water reserve north of the railway line and on the bank of the Hopkins River in the 1890s.</td>
<td>Survey identified insitu structural ruins of a house site and the likely location of the former Dobie Hall relocated school, both west of the Hopkins River. The house ruins are located on crown land between the Western Highway and the railway line, the hall site is a reserve comprising extensive, mature exotic vegetation and small mounds of redbrick located on a small rise next to the river, south of the highway.</td>
<td>Register on Heritage Inventory as two separate sites: H7523-0091 Dobie House Ruins H7523-0086 Former Dobie Hall School</td>
<td></td>
</tr>
<tr>
<td>HR7</td>
<td>Ahern's Well</td>
<td>Bank hut and well.</td>
<td>Brick lined well recorded</td>
<td>Register on Heritage Inventory as a site: H7523-0089 Ahern's Road Cistern</td>
<td></td>
</tr>
<tr>
<td>HR21</td>
<td>Peacocks Road House Site 1</td>
<td>2 room sawn timber dwelling, unfinished 2 room mud and timber building</td>
<td>At the western end of the alignment is a swampy, low lying, mid-section comprising a sugar gum plantation. At the eastern end is a house site comprising large scatter of redbrick granite and bluestone, concrete slabs, exotic vegetation,</td>
<td>Register on Heritage Inventory as a site: H7523-0087 Peacocks Road House Ruins (HI site)</td>
<td></td>
</tr>
<tr>
<td>O4</td>
<td>Major Mitchell Cairn</td>
<td>1930's cairn marking a stop on Major Mitchell's route through the area</td>
<td></td>
<td>Submit letter to Pyrenees Shire Council recommending relocation.</td>
<td></td>
</tr>
</tbody>
</table>

WHF Historical Cultural Heritage Impact Assessment
Andrew Long + Associates Pty Ltd

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Map 1: Historical Heritage Sites Subject to Impact Assessment and Mitigation Measures
6. Impact Assessment

The detailed impact assessment documented in this report addresses the potential impacts of the construction and operation of the proposed alignments of Section 2 of the Project. The alignments assessed are a culmination of progressive refinement of the design and consideration of potential impacts.

The Existing Conditions section of this report covers an area encompassing the long list of alignment options considered for the Project. Potential impacts of each option in the long list of alignments were considered in Phase 1 of the options assessment process, and were used to reduce the initial long list to a short list of alignment options.

The potential impacts of each option in the short list of alignment options were considered in more detail in Phase 2 of the option assessment process. Three proposed alignments were selected for further detailed assessment in the EES. The impacts of the proposed alignments, together with potential mitigation measures, were considered in detail through the environmental risk assessment process. The outcomes of the risk assessment process were used to finalise the proposed alignments assessed in the EES.

The proposed alignments assessed in this report are the outcome of progressive refinement through each phase of the options assessment process. The proposed alignments were also refined following the initial consideration of the environmental risk assessment.

The alignment options assessment process is described in in the ‘Western Highway Project Section 2 Options Assessment Report’ (February 2012). The environmental risk assessment methodology and complete risk register for all specialist disciplines is presented in ‘Western Highway Project Section 2 EES Environmental Risk Assessment’ (February 2012) report.

Extracts from the environmental risk register are provided in this report and the identified impacts of the preferred proposed alignments are considered in detail in the following sections.

6.1 Project Description

The Project provides two lanes in each direction and associated intersection upgrades to improve road safety, and facilitate the efficient movement of traffic. It commences at the railway overpass west of Old Shirley Road, Beaufort and extends for approximately 38 km to Heath Street, Ararat. The upgrade assessed in this impact assessment is a combination of freeway standard (AMP1) and highway standard (AMP3). For the first length from the railway overpass to approximately Ch. 800, near McKinnon Lane, there are no works proposed. Then from Ch. 800 to Warrayatkin Road on the outskirts of Ararat the proposed upgrade will be to freeway standard (AMP1). For the final length from Warrayatkin Road to Heath Street the proposed upgrade will be to highway standard (AMP3). Grade separated interchanges are proposed at Eurambeen-Streatham Road, Peacocks Road, Hillside Road, and Langi Ghiran Picnic Ground Road. An at grade intersection with a wide median treatment is proposed for Warrayatkin Road.

