

MELBOURNE AIRPORT RAIL

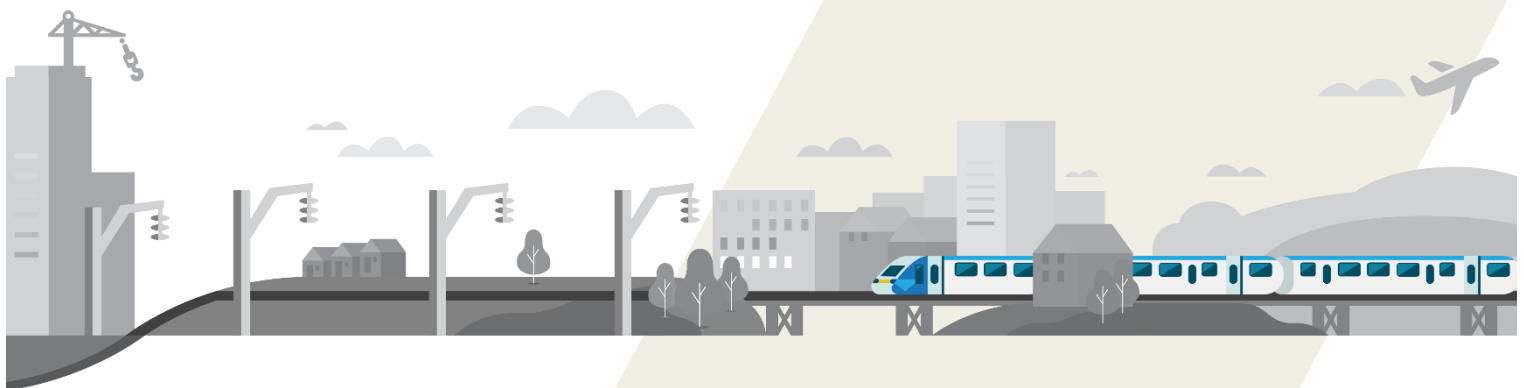
MAR STATE LAND HISTORICAL HERITAGE IMPACT ASSESSMENT

MAR-AJM-PWD-PWD-REP-XCH-NAP-0001709

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This document should be read in full and no excerpts are to be taken as representative of the findings.

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Table of Abbreviations

Table 1.1 Table of Abbreviations

Abbreviation	Definition
AJM-JV	Aurecon Jacobs Mott MacDonald Joint Venture
ARTC	Australian Rail Track Corporation
Burra Charter	Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter), 2013
CSR	Combined Service Route
CHL	Commonwealth Heritage List
COR	Corridor section
EES	Environment Effects Statement
EPBC Act	<i>Environment Protection and Biodiversity Act 1999</i>
EMR	Environmental Management Requirements
EMF	Environmental Management Framework
HO	Heritage Overlay
HV	High voltage
HV McKay	Hugh Victor McKay
Investigation Area	Area within an area of 500m from the centre line of the MAR corridor, confined to Sunshine/Albion area
LGA	Local Government Area
MAR	Melbourne Airport Rail
MNES	Matters of National Environmental Significance
NHL	National Heritage List
OHLE	Overhead Line Equipment
The Project	Melbourne Airport Rail Project
RPV	Rail Projects Victoria
SLV	State Library of Victoria
State Project Land	The State Project Land defines the land within which the Project components and construction activities are planned to be contained. It sets out the full extent of land identified as potentially required for the delivery of the Project.
SUN	Sunshine section
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register

1. Executive Summary

The Melbourne Airport Rail (MAR) project (the Project) is a once-in-a-generation transformation of Victoria's transport network, connecting Melbourne Airport's Integrated Terminal Precinct with a rail service for the first time. In 2018, the Victorian Government released the Melbourne Airport Rail Link Sunshine Route Strategic Appraisal, which confirmed that the Sunshine route remains the best solution for an airport rail link.

The purpose of the Historical Heritage Impact Assessment for the Project includes the following:

- The historical heritage assessment consists of a qualitative assessment of selected construction activities and a qualitative assessment of operational activities based on the Project.
- To assess the potential positive and adverse historical heritage impacts associated with the construction and operation of the Project
- Where impacts would occur, to consider opportunities to minimise the impact on heritage values through mitigation and management measures, to form the basis for performance requirements.

The Impact Assessment relates only to public and privately owned State Land, divided into the Corridor Section and Sunshine Section. It does not consider Commonwealth-owned land, which is subject to a separate approvals process.

The Historical Heritage Impact Assessment does not address Aboriginal cultural heritage, which is subject to a separate assessment.

Relevant legislative frameworks and approval requirements for heritage were reviewed, in particular, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), *Heritage Act 2017* (Heritage Act) and *Planning and Environment Act 1987* (P&E Act).

A desktop review and targeted fieldwork were undertaken to identify historical heritage values and places within State Project Land. This included places that are subject to statutory heritage listings under the relevant legislation, as well as places of potential heritage value but where no statutory controls apply. Within the State Project Land, there are six Victorian Heritage Register (VHR) places, three Victorian Heritage Inventory (VHI) places and a large number of places included in the Heritage Overlay (HO) under the Maribyrnong, Hobsons Bay, Brimbank, Moonee Valley and Moreland planning schemes, with the majority located in Brimbank.


Following the establishment of the existing conditions, the impacts posed by the Project were considered. Potential measures to avoid, minimise or mitigate adverse impacts were considered as part of the impact assessment methodology and it is anticipated that these will form the basis for defining performance requirements to meet historical heritage objectives.

The findings of impact assessment are summarised as follows:

- While the majority of project works occur within the rail corridor and no heritage impacts are expected, there are a number of locations where project works would intersect with state or locally listed heritage places and there would be some impacts on heritage values as a result.
- In some cases, the impacts arise as result of works within the heritage place, while in other cases, the introduction of significant new infrastructure in proximity would result in an impact on the presentation of the heritage places.

Corridor Section

- For the Corridor Section, the key heritage issue is that of the construction of the new Maribyrnong River Rail Bridge, adjacent to the VHR-listed Albion Viaduct (VHR H1197). While there would be no direct physical impact and the historical and technological values would be unaffected, the new bridge would have an adverse impact on the presentation of the existing viaduct in views within the river valley. Partial mitigation of the impact would be through the careful design of the new structure consistent with Heritage Design Guidelines (Lovell Chen, September 2020). The guidelines have been developed to guide the design of the new bridge to ensure an outcome that is responsive to the heritage viaduct. The



guidelines address a series of key elements of bridge design, including issues of the overall form and structural design as well as those relating to the integration of rail infrastructure.


- Project works would also interface with the locally-listed Dodds Homestead Ruins in Brimbank Park (H7822-0004/HO47 Brimbank) and Steele Creek Rail Embankment (HO37, Brimbank). In the case of the homestead ruins, this site is largely archaeological and a high level of archaeological potential has been identified. Avoidance and protection measures have been recommended, or if works are required that intersect with areas of archaeological sensitivity, these would be subject to appropriate archaeological investigations consistent with Heritage Victoria's requirements. Project works at the Steele Creek Rail Embankment (HO37) would have a major physical impact but on the basis of the nature of this feature and the identified values, there would be no significant adverse impact.

Sunshine Section

- For the Sunshine Section, project works would intersect with the VHR-listed HV McKay Memorial Gardens (VHR H1953), along the Garden's north-eastern edge. While the detail of the works has not been confirmed, there would be impacts from permanent works and temporary occupation of part of the site. The approach to this place should be to minimise the area of impact, including the protection of mature trees where possible, and to undertake landscape reinstatement works to restore the layout and character of the gardens consistent with its values and relevant management plans.
- The elevated viaduct north-west of Sunshine and extending over Ballarat Road would be in relatively close proximity to two significant heritage buildings/complexes within and fronting the rail corridor at Albion. While no direct physical impacts are expected as a result of the proximity of this structure, the viaduct will impact on some aspects of the presentation of the VHR-listed John Darling and Son Flour Mill (VHR H0829) and the locally-listed Albion VR D.C. Substation (HO28, Brimbank). Core heritage values would be maintained in both cases, but there would be a visual impact arising from the proximity of the new infrastructure, particularly in views from the east, which would be partially obstructed. A series of design considerations have been identified to assist in mitigating the impacts.
- Other heritage places that could be affected as part of the Sunshine section are the Sugar Gum Row in Talmage Street (HO42), the HV McKay Memorial Gates (HO53), both included in the HO and the unlisted Quonset Hut at 134 Hampshire Road, Sunshine. In each case, recommendations for mitigation and management of potential impacts have been provided.

Four project-wide heritage issues have been identified.

- Signalling and rail systems upgrade works will generally occur within the rail corridor and these are considered to be a low risk and unlikely to have an adverse impact on listed heritage places. Notwithstanding this, there are a number of heritage places along the corridor and there is a need to assess works proposed at each of the affected heritage places individually to confirm there are no adverse impacts on significant fabric or no adverse visual impact.
- Activities and potential works within roadways within or fronting heritage places or precincts were also identified as low risk. Recommendations have been provided to avoid any potential impacts.
- There is the potential for construction vibration to affect historical heritage places. Pre-construction and post-construction condition survey(s) should be undertaken for heritage places at risk of impact from structural integrity or other damage and disturbance as a result of the Project. Measures to manage and monitor potential vibration impacts on heritage places during construction must be implemented in accordance with the Construction Noise and Vibration Management Plan required for the Project under the relevant planning approval. The results of monitoring for heritage places may be reported to the Executive Director, Heritage Victoria or the local Council as relevant and remedial action undertaken, if required, consistent with good heritage practice and the principles of the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter), 2013.
- A further project-wide issue is that of historical archaeology. A desktop investigation of historical archaeological values and impacts has been undertaken (MAR State Land Historical Archaeology Impact Assessment, MAR-AJM-PWD-PWD-REP-XCH-NAP-0001872), see Appendix D. The study identified one known archaeological site listed in the VHI of high archaeological potential (Brimbank Park Ruins (VHI H7822-004) referenced above. Other sites and the remainder of the State Project Land



were assessed as of low archaeological potential. As well as the specific requirements for the listed VHI sites, general mitigation measures were recommended including training in historical heritage awareness, documentation of all potential sites of low archaeological potential, the on-call availability of a suitably qualified archaeologist and the implementation of a STOP, ADVISE and MANAGE procedure in the event of unexpected discovery of archaeological remains. With these mitigation measures in place consistent with the Heritage Act and Heritage Victoria's requirements, it is expected that impacts on historical archaeology would be limited.

Overall, while there would be some adverse impacts on historical heritage values, the heritage issues and impacts of the Project are localised rather than widespread.

For each location where impacts would occur, there are considered to be some opportunities to minimise the impact on heritage values through mitigation and management measures, to form the basis for performance requirements. Relevant examples of the recommended mitigation measures are listed above.

In addition to specific mitigation measures, recommendations have been made for site interpretation at particular locations along the alignment and this would have the potential to explore historical heritage themes and enhance community engagement with specific places and local history.

2. Introduction

Aurecon Jacobs Mott Macdonald Joint Venture (AJM-JV) has been engaged by Rail Projects Victoria (RPV) to prepare the Melbourne Airport Rail (MAR) State Land Historical Heritage Impact Assessment (the Impact Assessment).

2.1 Purpose

The purpose of the Impact Assessment included the following:

- To assess the potential positive and adverse historical heritage impacts associated with the construction and operation of the Melbourne Airport Rail Project
- Where impacts would occur to consider opportunities to minimise the impact on heritage values through mitigation and management measures, these to form the basis for performance requirements.

2.2 Methodology

The preparation of the Impact Assessment included the following:

- Review of the scope of works and mapping presented in the 'MAR Project Description for Environmental Specialists' (MAR-AJM-PWD-PWD-MEM-XLP-NAP-0001505, Revision C) (the Project Description)
- Review of statutory heritage listings for the State Project Land, mapping provided by AJM JV (MAR-AJM-PWD-PWD-MAP-XCH-MMN-0490414 Rev A.2)
- Review of places within a 500m investigation area surrounding the Sunshine/Albion area of the State Project Land (the additional investigation area allows for a broader characterisation of the heritage context)
- Review of relevant heritage studies and reports, including identification of potential heritage places. A list of references is provided at Section 2.2.1
- Review of heritage studies - including thematic and typological studies and databases - and proposed planning scheme amendments in order to identify places of potential heritage significance but not currently subject to statutory controls
- Targeted historical research for key locations where surface impacts are anticipated - to provide general context for existing conditions
- Description of heritage places and values for Victorian Heritage Register (VHR), Victorian Heritage Inventory (VHI) and Heritage Overlay (HO) places within the State Project Land and HO places which only intersect at the border of the State Project Land
- Targeted site inspections of existing and identified potential heritage places within the State Project Land (undertaken 2018, 2019 and 2020)
- Overview of relevant legislation and statutory heritage frameworks and potential approval and permit requirements arising from these
- Review of MAR State Land Historical Archaeology Impact Assessment (MAR-AJM-PWD-PWD-REP-XCH-NAP-0001872) provided at Appendix D and inclusion of relevant information in this report
- Review of MAR State Land Vibration Impact Assessment (MAR-AJM-PWD-REP-XEV-NAP-0001719) and inclusion of relevant matters in this report
- Review of State Land Airborne Noise Impact Assessment (MAR-AJM-PWD-REP-XEV-NAP-0001716) and inclusion of relevant matters in this report
- Assess impacts on heritage places and values and recommend measures for avoiding, minimising, and mitigating impacts. These measures will be formalised through an Environmental Management Framework (EMF), prepared and approved in accordance with the relevant planning approval. The EMF

will provide a transparent and integrated governance framework to manage the environmental aspects of the Project and will detail Environmental Management Requirements (EMR) that must be implemented by the Delivery Partner.

2.2.1 Desktop Assessment

Table 2.1 provides an overview of the data sources consulted in the preparation of this report.

Table 2.1 Data Sources

DATA	SOURCE
Historical Research	
Historical aerial photography and land information	Central Plan Office, Landata, Victorian Land Registry Services
Historical maps, plans and images	State Library of Victoria Map Collection and Picture Collection, Museum Victoria Collection
Historical newspapers and journals	Various, generally accessed via the online digital portal, Trove, maintained by the National Library of Australia at https://trove.nla.gov.au/newspaper/
Published sources	
	Robert Freestone, Model communities The Garden Cities Movement in Australia, 1989
Reports and heritage studies	
Heritage listings and citations	Allom Lovell and Associates, <i>John Darling & Son Flour Mill Assessment of Significance for Goodman Fielder</i> , 1990
	Allom Lovell and Associates, <i>City of Moreland Heritage Review</i> , 1999
	Jill Barnard, Olwen Ford, Graeme Butler, Francine Gilfedder & Gary Vines, <i>Maribyrnong Heritage Review Vol. 3</i> , 2000-2001
	Brimbank City Council, <i>H.V McKay Memorial Gardens Management Plan</i> , November 2017
	Trevor Budge and Associates, <i>Macedon Ranges Cultural Heritage Study</i> , 1994
	Built Heritage Pty Ltd, <i>Survey of Post-War Built Heritage in Victoria</i> , 2010
	Context Pty Ltd, <i>Outer Western Metro Site Reassessment Project: Municipalities of Brimbank and Hume</i> , 2010
	Context, <i>Moonee Valley Gaps Study Stage 1</i> , 2014
	Context, <i>City of Brimbank Heritage Gaps Report</i> , 2014
	Extent, <i>Sunshine Barley Terminal Silos Heritage Assessment Stage 1</i> , January 2021
	Heritage Alliance, <i>Survey of Post-War Built Heritage in Victoria: Stage One</i> , 2008 (1)
	Heritage Alliance, <i>Moonee Valley - City of Moonee Valley Gap Heritage Study</i> , 2005
	Heritage Alliance, <i>Former Midway & Phillip (Maribyrnong) Migrant Hostels Supplementary Assessment of Heritage Significance</i> , 2008 (2)
	Heritage Victoria <i>Executive Director Recommendation Report, Avon River Bridge</i> , September 2018
	Hobsons Bay, <i>Hobsons Bay Heritage Study</i> , amended 2017
	Miles Lewis, The Sunshine Harvester Works, 1987 (unpublished report, submission to the Historic Buildings Council hearing into the registration of the Massey Ferguson site)
	Moloney, David and Vicki Johnson, City of Hume Heritage Study: Former Shire of Bulla District, 1998
	Moloney, David and Vicki Johnson, Hume Heritage Study Review, 2003
	Gary Vines, Olwen Ford, Graeme Butler & Francine Gilfedder, Brimbank City Council Post-Contact Cultural Heritage Study, Version 1, 2000 (Vols. 1-4)
	Gary Vines, Brimbank Heritage Study Review, 2005

DATA	SOURCE
	Gary Vines, Olwen Ford, Graeme Butler & Francine Gilfedder, Brimbank City Council Post-Contact Cultural Heritage Study, Version 2, 2013
	Moloney, David and Vicki Johnson, City of Hume Heritage Study: Former Shire of Bulla District, 1998
	Moloney, David and Vicki Johnson, <i>Hume Heritage Study Review</i> , 2003
	Ildike Piercy, Karen Murphy, <i>Sunshine Signalling Control Centre – Heritage Impact Assessment</i> , AJM JV, 2019
	Quonset Hut 134 Hampshire Road, Heritage Citation Report accessed via Hermes Database, Hermes number 197624 (note no study reference available)
	Gary Vines, Olwen Ford, Graeme Butler & Francine Gilfedder, <i>Brimbank City Council Post-Contact Cultural Heritage Study, Version 1</i> , 2000 (Vols. 1-4)
	Gary Vines, <i>Brimbank Heritage Study Review</i> , 2005
	Gary Vines, Olwen Ford, Graeme Butler & Francine Gilfedder, <i>Brimbank City Council Post-Contact Cultural Heritage Study, Version 2</i> , 2013
	Tract, <i>Darling Flour Mill View Line Assessment – June 2014</i> , prepared for Brimbank City Council
Databases and websites	
	Victoria Heritage Database, https://vhd.heritagecouncil.vic.gov.au/
	Hermes Database (access restricted), http://hermes.heritage.vic.gov.au/HermesTomcat7/Login.html
	Maribyrnong Heritage Database, http://vhd.heritage.vic.gov.au/local/search/maribyrnong
	Brimbank Heritage Database, https://www.brimbank.vic.gov.au/building-and-planning/heritage/heritage-database
	Victorian Places, https://www.victorianplaces.com.au/

2.3 Assumptions and Limitations

The following assumptions and limitations apply to the Impact Assessment:

- The Impact Assessment relates only to public and privately owned State Land and does not consider Commonwealth-owned land, as Commonwealth land is not subject to Victoria's legislative framework. Impact Assessments associated with Commonwealth land, specifically land at Melbourne Airport, will form part of a separate suite of impact assessments.
- The Impact Assessment is based on the scope of works detailed in the MAR Project Description for Environmental Specialists Revision C (MAR-AJM-PWD-PWD-MEM-XLP-NAP-0001505).
- The Historical Heritage Impact Assessment does not specifically address Aboriginal cultural heritage, which is subject to a separate assessment. This is while acknowledging that there may be places with both Aboriginal and non-Aboriginal heritage values, or 'shared values'.
- Stakeholder engagement with the relevant municipal councils and Heritage Victoria has been undertaken by RPV and the outcomes of this engagement have been provided. It would be anticipated that further engagement may be undertaken with Heritage Victoria and relevant local councils.