There are three proposed alignment options that are being assessed. These share a common alignment from Beaufort to near the Anderson Road intersection, east of Buangor (Ch. 16800), retaining the existing single carriageway footprint, and providing a duplicate carriageway located approximately 15 to
There are steep grades from Beaufort through to Fiery Creek, before the highway levels for 18 km. To the west of Buangor the topography undulates as the highway crosses the Melbourne to Ararat railway line, and passes to the south of Langi Ghiran State Park. The highway then levels once again from the west side of Langi Ghiran State Park through to Ararat. Apart from the State Park and small areas of remnant forest, the surrounding land use is predominately agricultural (grazing and cropping).

Other than the Ballarat to Ararat railway which carries local passengers, no State significant infrastructure such as major pipelines or powerlines, is located within the study area. The alignment options all involve a crossing of the railway, six major waterways and 21 minor waterways (tributaries, drainage lines and irrigation channels).

There are three proposed alignment options that are being assessed. These share a common alignment from Beaufort to near the Anderson Road intersection, east of Buangor (Ch. 16800), retaining the existing single carriageway footprint, and providing a duplicate carriageway located approximately 15 to 100 m to the north. Thereafter the options differ in their geometry, and whether a duplication or an entirely new dual carriageway is constructed. The alignment options and the historical heritage sites within their impact pathway are summarised in Table 8 and their individual contexts illustrated in Maps 2-9.

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Alignment Option descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option</strong></td>
<td><strong>Location and Chainage (m)</strong></td>
</tr>
<tr>
<td><strong>East to West</strong></td>
<td></td>
</tr>
<tr>
<td>Common to all options</td>
<td>Box’s Cutting to Warrayatkin Road</td>
</tr>
<tr>
<td></td>
<td>(Ch. 840 to 34400)</td>
</tr>
<tr>
<td>Common to all options</td>
<td>Warrayatkin Road to Heath Street</td>
</tr>
<tr>
<td></td>
<td>(Ch. 34400 to 39600)</td>
</tr>
<tr>
<td>Common to all options</td>
<td>Beaufort to the base of Box’s Cutting</td>
</tr>
<tr>
<td></td>
<td>(Ch. 840 - 3400)</td>
</tr>
<tr>
<td>Common to all options</td>
<td>Box’s Cutting to Waldrons Road</td>
</tr>
<tr>
<td></td>
<td>(Ch. 3400 – 12000)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Option</td>
<td>Location and Chainage (m)</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>East to West</td>
</tr>
</tbody>
</table>
|        | Waldrons Road to east of Anderson Road (Ch. 12000 – 15700) | **Duplication** of the existing highway on the southern side, maintaining a median from approximately 15 m in the east to 40 m in the west. | **Construction immediately adjacent to:**  
H7523-0093 Former Middle Creek School Site  
Chainage ~10850 |
|        | Anderson Road to Pope Road (Ch. 16500 – 22400) | **New dual carriageway** to the north of Buangor, and meeting the existing highway west of Buangor-Ben Nevis Road.  
Alignment common to Option 3 |  |
|        | Pope Road to the eastern end of Hillside Road (Ch. 22400 – 24800) | **New dual carriageway**, extending southwest from the existing highway and crossing the rail line. |  |
| Option 1 | Eastern end of Hillside Road to Heath Street, Ararat (Ch. 24800 – 39600) | **New dual carriageway** located approximately 700 m south of the existing highway until Ch. 28400 where it converges over a 1.5 km distance. A **duplication** of the existing carriageway occurs from Ch. 28400 with the new carriageway to the south. The median width varies from 30 m in the east to a narrow 6 m treatment in the west. | **Construction immediately adjacent to:**  
H7523-0092 Former Dobie Railway Station  
Chainage ~33150–~33210  
H7523-0091 Dobie House Ruins  
Chainage ~33820–~3397 |
|        | Anderson Road to Pope Road (Ch. 16600 – 24600) | **New dual carriageway** that bypasses Buangor to the north, then extends south over the existing highway and rail line. | **Construction encounters:**  
H7523-0087 Peacocks Road House Ruins  
Chainage ~18300-18400 |
<p>| Option 2 | Pope Road to the eastern end of Hillside Road (Ch. 22600 – 24200) | <strong>New dual carriageway</strong>, extending along the southern side of the railway line, meeting the existing highway. |  |
|        | Eastern end of Hillside | <strong>Duplication</strong> of the existing |  |</p>
<table>
<thead>
<tr>
<th>Option</th>
<th>Location and Chainage (m)</th>
<th>Description</th>
<th>Historical Sites Within Impact Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>East to West</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road to Heath Street, Ararat. (Ch. 24200 – 39400)</td>
<td>highway on the southern side. Alignment common to Option 3.</td>
<td>H7523-0090 Former Colvinsby School Chainage ~26100-26180</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction immediately adjacent to: H7523-0092 Former Dobie Railway Station Chainage ~33150–33210</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H7523-0091 Dobie House Ruins Chainage ~33820–3397</td>
</tr>
<tr>
<td></td>
<td>Anderson Road to Pope Road (Ch. 16500 – 22400)</td>
<td>Common alignment with Option 2. <strong>New dual carriageway</strong> to the north of Buangor, and meeting the existing highway alignment west of Buangor-Ben Nevis Road.</td>
<td></td>
</tr>
<tr>
<td>Option 3</td>
<td>Pope Road to the eastern end of Hillside Road (Ch. 22400 – 24800)</td>
<td><strong>New dual carriageway</strong>, extending southwest across the rail line further than Option 2, then meeting the existing highway alignment in a similar location to Option 2.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eastern end of Hillside Road to Heath Street, Ararat. (Ch. 24800 – 39600)</td>
<td>Alignment common to Option 2. <strong>Duplication</strong> of the existing highway on the southern side.</td>
<td>Construction encounters: H7523-0090 Former Colvinsby School Chainage ~26100-26180</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction immediately adjacent to: H7523-0092 Former Dobie Railway Station Chainage ~33150–33210</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H7523-0091 Dobie House Ruins Chainage ~33820–3397</td>
</tr>
</tbody>
</table>

On balance, all three alignment options impact historical cultural heritage but these impacts can be mitigated by the measures described in Section 7.
Map 2: Major Mitchell Cairn Context Map

Legend:
- Study area
- Property parcel
- Historical heritage site
- Option 1 footprint
- Option 2 footprint
- Option 3 footprint
- Road
- Watercourse

Major Mitchell Cairn (DSE)

All Options

Map created by: Joanne de Lange

Data sources: Topographic data: DSE 2009

WHP Historical Cultural Heritage Impact Assessment
Andrew Long + Associates Pty Ltd
Map 3: Woodnaggerak Homestead Context Map

WHEES - Historical Heritage Impact Assessment
Section 2 - Beaufort to Ararat - Context map
Historical heritage sites subject to impact assessment and mitigation measures

Woodnaggerak Homestead (HO)

Legend
- Study area
- Property parcel
- Historical heritage site

All Options

MIDDLE CREEK
(Barwon Rural City)

Data sources: Topographic data: 2004-2008

WHP Historical Cultural Heritage Impact Assessment
Andrew Long + Associates Pty Ltd
Map 7: Former Colvinsby School Site Context Map

WHEES - Historical Heritage Impact Assessment
Section 2 - Beaufort to Ararat - Context map

Legend
- Study area
- Property parcel
- Historical heritage site

H7523-0090 - Former Colvinsby School (HI)

(WHP Historical Cultural Heritage Impact Assessment
Andrew Long + Associates Pty Ltd

Option 1
Option 2/Option 3

(Ararat Rural City)

Drawn by: Joosra de Lange

Date: 27 July 2012

Data sources: V-TJL topographic data 1994-2008

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Key Issues

This section reviews the key issues in terms of the potential impacts of the eventual development on the non-Aboriginal (historical) cultural heritage in or nearby to the project area. To inform this assessment, several modes of investigation were utilised in accordance with the EES Scoping Requirements discussed in Section 2. These included a detailed review of existing conditions by identifying relevant historical information within the vicinity of the project area through desktop and site survey investigations; providing an inventory of any historical cultural heritage places of significance in and within the vicinity of the project area; and establishing the cultural heritage significance of any known or newly recorded sites in consultation with Heritage Victoria and the Pyrenees Shire Council and Ararat Rural City Council.

This assessment identifies measures to avoid, mitigate or manage potential effects on known and registered places of cultural heritage significance and identifies the residual effects of the project on any potential historical cultural heritage and values in or nearby to the project area.

6.2 Impact Pathways

This section identifies and describes historical heritage cause and effect pathways associated with the construction and operation of the Project.

The impact pathways are considered in terms of how the Project would either encounter or interact with immediately adjacent non-Aboriginal (historical) cultural heritage. The construction of a road and associated infrastructure will likely involve the clearing of the Project area to a depth that will encounter historical heritage, if it is present. Thus, construction risks impacting upon historical heritage located above ground and in a subsurface context.