3. Background

3.1 Strategic Context

The MAR project (the Project) is a once-in-a-generation transformation of Victoria's transport network, connecting Melbourne Airport's Integrated Terminal Precinct with a rail service for the first time.

Melbourne Airport handled more than 37 million passenger movements in 2018-19¹ and by 2038, this figure is projected to almost double to more than 67 million², which is an average growth of 3.2% per annum. Transport connectivity from Melbourne Airport to Melbourne's Central Business District (CBD) is currently limited to the Tullamarine Freeway, and therefore, the Victorian Government is committed to delivering an efficient, competitive alternative to cater for the ongoing increase in passenger numbers at Melbourne Airport.

In 2002, the Victorian Government considered possible corridor and alignment options for a Melbourne Airport Rail Link, ultimately selecting the Sunshine route as the preferred option. At this time, land was reserved between the Albion-Jacana rail corridor and extending through to Sharps Road, Tullamarine for the construction of a rail link.

In 2018, the Victorian Government released the Melbourne Airport Rail Link Sunshine Route Strategic Appraisal, which confirmed that the Sunshine route remains the best solution for an airport rail link. The Sunshine route would provide superior connections to regional Victoria, Melbourne's growth areas in the north and west and Melbourne's south eastern suburbs and could be delivered sooner and at a significantly lower cost than other route options.

3.2 State Project Land

The State Project Land defines the land within which the Project components and construction activities are planned to be contained. It sets out the full extent of land identified as potentially required for the delivery of the Project.

The Project Land encompasses all State land areas that would be used for permanent structures and temporary construction areas. It provides the basis for and informs the Impact Assessment.

State Project Land relevant to State-based approvals generally includes:

- Land between Sharps Road and the Albion-Jacana rail corridor, including land crossing the M80 Freeway
- The existing Albion-Jacana rail corridor generally between Jacana and Albion Stations
- Land around Sunshine and Albion Stations, including the existing rail corridor
- Land required for the Project from Jacana Station in the north-east to Newport Station in the south-west and Middle Footscray Station in the east. This largely includes the Albion-Jacana rail corridor via Sunshine and Albion stations and land required for a new rail corridor between Sharps Road and the Albion-Jacana rail corridor.

The extent of the State Project Land is shown in Figure 3.1.

¹ https://www.bitre.gov.au/publications/ongoing/airport_traffic_data

² <https://www.melbourneairport.com.au/Corporate/Planning-projects/Master-plan>

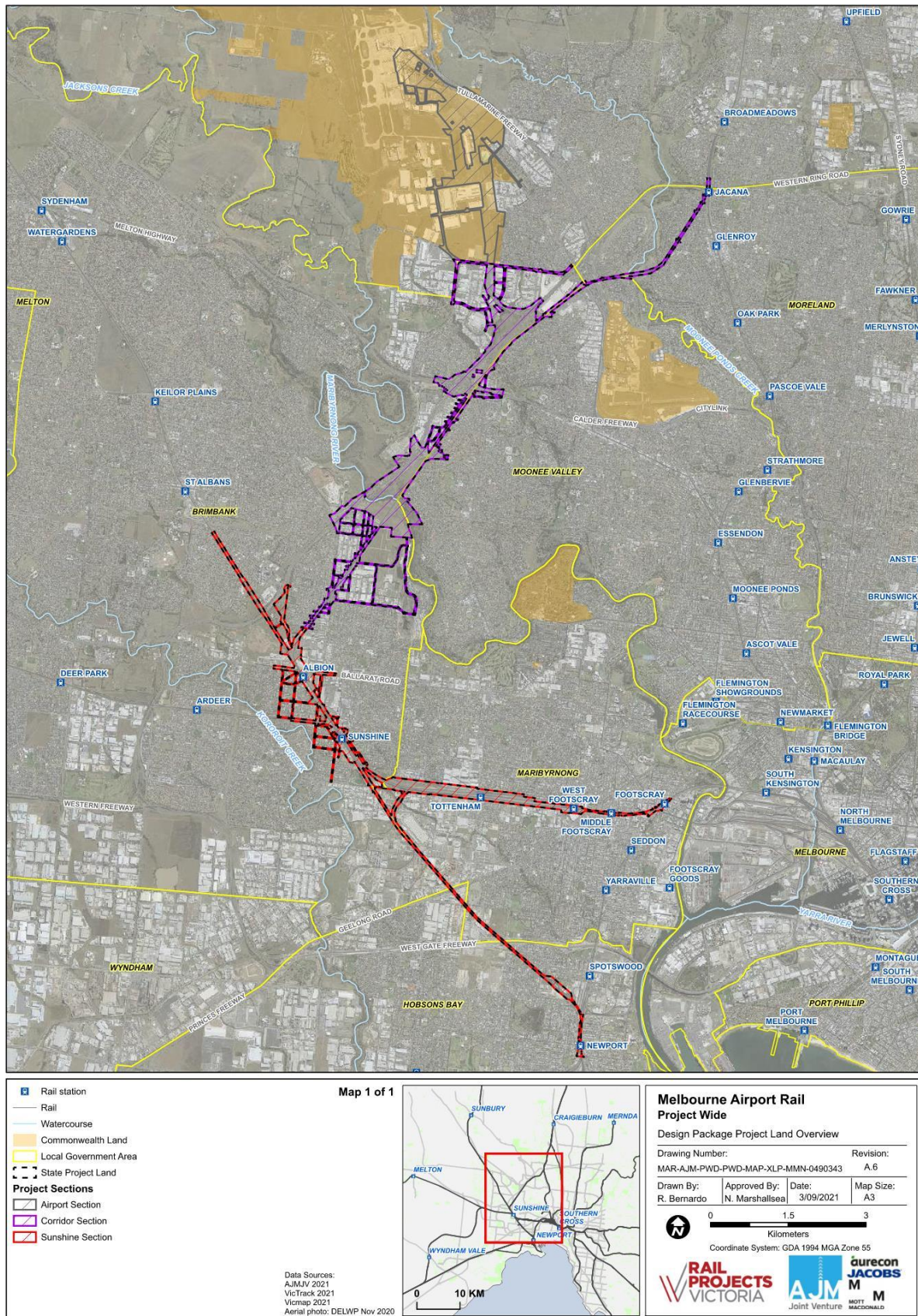


Figure 3.1 MAR State Project Land

3.3 Main Works Scope

3.3.1 Project Sections

The main works for the Project comprise of three geographically distinct sections. The sections are summarised in Table 3.1 and the location of the sections are shown in Figure 3.1.

Table 3.1 Summary of Project sections

Section	Summary
Airport section Not considered in State land approvals.	The Airport section generally includes all land relevant to the Project between Sharps Road, Tullamarine and Melbourne Airport and is located on Commonwealth owned land and is subject to a separate approvals process under the <i>Commonwealth Airports Act 1996</i>
Corridor section	The COR section generally includes the Albion-Jacana rail corridor between Jacana Station and south of Barwon Avenue, Sunshine North, as well as land between Sharps Road, Tullamarine and the Albion-Jacana rail corridor.
Sunshine section	The SUN section generally includes the existing rail corridor between Barwon Avenue, Sunshine North and Middle Footscray Station. The SUN Section also includes the Sunbury rail corridor to Giniifer Station and the Brooklyn freight corridor to Newport Station.

3.4 Corridor Section Summary

The COR section of the Project includes the following main works:

- Construction of the new MAR tracks, comprising an approximately 8 km dual track railway and associated overhead line equipment (OHLE), combined services route (CSR) and track drainage works, including:
 - > A 2.3 km long elevated twin track viaduct structure between Sharps Road, Tullamarine and the Albion-Jacana rail corridor, crossing Steele Creek and the Western Ring Road including emergency and maintenance access points.
 - > New at-grade MAR tracks within the existing Albion-Jacana rail corridor, located on the Western side of the existing Australian Rail Track Corporation (ARTC) tracks.
 - > An elevated twin track viaduct structure across the Maribyrnong River valley, adjacent to the Western side of the existing state significant heritage bridge.
 - > Slewing of ARTC tracks between Keilor Park Drive and the Calder Freeway.
- Signalling works along the Albion-Jacana rail corridor between Jacana Station and Barwon Avenue, Sunshine North and within the new MAR corridor North of the Western Ring Road.
- Construction of an intake supply substation at Terror Street or the Northeast area of Brimbank Park and two traction substations at Fullarton Road and within the McIntyre Sidings, Sunshine North.
- Construction of two new Digital Train Radio System (DTRS) facilities one North or South of Keilor Park Drive, Keilor East and a second at Airport Drive, Tullamarine.
- Diversion, relocation and replacement works associated with utilities and underground services, including the existing ARTC CSR, high voltage (HV) transmission lines and numerous miscellaneous assets
- Protection works associated with the Exxon Mobil jet fuel pipeline along the Albion-Jacana rail corridor.
- Modifications to existing structures, including structural modifications and strengthening works at Calder Freeway inbound and outbound bridges, Fullarton Road bridge, Western Ring Road on-ramp and off-ramp bridges, Keilor Park Drive and McIntyre Road bridges.
- Replacement of shared use path (SUP) connections at Calder Freeway / Fullarton Road, provision of a new SUP overpass at Cranbourne Avenue, and provision of a Strategic Cycling Corridor link between Western Ring Road and Airport Drive via Steele Creek.

- The provision of retention basins at several locations along the Albion-Jacana rail corridor
- Establishment of temporary construction laydown areas, site offices, worksites, storage, parking areas and access roads

3.5 Sunshine Section Summary

The SUN section of the Project includes the following main works:

- Construction of a new 1.8 km long MAR twin track viaduct structure, including associated OHLE and CSR between Sunshine Station and the Albion-Jacana corridor, crossing Anderson Road, Ballarat Road, the Sunbury rail corridor, St Albans Road and Stony Creek.
- Signalling works, including the installation of trackside equipment along the Sunbury line towards Ginifer Station, along the Brooklyn freight corridor towards Newport Station, and along the Western rail corridor to West Footscray Station.
- Modifications to the tracks, formation, drainage, CSR, OHLE and signalling equipment for the MAR, Sunbury and Bendigo tracks from Albion to the beginning of the Jacana freight corridor
- Modifications to the Western and Eastern Albion Station forecourts and car parks.
- Modifications to Sunshine Station, including modifications to platforms, the Sunshine Station western car park and the construction of a new concourse.
- Modifications to the existing Sunshine and Sunshine West substations
- Diversion, relocation and protection of existing utilities and underground services.
- Establishment of temporary construction laydown areas, site offices, worksites, storage, parking areas and access roads

4. Legislative Framework and Approval Requirements

Table 4.1 below summarises the relevant legislation that applies to the Project as well as the approvals required.

Table 4.1 Legislation and Approvals

Legislation/Policy	Key Policies/Strategies	Implications for the Project	Approvals Required
Commonwealth			
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	The EPBC Act is a Federal statute that focuses on the protection of Matters of National Environmental Significance (MNES) as well as actions undertaken by Commonwealth agencies and on Commonwealth land. The EPBC Act also establishes the National Heritage List (NHL) and Commonwealth Heritage List (CHL) and sets out the requirements for the management of heritage places on these lists.	There are no historical heritage places on the NHL or CHL within the project area.	Actions that have the potential for a significant impact on the environment (MNES) may be considered to be a Controlled Action under the EPBC Act and approval requirements apply. On the basis there are no known <i>historical heritage</i> MNES within the project area, approval is unlikely to be required.
State			
<i>Heritage Act 2017</i>	<p>The main purpose of the Heritage Act 2017 (Heritage Act) is to provide for the protection and conservation of places and objects of cultural heritage significance. The Heritage Act is administered by the Executive Director, Heritage Victoria within the Department of Land, Water and Planning (DELWP).</p> <p>The Heritage Act establishes two registers, the Victorian Heritage Register (VHR) for state significant places and objects and the Victorian Heritage Inventory (VHI) for archaeological sites. Places, objects and sites on the VHR and VHI are uniquely numbered.</p> <p>The Heritage Act also provides blanket protection for archaeological sites including those that are unknown and not included in the VHI. Significant archaeological sites which are more than 75 years old (this includes all archaeological sites other than those which are determined to be of low archaeological value), as well as all approved sites of archaeological value which are less than 75 years old, are also protected by the Heritage Act.</p> <p>Heritage Victoria and the Heritage Council of Victoria publish a range of guidelines</p>	<p>There are six VHR places included in the State Project Land area. These are:</p> <ul style="list-style-type: none"> Footscray Railway Station Complex (VHR 1563) Albion Viaduct (VHR H1197) Massey Ferguson Complex (VHR H0667) HV McKay Memorial Gardens (VHR H1953) HV McKay Offices (VHR H1966) John Darling and Son Flour Mill (VHR H0829) <p>There are two VHI places included in the State Project Land area. These are:</p> <ul style="list-style-type: none"> Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47) Former Tottenham Station (H7822-0842) <p>There may be other unlisted archaeological sites within the State Project Land area.</p>	<p>Any works to a registered place, including on registered land, require approval under the Heritage Act, unless specifically determined to be exempt from the requirement for a permit (exemptions can be tailored to a heritage place and declared by the Executive Director or the Heritage Council). As an alternative to a permit, minor works which do not have an adverse impact on the heritage values of a registered place or object, can be approved by way of a permit exemption.</p> <p>Section 123 of the Heritage Act specifies that it is an offence to disturb an archaeological site or artefact unless approval (by way of consent) has been obtained by a suitably qualified archaeologist from the Executive Director of Heritage Victoria. This includes sites included in the VHI and any archaeological sites which are not included in the VHI.</p> <p>Heritage permits would be required for:</p> <ul style="list-style-type: none"> Albion Viaduct (VHR H1197) HV McKay Memorial Gardens (VHR H1953) <p>In the case of HV McKay Memorial Gardens, the extent of works that require approval may</p>

Legislation/Policy	Key Policies/Strategies	Implications for the Project	Approvals Required
	including as related to the registration and permit processes for the VHR and for the investigation and management of historical archaeology.		<p>change based on the amendment of the existing VHR extent of registration (under consideration by Heritage Victoria).</p> <p>In addition, the Executive Director, Heritage Victoria is also assessing an amendment to the registration for the John Darling & Son Flour Mill to include additional land and make other changes to the registration. Depending on the outcome of this process, and in particular, the extent of any additional land included in the extent of registration, a heritage permit may be required for Project works.</p> <p>If required, consents would be required for subsurface works within Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004) and the Former Tottenham Station (H7822-0842).</p>
Local			
<i>Planning and Environment Act 1987 (P&E Act)</i>	<p>Under the P&E Act, places of local heritage significance are listed for protection in planning schemes under Clause 43.01 – Heritage Overlay (HO). HO places are not exclusively of local significance, places on the VHR are also included in the HO. Planning schemes are generally administered by local Councils.</p> <p>The majority of planning schemes also include policies related to heritage which are tailored to the local heritage context.</p> <p>Most HO listings are supported by assessments and statements of significance from local heritage studies which set out the heritage values and provide other information of relevance. These may be Incorporated Documents in the planning schemes.</p>	There are numerous places within the State Project Land assessment area that are subject to HO controls in various planning schemes, these included both precinct-based and individual controls.	<p>Under the current planning scheme provisions, planning permit requirements would apply for works on land affected by the HO. The exact permit requirements would vary depending on the nature of works, whether works are exempt under the HO provisions, and the manner in which individual HOs are scheduled (tree controls, paint controls and the like).</p> <p>Note that permits are not required under the HO for places that are also included in the VHR under the Heritage Act. This is with the exception of subdivision.</p> <p>Permits would required for the following (all Brimbank):</p> <ul style="list-style-type: none"> • Brimbank Park Ruins (HO47) if works are required • Steel Creek Rail Embankment (HO37) • Albion VR D.C. Substation (HO28) (protection and off-reservation works may be required) • Sugar Gum Row (HO42) if works are required within the HO • HV McKay Memorial Gates (HO53)
Other relevant documents			

Legislation/Policy	Key Policies/Strategies	Implications for the Project	Approvals Required
The Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter), 2013	An industry standard most frequently referenced as a guide to best practice management of cultural heritage places in Australia. It is recognised by the Heritage Council and Heritage Victoria and provides definitions for terms and processes associated with conservation of places of cultural significance and establishes a series of conservation principles, conservation processes and guidelines for conservation practice.	All works within or to heritage places should be carried out with reference to the principles set down in the Burra Charter.	N/A

5. Existing Conditions

This section provides a high-level description of the existing and potential heritage places within or intersecting with the areas relevant to the Project, and their identified and/or potential heritage values.

While the State Project Land is the primary focus, given the density of heritage places in the vicinity of the Sunshine/Albion area (to the north of Stony Creek/Sunshine Road junction up to and including the junction of the Sunbury and Jacana rail corridors, north of Ballarat Road), an additional investigation area was also considered in the existing conditions assessment. The additional investigation area captured places within an area of 500m from the centre line of the MAR corridor. Inclusion of an additional investigation area allowed for a broader characterisation of the heritage context and an appreciation of historical themes relevant to the area. This was considered to be necessary in Sunshine/Albion due to the scale of Project works and the high density of heritage places in this area.