A total of eight sites have been identified and assessed as being affected by the construction and operation of the proposed alignments of Section 2. Three sites are directly in the construction pathway and five sites are located immediately adjacent to it. Thus, construction activity risks impacting upon historical heritage located both above ground and in a subsurface context. Table 9 summarises the impact pathways which were identified in Table 8 by type of heritage listing and proximity to construction pathway.

Table 9 Summary of Impact Pathways

<table>
<thead>
<tr>
<th>Construction encounters heritage inventory (HI) feature or site</th>
<th>Construction encounters locally significant historical heritage feature or site (DSE local listing)</th>
<th>Construction immediately adjacent to heritage inventory (HI) feature or site</th>
<th>Construction encounters previously unregistered and unassessed historical cultural heritage sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>H7523-0087 Peacocks Road House Ruins Chainage ~18300-18400 Option 2 only</td>
<td>Major Mitchell Cairn Chainage ~10100 All Options</td>
<td>Woodnaggerak Homestead Chainage ~10625–~10800 All Options</td>
<td>Unknown</td>
</tr>
<tr>
<td>H7523-0090 Former Colvinsby School Chainage ~26100-26180 Options 2 and 3</td>
<td></td>
<td>H7523-0093 Former Middle Creek School Site Chainage ~10850 All Options</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>H7523-0088 Former Prince of Wales Hotel Site Chainage ~12500-12600 All Options</td>
<td></td>
</tr>
</tbody>
</table>
### 6.3 Risk Assessment

This section describes the risks resulting from the impact pathways and discusses the significance of the risks and the values that are potentially impacted.

VicRoads has a standard set of environmental protection measures, which are typically incorporated into its construction contracts for road works and bridge works, hereafter referred to as the “VicRoads standard environmental protection measures”. These measures have been used as the starting point for the impact assessment. Those that are relevant to historical heritage are included in the “planned controls” column of the risk assessment (Table 10) and outlined in more detail in Section 7 (Mitigation Measures).

As a result of the initial risk assessment, in some cases additional Project specific controls have been proposed to reduce risks. These are outlined in the “additional controls” column of the risk assessment in Table 10, and are described in more detail in Section 7.

Key observations from the risk assessment of the proposed alignment and associated construction corridor are:

1. Damage to or complete destruction of previously listed local historical site, Major Mitchell Cairn (1 site).
2. Damage to or complete destruction of previously registered historical archaeological HI sites: H7523-0087 Peacocks Road House Ruins and H7523-0090 Former Colvinsby School (2 sites).
3. Present design places the construction on the boundary of these sites. Avoidance by maintaining current design: Woodnaggerak Homestead H7523-0093, Former Middle Creek School Site, H7523-0088 Former Prince of Wales Hotel Site, H7523-0092 Former Dobie Railway Station and H7523-0091 Dobie House Ruins (5 sites).
4. Damage to or complete destruction of previously unregistered and currently unknown historical sites of potential local, State or national significance.

Option 2 will result in damage or complete destruction of two Heritage Inventory listed places (Peacocks Road House Ruins and Former Colvinsby School), which carry a high initial risk rating, but which can reduced to low following appropriate early consent application through Heritage Victoria. This option appears to have the requirement for the most extensive additional project specific controls, followed by Option 3, then by Option 1 with the fewest required controls (Table 10).
6.4 Key Impacts

The impacts across the three proposed alignment options are outlined below:

Option 1

If the current design were maintained Option 1 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, HO or HI sites thereby causing neither destruction nor damage to any sites other than the one DSE listed local site, Major Mitchell’s Cairn, which would require relocation.

Option 2

If the current design were maintained Option 2 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on two HI sites (H7523-0087 Peacocks Road House Ruins and H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn) which would require relocation.

Option 3

If the current design were maintained Option 3 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on one HI site (H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn), which would require relocation.

On balance, all three alignment options impact historical cultural heritage but these impacts can be mitigated by the measures described in Section 7 and the residual impacts would be low.
<table>
<thead>
<tr>
<th>Risk No.</th>
<th>Impact pathway</th>
<th>Description of consequences</th>
<th>Planned Controls to Manage Risk (as per Project Description, and VicRoads Contract Shell DC1: Design &amp; Construct, (April 2012)).</th>
<th>Initial Risks</th>
<th>Controls Recommended to Reduce Risk</th>
<th>Residual Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHH1</td>
<td>Construction encounters Major Mitchell Cairn (DSE local) Chainage -10100 Option 1, 2 and 3</td>
<td>Damage to, or complete destruction of previously registered historical site.</td>
<td>Submission to approvals authority (relevant LGA) prior to damaging, disturbing or otherwise impacting cultural heritage site to relocate site to an agreed area.</td>
<td>Minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Almost Certain</td>
<td>Medium</td>
<td>Early application to approvals authority (relevant LGA) prior to damaging, disturbing or otherwise impacting cultural heritage site to relocate site to an agreed area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unlikely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHH2</td>
<td>Construction immediately adjacent to Woodnaggerak Homestead Chainage -10625~10800 Option 1, 2 and 3</td>
<td>Present design places the construction on the boundary of this site. Alteration to design could cause damage to, or completely destroy historical site earmarked for Heritage Overlay.</td>
<td>Current design avoids site.</td>
<td>Insignificant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHH3</td>
<td>Construction immediately adjacent to Former Middle Creek School HI site. Chainage -10850 Option 1, 2 and 3</td>
<td>Present design places the construction on the boundary of this site. Alteration to design could cause damage to, or completely destroy site.</td>
<td>Current design avoids site.</td>
<td>Insignificant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHH4</td>
<td>Construction immediately adjacent to Former Prince of Wales Hotel HI site. Chainage -12500-12600 Option 1, 2 and 3</td>
<td>Present design places the construction on the boundary of this site. Alteration to design could cause damage to, or completely destroy site.</td>
<td>Current design avoids site.</td>
<td>Insignificant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHH5</td>
<td>Construction encounters Peacocks Road House HI site. Chainage -18300-18400 Option 2 only</td>
<td>Damage to, or complete destruction of previously registered historical archaeological sites or features (HI)</td>
<td>Approval would be obtained from Heritage Victoria prior to damaging, disturbing or otherwise impacting cultural heritage sites</td>
<td>Almost Certain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk No.</td>
<td>Impact pathway</td>
<td>Description of consequences</td>
<td>Planned Controls to Manage Risk (as per Project Description, and VicRoads Contract Shell DC1: Design &amp; Construct, (April 2012)).</td>
<td>Initial Risks</td>
<td>Controls Recommended to Reduce Risk</td>
<td>Residual Risks</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-----------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>CHH6</td>
<td>Construction encounters Former Colvinsby School site Chainage 26100-26180 Option 2 and 3</td>
<td>Damage to, or complete destruction of a previously registered historical archaeological site or features (HI)</td>
<td>Approval would be obtained from Heritage Victoria prior to damaging, disturbing or otherwise impacting cultural heritage sites</td>
<td>Consequence: Moderate</td>
<td>Likelihood: Almost Certain</td>
<td>Risk Rating: High</td>
</tr>
<tr>
<td>CHH7</td>
<td>Construction immediately adjacent to Former Dobie Railway Station HI site Chainage 33150-33210 Option 1, 2 and 3</td>
<td>Present design places the construction on the boundary of this site. Alteration to design could cause damage to, or completely destroy site.</td>
<td>Current design avoids site.</td>
<td>Consequence: Moderate</td>
<td>Likelihood: Unlikely</td>
<td>Risk Rating: Medium</td>
</tr>
<tr>
<td>CHH8</td>
<td>Construction immediately adjacent to Dobie House Ruins HI site. Chainage 33820-33975 Option 1, 2 and 3</td>
<td>Present design places the construction on the boundary of one site. Alteration to design could cause damage to, or completely destroy site.</td>
<td>Current design avoids site.</td>
<td>Consequence: Moderate</td>
<td>Likelihood: Unlikely</td>
<td>Risk Rating: Medium</td>
</tr>
<tr>
<td>CHH9</td>
<td>Construction encounters previously unregistered and unassessed historical cultural heritage sites Option 1, 2 and 3</td>
<td>Alteration to design could cause damage to, or completely destroy site previously unregistered and unassessed historical cultural heritage sites.</td>
<td>Avoidance or Approval would be obtained from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites</td>
<td>Consequence: Major</td>
<td>Likelihood: Unlikely</td>
<td>Risk Rating: Medium</td>
</tr>
</tbody>
</table>
7. Mitigation Measures

7.1 Construction

VicRoads will require the construction contractor to develop and implement a Construction Environmental Management Plan (CEMP) for the Project. VicRoads standard environmental protection measures and some additional Project specific controls identified below have been incorporated into the Environmental Management Framework for the Project. VicRoads will require the construction contractor to incorporate all of these measures into the CEMP.