Outside this Sunshine/Albion area, only heritage places which intersect directly with or are adjacent to State Project Land were considered. In these locations Project works are either minor and confined to the rail corridor (e.g. Newport railway line) or the project land provides sufficient coverage of the surrounding heritage context (Corridor Project Land).

Mapping showing heritage places within State Project Land and the investigation area is included at Appendix B.

The focus of the following existing conditions description is on those places and values that could be affected by the Project. Other places are referenced briefly by way of context, and more detailed information is provided on these at Appendix A.

5.1 Corridor Project Land

The Corridor Project Land extends to the east from the St Albans Road junction and extends along the Albion-Jacana rail corridor to just north of Jacana Station and to Melbourne Airport (excluding Commonwealth land).

5.1.1 VHR places

5.1.1.1 Albion Viaduct (VHR H1197/HO107 Moonee Valley/HO5 Brimbank)

The Albion Viaduct is included on the VHR for its scientific (technological), architectural (aesthetic) and historical values. It is distinguished by its scale and the details of its design. Almost 400m long, it is also known as the Quarter Mile bridge. It is said to have been the largest trestle bridge in Australia when constructed in 1927-29 and was one of Australia's highest railway bridges (it was briefly the highest before the completion of the Sydney Harbour Bridge in 1932).

Historically, the viaduct is associated with a major project in the late 1920s which separated goods traffic from the suburban rail network. Other elements of this project included the Tottenham rail yards and the Independent Goods Line from South Kensington to West Footscray. The viaduct is closely related to the contemporaneous railway trestle bridge over the Moonee Ponds Creek (at Strathmore Heights and Glenroy, 1927-29, refer Section 5.1.3.2) built as part of the same project, which is smaller but otherwise directly comparable in its design.

The Albion Viaduct was designed by the engineer Wilfrid Dinsey Chapman and erected by the Railway Construction Branch. The viaduct design adopted a number of unusual design features including the use of two girders per span, the use of K bracing in the towers and the use of broad flange beams at columns. The bridge is constructed of steel and is braced on 12 steel framed columns.

Aesthetically, the viaduct is a powerful presence in the Maribyrnong River valley and is a landmark in the local area. The structure is visible from numerous viewpoints in the surrounding area, and access into the valley is also provided via a public walking path. Long distance views to the viaduct are possible from most directions, including from the Western Ring Road which is located approximately 450m to the west of the bridge. A lookout is located to the east, accessed from Sterling Drive (Figure 5.1 and Figure 5.2).



Figure 5.1 View of the Albion Viaduct from the lookout off Sterling Drive to the east



Figure 5.2 Distant view of the Albion Viaduct from the south

5.1.2 VHI places

5.1.2.1 Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47 Brimbank)

The Dodds Homestead Ruins comprises a group of features related to the farming use of the land established by the Dodd and Delahey families in the 1840s (Figure 5.3), located in the southern section of Brimbank Park directly adjacent to the Western Ring Road.

There is a level of uncertainty in relation to the extent of this site, partly arising from its limited above-ground fabric combined with a more extensive archaeological potential. The site is included in both the VHI and the HO, however the extent of both listings differs, refer to Figure 5.4. It is noted that the smaller HO extent does not include all above-ground and archaeological fabric of potential significance on the site. The wider VHI mapping provides a more appropriate guide to considering this place, albeit noting that the HO extent falls partly outside this area.

The site is of archaeological significance and is generally in a ruinous state. The elements identified in the Heritage Victoria site card include:

- Bluestone ruins
- Possible infilled well
- Bluestone lined water cistern
- Bluestone pavers
- Well
- Concrete floors
- Barn ruin

- Stock pen
- Drystone wall
- Modern concrete building
- Possible quarry.

The site was originally identified in the Brimbank City Council Post-Contact Cultural Heritage Study (Vines et al, 2000) and was re-assessed in the Outer Western Metro Site Reassessment (Context, 2010). The 2010 study reaffirmed that the site was still intact and should be retained on the VHI. Above-ground features evident were mapped at that time (Figure 5.5).

The Brimbank citation for HO47 references the historical significance of the place as associated with the early phase of post-colonial occupation of the Maribyrnong River valley and with prominent local families, the Dodds and Delahays. It points to the high archaeological values and the interpretative potential of the site.

The MAR State Land Historical Archaeology Impact Assessment (Appendix D) includes the following comment on the archaeological significance of this site:

There is **high** potential for archaeological features to be present within **Brimbank Park Ruins** (VHI H7822-0004), and immediately surrounding the VHI site boundary, due to recent archaeological investigations revealing significant archaeological features associated with the Dodd family homestead complex identified in historical aerial imagery.

Refer to Appendix D for more detail.



Figure 5.3 Part of the Dodds Homestead Ruins, Brimbank Park



Figure 5.4 Detail of VHI extent (blue overlay) and HO extent (pink overlay) at the Dodds Homestead Ruins (Source: VicPlan)



Figure 5.5 Location of features in 2010 (Source: Heritage Victoria site card, Context, 2010)

5.1.3 HO places

5.1.3.1 Steele Creek Rail Embankment (HO37 Brimbank)

The Steele Creek Rail Embankment is a landscape feature associated with c. 1920s railway works. Constructed of crushed rock ballast, the railway embankment dates from the construction of the dedicated goods line through this area in the late 1920s (Figure 5.6). It has been identified as being of local historical significance for its association with developments in rail and with the two rail bridges on the same line (over the Maribyrnong River and Moonee Ponds Creek). It is said to be one of the highest railway embankments in the metropolitan area. A concrete ovoid culvert carrying Steele Creek extends through the embankment.

It is noted that the municipal boundary between Brimbank and Moonee Valley local government areas aligns with the railway line and so, only the western half of this linear feature is included in the HO. The rail embankment was identified and assessed in a study undertaken for the City of Brimbank, and the HO was applied to that part of the embankment. The eastern half of the embankment is within the Moonee Valley local government area and no HO has been applied.

It is noted that the HO schedule refers to this place as the *Steel* Creek Rail Embankment, however the creek is correctly referred to as Steele Creek. The correct spelling (i.e. Steele) is used in preference in this report.



Figure 5.6 Steele Creek Rail Embankment (HO37, Brimbank) and associated concrete ovoid culvert, viewed from the north-west

5.1.3.2 Railway Trestle Bridge, Moonee Ponds Creek, Strathmore Heights (HO342 Moonee Valley/HO219 Moreland)

The Railway Trestle Bridge at Moonee Ponds Creek is located at the municipal boundary between Moonee Valley and Moreland and is included in the Schedule to the HO of both planning schemes (HO342 and HO219 respectively).

The bridge was constructed in the 1920s as part of the goods line through the area. Approximately 265 metres long between abutments, it comprises two steel girders supported on ten steel framed towers. As noted above, this bridge is related both historically and through its design to the larger VHR-listed Albion Viaduct (see Section 5.1.1.1 above).

The project works will not impact on the heritage values and fabric of the Railway Trestle Bridge and it is not considered further in impact assessment.



Figure 5.7 View of the Trestle Bridge over Moonee Ponds Creek from the north-east

5.2 Sunshine Project Land

For the purposes of the following existing conditions assessment, the Sunshine Project Land has been divided into three areas as follows:

- Footscray rail corridor (Footscray Station to Stony Creek south)
- Newport rail corridor (Stony Creek south to Newport Station)
- Sunshine/Albion (including the additional investigation area described above).

5.2.1 Footscray rail corridor

The Footscray rail corridor extends from Footscray Station to the Sunshine Road/Stony Creek junction.

5.2.1.1 VHR places

5.2.1.1.1 Footscray Railway Station Complex (VHR 1563/HO49 Maribyrnong)

The existing Footscray Railway Station complex dates from 1900 (upside) – 1908 (downside) and is an amalgamation of two earlier railway stations that serviced the Bendigo line (c. 1859) and the Geelong/Williamstown line (c. 1857/1859) (Figure 5.8). Both the station complex and the ornamental rail reserve to its south are included in the VHR. The station has undergone significant redevelopment in recent years associated with rail upgrade projects.

The project works will not impact on the heritage values of the Footscray Railway Station Complex and it is not considered further in impact assessment.



Figure 5.8 View of the Footscray Railway Station complex prior to redevelopment, date unknown (Source: Victorian Heritage Database)



Figure 5.9 View of the redeveloped station and footbridge from the south, c. 2014 (Source: Regional Rail Link Victoria)

5.2.1.2 VHI places

5.2.1.2.1 Former Tottenham Station (H7822-0842)

There is one VHI site in this part of the State Project Land, this is the Former Tottenham Station (H7822-0842, shown in Figure 5.10). The VHI listing relates to the original Tottenham Station site. The rail tracks were relocated to the north of the original station site and a new station constructed to accommodate rail upgrades. A carpark was constructed on the site of the original station to service the replacement (existing) Tottenham Railway Station.

The site was identified in the MAR State Land Historical Archaeology Impact Assessment (Appendix D), however it was determined that it was not in proximity to significant works and was not examined further.

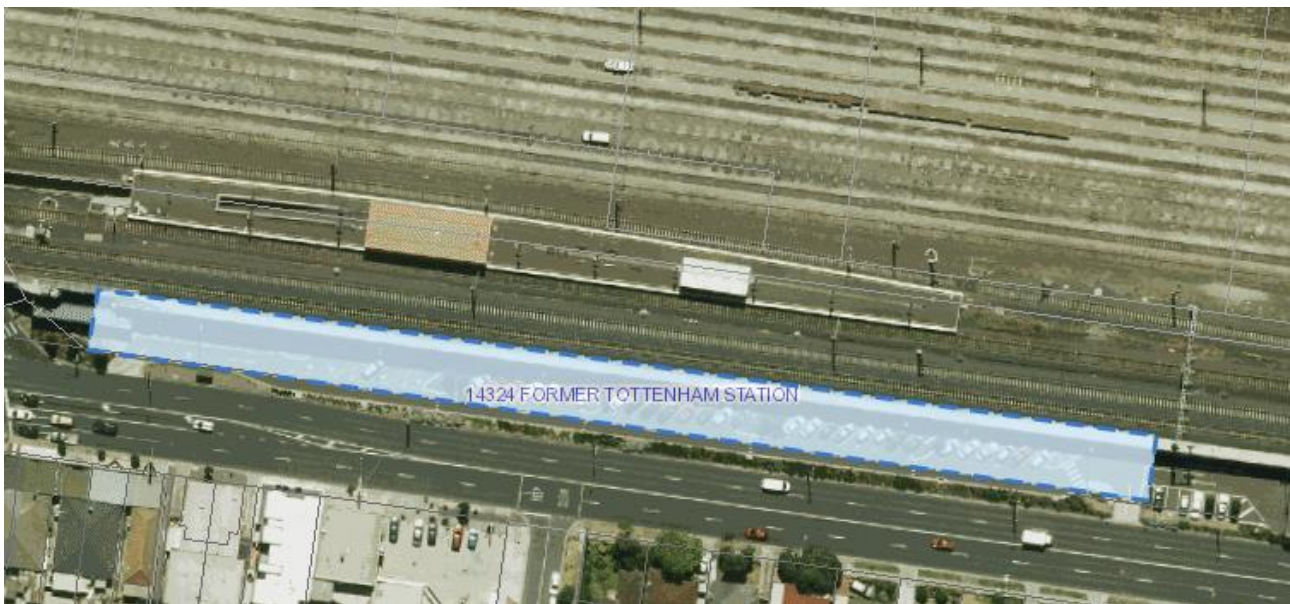


Figure 5.10 Aerial photograph showing the extent of the VHI site at Tottenham Station (H7822-0842) (Source: VicPlan)

5.2.1.3 HO places

There are eight HO places in the Footscray rail corridor that intersect with the edge of the State Project Land. All are located within the City of Maribyrnong and are as follows:

- Old Footscray Township residential heritage area (HO7)
- 102-106 Victoria Street, Footscray (HO70)
- Elm and ash street tree avenue (HO108)
- Creamota, 19 Sunshine Road, West Footscray (HO159)
- Australian Estate Wool Store, 47-61 Sunshine Road, West Footscray (HO160)
- Goldsborough Mort Wool Store, 63 Sunshine Road, West Footscray (HO161)
- Olex Cables, 207 Sunshine Road, West Footscray (HO162)
- Wiltshire Files, 213 Sunshine Road, West Footscray (HO163)

The project works will not impact on the heritage values of these heritage places and they are not considered further in impact assessment.

5.2.2 Newport rail corridor

The Newport rail corridor section of the State Project Land extends south from the Sunshine Road/Stony Creek junction to Newport Station. Works in this area are confined to signalling, and possibly CSR upgrades, within the rail corridor.

Accordingly, only those places intersecting with and/or directly adjacent to the rail corridor have been identified below.

5.2.2.1 VHR/VHI places

There are no VHR or VHI places that intersect with or are directly adjacent to this part of the State Project Land.

5.2.2.2 HO places

HO places that intersect with or are directly adjacent to this part of the State Project Land include railway buildings and complexes such as the Newport Railway Station Complex (HO136, Hobson Bay, 1912) and the former Victorian Railways Type A Electricity Substation at Newport (HO175, Hobsons Bay).



Figure 5.11 View of the west side building at the Newport Railway Station from Melbourne Road



Figure 5.12 View of the former Victoria Railways Type A Electricity Substation at Newport

There are an additional three HO places in the Newport rail corridor that intersect with the edge of the State Project Land. The majority are located within the City of Hobsons Bay, with one located in the City of Maribyrnong, and are as follows:

- Halls Farm and Heritage Precinct (HO11, Hobsons Bay)
- WC Thomas and Sons Flour Mill (HO186, Hobsons Bay)
- Bradmill (HO125, Maribyrnong)

There is also one HO precinct that intersects with the State Project Land through the inclusion of roadways within the precinct.

- Newport Civic and Commercial Heritage Precinct (HO22, Hobsons Bay)

5.2.3 Sunshine/Albion

5.2.3.1 Background

5.2.3.1.1 Sunshine

At the turn of the twentieth century, Sunshine was a small settlement known as Braybrook Junction, with a few small industrial firms, which had located premises near the railway line from the late 1880s. The growth of Sunshine as a major suburban centre and industrial heartland began when entrepreneur and industrialist HV McKay relocated his Sunshine Harvester Works from Ballarat to Braybrook Junction in c. 1906. Braybrook Junction was renamed Sunshine, a reflection on McKay's thoroughgoing approach to building his industrial enterprise.

Over time the factory expanded to cover a significant area adjacent to the railway line. Around it, McKay sought to build his own version of a company town, aspiring to develop a model community of freehold workers who would enjoy a range of community benefits and in turn would be a loyal and peaceful workforce. McKay's initiatives at Sunshine drew on some of the ideas of the contemporary British Garden

City movement and the concept of the 'industrial village' (Freestone, 1989) and contemporary sources represent Sunshine as progressive and modern.

The company acquired large tracts of land and took an active role in integrating industry with township development, including providing or facilitating the development of housing and other amenities for workers. Keen to encourage workers to home ownership, HV McKay Pty Ltd purchased and subdivided substantial estates for housing, beginning with the 76-allotment Sunshine Estate of 1907, which featured streets planted with sugar gums (*Herald*, 23 February 1909:3). The company continued to promote housing schemes in Sunshine until well into the 1920s (Ford, 2001: 82, 286-290). The company provided or assisted in the development of a range of community facilities including – for example – public gardens, tennis courts and a bowling green (1909), a church (1910) and a technical school (1913) (Ford, 2001, 110-112, 151-154). HV McKay also advocated for the provision of infrastructure and encouraged investment by other businesses and industries in Sunshine.

Sunshine developed very rapidly from 1906 through to the interwar period (Figure 5.13, Figure 5.14, Figure 5.15, Figure 5.17) and many of the heritage places located within or in proximity to the State Project Land relate to this phase in the history of the suburb, some directly to the operations of HV McKay. Equally, the heritage of Sunshine is more diverse than that, and encompasses a varied range of places, including those from the later nineteenth century and the post-war period. Important themes include those of industry, commerce and community and the suburb also has an important layer of heritage relating to post-WWII migrant culture.



Figure 5.13 c. 1918 aerial image showing the Sunshine Harvester Works and developing housing estates west of the railway line (Source: Reproduced from Ford, 2001)



Figure 5.14 Oblique aerial photograph over the Sunshine Harvester Works, c. 1925-1940; HV McKay Gardens in the foreground, and railway footbridge linking the two (Source: Museum Victoria Collection, photographer Charles Pratt)



Figure 5.15 Housing Estates west of the railway line, 1945 (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)



Figure 5.16 Sunshine Harvester Works and HV McKay Gardens to north of Sunshine Station, 1951 (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)



Figure 5.17 View over Sunshine overpass over the railway lines, 1962 (Source: Victorian Places, <https://www.victorianplaces.com.au/node/64680>)

5.2.3.1.2 Albion

Similar to Sunshine, at the turn of the twentieth century Albion was a small, largely rural settlement. Industrial development commenced in the early twentieth century and was supported by access to rail and road transport. The Albion VR D.C. Substation (HO28) was constructed in c. 1915-1917 and the Albion Railway Station in 1920 (Victorian Places, Albion) (Figure 5.18). The prominent John Darling and Son Flour Mill was constructed on the railway line just south of Ballarat Road in 1922; following a fire on the site in the mid-1920s the mill was substantially rebuilt. The landmark silos were added later.

Residential development in Albion was focussed to the west of the railway line and south of Ballarat Road (Figure 5.19). This included the development of a War Services estate in the post-World War One era in the area around Sydney, Coolamon, Gunnedah, Bazentin, Adelaide and Kamarooka streets.

Talmage Street, opposite the railway line, was developed in the early to mid-twentieth century by the McKay family (of Sunshine Harvester fame) with a number of family homes constructed along this street. These large properties are also visible on the 1945 aerial photograph at Figure 5.19. The last surviving residence from the McKay era was included in the HO (HO77) but has since been demolished following a fire (Figure 5.20).

In the post-war era Albion continued to grow as a residential suburb supported by substantial local industry in both Albion and Sunshine (Figure 5.21).