VicRoads standard environmental protection measures for historical cultural heritage that will be adopted for this Project include the following contract specification clauses:

1200.15
(b) Permits and Approvals

The permits and/or approvals identified in Table 1200.151 have already been obtained, or are being obtained by the Principal. The terms and conditions of these permits and approvals shall be observed by the Contractor.

Table 1200.151 – Heritage Permits and Approvals Obtained by the Principal

<table>
<thead>
<tr>
<th>Site</th>
<th>Permit / Approval Number</th>
<th>Issuing Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Indigenous (Historical)</td>
<td>TBC</td>
<td>TBC</td>
</tr>
</tbody>
</table>

(c) A Table 1200.152 listing known Cultural Heritage sites.

(f) Monitoring

Additional, Project specific controls are also recommended to reduce risks to historical cultural heritage. If historical heritage sites are found during any works the following steps should be applied:

1. The person who identified the find will immediately notify the person in charge.

2. The person in charge must then suspend any relevant works at the location of the discovery and to a distance within 50m of the relevant site extent and isolate the find via the installation of safety webbing, or other suitable barrier and the material to remain in situ.

3. The person in charge of works should notify a suitably qualified archaeologist of the find within 24 hours of the discovery.

4. Relevant management actions will be determined by the suitably qualified archaeologist in relation to the Heritage Act 1995 and in consultation with Heritage Victoria. The resultant recommendations will follow a similar process to the recommendations outlined in Figure 2, Section 4.1.7 of this report.
7.2 Summary

Table 11 presents a summary of the mitigation measures that have been identified to avoid, reduce or minimise impact risk. The measures comprise both relevant requirements of the VicRoads standard environmental protection measures as well as the additional measures identified by this impact assessment. The aim is to achieve the relevant EES Objectives described in Section 2.

### Table 11 Environmental Management Measures

<table>
<thead>
<tr>
<th>Risk No.</th>
<th>Risk Description</th>
<th>Management Measures</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHH1</td>
<td>Construction encounters, Major Mitchell’s Cairn, a locally significant historical heritage feature or site (DSE local listing).</td>
<td>Submission to approvals authority (relevant LGA/DSE) prior to damaging, disturbing or otherwise impacting cultural heritage site to relocate site to an agreed area.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH2</td>
<td>Construction immediately adjacent to Woodnaggerak, a locally significant historical heritage feature or site</td>
<td>Site avoidance as Public Acquisition Overlay goes to property fenceline.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH3</td>
<td>Construction immediately adjacent to H7523-0093 Former Middle Creek School an historical heritage feature or site (HI)</td>
<td>Maintain current design and avoid site.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH4</td>
<td>Construction immediately adjacent to H7523-0088 Former Prince of Wales Hotel Site, an historical heritage feature or site (HI)</td>
<td>Maintain current design and avoid site.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH5</td>
<td>Construction encounters H7523-0087 Peacocks Road House Ruins, an historical heritage feature or site (HI)</td>
<td>Approval obtained from Heritage Victoria prior to damaging, disturbing or otherwise impacting cultural heritage sites</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH6</td>
<td>Construction encounters the H7523-0090 Former Colvinsby School, an historical heritage features or site (HI)</td>
<td>Approval obtained from Heritage Victoria prior to damaging, disturbing or otherwise impacting cultural heritage site.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH7</td>
<td>Construction immediately adjacent to H7523-0092 Former Dobie Railway Station, an historical heritage feature or site (HI)</td>
<td>Maintain current design and avoid site.</td>
<td>VicRoads</td>
</tr>
<tr>
<td>CHH8</td>
<td>Construction immediately adjacent to H7523-0091 Dobie House Ruins, an historical heritage feature or site (HI)</td>
<td>Maintain current design and avoid site.</td>
<td>VicRoads</td>
</tr>
</tbody>
</table>
CHH9  Construction encounters previously unregistered and unassessed historical cultural heritage sites

An EMP would be prepared to include contingency measures that manage the unexpected discovery of historical cultural heritage sites and features. Subsequent avoidance or Approval from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites would be sought.
8. Conclusion

The EES Scoping Requirements relevant to the non-Aboriginal (historical) cultural heritage assessment are as follows:

- To protect historical cultural heritage.
- To identify relevant historical information within the vicinity of the project area and provide a thematic history of the area.
- To provide an inventory of any historical cultural heritage places of significance in and within the vicinity of the project area, including the Woodnaggerak Homestead and the former Cobb & Co. Changing Station at Buangor. Survey work may be required to ensure that the inventory is a thorough listing of all historical heritage places in and within the vicinity of the project area.
- To establish the cultural heritage significance of any known or newly recorded sites in consultation with Heritage Victoria and the Pyrenees Shire Council and Ararat Rural City Council.
- To identify and assess the potential effects of the project on known and recorded sites, including whether the project will affect the setting and context of heritage places.
- To identify measures to avoid, mitigate or manage potential effects on known and recorded places of cultural heritage significance. Include details of any proposed measures such as project redesign, site protection measures, site recording and documentation, funding options and relocation procedures, if necessary, and any requirements under either the Pyrenees or Ararat Planning Schemes and the Heritage Act 1995.
- To identify the residual effects of the project on historical cultural heritage and values in or nearby to the project area.

In order to meet these objectives, the following investigations were undertaken.

A desktop review was conducted to:

- determine the level of prior cultural heritage assessment (for example the 2008 Noble et. al. report ‘Western Highway Duplication: Burrenbeet to Stawell, Cultural Heritage Due Diligence’) of the study area and the surrounding region;
- determine the presence of registered historical heritage places within the study area and the surrounding region; and
- determine the environmental context of the study area with regard to landform.

Spatial datasets were consulted to inform the existing conditions assessment and assess the impact of the alignment options on registered and potential National and Commonwealth Heritage Listed places, Heritage Inventory (HI) places, local planning schemes Heritage Overlay (HO) places, Victorian Heritage Register (VHR) places and other Historical Heritage Registers (e.g. DSE). This was achieved by implementing the following:

- site inspection of previously registered sites and confirmation of their extents, and the
- integration of georeferenced parish maps, in consultation with local historical societies, community members, and local councils.
The results of the site inspection were discussed with Heritage Victoria in a workshop on 24 April 2012.

Nine previously unregistered sites required listing on the Heritage Inventory and one written submission to Pyrenees Shire Council and two to Ararat Rural City Council for possible inclusion in the Planning Scheme Heritage Overlay.

The impact assessment identified a total of eight sites that would be affected by the construction and operation of the proposed alignments options 1-3. Three sites are directly in the construction pathway and five sites are located immediately adjacent to the present construction design.

The impacts across the three proposed alignment options are outlined below. The risks presented by the adverse impacts identified can be managed and mitigated through implementing appropriate mitigation measures outlined in Chapter 7 of this report.

**Option 1**

If the current design were maintained Option 1 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, HO or HI sites thereby causing neither destruction nor damage to any sites other than the one DSE listed local site, Major Mitchell’s Cairn, which would require relocation.

**Option 2**

If the current design were maintained Option 2 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on two HI sites (H7523-0087 Peacocks Road House Ruins and H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn) which would require relocation.

**Option 3**

If the current design were maintained Option 3 would not directly encounter any National Heritage Listed, Commonwealth Heritage Listed, VHR, or HO sites but would impact directly on one HI site (H7523-0090 Former Colvinsby School site) and the one DSE listed local site (Major Mitchell’s Cairn), which would require relocation.

The key outcomes in terms of management and legislative obligations/approvals can be defined in four categories based on risk description, as follows:

**Risk Category 1**

Where construction encounters locally significant historical heritage feature or site (DSE local listing), a submission to approvals authority (relevant LGA/DSE) prior to damaging, disturbing or otherwise impacting cultural heritage site to relocate site to an agreed area is required.

**Risk Category 2**

Where construction is immediately adjacent to an historical heritage feature or site (HI), the current design should be maintained and site avoided.

**Risk Category 3**

Where construction encounters known historical heritage feature or site (HI), approval is to be sought from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites alleviating any potential delays resulting from unexpected finds and does not compromise the collection of data.
**Risk Category 4**

Where construction encounters previously unregistered and unassessed historical cultural heritage sites, an EMP should be prepared to include contingency measures that manage the unexpected discovery of historical cultural heritage sites and features. Subsequent avoidance or Approval from relevant authorities prior to damaging, disturbing or otherwise impacting cultural heritage sites should be sought.