Figure 5.18 Aerial view over the original John Darling and Sons Flour Mill and Albion substation, prior to the fire and rebuilding of the mill site in c. 1926 (Source: Museum Victoria collection MM16525)

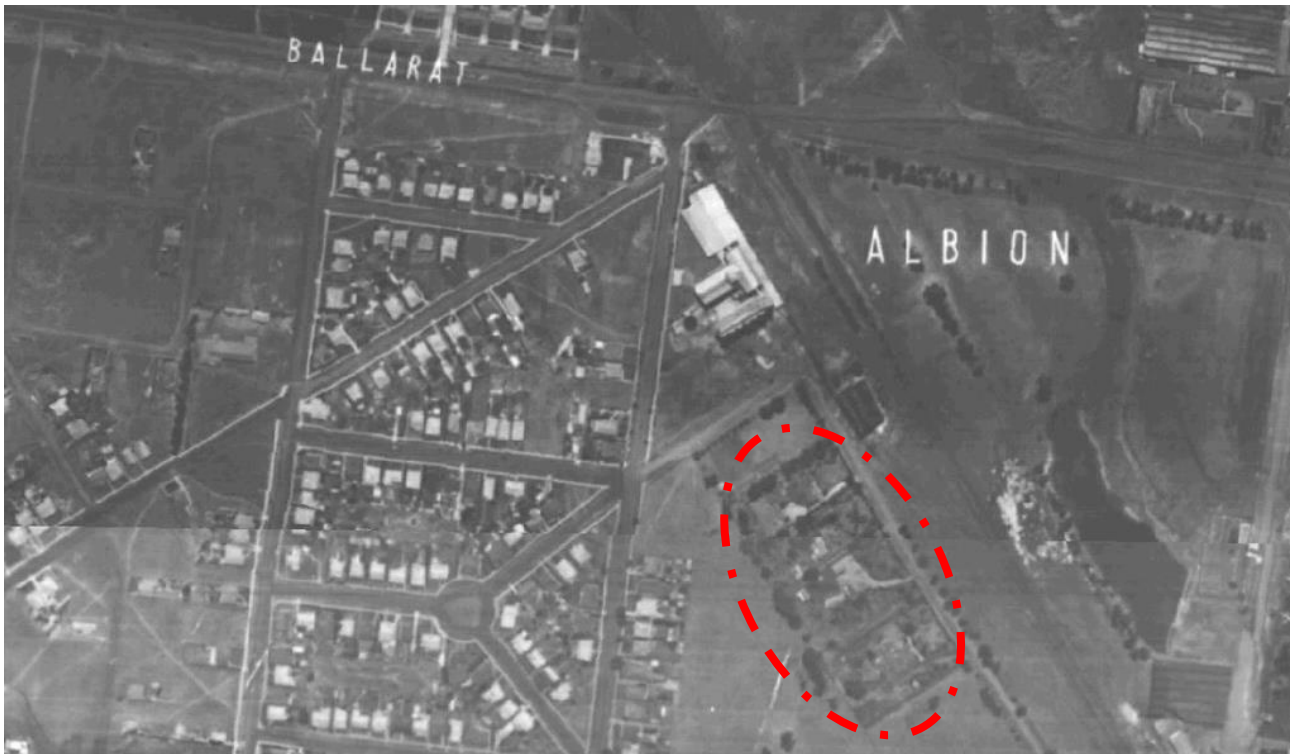


Figure 5.19 Aerial view of the area in the vicinity of Ballarat Road and the railway line near Albion in c. 1945, McKay family houses in Talmage Street indicated by red dashed line (Source: 1945 Melbourne)



Figure 5.20 View of the former (now demolished) Stuart McKay house at 22 Talmage Street, n.d. (Source: Brimbank City Council heritage citation)



Figure 5.21 1984 aerial photograph of Albion and Sunshine (part) showing the substantial residential development to the west of the railway and the concentration of industrial development to the east (Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)

5.2.3.2 VHR places

There are four VHR-registered places located within the Sunshine/Albion area. Of these, three are located proximate to the railway line in Sunshine and one is in Albion, also adjacent to the railway line. The three places located in Sunshine are related to HV McKay; these are the remnants of the Sunshine Harvester factory site (known as the Massey Ferguson Complex, H0667), the HV McKay Memorial Gardens across the railway line to the west of the factory, established by McKay in 1909 (H1953) and the company's 1909 offices in Devonshire Road (H1966) (Figure 5.22).



Figure 5.22 Map showing location of VHR places at Sunshine: 1. Massey Ferguson Complex (H0667), stars note location of gates and clocktower, 2. HV McKay Gardens (H1953), 3. HV McKay Offices (H1966)

5.2.3.2.1 Massey Ferguson Complex (VHR H0667)

Despite a very large area of registered land, the Massey Ferguson Complex was largely cleared in the late 1980s and 1990s and the site redeveloped; only remnants of the once extensive original manufacturing complex remain. Surviving structures and buildings at the registered place comprise a pair of [relocated] c. 1922 gates (Figure 5.23) and a clock tower surviving from the 1956 administration building - the building itself has been demolished - both located on Devonshire Road (Figure 5.24 and Figure 5.25) and a substantial brick store building (Figure 5.26) located on the broader site. Recognising these elements have a heritage value as related to their historical associations with the Sunshine Harvester manufacturing operation, they now stand as isolated remnants of the once extensive complex (Figure 5.14) and in a much-altered context. The individual elements do not relate strongly to one another nor do they in any sense reflect the nature of the complex they once formed a part of.

No works are proposed that would impact on this place and it is not considered further in impact assessment.



Figure 5.23 View of the remnant gates to the Massey Ferguson Complex (H0667), this view is looking east with new development located behind and to either side of the gates; the strip of land directly behind the gates is included in the VHR extent of registration



Figure 5.24 Showroom and clocktower, 1956 (Source: Museum Victoria)



Figure 5.25 Remnant clocktower with new footbridge on the left, 2014 (Source: Lovell Chen Collection)



Figure 5.26 View of the former store building on the Massey Ferguson Complex (H0667) in 2008 (Source: Victorian Heritage Database online; site access not available)

5.2.3.2.2 HV McKay Memorial Gardens (VHR H1953)

When compared with the former Massey Ferguson factory complex, the HV McKay Memorial Gardens (the Gardens) (Figure 5.27) is a more cohesive and intact heritage place, and is of state historical, social and aesthetic (landscape) significance. It is unusual as a privately funded garden attached to an industrial complex and retains much of its original and early layout and landscape character. The VHR statement of significance references the historical links between the Gardens and other heritage places in the immediate vicinity, including the adjacent Presbyterian Church (1926-28, HO54) and McKay Housing Estate to the west (HO24). The church is located outside the State Project Land, whereas the McKay Housing Estate intersects in roadways (refer section 5.2.3.5).

Both the statement of significance and the extent of registration for the Gardens emphasise the historical associations to the Massey Ferguson Complex (H0667) on the east side of the railway line, albeit the complex is largely demolished. There was originally a footbridge across the rail corridor linking the two and this bridge was a registered structure as part of the extent of registration for the Gardens. Dating from the early twentieth century and broadly contemporary with the Gardens, the footbridge was used by workers travelling to and from the factory and the housing estate to the west. Having undergone a series of alterations, the footbridge was demolished and replaced with a new bridge structure as part of the Regional Rail Link project (RRL) (Figure 5.28). The alignment of the replacement bridge varies from the registered footbridge and is on a much larger scale; it extends further to the west and incorporates a large lift shaft and external stairs at each end. Note that neither the extent of registration nor the statement of significance for the HV McKay Memorial Gardens have been updated to reflect the removal of the original footbridge (Figure 5.29).

There is a further issue regarding the extent of VHR registration on the north-eastern edge of the Gardens, where the landscaping and path along this edge is located within the VicTrack property boundary. The extent of registration currently excludes this section of land, however it does read as contiguous with and part of the overall Gardens landscape.

This registration is currently under review and assessment by the Executive Director, Heritage Victoria and is expected to be subject to a recommendation to the Heritage Council of Victoria for an amendment to the registration.



Figure 5.27 HV McKay Memorial Gardens (H1953)



Figure 5.28 View of the new footbridge over railway line to HV McKay Memorial Gardens (H1953) from the north-west. Note that the footpath and planting bed fall within the VicTrack boundary.



Figure 5.29 Part of the extent of registration for the HV McKay Gardens (H1953) showing the mapping of the original footbridge (now demolished) overlaid on an aerial photograph. Also note the boundary of the registration (yellow overlay) excludes the path and planting directly adjacent to the rail corridor (Source: VicPlan)

5.2.3.2.3 HV McKay Offices (VHR H1966)

The HV McKay Offices building is located on the south side of Devonshire Road and is of state historical and architectural significance (Figure 5.30). Like the Gardens and the surviving elements from the factory complex, its significance is also largely related to its very direct association with HV McKay and the Sunshine Harvester Works.

No works are proposed that would impact on this place and it is not considered further in impact assessment.



Figure 5.30 View of the former HV McKay Offices (H1966) on Devonshire Road

5.2.3.2.4 John Darling and Son Flour Mill (VHR H0829)

Located adjacent to the rail corridor in the vicinity of Albion Station, the VHR-listed John Darling and Son Flour Mill is a complex of state historical and architectural significance (Figure 5.31). The mill dates to 1926-7 and is a rebuild of the original, constructed in 1922, which was destroyed by a catastrophic fire in February 1926 (Allom Lovell & Associates, 1990, p. 10).

The John Darling and Son Flour Mill is recognised for its general and specific historical associations (including the development of the flour milling industry and industry generally in the early twentieth century and the Darling family in particular), for its distinctive form and architectural treatment, unusually elaborate and picturesque for a mill building, and its T-shaped plan form, expressive of the internal functioning of the building. At the time of registration in 1991, the survival of much of the machinery was also noted as contributing to its heritage significance. While not referenced in the VHR statement, the building is also an important local landmark.

The prominent concrete silos (x12 from 1939 and x6 from the 1970s) (Figure 5.32 and Figure 5.35) are not referenced in the statement but are explicitly referenced in the extent of registration itself. They are a major aspect of the public presentation of the mill.

The site also includes other buildings including a store and amenities, office and laboratory, workshop, maintenance and others, with the statement of significance noting that these are important and contribute to an understanding of the process. The statement also explicitly notes that these are 'contributory elements' and not of architectural or historical significance in themselves.



Figure 5.31 Aerial photograph with the extent of VHR registration of the John Darling and Son Flour Mill (H0829) indicated (yellow overlay) (Source: VicPlan)



Figure 5.32 View of the John Darling and Son Flour Mill (H0829) from the west on Sydney Street



Figure 5.33 View of the mill from Sydney Street showing the prominent parapet signage and distinctive tower

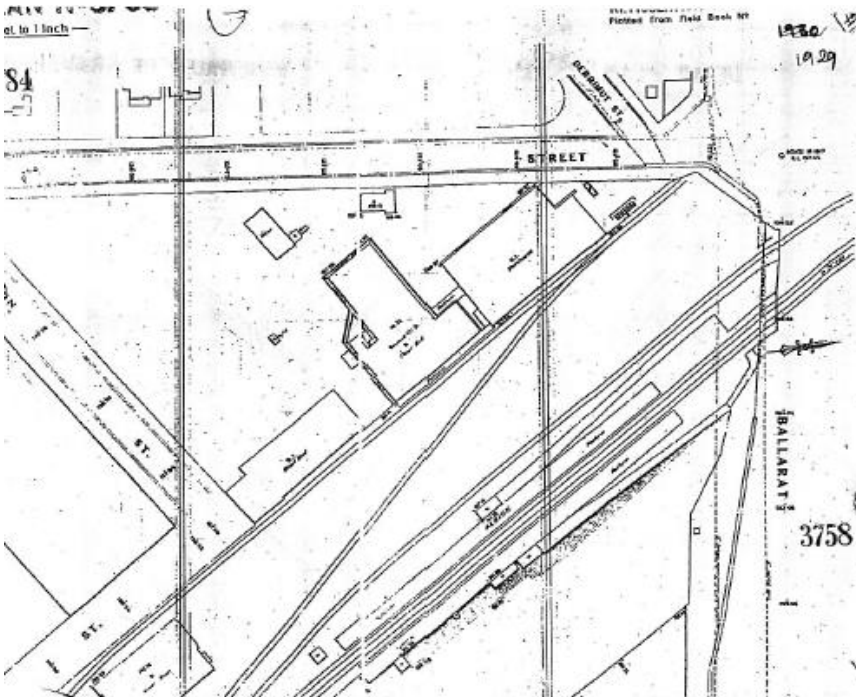


Figure 5.34 MMBW Detail Plan of 1929, note this plan pre-dates the construction of the silos on the site (Source: SLV)



Figure 5.35 View from the rail reserve showing the rail siding and loading platform, c. 1948 (Source: Museums Victoria)

In reviewing this registration, it was confirmed that the VicTrack boundary (indicating the rail reserve) does not follow the fence line on the ground at the John Darling and Son Flour Mill. The alignment of the boundary is such that the canopy structure (integral to the mill building, store and silos) appears to be located within the rail reserve rather than on the mill site. Any surviving remnants of the loading platform would be below the canopy and also within VicTrack land. On this basis these elements of the milling complex do not appear to be included within the VHR extent of registration (Figure 5.36), which only includes the land on the adjacent title (Vol. 4445 Folio 933).

The issue is illustrated in the diagram at Figure 5.37, note the following:

- The blue line is the VicTrack boundary
- The grey lines are the GIS Cadastral map base (sourced from the AJM JV GIS)
- The red line is an approximation of the fence line (data extracted from the AJM JV Mobile Laser Scan).

This registration is currently under review and assessment by the Executive Director, Heritage Victoria and is expected to be subject to a recommendation to the Heritage Council of Victoria for an amendment to the registration. This may include the inclusion of additional land, structures and features.

When viewed from the rail corridor, and the north side of this, the mill complex has a visual connection with another interwar building, the similarly prominent red brick Albion VR D.C. Substation (HO28), located a short distance to the south (discussed at 5.2.3.4.1).

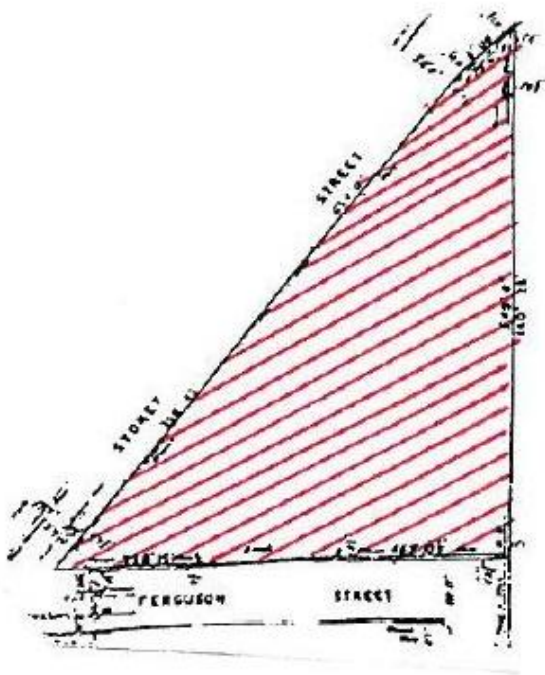


Figure 5.36 Extent of VHR registration for the John Darling and Son Flour Mill as included in the existing citation the title boundary to the adjacent VicTrack land is at right (Source: Victorian Heritage Database)

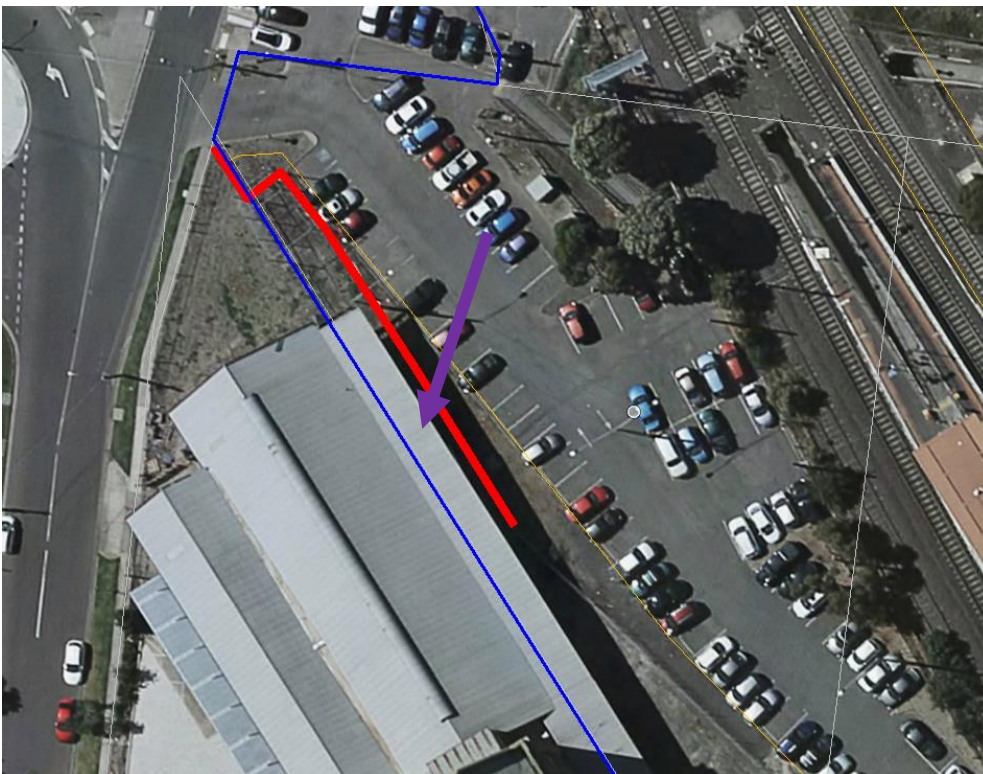


Figure 5.37 Aerial photograph overlaid with VicTrack boundary (blue line), Flour Mill awning, and fence line (red line) and the area of mill excluded from the VHR registration indicated by the purple arrow (north to top of image)

5.2.3.3 VHI places

There are no VHI places that intersect with or are directly adjacent to this part of the State Project Land.

5.2.3.4 HO places within State Project Land

The density of locally-listed heritage places in Sunshine/Albion partly reflects the relatively rapid development of Sunshine following the establishment of the Sunshine Harvester Works (Massey Ferguson) in the early twentieth century. While by no means homogenous in terms of the age and nature of its building stock, the area underwent relatively intensive development in the early twentieth century (1906-1930s in particular) and many HO places date from this period. Some are identified as significant because of specific historical associations with HV McKay or his company, or as related to the factory operations, while others relate to other themes in the history of Sunshine.

There is a mix of heritage place types within the State Project Land, including former industrial sites directly associated with the Sunshine Harvester Works, commercial buildings and areas mostly dating from the Edwardian era and civic places such as schools and community buildings.

The Sunshine/Albion area of the State Project Land is mostly located within the municipality of Brimbank, particularly within the suburbs of Sunshine and Albion. With one exception located in the City of Maribyrnong, all HO places are within the City of Brimbank.

It is noted that a number of the HO places intersect with the State Project Land at the edge of property boundaries or are roadways which are part of larger HO precincts.

The following HO places are wholly located within the State Project Land and these are discussed individually below:

- Albion VR D.C. substation (HO28)
- Sunshine Railway Signal Box (HO39)
- Sugar Gum Row (HO42)
- HV McKay Memorial Gates (HO53)
- Black Arch Bridge (Brimbank HO40/Maribyrnong HO164)

The following HO places (heritage precincts) intersect with the State Project Land and these are discussed at 5.2.3.4.6:

- Sunshine Commercial Area (HO22)
- McKay Housing Estate, Durham Road (HO23)
- McKay Housing Estate, King Edward Estate (HO24)
- Railway Estate Precinct (HO25)
- War Service Homes Heritage Area (HO26)
- Grand Junction Estate and Matthew's Hill (HO151)

5.2.3.4.1 Albion VR D.C. Substation (HO28)

The Albion VR D.C. Substation (HO28) is located adjacent to the railway line uptrack from Albion Station. It is a substantial red brick building in the Renaissance Revival style (Figure 5.38), constructed c. 1915-17 as part of the electrification of the metropolitan rail system. Ford (2001, 237) notes a contemporary account which described the building as 'a red and buff landmark visible for miles' and noted its cost as a massive £11,000.

The substation was assessed in Council's Brimbank City Council Post-Contact Cultural Heritage Study as of state significance for historical and architectural reasons (Vines et al, 2000). Specifically, it is significant for its association with a period of rail development in Victoria which was marked by large scale developments and 'an expression of grandeur in building design' and as a symbol of and association with the electrification of Melbourne's metropolitan rail network, which was a major project and important to the development of

suburban train services. The building was also identified as of significance for a brief association with the McKay harvester works as a supplier of power for the works.



Figure 5.38 View of the Albion VR, D.C. Substation (HO28) from the south-west

5.2.3.4.2 Sunshine Railway Signal Box (HO39)

The timber signal box located downtrack of Sunshine Station is included within the State Project Land. The signal box is included in the HO schedule as Sunshine Signal Box (1914, HO39; Figure 5.39). The signal box is one of the few remaining of the 'Metropolitan type' and is a particularly large example (Vines et al, 2000). The original signalling equipment has been replaced with modern electronic equipment. The signal box was originally a relatively short distance from Sunshine Station, but the station has been substantially redeveloped and it is currently located south of the Hampshire Road overpass; as a result, there is now a significant separation between the two.

5.2.3.4.3 Sugar Gum Row (HO42)

In Talmage Street Albion, on the western side of the railway line, a row of sugar gums (Figure 5.40) is included in the HO (HO42). The heritage citation describes the trees as 'probably being among the last surviving remnants of HV. McKay's original tree-planting scheme' (Vines et al, 2000), and considers that they may have originated either as an ornamental approach to the McKay houses on Talmage Street or as a surviving example of the streetscaping undertaken throughout the housing estates developed by McKay (Vines et al, 2000).

While there are a few large trees at the north end of the HO, many of the trees within the HO have been previously lopped and evidence a lower quality form and structure that is the result of regrowth from the base of the tree. A review of historical aerial photography suggests that these trees were lopped as a group c. 1975-1984 (Figure 5.41). The HO area also includes a small number of infill plantings of a different species, Smooth Barked Apple Myrtle (*Angophora costata*), that have been established within the last decade. These trees are not consistent with the historical planting and would not be considered to be of heritage significance.



Figure 5.39 View of the signal box at Sunshine Station (HO39) from the south-west

Although the HO for the gums extends along 200 metres of the east nature strip of Talmage Street, there are additional Sugar Gums located to the north that appear to relate to the same early planting. A short row of Sugar Gums of similar age is also located along the south edge of Barclay Reserve at King Edward Avenue, this is the remains of an originally triangular planting in the south-east corner of the reserve.

Historical aerial photography provides evidence of the original character of these plantings and their relationship to the residential subdivisions developed by McKay. These photographs confirm that by the 1920s a number of the streets within the Albion subdivisions had been planted with rows of street trees. The Talmage Street planting is clearly identifiable in these images; although its relationship to a more generalised tree-planting scheme is not confirmed, the Talmage Street planting would have improved the approach to HV McKay's house The Gables (demolished c.1960s) (Museums Victoria Item MM 16516) and adjoining residences, and to the Albion Substation to the north (refer 5.2.3.4.1).

The Talmage Street planting originally comprised a pair of dense rows to both sides of the street containing more than a hundred trees; this original density is only loosely expressed by the remaining trees, which persist in a more remnant condition along just the east side of the roadway. Although the surviving row is densest at the south end of the street where subject to the HO, this is also the section where the condition of the surviving trees has been most affected by previous lopping.



Figure 5.40 View of Sugar Gum Row (HO42) at Talmage Street, Albion looking to the north



Figure 5.41 Detail from 1984 aerial photograph showing the Sugar Gum Row with trees at south-east end (red arrow) having recently been lopped (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)



Figure 5.42 Detail from c. 1920s aerial photograph showing the residential subdivisions at Albion; the extent of the HO42 Sugar Gum Row to the far side of Talmage Street is indicated approximately (red arrows) (Source: Museums Victoria)



Figure 5.43 Detail from the c. 1920s aerial, showing the original row planting to both sides of Talmage Street as well as similar plantings in a triangle of the Barclay Reserve and along King Edward Avenue (far right) (Source: Museums Victoria)



Figure 5.44 Detail, 1931 aerial photograph, the extent of the HO42 area is indicated (red arrows) (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)



Figure 5.45 Detail, c. 1950-1954 aerial view showing intact row plantings to both sides of Talmage Street (red arrow) and on the north side of King Edward Avenue (lower left) (Source: State Library of Victoria)

5.2.3.4.4 HV McKay Memorial Gates (HO53)

The wrought iron HV McKay Memorial Gates (HO53, Figure 5.46) were erected in honour of HV McKay, for the 70th anniversary of the invention of the Sunshine Harvester (Vines et al, 2000). These are located at the south-western edge of Barclay Reserve. The gates are adjacent to a reconstruction/replica of the original smithy where the first Sunshine Harvester was built at Dunmartin in northern Victoria in 1884. The replica smithy dates from 2001 (this structure is not included in the HO). According to the citation, the gates were previously located at the Sunshine Harvester plant.

The gates are described as being of regional significance for their historical association with HV McKay and Sunshine more broadly. The gates have also been ascribed architectural significance, as related to their technical design, 'as a fine example of blacksmith-forged decorative wrought iron gates' (Vines et al, 2000).

The smithy is not considered of heritage significance in its own right but has some value as an interpretative element that references this key theme in Sunshine's history, particularly as co-located with the gates.



Figure 5.46 HV McKay Memorial Gates (HO53) at the southern end of Talmage Street with the replica timber smithy behind

5.2.3.4.5 Black Arch Rail Bridge (HO40 Brimbank/HO164 Maribyrnong)

A single HO place in the Sunshine/Albion section of the State Project Land is also identified in the HO schedule of the Maribyrnong Planning Scheme, this is the Black Arch Rail Bridge (HO164), which straddles the boundary between Maribyrnong and Brimbank municipalities. The bridge is an early bluestone rail structure constructed as part of the development of the Melbourne-Bendigo line in the 1850s (Figure 5.47).

The project works will not impact on the heritage values of the Black Arch Rail Bridge and it is not considered further in impact assessment.



Figure 5.47 View of the Black Arch Bridge, 2007 (Source: Lovell Chen Archives)


5.2.3.4.6 Places at the edge of State Project Land

Numerous HO places in the Sunshine/Albion area intersect with the State Project Land only at the property boundary or through the inclusion of roadways. These are a mix of precincts and individual buildings and other places of different types. As a general comment, these HO places reflect on the growth of Sunshine from the early twentieth century but more specifically in the interwar period. Many are related directly or indirectly to HV McKay and the Sunshine Harvester Works, including the housing estates and commercial and community infrastructure that developed around the works.

These are summarised below, refer to Appendix A for more detailed information.

To the west of Sunshine Station is the Sunshine Commercial Heritage Area (HO22), centred on City Place. As planned, this group of shops provided access to the level crossing and station, linking the residential estate with the Sunshine Harvester Works (Vines et. al, 2000). The key period of significance for the precinct is 1912-1925. A number of individual HO places are also located close to the station to the west of the rail reserve, including the Derrimut Hotel (c. 1929, HO65), the Sunshine Advocate Office (1926, HO51), the Sunshine Market (c. 1950, HO91) and the former ES&A Bank (1960, HO63).

Located to the south-west and more distant from Sunshine Station, is a group of community, religious and educational HO places. These include the former Church of Christ (1936, HO125), the Masonic Lodge (1926, HO126) and the Sunshine Picture Theatre (c. 1925, HO127). The former Sunshine Technical School (1912, 1941; HO56) and the former Sunshine Girls Technical School (1938, HO57) are located south-east of the railway line. A further religious building to the north-west of this group is the Sunshine Baptist Church (HO75), at 42 Ridley Street and 16 Sydney Street, Sunshine. This place is also included within the broader King Edward Avenue residential precinct (HO24).



Further north along the rail corridor there is a distinct cluster of commercial HO places on the eastern side of Hampshire Road and in closer proximity to the Sunshine Harvester Works, including shop rows at 193-197 Hampshire Road (1924, HO130) and 207-219 Hampshire Road (1920, HO133), HV McKay Offices (HO18, the eastern portion of the office complex included on the VHR H1966) and the commercial building known as Hampshire House (date unknown, HO144), 233-241 Hampshire Road. The Chemist Shop at 234 Hampshire Road (1925, HO108) is also located just within the State Project Land.

A number of residential heritage precincts are located partially within or on the edges of the State Project Land. These include the 1920s Concrete Housing Estate (HO20), as well as the McKay Housing Estate, Durham Road (HO23), McKay Housing Estate, King Edward Avenue (HO24) and Railway Station Estate (HO25), all of which were established earlier but which contain building stock of varying ages. The Grand Junction Estate and Matthew's Hill Precinct (HO151) is a residential precinct located on the eastern side of the railway corridor.

In Albion there are four HO places located at the boundary of the State Project Land; Curracloe, 11 Adelaide Street (HO71), Cameron's house and dairy (HO76) and the now demolished house and trees at 22-24 Talmage Street (HO77). The War Service Homes Heritage Area (HO26) is located to the west of the rail corridor.

For the majority of these places project works will not intersect with the places and there will be no impact. This is while noting that the general issue of potential roadworks within and in proximity to heritage places is considered by this impact assessment.

5.2.3.5 Places Outside State Land (500m investigation area)

Outside the State Project Land and within the 500m investigation area, are a number of heritage places in Sunshine and Albion. These places are listed at Appendix A. None of these places will be impacted by the project works and they are not considered in impact assessment.

5.2.3.6 Potential unlisted places

Three places of potential heritage value but which are currently not subject to statutory heritage controls have been identified within or on the periphery of the State Project Land:

- Quonset Hut at 134 Hampshire Road, Sunshine (located in the rail reserve)
- Sunshine Barley Terminal Silos, 2 Wright Street, Sunshine
- Melbourne to Echuca Railway.

5.2.3.6.1 Quonset Hut, 134 Hampshire Road

There is a prefabricated demountable building with a curved roof form located at 134 Hampshire Road (Figure 5.48). This building is a Quonset Hut, one of the many types of lightweight demountable buildings developed for military use. Quonset Huts were developed by the US military and are an adaption of the British Nissen Huts. These huts were used extensively in the Pacific during World War II and many were imported to Australia following the end of the war (Figure 5.51).

This building has been subject to a detailed heritage assessment for Brimbank City Council and a citation for the building was located on Heritage Victoria's Hermes Database, however the author, exact study reference and date of preparation are not identified. The citation recommended the place for inclusion in the HO, to the extent of title boundaries. This recommendation has not been implemented; the reasons for this are unknown.

The historical research material in the citation suggests that the building was relocated onto the site between 1955 and 1960 and used as part of a used car business that operated on the site. Aerial photographs indicate that the building was in place by 1962 (Figure 5.17) and it does not appear on aerials from 1945 or 1951 (and Figure 5.16).

The citation for the subject site notes that previous reports had identified other examples of Quonset Huts in Victoria/NSW as follows:

[Iain] Stuart (2005:56) reports that there are at least 10 identified Quonset Warehouses within Victoria and New South Wales, while Heritage Victoria (in a report responding to the nomination of the Former Quonset Warehouse at 175-185 Marong Road, Golden Square) notes in 2012 that there were at least 25 identified Quonset Warehouses in Victoria alone (NT file). (Quonset Hut Heritage Citation Report, Hermes Number 197624).

A 2008 assessment of the former Maribyrnong Migrant Hostel at 61-71 Hampstead Road Maribyrnong - a VHR-registered site which includes WWII huts - included a comparative analysis of Quonset and Nissen Huts and a list of known examples in Victoria at that time (Heritage Alliance, 2008 (2)). The report references the hut at 134 Hampshire Road and five other examples of Quonset huts. A review of these examples using recent aerial photography suggests that relatively few survive (February 2021). They may have been relocated to other sites, as is typical of such buildings, or demolished. On the former migrant hostel site itself, only two demountable buildings survive from over 60 introduced there from the late 1940s.

In summary, while the exact context is unknown, this is a building type which was once common but where there are unquestionably now diminishing numbers.

The conclusion of Council's heritage assessment for this building was that the building was of local architectural and historical significance. Its historical values were identified as related to its association with World War II and as a demonstration of the post war shortage of building materials. Architecturally, the building was identified as a clear example of its type, one that is becoming increasingly rare.

Having regard for the heritage assessment and even despite the absence of a HO control, the building is considered of some heritage value as a demountable structure developed for use in World War II and later adapted to the requirements of post-war Australia. Such structures are becoming rarer and/or are difficult to document, associated with their ephemeral and impermanent nature and to a degree with their ease of relocation. It is noted that the specific history of this example and its use on this site have not been identified as contributing to its significance.



Figure 5.48 View of the demountable building at 134 Hampshire Road from the north-west



Figure 5.49 1975 aerial photograph showing the demountable building on the site at 134 Hampshire Road (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)



Figure 5.50 Aerial view of the Quonset hut on the former migrant hostel at 61-71 Hampstead Road Maribyrnong (included on the VHR as former Maribyrnong Migrant Hostel, H2190) (Source: VicPlan)



AUSTRALIAN WAR MEMORIAL

P01672.001

Figure 5.51 View of a Quonset hut at Lungga Guadalcanal Solomon Islands, 1943 (Source: Australian War Memorial)

5.2.3.6.2 Sunshine Barley Terminal Silos

In January 2021 Brimbank City Council resolved to request interim heritage controls to be applied to the Sunshine Barley Terminal Silos at 2 Wright Street (Amendment C226), in anticipation of undertaking a formal process to apply permanent heritage controls. The silos are located directly adjacent to the rail corridor, in an area where only CSR works are proposed (Figure 5.52, Figure 5.53). At the time of writing the interim heritage control had not been gazetted.

The application of the HO is supported by a Heritage Assessment (Extent, 2021) which concluded that there is a strong likelihood that the silos meet the threshold for local significance for 'historical, representative and [likely] aesthetic heritage values' (Extent Heritage, 2021). Further work to support the application of the HO will be undertaken as part of a stage 2 assessment.




Figure 5.52 View to the silos from Sunshine Road to the south-west (Source: Google Streetview)



Figure 5.53 Image showing Sunshine Silos, approximate site outlined by red line, adjacent to the rail corridor and State Project Land (indicated by blue overlay) (Source: RPV GIS)

5.2.3.6.3 Melbourne to Echuca Railway

The Melbourne-Echuca railway line has previously been identified as a potential heritage place and was registered on the Register of the National Estate (RNE, a non-statutory archive). The line was also classified



by the National Trust of Australia (Victoria) (Victoria) (NTAV) in 1982 as the Mount Alexander and Murray River Railway Line and the classification was updated in 1998 as B5323.

The NTAV citation notes that the line is significant as one of the state's first two trunk lines, for its close adoption of English engineering and architectural standards, as well as for its role in connecting Melbourne with important regional areas. The RNE citation references surviving structures (mostly railway stations) as being the key contributing factor to the significance of the line.

Neither citation makes any reference to a buildings or structures within the Maribyrnong or Brimbank municipalities, where the line passes through the State Project Land, and on this basis it is not considered further in this impact assessment.

6. Impact Assessment

This section provides an assessment of project works on identified places of significance within State Project Land. The impact assessment is structured to consider project-wide issues including those associated with signalling and rail systems upgrade works, followed by an assessment of issues and impacts on specific heritage places arising from works within the Corridor and Sunshine sections of the Project.

In some cases the exact nature (including the extent and severity) of impacts is unknown and this is noted.

Recommendations have been made for avoidance, minimisation and mitigation of impacts. As noted in Section 2.2, these measures will be formalised through an EMF.

For each place, a comment on the current approvals requirements has been provided.

Note that the individual heritage citations for the places considered in Impact Assessment are included at Appendix C.

6.1 Project wide matters

6.1.1 Signalling/rail systems upgrade

6.1.1.1 Project works

Across both project sections (Corridor and Sunshine) there is a scope of upgrades to existing and installation of new signalling and other rail infrastructure to support maintenance, drainage and the like. The project works include the introduction of new railway track alignments and realignment of existing tracks. The works are contained within the rail corridor.

6.1.1.2 Impact assessment

Signalling and services upgrades within the rail corridor are typically confined to the replacement of equipment on/within existing infrastructure, on gantries and within service conduits, for example. New infrastructure within the rail corridor includes OHLE and digital towers. The introduction of new railway tracks and realignment of existing will involve the modification of railway fabric, noting that all components are subject to continual renewal and upgrade to support day to day operation of the railway.