Based on the risks and impacts identified historical heritage is impact by all three alignment options but these impacts can be mitigated. Overall, from an historical cultural heritage perspective Alignment Option 1 is the preferred option because it would only impact on one site of local significance. Options 2 and 3 would impact three and two sites of local significance respectively. All options have a low overall impact on historical cultural heritage.
9. References


Public Record Office Victoria: Parish maps: Eurambeen, Beaufort, Woodnaggerak, Buangor, Colvinsby, Gorrinn, Langi Ghiran, Ararat, Concongella, Concongella South, Mokepilly, Stawell
  › VPRS 625 Selection Files, Sections 19 and 20, Land Act 1869*
  › VPRS 626 District Selection Files, Sections 19 and 20, Land Act 1869*
  › VPRS 627 Land Selection Files, Section 31, Land Act 1869*
  › VPRS 629 Land Selection Files, Section 33, Land Act 1869*
  › VPRS 5920 Pastoral Run Files
Appendix A
Historical Heritage Consultation Log
## Western Highway Project Section 2
### Historical Heritage Consultation

<table>
<thead>
<tr>
<th>Date</th>
<th>Organisation / Individual</th>
<th>Location</th>
<th>Attendance</th>
<th>Theme</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 August 2011</td>
<td>Stawell Historical Society</td>
<td>Telephone conversation and follow up email</td>
<td>Sarah Rood, Gary Withers</td>
<td>Discussion of research undertaken and explanation of community consultation process. Request to set up a meeting.</td>
<td>Community consultation meeting arranged for 15 September 2011 at LangiMorgalla in Ararat. Additional information on potentially impacted sites emailed to Sarah Rood after the phone call (these were then emailed to ALA).</td>
</tr>
<tr>
<td>8 September 2011</td>
<td>Lorraine Huddle</td>
<td>Telephone</td>
<td>Sarah Rood, Lorraine Huddle</td>
<td>Discussion of research undertaken and explanation of community consultation process. Feedback sought on sites of importance.</td>
<td>Lorraine was invited to attend the community consultation meetings scheduled in Ararat. Agreement made to send final maps and list of impacted sites to Lorraine for feedback as she is Melbourne-based.</td>
</tr>
<tr>
<td>9 September 2011</td>
<td>Wendy Jacobs</td>
<td>Telephone</td>
<td>Sarah Rood, Wendy Jacobs</td>
<td>Discussion of research undertaken and community consultation process. Feedback sought on sites of importance.</td>
<td>Agreed to provide consultation should additional sites be identified on which little information could be found.</td>
</tr>
<tr>
<td>14 September 2011 (11am)</td>
<td>Ararat Rural City Council</td>
<td>Ararat Rural City Council Offices, Ararat</td>
<td>Neil Manning, Fiona Poulton, Sarah Rood</td>
<td>Presentation of geo-referenced maps and presentation of historical data summary table.</td>
<td>Positive feedback given on process, no additional sites identified. Additional secondary source recommended.</td>
</tr>
<tr>
<td>14 September 2011 (12pm)</td>
<td>Ararat Historical Society</td>
<td>LangMorgalla, Ararat</td>
<td>8 members of the Ararat Historical Society, Fiona Poulton, Sarah Rood</td>
<td>Presentation of geo-referenced maps and presentation of historical data summary table.</td>
<td>Several additional sites identified and robust discussion on the location and significance of these sites. Secondary material provided to consultants. Follow-up meetings 15 September 2011.</td>
</tr>
<tr>
<td>15 September 2011 (10am)</td>
<td>Judy Barry, local historian</td>
<td>Residence of Judy Barry</td>
<td>Judy Barry, Fiona Poulton, Sarah Rood</td>
<td>Presentation of geo-referenced maps and presentation of historical data summary table.</td>
<td>Additional information provided on sites identified by the members of the Ararat Historical Society. Additional secondary source material provided.</td>
</tr>
<tr>
<td>15 September 2011 (12pm)</td>
<td>Stawell Historical Society</td>
<td>Premises of the Stawell Historical Society, Stawell</td>
<td>3 members of the Stawell Historical Society, Fiona Poulton, Sarah Rood</td>
<td>Presentation of geo-referenced maps and presentation of historical data summary table.</td>
<td>Robust discussion of proposed alignments and their impact. Additional sites identified and copies of secondary material given to consultants.</td>
</tr>
<tr>
<td>15 September 2011 (2.30pm)</td>
<td>Ararat Historical Society</td>
<td>LangMorgalla, Ararat</td>
<td>5 members Ararat Historical Society, Fiona Poulton, Sarah Rood</td>
<td>Further discussion of sites identified at the previous meeting.</td>
<td>Digital copies of photographs relating to identified sites given to consultants.</td>
</tr>
</tbody>
</table>