Signalling works and track works intersect with the following heritage places:

- HV McKay Memorial Gardens (tracks are located beneath a section of the VHR extent of registration defined by reference to the demolished old footbridge) (VHR H1953/HO53 Brimbank)
- Albion Viaduct (VHR H1197/HO107 Moonee Valley/HO5 Brimbank)
- Black Arch Bridge (Brimbank HO40/Maribyrnong HO164)
- Sunshine Railway Signal Box (HO39 Brimbank)
- Steele Creek Rail Embankment (HO37 Brimbank)
- Railway Trestle Bridge, Moonee Ponds Creek, Strathmore Heights (HO342 Moonee Valley/HO219 Moreland)

As a general comment, the signalling and services upgrade, new infrastructure and track related works are very unlikely to have any adverse impact on the identified values of the heritage places within the rail corridor where works are proposed to occur.

Accepting that, it would be important to consider and assess works proposed at each of the affected heritage places individually to confirm there are no adverse impacts on significant fabric or no adverse visual impact.

6.1.1.3 Proposed mitigation

In detailed design, review works within heritage places and design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of affected heritage places.

6.1.1.4 Approval requirements

In the absence of more detailed information on the scope and nature of signalling/rail services works at each of the affected heritage places, it is not possible to confirm the approval requirements that would apply.

6.1.2 Roadworks/construction adjacent to heritage places

6.1.2.1 Project works

Proposed activities within roadways included in State Project Land relate to access to and from construction worksites. Modification to roadways may be required to allow for oversize vehicle access.

6.1.2.2 Impact assessment

While some roadways included in State Project Land intersect with HO precincts, none of the citations for these precincts identify the roadway fabric (gutters, kerbs, etc.) as being of significance or as contributing to the identified heritage values of the precincts. In this context, works to the roadways themselves to accommodate changed traffic conditions (either permanent or temporary) would be unlikely to be of concern.

It is also considered unlikely that works within the road reserve associated with traffic management would have an adverse physical impact on the heritage buildings or other features of significance (such as trees, gardens or fences) within HO precincts and fronting onto the road reserve.

6.1.2.3 Proposed mitigation measures

While impacts are considered unlikely, should roadworks be required that intersect physically with properties fronting the road reserve, these should be managed on a case-by-case basis to avoid any adverse impacts on identified heritage values.

This would include works within the tree protection zone (TPZ) of any trees of heritage value where tree controls are triggered under the HO. The majority of precincts and site-specific HOs where roadworks are proposed do not have tree controls, however tree controls do apply in the Grand Junction Estate and Matthew's Hill precinct (HO151 Brimbank), including for the street tree plantings at the junction of Hill, Drayton and Matthews Street Sunshine (within State Project Land).

In order to mitigate this risk, when detailed design becomes available, all roadworks within or abutting HO places should be reviewed, and consideration given to potential impacts. Where required, protection measures should be designed and implemented to ensure no adverse impacts.

6.1.2.4 Approval requirements

In the absence of more detailed information on the scope and nature of roadworks within heritage places, it is not possible to confirm the approval requirements that would apply. Note, however permits are not required under the HO for roadworks that do not change the appearance of a heritage place or are generally undertaken to the same details, specifications and materials.

6.1.3 Historical archaeology

6.1.3.1 Project works and potential impacts

6.1.3.1.1 Construction

The MAR State Land Historical Archaeology Impact Assessment (Appendix D) identified the following works and potential impacts to known and potential archaeological sites:

- Clearing and grubbing including the removal of vegetation and trees, including corridor-wide removal of vegetation and trees where new tracks are at-grade, and in the vicinity of the new elevated rail bridge at Maribyrnong River.
- Corridor wide ground disturbance as a result of construction activities including excavation works, grading, piling, rock breaking, tamping and regulating, ballast stockpiling and vehicle movements.
- Vibratory compaction activities along the length of the corridor including formation construction, structural backfill, access tracks and ground improvement.
- Indicative construction vehicle access along the north of the Maribyrnong River adjacent the Western Ring Road. The maintenance path intersects with part of the northwest boundary of Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47), including cutting across the west corner of the VHI site.
- Construction vehicle access, including the transportation of materials (e.g. concrete, precast elements, excavated spoil), immediately adjacent the parklands along the Western Ring Road.

In addition to these works and potential impacts, site-specific impacts on historical archaeology have been considered for the Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47). Impacts to this site are considered in detail at Section 6.2.2.

6.1.3.1.2 Operational impacts

The MAR State Land Historical Archaeology Impact Assessment (Appendix D) also considered the potential for operational impacts on historical archaeology but found there were unlikely to be impacts upon historical archaeology across the State Project Land, once the initial impacts from construction activities have been completed.

6.1.3.2 Mitigation measures

The MAR State Land Historical Archaeology Impact Assessment (Appendix D) considered the potential for the project to impact upon historical archaeological sites or potential archaeological sites of more than low archaeological potential, through project activities, and to provide management measures to help avoid, minimise or mitigate against project impacts on historical archaeological sites.

The impact assessment concluded that with the exception of the VHI-listed Brimbank Park Ruins (H7822-0004/HO47) which was found to be of high archaeological potential, the majority of State Project Land was of low archaeological potential, including a number of listed and identified sites of low archaeological potential.

The impact assessment for the Brimbank Park Ruins (H7822-0004/HO47) site is at Section 6.2.2 and more detail is provided at Appendix D.

For the balance of State Project Land, the following mitigation measures were identified:

Historical heritage awareness training should be completed as part of the site induction for RPV personnel and/or contractors prior to the commencement of construction works to ensure:

- an understanding of where all known historical archaeological sites are located within the State Project Land
- an understanding of the potential historical archaeological sites that may be impacted during the project
- the procedures required to be undertaken in the event of discovery of historical heritage material, features or deposits, or the discovery of human remains.
- A suitably qualified archaeologist is to be on-call in the advent that any unexpected historical archaeological sites are found.

6.1.3.2.1 Construction Environmental Management Plan

The heritage significance of all potential archaeological sites, including those specific places that are assessed as being of low potential, will be identified in the Contractor's Construction Environmental Management Plan.

6.1.3.2.2 Discoveries of historical archaeological sites

If any archaeological remains are discovered during construction works, the following procedure must be followed by RPV and/or their contractors:

STOP

- Stop any activity which may impact on the discovery;
- Ensure that other people working in the area are aware of it and have also stopped work in the area;
- Protect the artefacts or site by erecting temporary fencing or other suitable barrier.

ADVISE

- A supervisor or the historical archaeologist must be consulted if they are on site;
- Supervisors are to contact [the client] to advise of the discovery;
- Supervisors are to advise Heritage Victoria where the discovery was made and provide a description or photograph of the discovery.

MANAGE

- Heritage Victoria, the onsite historical archaeologist or supervisor will advise on how to manage the discovery;
- Management of the discovery may involve protection, recovery, recording or removal of the artefacts or features and is likely to require Consent to Damage from Heritage Victoria.

6.1.3.3 Approval requirements

Unexpected discoveries of historical archaeological sites – all historical archaeological sites in Victoria older than 75 years are protected by the Heritage Act, whether they are recorded on the VHI or not. It is an offence to knowingly or negligently deface, damage, or otherwise interfere with an archaeological site without obtaining the appropriate consent from the Executive Director of Heritage Victoria.

Under Section 127 of the Heritage Act, if an archaeological site is discovered during construction or excavation on any land, the person in charge of the construction or excavation must as soon as practicable report the discovery to Heritage Victoria. The STOP, ADVISE and MANAGE procedure outlined in above must be followed.

6.1.4 Construction Vibration

6.1.4.1 Project works

The MAR State Land Vibration Impact Assessment (MAR-AJM-PWD-PWD-REP-XEV-NAP-0001719) identifies a number of buildings subject to statutory heritage controls that could potentially be at risk of structural damage as a result of vibration associated with Project construction works.

The historical heritage places that are potentially at risk include:

- Albion Viaduct (VHR H1197/HO107 Moonee Valley/HO5 Brimbank)
- HV McKay Memorial Gardens (VHR H1953 Brimbank)
- Sunshine Railway Signal Box (HO39 Brimbank)
- Sugar Gum Row (HO42 Brimbank)

- HV McKay Memorial Gates (HO53 Brimbank)
- Sunshine Market (HO91 Brimbank)
- Sunshine Barley Terminal Silos (potential heritage place)

6.1.4.2 Impact assessment

The MAR State Land Vibration Impact Assessment (MAR-AJM-PWD-PWD-REP-XEV-NAP-0001719) notes that the potential for impact (structural damage) on heritage places arises from construction activities adjacent to the heritage places. Specifically, the type of equipment used is the key consideration as to the likelihood of structural damage. There is a risk that excavation works (use of excavators and rockbreakers) may exceed the relevant measure at the Albion Viaduct. The balance of identified heritage places could be subject to vibration arising from the use of rollers (for trackwork), specifically an 18T vibratory roller, which would exceed the relevant measure.

6.1.4.3 Proposed mitigation

Where there is a risk of exceeding the structural damage guideline levels, alternative measures such as the use of smaller plant equipment or static rollers may be implemented to minimise potential impacts.

Additionally, pre-construction and post-construction condition survey(s) should be undertaken for heritage places at risk of impact from structural integrity or other damage and disturbance as a result of the project. Measures to manage and monitor potential vibration impacts on heritage places during construction must be implemented in accordance with the Construction Noise and Vibration Management Plan required for the Project.

The results of monitoring for heritage places may be reported to the Executive Director, Heritage Victoria or the local Council where required and remedial action taken, if required, consistent with good heritage practice and the principles of the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter), 2013. The Burra Charter supports an approach to maintenance and repair (where that is required) that maintains original or significant fabric as far as is possible and uses techniques and materials that are consistent with the values of the heritage place (building or structure).

6.1.4.4 Approvals requirements

No approvals are required for construction works outside listed heritage places.

In the event that repair/conservation works are required to address structural or other damage arising from vibration, approvals may be required under either the Heritage Act or the P&E Act.

A permit would be required under the Heritage Act (for registered places).

A permit would be required under Clause 43.01 for works within an HO extent.

6.2 Corridor Section

The following heritage places within the Corridor Section have the potential to be impacted by the works. They are considered in detail below:

- Albion Viaduct (H1197)
- Dodds Homestead/Brimbank Park Ruins (H7822-0004/HO47 Brimbank)
- Steele Creek Rail Embankment (HO37 Brimbank)

6.2.1 Albion Viaduct (VHR H1197)

6.2.1.1 Proposed works

Works proposed to the Albion Viaduct include CSR, utility and signalling works. These will occur at deck level (refer 6.1.1). Track and civil works are proposed at the northern and southern extents of the Albion Viaduct, adjacent to the concrete abutments at the top of the escarpment.

Temporary worksites, laydown areas and construction vehicle access will be located within the Maribyrnong River Valley beneath and adjacent to the Albion Viaduct. More broadly, worksites and construction areas are to be located to both sides of the Albion Viaduct. The construction of these areas will require significant groundworks within the river valley.

A new 500-metre-long elevated rail bridge is proposed to the immediate west of the Albion Viaduct. The new bridge piers are to align with every second trestle of the Albion Viaduct. Noise walls, if required, are presumed to be integrated into the design of the proposed new bridge.

Other permanent works include maintenance paths, security fencing and the like.

6.2.1.2 Impact assessment

Ground level civil and utility works, and landscape works are likely to occur in close proximity to the Albion Viaduct and its concrete trestle bases. Assuming no direct physical impact to the existing structure, these works are unlikely to have any adverse heritage impact. While the broad relationship of the Albion Viaduct with the river valley and escarpments to either side is important, the existing landscaping character itself is not of significance and does not contribute to the viaduct's heritage values.

At deck level, track and associated works are expected to be required to the Albion Viaduct. These are works that are very unlikely to affect significant fabric (noting that rails, sleepers, ballast and the like are subject to regular renewal; refer 6.1.1.2).

The key heritage issue and impact is that of the new elevated bridge structure, which would be located immediately to the west of the Albion Viaduct. Given the highly exposed position of the Albion Viaduct, the new structure will change its immediate context and will have an impact on its presentation in a range of close, medium and long-range views. Depending on the viewing position, the new structure will either be in front of and partly obscure views to the Albion Viaduct or will be visible behind. The new bridge would also be evident in oblique or direct views under and along the length of the viaduct from the riverbank.

In assessing the nature of the impact, consideration was given to the question of whether there are key views to the Albion Viaduct, views that are more important than others, however none were identified from a heritage perspective, having regard for the values, and history and design of the viaduct. In practice the more significant views from a community perspective may be considered to be those which are currently available from public walkways and viewing points in the surrounding area, including the path along the riverbank in Brimbank Park, and the elevated views from the path along the rear of properties in Sterling Drive and in particular the viewing point at its western end. Equally, these views may change and new views may become available over time. There are also a range of other views available to the Albion Viaduct from public and private land.

Having regard for these considerations, there will be some adverse impact on the heritage values of the Albion Viaduct arising from a new structure in such close proximity. This is recognising that its state-level values are based in large part from its architectural/aesthetic qualities, including its notable scale and distinctive trestle tower and girder design details. While not referenced in the VHR statement of significance, the visual prominence of this structure in the Maribyrnong River valley, deriving from its siting, scale and design, is of significance. It is a landmark in the river valley. Acknowledging that this part of the Maribyrnong River valley forms an extended setting to the Albion Viaduct, there would be an impact on its setting and presentation.

There would be no impact on the scientific (technological and engineering) or historical values of the Albion Viaduct. The distinctive structural engineering design will continue to be demonstrated through the fabric and will remain entirely legible in a physical and visual sense. Similarly, the historical associations and values of the viaduct as a key component of the 1920s goods line project will be unaffected.




Figure 6.1 View from an elevated position to the-east; the new structure would be visible behind the Albion Viaduct



Figure 6.2 View from a position beside the path on the river bank to the west of the Albion Viaduct; the new structure would be in the foreground in this view

6.2.1.3 Proposed mitigation

Appropriate protection works should be provided to prevent damage to the Albion Viaduct as a result of works in proximity.



The design of the new MAR bridge should be developed in a manner that seeks to minimise adverse impacts. The approach should be to ensure – to the greatest extent possible within functional and structural constraints – that the Albion Viaduct retains its prominence in the river valley and the legibility of its distinctive design.

To this end, Heritage Design Guidelines (Lovell Chen, September 2020) have been developed to establish to guide the design process. These address all relevant aspects of the new bridge design, including the critical issues of the overall form and structural design as well as those relating to rail infrastructure.

The guidelines address a range of relevant issues as follows:

- Separation from the existing viaduct
- Structural response (pier spacing)
- Pier form
- Bridge deck form and undercroft
- Abutment design
- Ancillary elements (e.g. overhead line structures, lighting, screening)
- Materiality and colour

These guidelines should form the basis for the further development of the design.

It is also recommended that a heritage interpretation strategy be developed and implemented on the site. This would serve to enhance community understanding of the history and significant design attributes of the Albion Viaduct.

A heritage interpretation strategy could include the following:

- Identification of relevant themes/stories based on historical research, review of heritage values, stakeholder engagement
- Identification of opportunities for interpretive media to communicate the themes/stories, there are a range of options, at this site the most likely would be a combination of-site signage with the potential for online content, again this would likely include stakeholder engagement including land managers.

The information and recommendations of the strategy are then subject to implementation.

The development and implementation of interpretation strategies is frequently a condition on Heritage Victoria permits.

6.2.1.4 Approval requirements

On 3 June 2021 the Heritage Council determined to amend the VHR registration for the Albion Viaduct to include additional land to either side of the structure in the extent of registration. The proposed new rail bridge would be located within the registration land extent and the works would require a permit under the Heritage Act.

In the process of the registration amendment, a range of works have been determined to be exempt from the requirement for a permit. These include works at deck level of the existing viaduct including track and ballast repair/replacement, wiring and cabling for the use of the structure, emergency and maintenance works associated with rail operations, public safety and security, graffiti management and removal, signage, landscaping, fire suppression works, maintenance, repair and replacement of existing infrastructure on the land and works associated with the management of the waterway and riverbank.

6.2.2 Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47 Brimbank)

6.2.2.1 Proposed works

Relevant Project works at the Dodds Homestead Ruins/Brimbank Park Ruins (H7822-0004/HO47) include the following:

- Indicative construction vehicle access along the north of the Maribyrnong River adjacent the Western Ring Road. The maintenance path intersects with part of the northwest boundary, including cutting across the west corner of the VHI site.



Figure 6.3 Detail of GIS mapping showing intersection of maintenance access path (salmon coloured overlay indicated by arrow) with VHI extent of Dodds Homestead Ruins shown by blue overlay

6.2.2.2 Impact assessment

As identified in the MAR State Land Historical Archaeology Impact Assessment (Appendix D), impacts to this archaeological site include the use of heavy vehicles within and around the VHI boundary of the site. Such movements are likely to have an impact upon archaeological features through the compaction of the soil underneath the vehicles.

Should the scope or nature of the proposed works change, then they will need to be reassessed in terms of their potential to impact upon the archaeological site.

6.2.2.3 Proposed mitigation

The MAR State Land Historical Archaeology Impact Assessment (0) made recommendations for historical heritage awareness training, the inclusion of relevant information in the Contractor's Construction Environmental Management Plan and required procedures in the event of the discovery of archaeological remains during works, and these are set out at section 6.1.3.2.

In addition to these, specific mitigation measures were recommended for this site, as follows:

Protective fencing

Prior to any vehicle movements taking place in the area, protective barrier fencing will be erected around the areas of archaeological potential as close to the maintenance path as possible to ensure that vehicles and machinery do not intrude upon the area any further than necessary along the required maintenance path. The fencing would be installed for the duration of works for the project and removed following completion.

Works are then to be undertaken in such a way as to minimise direct contact by construction vehicles or machinery with the heritage boundary of this archaeological site.

Archaeological investigations

If the archaeology cannot be avoided, further archaeological assessment of the site and its immediate surrounds will be required prior to works occurring, under appropriate approvals from Heritage Victoria. An appropriately qualified archaeologist should undertake a detailed archaeological assessment of the site, research design and methodology, and test excavation or archaeological salvage excavation prior to any works taking place. The archaeologist would notify Heritage Victoria of the results of this archaeological assessment.

Construction Environmental Management Plan

The heritage significance of the Brimbank Park Ruins (VHI H7822-004) will be identified in the Contractor's Construction Environmental Management Plan.

6.2.2.4 Interpretation

The potential for this site to be used for interpretation was noted in the Council citation and it may be possible to integrate information relating to the history of Dodds Homestead, including its archaeology, to a broader interpretation strategy within Brimbank Park.

6.2.2.5 Approval requirements

6.2.2.5.1 Heritage overlay

No works are proposed within the HO extent. In the event works were proposed within the HO site, a permit would be required under Clause 43.01 for works within an HO extent.

6.2.2.5.2 VHI

As per legislative requirements, a VHI Consent to Damage is required under s.124 of the Heritage Act for the works within Brimbank Park Ruins (VHI H7822-0004).

The *Application for consent to undertake works or activities on an archaeological site* form would be required to be submitted to Heritage Victoria; the application should include the relevant assessment in the MAR State Land Historical Archaeology Impact Assessment (0).

As noted above, should the scope or nature of the proposed works change, then they will need to be reassessed in terms of their potential to impact upon the archaeological site.

6.2.3 Steele Creek Rail Embankment (HO37 Brimbank)

6.2.3.1 Proposed works

The proposed works involve the construction of a new elevated dual track railway (viaduct) on the western embankment crossing Steele Creek, adjacent to the existing rail line. The viaduct will comprise piers, rail deck, OHLE and associated noise attenuation (integrated noise wall) and emergency egress stair and maintenance features. The viaduct will be approximately 20 metres high over the Steele Creek valley.

Civil works include the construction of permanent vehicle access beneath the elevated viaduct (Figure 6.4). Works include the removal of vegetation, re-profiling of the western embankment and civil works including drainage works and construction of a new roadway access.

A SUP is proposed within the Steele Creek valley on the west side, although this does not intersect with the HO extent.

6.2.3.2 Impact assessment

The embankment is identified as a place of local historical significance associated with the development of the railway line in this area. It is also identified as one of the highest railway embankments in the metropolitan area (Vines, 2000).

The construction of the viaduct and associated civil works will result in a substantial modification of the gradient and surface profile of the western side of the embankment crossing the Steele Creek valley. Works will introduce a new structure of height (piers, rail deck and OHLE, and egress stair), ground level service pits and alter the form and profile of the embankment through the introduction of vehicle access beneath the elevated railway line.

As related to historical significance, the association with the development of the railway line will not change or be affected as an outcome of the works. The adjacent earlier railway line will remain, as will the historical connection to the Albion Viaduct (VHR H1197) to the south-west and the Railway Trestle Bridge crossing Moonee Ponds Creek in Strathmore Heights (HO342 Moonee Valley/HO219 Moreland) to the north-east.

The other aspect of significance is the scale of the feature; the embankment is described as 'one of the highest railway embankments in the metropolitan area' in the heritage citation (Vines, 2000). This would not change; while the visibility of the western embankment would be reduced as a result of the introduction of viaduct infrastructure (piers and deck) and civil works, the overall height would be maintained. It is also noted that western embankment particularly, is viewed in a largely industrial and urbanised context. The works to the western side of the embankment would cause a change to presentation, though not the overall height.

Overall, when considering the impact of the physical changes to this feature on its heritage values, it is important to note that the eastern half of the embankment (albeit outside the HO) will not be affected and the original overall form and physical attributes of the feature will continue to be demonstrated through that fabric.

The works are also likely to involve the modification of the concrete culvert containing Steele Creek. This utilitarian element does not contribute to significance, however and its modification will not result in an adverse impact on the heritage values of the listed embankment.

On this basis, even though the physical change will be substantial, when considering the identified values of the place and the nature of the fabric, together with the retention of the eastern embankment, the heritage impact is not considered a significant one.



6.2.3.3 Figure 6.4 Aerial photograph of Steele Creek Rail Embankment (HO37) shown pink, with the maintenance access road in salmon (indicated by arrow) and track and civil works and CSR, signalling and utility works shown in green with yellow hatching. Proposed mitigation

None identified.

The current condition of the embankment should be recorded in full prior to works occurring.

6.2.3.4 Approval requirements

A permit would be required under Clause 43.01 for works within the HO extent.

6.3 Sunshine Section

The following heritage places within the Sunshine Section have the potential to be impacted by the works. They are considered in detail below:

- HV McKay Gardens (VHR H1953)

- John Darling and Son Mill (VHR H0829)
- Albion VR D.C. Substation (HO89)
- Railway Signal Box (HO39)
- Sugar Gum Row (HO74)
- HV McKay Gates (HO53)
- Quonset Hut (potential heritage place)

6.3.1 HV McKay Memorial Gardens (VHR H1953)

6.3.1.1 Project works

At the HV McKay Memorial Gardens, it is proposed to utilise a section at the northern end of the gardens for a temporary work site, construction laydown and access (Figure 6.5). This intersects with the VHR extent of registration and would affect the extant gates, pathways, and vegetation in this area. The establishment of the work site requires the removal of vegetation and installation of hardstand and vehicle access points.

In addition to the works within the VHR extent of registration, works are also proposed to a section of the rail corridor (owned by VicTrack) along the eastern edge of the Gardens and in the northern extent. The Project Description indicates that CSR signalling, construction of a SUP and track and civil works will occur in this area. It is noted that there is no physical separation defining the legal boundary between VicTrack land and the Gardens; this section largely reads as contiguous with and as part of the landscape. A review of the historical aerial images and other sources indicates it historically has formed part of the Gardens.




Figure 6.5 HV McKay Memorial Gardens with Project Land overlaid in light blue, note dark yellow indicates works site/laydown area, green with yellow hatch indicates track and civil works and CSR works (Source: RPV GIS)

6.3.1.2 Impact assessment

The proposed works would affect areas along the eastern boundary of the HV McKay Memorial Gardens which lie both inside and immediately outside of the extent of the heritage registration (which is aligned roughly with the west edge of the diagonal 'Straight Six' pathway). Works on both sides of the registration boundary would have the potential to impact the significance of the place.

Potential impacts inside of the extent of the heritage registration may include impacts to a large number of significant trees within the gardens either directly (through a requirement to remove one or more trees or undertake pruning of the tree canopy), or indirectly through impacts to the root zone of the tree as a consequence of excavation or other works and ground or surfacing improvements, stockpiling of materials or vehicle traffic. Temporary impacts may also occur at the ends of existing pathways, although these would be anticipated to be reversible at completion of the works.

There would be a requirement to avoid or manage potential impacts to significant trees, paths and other features within the extent of registration of HV McKay Memorial Gardens, and to apply for an approval under the Heritage Act for all works and impacts occurring in this area.



The 'Straight Six' pathway (Figure 6.6) and cultivated vegetation along the corridor edge have not been included within the extent of the heritage registration, but these are included in the management plan for the gardens and have been planted and managed as part of the gardens landscape. Although unregistered and with fabric that is of recent origins, the path is a significant element of the Gardens original layout, having been in place in some form since the establishment of the gardens in c. 1909. There were originally a number of seats and a hedged arrangement, which were removed when the path system was concreted in 1975 (Brimbank, 2017: 14).

The majority of plantings along this edge are of recent origins and would not be considered to be of significance in themselves, however there is a tradition of buffer boundary planting east of the Straight Six path in this location. These recent tree plantings have adopted the characteristic ornamental species selections of Victorian and early twentieth century gardens, including a mix of exotic and native tree specimens and a palm. Shrubbery and groundcover plantings in beds along the boundary are also largely of recent origin. The level of residual impact to this area following the works would be dependent on the final nature of the works in this area and the space available for reinstatement plantings following construction.

A small number of older trees are also present on the boundary, including a Peppercorn Tree (*Schinus molle*) that may have self-sown on an older fence line or other feature, and two mature gum trees (*Eucalyptus spp.*) located at the south end of the Straight Six path. Removal of these outlying mature trees would not in its own right result in a measurable impact to the integrity and heritage significance of the gardens' ornamental landscape, however their removal may contribute to an overall loss of boundary screening and a cumulative impact on the perception and amenity of this area.

Depending on the final outcome and potential for landscape reinstatement works along this edge, the proposed works have the potential to have a significant adverse impact on the heritage place.

That impact would occur in the scenario that the works and permanent outcome on this edge resulted in an effective truncation of the extent of the Gardens. Such an approach would impact on the completeness of the heritage place and its integrity to the original design and layout. In terms of the identified values, the impacts would be on the historical significance as an early, rare and intact (despite some changes) garden of its type, and its aesthetic significance which relates to its layout, character and its relationship to the densely developed industrial and residential surroundings. There may also be contemporary social impact associated with the change, including to the use of the Straight Six path.

Conversely, if the scope of works is such that the landscape can be remediated and effectively returned to the current arrangements (Straight Six path and buffer edge planting, including accommodation of small and medium-sized trees), the impact of the works could be mitigated over time and there would be minimal long-term impact on values.



Figure 6.6 1945 aerial photograph of the HV McKay Gardens, the approximate location of the Straight Six path is indicated by the arrow (Source: Landata, Victorian Land Registry Services, Historical Aerial Photography Collection)

6.3.1.3 Proposed mitigation


In detailed design, minimise the extent of incursion and physical impacts of temporary and permanent works on the Gardens. Where possible, implement protection works to mature and semi-mature trees. Works should also be designed so as to limit residual impacts and optimise the potential for effective landscape reinstatement, having regard for issues of space available and soil depth.

While its scope would vary depending on the scope and nature of the works within the Gardens (both within and outside the current legal extent of VHR registration), a plan for landscape reinstatement works should be prepared and implemented. This should be developed in consultation with Council and Heritage Victoria and based on the existing HV McKay Memorial Gardens Management Plan (Brimbank City Council, 2017) and the HV McKay Memorial Gardens Conservation Analysis and Management Guidelines (Burness, Hawker and Nilsen, 1994). The reinstatement works should include the Straight Six path and buffer boundary planting.

6.3.2 John Darling and Son Flour Mill (VHR H0829)

6.3.2.1 Project works

The project proposes a two-kilometre flyover (viaduct), rising within the rail corridor south of Albion Station, and extending over Ballarat Road. At its highest point the viaduct will be elevated above ground level to 23.8 metres including OHLE supports. The viaduct is to include an architectural feature over Ballarat Road. The viaduct will be supported on piers, and incorporate noise attenuation, services, drainage and other features.



Other works are proposed within the forecourt of the mill (on VicTrack land) and these include modification works to the existing carpark, CSR and signalling works and track and civil works. These works will abut the VHR extent of registration boundary to the east of the site.

6.3.2.2 Impact assessment

The John Darling and Son Flour Mill occupies a triangular site to the north-west of the Albion Station.

Outside the extent of registration, works within the rail reserve immediately to the east of the registered buildings include track and civil works. As noted at Section 5.2.3.2.4, the platform awning on this edge is partly located within the rail reserve (outside the extent of registration) but is integral to the heritage buildings. Any potential impact from these works could be avoided by implementing protection works in this location.

A more significant impact is expected from the works to the east (also outside the extent of registration), where the elevated viaduct to be constructed in the rail reserve is likely to impact on the broader setting of the John Darling and Son Flour Mill and on aspects of its presentation.

The mill itself is a substantial and visually arresting and appealing building, paired with the more typical utilitarian tall concrete silo forms to its south. The complex is located in a generally low-scale residential and industrial area, meaning that it can be viewed from numerous positions in the local area as well as by those travelling by train through the rail corridor. It is a local landmark, but one that is also viewed by people who are not local. It also has a strong connection, historically and visually, to the railway lines, evidenced by its siting overall, and, more directly, by the arrangement of awning and platform and the space formerly occupied by the rail siding (now removed).

Additionally, while not related in a direct functional or historical sense, there is also an important visual relationship between the mill and the substation to its south (HO28 Brimbank). Both are substantial and striking red brick industrial structures constructed within a short period in the early twentieth century and to a degree they present as related and as a set piece of sorts in this location. Collectively, these two buildings form a robust and dominant expression of early twentieth century industrial activity in the Albion and Sunshine areas.

The heritage sensitivities arising from the elevated viaduct relate primarily to its proximity and scale and the interruption of certain views from the east to both the mill and its ancillary buildings and the substation. The viaduct structure would be positioned forward of and would cut across views of the mill from a variety of locations to the east of the rail corridor and from within the rail corridor itself (both in transit and within the station environs).

It is relevant to note that the Brimbank Planning Scheme makes reference to a view line study for the mill; this is the Darling Flour Mill View Line Assessment (Tract, 2014). This study is referenced in the Brimbank Planning Scheme at Schedule 1 to Clause 37.08 Activity Centre Zone (Sunshine Town Centre).

The study was directed at the identification of important views to the mill in the context of a review of the development potential of an area of land known as the 'Albion Triangle' to the east of the rail line. It considered only views from Ballarat Road, which include elevated views when in a moving vehicle. The study is therefore somewhat limited in its scope and it also does not appear to be based on a heritage analysis of significant views or presentational aspects of the registered place.

The relationship between the mill and the substation is predominantly appreciated in views from the east and this would also be eroded by the presence of the new viaduct.

Conversely, it is important to note that in a range of other views to the heritage place would either be unaffected, or the new viaduct would be visible but would not obstruct or be dominant as related to the mill and ancillary buildings.

Specifically:

- important views to the mill from the north would be relatively unaffected; in these the viaduct would be visible but would be adjacent rather than obscuring or dominating

- views to the mill from the west within the residential areas would be relatively unaffected. Here, the viaduct would be unlikely to be visible in most views, and would appear as a backdrop element where it is visible
- the substation is a robust structure that would continue to hold its own in views within Talmage Street including in views from the south.

In considering the nature of this impact, it is also noted that the majority of values under the VHR listing would not be adversely affected by the viaduct. The historical associations with the flour milling industry, the industrial development of Sunshine and the region, and the Darling family would all remain unchanged. The ability of the place to demonstrate the flour milling process would also be unaffected by the works and the distinctive architectural design of the mill building would still be evident, albeit certain views to the building and complex as a whole would be interrupted and compromised.

It is also noted that while the contextual change would be substantial, the historical relationship of the mill to the rail corridor would be retained.

Works to the station forecourt / existing carpark area directly in front of the mill complex (outside the extent of registration) would occur and these are unlikely to have an adverse impact. There may be an opportunity in detailed design to include interpretation or otherwise explore opportunities to reflect the former rail sidings use of this land as related the mill.

6.3.2.3 Proposed mitigation

The existing buildings should be protected from physical damage as a result of construction, including potential damage from piling and other construction activities.

In developing the design of the new elevated structure, the primary design objective should be for an outcome which as far as possible enables the legibility and landmark status of the John Darling and Sons Flour Mill and Albion VR D.C. Substation to be maintained in the immediate context. Considerations would include a preference for the following:

- maintain physical separation between the viaduct and heritage buildings as far as is feasible
- visually uncluttered appearance to the undercroft area where adjacent to the heritage buildings
- minimise the depth of the deck edge, parapet and barriers as far as possible to minimise the impact on views from the east of the heritage buildings
- consider a visually permeable response to structures and elements above the deck level to enable an appreciation of the heritage buildings
- consider opportunities to integrate heritage interpretation of the heritage places along the rail corridor as part of the design response.

There may also be opportunities to provide heritage benefits, as follows:

- There may be opportunities for the maintenance of closer views and an appreciation of the buildings through public realm treatments incorporating interpretation. The historical and functional relationship of the mill to the rail line is important and is still evident, not only through the siting of the buildings, but also any remnant sections of loading platform below the canopy and the space in front of the buildings (formerly occupied by goods sidings). There may be an opportunity to focus on these connections as part of an interpretation strategy or in the design of the station forecourt/carpark in this location.
- New views of the heritage buildings could be provided from elevated structure.

6.3.2.4 Approval requirements

Permits or exemptions would be required for works within the extent of registration.

No statutory heritage controls apply to works within the rail reserve.

6.3.3 Albion VR D.C. Substation (HO28 Brimbank)

6.3.3.1 Project works

Project works adjacent to the Albion VR D.C. Substation include the construction of a two-kilometre flyover (viaduct), rising within the rail corridor south of Albion station, and extending over Ballarat Road. At its highest point the viaduct will be elevated above ground level to 23.8 metres including OHLE supports. The viaduct will be supported on piers, and incorporate noise attenuation, services, drainage and other features. There is a very limited separation between the new structure and the substation; this is shown in detail in the plan excerpt at Figure 6.7.

The impact of this structure on the nearby John Darling and Son Flour Mill (VHR H0829) is considered at section 6.3.2.

CSR, signalling and civil and track works are proposed to the east side of and abutting the Albion VR D.C. Substation, within VicTrack land. A construction worksite and laydown area is proposed within the southern forecourt of the former substation, though this is offset from the structure itself.


Off-reservation treatment for noise mitigation may be required as noted in the MAR State Land Airborne Noise Impact Assessment (MAR-AJM-PWD-PWD-REP-XEV-NAP-0001716).



Figure 6.7 Aerial photograph showing new viaduct alignment (red overlay) adjacent to the Albion VR D.C. Substation (HO28), pink overlay (Source: RPV GIS)

6.3.3.2 Impact assessment

While the substation is less prominent than the John Darling and Son Flour Mill site, it is also a local landmark, and this is acknowledged in the various citations. This is on the basis of its scale and striking and characteristically 'overscaled' Renaissance Revival design. Like the mill, it also has a strong relationship to the rail corridor, in this case the building was constructed as part of the operations of the rail network.



The impact of the elevated viaduct structure would be a visual change arising from the juxtaposition of an unrelated structure of substantial scale in very close proximity to the heritage building.

The nature of this impact would depend to some extent on the height of the viaduct where it passes the heritage building and the relationship of supporting structure in proximity.

It would be expected that the major impact would be on views to the heritage building from the east where the viaduct is likely to partly obstruct views to the building and/or to alter the traditional relationship with the rail corridor. Accepting this, a range of views would still be available to the building, including from Talmage Street. In these views, the viaduct would be visible but would not disrupt or undermine an appreciation of the design of the building. This is a monumental and powerful building which will continue to hold its own in this context.

Considering the heritage values of the place, the historical associations would not be adversely affected by the works and the architectural values would also be undiminished. The impact would be in the disruption of some views to the building and a change to its immediate setting within the rail reserve. Conversely, the building's historical relationship to the rail network would be maintained.

Refer also to the discussion of the John Darling and Son Flour Mill at section 6.3.2.2.

As related to noise mitigation treatments, the scope of interventions to manage airborne noise and the impacts of these are not known.

6.3.3.3 Proposed mitigation

The existing building should be protected from physical damage as a result of construction, including potential damage from piling and other construction activities.

In developing the design, the detail of the interface with the existing building should consider the following:

- Maintenance of a clear separation between the existing building and the viaduct
- Location of supporting structure, with a preference for no direct interface with the building.

Refer also to the mitigation measures identified at section 6.3.2.3, which are also applicable to the works adjacent to the substation.

As related to interventions to manage air borne noise, these should be designed to minimise the impacts on identified heritage values and fabric. In preference, any interventions should be designed to maintain the external presentation of the heritage place and be located to the interior of the building.

6.3.3.4 Approval requirements

Under current planning scheme provisions, a permit would be required for works within the HO extent, noting that the HO applies only to the building envelope without a defined area of land around it.

6.3.4 Railway Signal Box (HO39)

6.3.4.1 Project works

While Project works will occur in the rail corridor in the vicinity of the Railway Signal Box, the structure will be retained in situ.

6.3.4.2 Impact assessment

Provided that the Railway Signal Box is protected during works, no adverse heritage impact is anticipated.

6.3.4.3 Proposed mitigation

The Railway Signal Box should be protected during works, including the establishment of fencing or other protective measures to prevent accidental incursion or damage to the building.

6.3.4.4 Approval requirements

None identified.

6.3.5 Sugar Gum Row (HO42 Brimbank)

6.3.5.1 Project works

The Project Description indicates areas within and adjoining the HO would be used as a temporary worksite, construction laydown area and access. The extent of the works area includes the southernmost section of the Talmage Street road edge occupied by the Sugar Gum Row and included in the HO. Further north, the works site is mapped to the edge of the road reserve, but would occupy land within the Tree Protection Zones (TPZs) of the HO trees.

Vegetation would be removed, and hardstands installed for the establishment of worksites.

6.3.5.2 Impact assessment

The proposed worksite has the potential to directly or indirectly impact the Sugar Gum Row. Direct impacts could include a requirement to remove or prune trees to facilitate installation of temporary crossovers, overhead lines or other services to the site. Indirect impacts would be anticipated from ground improvements and resurfacing, as well as from vehicle movements and storage of materials within the TPZs of the trees.

The Sugar Gum Row survives in a fragmentary and altered condition as a result of previous attrition, removal of a counterpart planting on the west side of Talmage Street, and a substantial lopping of a number of the specimens in the 1980s, following which these regrew from basal shoots.

Although containing a small number of high value specimen trees, and remaining legible as a former row planting, the historical values and associations of the row are only apparent through research. If further attrition occurs as a result of works requirements or impacts from a long occupation of this works site, the impact would be anticipated to result in a further diminishment of the continuity and legibility of the row as a historical planting.

6.3.5.3 Proposed mitigation

In preference the remaining trees of the Sugar Gum Row would be protected in their entirety during project works. However, if further removals or other impacts to these trees are required as part of the use of the adjacent works site, a possible approach to mitigation would be to undertake a reinstatement of the historical length of the row through new plantings of Sugar Gum (*Eucalyptus cladocalyx*) on the full length of Talmage Street.

6.3.5.4 Approval requirements

Under current planning scheme provisions, a permit would be required for works within the HO extent, including tree removal or lopping.

6.3.6 HV McKay Memorial Gates (HO53)

6.3.6.1 Project works

The HV McKay Memorial Gates (HO53) are located on a parcel of land (Barclay Reserve) indicated in the Project Description as a temporary worksite and construction laydown area (Figure 6.8). Project works include the removal of vegetation and construction of hardstand areas.

6.3.6.2 Impact assessment

Project works proximate to the gates have the potential to physically impact on this feature. It is noted that works would also likely impact on the replica Sunshine Harvester Works smithy to the rear. This is an interpretative feature which dates from 2001.

6.3.6.3 Proposed mitigation

In preference, all construction works in the worksite and construction laydown area would be located away from the gates and protective measures, such as the provision of a secured hoarded area restricting access to the gates, should be implemented. Protection is the preferred heritage response as this retains the feature in situ and manages the potential for physical impact and loss of heritage value.

If it is not feasible to utilise this site with the gates in situ, dismantling, secure storage and reinstatement in their original position at the completion of project works is an acceptable approach. The gates should be documented (photographically and in drawings) to assist in their accurate reconstruction and a methodology developed to guide dismantling, conservation works/repair and future reinstatement.

Should the gates be retained in situ, appropriate protection measures, including a no-go zone, should be instituted to ensure there are no adverse physical impact on the gates.

If the removal of the gates is required, a detailed methodology for the dismantling, storage and reconstruction of the gates should be developed. Following the conclusion of project works, the gates should be reinstated in the same location. Recognising that the HO applies to the gates in this particular location, they have been relocated onto this site. If needed, reinstatement in an alternative position or location could be considered, providing it has relevance to the HV McKay and the origins of the gates can be interpreted.

While not of heritage significance or included in the HO extent, consideration should also be given to the management of the replica smithy in association with the gates. The two elements are related and (along with the HV McKay Gardens and other sites in Sunshine), provide a local focus for interpretation of the history of HV McKay and the Sunshine Harvester works. It is recommended that the building be protected in situ or removed and reinstated.

6.3.6.4 Approval requirements

Under current planning scheme provisions, a permit would be required for works within the HO extent.



Figure 6.8 Detail of GIS mapping showing intersection of site identified for temporary works (yellow overlay) with the HV McKay Gates (HO53) (pink overlay indicated by red arrow) (Source: RPV GIS)

6.3.7 Quonset Hut, 134 Hampshire Road

6.3.7.1 Project works


The land where the Quonset Hut is located is indicated in the Project Description as undergoing modification works to the bus interchange/car park east of the subject building. CSR, signalling, and utility works are proposed south of the subject building. It is assumed that the Quonset Hut would be removed for the project works.

6.3.7.2 Impact assessment

The Quonset Hut is not currently subject to statutory heritage controls. It is however, considered to be of heritage significance as a relatively intact example of such a structure, which while once common, are now becoming more rare.

Noting that the site is likely to be cleared for the project works, total demolition may be an outcome, and if this occurred, it would result in the loss of heritage values.

In considering potential outcomes and impacts, there is a distinction in this case compared to most heritage places. This is on the basis that the heritage values of the Quonset Hut (historical, representative and rarity) relate only to the building itself, they do not derive particularly from its location and its siting in Hampshire Road. It is not known where the building came from (other than it was sourced as surplus in a period of post-WII austerity and materials shortages). While the relevant broad historical themes are demonstrated in the



adaptive reuse (in this case for a car yard), this is common across the building type, and the specifics of the location and use have not been identified as factors in significance.

Quonset and Nissen huts have a history of relocation and adaptive reuse, particularly in the immediate post-war period, but also subsequently. They are of lightweight construction and were developed to be easily constructed and relocated. This is of relevance in considering options for the building and possible mitigation of impacts.

6.3.7.3 Proposed mitigation

Rather than demolition, the preference would be for removal and relocation for reuse, either on this site or in an alternative location.

Given the demountable nature of such buildings, and the specific history of this example, such an action would not be inconsistent with its heritage values.

If temporary or permanent relocation is considered, a suitable methodology would need to be developed.

The building should be fully recorded.

6.3.7.4 Approval requirements

None required.

7. *Environment Effects Act 1978* Self-Assessment Criteria

The *Environment Effects Act 1978* (EE Act) is relevant to the Project as it provides for the assessment of proposed projects that may have a significant effect on the environment. The *Ministerial Guidelines for the assessment of environment effects under the Environment Effects Act 1978* (Ministerial Guidelines) under the EE Act provide the criteria used to determine whether a project warrants referral to the Minister for Planning. A project proponent is responsible for assessing whether its project will have potential adverse environmental effects that could be significant in a regional or State context.

As part of this Impact Assessment, consideration has been given to the criteria specifically relevant to historical heritage only to determine the potential extent of effects to heritage place. The referral criteria relevant to this Impact Assessment and the associated response is provided in Table 7.1 below.

Criteria relevant to other environmental matters are addressed in the relevant impact assessment.

Table 7.1 Historical Heritage Assessment of EE Act Referral Criteria

EE Act Self-Assessment Criteria	Historical Heritage Response	EE Act Self-Assessment Criteria
<p>Potential extensive or major effects on cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the <i>Heritage Act 1995</i> (Vic).</p> <p>Note: The <i>Heritage Act 1995</i> has been repealed and replaced with the <i>Heritage Act 2017</i>. As such, this response has regard to the <i>Heritage Act 2017</i>.</p> <p>Further, the Archaeological Inventory is referred to as the Victorian Heritage Inventory (VHI).</p>	<p>There are six VHR sites located within the State Project Land, with three of these sites likely to be impacted by Project works, detailed as follows:</p> <ul style="list-style-type: none"> HV McKay Memorial Gardens (VHR H1953): Project works would occur along the north-eastern edge of the HV McKay Memorial Gardens. Within the heritage registration extent, there may be potential impacts to significant trees through the pruning of tree canopies and impacts to the root zone of trees from works along the north-eastern edge of the Gardens. Avoidance or management of potential impacts to significant trees, paths and other features within the extent of registration of HV McKay Memorial Gardens will minimise potential impacts. Any works within or along the interface with the registered extent of the Gardens will require approval to be obtained under the <i>Heritage Act 2017</i> prior to the commencement of works, with works to be completed in accordance with the relevant approval. <p>It is noted that the 'Straight Six' pathway and cultivated vegetation along the north-eastern edge of the Gardens are located outside the legal extent of the VHR registration and fall within VicTrack land; however, both the pathway and landscaped buffer are considered to be of heritage value as they form part of the original garden layout. Impacts to this landscape buffer through vegetation removal and impacts to the existing footpath may have an adverse impact on the Gardens. It is however assumed that the final works along this edge will allow the landscape buffer to be remediated through reinstatement plantings and will be returned to the current arrangement (i.e. Straight Six pathway and buffer edge planting, including accommodation of small and medium-sized trees) The impact of the works could therefore be mitigated over time and there would be minimal long-term impact on heritage values.</p> <ul style="list-style-type: none"> John Darling and Son Flour Mill (VHR H0829): Located a short distance west of Albion Station, the VHR-listed John Darling and Son Flour Mill is a complex of state historical and architectural significance. No direct physical impacts are anticipated on the VHR site and no works are proposed within the extent of registration (land associated with the place), however the Sunshine / Albion Viaduct would be located in close proximity and is likely to impact on some aspects of the presentation of the heritage place, particularly when viewed from the east, and its broader setting. The design response will however seek to reduce potential impacts through maintaining physical separation between the viaduct and heritage place and minimising the obscuring caused by permanent infrastructure. It is further noted that the core heritage values associated with the John Darling and Son Flour Mill will be maintained and the Project would not have a significant impact on this site. Albion Viaduct (VHR H1197): The new Maribyrnong River Rail Bridge is proposed to be located adjacent to the existing VHR listed Albion Viaduct. The works are not expected to have a direct physical impact on the existing Albion Viaduct, meaning impacts to historical and technological values would be avoided. However, the addition of the Maribyrnong River Rail Bridge would be in close proximity to the Albion Viaduct and would have an impact on the presentation of this structure in views throughout the river valley. Any such impacts will be partially mitigated through adopting a sympathetic and contextual design response, including through designing the new Maribyrnong River Rail Bridge to match the height and length of the existing bridge and aligning the new bridge piers with every second pier of the Albion Viaduct. <p>The recent amendment to the extent of VHR registration to include an area of land associated with the viaduct means that a permit for the new Maribyrnong River Rail Bridge will be required under the Heritage Act and provides greater certainty that any adverse impacts on the heritage values of the viaduct will be appropriately managed. It is also noted that the majority of heritage values under the VHR listing would not be adversely affected by the new bridge.</p> <p>Any works within registered places will be completed in accordance with a Heritage Permit or exemptions obtained from Heritage Victoria prior to the commencement of works. Compliance with permit conditions or a formal exemption will ensure that major extensive or major effects to VHR sites are avoided.</p> <p>There are also two historical archaeological sites in the Project Land, with the following likely to be impacted by project works:</p>	<p>Criterion not met.</p>

EE Act Self-Assessment Criteria	Historical Heritage Response	EE Act Self-Assessment Criteria
	<ul style="list-style-type: none"> Brimbank Park Ruins (H7822-0004) is located in Brimbank Park, along the Western Ring Road in Keilor East. The site is considered to be of high archaeological significance, containing both upstanding remains and demonstrable archaeological deposits relating to settlement and farming in the area from the middle of the 19th century. Project works within the site are very limited and recommendations have been made for protection works to the greatest extent possible. If the archaeology cannot be avoided, further archaeological assessment of the site and its immediate surrounds will be required prior to works occurring, under appropriate approvals from Heritage Victoria. <p>Following the above, the anticipated impacts caused to VHI sites by the MAR Project are not considered extensive or major.</p>	

8. Conclusion

While the majority of project works occur within the rail corridor and no heritage impacts are expected, there are a number of locations where project works would intersect with state or locally listed heritage places and there would be some impacts on heritage values as a result.

In some cases, the impacts arise as result of works within the heritage place, while in other cases, the introduction of significant new infrastructure in proximity would result in an impact on the presentation of the heritage places.

8.1 Corridor Section

For the Corridor Section, the key heritage issue is that of the construction of the new Maribyrnong River Rail Bridge, adjacent to the VHR-listed Albion Viaduct (VHR H1197). While there would be no direct physical impact and the historical and technological values would be unaffected, the new bridge would have an adverse impact on the presentation of the existing bridge in views within the river valley. Partial mitigation of the impact would be through the careful design of the new structure consistent with Heritage Design Guidelines (Lovell Chen, September 2020).

Project works would also interface with the locally listed Dodds Homestead Ruins in Brimbank Park (H7822-0004/HO47 Brimbank) and Steele Creek Rail Embankment (HO37, Brimbank). In the case of the homestead ruins, this site is largely archaeological, and a high level of archaeological potential has been identified. Avoidance and protection measures have been recommended, or if works are required that intersect with areas of archaeological sensitivity, these would be subject to appropriate archaeological investigations consistent with Heritage Victoria's requirements.

Project works at Steele Creek embankment would have a major physical impact but on the basis of the nature of this feature and the identified values, there would be no significant adverse impact.

8.2 Sunshine Section

For the Sunshine Section, project works would intersect with the VHR-listed HV McKay Memorial Gardens (VHR H1953), along the Garden's north-eastern edge. While the detail of the works has not been confirmed, there would be impacts from permanent works and temporary occupation of part of the site. The approach to this place should be to minimise the area of impact, including the protection of mature trees where possible, and to undertake landscape reinstatement works to restore the layout and character of the gardens consistent with its values and relevant management plans.

The proposed Sunshine Viaduct north-west of Sunshine and extending over Ballarat Road would be in relatively close proximity to two significant heritage buildings/complexes within and fronting the rail corridor at Albion. While no direct physical impacts are expected, the viaduct will impact on some aspects of the presentation of the VHR-listed John Darling and Son Flour Mill (VHR H0829) and the locally listed Albion VR D.C. Substation (HO28, Brimbank). Core heritage values would be maintained in both cases, but there would be an impact arising from the proximity of the new infrastructure, particularly in views from the east, which would be partially obstructed. A series of design considerations have been identified to assist in mitigating the impacts.

Other heritage places that could be affected as part of the Sunshine Section are the Sugar Gum Row in Talmage Street (HO42, Brimbank), the HV McKay Memorial Gates (HO53, Brimbank), both included in the HO and the unlisted Quonset Hut at 134 Hampshire Road. In each case, recommendations for mitigation and management of potential impacts have been provided.

8.3 Project-wide matters

Four project-wide heritage issues have been identified.

- Signalling and rail systems upgrade works will generally occur within the rail corridor and these are considered to be a low risk and unlikely to have an adverse impact on listed heritage places. Notwithstanding this, there are a number of heritage places along the corridor and there is a need assess works proposed at each of the affected heritage places individually to confirm there are no adverse impacts on significant fabric or no adverse visual impact.
- Activities and potential works within roadways within or fronting heritage places or precincts were also identified as low risk. Recommendations have been provided to avoid any potential impacts.
- There is the potential for construction vibration to affect historical heritage places. Pre-construction and post-construction condition survey(s) should be undertaken for heritage places at risk of impact from structural integrity or other damage and disturbance as a result of the project. Measures to manage and monitor potential vibration impacts on heritage places during construction must be implemented in accordance with the Construction Noise and Vibration Management Plan required for the Project under the relevant planning approval. The results of monitoring for heritage places may be reported to the Executive Director, Heritage Victoria or the local Council as relevant and remedial action undertaken, if required, consistent with good heritage practice and the principles of the Burra Charter.
- A further project-wide matter is that of historical archaeology. A desktop investigation of historical archaeological values and impacts has been undertaken (see Appendix D). The study identified one known archaeological site listed in the VHI of high archaeological potential (Brimbank Park Ruins (VHI H7822-004) . Other sites and the remainder of the State Project Land were assessed as of low archaeological potential. As well as the specific requirements for the listed VHI sites, general mitigation measures were recommended including training in historical heritage awareness, documentation of all potential sites of low archaeological potential, the on-call availability of a suitably qualified archaeologist and the implementation of a STOP, ADVISE and MANAGE procedure in the event of unexpected discovery of archaeological remains. With these mitigation measures in place consistent with the Heritage Act and Heritage Victoria's requirements, it is expected that impacts on historical archaeology would be limited.

8.4 Summary

Overall, while there would be some adverse impacts on historical heritage values, the heritage issues and impacts of the Project are localised rather than widespread. For each location where impacts would occur there are considered to be some opportunities to minimise the impact on heritage values through mitigation and management measures, to form the basis of performance requirements

In addition to specific mitigation measures, recommendations have been made for site interpretation at particular locations along the alignment and this would have the potential to explore historical heritage themes and enhance community engagement with specific places and local history.